

RUBIX

eVOX INCLUDED
PLATFORM

C-A-F-S SERIES

IE2-IE3

Helical gear units C

Helical bevel gear units A  INCLUDED

Shaft mounted gear units F

Single stage gearboxes S

 **Bonfiglioli**



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Revisions

Refer to page 680 for the catalogue revision index. Visit www.bonfiglioli.com to search for catalogues with up-to-date revisions.



GENERAL INFORMATION

1 SYMBOLS AND UNITS OF MEASURE

Symbols	Units of Measure	Description	Symbols	Units of Measure	Description
$A_{N 1,2}$	[N]	Permissible axial force	$P_{1,2}$	[kW]	Power
f_s	–	Service factor	$P_{N 1,2}$	[kW]	Rated power
f_T	–	Thermal factor	$P_{R 1,2}$	[kW]	Power demand
f_{TP}	–	Temperature factor	$R_{C 1,2}$	[N]	Calculated radial force
i	–	Gear ratio	$R_{N 1,2}$	[N]	Permissible overhung load
l	–	Cyclic duration factor	S	–	Safety factor
J_C	[Kgm ²]	Mass moment of inertia to be driven	t_a	[°C]	Ambient temperature
J_M	[Kgm ²]	Motor mass moment of inertia	t_s	[°C]	Surface temperature
J_R	[Kgm ²]	Mass moment of inertia for the gear unit	t_o	[°C]	Oil temperature
K	–	Mass acceleration factor	t_f	[min]	Work time under constant load
K_T	–	Transmission element factor	t_r	[min]	Rest time
$M_{1,2}$	[Nm]	Torque	η_d	–	Dynamic efficiency
$M_{c 1,2}$	[Nm]	Calculated torque	η_s	–	Static efficiency
$M_{n 1,2}$	[Nm]	Rated torque	φ	[']	Output shaft angular backlash (with locked input shaft)
$M_{r 1,2}$	[Nm]	Torque demand			
$n_{1,2}$	[min ⁻¹]	Speed			

₁ value applies to input shaft

₂ value applies to output shaft



The symbol shows the page the information can be sorted from.



This symbol refers to the angle the overhung load applies (viewing from drive end).



DANGER - WARNING
This symbol indicates situations of danger, which if ignored, may result in serious injury to the operator.



Symbol refers to weight of gearmotors and speed reducers.
Figure for gearmotors incorporates the weight of the 4-pole motor and for life lubricated units, where applicable, the weight of the oil.



IMPORTANT
This symbol indicates important technical information.



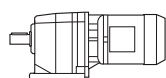
Apply to equipment complying with "ATEX" Directive.

Series C

Series A

Series F

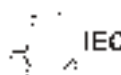
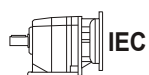
Series S



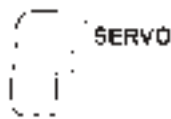
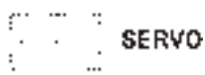
Gearmotor with compact motor.



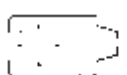
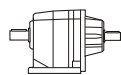
Gearmotor with IEC motor.



Gear unit with IEC motor interface.



Gear unit with servomotor input adapter.




Speed reducer with solid input shaft.




2 ALLOWED TEMPERATURE LIMITS

Symbols	Description / Condition	Value (*)	
		Synthetic Oil	Mineral Oil
t_a	Ambient temperature		
$t_{au \text{ min}}$	Minimum operating ambient temperature	-30°C	-10°C
$t_{au \text{ Max}}$	Maximum operating ambient temperature	+50°C	+40°C
$t_{as \text{ min}}$	Minimum storage ambient temperature	-40°C	-10°C
$t_{as \text{ Max}}$	Maximum storage ambient temperature	+50°C	+50°C
t_s	Surface temperature		
$t_{s \text{ min}}$	Minimum gearbox surface temperature starting with partial load (#)	-25°C	-10°C
$t_{sc \text{ min}}$	Minimum gearbox surface temperature starting with full load	-10°C	-5°C
$t_{s \text{ Max}}$	Maximum casing surface temperature during continuous operation (measured next to the gearbox input)	+100°C	+100°C (@)
t_o	Oil temperature		
$t_{o \text{ Max}}$	Maximum oil temperature during continuous operation	+95°C	+95°C (@)

(*) = Refer to the table "Selection of the optimal oil viscosity" for further information about minimum and maximum values of different oil viscosity. For values of $t_a < -20^\circ\text{C}$ and $t_s, t_o > 80^\circ\text{C}$, choose (as permitted in the product configuration stage) the sealing type of the most suitable material to the type of application. If needed contact Bonfiglioli Technical Service. 

(@) = Continuous operation it is not advised if t_s and t_o range is 80°C to 95°C .

(#) = For full load start-up it is recommended to ramp-up and provide for greater absorption of the motor. If needed, contact Bonfiglioli Technical Service. 



3 TORQUE

3.1 Rated torque M_{n2} [Nm]

The torque that can be transmitted continuously through the output shaft, with the gear unit operated under a service factor $f_s = 1$.

Rating is speed sensitive.

3.2 Required torque M_{r2} [Nm]

The torque demand based on application requirement.

It must always be equal to or less than torque M_{n2} the gearbox under study is rated for.

3.3 Calculated torque M_{c2} [Nm]

Computational torque value to be used when selecting the gearbox. It is calculated considering the required torque M_{r2} and service factor f_s , as per the equation here after:

$$M_{c2} = M_{r2} \cdot f_s < M_{n2} \quad (1)$$

4 POWER

4.1 Rated power P_{n1} [kW]

In the gearbox selection charts this is the power applicable to input shaft, based on input speed n_1 and corresponding to service factor $f_s = 1$.



5 THERMAL CAPACITY P_t [kW]

The following indications are valid for C, F and S gearboxes. For the thermal verification of the A gearboxes, refer to the indications in paragraph 48 (valid both for standard and ATEX products).


P_t is the power that can be transmitted through the gear unit, under a continuous duty and an ambient temperature of 20 °C, without resulting into damage of the inner parts or degradation of the lubricant properties. Refer to chart (A1) for specific kW ratings.


In case of intermittent duty, or an operating ambient temperature other than the rated 20°C, the P_t value should be adjusted through the factor f_t , obtained from chart (A2), as per the following equation:


$$P_t = P_t \times f_t$$

Gear units featuring more than 2 reductions and/or a gear ratio greater than $i = 45$ do not normally require the thermal limit to be checked as in these cases the thermal rating usually exceeds the mechanical rating.

(A 1)

P_t [kW] 20 °C		
	$n_1 = 1400 \text{ min}^{-1}$	$n_1 = 2800 \text{ min}^{-1}$
C 05 2	—	—
C 12 2	—	—
C 22 2	—	—
C 32 2	—	4.5
C 36 2	6.5	5.0
C 41 2	8.0	6.0
C 51 2	11.0	7.8
C 61 2	14.0	10.0
C 70 2	21	16.0
C 80 2	32	24
C 90 2	43	32
C 100 2	59	42

P_t [kW] 20 °C		
	$n_1 = 1400 \text{ min}^{-1}$	$n_1 = 2800 \text{ min}^{-1}$
F 10 2	3.8	2.7
F 20 2	9.1	6.5
F 25 2	10.2	7.4
F 31 2	11.7	8.5
F 41 2	14.3	10.4
F 51 2	21.5	15.0
F 60 3	26.0	18.9
F 70 3	36.4	26.0
F 80 3	52	36
F 90 3	75	53

P_t [kW] 20 °C		
	$n_1 = 1400 \text{ min}^{-1}$	$n_1 = 2800 \text{ min}^{-1}$
S 10 1	5.5	4.9
S 20 1	7.8	7.2
S 30 1	10.0	9.1
S 40 1	15.6	14.3
S 50 1	21	18.9



(A 2)

		f_t			
t_a [°C]	Continuous duty	Intermittent duty			
		Degree of intermittence [I]			
		80%	60%	40%	20%
40	0.80	1.1	1.3	1.5	1.6
30	0.85	1.3	1.5	1.6	1.8
20	1.0	1.5	1.6	1.8	2.0
10	1.15	1.6	1.8	2.0	2.3

Where cyclic duration factor (I)% is the relationship of operating time under load t_f to total time ($t_f + t_r$) expressed as a percentage.

$$I = \frac{t_f}{t_f + t_r} \cdot 100 \quad (2)$$

The condition to be verified is:

$$P_{r1} \leq P_t \times f_t \quad (3)$$

6 EFFICIENCY

6.1 Dynamic efficiency η_d

Obtained from the relationship of delivered power P_2 to input power P_1 , according to the following equation:

$$\eta_d = \frac{P_2}{P_1} \cdot 100 \quad [\%] \quad (4)$$

(A 3)

	2 x	3 x	4 x
η_d	95%	93%	90%

	2 x	3 x	4 x
η_d	94%	91%	89%

	2 x	3 x	4 x
η_d	95%	93%	90%

	1 x		
η_d	98%		



7 GEAR RATIO i

The value for the gear ratio is referred to with the letter [i] and calculated through the relationship of the input speed n_1 to the output speed n_2 :

$$i = \frac{n_1}{n_2} \quad (5)$$

The gear ratio is usually a decimal number which in this catalogue is truncated at one digit after the comma (no decimals for $i > 1000$).

If interested in knowing the exact value see also chapters "EXACT RATIOS".

8 ANGULAR VELOCITY

8.1 Input speed n_1 [min^{-1}]

The speed is related to the prime mover selected. Catalogue values refer to speed of either single or double speed motors that are common in the industry.

If the gearbox is driven by an external transmission it is recommended to operate it with a speed of 1400 min^{-1} , or lower, in order to optimise operating conditions and lifetime.

Higher input speeds are permitted, however in this case consider that torque rating M_{n_2} is affected adversely.

Please consult a Bonfiglioli representative.

8.2 Output speed n_2 [min^{-1}]

The output speed value n_2 is calculated from the relationship of input speed n_1 to the gear ratio i , as per the following equation:

$$n_2 = \frac{n_1}{i} \quad (6)$$

9 MOMENT OF INERTIA J_r [Kgm^2]

Moments of inertia specified in the catalogue refer to the gear unit input axis.

They are therefore related to motor speed, in the case of direct motor mounting.



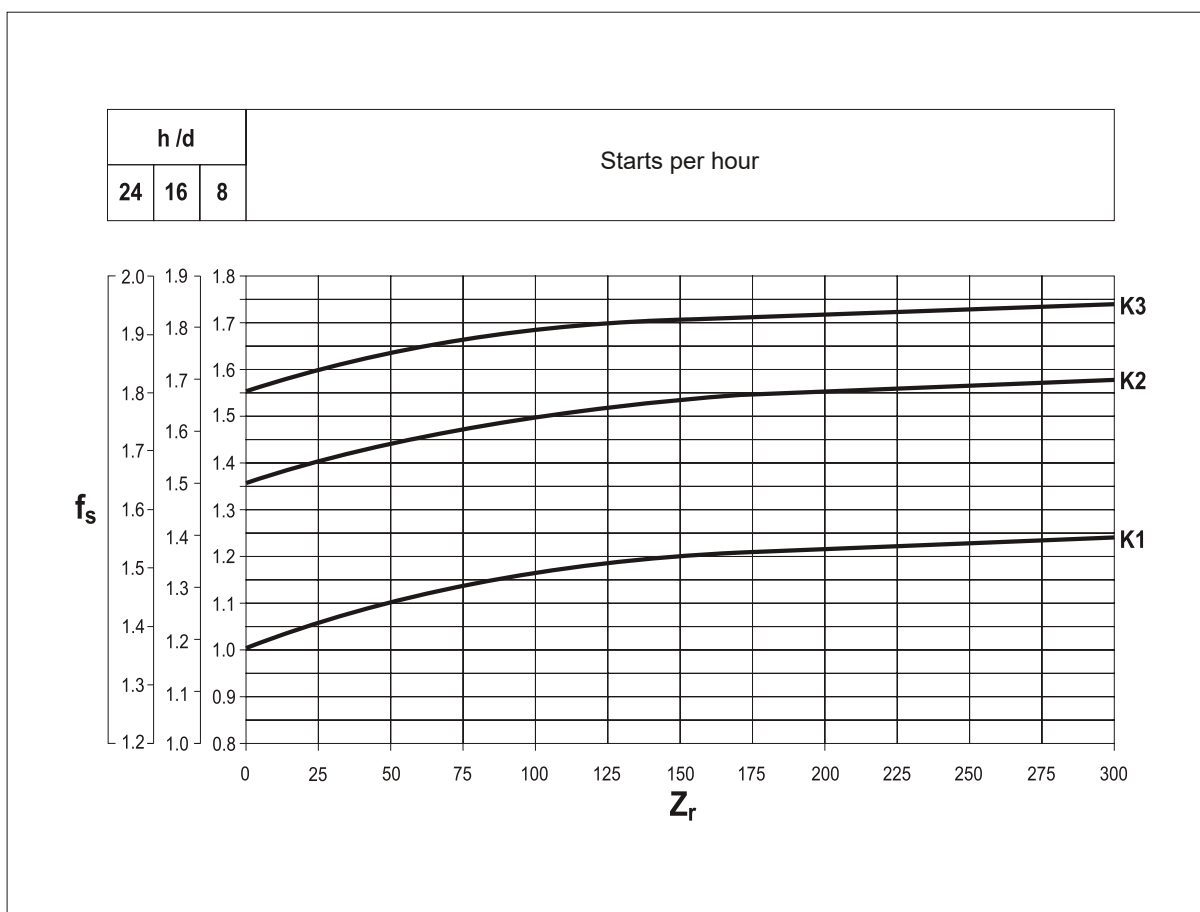
10 SERVICE FACTOR f_s

This factor is the numeric value describing reducer service duty. It takes into consideration, with unavoidable approximation, daily operating conditions, load variations and overloads connected with reducer application.

In the graph (A4) below, after selecting proper “daily working hours” column, the service factor is given by intersecting the number of starts per hour and one of the K1, K2 or K3 curves.

K _ curves are linked with the service nature (approximately: uniform, medium and heavy) through the acceleration factor of masses K , connected to the ratio between driven masses and motor inertia values. Regardless of the value given for the service factor, we would like to remind that in some applications, which for example involve lifting of parts, failure of the reducer may expose the operators to the risk of injuries. If in doubt, please contact our Technical Service Department.

(A 4)



10.1 Acceleration factor of masses K

This parameter serves for selecting the right curve for the type of load.

The value is given by the following ratio:

(A 5)

$K = \frac{J_c}{J_m}$	$J_c =$ Moment of inertia of driven masses referred to motor drive shaft	$K \leq 0,25$	\rightarrow K1	Uniform load
	$J_m =$ Motor moment of inertia	$0,25 < K \leq 3$	\rightarrow K2	Moderate shock load
	\rightarrow	$3 < K \leq 10$	\rightarrow K3	Heavy shock load
		$K > 10$	\rightarrow	Please consult Bonfiglioli Technical Service



11 LUBRICATION

Life lubricated gearboxes do not require any periodical oil changes.

Refer to the User's Manual available at www.bonfiglioli.com for indications about checking the oil level and its replacement for other types of gearboxes.

Do not mix mineral oils with synthetic oils and/or different brands.

However, oil level should be checked at regular intervals and topped up as required.

Check monthly if unit operates under intermittent duty, more frequently if duty is continuous.

11.1 Selection of the optimal oil viscosity (data relating to Shell Oils)

(A 6)

		Operating ambient temperature [C°]																		
		-40	-35	-30	-25	-20	-15	-10	-5	0	+5	+10	+15	+20	+25	+30	+35	+40	+45	+50
		suitability seals check				standard seals provided in the catalog														
Splash lubrication	Mineral oil [1]	150 VG							*											
		220 VG	⊘						*											☎
		320 VG	⊘	☎						*										
		460 VG									*									
	Synthetic oil (PAG) [2]	150 VG		*	*															☎
		220 VG	⊘	*	*															
		320 VG			*	*														
		460 VG		☎	*	*														
	Synthetic oil (PAO)	150 VG				*	*													☎
		220 VG	⊘			*	*													
		320 VG		☎	*	*														
		460 VG				*	*													

Recommended operating limits

Allowed operating limits. ☎

Forbidden operating limits.

* = It is recommended to ramp-up and to provide for greater absorption of the motor.

If needed and in the event of impulse loads, contact Bonfiglioli Technical Service. ☎

[1] The use of mineral oil is permitted on gearmotors with service factor $f_s \geq 1.30$

[2] Gearboxes A05...60 must be used with PAG oil strictly (suggested the viscosity 320).
For different needs please contact the technical service.



11.2 Lubrication for C, A, F, S series gearboxes

The inner parts of Bonfiglioli gear units are oil-bath and splash lubricated.

Frame sizes C 05...C 41, A 05...A 41, F 10...F 41, S 10...S 40 are supplied by the factory, or by the authorized dealers, already filled with oil.

Unless otherwise specified, units size C 51, A 50, F 51, S 50 and larger are usually supplied unlubricated at it will be the customer care to fill them with oil prior to putting them into operation. In both cases, depending on the version, prior to putting the gear unit into operation may need to replace the closed plug used for transportation purposes with breather plug supplied with.

For the reference charts of oil plugs placement and quantity of lubricant, refer to the Installation, Operation and Maintenance Manual (available on www.bonfiglioli.com).

The “long life” polyglycol-based lubricant supplied by the factory (SHELL OMALA S4 WE 320), in the absence of contamination, does not require periodical oil changes throughout the lifetime of the gear unit.

11.3 Lubrication for A-EX (Atex) gearboxes

The inner parts of Bonfiglioli gear units are oil-bath and splash lubricated.

The ATEX version gear unit (with some exceptions see Table below) are factory-charged with “long-life” lubricant SHELL OMALA S4 WE 320 in the quantity suitable for the mounting position specified in the order.

(A 7)

A 05	A 10	A 20	A 30	A 35	A 41	A 50	A 55 ¹⁾	A 60 2 ²⁾	A 60 3 ¹⁾	A 60 4 ¹⁾	A 70 ¹⁾	A 80 ¹⁾	A 90 ¹⁾
------	------	------	------	------	------	------	--------------------	----------------------	----------------------	----------------------	--------------------	--------------------	--------------------

Gearbox pre-filled with a synthetic “for life” lubricant
 Gearbox pre-filled with a synthetic lubricant

⁽¹⁾ Without lubricant for mounting positions B6 and B7

⁽²⁾ Without lubricant for mounting positions B6, B7 and VB

Gearboxes are fitted with sealed filler plugs for transport purposes. Depending on version, they may be supplied with a vented plug which the user must fit before putting the gearbox into service. Refer to the installation, operation and maintenance manual to replace the filler plug correctly. (These manuals are available in a number of languages and can be downloaded in pdf format from the website www.bonfiglioli.com.)

When a gearbox is supplied with no lubricant, it is recommended to fill it with a lubricant of a similar type, selected from those listed in its installation, operation and maintenance manual.




12 SELECTION

Some fundamental data are necessary to assist the correct selection of a gearbox or gearmotor. The table below (A8) briefly sums up this information.

To simplify selection, fill in the table and send a copy to our Technical Service which will select the most suitable drive unit for your application.

(A8)

		 TECHNICAL DATA REQUIRED FOR THE SELECTION OF GEARBOXES SERIES ...		Nr:		
				Date:		
		Rev_	Date:			
A) GENERAL DATA						
#	1	Company / Customer				
#	2	Contact				
#	3	Branch / Distributor				
#	4	Order quantity				
	5	Delivery time				
B₁) ELECTRIC MOTOR						
	6	Motor Type				
#	7	P _{n1}	Rated motor Power	[kW]		
#	8	P _{r1}	Motor power demand	[kW]		
	9	n ₁	Input speed	[min ⁻¹]		
	10	No. of Poles				
C) GEARBOX						
#	11	Gearbox configuration				
#	12	i	Gear ratio			
#	13	n ₁	Input speed	[min ⁻¹]		
#	14	M _{r2}	Output torque demand	[Nm]		
#	15	f _s	Service factor demand			
	16	Rotation of the output shaft [frontal view]:		CW	CCW	
#	17	L _{10H}	Bearings lifetime	[h]		
	18	Gears lifetime		[h]		
	19	SF _{min}	Safety for tooth root stress	standard reference (ISO preferred)		
	20	SH _{min}	Safety for flank pressure	standard reference (ISO preferred)		
D) ADDITIONAL LOADS						
	21	R _{c2}	Radial load on output shaft	[N]	Orientation [°]	
	22	x ₂	Load application distance from shaft shoulder	[mm]		
	23	R _{c1}	Radial load on input shaft	[N]	Orientation [°]	
	24	x ₁	Load application distance from shaft shoulder	[mm]		
	25	A _{n2}	Thrust load on output shaft (+ / -)	[N]	+ = push	
	26	A _{n1}	Thrust load on input shaft (+ / -)	[N]	- = pull	
E) APPLICATION						
#	27	Type of application				
	28	Duty cycle		Time phase	Gearbox output torque	
				%	[Nm]	Gearbox output speed
				****	****	[min ⁻¹]
				****	****	
	29	Notes about Duty Cycle:				
	30	Rating according FEM class		T-	L- M-	
	31	Degree of intermittence		[%]		
	32	t _a	Ambient temperature range	[°C]		
#	33	Altitude a.s.l.		[m]		
	34	Type of ambient	small indoor space	large indoor space	outdoor	
F) NOTES						
	35	Notes and additional Customer requirements:				
# Mandatory for the selection						



For the selection of Series A gear units in ATEX configuration, see also the specific chapter on page 348.

12.1 Selection of a gearmotor

a) Determine service factor f_s according to type of duty (factor K), number of starts per hour Z_r and hours of operation.

b) From values of torque M_{r2} , speed n_2 and efficiency η_d the required input power can be calculated from the equation:

$$P_{r1} = \frac{M_{r2} \cdot n_2}{9550 \cdot \eta_d} \text{ [kW]} \quad (7)$$

Value of η_d for the captioned gear unit can be sorted out from paragraph 6.

c) Consult the gearmotor selection charts and locate the table corresponding to normalised power P_n :

$$P_n \geq P_{r1} \quad (8)$$

Unless otherwise specified, power P_n of motors indicated in the catalogue refers to continuous duty S1. For motors used in conditions other than S1, the type of duty required by reference to CEI 2-3/IEC 34-1 Standards must be mentioned.

For duties from S2 to S8 in particular and for motor frame 132 or smaller, extra power output can be obtained with respect to continuous duty.

Accordingly the following condition must be satisfied:

$$P_n \geq \frac{P_{r1}}{f_m} \quad (9)$$

The adjusting factor f_m can be obtained from table (A9).

12.2 Intermittence ratio

$$I = \frac{t_f}{t_f + t_r} \cdot 100 \quad (10)$$

t_f = work time at constant load

t_r = rest time



(A 9)

	DUTY						Please contact us
	S2			S3*			
	Cycle duration [min]			Cyclic duration factor (I)			
	10	30	60	25%	40%	70%	
f_m	1.35	1.15	1.05	1.25	1.15	1.1	

* Cycle duration, in any event, must be 10 minutes or less. If it is longer, please contact our Technical Service.

Next, refer to the appropriate P_n section within the gearmotor selection charts and locate the unit that features the desired output speed n_2 , or closest to, along with a safety factor S that meets or exceeds the applicable service factor f_s .

The safety factor is so defined:

$$S = \frac{M_{n2}}{M_2} = \frac{P_{n1}}{P_1} \quad (11)$$

As standard, gear and motor combinations are implemented with 2, 4 and 6 pole motors, 50 Hz supplied.

Should the drive speed be different from 2800, 1400 or 900 min⁻¹, base the selection on the gear unit nominal rating.

12.3 Selection of speed reducer and gearbox with IEC motor adapter

a) Determine service factor f_s .

b) Assuming the required output torque for the application M_{r2} is known, the calculation torque can be then defined as:

$$M_{c2} = M_{r2} \cdot f_s \quad (12)$$

c) The gear ratio is calculated according to requested output speed n_2 and drive speed n_1 :

$$i = \frac{n_1}{n_2} \quad (13)$$



Once values for M_{c2} and i are known consult the rating charts under the appropriate input speed n_1 and locate the gear unit that features the gear ratio closest to $[i]$ and at same time offers a rated torque value M_{n2} so that:

$$M_{n2} \geq M_{c2} \quad (14)$$

If a IEC normalized motor must be fitted check geometrical compatibility with the gear unit at paragraph "MOTOR AVAILABILITY".

13 VERIFICATION

After the selection of the speed reducer, or gearmotor, is complete it is recommended that the following verifications are conducted:

a) Thermal capacity

Make sure that the thermal capacity of the gearbox is equal to or greater than the power required by the application according to equation (3) on page 7.

If this condition is not verified, select a larger gearbox or apply a forced cooling system.

b) Maximum torque

The maximum torque (intended as instantaneous peak load) applicable to the gearbox must not, in general, exceed 200% of rated torque M_{n2} . Therefore, check that this limit is not exceeded, using suitable torque limiting devices, if necessary.

For three-phase double speed motors, it is important to pay attention to the switching torque which is generated when switching from high to low speed, because it could be significantly higher than maximum torque.

A simple, economical way to minimize overloading is to power only two phases of the motor during switch-over (power-up time on two phases can be controlled with a time-relay):

$$M_{g2} = 0.5 \cdot M_{g3}$$

M_{g2} = Switching torque with two-phase power-up

M_{g3} = Switching torque with three-phase power-up

We recommend, in any event, to contact our Technical Service.

c) Radial loads

Make sure that radial forces applying on input and/or output shaft are within permittend catalogue values.

If they were higher consider designing a different bearing arrangement before switching to a larger gear unit.

Catalogue values for rated overhung loads refer to mid-point of shaft under study.

Should application point of the overhung load be localised further out the revised loading capability must be adjusted as per instructions given in this manual.

Please refer to the paragraphs relating to radial loads.



d) Thrust loads

Actual thrust load must be found within 20% of the equivalent overhung load capacity.

Should an extremely high, or a combination of radial and axial load apply, consult Bonfiglioli Technical Service.

e) Starts per hour

For duties featuring a high number of switches the actual starting capability in loaded condition [Z] must be calculated.

Actual number of starts per hour must be lower than value so calculated.

14 INSTALLATION

The following installation instructions must be observed:

a) Make sure that the gearbox is correctly secured to avoid vibrations.

If shocks or overloads are expected, install hydraulic couplings, clutches, torque limiters, etc.

b) Before being paint coated, the machined surfaces and the outer face of the oil seals must be protected to prevent paint drying out the rubber and jeopardising the sealing function.

c) Parts fitted on the gearbox output shaft must be machined to ISO H7 tolerance to prevent interference fits that could damage the gearbox itself.

Further, to mount or remove such parts, use suitable pullers or extraction devices using the tapped hole located at the top of the shaft extension.

d) Mating surfaces must be cleaned and treated with suitable protective products before mounting to avoid oxidation and, as a result, seizure of parts.

e) Prior to putting the gear unit into operation make sure that the equipment that incorporates the same complies with the current revision of the Machines Directive 2006/42/EC.

f) Before starting up the machine, make sure that oil level conforms to the mounting position specified for the gear unit and the viscosity is adequate (refer to the User's Manual available at www.bonfiglioli.com).

g) For outdoor installation provide adequate guards in order to protect the drive from rainfalls as well as direct sun radiation.



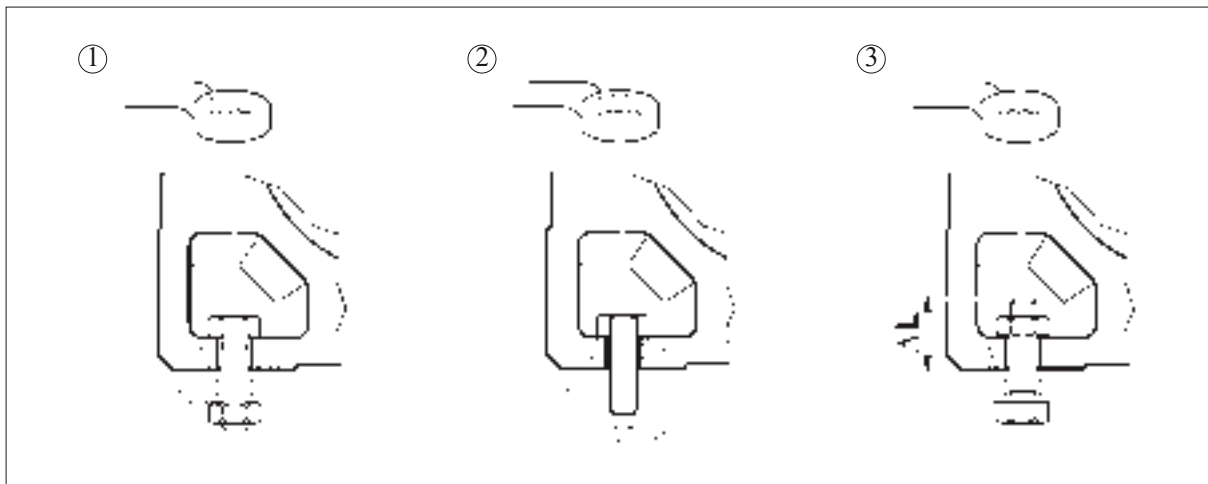
14.1 Fitting servomotors to gear heads featuring a clamping device (adapter type SC)

Turn the clamping device until its slot is aligned to those that are milled on the reducer input shaft. If the motor shaft features a key, this must be removed and the relevant keyway must also be aligned with the slots of clamping device and gear head input shaft, prior to inserting the servomotor into site. The keyway must be sitting on the same side as the locking screw. Tighten the bolts that hold the servomotor to the gear head, insert a torque wrench through the hole on the side of the flange and tighten the locking screw of the clamping device to the torque that is specified in the drawing section for the given adapter.

15 INSTALLATION INSTRUCTIONS

Schemes in table (A10) show the 3 possible installation patterns for A gear units to the machine frame. For each of these circumstances, table (A11) indicates exagonal head screw sizes to be used. Besides, to facilitate the installation, we suggest to use a wrench of the type shown in table (A10).

(A 10)



(A 11)

	Bolt type			ΔL (mm)
	①	②	③	
A 05	M8x22	M8x20	M8x ...	22
A 10	M8x25	M8x20	M8x ...	20
A 20	M8x25	M8x20	M8x ...	20
A 30	M10x30	M10x25	M10x ...	25
A 35	M10x30	M10x25	M10x ...	25
A 41	M12x35	M12x30	M12x ...	30

	Bolt type			ΔL (mm)
	①	②	③	
A 50	M14x45	M14x40	M14x ...	35
A 55	M14x40	M14x40	M14x ...	35
A 60	M16x50	M16x45	M16x ...	40
A 70	M20x60	M20x55	M20x ...	45
A 80	M24x70	M24x65	M24x ...	55
A 90	M24x90	M24x80	M24x ...	65



16 STORAGE

Observe the following instructions to ensure correct storage of the products:

- a) Do not store outdoors, in areas exposed to weather or with excessive humidity.
- b) Always place boards, wood or other material between the products and the floor. The gearboxes should not have direct contact with the floor.
- c) In case of long-term storage all machined surfaces such as flanges, shafts and couplings must be coated with a suitable rust inhibiting product (Mobilarma 248 or equivalent).
- d) In the cases of long-term storage defined in the order phase with the optional choice of SLM or SLP (see specific chapter for cases and times), the appropriate technical requirements are given in the User Manual available on www.bonfiglioli.com. To guarantee times, conditions and extensions, contact the Bonfiglioli Assistance Center available on the company website.

Furthermore gear units must be placed with the fill plug in the highest position and filled up with oil. Before putting the units into operation the appropriate quantity, and type, of oil must be restored (refer to the User's Manual available at www.bonfiglioli.com).

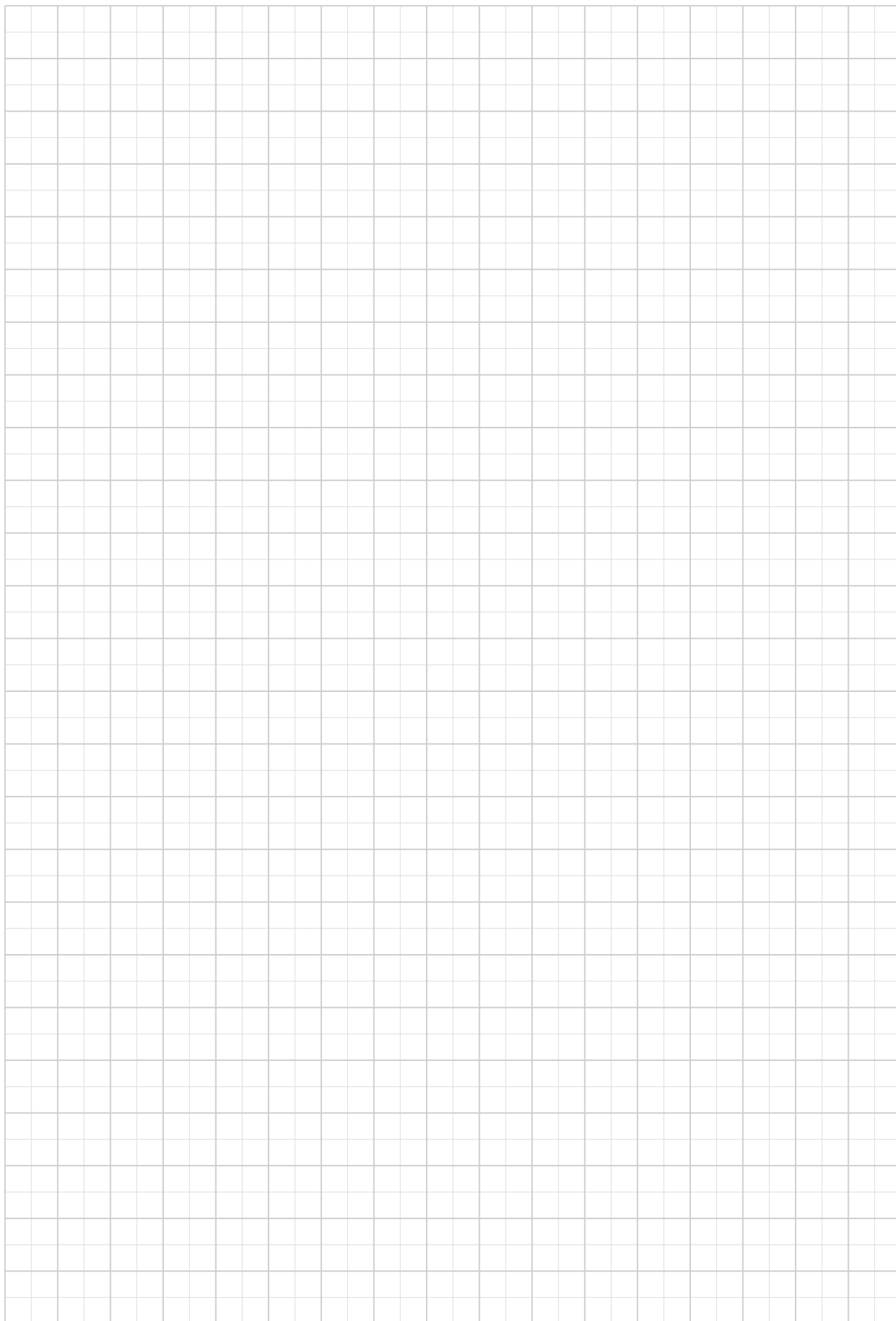
17 CONDITIONS OF SUPPLY

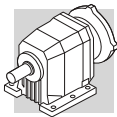
Gear units are supplied as follows:

- a) configured for installation in the mounting position specified when ordering;
- b) tested to manufacturer specifications;
- c) mating machined surfaces come unpainted;
- d) nuts and bolts for mounting motors are provided;
- e) shafts are protected during transportation by plastic caps;
- f) supplied with lifting lug (where applicable).

18 PAINT SPECIFICATIONS

Specifications for paint applied to gearboxes (where applicable) may be obtained from the branches or dealers that supplied the units.





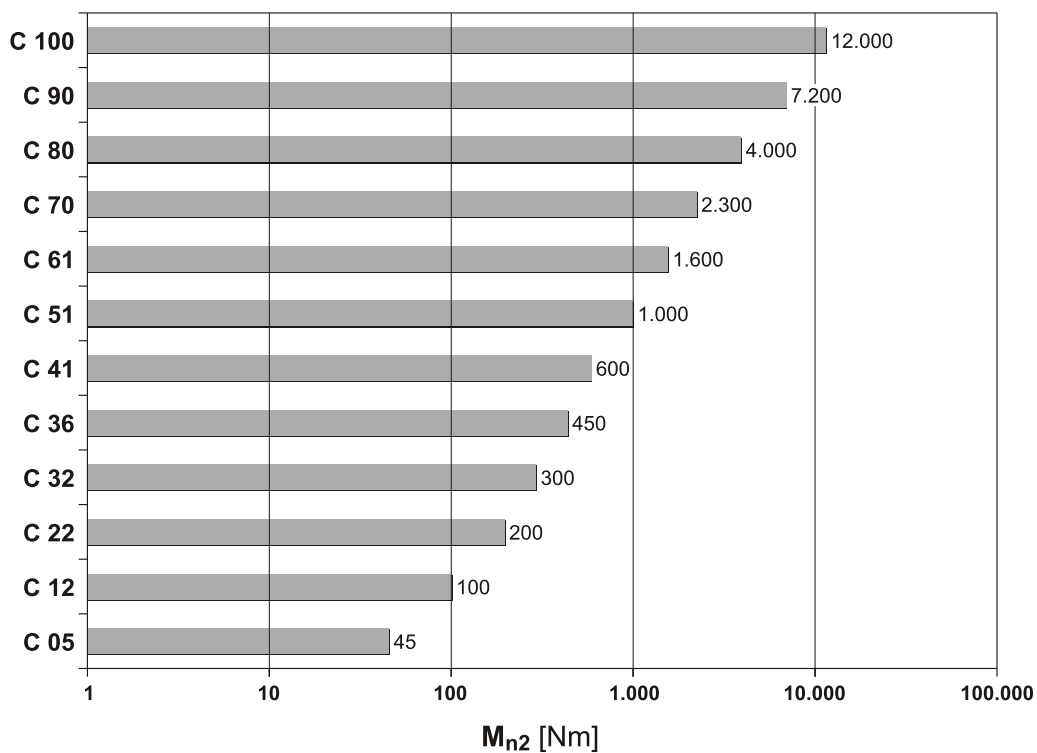
HELICAL GEAR UNITS SERIES C

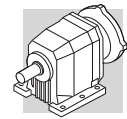
19 DESIGN FEATURES

The main design characteristics are:

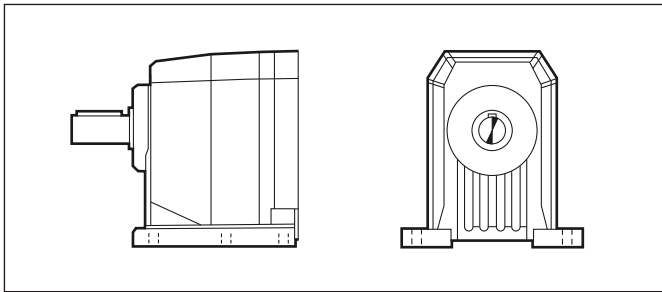
- modularity
- space effective
- universal mounting
- high efficiency
- quiet operation
- gears in hardened and case-hardened steel
- bare aluminium housing for sizes 05, 12, 22 and 32.
Larger frame sizes come in sturdy cast iron housings
- input and output shafts from high grade steel.

(B 12)





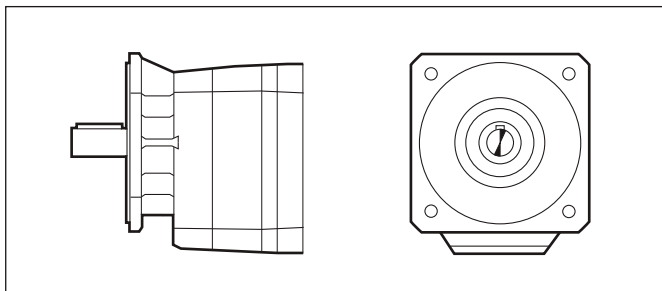
20 VERSIONS



P

Foot mount

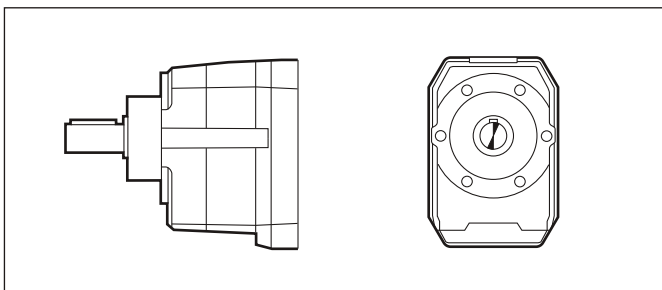
C 05 ... C 100



F

Flange mount

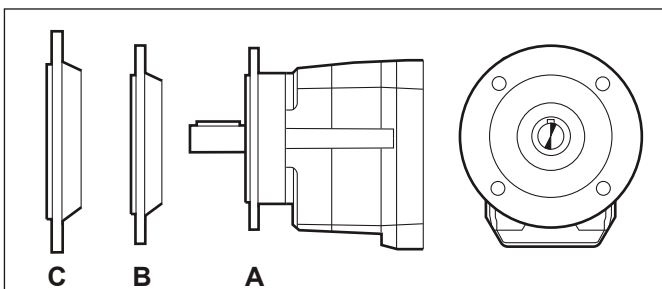
C 05 ... C 32
C 70 ... C 100



U

UNIBOX- universal housing

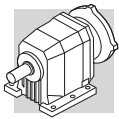
C 12 ... C 61



UF

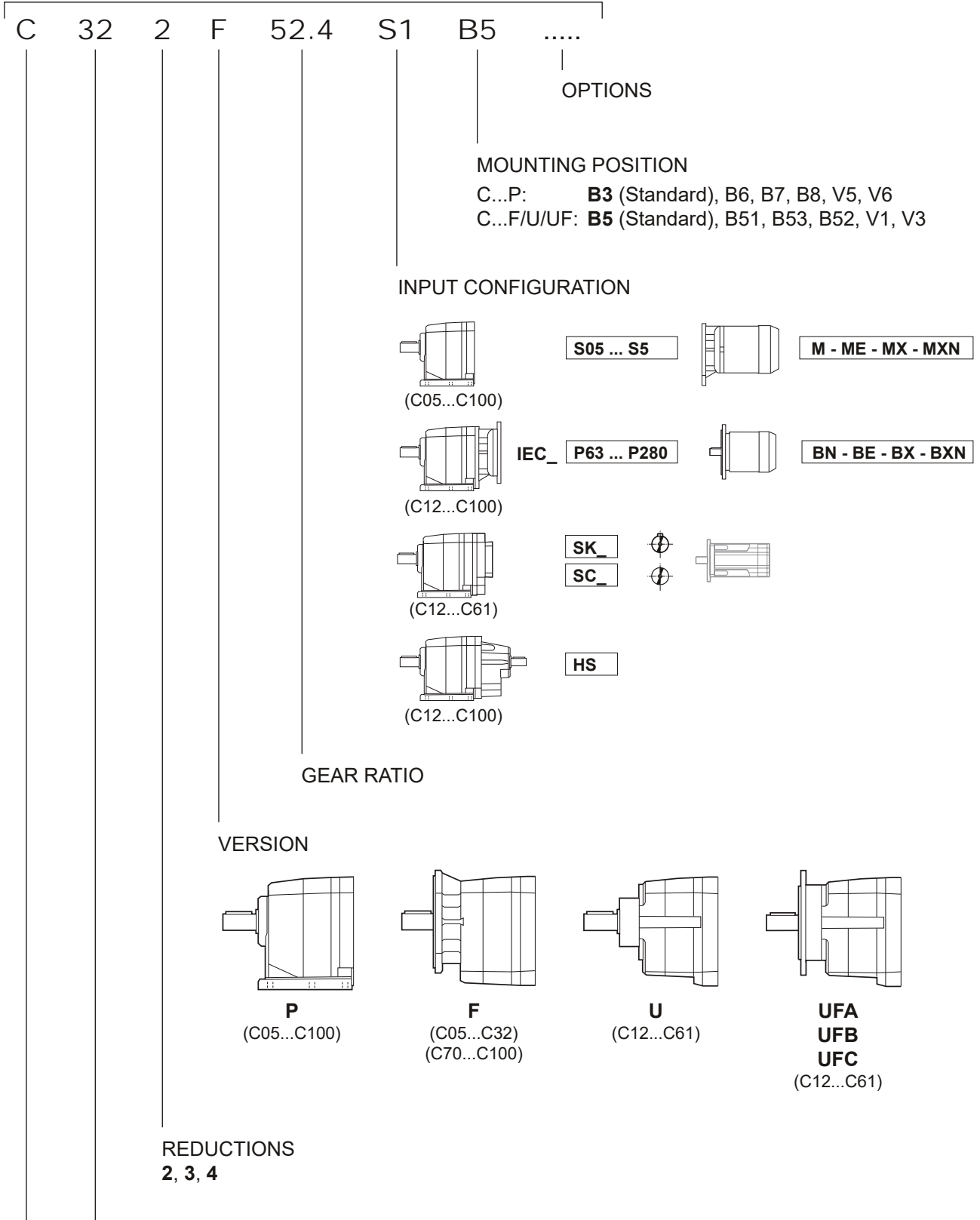
UNIBOX bolt-on flange

C 12 ... C 61

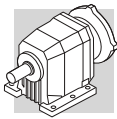


21 DESIGNATION

GEAR UNIT



TYPE: **C** = helical in-line gear units




21.1 Gearbox options

LUBRICATION

Gearboxes C05, C12, C22, C32, C36 and C41, are usually factory filled with oil in the standard version. Gearboxes C51, C61, C70, C80, C90 and C100, are usually supplied unlubricated in the standard version.

However, for all sizes of gearbox factory filled with oil, it is possible to request the supply with more types of oil, selectable according to what is defined in the following table.

The option is not available for gearboxes C70, C80, C90, and C100 in mounting positions V6 and V3.

LUBRICATION	Type	Designation	Producer
LU	PolyAlfaOlefine (PAO)	OMALA S4 GX 150	
LY	PolyAlfaOlefine (PAO)	OMALA S4 GX 220	
LV	PolyAlfaOlefine (PAO)	OMALA S4 GX 320	
LW	PolyAlfaOlefine (PAO)	OMALA S4 GX 460	
LH	PolyGlicole (PAG)	OMALA S4 WE 150	
LS	PolyGlicole (PAG)	OMALA S4 WE 220	
LO*	PolyGlicole (PAG)	OMALA S4 WE 320	
LK	PolyGlicole (PAG)	OMALA S4 WE 460	
LN ^[1]	Mineral Base EP	OMALA S2 G 150	
LZ ^[1]	Mineral Base EP	OMALA S2 G 220	
LI ^[1]	Mineral Base EP	OMALA S2 G 320	
LJ ^[1]	Mineral Base EP	OMALA S2 G 460	
LA	Food grade	KLUBERSYNTH UH1 6-150	
LB	Food grade	KLUBERSYNTH UH1 6-220	
LC	Food grade	KLUBERSYNTH UH1 6-320	
LD	Food grade	KLUBERSYNTH UH1 6-460	

* unless otherwise specified, the gearboxes C05, C12, C22, C32, C36 e C41 supplied with lubricant use OMALA S4 WE 320 oil.

[1] The use of mineral oil is permitted on gearmotors with service factor $f_s \geq 1.30$

SO

Gear units C05, C12, C22, C32, C36, C41, usually factory filled with oil, to be supplied unlubricated.

DL

The output shaft features a dual oil seal.

DV

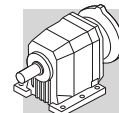
Dual oil seals on input shaft. (Only available for integral gearmotors).

VV

Fluoro elastomer oil seal on input shaft.

PV

Both input and output shafts feature Fluoro elastomer oil seals.



RB

Gear units C12, C22, C32, C36, C41, C51 and C61, usually supplied with standard values of angular backlash, are, in this case, supplied with reduced angular backlash values.

The following table specifies the corresponding figures of angular backlash.

(B 13)

		standard			RB	
C 05	i =	5.5 ; 9.3 ; 15.6 ; 27.1	6.7 ; 7.4 ; 11.2 ; 12.5 ; 18.9 ; 21.0 ; 32.8 44.7		—	
	φ [°]	34	29			
C 12	i =	2.8 6.2	7.6 66.2		2.8 6.2	7.6 66.2
	φ [°]	55	29		—	13
C 22	i =	2.7 6.1	7.1 261.0		2.7 6.1	7.1 261.0
	φ [°]	47	25		—	12
C 32	i =	2.9 6.3	7.2 274.7		2.9 6.3	7.2 274.7
	φ [°]	39	21		—	11
C 36	i =	2.7 5.8	6.8 19.0	22.1 848.5	2.7 5.8	6.8 848.5
	φ [°]	37	20	17	—	10
C 41 2	i =	2.7 6.0	6.4 44.8	—	2.7 6.0	6.4 44.8
	φ [°]	34	17	—	—	9
C 41 3/4	i =	—	—	28.5 855.5	—	28.5 855.5
	φ [°]	—	—	15	—	9
C 51 2	i =	2.6 5.6	7.0 57.0	—	2.6 5.6	7.0 57.0
	φ [°]	32	15	—	—	8
C 51 3/4	i =	—	—	21.8 884.9	—	21.8 884.9
	φ [°]	—	—	13	—	8
C 61 2	i =	2.8 6.0	6.7 38.0	—	2.8 6.0	6.7 38.0
	φ [°]	27	13	—	12	7
C 61 3/4	i =	—	—	26.8 796.1	—	26.8 796.1
	φ [°]	—	—	11	—	7
C 70	i =	4.6 34.7	41.3 1476		—	
	φ [°]	18	20			
C 80	i =	5.6 39.1	43.5 1481		—	
	φ [°]	16	18			
C 90	i =	5.2 35.1	39.4 1240		—	
	φ [°]	16	18			
C 100	i =	4.9 29.6	34.3 1081		—	
	φ [°]	14	16			

For the delivery timeframe contact the Bonfiglioli's sales network

IHB

For applications where the Rated torque M_{n2} - Torque demand M_{r2} gearbox's ratio:

$$\frac{M_{n2}}{M_{r2}} \leq 1.5$$

some gearboxes can be requested with bearings with increased load ratings by specifying the **IHB** option in the order.

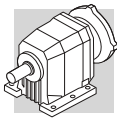
The **IHB** option is available for all gearboxes supplied with IEC motor adaptor: P160 - P180 - P200. It is advisable to contact the Bonfiglioli Technical Service to verify the application.

BP

Gearboxes, usually supplied with open breather plug, are supplied with a valve breather plug. The calibration of the valve can vary from 0,10 to 0,15 bar depending on the plug type. The valve opens at intervals and allows venting of internal pressure keeping out foreign bodies.

For option availability see chapter "Mounting positions and service plugs" of the Installation, Operation and Maintenance Manual (available at: www.bonfiglioli.com).

If needed contact Bonfiglioli Technical Service.



LONG TERM STOCK

In presence of Long Term Stock option the configured product is supplied without the standard lubricant oil but with an anticorrosive protective liquid to grant the integrity and full functionality of the gear unit in those cases where the unit will not be installed immediately but it has to be stocked for a long period of time (installation later than 6 months from delivery).

The warranty conditions are valid 12 months from commissioning (with commissioning within 24 months from delivery) or 24 months from delivery without commissioning.

After 2 years of stock, the unit with SL option needs to be checked by Bonfiglioli assistance center. In case of a product that is not properly preserved, an offer by Bonfiglioli will be issued for a complete restore.

With the recovery activity successfully concluded, the warranty conditions restart from the 12 months of commissioning (with commissioning within 24 months from restore date) or 24 months from restore date

Applicability of Long Term Stock option:

Gearbox size	Applicability of Long Term Stock option
C12 ... C41	Only when oil lubrication options are not active (SO option is active)
C51 ... C100	Only when oil lubrication options are not active (LO, LH, LS, LK, LA, LB, LC, LD)

The Long Term Stock option can be requested in 2 versions:



- **SLM Long Term Stock_Mineral Oil:** option having anti-corrosive protective oil compatible with all mineral-based oil lubricants listed in the "Installation, operation and maintenance" Bonfiglioli manual (MUM).

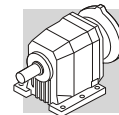
- **SLP Long Term Stock_Polyglycol Oil:** option having anti-corrosive protective oil compatible with all polyglycol-based oil lubricants listed in the "Installation, operation and maintenance" Bonfiglioli manual (MUM).

Note: only one version can be selected. SLM and SLP can't coexist.

When configuring a gear unit or gearmotor with Long Term Stock option, it is necessary to know the type of lubricating oil that will be used by the customer during the operating period (mineral or polyglycol oil). Before commissioning a Bonfiglioli product with Long Term Stock option, make sure that the lubricating oil filling activity takes place through the specific filling plug determined by the mounting position indicated on the plate.

With regards to gear units with lifetime lubrication (see table below), the quantity of lubricating oil to top up is not indicated in the relevant "installation, use and maintenance" Bonfiglioli manual. In this case, if the Long Term Stock option is active, it is therefore necessary to contact the Bonfiglioli assistance center to receive this information.

Gearbox size	Lubricant charge quantity
C12 ... C41	 BONFIGLIOLI TECHNICAL SERVICE
C51 ... C100	



SURFACE PROTECTION

When no specific protection class is requested, the painted (ferrous) surfaces of gearboxes are protected to at least corrosivity class C2 (UNI EN ISO 12944-2). For improved resistance to atmospheric corrosion, gearboxes can be delivered with **C3** and **C4** surface protection, obtained by painting the complete gearbox.

(B 14)

SURFACE PROTECTION	Typical environments	Maximum surface temperature	Corrosivity class according to UNI EN ISO 12944-2
C3	Urban and industrial environments with up to 100% relative humidity (medium air pollution)	120°C	C3
C4	Industrial areas, coastal areas, chemical plant, with up to 100% relative humidity (high air pollution)	120°C	C4

Gearboxes with optional protection to class **C3** or **C4** are available in a choice of colours. If no specific colour is requested (see the “PAINTING” option) gearboxes are finished in RAL 7042. Gearboxes can also be supplied with surface protection for corrosivity class **C5** according to UNI EN ISO 12944-2. Contact our Technical Service for further details.

PAINTING

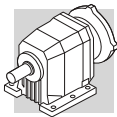
Gearboxes with optional protection to class C3 or C4 are available in the colours listed in the following table.

(B 15)

PAINTING	Colour	RAL number
RAL7042*	Traffic Grey A	7042
RAL5010	Gentian Blue	5010
RAL9005	Jet Black	9005
RAL9006	White Aluminium	9006
RAL9010	Pure White	9010
RAL7035	Light Grey	7035
RAL7001	Silver Grey	7001
RAL5015	Sky Blue	5015
RAL7037	Dusty Grey	7037
RAL5024	Pastel Blue	5024

* Gearboxes are supplied in this standard colour if no other colour is specified.

NOTE – “PAINTING” options can only be specified in conjunction with “SURFACE PROTECTION” options.



CERTIFICATES

AC - Certificate of compliance

The document certifies the compliance of the product with the purchase order and the construction in conformity with the applicable procedures of the Bonfiglioli Quality System.

CC - Inspection certificate

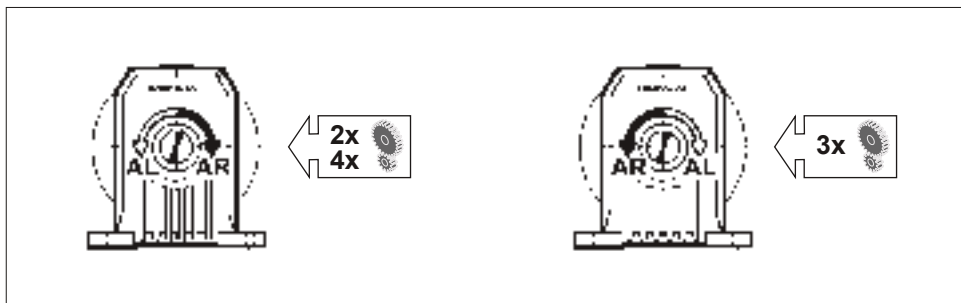
The document entails checking on order compliance, the visual inspection of external conditions and of mating dimensions. Checking on main functional parameters in unloaded conditions is also performed along with oil seal proofing, both in static and in running conditions. Units inspected are sampled within the shipping batch and marked individually.

21.2 Motor options

AL, AR

A backstop device on the motor itself, as described in the electric motors section of this catalogue, is available for gearmotors with integral M, ME or MX Series motors. The following table shows the direction of free rotation of the gearbox, on the basis of which the correct option must be selected.

(B 17)



For further information on options, consult the electric motors section.

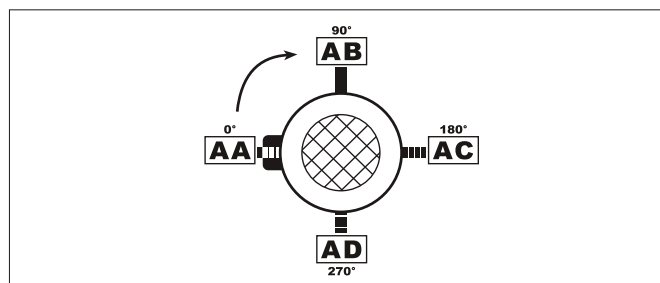
22 MOUNTING POSITION AND TERMINAL BOX ORIENTATION

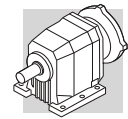
Location of motor terminal box can be specified by viewing the motor from the fan side; standard location is shown in black (W).

Angular position of the brake release lever.

Unless otherwise specified, brake motors have the manual device side located, 90° apart from terminal box. Different angles can be specified through the relevant options available.

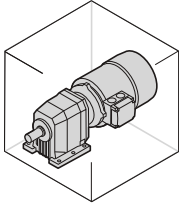
(B 16)



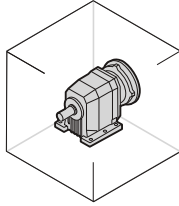


C ... P

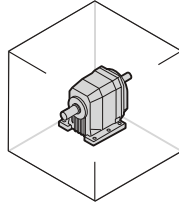
B3



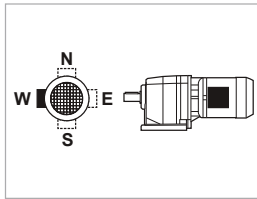
_S



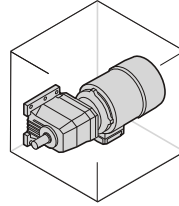
_P(IEC) _SK / _SC



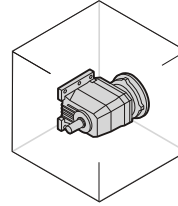
_HS



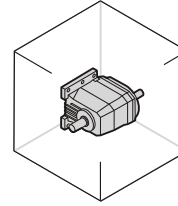
B6



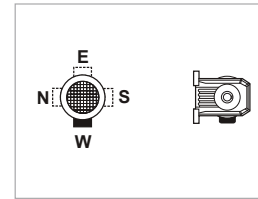
_S



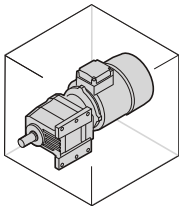
_P(IEC) _SK / _SC



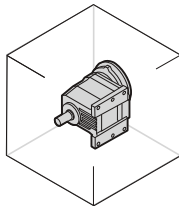
_HS



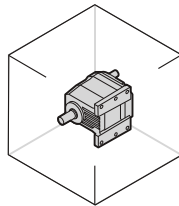
B7



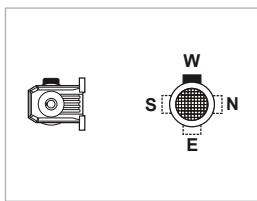
_S



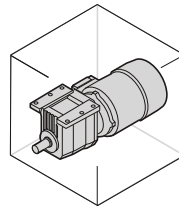
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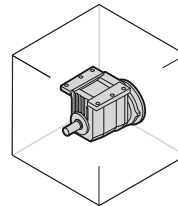
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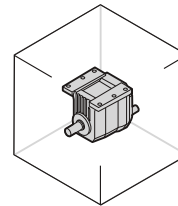
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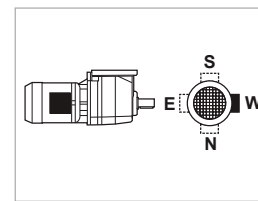
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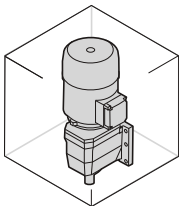
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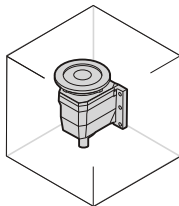
_HS



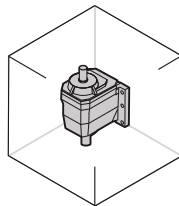
V5



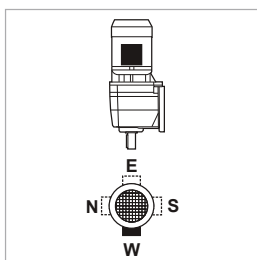
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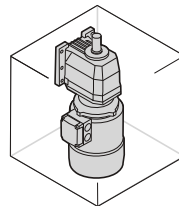
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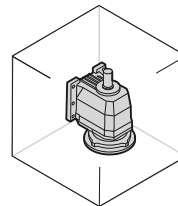
_HS



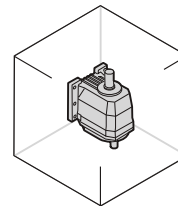
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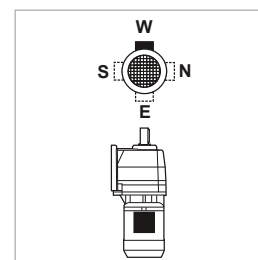
_S

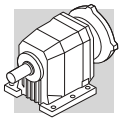


_P(IEC) _SK / _SC



_HS



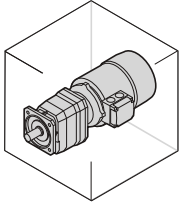


C ... F

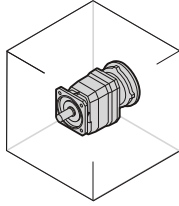
C ... U

C ... UF

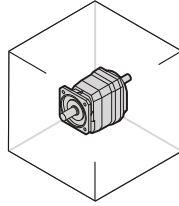
B5



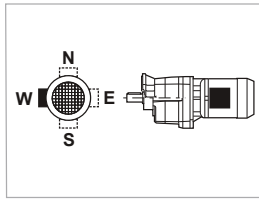
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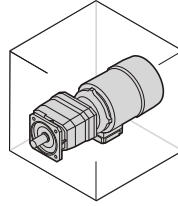
_P(IEC) _SK / _SC



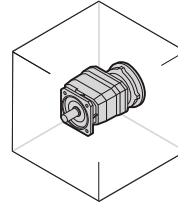
_HS



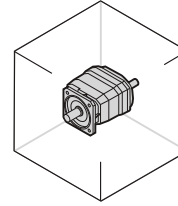
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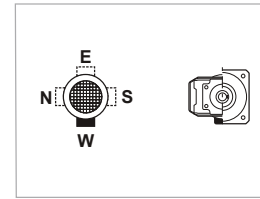
_S



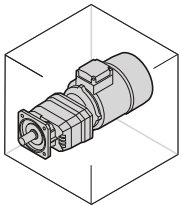
_P(IEC) _SK / _SC



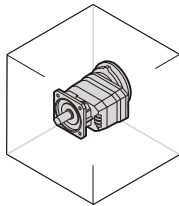
_HS



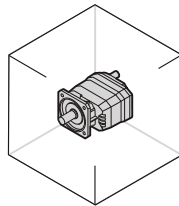
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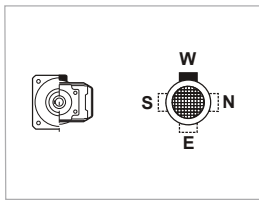
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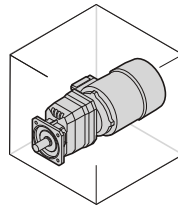
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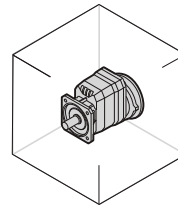
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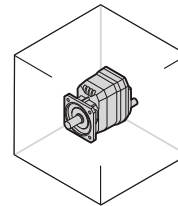
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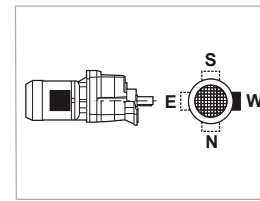
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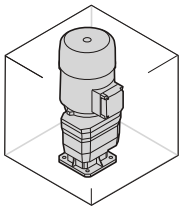
_P(IEC) _SK / _SC



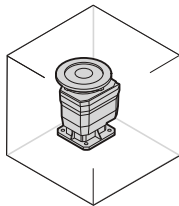
_HS



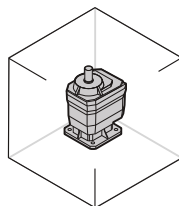
V1



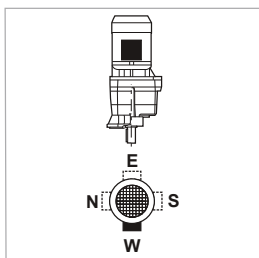
_S



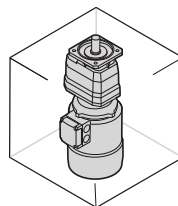
_P(IEC) _SK / _SC



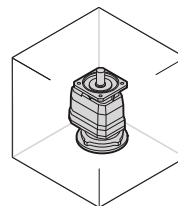
_HS



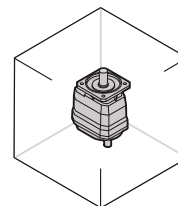
V3



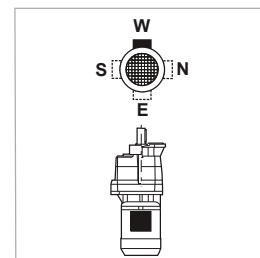
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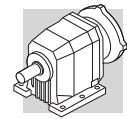


_P(IEC) _SK / _SC



_HS





23 OVERHUNG LOADS

External transmissions keyed onto input and/or output shaft generate loads that act radially onto same shaft.

Resulting shaft loading must be compatible with both the bearing and the shaft capacity. Namely shaft loading (R_{c1} for input shaft, R_{c2} for output shaft), must be equal or lower than admissible overhung load capacity for shaft under study (R_{n1} for input shaft, R_{n2} for output shaft). OHL capability listed in the rating chart section.

In the formulas given below, index (1) applies to parameters relating to input shaft, whereas index (2) refers to output shaft.

The load generated by an external transmission can be calculated with close approximation by the following equations:

$$R_{c1} [N] = \frac{2000 \cdot M_1 [Nm] \cdot K_r}{d [mm]} \quad ; \quad R_{c2} [N] = \frac{2000 \cdot M_2 [Nm] \cdot K_r}{d [mm]} \quad (15)$$

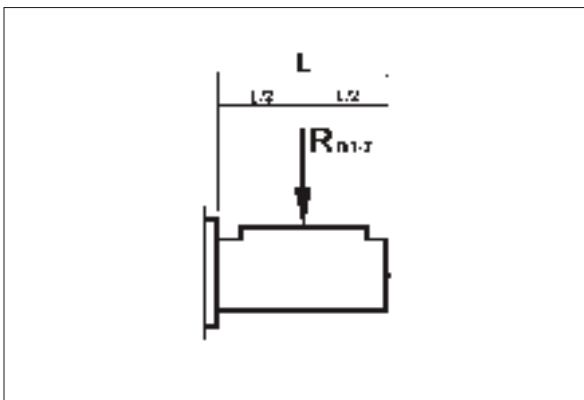
(B 18)

M_1 [Nm]	Torque applied to input shaft
M_2 [Nm]	Torque drawn at output shaft
d [mm]	Pitch diameter of element keyed onto shaft
$K_r = 1$	Chain transmission

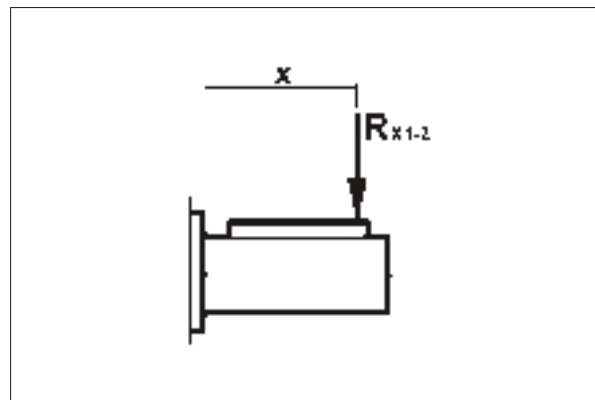
$K_r = 1,25$	Gear transmission
$K_r = 1,5$	V-belt transmission
$K_r = 2,0$	Flat belt transmission

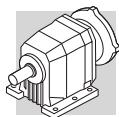
Verification of OHL capability varies depending on whether load applies at midpoint of shaft or it is shifted further out:

(B 19)



(B 20)





a) Load applied at midpoint of shaft, tab. (B19)

A comparison of shaft loading with catalogue OHL ratings should verify the following condition:

$$R_{c1} \leq R_{n1} \quad [\text{input shaft}]$$

or

$$R_{c2} \leq R_{n2} \quad [\text{output shaft}]$$

b) Load off the midpoint tab. (B20)

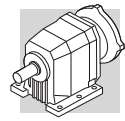
When load is shifted at an “x” distance from shaft shoulder, permissible load must be calculated for that distance.

Revised permissible overhung loads R_{x1} (input) and R_{x2} (output) are calculated respectively from original rated values R_{n1} and R_{n2} through factor:

$$\frac{a}{b+x} \quad (16)$$

(B 21)

	Load location factors					
	Output shaft			Input shaft		
	a	b	c	a	b	c
C 05 2	38	18	250	—	—	—
C 12 2	46	26	450	21	1	300
C 22 2	53	28	550	40	20	350
C 22 3	53	28	550	21	1	300
C 32 2	60.5	30.5	750	41.5	21.5	350
C 32 3	60.5	30.5	750	21	1	300
C 36 2 - C 36 3	69.5	34.5	800	51.5	26.5	450
C 36 4	69.5	34.5	800	21	1	300
C 41 2 - C 41 3	69.5	34.5	850	51.5	26.5	450
C 41 4	69.5	34.5	850	40	20	350
C 51 2 - C 51 3	76.5	36.5	900	51.5	26.5	450
C 51 4	76.5	36.5	900	41.5	21.5	350
C 61 2 - C 61 3	95.5	45.5	1000	57.5	27.5	450
C 61 4	95.5	45.5	1000	51.5	26.5	450
C 70 2 - C 70 3	114	54	1200	86	31	1000
C 70 4	114	54	1200	49.5	24.5	450
C 80 2 - C 80 3	131	61	1500	86	31	1000
C 80 4	131	61	1500	49.5	24.5	450
C 90 2 - C 90 3	161	76	2000	116	46	1400
C 90 4	161	76	2000	49.5	24.5	450
C 100 2 - C 100 3	163.5	58.5	2500	116	46	1400
C 100 4	163.5	58.5	2500	49.5	24.5	450



Verification procedure is described here after.

INPUT SHAFT

1. Calculate:

$$R_{x1} = R_{n1} \cdot \frac{a}{b+x} \quad (17)$$

N.B. Subject to condition:

$$\frac{L}{2} \leq x \leq c \quad (18)$$

Finally, the following condition must be verified:

$$R_{c1} \leq R_{x1} \quad (19)$$

OUTPUT SHAFT

1. Calculate:

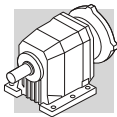
$$R_{x2} = R_{n2} \cdot \frac{a}{b+x} \quad (20)$$

N.B. Subject to condition:

$$\frac{L}{2} \leq x \leq c \quad (21)$$

Finally, the following condition must be verified:

$$R_{c2} \leq R_{x2} \quad (22)$$



24 THRUST LOADS, A_{n1} , A_{n2}

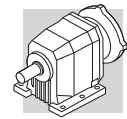
Permissible thrust loads on input [A_{n1}] and output [A_{n2}] shafts are obtained from the radial loading for the shaft under consideration [R_{n1}] and [R_{n2}] through the following equation:

$$\begin{aligned} A_{n1} &= R_{n1} \cdot 0.2 \\ A_{n2} &= R_{n2} \cdot 0.2 \end{aligned} \quad (23)$$

The thrust loads calculated through these formulas apply to thrust forces occurring at the same time as rated radial loads.

In the only case that no overhung load acts on the shaft the value of the admissible thrust load [A_n] amounts to 50% of rated OHL [R_n] on same shaft.



Where thrust loads exceed permissible value or largely prevail over radial loads, contact Bonfiglioli Riduttori for an in-depth analysis of the application.

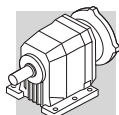


25 GEARMOTOR RATING CHARTS

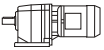





The selection of motors takes into account the requirements of Regulation 2009/125/CE (see section M of this catalogue). When the motor rated power is below 0,12kW, **BN/M** motors can be provided. Starting from 1st July 2021 the regulation 2009/125/CE will apply also to motors equipped with brake, and 8 poles motors.

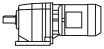




0.09 kW								
n_2 min ⁻¹	M_2 Nm	S	i	R_{n2} N	 IE1	 IE1		
1.0	760	0.8	855.5	7000	C414_855.5 S05 M05A6	158	C414_855.5 P63 BN63A6	159
1.2	654	0.9	735.9	7000	C414_735.9 S05 M05A6	158	C414_735.9 P63 BN63A6	159
1.3	597	1.0	671.3	7000	C414_671.3 S05 M05A6	158	C414_671.3 P63 BN63A6	159
1.5	511	0.9	574.7	6500	C364_574.7 S05 M05A6	154	C364_574.7 P63 BN63A6	159
1.6	483	1.2	543.5	7000	C414_543.5 S05 M05A6	158	C414_543.5 P63 BN63A6	159
1.9	407	1.1	458.4	6500	C364_458.4 S05 M05A6	154	C364_458.4 P63 BN63A6	159
2.0	400	1.5	450.2	7000	C414_450.2 S05 M05A6	158	C414_450.2 P63 BN63A6	159
2.6	301	1.5	341.7	6500	C364_341.7 S05 M05A6	154	C364_341.7 P63 BN63A6	159
2.6	296	2.0	333.4	7000	C414_333.4 S05 M05A6	158	C414_333.4 P63 BN63A6	159
3.2	250	1.1	274.7	5500	C323_274.7 S05 M05A6	150	C323_274.7 P63 BN63A6	151
3.9	205	1.0	225.8	5000	C223_225.8 S05 M05A6	146	C223_225.8 P63 BN63A6	147
4.1	196	1.5	215.6	5500	C323_215.6 S05 M05A6	150	C323_215.6 P63 BN63A6	151
4.9	162	1.2	178.5	5000	C223_178.5 S05 M05A6	146	C223_178.5 P63 BN63A6	147
5.8	138	1.5	151.7	5000	C223_151.7 S05 M05A6	146	C223_151.7 P63 BN63A6	147
5.9	135	2.2	148.4	5500	C323_148.4 S05 M05A6	150	C323_148.4 P63 BN63A6	151
7.2	111	1.8	122.2	5000	C223_122.2 S05 M05A6	146	C223_122.2 P63 BN63A6	147
7.2	111	2.7	122.4	5500	C323_122.4 S05 M05A6	150	C323_122.4 P63 BN63A6	151
7.9	102	2.0	112.0	5000	C223_112.0 S05 M05A6	146	C223_112.0 P63 BN63A6	147
8.8	91	2.2	100.2	5000	C223_100.2 S05 M05A6	146	C223_100.2 P63 BN63A6	147
10.7	75	2.7	82.6	5000	C223_82.6 S05 M05A6	146	C223_82.6 P63 BN63A6	147
13.3	61	1.5	66.2	2000	C122_66.2 S05 M05A6	142	C122_66.2 P63 BN63A6	143
16.0	51	1.8	55.2	2000	C122_55.2 S05 M05A6	142	C122_55.2 P63 BN63A6	143
18.5	44	2.0	47.6	2000	C122_47.6 S05 M05A6	142	C122_47.6 P63 BN63A6	143
19.7	42	1.1	44.7	1170	C052_44.7 S05 M05A6	141		
20.8	39	2.3	42.3	2000	C122_42.3 S05 M05A6	142	C122_42.3 P63 BN63A6	143
21.8	38	1.2	40.3	1150	C052_40.3 S05 M05A6	141		
23.8	34	2.6	37.0	2000	C122_37.0 S05 M05A6	142	C122_37.0 P63 BN63A6	143
24.2	34	1.3	36.4	1140	C052_36.4 S05 M05A6	141		
26.8	31	1.5	32.8	1110	C052_32.8 S05 M05A6	141		
26.8	31	2.9	32.8	2000	C122_32.8 S05 M05A6	142	C122_32.8 P63 BN63A6	143
30	27	1.7	44.7	1170	C052_44.7 S0 M0B4	141		
33	25	1.8	40.3	990	C052_40.3 S0 M0B4	141		
37	22	2.0	36.4	980	C052_36.4 S0 M0B4	141		
41	20	2.3	32.8	960	C052_32.8 S0 M0B4	141		
42	19	2.3	21.0	1020	C052_21.0 S05 M05A6	141		

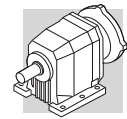


0.09 kW

n ₂ min-1	M ₂ Nm	S	i	R _{n2} N	IE1		IEC		
									
50	16	2.7	27.1	930	C052_27.1 S0 M0B4	141			
56	15	3.1	15.6	950	C052_15.6 S05 M05A6	141			
66	12	6.5	13.4	2000	C122_13.4 S05 M05A6	142	C122_13.4 P63 BN63A6		143
71	12	3.9	12.5	900	C052_12.5 S05 M05A6	141			
74	11	7.0	11.9	2000	C122_11.9 S05 M05A6	142	C122_11.9 P63 BN63A6		143
78	10	4.3	11.2	880	C052_11.2 S05 M05A6	141			
88	9	7.7	10.1	2000	C122_10.1 S05 M05A6	142	C122_10.1 P63 BN63A6		143
95	9	5.2	9.3	830	C052_9.3 S05 M05A6	141			
100	8	8.4	8.8	2000	C122_8.8 S05 M05A6	142	C122_8.8 P63 BN63A6		143
119	7	6.5	7.4	780	C052_7.4 S05 M05A6	141			
132	6	7.3	6.7	760	C052_6.7 S05 M05A6	141			
146	6	10.9	6.2	1960	C122_6.2 S05 M05A6	142	C122_6.2 P63 BN63A6		143
157	5	11.1	5.6	1850	C122_5.6 S05 M05A6	142	C122_5.6 P63 BN63A6		143
159	5	8.8	5.5	720	C052_5.5 S05 M05A6	141			
187	4	12.6	4.9	1810	C122_4.9 S05 M05A6	142	C122_4.9 P63 BN63A6		143
205	4	13.0	4.3	1730	C122_4.3 S05 M05A6	142	C122_4.3 P63 BN63A6		143
249	3	15.0	3.7	1650	C122_3.7 S05 M05A6	142	C122_3.7 P63 BN63A6		143
275	3	15.4	3.2	1580	C122_3.2 S05 M05A6	142	C122_3.2 P63 BN63A6		143
329	2	17.3	2.8	1510	C122_2.8 S05 M05A6	142	C122_2.8 P63 BN63A6		143

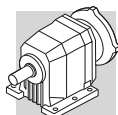
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n ₂ min-1	M ₂ Nm	S	i	R _{n2} N	IE1		IE2		IEC		
											
0.98	1061	0.9	884.9	10000					C514_884.9 P63 BN63B6	163	
1.2	860	1.2	717.7	10000					C514_717.7 P63 BN63B6	163	
1.5	681	0.9	855.5	7000	C414_855.5 S05 M05A4	C414_855.5 S05 ME05A4	158	C414_855.5 P63 BN63A4	C414_855.5 P63 BE63A4	159	
1.6	643	1.6	808.0	10000					C514_808.0 P63 BN63A4	C514_808.0 P63 BE63A4	163
1.7	621	1.0	780.4	7000	C414_780.4 S05 M05A4	C414_780.4 S05 ME05A4	158	C414_780.4 P63 BN63A4	C414_780.4 P63 BE63A4	159	
1.8	586	1.0	735.9	7000	C414_735.9 S05 M05A4	C414_735.9 S05 ME05A4	158	C414_735.9 P63 BN63A4	C414_735.9 P63 BE63A4	159	
2.0	534	1.1	671.3	7000	C414_671.3 S05 M05A4	C414_671.3 S05 ME05A4	158	C414_671.3 P63 BN63A4	C414_671.3 P63 BE63A4	159	
2.0	509	0.9	665.9	6500	C364_665.9 S05 M05A4	C364_665.9 S05 ME05A4	154	C364_665.9 P63 BN63A4	C364_665.9 P63 BE63A4	159	
2.2	474	1.3	595.8	7000	C414_595.8 S05 M05A4	C414_595.8 S05 ME05A4	158	C414_595.8 P63 BN63A4	C414_595.8 P63 BE63A4	159	
2.3	440	1.0	574.7	6500	C364_574.7 S05 M05A4	C364_574.7 S05 ME05A4	154	C364_574.7 P63 BN63A4	C364_574.7 P63 BE63A4	159	
2.4	433	1.4	543.5	7000	C414_543.5 S05 M05A4	C414_543.5 S05 ME05A4	158	C414_543.5 P63 BN63A4	C414_543.5 P63 BE63A4	159	
2.6	396	1.1	517.2	6500	C364_517.2 S05 M05A4	C364_517.2 S05 ME05A4	154	C364_517.2 P63 BN63A4	C364_517.2 P63 BE63A4	159	
2.7	393	1.5	493.5	7000	C414_493.5 S05 M05A4	C414_493.5 S05 ME05A4	158	C414_493.5 P63 BN63A4	C414_493.5 P63 BE63A4	159	
2.9	351	1.3	458.4	6500	C364_458.4 S05 M05A4	C364_458.4 S05 ME05A4	154	C364_458.4 P63 BN63A4	C364_458.4 P63 BE63A4	159	
2.9	358	1.7	450.2	7000	C414_450.2 S05 M05A4	C414_450.2 S05 ME05A4	158	C414_450.2 P63 BN63A4	C414_450.2 P63 BE63A4	159	
3.1	333	1.8	418.5	7000	C414_418.5 S05 M05A4	C414_418.5 S05 ME05A4	158	C414_418.5 P63 BN63A4	C414_418.5 P63 BE63A4	159	
3.2	321	1.4	420.2	6500	C364_420.2 S05 M05A4	C364_420.2 S05 ME05A4	154	C364_420.2 P63 BN63A4	C364_420.2 P63 BE63A4	159	
3.4	304	2.0	381.8	7000	C414_381.8 S05 M05A4	C414_381.8 S05 ME05A4	158	C414_381.8 P63 BN63A4	C414_381.8 P63 BE63A4	159	
3.6	289	1.6	377.9	6500	C364_377.9 S05 M05A4	C364_377.9 S05 ME05A4	154	C364_377.9 P63 BN63A4	C364_377.9 P63 BE63A4	159	
3.9	265	2.3	333.4	7000	C414_333.4 S05 M05A4	C414_333.4 S05 ME05A4	158	C414_333.4 P63 BN63A4	C414_333.4 P63 BE63A4	159	
4.0	261	1.7	341.7	6500	C364_341.7 S05 M05A4	C364_341.7 S05 ME05A4	154	C364_341.7 P63 BN63A4	C364_341.7 P63 BE63A4	159	
4.2	244	1.8	318.9	6500	C364_318.9 S05 M05A4	C364_318.9 S05 ME05A4	154	C364_318.9 P63 BN63A4	C364_318.9 P63 BE63A4	159	
4.3	242	2.5	304.2	7000	C414_304.2 S05 M05A4	C414_304.2 S05 ME05A4	158	C414_304.2 P63 BN63A4	C414_304.2 P63 BE63A4	159	
4.6	223	2.0	290.9	6500	C364_290.9 S05 M05A4	C364_290.9 S05 ME05A4	154	C364_290.9 P63 BN63A4	C364_290.9 P63 BE63A4	159	
4.9	219	0.9	178.5	5000	C223_178.5 S05 M05B6		146	C223_178.5 P63 BN63B6		147	

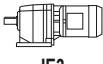
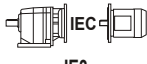


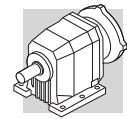
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n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE1	IE2		IE1	IE2	
4.9	217	1.2	274.7	5500	C323_274.7 S05 M05A4	C323_274.7 S05 ME05A4	150	C323_274.7 P63 BN63A4	C323_274.7 P63 BE63A4	151
5.0	209	2.9	263.0	7000	C414_263.0 S05 M05A4	C414_263.0 S05 ME05A4	158	C414_263.0 P63 BN63A4	C414_263.0 P63 BE63A4	159
5.3	195	2.3	255.0	6500	C364_255.0 S05 M05A4	C364_255.0 S05 ME05A4	154	C364_255.0 P63 BN63A4	C364_255.0 P63 BE63A4	159
5.5	193	1.3	244.2	5500	C323_244.2 S05 M05A4	C323_244.2 S05 ME05A4	150	C323_244.2 P63 BN63A4	C323_244.2 P63 BE63A4	151
5.8	177	2.5	230.9	6500	C364_230.9 S05 M05A4	C364_230.9 S05 ME05A4	154	C364_230.9 P63 BN63A4	C364_230.9 P63 BE63A4	159
6.0	178	1.0	225.8	5000	C223_225.8 S05 M05A4	C223_225.8 S05 ME05A4	146	C223_225.8 P63 BN63A4	C223_225.8 P63 BE63A4	147
6.3	170	1.8	215.6	5500	C323_215.6 S05 M05A4	C323_215.6 S05 ME05A4	150	C323_215.6 P63 BN63A4	C323_215.6 P63 BE63A4	151
6.5	163	2.8	206.4	6500	C363_206.4 S05 M05A4	C363_206.4 S05 ME05A4	154	C363_206.4 P63 BN63A4	C363_206.4 P63 BE63A4	155
6.7	159	1.2	200.7	5000	C223_200.7 S05 M05A4	C223_200.7 S05 ME05A4	146	C223_200.7 P63 BN63A4	C223_200.7 P63 BE63A4	147
7.3	147	2.0	186.0	5500	C323_186.0 S05 M05A4	C323_186.0 S05 ME05A4	150	C323_186.0 P63 BN63A4	C323_186.0 P63 BE63A4	151
7.4	145	3.1	183.5	6500	C363_183.5 S05 M05A4	C363_183.5 S05 ME05A4	154	C363_183.5 P63 BN63A4	C363_183.5 P63 BE63A4	155
7.6	141	1.4	178.5	5000	C223_178.5 S05 M05A4	C223_178.5 S05 ME05A4	146	C223_178.5 P63 BN63A4	C223_178.5 P63 BE63A4	147
8.1	132	2.3	167.4	5500	C323_167.4 S05 M05A4	C323_167.4 S05 ME05A4	150	C323_167.4 P63 BN63A4	C323_167.4 P63 BE63A4	151
8.9	120	1.7	151.7	5000	C223_151.7 S05 M05A4	C223_151.7 S05 ME05A4	146	C223_151.7 P63 BN63A4	C223_151.7 P63 BE63A4	147
9.1	117	2.6	148.4	5500	C323_148.4 S05 M05A4	C323_148.4 S05 ME05A4	150	C323_148.4 P63 BN63A4	C323_148.4 P63 BE63A4	151
9.9	108	1.9	136.5	5000	C223_136.5 S05 M05A4	C223_136.5 S05 ME05A4	146	C223_136.5 P63 BN63A4	C223_136.5 P63 BE63A4	147
9.9	108	2.8	136.0	5500	C323_136.0 S05 M05A4	C323_136.0 S05 ME05A4	150	C323_136.0 P63 BN63A4	C323_136.0 P63 BE63A4	151
11.0	97	3.1	122.4	5500	C323_122.4 S05 M05A4	C323_122.4 S05 ME05A4	150	C323_122.4 P63 BN63A4	C323_122.4 P63 BE63A4	151
11.0	97	2.1	122.2	5000	C223_122.2 S05 M05A4	C223_122.2 S05 ME05A4	146	C223_122.2 P63 BN63A4	C223_122.2 P63 BE63A4	147
12.1	89	2.3	112.0	5000	C223_112.0 S05 M05A4	C223_112.0 S05 ME05A4	146	C223_112.0 P63 BN63A4	C223_112.0 P63 BE63A4	147
13.5	79	2.5	100.2	5000	C223_100.2 S05 M05A4	C223_100.2 S05 ME05A4	146	C223_100.2 P63 BN63A4	C223_100.2 P63 BE63A4	147
15.3	70	2.9	88.5	5000	C223_88.5 S05 M05A4	C223_88.5 S05 ME05A4	146	C223_88.5 P63 BN63A4	C223_88.5 P63 BE63A4	147
16.3	65	3.1	82.6	5000	C223_82.6 S05 M05A4	C223_82.6 S05 ME05A4	146	C223_82.6 P63 BN63A4	C223_82.6 P63 BE63A4	147
20.4	53	1.7	66.2	2000	C122_66.2 S05 M05A4	C122_66.2 S05 ME05A4	142	C122_66.2 P63 BN63A4	C122_66.2 P63 BE63A4	143
21.3	51	2.5	63.3	5000	C222_63.3 S05 M05A4	C222_63.3 S05 ME05A4	146	C222_63.3 P63 BN63A4	C222_63.3 P63 BE63A4	147
24.5	45	2.0	55.2	2000	C122_55.2 S05 M05A4	C122_55.2 S05 ME05A4	142	C122_55.2 P63 BN63A4	C122_55.2 P63 BE63A4	143
24.7	44	3.5	54.7	5000	C222_54.7 S05 M05A4	C222_54.7 S05 ME05A4	146	C222_54.7 P63 BN63A4	C222_54.7 P63 BE63A4	147
28.4	38	2.3	47.6	2000	C122_47.6 S05 M05A4	C122_47.6 S05 ME05A4	142	C122_47.6 P63 BN63A4	C122_47.6 P63 BE63A4	143
29.3	37	1.2	44.7	1010	C052_44.7 S05 M05A4	C052_44.7 S05 ME05A4	141			
32	34	2.6	42.3	2000	C122_42.3 S05 M05A4	C122_42.3 S05 ME05A4	142	C122_42.3 P63 BN63A4	C122_42.3 P63 BE63A4	143
33	34	1.3	40.3	990	C052_40.3 S05 M05A4	C052_40.3 S05 ME05A4	141			
36	30	1.5	36.4	980	C052_36.4 S05 M05A4	C052_36.4 S05 ME05A4	141			
36	30	3.0	37.0	2000	C122_37.0 S05 M05A4	C122_37.0 S05 ME05A4	142	C122_37.0 P63 BN63A4	C122_37.0 P63 BE63A4	143
40	27	1.6	32.8	960	C052_32.8 S05 M05A4	C052_32.8 S05 ME05A4	141			
41	26	3.4	32.8	2000	C122_32.8 S05 M05A4	C122_32.8 S05 ME05A4	142	C122_32.8 P63 BN63A4	C122_32.8 P63 BE63A4	143
48	23	2.0	27.1	930	C052_27.1 S05 M05A4	C052_27.1 S05 ME05A4	141			
56	20	2.3	15.6	900	C052_15.6 S05 M05B6		141			
62	18	2.6	21.0	890	C052_21.0 S05 M05A4	C052_21.0 S05 ME05A4	141			
69	16	2.5	18.9	860	C052_18.9 S05 M05A4	C052_18.9 S05 ME05A4	141			
78	14	3.2	11.2	850	C052_11.2 S05 M05B6		141			
84	13	3.1	15.6	820	C052_15.6 S05 M05A4	C052_15.6 S05 ME05A4	141			
105	10	3.8	12.5	780	C052_12.5 S05 M05A4	C052_12.5 S05 ME05A4	141			
117	9	4.3	11.2	760	C052_11.2 S05 M05A4	C052_11.2 S05 ME05A4	141			
130	8	5.4	6.7	740	C052_6.7 S05 M05B6		141			
141	8	3.9	9.3	720	C052_9.3 S05 M05A4	C052_9.3 S05 ME05A4	141			
177	6	4.8	7.4	680	C052_7.4 S05 M05A4	C052_7.4 S05 ME05A4	141			
196	6	5.4	6.7	660	C052_6.7 S05 M05A4	C052_6.7 S05 ME05A4	141			

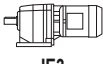
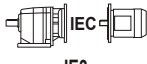


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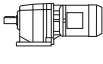

n ₂ min-1	M ₂ Nm	S	i	R _{n2} N	 IE3	 IEC IE3
0.98	1061	0.9	884.9	10000		
1.2	860	1.2	717.7	10000		
1.5	681	0.9	855.5	7000	C414_855.5 S05 MXN05MA4	158 C414_855.5 P63 BXN63MA4
1.6	643	1.6	808.0	10000		C514_808.0 P63 BXN63MA4
1.7	621	1.0	780.4	7000	C414_780.4 S05 MXN05MA4	158 C414_780.4 P63 BXN63MA4
1.8	586	1.0	735.9	7000	C414_735.9 S05 MXN05MA4	158 C414_735.9 P63 BXN63MA4
2.0	534	1.1	671.3	7000	C414_671.3 S05 MXN05MA4	158 C414_671.3 P63 BXN63MA4
2.0	509	0.9	665.9	6500	C364_665.9 S05 MXN05MA4	154 C364_665.9 P63 BXN63MA4
2.2	474	1.3	595.8	7000	C414_595.8 S05 MXN05MA4	158 C414_595.8 P63 BXN63MA4
2.3	440	1.0	574.7	6500	C364_574.7 S05 MXN05MA4	154 C364_574.7 P63 BXN63MA4
2.4	433	1.4	543.5	7000	C414_543.5 S05 MXN05MA4	158 C414_543.5 P63 BXN63MA4
2.6	396	1.1	517.2	6500	C364_517.2 S05 MXN05MA4	154 C364_517.2 P63 BXN63MA4
2.7	393	1.5	493.5	7000	C414_493.5 S05 MXN05MA4	158 C414_493.5 P63 BXN63MA4
2.9	351	1.3	458.4	6500	C364_458.4 S05 MXN05MA4	154 C364_458.4 P63 BXN63MA4
2.9	358	1.7	450.2	7000	C414_450.2 S05 MXN05MA4	158 C414_450.2 P63 BXN63MA4
3.1	333	1.8	418.5	7000	C414_418.5 S05 MXN05MA4	158 C414_418.5 P63 BXN63MA4
3.2	321	1.4	420.2	6500	C364_420.2 S05 MXN05MA4	154 C364_420.2 P63 BXN63MA4
3.4	304	2.0	381.8	7000	C414_381.8 S05 MXN05MA4	158 C414_381.8 P63 BXN63MA4
3.6	289	1.6	377.9	6500	C364_377.9 S05 MXN05MA4	154 C364_377.9 P63 BXN63MA4
3.9	265	2.3	333.4	7000	C414_333.4 S05 MXN05MA4	158 C414_333.4 P63 BXN63MA4
4.0	261	1.7	341.7	6500	C364_341.7 S05 MXN05MA4	154 C364_341.7 P63 BXN63MA4
4.2	244	1.8	318.9	6500	C364_318.9 S05 MXN05MA4	154 C364_318.9 P63 BXN63MA4
4.3	242	2.5	304.2	7000	C414_304.2 S05 MXN05MA4	158 C414_304.2 P63 BXN63MA4
4.6	223	2.0	290.9	6500	C364_290.9 S05 MXN05MA4	154 C364_290.9 P63 BXN63MA4
4.9	219	0.9	178.5	5000		
4.9	217	1.2	274.7	5500	C323_274.7 S05 MXN05MA4	150 C323_274.7 P63 BXN63MA4
5.0	209	2.9	263.0	7000	C414_263.0 S05 MXN05MA4	158 C414_263.0 P63 BXN63MA4
5.3	195	2.3	255.0	6500	C364_255.0 S05 MXN05MA4	154 C364_255.0 P63 BXN63MA4
5.5	193	1.3	244.2	5500	C323_244.2 S05 MXN05MA4	150 C323_244.2 P63 BXN63MA4
5.8	177	2.5	230.9	6500	C364_230.9 S05 MXN05MA4	154 C364_230.9 P63 BXN63MA4
6.0	178	1.0	225.8	5000	C223_225.8 S05 MXN05MA4	146 C223_225.8 P63 BXN63MA4
6.3	170	1.8	215.6	5500	C323_215.6 S05 MXN05MA4	150 C323_215.6 P63 BXN63MA4
6.5	163	2.8	206.4	6500		C363_206.4 P63 BXN63MA4
6.7	159	1.2	200.7	5000	C223_200.7 S05 MXN05MA4	146 C223_200.7 P63 BXN63MA4
7.3	147	2.0	186.0	5500	C323_186.0 S05 MXN05MA4	150 C323_186.0 P63 BXN63MA4
7.4	145	3.1	183.5	6500		C363_183.5 P63 BXN63MA4
7.6	141	1.4	178.5	5000	C223_178.5 S05 MXN05MA4	146 C223_178.5 P63 BXN63MA4
8.1	132	2.3	167.4	5500	C323_167.4 S05 MXN05MA4	150 C323_167.4 P63 BXN63MA4
8.9	120	1.7	151.7	5000	C223_151.7 S05 MXN05MA4	146 C223_151.7 P63 BXN63MA4
9.1	117	2.6	148.4	5500	C323_148.4 S05 MXN05MA4	150 C323_148.4 P63 BXN63MA4
9.9	108	1.9	136.5	5000	C223_136.5 S05 MXN05MA4	146 C223_136.5 P63 BXN63MA4
9.9	108	2.8	136.0	5500	C323_136.0 S05 MXN05MA4	150 C323_136.0 P63 BXN63MA4
11.0	97	3.1	122.4	5500	C323_122.4 S05 MXN05MA4	150 C323_122.4 P63 BXN63MA4
11.0	97	2.1	122.2	5000	C223_122.2 S05 MXN05MA4	146 C223_122.2 P63 BXN63MA4
12.1	89	2.3	112.0	5000	C223_112.0 S05 MXN05MA4	146 C223_112.0 P63 BXN63MA4
13.5	79	2.5	100.2	5000	C223_100.2 S05 MXN05MA4	146 C223_100.2 P63 BXN63MA4
15.3	70	2.9	88.5	5000	C223_88.5 S05 MXN05MA4	146 C223_88.5 P63 BXN63MA4
16.3	65	3.1	82.6	5000	C223_82.6 S05 MXN05MA4	146 C223_82.6 P63 BXN63MA4
20.4	53	1.7	66.2	2000	C122_66.2 S05 MXN05MA4	142 C122_66.2 P63 BXN63MA4
21.3	51	2.5	63.3	5000	C222_63.3 S05 MXN05MA4	146 C222_63.3 P63 BXN63MA4
24.5	45	2.0	55.2	2000	C122_55.2 S05 MXN05MA4	142 C122_55.2 P63 BXN63MA4

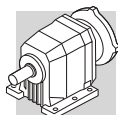


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n ₂ min-1	M ₂ Nm	S	i	R _{n2} N	 IE3		 IE3	
24.7	44	3.5	54.7	5000	C222_54.7 S05 MXN05MA4	146	C222_54.7 P63 BXN63MA4	147
28.4	38	2.3	47.6	2000	C122_47.6 S05 MXN05MA4	142	C122_47.6 P63 BXN63MA4	143
29.3	37	1.2	44.7	1010				
32	34	2.6	42.3	2000	C122_42.3 S05 MXN05MA4	142	C122_42.3 P63 BXN63MA4	143
33	34	1.3	40.3	990				
36	30	1.5	36.4	980				
36	30	3.0	37.0	2000	C122_37.0 S05 MXN05MA4	142	C122_37.0 P63 BXN63MA4	143
40	27	1.6	32.8	960				
41	26	3.4	32.8	2000	C122_32.8 S05 MXN05MA4	142	C122_32.8 P63 BXN63MA4	143
48	23	2.0	27.1	930				
56	20	2.3	15.6	900				
62	18	2.6	21.0	890				
69	16	2.5	18.9	860				
78	14	3.2	11.2	850				
84	13	3.1	15.6	820				
105	10	3.8	12.5	780				
117	9	4.3	11.2	760				
130	8	5.4	6.7	740				
141	8	3.9	9.3	720				
177	6	4.8	7.4	680				
196	6	5.4	6.7	660				

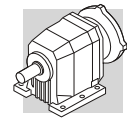
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n ₂ min-1	M ₂ Nm	S	i	R _{n2} N	 IE1		 IE2	
0.66	2367	1.0	1362	25000			C704_1362 P71 BN71A6	171
0.84	1858	1.2	1069	25000			C704_1069 P71 BN71A6	171
1.2	1262	1.3	726.3	16000	C614_726.3 S1 M1SC6	166	C614_726.3 P71 BN71A6	167
1.3	1248	0.8	717.7	10000	C514_717.7 S1 M1SC6	162	C514_717.7 P71 BN71A6	163
1.5	1049	1.0	884.9	10000			C514_884.9 P63 BN63B4	163
1.6	958	1.0	808.0	10000			C514_808.0 P63 BN63B4	163
1.6	955	1.0	549.7	10000	C514_549.7 S1 M1SC6	162	C514_549.7 P71 BN71A6	163
1.8	861	1.9	726.3	16000			C614_726.3 P63 BN63B4	167
1.8	851	1.2	717.7	10000			C514_717.7 P63 BN63B4	163
1.9	806	1.2	463.9	10000	C514_463.9 S1 M1SC6	162	C514_463.9 P71 BN71A6	163
1.9	803	2.0	462.0	16000	C614_462.0 S1 M1SC6	166	C614_462.0 P71 BN71A6	167
2.0	796	0.8	671.3	7000	C414_671.3 S05 M05B4	158	C414_671.3 P63 BN63B4	159
2.0	783	0.8	450.2	7000	C414_450.2 S1 M1SC6	158	C414_450.2 P71 BN71A6	159
2.0	777	1.3	655.4	10000			C514_655.4 P63 BN63B4	163
2.2	727	0.8	418.5	7000	C414_418.5 S1 M1SC6	158	C414_418.5 P71 BN71A6	159
2.2	723	1.4	415.7	10000	C514_415.7 S1 M1SC6	162	C514_415.7 P71 BN71A6	163
2.2	706	0.8	595.8	7000	C414_595.8 S05 M05B4	158	C414_595.8 P63 BN63B4	159
2.4	660	1.5	379.6	10000	C514_379.6 S1 M1SC6	162	C514_379.6 P71 BN71A6	163
2.4	644	0.9	543.5	7000	C414_543.5 S05 M05B4	158	C414_543.5 P63 BN63B4	159
2.6	587	0.8	341.7	6300	C364_341.7 S1 M1SC6	154	C364_341.7 P71 BN71A6	159
2.7	585	1.0	493.5	7000	C414_493.5 S05 M05B4	158	C414_493.5 P63 BN63B4	159
2.9	534	1.1	450.2	7000	C414_450.2 S05 M05B4	158	C414_450.2 P63 BN63B4	159
2.9	536	0.8	458.4	6500	C364_458.4 S05 M05B4	154	C364_458.4 P63 BN63B4	159
3.1	492	0.9	420.2	6500	C364_420.2 S05 M05B4	154	C364_420.2 P63 BN63B4	159
3.2	496	1.2	418.5	7000	C414_418.5 S05 M05B4	158	C414_418.5 P63 BN63B4	159
3.5	452	1.3	381.8	7000	C414_381.8 S05 M05B4	158	C414_381.8 P63 BN63B4	159
3.5	442	1.0	377.9	6500	C364_377.9 S05 M05B4	154	C364_377.9 P63 BN63B4	159
3.9	400	1.1	341.7	6500	C364_341.7 S05 M05B4	154	C364_341.7 P63 BN63B4	159
4.0	395	1.5	333.4	7000	C414_333.4 S05 M05B4	158	C414_333.4 P63 BN63B4	159

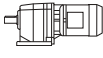





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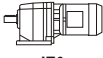



n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N				IEC		
					IE1	IE2		IE1	IE2	
4.1	373	1.2	318.9	6500	C364_318.9 S05 M05B4	C364_318.9 S05 ME05B4	154	C364_318.9 P63 BN63B4	C364_318.9 P63 BE63B4	159
4.3	371	1.6	209.1	7000	C413_209.1 S1 M1SC6		158	C413_209.1 P71 BN71A6		159
4.3	360	1.7	304.2	7000	C414_304.2 S05 M05B4	C414_304.2 S05 ME05B4	158	C414_304.2 P63 BN63B4	C414_304.2 P63 BE63B4	159
4.5	340	1.3	290.9	6500	C364_290.9 S05 M05B4	C364_290.9 S05 ME05B4	154	C364_290.9 P63 BN63B4	C364_290.9 P63 BE63B4	159
4.7	339	1.8	190.8	7000	C413_190.8 S1 M1SC6		158	C413_190.8 P71 BN71A6		159
4.8	330	0.9	186.0	5500	C323_186.0 S1 M1SC6		150	C323_186.0 P71 BN71A6		151
5.0	312	1.9	263.0	7000	C414_263.0 S05 M05B4	C414_263.0 S05 ME05B4	158	C414_263.0 P63 BN63B4	C414_263.0 P63 BE63B4	159
5.2	298	1.5	255.0	6500	C364_255.0 S05 M05B4	C364_255.0 S05 ME05B4	154	C364_255.0 P63 BN63B4	C364_255.0 P63 BE63B4	159
5.4	297	1.0	167.4	5500	C323_167.4 S1 M1SC6		150	C323_167.4 P71 BN71A6		151
5.4	295	0.9	244.2	5500	C323_244.2 S05 M05B4	C323_244.2 S05 ME05B4	150	C323_244.2 P63 BN63B4	C323_244.2 P63 BE63B4	151
5.7	270	1.7	230.9	6500	C364_230.9 S05 M05B4	C364_230.9 S05 ME05B4	154	C364_230.9 P63 BN63B4	C364_230.9 P63 BE63B4	159
6.1	261	1.2	215.6	5500	C323_215.6 S05 M05B4	C323_215.6 S05 ME05B4	150	C323_215.6 P63 BN63B4	C323_215.6 P63 BE63B4	151
6.4	250	1.8	206.4	6500	C363_206.4 S05 M05B4	C363_206.4 S05 ME05B4	154	C363_206.4 P63 BN63B4	C363_206.4 P63 BE63B4	155
7.1	225	1.3	186.0	5500	C323_186.0 S05 M05B4	C323_186.0 S05 ME05B4	150	C323_186.0 P63 BN63B4	C323_186.0 P63 BE63B4	151
7.2	222	2.0	183.5	6500	C363_183.5 S05 M05B4	C363_183.5 S05 ME05B4	154	C363_183.5 P63 BN63B4	C363_183.5 P63 BE63B4	155
7.4	216	0.9	178.5	5000	C223_178.5 S05 M05B4	C223_178.5 S05 ME05B4	146	C223_178.5 P63 BN63B4	C223_178.5 P63 BE63B4	147
7.9	202	1.5	167.4	5500	C323_167.4 S05 M05B4	C323_167.4 S05 ME05B4	146	C323_167.4 P63 BN63B4	C323_167.4 P63 BE63B4	151
8.1	196	2.3	162.0	6500	C363_162.0 S05 M05B4	C363_162.0 S05 ME05B4	154	C363_162.0 P63 BN63B4	C363_162.0 P63 BE63B4	155
8.7	183	1.1	151.7	5000	C223_151.7 S05 M05B4	C223_151.7 S05 ME05B4	146	C223_151.7 P63 BN63B4	C223_151.7 P63 BE63B4	147
8.9	179	1.7	148.4	5500	C323_148.4 S05 M05B4	C323_148.4 S05 ME05B4	150	C323_148.4 P63 BN63B4	C323_148.4 P63 BE63B4	151
9.4	169	2.7	139.8	6500	C363_139.8 S05 M05B4	C363_139.8 S05 ME05B4	154	C363_139.8 P63 BN63B4	C363_139.8 P63 BE63B4	155
9.7	165	1.2	136.5	5000	C223_136.5 S05 M05B4	C223_136.5 S05 ME05B4	146	C223_136.5 P63 BN63B4	C223_136.5 P63 BE63B4	147
9.7	164	1.8	136.0	5500	C323_136.0 S05 M05B4	C323_136.0 S05 ME05B4	150	C323_136.0 P63 BN63B4	C323_136.0 P63 BE63B4	151
10.5	152	3.0	125.8	6500	C363_125.8 S05 M05B4	C363_125.8 S05 ME05B4	154	C363_125.8 P63 BN63B4	C363_125.8 P63 BE63B4	155
10.8	148	2.0	122.4	5500	C323_122.4 S05 M05B4	C323_122.4 S05 ME05B4	150	C323_122.4 P63 BN63B4	C323_122.4 P63 BE63B4	151
10.8	148	1.4	122.2	5000	C223_122.2 S05 M05B4	C223_122.2 S05 ME05B4	146	C223_122.2 P63 BN63B4	C223_122.2 P63 BE63B4	147
11.8	135	1.5	112.0	5000	C223_112.0 S05 M05B4	C223_112.0 S05 ME05B4	146	C223_112.0 P63 BN63B4	C223_112.0 P63 BE63B4	147
11.8	135	3.3	111.5	6500	C363_111.5 S05 M05B4	C363_111.5 S05 ME05B4	154	C363_111.5 P63 BN63B4	C363_111.5 P63 BE63B4	155
11.9	134	2.2	110.6	5500	C323_110.6 S05 M05B4	C323_110.6 S05 ME05B4	150	C323_110.6 P63 BN63B4	C323_110.6 P63 BE63B4	151
12.8	125	2.4	103.3	5500	C323_103.3 S05 M05B4	C323_103.3 S05 ME05B4	150	C323_103.3 P63 BN63B4	C323_103.3 P63 BE63B4	151
12.9	124	3.6	102.2	6500	C363_102.2 S05 M05B4	C363_102.2 S05 ME05B4	154	C363_102.2 P63 BN63B4	C363_102.2 P63 BE63B4	155
13.2	121	1.7	100.2	5000	C223_100.2 S05 M05B4	C223_100.2 S05 ME05B4	146	C223_100.2 P63 BN63B4	C223_100.2 P63 BE63B4	147
14.0	114	2.6	94.2	5500	C323_94.2 S05 M05B4	C323_94.2 S05 ME05B4	150	C323_94.2 P63 BN63B4	C323_94.2 P63 BE63B4	151
14.9	107	1.9	88.5	5000	C223_88.5 S05 M05B4	C223_88.5 S05 ME05B4	146	C223_88.5 P63 BN63B4	C223_88.5 P63 BE63B4	147
16.0	100	2.0	82.6	5000	C223_82.6 S05 M05B4	C223_82.6 S05 ME05B4	146	C223_82.6 P63 BN63B4	C223_82.6 P63 BE63B4	147
16.0	100	3.0	82.6	5500	C323_82.6 S05 M05B4	C323_82.6 S05 ME05B4	150	C323_82.6 P63 BN63B4	C323_82.6 P63 BE63B4	151
17.6	90	2.2	74.8	5000	C223_74.8 S05 M05B4	C223_74.8 S05 ME05B4	146	C223_74.8 P63 BN63B4	C223_74.8 P63 BE63B4	147
17.7	90	3.2	74.7	5500	C323_74.7 S05 M05B4	C323_74.7 S05 ME05B4	150	C323_74.7 P63 BN63B4	C323_74.7 P63 BE63B4	151
19.8	83	2.6	66.8	5500	C322_66.8 S05 M05B4	C322_66.8 S05 ME05B4	140	C322_66.8 P63 BN63B4	C322_66.8 P63 BE63B4	151
20.0	82	1.1	66.2	2000	C122_66.2 S05 M05B4	C122_66.2 S05 ME05B4	142	C122_66.2 P63 BN63B4	C122_66.2 P63 BE63B4	143
20.2	79	2.5	65.3	5000	C223_65.3 S05 M05B4	C223_65.3 S05 ME05B4	146	C223_65.3 P63 BN63B4	C223_65.3 P63 BE63B4	147
20.9	78	1.7	63.3	5000	C222_63.3 S05 M05B4	C222_63.3 S05 ME05B4	146	C222_63.3 P63 BN63B4	C222_63.3 P63 BE63B4	147
22.0	73	2.6	60.0	5000	C223_60.0 S05 M05B4	C223_60.0 S05 ME05B4	146	C223_60.0 P63 BN63B4	C223_60.0 P63 BE63B4	147
22.2	73	2.9	59.4	5500	C322_59.4 S05 M05B4	C322_59.4 S05 ME05B4	150	C322_59.4 P63 BN63B4	C322_59.4 P63 BE63B4	151
23.9	68	1.3	55.2	2000	C122_55.2 S05 M05B4	C122_55.2 S05 ME05B4	142	C122_55.2 P63 BN63B4	C122_55.2 P63 BE63B4	143
24.1	68	2.3	54.7	5000	C222_54.7 S05 M05B4	C222_54.7 S05 ME05B4	146	C222_54.7 P63 BN63B4	C222_54.7 P63 BE63B4	147
27.1	60	2.6	48.6	5000	C222_48.6 S05 M05B4	C222_48.6 S05 ME05B4	146	C222_48.6 P63 BN63B4	C222_48.6 P63 BE63B4	147
27.7	59	1.5	47.6	2000	C122_47.6 S05 M05B4	C122_47.6 S05 ME05B4	142	C122_47.6 P63 BN63B4	C122_47.6 P63 BE63B4	143
31	53	3.6	43.3	5000	C222_43.3 S05 M05B4	C222_43.3 S05 ME05B4	146	C222_43.3 P63 BN63B4	C222_43.3 P63 BE63B4	147
31	52	1.7	42.3	2000	C122_42.3 S05 M05B4	C122_42.3 S05 ME05B4	142	C122_42.3 P63 BN63B4	C122_42.3 P63 BE63B4	143
33	50	0.9	40.3	850	C052_40.3 S05 M05B4	C052_40.3 S05 ME05B4	141			
36	45	1.0	36.4	850	C052_36.4 S05 M05B4	C052_36.4 S05 ME05B4	141			
36	46	2.0	37.0	2000	C122_37.0 S05 M05B4	C122_37.0 S05 ME05B4	142	C122_37.0 P63 BN63B4	C122_37.0 P63 BE63B4	143
40	40	2.2	32.8	2000	C122_32.8 S05 M05B4	C122_32.8 S05 ME05B4	142	C122_32.8 P63 BN63B4	C122_32.8 P63 BE63B4	143
40	41	1.1	32.8	840	C052_32.8 S05 M05B4	C052_32.8 S05 ME05B4	141			
45	36	2.5	29.5	2000	C122_29.5 S05 M05B4	C122_29.5 S05 ME05B4	142	C122_29.5 P63 BN63B4	C122_29.5 P63 BE63B4	143
49	34	1.3	27.1	820	C052_27.1 S05 M05B4	C052_27.1 S05 ME05B4	141			
52	31	2.8	25.4	2000	C122_25.4 S05 M05B4	C122_25.4 S05 ME05B4	142	C122_25.4 P63 BN63B4	C122_25.4 P63 BE63B4	143
57	29	3.0	23.2	2000	C122_23.2 S05 M05B4	C122_23.2 S05 ME05B4	142	C122_23.2 P63 BN63B4	C122_23.2 P63 BE63B4	143
63	26	1.7	21.0	810	C052_21.0 S05 M05B4	C052_21.0 S05 ME05B4	141			
64	25	3.2	20.6	2000	C122_20.6 S05 M05B4	C122_20.6 S05 ME05B4	142	C122_20.6 P63 BN63B4	C122_20.6 P63 BE63B4	143
70	23	1.7	18.9	790	C052_18.9 S05 M05B4	C052_18.9 S05 ME05B4	141			
72	23	3.4	18.4	2000	C122_18.4 S05 M05B4	C122_18.4 S05 ME05B4	142	C122_18.4 P63 BN63B4	C122_18.4 P63 BE63B4	143
77	21	3.6	17.2	2000	C122_17.2 S05 M05B4	C122_17.2 S05 ME05B4	142	C122_17.2 P63 BN63B4	C122_17.2 P63 BE63B4	143
85	19	2.1	15.6	760	C052_15.6 S05 M05B4	C052_15.6 S05 ME05B4	141			

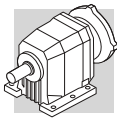


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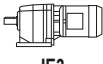
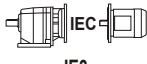
n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE1	IE2		IE1	IE2	
106	15	2.6	12.5	740	C052_12.5 S05 M05B4	C052_12.5 S05 ME05B4	141			
118	14	2.9	11.2	720	C052_11.2 S05 M05B4	C052_11.2 S05 ME05B4	141			
142	11	2.6	9.3	690	C052_9.3 S05 M05B4	C052_9.3 S05 ME05B4	141			
178	9	3.3	7.4	650	C052_7.4 S05 M05B4	C052_7.4 S05 ME05B4	141			
197	8	3.6	6.7	640	C052_6.7 S05 M05B4	C052_6.7 S05 ME05B4	141			
229	7	7.4	11.9	1670	C122_11.9 S05 M05A2		142	C122_11.9 P63 BN63A2		143
240	7	4.4	5.5	600	C052_5.5 S05 M05B4	C052_5.5 S05 ME05B4	141			
268	6	8.1	10.1	1600	C122_10.1 S05 M05A2		142	C122_10.1 P63 BN63A2		143
310	5	8.9	8.8	1530	C122_8.8 S05 M05A2		142	C122_8.8 P63 BN63A2		143
354	5	9.8	7.6	1470	C122_7.6 S05 M05A2		142	C122_7.6 P63 BN63A2		143
440	4	11.3	6.2	1390	C122_6.2 S05 M05A2		142	C122_6.2 P63 BN63A2		143
488	3	11.9	5.6	1300	C122_5.6 S05 M05A2		142	C122_5.6 P63 BN63A2		143
577	3	13.4	4.9	1250	C122_4.9 S05 M05A2		142	C122_4.9 P63 BN63A2		143
635	3	14.0	4.3	1190	C122_4.3 S05 M05A2		142	C122_4.3 P63 BN63A2		143
770	2	16.0	3.7	1140	C122_3.7 S05 M05A2		142	C122_3.7 P63 BN63A2		143
853	2	16.7	3.2	1090	C122_3.2 S05 M05A2		142	C122_3.2 P63 BN63A2		143
1015	2	18.7	2.8	1040	C122_2.8 S05 M05A2		142	C122_2.8 P63 BN63A2		143

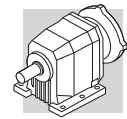
0.18 kW

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE3	IE3		IE3	IE3	
0.66	2367	1.0	1362	25000						
0.84	1858	1.2	1069	25000						
1.2	1262	1.3	726.3	16000						
1.3	1248	0.8	717.7	10000						
1.5	1049	1.0	884.9	10000				C514_884.9 P63 BXN63MB4		163
1.6	958	1.0	808.0	10000				C514_808.0 P63 BXN63MB4		163
1.6	955	1.0	549.7	10000						
1.8	861	1.9	726.3	16000				C614_726.3 P63 BXN63MB4		167
1.8	851	1.2	717.7	10000				C514_717.7 P63 BXN63MB4		163
1.9	806	1.2	463.9	10000						
1.9	803	2.0	462.0	16000						
2.0	796	0.8	671.3	7000	C414_671.3 S05 MXN05MB4		158	C414_671.3 P63 BXN63MB4		159
2.0	783	0.8	450.2	7000						
2.0	777	1.3	655.4	10000				C514_655.4 P63 BXN63MB4		163
2.2	727	0.8	418.5	7000						
2.2	723	1.4	415.7	10000						
2.2	706	0.8	595.8	7000	C414_595.8 S05 MXN05MB4		158	C414_595.8 P63 BXN63MB4		159
2.4	660	1.5	379.6	10000						
2.4	644	0.9	543.5	7000	C414_543.5 S05 MXN05MB4		158	C414_543.5 P63 BXN63MB4		159
2.6	587	0.8	341.7	6300						
2.7	585	1.0	493.5	7000	C414_493.5 S05 MXN05MB4		158	C414_493.5 P63 BXN63MB4		159
2.9	534	1.1	450.2	7000	C414_450.2 S05 MXN05MB4		158	C414_450.2 P63 BXN63MB4		159
2.9	536	0.8	458.4	6500	C364_458.4 S05 MXN05MB4		154	C364_458.4 P63 BXN63MB4		159
3.1	492	0.9	420.2	6500	C364_420.2 S05 MXN05MB4		154	C364_420.2 P63 BXN63MB4		159
3.2	496	1.2	418.5	7000	C414_418.5 S05 MXN05MB4		158	C414_418.5 P63 BXN63MB4		159
3.5	452	1.3	381.8	7000	C414_381.8 S05 MXN05MB4		158	C414_381.8 P63 BXN63MB4		159
3.5	442	1.0	377.9	6500	C364_377.9 S05 MXN05MB4		154	C364_377.9 P63 BXN63MB4		159
3.9	400	1.1	341.7	6500	C364_341.7 S05 MXN05MB4		154	C364_341.7 P63 BXN63MB4		159
4.0	395	1.5	333.4	7000	C414_333.4 S05 MXN05MB4		158	C414_333.4 P63 BXN63MB4		159
4.1	373	1.2	318.9	6500	C364_318.9 S05 MXN05MB4		154	C364_318.9 P63 BXN63MB4		159
4.3	371	1.6	209.1	7000						
4.3	360	1.7	304.2	7000	C414_304.2 S05 MXN05MB4		158	C414_304.2 P63 BXN63MB4		159
4.5	340	1.3	290.9	6500	C364_290.9 S05 MXN05MB4		154	C364_290.9 P63 BXN63MB4		159
4.7	339	1.8	190.8	7000						
4.8	330	0.9	186.0	5500						
5.0	312	1.9	263.0	7000	C414_263.0 S05 MXN05MB4		158	C414_263.0 P63 BXN63MB4		159
5.2	298	1.5	255.0	6500	C364_255.0 S05 MXN05MB4		154	C364_255.0 P63 BXN63MB4		159
5.4	297	1.0	167.4	5500						
5.4	295	0.9	244.2	5500	C323_244.2 S05 MXN05MB4		150	C323_244.2 P63 BXN63MB4		151
5.7	270	1.7	230.9	6500	C364_230.9 S05 MXN05MB4		154	C364_230.9 P63 BXN63MB4		159

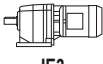

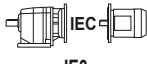



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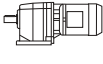




n ₂ min-1	M ₂ Nm	S	i	R _{n2} N	 IE3	 IEC IE3
6.1	261	1.2	215.6	5500	C323_215.6 S05 MXN05MB4	150 C323_215.6 P63 BXN63MB4
6.4	250	1.8	206.4	6500		C363_206.4 P63 BXN63MB4
7.1	225	1.3	186.0	5500	C323_186.0 S05 MXN05MB4	150 C323_186.0 P63 BXN63MB4
7.2	222	2.0	183.5	6500		C363_183.5 P63 BXN63MB4
7.4	216	0.9	178.5	5000	C223_178.5 S05 MXN05MB4	146 C223_178.5 P63 BXN63MB4
7.9	202	1.5	167.4	5500	C323_167.4 S05 MXN05MB4	150 C323_167.4 P63 BXN63MB4
8.1	196	2.3	162.0	6500		C363_162.0 P63 BXN63MB4
8.7	183	1.1	151.7	5000	C223_151.7 S05 MXN05MB4	146 C223_151.7 P63 BXN63MB4
8.9	179	1.7	148.4	5500	C323_148.4 S05 MXN05MB4	150 C323_148.4 P63 BXN63MB4
9.4	169	2.7	139.8	6500		C363_139.8 P63 BXN63MB4
9.7	165	1.2	136.5	5000	C223_136.5 S05 MXN05MB4	146 C223_136.5 P63 BXN63MB4
9.7	164	1.8	136.0	5500	C323_136.0 S05 MXN05MB4	150 C323_136.0 P63 BXN63MB4
10.5	152	3.0	125.8	6500		C363_125.8 P63 BXN63MB4
10.8	148	2.0	122.4	5500	C323_122.4 S05 MXN05MB4	150 C323_122.4 P63 BXN63MB4
10.8	148	1.4	122.2	5000	C223_122.2 S05 MXN05MB4	146 C223_122.2 P63 BXN63MB4
11.8	135	1.5	112.0	5000	C223_112.0 S05 MXN05MB4	146 C223_112.0 P63 BXN63MB4
11.8	135	3.3	111.5	6500		C363_111.5 P63 BXN63MB4
11.9	134	2.2	110.6	5500	C323_110.6 S05 MXN05MB4	150 C323_110.6 P63 BXN63MB4
12.8	125	2.4	103.3	5500	C323_103.3 S05 MXN05MB4	150 C323_103.3 P63 BXN63MB4
12.9	124	3.6	102.2	6500		C363_102.2 P63 BXN63MB4
13.2	121	1.7	100.2	5000	C223_100.2 S05 MXN05MB4	146 C223_100.2 P63 BXN63MB4
14.0	114	2.6	94.2	5500	C323_94.2 S05 MXN05MB4	150 C323_94.2 P63 BXN63MB4
14.9	107	1.9	88.5	5000	C223_88.5 S05 MXN05MB4	146 C223_88.5 P63 BXN63MB4
16.0	100	2.0	82.6	5000	C223_82.6 S05 MXN05MB4	146 C223_82.6 P63 BXN63MB4
16.0	100	3.0	82.6	5500	C323_82.6 S05 MXN05MB4	150 C323_82.6 P63 BXN63MB4
17.6	90	2.2	74.8	5000	C223_74.8 S05 MXN05MB4	146 C223_74.8 P63 BXN63MB4
17.7	90	3.2	74.7	5500	C323_74.7 S05 MXN05MB4	150 C323_74.7 P63 BXN63MB4
19.8	83	2.6	66.8	5500	C322_66.8 S05 MXN05MB4	150 C322_66.8 P63 BXN63MB4
20.0	82	1.1	66.2	2000	C122_66.2 S05 MXN05MB4	142 C122_66.2 P63 BXN63MB4
20.2	79	2.5	65.3	5000	C223_65.3 S05 MXN05MB4	146 C223_65.3 P63 BXN63MB4
20.9	78	1.7	63.3	5000	C222_63.3 S05 MXN05MB4	146 C222_63.3 P63 BXN63MB4
22.0	73	2.6	60.0	5000	C223_60.0 S05 MXN05MB4	146 C223_60.0 P63 BXN63MB4
22.2	73	2.9	59.4	5500		C322_59.4 P63 BXN63MB4
23.9	68	1.3	55.2	2000	C122_55.2 S05 MXN05MB4	142 C122_55.2 P63 BXN63MB4
24.1	68	2.3	54.7	5000	C222_54.7 S05 MXN05MB4	146 C222_54.7 P63 BXN63MB4
27.1	60	2.6	48.6	5000	C222_48.6 S05 MXN05MB4	146 C222_48.6 P63 BXN63MB4
27.7	59	1.5	47.6	2000	C122_47.6 S05 MXN05MB4	142 C122_47.6 P63 BXN63MB4
31	53	3.6	43.3	5000	C222_43.3 S05 MXN05MB4	146 C222_43.3 P63 BXN63MB4
31	52	1.7	42.3	2000	C122_42.3 S05 MXN05MB4	142 C122_42.3 P63 BXN63MB4
33	50	0.9	40.3	850		
36	45	1.0	36.4	850		
36	46	2.0	37.0	2000	C122_37.0 S05 MXN05MB4	142 C122_37.0 P63 BXN63MB4
40	40	2.2	32.8	2000	C122_32.8 S05 MXN05MB4	142 C122_32.8 P63 BXN63MB4
40	41	1.1	32.8	840		
45	36	2.5	29.5	2000	C122_29.5 S05 MXN05MB4	142 C122_29.5 P63 BXN63MB4
49	34	1.3	27.1	820		
52	31	2.8	25.4	2000	C122_25.4 S05 MXN05MB4	142 C122_25.4 P63 BXN63MB4
57	29	3.0	23.2	2000	C122_23.2 S05 MXN05MB4	142 C122_23.2 P63 BXN63MB4
63	26	1.7	21.0	810		
64	25	3.2	20.6	2000	C122_20.6 S05 MXN05MB4	142 C122_20.6 P63 BXN63MB4
70	23	1.7	18.9	790		
72	23	3.4	18.4	2000	C122_18.4 S05 MXN05MB4	142 C122_18.4 P63 BXN63MB4
77	21	3.6	17.2	2000	C122_17.2 S05 MXN05MB4	142 C122_17.2 P63 BXN63MB4
85	19	2.1	15.6	760		
106	15	2.6	12.5	740		
118	14	2.9	11.2	720		
142	11	2.6	9.3	690		
178	9	3.3	7.4	650		
197	8	3.6	6.7	640		
229	7	7.4	11.9	1670		
240	7	4.4	5.5	600		
268	6	8.1	10.1	1600		
310	5	8.9	8.8	1530		
354	5	9.8	7.6	1470		
440	4	11.3	6.2	1390		

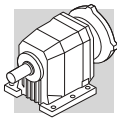


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n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N	 IE3		 IE3	
488	3	11.9	5.6	1300				
577	3	13.4	4.9	1250				
635	3	14.0	4.3	1190				
770	2	16.0	3.7	1140				
853	2	16.7	3.2	1090				
1015	2	18.7	2.8	1040				

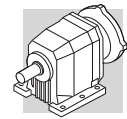
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n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N	 IE1	 IE2		 IEC	
0.61	3575	1.1	1481	35000					174
0.77	2820	1.4	1168	35000					174
1.2	1753	0.9	726.3	16000	C614_726.3 S1 M1SD6		166		167
1.6	1330	0.8	808.0	10000				C514_808.0 P63 BN63C4	163
1.6	1327	0.8	549.7	10000	C514_549.7 S1 M1SD6		162	C514_808.0 P71 BE71A4	163
1.9	1134	0.9	717.7	10000				C514_717.7 P71 BN71A4	163
1.9	1120	0.9	463.9	10000	C514_463.9 S1 M1SD6		162	C514_463.9 P71 BN71B6	163
2.0	1101	1.5	668.8	16000				C614_668.8 P63 BN63C4	167
2.4	894	1.8	370.1	16000	C614_370.1 S1 M1SD6		166	C614_370.1 P71 BN71B6	167
2.5	869	1.2	549.7	10000				C514_549.7 P71 BN71A4	163
2.9	741	0.8	450.2	7000	C414_450.2 S05 M05C4	C414_450.2 S1 ME1SA	158	C414_450.2 P71 BN71A4	159
3.2	689	0.9	418.5	7000	C414_418.5 S05 M05C4	C414_418.5 S1 ME1SA	158	C414_418.5 P71 BN71A4	159
3.2	684	1.5	415.7	10000				C514_415.7 P71 BN71A4	163
3.5	628	1.0	381.8	7000	C414_381.8 S05 M05C4	C414_381.8 S1 ME1SA	158	C414_381.8 P71 BN71A4	159
3.5	625	1.6	379.6	10000				C514_379.6 P71 BN71A4	163
3.8	567	0.8	344.3	6500	C364_344.3 S05 M05C4	C364_344.3 S1 ME1SA	154	C364_344.3 P71 BN71A4	159
4.0	549	1.1	333.4	7000	C414_333.4 S05 M05C4	C414_333.4 S1 ME1SA	158	C414_333.4 P71 BN71A4	159
4.0	537	1.9	326.1	10000				C514_326.1 P71 BN71A4	163
4.2	511	0.9	318.9	6500	C364_318.9 S05 M05C4	C364_318.9 S1 ME1SA	154	C364_318.9 P71 BN71A4	159
4.3	501	1.2	304.2	7000	C414_304.2 S05 M05C4	C414_304.2 S1 ME1SA	158	C414_304.2 P71 BN71A4	159
4.4	490	2.0	297.8	10000				C514_297.8 P71 BN71A4	163
4.6	466	1.0	290.9	6500	C364_290.9 S05 M05C4	C364_290.9 S1 ME1SA	154	C364_290.9 P71 BN71A4	159
5.0	434	2.3	263.8	10000				C514_263.8 P71 BN71A4	163
5.0	433	1.4	263.0	7000	C414_263.0 S05 M05C4	C414_263.0 S1 ME1SA	158	C414_263.0 P71 BN71A4	159
5.3	409	1.1	255.0	6500	C364_255.0 S05 M05C4	C364_255.0 S1 ME1SA	154	C364_255.0 P71 BN71A4	159
5.5	395	1.5	239.9	7000	C414_239.9 S05 M05C4	C414_239.9 S1 ME1SA	158	C414_239.9 P71 BN71A4	159
5.8	370	1.2	230.9	6500	C364_230.9 S05 M05C4	C364_230.9 S1 ME1SA	154	C364_230.9 P71 BN71A4	159
6.3	350	2.9	216.7	10000				C513_216.7 P71 BE71A4	163
6.5	342	1.3	206.4	6500	C363_206.4 S05 M05C4	C363_206.4 S1 ME1SA	154	C363_206.4 P71 BN71A4	155
7.2	308	1.9	190.8	7000				C413_190.8 P71 BN71A4	159
7.2	308	1.0	186.0	5500	C323_186.0 S05 M05C4	C323_186.0 S1 ME1SA	150	C323_186.0 P71 BN71A4	151
7.3	304	1.5	183.5	6500	C363_183.5 S05 M05C4	C363_183.5 S1 ME1SA	154	C363_183.5 P71 BN71A4	155
8.0	277	1.1	167.4	5500	C323_167.4 S05 M05C4	C323_167.4 S1 ME1SA	150	C323_167.4 P71 BN71A4	151
8.3	268	1.7	162.0	6500	C363_162.0 S05 M05C4	C363_162.0 S1 ME1SA	154	C363_162.0 P71 BN71A4	155
8.4	265	2.3	164.1	7000				C413_164.1 P71 BN71A4	159
9.0	246	1.2	148.4	5500	C323_148.4 S05 M05C4	C323_148.4 S1 ME1SA	150	C323_148.4 P71 BN71A4	151
9.6	231	1.9	139.8	6500	C363_139.8 S05 M05C4	C363_139.8 S1 ME1SA	154	C363_139.8 P71 BN71A4	155
9.8	226	0.9	136.5	5000	C223_136.5 S05 M05C4	C223_136.5 S1 ME1SA	146	C223_136.5 P71 BN71A4	147
9.9	225	1.3	136.0	5500	C323_136.0 S05 M05C4	C323_136.0 S1 ME1SA	150	C323_136.0 P71 BN71A4	151
10.3	215	2.8	132.9	7000				C413_132.9 P71 BN71A4	159
10.7	208	2.2	125.8	6500	C363_125.8 S05 M05C4	C363_125.8 S1 ME1SA	154	C363_125.8 P71 BN71A4	155
11.0	203	1.5	122.4	5500	C323_122.4 S05 M05C4	C323_122.4 S1 ME1SA	150	C323_122.4 P71 BN71A4	151
11.0	202	1.0	122.2	5000	C223_122.2 S05 M05C4	C223_122.2 S1 ME1SA	146	C223_122.2 P71 BN71A4	147
12.0	185	1.1	112.0	5000	C223_112.0 S05 M05C4	C223_112.0 S1 ME1SA	146	C223_112.0 P71 BN71A4	147
12.0	185	2.4	111.5	6500	C363_111.5 S05 M05C4	C363_111.5 S1 ME1SA	154	C363_111.5 P71 BN71A4	155
12.1	183	1.6	110.6	5500	C323_110.6 S05 M05C4	C323_110.6 S1 ME1SA	150	C323_110.6 P71 BN71A4	151
13.0	171	1.8	103.3	5500	C323_103.3 S05 M05C4	C323_103.3 S1 ME1SA	150	C323_103.3 P71 BN71A4	151
13.1	169	2.7	102.2	6500	C363_102.2 S05 M05C4	C363_102.2 S1 ME1SA	154	C363_102.2 P71 BN71A4	155
13.4	166	1.2	100.2	5000	C223_100.2 S05 M05C4	C223_100.2 S1 ME1SA	146	C223_100.2 P71 BN71A4	147
14.2	156	1.9	94.2	5500	C323_94.2 S05 M05C4	C323_94.2 S1 ME1SA	150	C323_94.2 P71 BN71A4	151
14.6	152	3.0	91.9	6500	C363_91.9 S05 M05C4	C363_91.9 S1 ME1SA	154	C363_91.9 P71 BN71A4	155





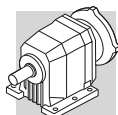
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n ₂ min-1	M ₂ Nm	S	i	R _{n2} N				IEC		
					IE1	IE2		IE1	IE2	
15.1	147	1.4	88.5	5000	C223_88.5 S05 M05C4	C223_88.5 S1 ME1SA	146	C223_88.5 P71 BN71A4	C223_88.5 P71 BE71A4	147
16.2	137	1.5	82.6	5000	C223_82.6 S05 M05C4	C223_82.6 S1 ME1SA	146	C223_82.6 P71 BN71A4	C223_82.6 P71 BE71A4	147
16.2	137	2.2	82.6	5500	C323_82.6 S05 M05C4	C323_82.6 S1 ME1SA	150	C323_82.6 P71 BN71A4	C323_82.6 P71 BE71A4	151
17.9	124	1.6	74.8	5000	C223_74.8 S05 M05C4	C223_74.8 S1 ME1SA	146	C223_74.8 P71 BN71A4	C223_74.8 P71 BE71A4	147
17.9	124	2.3	74.7	5500	C323_74.7 S05 M05C4	C323_74.7 S1 ME1SA	150	C323_74.7 P71 BN71A4	C323_74.7 P71 BE71A4	151
20.1	113	1.9	66.8	5500	C322_66.8 S05 M05C4	C322_66.8 S1 ME1SA	150	C322_66.8 P71 BN71A4	C322_66.8 P71 BE71A4	151
20.3	112	0.8	66.2	2000	C122_66.2 S05 M05C4	C122_66.2 S1 ME1SA	142	C122_66.2 P71 BN71A4	C122_66.2 P71 BE71A4	143
20.5	108	1.8	65.3	5000	C223_65.3 S05 M05C4	C223_65.3 S1 ME1SA	146	C223_65.3 P71 BN71A4	C223_65.3 P71 BE71A4	147
21.2	107	1.2	63.3	5000	C222_63.3 S05 M05C4	C222_63.3 S1 ME1SA	146	C222_63.3 P71 BN71A4	C222_63.3 P71 BE71A4	147
22.3	99	1.9	60.0	5000	C223_60.0 S05 M05C4	C223_60.0 S1 ME1SA	146	C223_60.0 P71 BN71A4	C223_60.0 P71 BE71A4	147
22.6	100	2.1	59.4	5500	C322_59.4 S05 M05C4	C322_59.4 S1 ME1SA	150	C322_59.4 P71 BN71A4	C322_59.4 P71 BE71A4	151
24.3	93	1.0	55.2	2000	C122_55.2 S05 M05C4	C122_55.2 S1 ME1SA	142	C122_55.2 P71 BN71A4	C122_55.2 P71 BE71A4	143
24.5	93	1.7	54.7	5000	C222_54.7 S05 M05C4	C222_54.7 S1 ME1SA	146	C222_54.7 P71 BN71A4	C222_54.7 P71 BE71A4	147
25.6	89	3.4	52.4	5500	C322_52.4 S05 M05C4	C322_52.4 S1 ME1SA	150	C322_52.4 P71 BN71A4	C322_52.4 P71 BE71A4	151
27.5	82	1.9	48.6	5000	C222_48.6 S05 M05C4	C222_48.6 S1 ME1SA	146	C222_48.6 P71 BN71A4	C222_48.6 P71 BE71A4	147
28.1	80	1.1	47.6	2000	C122_47.6 S05 M05C4	C122_47.6 S1 ME1SA	142	C122_47.6 P71 BN71A4	C122_47.6 P71 BE71A4	143
31	73	2.6	43.3	4750	C222_43.3 S05 M05C4	C222_43.3 S1 ME1SA	146	C222_43.3 P71 BN71A4	C222_43.3 P71 BE71A4	147
32	72	1.3	42.3	2000	C122_42.3 S05 M05C4	C122_42.3 S1 ME1SA	142	C122_42.3 P71 BN71A4	C122_42.3 P71 BE71A4	143
36	63	1.4	37.0	2000	C122_37.0 S05 M05C4	C122_37.0 S1 ME1SA	142	C122_37.0 P71 BN71A4	C122_37.0 P71 BE71A4	143
36	62	3.2	36.8	4540	C222_36.8 S05 M05C4	C222_36.8 S1 ME1SA	146	C222_36.8 P71 BN71A4	C222_36.8 P71 BE71A4	147
40	56	3.6	33.1	4500	C222_33.1 S05 M05C4	C222_33.1 S1 ME1SA	146	C222_33.1 P71 BN71A4	C222_33.1 P71 BE71A4	147
41	55	1.6	32.8	2000	C122_32.8 S05 M05C4	C122_32.8 S1 ME1SA	142	C122_32.8 P71 BN71A4	C122_32.8 P71 BE71A4	143
45	50	1.8	29.5	2000	C122_29.5 S05 M05C4	C122_29.5 S1 ME1SA	142	C122_29.5 P71 BN71A4	C122_29.5 P71 BE71A4	143
49	47	1.0	27.1	700	C052_27.1 S05 M05C4	C052_27.1 S1 ME1SA	141			
53	43	2.1	25.4	2000	C122_25.4 S05 M05C4	C122_25.4 S1 ME1SA	142	C122_25.4 P71 BN71A4	C122_25.4 P71 BE71A4	143
58	39	2.2	23.2	2000	C122_23.2 S05 M05C4	C122_23.2 S1 ME1SA	142	C122_23.2 P71 BN71A4	C122_23.2 P71 BE71A4	143
63	36	1.2	21.0	720	C052_21.0 S05 M05C4	C052_21.0 S1 ME1SA	141			
65	35	2.4	20.6	2000	C122_20.6 S05 M05C4	C122_20.6 S1 ME1SA	142	C122_20.6 P71 BN71A4	C122_20.6 P71 BE71A4	143
70	33	1.2	18.9	710	C052_18.9 S05 M05C4	C052_18.9 S1 ME1SA	141			
73	31	2.5	18.4	2000	C122_18.4 S05 M05C4	C122_18.4 S1 ME1SA	142	C122_18.4 P71 BN71A4	C122_18.4 P71 BE71A4	143
78	29	2.6	17.2	2000	C122_17.2 S05 M05C4	C122_17.2 S1 ME1SA	142	C122_17.2 P71 BN71A4	C122_17.2 P71 BE71A4	143
85	27	1.5	15.6	700	C052_15.6 S05 M05C4	C052_15.6 S1 ME1SA	141			
87	26	2.8	15.4	2000	C122_15.4 S05 M05C4	C122_15.4 S1 ME1SA	142	C122_15.4 P71 BN71A4	C122_15.4 P71 BE71A4	143
100	23	3.1	13.4	2000	C122_13.4 S05 M05C4	C122_13.4 S1 ME1SA	142	C122_13.4 P71 BN71A4	C122_13.4 P71 BE71A4	143
106	22	1.9	12.5	690	C052_12.5 S05 M05C4	C052_12.5 S1 ME1SA	141			
113	20	3.3	11.9	2000	C122_11.9 S05 M05C4	C122_11.9 S1 ME1SA	142	C122_11.9 P71 BN71A4	C122_11.9 P71 BE71A4	143
118	19	2.1	11.2	670	C052_11.2 S05 M05C4	C052_11.2 S1 ME1SA	141			
133	17	3.7	10.1	1980	C122_10.1 S05 M05C4	C122_10.1 S1 ME1SA	142	C122_10.1 P71 BN71A4	C122_10.1 P71 BE71A4	143
142	16	1.9	9.3	650	C052_9.3 S05 M05C4	C052_9.3 S1 ME1SA	141			
157	14	4.2	17.2	1870	C122_17.2 S05 M05B2		142	C122_17.2 P63 BN63B2		143
178	13	2.4	7.4	620	C052_7.4 S05 M05C4	C052_7.4 S1 ME1SA	141			
197	12	2.6	6.7	610	C052_6.7 S05 M05C4	C052_6.7 S1 ME1SA	141			
204	11	5.0	13.4	1710	C122_13.4 S05 M05B2		142	C122_13.4 P63 BN63B2		143
230	10	5.4	11.9	1660	C122_11.9 S05 M05B2		142	C122_11.9 P63 BN63B2		143
240	9	3.2	5.5	580	C052_5.5 S05 M05C4	C052_5.5 S1 ME1SA	141			
268	8	5.8	10.1	1590	C122_10.1 S05 M05B2		142	C122_10.1 P63 BN63B2		143
311	7	6.5	8.8	1510	C122_8.8 S05 M05B2		142	C122_8.8 P63 BN63B2		143
354	6	7.0	7.6	1460	C122_7.6 S05 M05B2		142	C122_7.6 P63 BN63B2		143
442	5	8.2	6.2	1350	C122_6.2 S05 M05B2		142	C122_6.2 P63 BN63B2		143
489	5	8.6	5.6	1290	C122_5.6 S05 M05B2		142	C122_5.6 P63 BN63B2		143
577	4	9.7	4.9	1240	C122_4.9 S05 M05B2		142	C122_4.9 P63 BN63B2		143
637	4	10.1	4.3	1180	C122_4.3 S05 M05B2		142	C122_4.3 P63 BN63B2		143
770	3	11.5	3.7	1130	C122_3.7 S05 M05B2		142	C122_3.7 P63 BN63B2		143
856	3	12.1	3.2	1080	C122_3.2 S05 M05B2		142	C122_3.2 P63 BN63B2		143
979	2	13.0	2.8	1030	C122_2.8 S05 M05B2		142	C122_2.8 P63 BN63B2		143

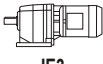





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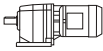



n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N	 IE3		 IE3	
0.61	3575	1.1	1481	35000				
0.77	2820	1.4	1168	35000				
1.2	1753	0.9	726.3	16000				
1.6	1330	0.8	808.0	10000				
1.6	1327	0.8	549.7	10000				
1.9	1134	0.9	717.7	10000			C514_717.7 P71 BXN71MA4	163
1.9	1120	0.9	463.9	10000				
2.0	1101	1.5	668.8	16000				
2.4	894	1.8	370.1	16000				
2.5	869	1.2	549.7	10000			C514_549.7 P71 BXN71MA4	163
2.9	741	0.8	450.2	7000	C414_450.2 S10 MXN10MA4	158	C414_450.2 P71 BXN71MA4	159
3.2	689	0.9	418.5	7000	C414_418.5 S10 MXN10MA4	158	C414_418.5 P71 BXN71MA4	159
3.2	684	1.5	415.7	10000			C514_415.7 P71 BXN71MA4	163
3.5	628	1.0	381.8	7000	C414_381.8 S10 MXN10MA4	158	C414_381.8 P71 BXN71MA4	159
3.5	625	1.6	379.6	10000			C514_379.6 P71 BXN71MA4	163
3.8	567	0.8	344.3	6500	C364_344.3 S10 MXN10MA4	154	C364_344.3 P71 BXN71MA4	159
4.0	549	1.1	333.4	7000	C414_333.4 S10 MXN10MA4	158	C414_333.4 P71 BXN71MA4	159
4.0	537	1.9	326.1	10000			C514_326.1 P71 BXN71MA4	163
4.2	511	0.9	318.9	6500	C364_318.9 S10 MXN10MA4	154	C364_318.9 P71 BXN71MA4	159
4.3	501	1.2	304.2	7000	C414_304.2 S10 MXN10MA4	158	C414_304.2 P71 BXN71MA4	159
4.4	490	2.0	297.8	10000			C514_297.8 P71 BXN71MA4	163
4.6	466	1.0	290.9	6500	C364_290.9 S10 MXN10MA4	154	C364_290.9 P71 BXN71MA4	159
5.0	434	2.3	263.8	10000			C514_263.8 P71 BXN71MA4	163
5.0	433	1.4	263.0	7000	C414_263.0 S10 MXN10MA4	158	C414_263.0 P71 BXN71MA4	159
5.3	409	1.1	255.0	6500	C364_255.0 S10 MXN10MA4	154	C364_255.0 P71 BXN71MA4	159
5.5	395	1.5	239.9	7000	C414_239.9 S10 MXN10MA4	158	C414_239.9 P71 BXN71MA4	159
5.8	370	1.2	230.9	6500	C364_230.9 S10 MXN10MA4	154	C364_230.9 P71 BXN71MA4	159
6.3	350	2.9	216.7	10000			C513_216.7 P71 BXN71MA4	163
6.5	342	1.3	206.4	6500	C363_206.4 S10 MXN10MA4	154	C363_206.4 P71 BXN71MA4	155
7.2	308	1.9	190.8	7000			C413_190.8 P71 BXN71MA4	159
7.2	308	1.0	186.0	5500	C323_186.0 S10 MXN10MA4	150	C323_186.0 P71 BXN71MA4	151
7.3	304	1.5	183.5	6500	C363_183.5 S10 MXN10MA4	154	C363_183.5 P71 BXN71MA4	155
8.0	277	1.1	167.4	5500	C323_167.4 S10 MXN10MA4	150	C323_167.4 P71 BXN71MA4	151
8.3	268	1.7	162.0	6500	C363_162.0 S10 MXN10MA4	154	C363_162.0 P71 BXN71MA4	155
8.4	265	2.3	164.1	7000			C413_164.1 P71 BXN71MA4	159
9.0	246	1.2	148.4	5500	C323_148.4 S10 MXN10MA4	150	C323_148.4 P71 BXN71MA4	151
9.6	231	1.9	139.8	6500	C363_139.8 S10 MXN10MA4	154	C363_139.8 P71 BXN71MA4	155
9.8	226	0.9	136.5	5000	C223_136.5 S10 MXN10MA4	146	C223_136.5 P71 BXN71MA4	147
9.9	225	1.3	136.0	5500	C323_136.0 S10 MXN10MA4	150	C323_136.0 P71 BXN71MA4	151
10.3	215	2.8	132.9	7000			C413_132.9 P71 BXN71MA4	159
10.7	208	2.2	125.8	6500	C363_125.8 S10 MXN10MA4	154	C363_125.8 P71 BXN71MA4	155
11.0	203	1.5	122.4	5500	C323_122.4 S10 MXN10MA4	150	C323_122.4 P71 BXN71MA4	151
11.0	202	1.0	122.2	5000	C223_122.2 S10 MXN10MA4	146	C223_122.2 P71 BXN71MA4	147
12.0	185	1.1	112.0	5000	C223_112.0 S10 MXN10MA4	146	C223_112.0 P71 BXN71MA4	147
12.0	185	2.4	111.5	6500	C363_111.5 S10 MXN10MA4	154	C363_111.5 P71 BXN71MA4	155
12.1	183	1.6	110.6	5500	C323_110.6 S10 MXN10MA4	150	C323_110.6 P71 BXN71MA4	151
13.0	171	1.8	103.3	5500	C323_103.3 S10 MXN10MA4	150	C323_103.3 P71 BXN71MA4	151
13.1	169	2.7	102.2	6500	C363_102.2 S10 MXN10MA4	154	C363_102.2 P71 BXN71MA4	155
13.4	166	1.2	100.2	5000	C223_100.2 S10 MXN10MA4	146	C223_100.2 P71 BXN71MA4	147
14.2	156	1.9	94.2	5500	C323_94.2 S10 MXN10MA4	150	C323_94.2 P71 BXN71MA4	151
14.6	152	3.0	91.9	6500	C363_91.9 S10 MXN10MA4	154	C363_91.9 P71 BXN71MA4	155
15.1	147	1.4	88.5	5000	C223_88.5 S10 MXN10MA4	146	C223_88.5 P71 BXN71MA4	147
16.2	137	1.5	82.6	5000	C223_82.6 S10 MXN10MA4	146	C223_82.6 P71 BXN71MA4	147
16.2	137	2.2	82.6	5500	C323_82.6 S10 MXN10MA4	150	C323_82.6 P71 BXN71MA4	151
17.9	124	1.6	74.8	5000	C223_74.8 S10 MXN10MA4	146	C223_74.8 P71 BXN71MA4	147
17.9	124	2.3	74.7	5500	C323_74.7 S10 MXN10MA4	150	C323_74.7 P71 BXN71MA4	151
20.1	113	1.9	66.8	5500	C322_66.8 S10 MXN10MA4	150	C322_66.8 P71 BXN71MA4	151
20.3	112	0.8	66.2	2000	C122_66.2 S10 MXN10MA4	142	C122_66.2 P71 BXN71MA4	143
20.5	108	1.8	65.3	5000	C223_65.3 S10 MXN10MA4	146	C223_65.3 P71 BXN71MA4	147
21.2	107	1.2	63.3	5000	C222_63.3 S10 MXN10MA4	146	C222_63.3 P71 BXN71MA4	147
22.3	99	1.9	60.0	5000	C223_60.0 S10 MXN10MA4	146	C223_60.0 P71 BXN71MA4	147
22.6	100	2.1	59.4	5500	C322_59.4 S10 MXN10MA4	150	C322_59.4 P71 BXN71MA4	151
24.3	93	1.0	55.2	2000	C122_55.2 S10 MXN10MA4	142	C122_55.2 P71 BXN71MA4	143
24.5	93	1.7	54.7	5000	C222_54.7 S10 MXN10MA4	146	C222_54.7 P71 BXN71MA4	147
25.6	89	3.4	52.4	5500	C322_52.4 S10 MXN10MA4	150	C322_52.4 P71 BXN71MA4	151

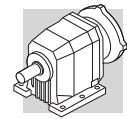


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

n ₂ min-1	M ₂ Nm	S	i	R _{n2} N	IE3		IE3	
								
27.5	82	1.9	48.6	5000	C222_48.6 S10 MXN10MA4	146	C222_48.6 P71 BXN71MA4	147
28.1	80	1.1	47.6	2000	C122_47.6 S10 MXN10MA4	142	C122_47.6 P71 BXN71MA4	143
31	73	2.6	43.3	4750	C222_43.3 S10 MXN10MA4	146	C222_43.3 P71 BXN71MA4	147
32	72	1.3	42.3	2000	C122_42.3 S10 MXN10MA4	142	C122_42.3 P71 BXN71MA4	143
36	63	1.4	37.0	2000	C122_37.0 S10 MXN10MA4	142	C122_37.0 P71 BXN71MA4	143
36	62	3.2	36.8	4540	C222_36.8 S10 MXN10MA4	146	C222_36.8 P71 BXN71MA4	147
40	56	3.6	33.1	4500	C222_33.1 S10 MXN10MA4	146	C222_33.1 P71 BXN71MA4	147
41	55	1.6	32.8	2000	C122_32.8 S10 MXN10MA4	142	C122_32.8 P71 BXN71MA4	143
45	50	1.8	29.5	2000	C122_29.5 S10 MXN10MA4	142	C122_29.5 P71 BXN71MA4	143
49	47	1.0	27.1	700				
53	43	2.1	25.4	2000	C122_25.4 S10 MXN10MA4	142	C122_25.4 P71 BXN71MA4	143
58	39	2.2	23.2	2000	C122_23.2 S10 MXN10MA4	142	C122_23.2 P71 BXN71MA4	143
63	36	1.2	21.0	720				
65	35	2.4	20.6	2000	C122_20.6 S10 MXN10MA4	142	C122_20.6 P71 BXN71MA4	143
70	33	1.2	18.9	710				
73	31	2.5	18.4	2000	C122_18.4 S10 MXN10MA4	142	C122_18.4 P71 BXN71MA4	143
78	29	2.6	17.2	2000	C122_17.2 S10 MXN10MA4	142	C122_17.2 P71 BXN71MA4	143
85	27	1.5	15.6	700				
87	26	2.8	15.4	2000	C122_15.4 S10 MXN10MA4	142	C122_15.4 P71 BXN71MA4	143
100	23	3.1	13.4	2000	C122_13.4 S10 MXN10MA4	142	C122_13.4 P71 BXN71MA4	143
106	22	1.9	12.5	690				
113	20	3.3	11.9	2000	C122_11.9 S10 MXN10MA4	142	C122_11.9 P71 BXN71MA4	143
118	19	2.1	11.2	670				
133	17	3.7	10.1	1980	C122_10.1 S10 MXN10MA4	142	C122_10.1 P71 BXN71MA4	143
142	16	1.9	9.3	650				
157	14	4.2	17.2	1870				
178	13	2.4	7.4	620				
197	12	2.6	6.7	610				
204	11	5.0	13.4	1710				
230	10	5.4	11.9	1660				
240	9	3.2	5.5	580				
268	8	5.8	10.1	1590				
311	7	6.5	8.8	1510				
354	6	7.0	7.6	1460				
442	5	8.2	6.2	1350				
489	5	8.6	5.6	1290				
577	4	9.7	4.9	1240				
637	4	10.1	4.3	1180				
770	3	11.5	3.7	1130				
856	3	12.1	3.2	1080				
979	2	13.0	2.8	1030				

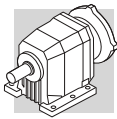
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n ₂ min-1	M ₂ Nm	S	i	R _{n2} N	IE1 IE2		IE1 IE2			
										
0.73	4382	1.6	1240	60000	C904_1240 S1 M1LA6		176	C904_1240 P80 BN80A6	177	
0.78	4127	1.0	1168	35000				C804_1168 P80 BN80A6	174	
0.93	3476	1.2	1481	35000				C804_1481 P71 BN71B4	174	
1.2	2741	1.5	1168	35000				C804_1168 P71 BN71B4	174	
1.4	2220	1.8	945.7	35000				C804_945.7 P71 BN71B4	174	
1.5	2165	1.1	922.6	25000				C704_922.6 P71 BN71B4	171	
1.7	1869	0.9	796.1	16000	C614_796.1 S1 M1SD4	C614_796.1 S1 ME1SA4	166	C614_796.1 P71 BN71B4	C614_796.1 P71 BE71B4	167
2.0	1570	1.0	668.8	16000	C614_668.8 S1 M1SD4	C614_668.8 S1 ME1SA4	166	C614_668.8 P71 BN71B4	C614_668.8 P71 BE71B4	167
2.1	1543	1.5	657.3	25000				C704_657.3 P71 BN71B4	C704_657.3 P71 BE71B4	171
2.4	1341	1.2	571.2	16000	C614_571.2 S1 M1SD4	C614_571.2 S1 ME1SA4	166	C614_571.2 P71 BN71B4	C614_571.2 P71 BE71B4	167
2.5	1302	1.8	554.7	25000				C704_554.7 P71 BN71B4	C704_554.7 P71 BE71B4	171
2.5	1290	0.8	549.7	10000	C514_549.7 S1 M1SD4	C514_549.7 S1 ME1SA4	162	C514_549.7 P71 BN71B4	C514_549.7 P71 BE71B4	163
2.6	1223	1.3	521.1	16000	C614_521.1 S1 M1SD4	C614_521.1 S1 ME1SA4	166	C614_521.1 P71 BN71B4	C614_521.1 P71 BE71B4	167
3.3	989	1.6	421.5	16000	C614_421.5 S1 M1SD4	C614_421.5 S1 ME1SA4	166	C614_421.5 P71 BN71B4	C614_421.5 P71 BE71B4	167
3.3	976	1.0	415.7	10000	C514_415.7 S1 M1SD4	C514_415.7 S1 ME1SA4	162	C514_415.7 P71 BN71B4	C514_415.7 P71 BE71B4	163
3.3	961	2.4	409.4	25000				C704_409.4 P71 BN71B4	C704_409.4 P71 BE71B4	171



0.37 kW

n ₂ min-1	M ₂ Nm	S	i	R _{N2} N						
					IE1	IE2		IE1	IE2	
3.6	891	1.1	379.6	10000	C514_379.6 S1 M1SD4	C514_379.6 S1 ME1SA4	162	C514_379.6 P71 BN71B4	C514_379.6 P71 BE71B4	163
3.7	869	1.8	370.1	16000	C614_370.1 S1 M1SD4	C614_370.1 S1 ME1SA4	166	C614_370.1 P71 BN71B4	C614_370.1 P71 BE71B4	167
4.1	793	2.0	337.7	16000	C614_337.7 S1 M1SD4	C614_337.7 S1 ME1SA4	166	C614_337.7 P71 BN71B4	C614_337.7 P71 BE71B4	167
4.1	783	0.8	333.4	7000	C414_333.4 S1 M1SD4	C414_333.4 S1 ME1SA4	158	C414_333.4 P71 BN71B4	C414_333.4 P71 BE71B4	159
4.2	765	1.3	326.1	10000	C514_326.1 S1 M1SD4	C514_326.1 S1 ME1SA4	162	C514_326.1 P71 BN71B4	C514_326.1 P71 BE71B4	163
4.6	699	1.4	297.8	10000	C514_297.8 S1 M1SD4	C514_297.8 S1 ME1SA4	162	C514_297.8 P71 BN71B4	C514_297.8 P71 BE71B4	163
5.2	619	1.6	263.8	10000	C514_263.8 S1 M1SD4	C514_263.8 S1 ME1SA4	162	C514_263.8 P71 BN71B4	C514_263.8 P71 BE71B4	163
5.2	617	1.0	263.0	7000	C414_263.0 S1 M1SD4	C414_263.0 S1 ME1SA4	158	C414_263.0 P71 BN71B4	C414_263.0 P71 BE71B4	159
5.9	540	0.8	230.9	6300	C364_230.9 S1 M1SD4	C364_230.9 S1 ME1SA4	154	C364_230.9 P71 BN71B4	C364_230.9 P71 BE71B4	159
6.3	520	1.9	216.7	10000	C513_216.7 S1 M1SD4	C513_216.7 S1 ME1SA4	162	C513_216.7 P71 BN71B4	C513_216.7 P71 BE71B4	163
6.6	502	1.2	209.1	7000	C413_209.1 S1 M1SD4	C413_209.1 S1 ME1SA4	158	C413_209.1 P71 BN71B4	C413_209.1 P71 BE71B4	159
6.6	499	0.9	206.4	6500		C363_206.4 P71 BN71B4		C363_206.4 P71 BN71B4	C363_206.4 P71 BE71B4	155
6.9	475	2.1	197.9	10000	C513_197.9 S1 M1SD4	C513_197.9 S1 ME1SA4	162	C513_197.9 P71 BN71B4	C513_197.9 P71 BE71B4	163
7.2	458	1.3	190.8	7000	C413_190.8 S1 M1SD4	C413_190.8 S1 ME1SA4	158	C413_190.8 P71 BN71B4	C413_190.8 P71 BE71B4	159
7.5	444	1.0	183.5	6500		C413_179.9 S1 ME1SA4		C363_183.5 P71 BN71B4	C363_183.5 P71 BE71B4	155
7.6	431	1.4	179.9	7000	C413_179.9 S1 M1SD4	C413_179.9 S1 ME1SA4	158	C413_179.9 P71 BN71B4	C413_179.9 P71 BE71B4	159
7.8	422	2.4	175.8	10000	C513_175.8 S1 M1SD4	C513_175.8 S1 ME1SA4	162	C513_175.8 P71 BN71B4	C513_175.8 P71 BE71B4	163
8.3	394	1.5	164.1	7000	C413_164.1 S1 M1SD4	C413_164.1 S1 ME1SA4	158	C413_164.1 P71 BN71B4	C413_164.1 P71 BE71B4	159
8.5	385	2.6	160.5	10000	C513_160.5 S1 M1SD4	C513_160.5 S1 ME1SA4	162	C513_160.5 P71 BN71B4	C513_160.5 P71 BE71B4	163
8.5	392	1.1	162.0	6500	C363_162.0 S1 M1SD4	C363_162.0 S1 ME1SA4	154	C363_162.0 P71 BN71B4	C363_162.0 P71 BE71B4	155
9.4	349	1.7	145.6	7000	C413_145.6 S1 M1SD4	C413_145.6 S1 ME1SA4	158	C413_145.6 P71 BN71B4	C413_145.6 P71 BE71B4	159
9.8	338	1.3	139.8	6500	C363_139.8 S1 M1SD4	C363_139.8 S1 ME1SA4	154	C363_139.8 P71 BN71B4	C363_139.8 P71 BE71B4	155
10.1	329	0.9	136.0	5500	C323_136.0 S1 M1SD4	C323_136.0 S1 ME1SA4	150	C323_136.0 P71 BN71B4	C323_136.0 P71 BE71B4	151
10.3	319	1.9	132.9	7000	C413_132.9 S1 M1SD4	C413_132.9 S1 ME1SA4	158	C413_132.9 P71 BN71B4	C413_132.9 P71 BE71B4	159
10.9	304	1.5	125.8	6500	C363_125.8 S1 M1SD4	C363_125.8 S1 ME1SA4	154	C363_125.8 P71 BN71B4	C363_125.8 P71 BE71B4	155
11.2	296	1.0	122.4	5500	C323_122.4 S1 M1SD4	C323_122.4 S1 ME1SA4	150	C323_122.4 P71 BN71B4	C323_122.4 P71 BE71B4	151
11.4	289	2.1	120.6	7000	C413_120.6 S1 M1SD4	C413_120.6 S1 ME1SA4	158	C413_120.6 P71 BN71B4	C413_120.6 P71 BE71B4	159
12.3	270	1.7	111.5	6500	C363_111.5 S1 M1SD4	C363_111.5 S1 ME1SA4	154	C363_111.5 P71 BN71B4	C363_111.5 P71 BE71B4	155
12.4	264	2.3	110.1	7000	C413_110.1 S1 M1SD4	C413_110.1 S1 ME1SA4	158	C413_110.1 P71 BN71B4	C413_110.1 P71 BE71B4	159
12.4	267	1.1	110.6	5500	C323_110.6 S1 M1SD4	C323_110.6 S1 ME1SA4	150	C323_110.6 P71 BN71B4	C323_110.6 P71 BE71B4	151
13.3	250	1.2	103.3	5500	C323_103.3 S1 M1SD4	C323_103.3 S1 ME1SA4	150	C323_103.3 P71 BN71B4	C323_103.3 P71 BE71B4	151
13.4	245	2.4	102.3	7000	C413_102.3 S1 M1SD4	C413_102.3 S1 ME1SA4	158	C413_102.3 P71 BN71B4	C413_102.3 P71 BE71B4	159
13.4	247	1.8	102.2	6500	C363_102.2 S1 M1SD4	C363_102.2 S1 ME1SA4	154	C363_102.2 P71 BN71B4	C363_102.2 P71 BE71B4	155
14.5	228	1.3	94.2	5500	C323_94.2 S1 M1SD4	C323_94.2 S1 ME1SA4	150	C323_94.2 P71 BN71B4	C323_94.2 P71 BE71B4	151
14.7	224	2.7	93.3	7000	C413_93.3 S1 M1SD4	C413_93.3 S1 ME1SA4	158	C413_93.3 P71 BN71B4	C413_93.3 P71 BE71B4	159
14.9	222	2.0	91.9	6500	C363_91.9 S1 M1SD4	C363_91.9 S1 ME1SA4	154	C363_91.9 P71 BN71B4	C363_91.9 P71 BE71B4	155
15.5	214	0.9	88.5	4850	C223_88.5 S1 M1SD4	C223_88.5 S1 ME1SA4	146	C223_88.5 P71 BN71B4	C223_88.5 P71 BE71B4	147
16.5	201	2.2	83.1	6500	C363_83.1 S1 M1SD4	C363_83.1 S1 ME1SA4	154	C363_83.1 P71 BN71B4	C363_83.1 P71 BE71B4	155
16.6	200	1.0	82.6	5000	C223_82.6 S1 M1SD4	C223_82.6 S1 ME1SA4	146	C223_82.6 P71 BN71B4	C223_82.6 P71 BE71B4	147
16.6	200	1.5	82.6	5500	C323_82.6 S1 M1SD4	C323_82.6 S1 ME1SA4	150	C323_82.6 P71 BN71B4	C323_82.6 P71 BE71B4	151
16.8	196	3.1	81.5	7000	C413_81.5 S1 M1SD4	C413_81.5 S1 ME1SA4	158	C413_81.5 P71 BN71B4	C413_81.5 P71 BE71B4	159
17.7	188	2.4	77.6	6500	C363_77.6 S1 M1SD4	C363_77.6 S1 ME1SA4	154	C363_77.6 P71 BN71B4	C363_77.6 P71 BE71B4	155
18.3	181	1.1	74.8	5000	C223_74.8 S1 M1SD4	C223_74.8 S1 ME1SA4	146	C223_74.8 P71 BN71B4	C223_74.8 P71 BE71B4	147
18.3	181	1.6	74.7	5500	C323_74.7 S1 M1SD4	C323_74.7 S1 ME1SA4	150	C323_74.7 P71 BN71B4	C323_74.7 P71 BE71B4	151
18.4	178	3.4	74.4	7000	C413_74.4 S1 M1SD4	C413_74.4 S1 ME1SA4	158	C413_74.4 P71 BN71B4	C413_74.4 P71 BE71B4	159
19.4	171	2.6	70.8	6500	C363_70.8 S1 M1SD4	C363_70.8 S1 ME1SA4	154	C363_70.8 P71 BN71B4	C363_70.8 P71 BE71B4	155
20.5	165	1.3	66.8	5500		C322_66.8 P71 BN71B4		C322_66.8 P71 BN71B4	C322_66.8 P71 BE71B4	151
21.0	158	1.3	65.3	5000	C223_65.3 S1 M1SD4	C223_65.3 S1 ME1SA4	146	C223_65.3 P71 BN71B4	C223_65.3 P71 BE71B4	147
21.7	156	0.8	63.3	4850		C222_63.3 P71 BN71B4		C222_63.3 P71 BN71B4	C222_63.3 P71 BE71B4	147
22.1	150	3.0	62.0	6500	C363_62.0 S1 M1SD4	C363_62.0 S1 ME1SA4	154	C363_62.0 P71 BN71B4	C363_62.0 P71 BE71B4	155
22.8	145	1.3	60.0	5000	C223_60.0 S1 M1SD4	C223_60.0 S1 ME1SA4	146	C223_60.0 P71 BN71B4	C223_60.0 P71 BE71B4	147
23.1	147	1.5	59.4	5500	C322_59.4 S1 M1SD4	C322_59.4 S1 ME1SA4	150	C322_59.4 P71 BN71B4	C322_59.4 P71 BE71B4	151
25.0	135	1.1	54.7	5000		C222_54.7 P71 BN71B4		C222_54.7 P71 BN71B4	C222_54.7 P71 BE71B4	147
26.1	130	2.3	52.4	5500	C322_52.4 S1 M1SD4	C322_52.4 S1 ME1SA4	150	C322_52.4 P71 BN71B4	C322_52.4 P71 BE71B4	151
28.2	120	1.3	48.6	4850		C222_48.6 P71 BN71B4		C222_48.6 P71 BN71B4	C222_48.6 P71 BE71B4	147
30	112	2.7	45.3	5500	C322_45.3 S1 M1SD4	C322_45.3 S1 ME1SA4	150	C322_45.3 P71 BN71B4	C322_45.3 P71 BE71B4	151
32	107	1.8	43.3	4530	C222_43.3 S1 M1SD4	C222_43.3 S1 ME1SA4	146	C222_43.3 P71 BN71B4	C222_43.3 P71 BE71B4	147
34	101	3.0	40.7	5500	C322_40.7 S1 M1SD4	C322_40.7 S1 ME1SA4	150	C322_40.7 P71 BN71B4	C322_40.7 P71 BE71B4	151
37	91	1.0	37.0	2000	C122_37.0 S1 M1SD4	C122_37.0 S1 ME1SA4	142	C122_37.0 P71 BN71B4	C122_37.0 P71 BE71B4	143
37	91	2.2	36.8	4360	C222_36.8 S1 M1SD4	C222_36.8 S1 ME1SA4	146	C222_36.8 P71 BN71B4	C222_36.8 P71 BE71B4	147
38	89	3.4	36.1	5500	C322_36.1 S1 M1SD4	C322_36.1 S1 ME1SA4	150	C322_36.1 P71 BN71B4	C322_36.1 P71 BE71B4	151
41	82	2.4	33.1	4240	C222_33.1 S1 M1SD4	C222_33.1 S1 ME1SA4	146	C222_33.1 P71 BN71B4	C222_33.1 P71 BE71B4	147
42	81	1.1	32.8	2000	C122_32.8 S1 M1SD4	C122_32.8 S1 ME1SA4	142	C122_32.8 P71 BN71B4	C122_32.8 P71 BE71B4	143
46	73	2.7	29.6	4130	C222_29.6 S1 M1SD4	C222_29.6 S1 ME1SA4	146	C222_29.6 P71 BN71B4	C222_29.6 P71 BE71B4	147
46	73	1.2	29.5	2000	C122_29.5 S1 M1SD4	C122_29.5 S1 ME1SA4	142	C122_29.5 P71 BN71B4	C122_29.5 P71 BE71B4	143

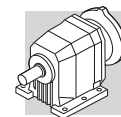


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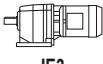
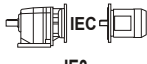
n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE1	IE2		IE1	IE2	
50	67	3.0	27.2	4100	C222_27.2 S1 M1SD4	C222_27.2 S1 ME1SA4	146	C222_27.2 P71 BN71B4	C222_27.2 P71 BE71B4	147
54	63	1.4	25.4	2000	C122_25.4 S1 M1SD4	C122_25.4 S1 ME1SA4	142	C122_25.4 P71 BN71B4	C122_25.4 P71 BE71B4	143
56	60	3.3	24.3	3920	C222_24.3 S1 M1SD4	C222_24.3 S1 ME1SA4	146	C222_24.3 P71 BN71B4	C222_24.3 P71 BE71B4	147
59	57	1.5	23.2	2000	C122_23.2 S1 M1SD4	C122_23.2 S1 ME1SA4	142	C122_23.2 P71 BN71B4	C122_23.2 P71 BE71B4	143
66	51	1.6	20.6	2000	C122_20.6 S1 M1SD4	C122_20.6 S1 ME1SA4	142	C122_20.6 P71 BN71B4	C122_20.6 P71 BE71B4	143
74	45	1.7	18.4	2000	C122_18.4 S1 M1SD4	C122_18.4 S1 ME1SA4	142	C122_18.4 P71 BN71B4	C122_18.4 P71 BE71B4	143
80	42	1.8	17.2	2000	C122_17.2 S1 M1SD4	C122_17.2 S1 ME1SA4	142	C122_17.2 P71 BN71B4	C122_17.2 P71 BE71B4	143
88	39	1.0	15.6	580	C052_15.6 S1 M1SD4	C052_15.6 S1 ME1SA4	141			
89	38	1.9	15.4	2000	C122_15.4 S1 M1SD4	C122_15.4 S1 ME1SA4	142	C122_15.4 P71 BN71B4	C122_15.4 P71 BE71B4	143
102	33	2.1	13.4	2000	C122_13.4 S1 M1SD4	C122_13.4 S1 ME1SA4	142	C122_13.4 P71 BN71B4	C122_13.4 P71 BE71B4	143
110	31	1.3	12.5	600	C052_12.5 S1 M1SD4	C052_12.5 S1 ME1SA4	141			
115	29	2.3	11.9	2000	C122_11.9 S1 M1SD4	C122_11.9 S1 ME1SA4	142	C122_11.9 P71 BN71B4	C122_11.9 P71 BE71B4	143
122	28	1.4	11.2	590	C052_11.2 S1 M1SD4	C052_11.2 S1 ME1SA4	141			
136	25	2.5	10.1	1930	C122_10.1 S1 M1SD4	C122_10.1 S1 ME1SA4	142	C122_10.1 P71 BN71B4	C122_10.1 P71 BE71B4	143
147	23	1.3	9.3	580	C052_9.3 S1 M1SD4	C052_9.3 S1 ME1SA4	141			
155	22	2.7	8.8	1850	C122_8.8 S1 M1SD4	C122_8.8 S1 ME1SA4	142	C122_8.8 P71 BN71B4	C122_8.8 P71 BE71B4	143
164	20	2.2	5.5	570	C052_5.5 S1 M1LA6		141			
180	19	3.0	7.6	1780	C122_7.6 S1 M1SD4	C122_7.6 S1 ME1SA4	142	C122_7.6 P71 BN71B4	C122_7.6 P71 BE71B4	143
185	18	1.6	7.4	570	C052_7.4 S1 M1SD4	C052_7.4 S1 ME1SA4	141			
204	17	1.8	6.7	560	C052_6.7 S1 M1SD4	C052_6.7 S1 ME1SA4	141			
220	15	3.4	6.2	1650	C122_6.2 S1 M1SD4	C122_6.2 S1 ME1SA4	142	C122_6.2 P71 BN71B4	C122_6.2 P71 BE71B4	143
235	14	3.7	11.9	1610	C122_11.9 S05 M05C2		142	C122_11.9 P71 BN71A2		143
249	14	2.2	5.5	540	C052_5.5 S1 M1SD4	C052_5.5 S1 ME1SA4	141			
273	12	4.0	10.1	1570	C122_10.1 S05 M05C2		142	C122_10.1 P71 BN71A2		143
318	11	4.5	8.8	1500	C122_8.8 S05 M05C2		142	C122_8.8 P71 BN71A2		143
361	9	4.8	7.6	1440	C122_7.6 S05 M05C2		142	C122_7.6 P71 BN71A2		143
452	7	5.7	6.2	1350	C122_6.2 S05 M05C2		142	C122_6.2 P71 BN71A2		143
500	7	6.0	5.6	1290	C122_5.6 S05 M05C2		142	C122_5.6 P71 BN71A2		143
577	6	6.5	4.9	1230	C122_4.9 S05 M05C2		142	C122_4.9 P71 BN71A2		143
651	5	7.0	4.3	1180	C122_3.2 S05 M05C2		142	C122_3.2 P71 BN71A2		143
770	4	7.8	3.7	1120	C122_3.7 S05 M05C2		142	C122_3.7 P71 BN71A2		143
875	4	8.4	3.2	1080	C122_3.2 S05 M05C2		142	C122_3.2 P71 BN71A2		143
1015	3	9.1	2.8	1030	C122_2.8 S05 M05C2		142	C122_2.8 P71 BN71A2		143

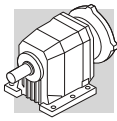
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n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE3			IE3		
0.73	4382	1.6	1240	60000						
0.78	4127	1.0	1168	35000						
0.93	3476	1.2	1481	35000				C804_1481 P71 BXN71MB4		174
1.2	2741	1.5	1168	35000				C804_1168 P71 BXN71MB4		174
1.4	2220	1.8	945.7	35000				C804_945.7 P71 BXN71MB4		174
1.5	2165	1.1	922.6	25000				C704_922.6 P71 BXN71MB4		171
1.7	1869	0.9	796.1	16000	C614_796.1 S10 MXN10MB4	166		C614_796.1 P71 BXN71MB4		167
2.0	1570	1.0	668.8	16000	C614_668.8 S10 MXN10MB4	166		C614_668.8 P71 BXN71MB4		167
2.1	1543	1.5	657.3	25000				C704_657.3 P71 BXN71MB4		171
2.4	1341	1.2	571.2	16000	C614_571.2 S10 MXN10MB4	166		C614_571.2 P71 BXN71MB4		167
2.5	1302	1.8	554.7	25000				C704_554.7 P71 BXN71MB4		171
2.5	1290	0.8	549.7	10000	C514_549.7 S10 MXN10MB4	162		C514_549.7 P71 BXN71MB4		163
2.6	1223	1.3	521.1	16000	C614_521.1 S10 MXN10MB4	166		C614_521.1 P71 BXN71MB4		167
3.3	989	1.6	421.5	16000	C614_421.5 S10 MXN10MB4	166		C614_421.5 P71 BXN71MB4		167
3.3	976	1.0	415.7	10000	C514_415.7 S10 MXN10MB4	162		C514_415.7 P71 BXN71MB4		163
3.3	961	2.4	409.4	25000				C704_409.4 P71 BXN71MB4		171
3.6	891	1.1	379.6	10000	C514_379.6 S10 MXN10MB4	162		C514_379.6 P71 BXN71MB4		163
3.7	869	1.8	370.1	16000	C614_370.1 S10 MXN10MB4	166		C614_370.1 P71 BXN71MB4		167
4.1	793	2.0	337.7	16000	C614_337.7 S10 MXN10MB4	166		C614_337.7 P71 BXN71MB4		167
4.1	783	0.8	333.4	7000	C414_333.4 S10 MXN10MB4	158		C414_333.4 P71 BXN71MB4		159
4.2	765	1.3	326.1	10000	C514_326.1 S10 MXN10MB4	162		C514_326.1 P71 BXN71MB4		163
4.6	699	1.4	297.8	10000	C514_297.8 S10 MXN10MB4	162		C514_297.8 P71 BXN71MB4		163
5.2	619	1.6	263.8	10000	C514_263.8 S10 MXN10MB4	162		C514_263.8 P71 BXN71MB4		163
5.2	617	1.0	263.0	7000	C414_263.0 S10 MXN10MB4	158		C414_263.0 P71 BXN71MB4		159

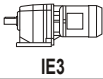
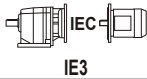






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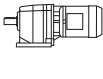

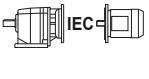
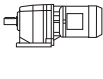

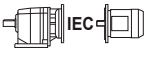

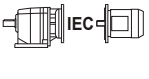

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N	 IE3	 IEC IE3
5.9	540	0.8	230.9	6300	C364_230.9 S10 MXN10MB4	154 C364_230.9 P71 BXN71MB4
6.3	520	1.9	216.7	10000		C513_216.7 P71 BXN71MB4
6.6	502	1.2	209.1	7000		C413_209.1 P71 BXN71MB4
6.6	499	0.9	206.4	6500		C363_206.4 P71 BXN71MB4
6.9	475	2.1	197.9	10000		C513_197.9 P71 BXN71MB4
7.2	458	1.3	190.8	7000		C413_190.8 P71 BXN71MB4
7.5	444	1.0	183.5	6500		C363_183.5 P71 BXN71MB4
7.6	431	1.4	179.9	7000		C413_179.9 P71 BXN71MB4
7.8	422	2.4	175.8	10000		C513_175.8 P71 BXN71MB4
8.3	394	1.5	164.1	7000		C413_164.1 P71 BXN71MB4
8.5	385	2.6	160.5	10000		C513_160.5 P71 BXN71MB4
8.5	392	1.1	162.0	6500	C363_162.0 S10 MXN10MB4	154 C363_162.0 P71 BXN71MB4
9.4	349	1.7	145.6	7000		C413_145.6 P71 BXN71MB4
9.8	338	1.3	139.8	6500	C363_139.8 S10 MXN10MB4	154 C363_139.8 P71 BXN71MB4
10.1	329	0.9	136.0	5500	C323_136.0 S10 MXN10MB4	150 C323_136.0 P71 BXN71MB4
10.3	319	1.9	132.9	7000		C413_132.9 P71 BXN71MB4
10.9	304	1.5	125.8	6500	C363_125.8 S10 MXN10MB4	154 C363_125.8 P71 BXN71MB4
11.2	296	1.0	122.4	5500	C323_122.4 S10 MXN10MB4	150 C323_122.4 P71 BXN71MB4
11.4	289	2.1	120.6	7000		C413_120.6 P71 BXN71MB4
12.3	270	1.7	111.5	6500	C363_111.5 S10 MXN10MB4	154 C363_111.5 P71 BXN71MB4
12.4	264	2.3	110.1	7000		C413_110.1 P71 BXN71MB4
12.4	267	1.1	110.6	5500	C323_110.6 S10 MXN10MB4	150 C323_110.6 P71 BXN71MB4
13.3	250	1.2	103.3	5500	C323_103.3 S10 MXN10MB4	150 C323_103.3 P71 BXN71MB4
13.4	245	2.4	102.3	7000		C413_102.3 P71 BXN71MB4
13.4	247	1.8	102.2	6500	C363_102.2 S10 MXN10MB4	154 C363_102.2 P71 BXN71MB4
14.5	228	1.3	94.2	5500	C323_94.2 S10 MXN10MB4	150 C323_94.2 P71 BXN71MB4
14.7	224	2.7	93.3	7000		C413_93.3 P71 BXN71MB4
14.9	222	2.0	91.9	6500	C363_91.9 S10 MXN10MB4	154 C363_91.9 P71 BXN71MB4
15.5	214	0.9	88.5	4850	C223_88.5 S10 MXN10MB4	146 C223_88.5 P71 BXN71MB4
16.5	201	2.2	83.1	6500	C363_83.1 S10 MXN10MB4	154 C363_83.1 P71 BXN71MB4
16.6	200	1.0	82.6	5000	C223_82.6 S10 MXN10MB4	146 C223_82.6 P71 BXN71MB4
16.6	200	1.5	82.6	5500	C323_82.6 S10 MXN10MB4	150 C323_82.6 P71 BXN71MB4
16.8	196	3.1	81.5	7000		C413_81.5 P71 BXN71MB4
17.7	188	2.4	77.6	6500	C363_77.6 S10 MXN10MB4	154 C363_77.6 P71 BXN71MB4
18.3	181	1.1	74.8	5000	C223_74.8 S10 MXN10MB4	146 C223_74.8 P71 BXN71MB4
18.3	181	1.6	74.7	5500	C323_74.7 S10 MXN10MB4	150 C323_74.7 P71 BXN71MB4
18.4	178	3.4	74.4	7000		C413_74.4 P71 BXN71MB4
19.4	171	2.6	70.8	6500	C363_70.8 S10 MXN10MB4	154 C363_70.8 P71 BXN71MB4
20.5	165	1.3	66.8	5500		C322_66.8 P71 BXN71MB4
21.0	158	1.3	65.3	5000	C223_65.3 S10 MXN10MB4	146 C223_65.3 P71 BXN71MB4
21.7	156	0.8	63.3	4850		C222_63.3 P71 BXN71MB4
22.1	150	3.0	62.0	6500	C363_62.0 S10 MXN10MB4	154 C363_62.0 P71 BXN71MB4
22.8	145	1.3	60.0	5000	C223_60.0 S10 MXN10MB4	146 C223_60.0 P71 BXN71MB4
23.1	147	1.5	59.4	5500	C322_59.4 S10 MXN10MB4	150 C322_59.4 P71 BXN71MB4
25.0	135	1.1	54.7	5000		C222_54.7 P71 BXN71MB4
26.1	130	2.3	52.4	5500	C322_52.4 S10 MXN10MB4	150 C322_52.4 P71 BXN71MB4
28.2	120	1.3	48.6	4850		C222_48.6 P71 BXN71MB4
30	112	2.7	45.3	5500	C322_45.3 S10 MXN10MB4	150 C322_45.3 P71 BXN71MB4
32	107	1.8	43.3	4530	C222_43.3 S10 MXN10MB4	146 C222_43.3 P71 BXN71MB4
34	101	3.0	40.7	5500	C322_40.7 S10 MXN10MB4	150 C322_40.7 P71 BXN71MB4
37	91	1.0	37.0	2000	C122_37.0 S10 MXN10MB4	142 C122_37.0 P71 BXN71MB4
37	91	2.2	36.8	4360	C222_36.8 S10 MXN10MB4	146 C222_36.8 P71 BXN71MB4
38	89	3.4	36.1	5500	C322_36.1 S10 MXN10MB4	150 C322_36.1 P71 BXN71MB4
41	82	2.4	33.1	4240	C222_33.1 S10 MXN10MB4	146 C222_33.1 P71 BXN71MB4
42	81	1.1	32.8	2000	C122_32.8 S10 MXN10MB4	142 C122_32.8 P71 BXN71MB4
46	73	2.7	29.6	4130	C222_29.6 S10 MXN10MB4	146 C222_29.6 P71 BXN71MB4
46	73	1.2	29.5	2000	C122_29.5 S10 MXN10MB4	142 C122_29.5 P71 BXN71MB4
50	67	3.0	27.2	4100	C222_27.2 S10 MXN10MB4	146 C222_27.2 P71 BXN71MB4
54	63	1.4	25.4	2000	C122_25.4 S10 MXN10MB4	142 C122_25.4 P71 BXN71MB4
56	60	3.3	24.3	3920	C222_24.3 S10 MXN10MB4	146 C222_24.3 P71 BXN71MB4
59	57	1.5	23.2	2000	C122_23.2 S10 MXN10MB4	142 C122_23.2 P71 BXN71MB4
66	51	1.6	20.6	2000	C122_20.6 S10 MXN10MB4	142 C122_20.6 P71 BXN71MB4
74	45	1.7	18.4	2000	C122_18.4 S10 MXN10MB4	142 C122_18.4 P71 BXN71MB4
80	42	1.8	17.2	2000	C122_17.2 S10 MXN10MB4	142 C122_17.2 P71 BXN71MB4
88	39	1.0	15.6	580		

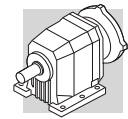


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n ₂ min-1	M ₂ Nm	S	i	R _{n2} N	 IE3		 IE3	
								
89	38	1.9	15.4	2000	C122_15.4 S10 MXN10MB4	142	C122_15.4 P71 BXN71MB4	143
102	33	2.1	13.4	2000	C122_13.4 S10 MXN10MB4	142	C122_13.4 P71 BXN71MB4	143
110	31	1.3	12.5	600				
115	29	2.3	11.9	2000	C122_11.9 S10 MXN10MB4	142	C122_11.9 P71 BXN71MB4	143
122	28	1.4	11.2	590				
136	25	2.5	10.1	1930	C122_10.1 S10 MXN10MB4	142	C122_10.1 P71 BXN71MB4	143
147	23	1.3	9.3	580				
155	22	2.7	8.8	1850	C122_8.8 S10 MXN10MB4	142	C122_8.8 P71 BXN71MB4	143
164	20	2.2	5.5	570				
180	19	3.0	7.6	1780	C122_7.6 S10 MXN10MB4	142	C122_7.6 P71 BXN71MB4	143
185	18	1.6	7.4	570				
204	17	1.8	6.7	560				
220	15	3.4	6.2	1650	C122_6.2 S10 MXN10MB4	142	C122_6.2 P71 BXN71MB4	143
235	14	3.7	11.9	1610				
249	14	2.2	5.5	540				
273	12	4.0	10.1	1570				
318	11	4.5	8.8	1500				
361	9	4.8	7.6	1440				
452	7	5.7	6.2	1350				
500	7	6.0	5.6	1290				
577	6	6.5	4.9	1230				
651	5	7.0	4.3	1180				
770	4	7.8	3.7	1120				
875	4	8.4	3.2	1080				
1015	3	9.1	2.8	1030				

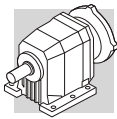
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n ₂ min-1	M ₂ Nm	S	i	R _{n2} N	 IE1		 IE2		 IEC	
										
0.74	6442	1.1	1240	60000	C904_1240 S2 M2SA6	176	C904_1240 P80 BN80B6	177		
0.85	5616	2.1	1081	85000	C1004_1081 S2 M2SA6	179	C1004_1081 P80 BN80B6	180		
1.0	4792	1.5	922.3	60000	C904_922.3 S2 M2SA6	176	C904_922.3 P80 BN80B6	177		
1.1	4381	0.9	1274	35000	C804_1274 S1 M1LA4	173	C804_1274 P80 BN80A4	174		
1.1	4295	1.7	1240	60000	C904_1240 S1 M1LA4	176	C904_1240 P80 BN80A4	177		
1.3	3549	1.1	1032	35000	C804_1032 S1 M1LA4	173	C804_1032 P80 BN80A4	174		
1.4	3484	2.1	1006	60000	C904_1006 S1 M1LA4	176	C904_1006 P80 BN80A4	177		
1.6	2939	1.4	854.6	35000	C804_854.6 S1 M1LA4	173	C804_854.6 P80 BN80A4	174		
1.6	2923	2.5	844.0	65000	C904_844.0 S1 M1LA4	176	C904_844.0 P80 BN80A4	177		
1.9	2531	0.9	736.0	25000	C704_736.0 S1 M1LA4	170	C704_736.0 P80 BN80A4	171		
1.9	2492	1.6	724.7	35000	C804_724.7 S1 M1LA4	173	C804_724.7 P80 BN80A4	174		
2.1	2284	1.8	664.3	35000	C804_664.3 S1 M1LA4	173	C804_664.3 P80 BN80A4	174		
2.1	2260	1.0	657.3	25000	C704_657.3 S1 M1LA4	170	C704_657.3 P80 BN80A4	171		
2.4	1978	0.8	571.2	16000	C614_571.2 S1 M1LA4	166	C614_571.2 P80 BN80A4	167		
2.5	1907	1.2	554.7	25000	C704_554.7 S1 M1LA4	170	C704_554.7 P80 BN80A4	171		
2.6	1820	2.2	529.3	35000	C804_529.3 S1 M1LA4	173	C804_529.3 P80 BN80A4	174		
3.0	1600	1.0	462.0	16000	C614_462.0 S1 M1LA4	166	C614_462.0 P80 BN80A4	167		
3.1	1566	2.6	455.4	35000	C804_455.4 S1 M1LA4	173	C804_455.4 P80 BN80A4	174		
3.1	1525	1.5	443.5	25000	C704_443.5 S1 M1LA4	170	C704_443.5 P80 BN80A4	171		
3.3	1460	1.1	421.5	16000	C614_421.5 S1 M1LA4	166	C614_421.5 P80 BN80A4	167		
3.6	1315	0.8	379.6	10000	C514_379.6 S1 M1LA4	162	C514_379.6 P80 BN80A4	163		
3.7	1282	1.2	370.1	16000	C614_370.1 S1 M1LA4	166	C614_370.1 P80 BN80A4	167		
3.8	1254	3.2	364.7	35000	C804_364.7 S1 M1LA4	173	C804_364.7 P80 BN80A4	174		
4.0	1184	1.9	344.3	25000	C704_344.3 S1 M1LA4	170	C704_344.3 P80 BN80A4	171		
4.1	1170	1.4	337.7	16000	C614_337.7 S1 M1LA4	166	C614_337.7 P80 BN80A4	167		
4.2	1130	0.9	326.1	10000	C514_326.1 S1 M1LA4	162	C514_326.1 P80 BN80A4	163		
4.6	1031	1.0	297.8	10000	C514_297.8 S1 M1LA4	162	C514_297.8 P80 BN80A4	163		
5.0	953	1.7	275.3	16000	C614_275.3 S1 M1LA4	166	C614_275.3 P80 BN80A4	167		
5.1	936	2.5	272.2	25000	C704_272.2 S1 M1LA4	170	C704_272.2 P80 BN80A4	171		
5.2	914	1.1	263.8	10000	C514_263.8 S1 M1LA4	162	C514_263.8 P80 BN80A4	163		
5.7	834	1.2	240.9	10000	C514_240.9 S1 M1LA4	162	C514_240.9 P80 BN80A4	163		
5.8	847	2.7	239.3	25000	C703_239.3 S1 M1LA4	170	C703_239.3 P80 BN80A4	171		



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n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE1	IE2		IE1	IE2	
5.8	825	1.9	238.3	16000	C614_238.3 S1 M1LA4	C614_238.3 S2 ME2SA4	166	C614_238.3 P80 BN80A4	C614_238.3 P80 BE80A4	167
6.2	782	2.9	220.9	25000				C703_220.9 P80 BN80A4	C703_220.9 P80 BE80A4	171
6.3	753	2.1	217.4	16000	C614_217.4 S1 M1LA4	C614_217.4 S2 ME2SA4	166	C614_217.4 P80 BN80A4	C614_217.4 P80 BE80A4	167
6.4	767	1.3	216.7	10000	C513_216.7 S1 M1LA4	C513_216.7 S2 ME2SA4	162	C513_216.7 P80 BN80A4	C513_216.7 P80 BE80A4	163
7.0	700	1.4	197.9	10000	C513_197.9 S1 M1LA4	C513_197.9 S2 ME2SA4	162	C513_197.9 P80 BN80A4	C513_197.9 P80 BE80A4	163
7.0	693	2.3	195.8	16000				C613_195.8 P80 BN80A4	C613_195.8 P80 BE80A4	166
7.1	687	3.3	194.1	25000				C703_194.1 P80 BN80A4	C703_194.1 P80 BE80A4	171
7.7	637	0.9	179.9	7000	C413_179.9 S1 M1LA4	C413_179.9 S2 ME2SA4	158	C413_179.9 P80 BN80A4	C413_179.9 P80 BE80A4	159
7.7	632	2.5	178.6	16000				C613_178.6 P80 BN80A4	C613_178.6 P80 BE80A4	166
7.9	622	1.6	175.8	10000	C513_175.8 S1 M1LA4	C513_175.8 S2 ME2SA4	162	C513_175.8 P80 BN80A4	C513_175.8 P80 BE80A4	163
8.4	582	2.7	164.5	16000				C613_164.5 P80 BN80A4	C613_164.5 P80 BE80A4	166
8.4	581	1.0	164.1	7000	C413_164.1 S1 M1LA4	C413_164.1 S2 ME2SA4	158	C413_164.1 P80 BN80A4	C413_164.1 P80 BE80A4	159
8.6	568	1.8	160.5	10000	C513_160.5 S1 M1LA4	C513_160.5 S2 ME2SA4	162	C513_160.5 P80 BN80A4	C513_160.5 P80 BE80A4	163
9.2	531	3.0	150.0	16000				C613_150.0 P80 BN80A4	C613_150.0 P80 BE80A4	166
9.4	522	1.9	147.4	10000	C513_147.4 S1 M1LA4	C513_147.4 S2 ME2SA4	162	C513_147.4 P80 BN80A4	C513_147.4 P80 BE80A4	163
9.5	516	1.2	145.6	7000	C413_145.6 S1 M1LA4	C413_145.6 S2 ME2SA4	158	C413_145.6 P80 BN80A4	C413_145.6 P80 BE80A4	159
9.8	497	3.2	140.5	16000				C613_140.5 P80 BN80A4	C613_140.5 P80 BE80A4	166
9.9	494	0.9	139.8	6500	C363_139.8 S1 M1LA4	C363_139.8 S2 ME2SA4	154	C363_139.8 P80BN80A4	C363_139.8 P80 BE80A4	155
10.3	477	2.1	134.6	10000	C513_134.6 S1 M1LA4	C513_134.6 S2 ME2SA4	162	C513_134.6 P80 BN80A4	C513_134.6 P80 BE80A4	163
10.4	470	1.3	132.9	7000	C413_132.9 S1 M1LA4	C413_132.9 S2 ME2SA4	158	C413_132.9 P80 BN80A4	C413_132.9 P80 BE80A4	159
11.0	445	1.0	125.8	6500	C363_125.8 S1 M1LA4	C363_125.8 S2 ME2SA4	154	C363_125.8 P80BN80A4	C363_125.8 P80 BE80A4	155
11.1	440	2.3	124.4	10000	C513_124.4 S1 M1LA4	C513_124.4 S2 ME2SA4	162	C513_124.4 P80 BN80A4	C513_124.4 P80 BE80A4	163
11.4	427	1.4	120.6	7000	C413_120.6 S1 M1LA4	C413_120.6 S2 ME2SA4	158	C413_120.6 P80 BN80A4	C413_120.6 P80 BE80A4	159
12.1	402	2.5	113.6	10000	C513_113.6 S1 M1LA4	C513_113.6 S2 ME2SA4	162	C513_113.6 P80 BN80A4	C513_113.6 P80 BE80A4	163
12.4	394	1.1	111.5	6500	C363_111.5 S1 M1LA4	C363_111.5 S2 ME2SA4	154	C363_111.5 P80BN80A4	C363_111.5 P80 BE80A4	155
12.5	390	1.5	110.1	7000	C413_110.1 S1 M1LA4	C413_110.1 S2 ME2SA4	158	C413_110.1 P80 BN80A4	C413_110.1 P80 BE80A4	159
13.5	362	1.7	102.3	7000	C413_102.3 S1 M1LA4	C413_102.3 S2 ME2SA4	158	C413_102.3 P80 BN80A4	C413_102.3 P80 BE80A4	159
13.5	361	1.2	102.2	6500	C363_102.2 S1 M1LA4	C363_102.2 S2 ME2SA4	154	C363_102.2 P80BN80A4	C363_102.2 P80 BE80A4	155
13.6	360	2.8	101.8	10000	C513_101.8 S1 M1LA4	C513_101.8 S2 ME2SA4	162	C513_101.8 P80 BN80A4	C513_101.8 P80 BE80A4	163
14.7	333	0.9	94.2	5500	C323_94.2 S1 M1LA4	C323_94.2 S2 ME2SA4	150	C323_94.2 P80BN80A4	C323_94.2 P80 BE80A4	151
14.8	330	1.8	93.3	7000	C413_93.3 S1 M1LA4	C413_93.3 S2 ME2SA4	158	C413_93.3 P80 BN80A4	C413_93.3 P80 BE80A4	159
14.8	329	3.0	93.0	10000	C513_93.0 S1 M1LA4	C513_93.0 S2 ME2SA4	162	C513_93.0 P80 BN80A4	C513_93.0 P80 BE80A4	163
15.0	325	1.4	91.9	6500	C363_91.9 S1 M1LA4	C363_91.9 S2 ME2SA4	154	C363_91.9 P80BN80A4	C363_91.9 P80 BE80A4	155
16.6	294	1.5	83.1	6500	C363_83.1 S1 M1LA4	C363_83.1 S2 ME2SA4	154	C363_83.1 P80BN80A4	C363_83.1 P80 BE80A4	155
16.7	292	1.0	82.6	5500	C323_82.6 S1 M1LA4	C323_82.6 S2 ME2SA4	150	C323_82.6 P80BN80A4	C323_82.6 P80 BE80A4	151
16.9	289	2.1	81.5	7000	C413_81.5 S1 M1LA4	C413_81.5 S2 ME2SA4	158	C413_81.5 P80 BN80A4	C413_81.5 P80 BE80A4	159
17.5	284	1.1	52.4	5500	C322_52.4 S2 M2SA6		150	C322_52.4 P80 BN80B6		151
17.8	274	1.6	77.6	6500	C363_77.6 S1 M1LA4	C363_77.6 S2 ME2SA4	154	C363_77.6 P80BN80A4	C363_77.6 P80 BE80A4	155
18.5	264	1.1	74.7	5500	C323_74.7 S1 M1LA4	C323_74.7 S2 ME2SA4	150	C323_74.7 P80BN80A4	C323_74.7 P80 BE80A4	151
18.6	263	2.3	74.4	7000	C413_74.4 S1 M1LA4	C413_74.4 S2 ME2SA4	158	C413_74.4 P80 BN80A4	C413_74.4 P80 BE80A4	159
19.5	250	1.8	70.8	6500	C363_70.8 S1 M1LA4	C363_70.8 S2 ME2SA4	154	C363_70.8 P80BN80A4	C363_70.8 P80 BE80A4	155
20.7	241	0.9	66.8	5500				C322_66.8 P80BN80A4	C322_66.8 P80 BE80A4	151
21.5	228	2.6	64.3	7000	C413_64.3 S1 M1LA4	C413_64.3 S2 ME2SA4	158	C413_64.3 P80 BN80A4	C413_64.3 P80 BE80A4	159
22.2	219	2.1	62.0	6500	C363_62.0 S1 M1LA4	C363_62.0 S2 ME2SA4	154	C363_62.0 P80BN80A4	C363_62.0 P80 BE80A4	155
22.6	221	1.4	40.7	5500	C322_40.7 S2 M2SA6		150	C322_40.7 P80 BN80B6		151
23.0	212	0.9	60.0	4280	C223_60.0 S1 M1LA4	C223_60.0 S2 ME2SA4	146	C223_60.0 P80BN80A4	C223_60.0 P80 BE80A4	147
23.2	214	1.0	59.4	5500	C322_59.4 S1 M1LA4	C322_59.4 S2 ME2SA4	150	C322_59.4 P80BN80A4	C322_59.4 P80 BE80A4	151
23.5	208	2.9	58.7	7000	C413_58.7 S1 M1LA4	C413_58.7 S2 ME2SA4	158	C413_58.7 P80 BN80A4	C413_58.7 P80 BE80A4	159
24.6	198	2.3	56.2	6500	C363_56.2 S1 M1LA4	C363_56.2 S2 ME2SA4	154	C363_56.2 P80BN80A4	C363_56.2 P80 BE80A4	155
26.3	189	1.6	52.4	5500	C322_52.4 S1 M1LA4	C322_52.4 S2 ME2SA4	150	C322_52.4 P80BN80A4	C322_52.4 P80 BE80A4	151
26.8	182	3.3	51.5	7000	C413_51.5 S1 M1LA4	C413_51.5 S2 ME2SA4	158	C413_51.5 P80 BN80A4	C413_51.5 P80 BE80A4	159
27.8	180	1.1	33.1	4270	C222_33.1 S2 M2SA6		146	C222_33.1 P80 BN80B6		147
28.7	170	2.6	48.2	6500	C363_48.2 S1 M1LA4	C363_48.2 S2 ME2SA4	154	C363_48.2 P80BN80A4	C363_48.2 P80 BE80A4	155
30	163	1.8	45.3	5500	C322_45.3 S1 M1LA4	C322_45.3 S2 ME2SA4	150	C322_45.3 P80BN80A4	C322_45.3 P80 BE80A4	151
31	162	3.1	44.8	7000	C412_44.8 S1 M1LA4	C412_44.8 S2 ME2SA4	158	C412_44.8 P80 BN80A4	C412_44.8 P80 BE80A4	159
32	154	2.9	43.5	6500	C363_43.5 S1 M1LA4	C363_43.5 S2 ME2SA4	154	C363_43.5 P80BN80A4	C363_43.5 P80 BE80A4	155
32	156	1.2	43.3	4190	C222_43.3 S1 M1LA4	C222_43.3 S2 ME2SA4	146	C222_43.3 P80BN80A4	C222_43.3 P80 BE80A4	147
34	147	2.0	40.7	5500	C322_40.7 S1 M1LA4	C322_40.7 S2 ME2SA4	150	C322_40.7 P80BN80A4	C322_40.7 P80 BE80A4	151
36	135	3.3	38.1	6500	C363_38.1 S1 M1LA4	C363_38.1 S2 ME2SA4	154	C363_38.1 P80BN80A4	C363_38.1 P80 BE80A4	155
38	133	1.5	36.8	4070	C222_36.8 S1 M1LA4	C222_36.8 S2 ME2SA4	146	C222_36.8 P80BN80A4	C222_36.8 P80 BE80A4	147
38	130	2.3	36.1	5500	C322_36.1 S1 M1LA4	C322_36.1 S2 ME2SA4	150	C322_36.1 P80BN80A4	C322_36.1 P80 BE80A4	151
42	119	1.7	33.1	3970	C222_33.1 S1 M1LA4	C222_33.1 S2 ME2SA4	146	C222_33.1 P80BN80A4	C222_33.1 P80 BE80A4	147
42	119	2.5	33.1	5500	C322_33.1 S1 M1LA4	C322_33.1 S2 ME2SA4	150	C322_33.1 P80BN80A4	C322_33.1 P80 BE80A4	151
46	107	2.8	29.8	5500	C322_29.8 S1 M1LA4	C322_29.8 S2 ME2SA4	150	C322_29.8 P80BN80A4	C322_29.8 P80 BE80A4	151
47	107	1.9	29.6	3890	C222_29.6 S1 M1LA4	C222_29.6 S2 ME2SA4	146	C222_29.6 P80BN80A4	C222_29.6 P80 BE80A4	147

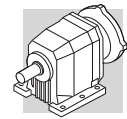


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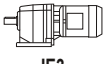
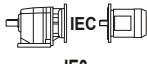
n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE1	IE2		IE1	IE2	
47	106	0.8	29.5	1820	C122_29.5 S1 M1LA4	C122_29.5 S2 ME2SA4	142	C122_29.5 P80BN80A4	C122_29.5 P80 BE80A4	143
51	98	2.0	27.2	3860	C222_27.2 S1 M1LA4	C222_27.2 S2 ME2SA4	146	C222_27.2 P80BN80A4	C222_27.2 P80 BE80A4	147
51	97	3.1	26.9	5500	C322_26.9 S1 M1LA4	C322_26.9 S2 ME2SA4	150	C322_26.9 P80BN80A4	C322_26.9 P80 BE80A4	151
54	92	1.0	25.4	2000	C122_25.4 S1 M1LA4	C122_25.4 S2 ME2SA4	142	C122_25.4 P80BN80A4	C122_25.4 P80 BE80A4	143
55	91	3.3	25.1	5500	C322_25.1 S1 M1LA4	C322_25.1 S2 ME2SA4	150	C322_25.1 P80BN80A4	C322_25.1 P80 BE80A4	151
57	88	2.3	24.3	3720	C222_24.3 S1 M1LA4	C222_24.3 S2 ME2SA4	146	C222_24.3 P80BN80A4	C222_24.3 P80 BE80A4	147
59	84	1.0	23.2	2000	C122_23.2 S1 M1LA4	C122_23.2 S2 ME2SA4	142	C122_23.2 P80BN80A4	C122_23.2 P80 BE80A4	143
64	77	2.5	21.5	3700	C222_21.5 S1 M1LA4	C222_21.5 S2 ME2SA4	146	C222_21.5 P80BN80A4	C222_21.5 P80 BE80A4	147
67	74	1.1	20.6	2000	C122_20.6 S1 M1LA4	C122_20.6 S2 ME2SA4	142	C122_20.6 P80BN80A4	C122_20.6 P80 BE80A4	143
69	72	2.6	20.0	3560	C222_20.0 S1 M1LA4	C222_20.0 S2 ME2SA4	146	C222_20.0 P80BN80A4	C222_20.0 P80 BE80A4	147
75	66	1.2	18.4	2000	C122_18.4 S1 M1LA4	C122_18.4 S2 ME2SA4	142	C122_18.4 P80BN80A4	C122_18.4 P80 BE80A4	143
76	65	2.8	18.1	3500	C222_18.1 S1 M1LA4	C222_18.1 S2 ME2SA4	146	C222_18.1 P80BN80A4	C222_18.1 P80 BE80A4	147
80	62	1.2	17.2	2000	C122_17.2 S1 M1LA4	C122_17.2 S2 ME2SA4	142	C122_17.2 P80BN80A4	C122_17.2 P80 BE80A4	143
87	57	3.1	15.8	3350	C222_15.8 S1 M1LA4	C222_15.8 S2 ME2SA4	146	C222_15.8 P80BN80A4	C222_15.8 P80 BE80A4	147
89	56	1.3	15.4	2000	C122_15.4 S1 M1LA4	C122_15.4 S2 ME2SA4	142	C122_15.4 P80BN80A4	C122_15.4 P80 BE80A4	143
95	53	3.2	14.5	3300	C222_14.5 S1 M1LA4	C222_14.5 S2 ME2SA4	146	C222_14.5 P80BN80A4	C222_14.5 P80 BE80A4	147
103	48	1.4	13.4	1990	C122_13.4 S1 M1LA4	C122_13.4 S2 ME2SA4	142	C122_13.4 P80BN80A4	C122_13.4 P80 BE80A4	143
116	43	1.6	11.9	1920	C122_11.9 S1 M1LA4	C122_11.9 S2 ME2SA4	142	C122_11.9 P80BN80A4	C122_11.9 P80 BE80A4	143
121	41	1.6	7.6	1910	C122_7.6 S2 M2SA6		142	C122_7.6 P80 BN80B6		143
123	40	1.0	11.2	480	C052_11.2 S1 M1LA4	C052_11.2 S2 ME2SA4	141			
137	36	1.7	10.1	1850	C122_10.1 S1 M1LA4	C122_10.1 S2 ME2SA4	142	C122_10.1 P80BN80A4	C122_10.1 P80 BE80A4	143
151	33	3.3	6.1	2860	C222_6.1 S2 M2SA6		146	C222_6.1 P80 BN80B6		147
156	32	1.9	8.8	1780	C122_8.8 S1 M1LA4	C122_8.8 S2 ME2SA4	142	C122_8.8 P80BN80A4	C122_8.8 P80 BE80A4	143
181	28	2.0	7.6	1720	C122_7.6 S1 M1LA4	C122_7.6 S2 ME2SA4	142	C122_7.6 P80BN80A4	C122_7.6 P80 BE80A4	143
186	27	1.1	7.4	460	C052_7.4 S1 M1LA4	C052_7.4 S2 ME2SA4	141			
206	24	1.2	6.7	450	C052_6.7 S1 M1LA4	C052_6.7 S2 ME2SA4	141			
221	22	2.4	6.2	1590	C122_6.2 S1 M1LA4	C122_6.2 S2 ME2SA4	142	C122_6.2 P80BN80A4	C122_6.2 P80 BE80A4	143
237	21	2.5	11.9	1580	C122_11.9 S1 M1SD2		142	C122_11.9 P71 BN71B2		143
246	20	2.5	5.6	1540	C122_5.6 S1 M1LA4	C122_5.6 S2 ME2SA4	142	C122_5.6 P80BN80A4	C122_5.6 P80 BE80A4	143
251	20	1.5	5.5	430	C052_5.5 S1 M1LA4	C052_5.5 S2 ME2SA4	141			
279	18	2.7	10.1	1530	C122_10.1 S1 M1SD2		142	C122_10.1 P71 BN71B2		143
283	18	2.7	4.9	1490	C122_4.9 S1 M1LA4	C122_4.9 S2 ME2SA4	142	C122_4.9 P80BN80A4	C122_4.9 P80 BE80A4	143
320	16	3.0	8.8	1470	C122_8.8 S1 M1SD2		142	C122_8.8 P71 BN71B2		143
320	16	2.9	4.3	1420	C122_4.3 S1 M1LA4	C122_4.3 S2 ME2SA4	142	C122_4.3 P80BN80A4	C122_4.3 P80 BE80A4	143
369	14	3.3	7.6	1410	C122_7.6 S1 M1SD2		142	C122_7.6 P71 BN71B2		143
378	13	3.2	3.7	1370	C122_3.7 S1 M1LA4	C122_3.7 S2 ME2SA4	142	C122_3.7 P80BN80A4	C122_3.7 P80 BE80A4	143
451	11	3.8	6.2	1300	C122_6.2 S1 M1SD2		142	C122_6.2 P71 BN71B2		143
504	10	4.0	5.6	1260	C122_5.6 S1 M1SD2		142	C122_5.6 P71 BN71B2		143
577	9	4.4	4.9	1210	C122_4.9 S1 M1SD2		142	C122_4.9 P71 BN71B2		143
656	8	4.7	4.3	1170	C122_4.3 S1 M1SD2		142	C122_4.3 P71 BN71B2		143
770	6	5.2	3.7	1110	C122_3.7 S1 M1SD2		142	C122_3.7 P71 BN71B2		143
881	6	5.7	3.2	990	C122_3.2 S1 M1SD2		142	C122_3.2 P71 BN71B2		143
1007	5	6.1	2.8	950	C122_2.8 S1 M1SD2		142	C122_2.8 P71 BN71B2		143

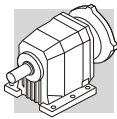
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n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE3			IE3		
0.74	6442	1.1	1240	60000						
0.85	5616	2.1	1081	85000						
1.0	4792	1.5	922.3	60000						
1.1	4381	0.9	1274	35000				C804_1274 P80 BXN80MA4		174
1.1	4295	1.7	1240	60000				C904_1240 P80 BXN80MA4		177
1.3	3549	1.1	1032	35000				C804_1032 P80 BXN80MA4		174
1.4	3484	2.1	1006	60000				C904_1006 P80 BXN80MA4		177
1.6	2939	1.4	854.6	35000				C804_854.6 P80 BXN80MA4		174
1.6	2923	2.5	844.0	65000				C904_844.0 P80 BXN80MA4		177
1.9	2531	0.9	736.0	25000				C704_736.0 P80 BXN80MA4		171
1.9	2492	1.6	724.7	35000				C804_724.7 P80 BXN80MA4		174
2.1	2284	1.8	664.3	35000				C804_664.3 P80 BXN80MA4		174
2.1	2260	1.0	657.3	25000				C704_657.3 P80 BXN80MA4		171
2.4	1978	0.8	571.2	16000				C614_571.2 P80 BXN80MA4		167

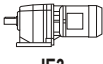
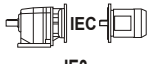


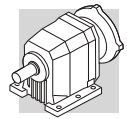
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n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N	 IE3		 IEC	
2.5	1907	1.2	554.7	25000			C704_554.7 P80 BXN80MA4	171
2.6	1820	2.2	529.3	35000			C804_529.3 P80 BXN80MA4	174
3.0	1600	1.0	462.0	16000			C614_462.0 P80 BXN80MA4	167
3.1	1566	2.6	455.4	35000			C804_455.4 P80 BXN80MA4	174
3.1	1525	1.5	443.5	25000			C704_443.5 P80 BXN80MA4	171
3.3	1460	1.1	421.5	16000			C614_421.5 P80 BXN80MA4	167
3.6	1315	0.8	379.6	10000			C514_379.6 P80 BXN80MA4	163
3.7	1282	1.2	370.1	16000			C614_370.1 P80 BXN80MA4	167
3.8	1254	3.2	364.7	35000			C804_364.7 P80 BXN80MA4	174
4.0	1184	1.9	344.3	25000			C704_344.3 P80 BXN80MA4	171
4.1	1170	1.4	337.7	16000			C614_337.7 P80 BXN80MA4	167
4.2	1130	0.9	326.1	10000			C514_326.1 P80 BXN80MA4	163
4.6	1031	1.0	297.8	10000			C514_297.8 P80 BXN80MA4	163
5.0	953	1.7	275.3	16000			C614_275.3 P80 BXN80MA4	167
5.1	936	2.5	272.2	25000			C704_272.2 P80 BXN80MA4	171
5.2	914	1.1	263.8	10000			C514_263.8 P80 BXN80MA4	163
5.7	834	1.2	240.9	10000			C514_240.9 P80 BXN80MA4	163
5.8	847	2.7	239.3	25000			C703_239.3 P80 BXN80MA4	171
5.8	825	1.9	238.3	16000			C614_238.3 P80 BXN80MA4	167
6.2	782	2.9	220.9	25000			C703_220.9 P80 BXN80MA4	171
6.3	753	2.1	217.4	16000			C614_217.4 P80 BXN80MA4	167
6.4	767	1.3	216.7	10000			C513_216.7 P80 BXN80MA4	163
7.0	700	1.4	197.9	10000			C513_197.9 P80 BXN80MA4	163
7.0	693	2.3	195.8	16000			C613_195.8 P80 BXN80MA4	166
7.1	687	3.3	194.1	25000			C703_194.1 P80 BXN80MA4	171
7.7	637	0.9	179.9	7000			C413_179.9 P80 BXN80MA4	159
7.7	632	2.5	178.6	16000			C613_178.6 P80 BXN80MA4	166
7.9	622	1.6	175.8	10000			C513_175.8 P80 BXN80MA4	163
8.4	582	2.7	164.5	16000			C613_164.5 P80 BXN80MA4	166
8.4	581	1.0	164.1	7000			C413_164.1 P80 BXN80MA4	159
8.6	568	1.8	160.5	10000			C513_160.5 P80 BXN80MA4	163
9.2	531	3.0	150.0	16000			C613_150.0 P80 BXN80MA4	166
9.4	522	1.9	147.4	10000			C513_147.4 P80 BXN80MA4	163
9.5	516	1.2	145.6	7000			C413_145.6 P80 BXN80MA4	159
9.8	497	3.2	140.5	16000			C613_140.5 P80 BXN80MA4	166
9.9	494	0.9	139.8	6500			C363_139.8 P80 BXN80MA4	155
10.3	477	2.1	134.6	10000			C513_134.6 P80 BXN80MA4	163
10.4	470	1.3	132.9	7000			C413_132.9 P80 BXN80MA4	159
11.0	445	1.0	125.8	6500			C363_125.8 P80 BXN80MA4	155
11.1	440	2.3	124.4	10000			C513_124.4 P80 BXN80MA4	163
11.4	427	1.4	120.6	7000			C413_120.6 P80 BXN80MA4	159
12.1	402	2.5	113.6	10000			C513_113.6 P80 BXN80MA4	163
12.4	394	1.1	111.5	6500			C363_111.5 P80 BXN80MA4	155
12.5	390	1.5	110.1	7000			C413_110.1 P80 BXN80MA4	159
13.5	362	1.7	102.3	7000			C413_102.3 P80 BXN80MA4	159
13.5	361	1.2	102.2	6500			C363_102.2 P80 BXN80MA4	155
13.6	360	2.8	101.8	10000			C513_101.8 P80 BXN80MA4	163
14.7	333	0.9	94.2	5500	C323_94.2 S20 MXN20MA4	150	C323_94.2 P80 BXN80MA4	151
14.8	330	1.8	93.3	7000			C413_93.3 P80 BXN80MA4	159
14.8	329	3.0	93.0	10000			C513_93.0 P80 BXN80MA4	163
15.0	325	1.4	91.9	6500			C363_91.9 P80 BXN80MA4	155
16.6	294	1.5	83.1	6500			C363_83.1 P80 BXN80MA4	155
16.7	292	1.0	82.6	5500	C323_82.6 S20 MXN20MA4	150	C323_82.6 P80 BXN80MA4	151
16.9	289	2.1	81.5	7000			C413_81.5 P80 BXN80MA4	159
17.5	284	1.1	52.4	5500				
17.8	274	1.6	77.6	6500			C363_77.6 P80 BXN80MA4	155
18.5	264	1.1	74.7	5500	C323_74.7 S20 MXN20MA4	150	C323_74.7 P80 BXN80MA4	151
18.6	263	2.3	74.4	7000			C413_74.4 P80 BXN80MA4	159
19.5	250	1.8	70.8	6500			C363_70.8 P80 BXN80MA4	155
20.7	241	0.9	66.8	5500			C322_66.8 P80 BXN80MA4	151
21.5	228	2.6	64.3	7000			C413_64.3 P80 BXN80MA4	159
22.2	219	2.1	62.0	6500			C363_62.0 P80 BXN80MA4	155
22.6	221	1.4	40.7	5500				
23.0	212	0.9	60.0	4280	C223_60.0 S20 MXN20MA4	146	C223_60.0 P80 BXN80MA4	147
23.2	214	1.0	59.4	5500			C322_59.4 P80 BXN80MA4	151





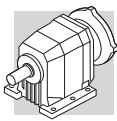
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n ₂ min-1	M ₂ Nm	S	i	R _{n2} N	 IE3	 IEC IE3		
23.5	208	2.9	58.7	7000			C413_58.7 P80 BXN80MA4	159
24.6	198	2.3	56.2	6500			C363_56.2 P80 BXN80MA4	155
26.3	189	1.6	52.4	5500			C322_52.4 P80 BXN80MA4	151
26.8	182	3.3	51.5	7000			C413_51.5 P80 BXN80MA4	159
27.8	180	1.1	33.1	4270				
28.7	170	2.6	48.2	6500			C363_48.2 P80 BXN80MA4	155
30	163	1.8	45.3	5500			C322_45.3 P80 BXN80MA4	151
31	162	3.1	44.8	7000			C412_44.8 P80 BXN80MA4	159
32	154	2.9	43.5	6500			C363_43.5 P80 BXN80MA4	155
32	156	1.2	43.3	4190	C222_43.3 S20 MXN20MA4	146	C222_43.3 P80 BXN80MA4	147
34	147	2.0	40.7	5500			C322_40.7 P80 BXN80MA4	151
36	135	3.3	38.1	6500			C363_38.1 P80 BXN80MA4	155
38	133	1.5	36.8	4070	C222_36.8 S20 MXN20MA4	146	C222_36.8 P80 BXN80MA4	147
38	130	2.3	36.1	5500			C322_36.1 P80 BXN80MA4	151
42	119	1.7	33.1	3970	C222_33.1 S20 MXN20MA4	146	C222_33.1 P80 BXN80MA4	147
42	119	2.5	33.1	5500			C322_33.1 P80 BXN80MA4	151
46	107	2.8	29.8	5500			C322_29.8 P80 BXN80MA4	151
47	107	1.9	29.6	3890	C222_29.6 S20 MXN20MA4	146	C222_29.6 P80 BXN80MA4	147
47	106	0.8	29.5	1820	C122_29.5 S20 MXN20MA4	142	C122_29.5 P80 BXN80MA4	143
51	98	2.0	27.2	3860	C222_27.2 S20 MXN20MA4	146	C222_27.2 P80 BXN80MA4	147
51	97	3.1	26.9	5500			C322_26.9 P80 BXN80MA4	151
54	92	1.0	25.4	2000	C122_25.4 S20 MXN20MA4	142	C122_25.4 P80 BXN80MA4	143
55	91	3.3	25.1	5500			C322_25.1 P80 BXN80MA4	151
57	88	2.3	24.3	3720	C222_24.3 S20 MXN20MA4	146	C222_24.3 P80 BXN80MA4	147
59	84	1.0	23.2	2000	C122_23.2 S20 MXN20MA4	142	C122_23.2 P80 BXN80MA4	143
64	77	2.5	21.5	3700	C222_21.5 S20 MXN20MA4	146	C222_21.5 P80 BXN80MA4	147
67	74	1.1	20.6	2000	C122_20.6 S20 MXN20MA4	142	C122_20.6 P80 BXN80MA4	143
69	72	2.6	20.0	3560	C222_20.0 S20 MXN20MA4	146	C222_20.0 P80 BXN80MA4	147
75	66	1.2	18.4	2000	C122_18.4 S20 MXN20MA4	142	C122_18.4 P80 BXN80MA4	143
76	65	2.8	18.1	3500	C222_18.1 S20 MXN20MA4	146	C222_18.1 P80 BXN80MA4	147
80	62	1.2	17.2	2000	C122_17.2 S20 MXN20MA4	142	C122_17.2 P80 BXN80MA4	143
87	57	3.1	15.8	3350	C222_15.8 S20 MXN20MA4	146	C222_15.8 P80 BXN80MA4	147
89	56	1.3	15.4	2000	C122_15.4 S20 MXN20MA4	142	C122_15.4 P80 BXN80MA4	143
95	53	3.2	14.5	3300	C222_14.5 S20 MXN20MA4	146	C222_14.5 P80 BXN80MA4	147
103	48	1.4	13.4	1990	C122_13.4 S20 MXN20MA4	142	C122_13.4 P80 BXN80MA4	143
116	43	1.6	11.9	1920	C122_11.9 S20 MXN20MA4	142	C122_11.9 P80 BXN80MA4	143
121	41	1.6	7.6	1910				
123	40	1.0	11.2	480				
137	36	1.7	10.1	1850	C122_10.1 S20 MXN20MA4	142	C122_10.1 P80 BXN80MA4	143
151	33	3.3	6.1	2860				
156	32	1.9	8.8	1780	C122_8.8 S20 MXN20MA4	142	C122_8.8 P80 BXN80MA4	143
181	28	2.0	7.6	1720	C122_7.6 S20 MXN20MA4	142	C122_7.6 P80 BXN80MA4	143
186	27	1.1	7.4	460				
206	24	1.2	6.7	450				
221	22	2.4	6.2	1590	C122_6.2 S20 MXN20MA4	142	C122_6.2 P80 BXN80MA4	143
237	21	2.5	11.9	1580				
246	20	2.5	5.6	1540	C122_5.6 S20 MXN20MA4	142	C122_5.6 P80 BXN80MA4	143
251	20	1.5	5.5	430				
279	18	2.7	10.1	1530				
283	18	2.7	4.9	1490	C122_4.9 S20 MXN20MA4	142	C122_4.9 P80 BXN80MA4	143
320	16	3.0	8.8	1470				
320	16	2.9	4.3	1420	C122_4.3 S20 MXN20MA4	142	C122_4.3 P80 BXN80MA4	143
369	14	3.3	7.6	1410				
378	13	3.2	3.7	1370	C122_3.7 S20 MXN20MA4	142	C122_3.7 P80 BXN80MA4	143
451	11	3.8	6.2	1300				
504	10	4.0	5.6	1260				
577	9	4.4	4.9	1210				
656	8	4.7	4.3	1170				
770	6	5.2	3.7	1110				
881	6	5.7	3.2	990				
1007	5	6.1	2.8	950				

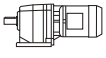



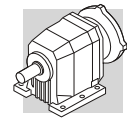
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n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
0.86	7413	1.6	1081	85000	C1004_1081 S3 ME3SA6		179	C1004_1081 P90 BE90S6		180
0.93	6973	1.0	1006	60000	C904_1006 S3 ME3SA6		176	C904_1006 P90 BE90S6		177
1.2	5582	1.3	1240	60000	C904_1240 S2 ME2SB4	C904_1240 S2 MX2SB4	176	C904_1240 P80 BE80B4	C904_1240 P80 BX80B4	177
1.3	5117	1.4	1137	60000	C904_1137 S2 ME2SB4	C904_1137 S2 MX2SB4	176	C904_1137 P80 BE80B4	C904_1137 P80 BX80B4	177
1.3	4865	2.5	1081	85000	C1004_1081 S2 ME2SB4	C1004_1081 S2 MX2SB4	179	C1004_1081 P80 BE80B4	C1004_1081 P80 BX80B4	180
1.4	4528	1.6	1006	60000	C904_1006 S2 ME2SB4	C904_1006 S2 MX2SB4	176	C904_1006 P80 BE80B4	C904_1006 P80 BX80B4	177
1.4	4517	2.7	1004	85000	C1004_1004 S2 ME2SB4	C1004_1004 S2 MX2SB4	179	C1004_1004 P80 BE80B4	C1004_1004 P80 BX80B4	180
1.5	4256	0.9	945.7	35000	C804_945.7 S2 ME2SB4	C804_945.7 S2 MX2SB4	173	C804_945.7 P80 BE80B4	C804_945.7 P80 BX80B4	174
1.6	4150	1.7	922.3	60000	C904_922.3 S2 ME2SB4	C904_922.3 S2 MX2SB4	176	C904_922.3 P80 BE80B4	C904_922.3 P80 BX80B4	177
1.6	4087	2.9	908.2	85000	C1004_908.2 S2 ME2SB4	C1004_908.2 S2 MX2SB4	179	C1004_908.2 P80 BE80B4	C1004_908.2 P80 BX80B4	180
1.7	3846	1.0	854.6	35000	C804_854.6 S2 ME2SB4	C804_854.6 S2 MX2SB4	173	C804_854.6 P80 BE80B4	C804_854.6 P80 BX80B4	174
1.7	3798	1.9	844.0	60000	C904_844.0 S2 ME2SB4	C904_844.0 S2 MX2SB4	176	C904_844.0 P80 BE80B4	C904_844.0 P80 BX80B4	177
1.8	3525	1.1	783.4	35000	C804_783.4 S2 ME2SB4	C804_783.4 S2 MX2SB4	173	C804_783.4 P80 BE80B4	C804_783.4 P80 BX80B4	174
1.8	3481	2.1	773.6	60000	C904_773.6 S2 ME2SB4	C904_773.6 S2 MX2SB4	176	C904_773.6 P80 BE80B4	C904_773.6 P80 BX80B4	177
2.0	3261	1.2	724.7	35000	C804_724.7 S2 ME2SB4	C804_724.7 S2 MX2SB4	173	C804_724.7 P80 BE80B4	C804_724.7 P80 BX80B4	174
2.0	3205	2.2	712.2	60000	C904_712.2 S2 ME2SB4	C904_712.2 S2 MX2SB4	176	C904_712.2 P80 BE80B4	C904_712.2 P80 BX80B4	177
2.2	2989	1.3	664.3	35000	C804_664.3 S2 ME2SB4	C804_664.3 S2 MX2SB4	173	C804_664.3 P80 BE80B4	C804_664.3 P80 BX80B4	174
2.2	2938	2.5	652.8	60000	C904_652.8 S2 ME2SB4	C904_652.8 S2 MX2SB4	176	C904_652.8 P80 BE80B4	C904_652.8 P80 BX80B4	177
2.5	2623	2.7	582.8	60000	C904_582.8 S2 ME2SB4	C904_582.8 S2 MX2SB4	176	C904_582.8 P80 BE80B4	C904_582.8 P80 BX80B4	177
2.5	2598	1.5	577.4	35000	C804_577.4 S2 ME2SB4	C804_577.4 S2 MX2SB4	173	C804_577.4 P80 BE80B4	C804_577.4 P80 BX80B4	174
2.6	2496	0.9	554.7	25000	C704_554.7 S2 ME2SB4	C704_554.7 S2 MX2SB4	170	C704_554.7 P80 BE80B4	C704_554.7 P80 BX80B4	171
2.7	2404	3.0	534.2	60000	C904_534.2 S2 ME2SB4	C904_534.2 S2 MX2SB4	176	C904_534.2 P80 BE80B4	C904_534.2 P80 BX80B4	177
2.7	2382	1.7	529.3	35000	C804_529.3 S2 ME2SB4	C804_529.3 S2 MX2SB4	173	C804_529.3 P80 BE80B4	C804_529.3 P80 BX80B4	174
2.8	2304	1.0	512.0	25000	C704_512.0 S2 ME2SB4	C704_512.0 S2 MX2SB4	170	C704_512.0 P80 BE80B4	C704_512.0 P80 BX80B4	171
3.1	2049	2.0	455.4	35000	C804_455.4 S2 ME2SB4	C804_455.4 S2 MX2SB4	173	C804_455.4 P80 BE80B4	C804_455.4 P80 BX80B4	174
3.2	1996	1.2	443.5	25000	C704_443.5 S2 ME2SB4	C704_443.5 S2 MX2SB4	170	C704_443.5 P80 BE80B4	C704_443.5 P80 BX80B4	171
3.4	1897	0.8	421.5	16000	C614_421.5 S2 ME2SB4	C614_421.5 S2 MX2SB4	166	C614_421.5 P80 BE80B4	C614_421.5 P80 BX80B4	167
3.4	1879	2.1	417.5	35000	C804_417.5 S2 ME2SB4	C804_417.5 S2 MX2SB4	173	C804_417.5 P80 BE80B4	C804_417.5 P80 BX80B4	174
3.5	1842	1.2	409.4	25000	C704_409.4 S2 ME2SB4	C704_409.4 S2 MX2SB4	170	C704_409.4 P80 BE80B4	C704_409.4 P80 BX80B4	171
3.9	1666	1.0	370.1	16000	C614_370.1 S2 ME2SB4	C614_370.1 S2 MX2SB4	166	C614_370.1 P80 BE80B4	C614_370.1 P80 BX80B4	167
3.9	1696	1.4	239.3	25000	C703_239.3 S3 ME3SA6		170	C703_239.3 P90 BE90S6		171
3.9	1641	2.4	364.7	35000	C804_364.7 S2 ME2SB4	C804_364.7 S2 MX2SB4	173	C804_364.7 P80 BE80B4	C804_364.7 P80 BX80B4	174
4.2	1550	1.5	344.3	25000	C704_344.3 S2 ME2SB4	C704_344.3 S2 MX2SB4	170	C704_344.3 P80 BE80B4	C704_344.3 P80 BX80B4	171
4.2	1520	1.1	337.7	16000	C614_337.7 S2 ME2SB4	C614_337.7 S2 MX2SB4	166	C614_337.7 P80 BE80B4	C614_337.7 P80 BX80B4	167
4.3	1504	2.7	334.3	35000	C804_334.3 S2 ME2SB4	C804_334.3 S2 MX2SB4	173	C804_334.3 P80 BE80B4	C804_334.3 P80 BX80B4	174
4.3	1529	2.6	215.8	35000	C803_215.8 S3 ME3SA6		173	C803_215.8 P90 BE90S6		174
4.5	1430	1.6	317.9	25000	C704_317.9 S2 ME2SB4	C704_317.9 S2 MX2SB4	170	C704_317.9 P80 BE80B4	C704_317.9 P80 BX80B4	171
4.7	1358	1.2	301.7	16000	C614_301.7 S2 ME2SB4	C614_301.7 S2 MX2SB4	166	C614_301.7 P80 BE80B4	C614_301.7 P80 BX80B4	167
4.8	1387	1.2	195.8	16000	C613_195.8 S3 ME3SA6		166	C613_195.8 P90 BE90S6		167
5.2	1239	1.3	275.3	16000	C614_275.3 S2 ME2SB4	C614_275.3 S2 MX2SB4	166	C614_275.3 P80 BE80B4	C614_275.3 P80 BX80B4	167
5.2	1265	1.3	178.6	16000	C613_178.6 S3 ME3SA6		166	C613_178.6 P90 BE90S6		167
5.3	1225	1.9	272.2	25000	C704_272.2 S2 ME2SB4	C704_272.2 S2 MX2SB4	170	C704_272.2 P80 BE80B4	C704_272.2 P80 BX80B4	171
5.4	1187	0.8	263.8	10000	C514_263.8 S2 ME2SB4	C514_263.8 S2 MX2SB4	162	C514_263.8 P80 BE80B4	C514_263.8 P80 BX80B4	163
5.7	1165	1.4	164.5	16000	C613_164.5 S3 ME3SA6		166	C613_164.5 P90 BE90S6		167
5.7	1131	2.0	251.3	25000	C704_251.3 S2 ME2SB4	C704_251.3 S2 MX2SB4	170	C704_251.3 P80 BE80B4	C704_251.3 P80 BX80B4	171
5.9	1084	0.9	240.9	10000	C514_240.9 S2 ME2SB4	C514_240.9 S2 MX2SB4	162	C514_240.9 P80 BE80B4	C514_240.9 P80 BX80B4	163
6.0	1113	2.1	239.3	25000	C703_239.3 S2 ME2SB4	C703_239.3 S2 MX2SB4	170	C703_239.3 P80 BE80B4	C703_239.3 P80 BX80B4	171
6.0	1072	1.5	238.3	16000	C614_238.3 S2 ME2SB4	C614_238.3 S2 MX2SB4	166	C614_238.3 P80 BE80B4	C614_238.3 P80 BX80B4	167
6.5	1027	2.2	220.9	25000	C703_220.9 S2 ME2SB4	C703_220.9 S2 MX2SB4	170	C703_220.9 P80 BE80B4	C703_220.9 P80 BX80B4	171
6.6	978	1.6	217.4	16000	C614_217.4 S2 ME2SB4	C614_217.4 S2 MX2SB4	166	C614_217.4 P80 BE80B4	C614_217.4 P80 BX80B4	167
6.6	1008	1.0	216.7	10000	C513_216.7 S2 ME2SB4	C513_216.7 S2 MX2SB4	162	C513_216.7 P80 BE80B4	C513_216.7 P80 BX80B4	163
7.2	920	1.1	197.9	10000	C513_197.9 S2 ME2SB4	C513_197.9 S2 MX2SB4	162	C513_197.9 P80 BE80B4	C513_197.9 P80 BX80B4	163
7.3	881	1.8	195.8	16000	C613_195.8 S2 ME2SB4	C613_195.8 S2 MX2SB4	166	C613_195.8 P80 BE80B4	C613_195.8 P80 BX80B4	167
7.4	903	2.5	194.1	25000	C703_194.1 S2 ME2SB4	C703_194.1 S2 MX2SB4	170	C703_194.1 P80 BE80B4	C703_194.1 P80 BX80B4	171
8.0	833	2.8	179.2	25000	C703_179.2 S2 ME2SB4	C703_179.2 S2 MX2SB4	170	C703_179.2 P80 BE80B4	C703_179.2 P80 BX80B4	171
8.0	804	2.0	178.6	16000	C613_178.6 S2 ME2SB4	C613_178.6 S2 MX2SB4	166	C613_178.6 P80 BE80B4	C613_178.6 P80 BX80B4	167
8.1	817	1.2	175.8	10000	C513_175.8 S2 ME2SB4	C513_175.8 S2 MX2SB4	162	C513_175.8 P80 BE80B4	C513_175.8 P80 BX80B4	163
8.7	740	2.2	164.5	16000	C613_164.5 S2 ME2SB4	C613_164.5 S2 MX2SB4	166	C613_164.5 P80 BE80B4	C613_164.5 P80 BX80B4	167
8.8	757	3.0	162.8	25000	C703_162.8 S2 ME2SB4	C703_162.8 S2 MX2SB4	170	C703_162.8 P80 BE80B4	C703_162.8 P80 BX80B4	171
8.9	746	1.3	160.5	10000	C513_160.5 S2 ME2SB4	C513_160.5 S2 MX2SB4	162	C513_160.5 P80 BE80B4	C513_160.5 P80 BX80B4	163
9.5	675	2.4	150.0	16000	C613_150.0 S2 ME2SB4	C613_150.0 S2 MX2SB4	166	C613_150.0 P80 BE80B4	C613_150.0 P80 BX80B4	167
9.7	686	1.5	147.4	10000	C513_147.4 S2 ME2SB4	C513_147.4 S2 MX2SB4	162	C513_147.4 P80 BE80B4	C513_147.4 P80 BX80B4	163
10.2	632	2.5	140.5	16000	C613_140.5 S2 ME2SB4	C613_140.5 S2 MX2SB4	166	C613_140.5 P80 BE80B4	C613_140.5 P80 BX80B4	167
10.6	626	1.6	134.6	10000	C513_134.6 S2 ME2SB4	C513_134.6 S2 MX2SB4	162	C513_134.6 P80 BE80B4	C513_134.6 P80 BX80B4	163
10.8	618	1.0	132.9	7000	C413_132.9 S2 ME2SB4	C413_132.9 S2 MX2SB4	158	C413_132.9 P80 BE80B4	C413_132.9 P80 BX80B4	159
11.2	577	2.8	128.1	16000	C613_128.1 S2 ME2SB4	C613_128.1 S2 MX2SB4	166	C613_128.1 P80 BE80B4	C613_128.1 P80 BX80B4	167
11.5	579	1.7	124.4	10000	C513_124.4 S2 ME2SB4	C513_124.4 S2 MX2SB4	162	C513_124.4 P80 BE80B4	C513_124.4 P80 BX80B4	163
11.9	561	1.1	120.6	7000	C413_120.6 S2 ME2SB4	C413_120.6 S2 MX2SB4	158	C413_120.6 P80 BE80B4	C413_120.6 P80 BX80B4	159
12.6	511	3.1	113.6	16000	C613_113.6 S2 ME2SB4	C613_113.6 S2 MX2SB4	166	C613_113.6 P80 BE80B4	C613_113.6 P80 BX80B4	167

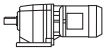



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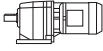

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
12.6	528	1.9	113.6	10000	C513_113.6 S2 ME2SB4	C513_113.6 S2 MX2SB4	162	C513_113.6 P80 BE80B4	C513_113.6 P80 BX80B4	163
13.0	512	1.2	110.1	7000	C413_110.1 S2 ME2SB4	C413_110.1 S2 MX2SB4	158	C413_110.1 P80 BE80B4	C413_110.1 P80 BX80B4	159
13.8	466	3.4	103.6	16000	C613_103.6 S2 ME2SB4	C613_103.6 S2 MX2SB4	166	C613_103.6 P80 BE80B4	C613_103.6 P80 BX80B4	167
14.0	476	1.3	102.3	7000	C413_102.3 S2 ME2SB4	C413_102.3 S2 MX2SB4	158	C413_102.3 P80 BE80B4	C413_102.3 P80 BX80B4	159
14.0	475	0.9	102.2	6500	C363_102.2 S2 ME2SB4	C363_102.2 S2 MX2SB4	154	C363_102.2 P80 BE80B4	C363_102.2 P80 BX80B4	155
14.0	473	2.1	101.8	10000	C513_101.8 S2 ME2SB4	C513_101.8 S2 MX2SB4	162	C513_101.8 P80 BE80B4	C513_101.8 P80 BX80B4	163
15.3	434	1.4	93.3	7000	C413_93.3 S2 ME2SB4	C413_93.3 S2 MX2SB4	158	C413_93.3 P80 BE80B4	C413_93.3 P80 BX80B4	159
15.4	432	2.3	93.0	10000	C513_93.0 S2 ME2SB4	C513_93.0 S2 MX2SB4	162	C513_93.0 P80 BE80B4	C513_93.0 P80 BX80B4	163
15.6	427	1.1	91.9	6500	C363_91.9 S2 ME2SB4	C363_91.9 S2 MX2SB4	154	C363_91.9 P80 BE80B4	C363_91.9 P80 BX80B4	155
17.2	387	1.2	83.1	6500	C363_83.1 S2 ME2SB4	C363_83.1 S2 MX2SB4	154	C363_83.1 P80 BE80B4	C363_83.1 P80 BX80B4	155
17.5	379	1.6	81.5	7000	C413_81.5 S2 ME2SB4	C413_81.5 S2 MX2SB4	158	C413_81.5 P80 BE80B4	C413_81.5 P80 BX80B4	159
17.9	371	2.7	79.9	10000	C513_79.9 S2 ME2SB4	C513_79.9 S2 MX2SB4	162	C513_79.9 P80 BE80B4	C513_79.9 P80 BX80B4	163
18.4	361	1.2	77.6	6500	C363_77.6 S2 ME2SB4	C363_77.6 S2 MX2SB4	154	C363_77.6 P80 BE80B4	C363_77.6 P80 BX80B4	155
19.2	346	1.7	74.4	7000	C413_74.4 S2 ME2SB4	C413_74.4 S2 MX2SB4	158	C413_74.4 P80 BE80B4	C413_74.4 P80 BX80B4	159
19.6	339	2.9	72.9	10000	C513_72.9 S2 ME2SB4	C513_72.9 S2 MX2SB4	162	C513_72.9 P80 BE80B4	C513_72.9 P80 BX80B4	163
20.2	329	1.4	70.8	6500	C363_70.8 S2 ME2SB4	C363_70.8 S2 MX2SB4	154	C363_70.8 P80 BE80B4	C363_70.8 P80 BX80B4	155
22.1	300	3.3	64.6	10000	C513_64.6 S2 ME2SB4	C513_64.6 S2 MX2SB4	162	C513_64.6 P80 BE80B4	C513_64.6 P80 BX80B4	163
22.2	299	2.0	64.3	7000	C413_64.3 S2 ME2SB4	C413_64.3 S2 MX2SB4	158	C413_64.3 P80 BE80B4	C413_64.3 P80 BX80B4	159
23.0	295	1.0	40.7	5500	C322_40.7 S3 ME3SA6		150	C322_40.7 P90 BE90S6		151
23.1	288	1.6	62.0	6500	C363_62.0 S2 ME2SB4	C363_62.0 S2 MX2SB4	154	C363_62.0 P80 BE80B4	C363_62.0 P80 BX80B4	155
24.4	273	2.2	58.7	7000	C413_58.7 S2 ME2SB4	C413_58.7 S2 MX2SB4	158	C413_58.7 P80 BE80B4	C413_58.7 P80 BX80B4	159
25.1	271	2.9	57.0	10000	C512_57.0 S2 ME2SB4	C512_57.0 S2 MX2SB4	162	C512_57.0 P80 BE80B4	C512_57.0 P80 BX80B4	163
25.5	261	1.7	56.2	6500	C363_56.2 S2 ME2SB4	C363_56.2 S2 MX2SB4	154	C363_56.2 P80 BE80B4	C363_56.2 P80 BX80B4	155
27.3	249	1.2	52.4	5500	C322_52.4 S2 ME2SB4	C322_52.4 S2 MX2SB4	150	C322_52.4 P80 BE80B4	C322_52.4 P80 BX80B4	151
27.8	239	2.5	51.5	7000	C413_51.5 S2 ME2SB4	C413_51.5 S2 MX2SB4	158	C413_51.5 P80 BE80B4	C413_51.5 P80 BX80B4	159
27.8	244	2.9	51.4	10000	C512_51.4 S2 ME2SB4	C512_51.4 S2 MX2SB4	162	C512_51.4 P80 BE80B4	C512_51.4 P80 BX80B4	163
29.7	224	2.0	48.2	6500	C363_48.2 S2 ME2SB4	C363_48.2 S2 MX2SB4	154	C363_48.2 P80 BE80B4	C363_48.2 P80 BX80B4	155
29.9	227	3.5	47.8	10000	C512_47.8 S2 ME2SB4	C512_47.8 S2 MX2SB4	162	C512_47.8 P80 BE80B4	C512_47.8 P80 BX80B4	163
30	218	2.7	47.0	7000	C413_47.0 S2 ME2SB4	C413_47.0 S2 MX2SB4	158	C413_47.0 P80 BE80B4	C413_47.0 P80 BX80B4	159
32	215	1.4	45.3	5500	C322_45.3 S2 ME2SB4	C322_45.3 S2 MX2SB4	150	C322_45.3 P80 BE80B4	C322_45.3 P80 BX80B4	151
32	213	2.4	44.8	7000	C412_44.8 S2 ME2SB4	C412_44.8 S2 MX2SB4	158	C412_44.8 P80 BE80B4	C412_44.8 P80 BX80B4	159
33	202	2.2	43.5	6500	C363_43.5 S2 ME2SB4	C363_43.5 S2 MX2SB4	154	C363_43.5 P80 BE80B4	C363_43.5 P80 BX80B4	155
33	206	0.9	43.3	3810	C222_43.3 S2 ME2SB4	C222_43.3 S2 MX2SB4	146	C222_43.3 P80 BE80B4	C222_43.3 P80 BX80B4	147
35	193	1.6	40.7	5500	C322_40.7 S2 ME2SB4	C322_40.7 S2 MX2SB4	150	C322_40.7 P80 BE80B4	C322_40.7 P80 BX80B4	151
38	177	2.5	38.1	6500	C363_38.1 S2 ME2SB4	C363_38.1 S2 MX2SB4	154	C363_38.1 P80 BE80B4	C363_38.1 P80 BX80B4	155
39	176	2.8	37.1	7000	C412_37.1 S2 ME2SB4	C412_37.1 S2 MX2SB4	158	C412_37.1 P80 BE80B4	C412_37.1 P80 BX80B4	159
39	175	1.1	36.8	3750	C222_36.8 S2 ME2SB4	C222_36.8 S2 MX2SB4	146	C222_36.8 P80 BE80B4	C222_36.8 P80 BX80B4	147
40	171	1.7	36.1	5500	C322_36.1 S2 ME2SB4	C322_36.1 S2 MX2SB4	150	C322_36.1 P80 BE80B4	C322_36.1 P80 BX80B4	151
41	161	2.8	34.6	6500	C363_34.6 S2 ME2SB4	C363_34.6 S2 MX2SB4	154	C363_34.6 P80 BE80B4	C363_34.6 P80 BX80B4	155
43	159	3.2	33.4	7000	C412_33.4 S2 ME2SB4	C412_33.4 S2 MX2SB4	158	C412_33.4 P80 BE80B4	C412_33.4 P80 BX80B4	159
43	157	1.3	33.1	3680	C222_33.1 S2 ME2SB4	C222_33.1 S2 MX2SB4	146	C222_33.1 P80 BE80B4	C222_33.1 P80 BX80B4	147
43	157	1.9	33.1	5500	C322_33.1 S2 ME2SB4	C322_33.1 S2 MX2SB4	150	C322_33.1 P80 BE80B4	C322_33.1 P80 BX80B4	151
48	141	2.1	29.8	5500	C322_29.8 S2 ME2SB4	C322_29.8 S2 MX2SB4	150	C322_29.8 P80 BE80B4	C322_29.8 P80 BX80B4	151
48	141	1.4	29.6	3630	C222_29.6 S2 ME2SB4	C222_29.6 S2 MX2SB4	146	C222_29.6 P80 BE80B4	C222_29.6 P80 BX80B4	147
50	134	3.4	28.7	6490	C363_28.7 S2 ME2SB4	C363_28.7 S2 MX2SB4	154	C363_28.7 P80 BE80B4	C363_28.7 P80 BX80B4	155
53	129	1.6	27.2	3600	C222_27.2 S2 ME2SB4	C222_27.2 S2 MX2SB4	146	C222_27.2 P80 BE80B4	C222_27.2 P80 BX80B4	147
53	128	2.3	26.9	5500	C322_26.9 S2 ME2SB4	C322_26.9 S2 MX2SB4	150	C322_26.9 P80 BE80B4	C322_26.9 P80 BX80B4	151
57	119	2.5	25.1	5460	C322_25.1 S2 ME2SB4	C322_25.1 S2 MX2SB4	150	C322_25.1 P80 BE80B4	C322_25.1 P80 BX80B4	151
59	115	1.7	24.3	3510	C222_24.3 S2 ME2SB4	C222_24.3 S2 MX2SB4	146	C222_24.3 P80 BE80B4	C222_24.3 P80 BX80B4	147
62	109	2.7	22.9	5300	C322_22.9 S2 ME2SB4	C322_22.9 S2 MX2SB4	150	C322_22.9 P80 BE80B4	C322_22.9 P80 BX80B4	151
67	102	1.9	21.5	3480	C222_21.5 S2 ME2SB4	C222_21.5 S2 MX2SB4	146	C222_21.5 P80 BE80B4	C222_21.5 P80 BX80B4	147
71	95	3.1	20.1	5150	C322_20.1 S2 ME2SB4	C322_20.1 S2 MX2SB4	150	C322_20.1 P80 BE80B4	C322_20.1 P80 BX80B4	151
71	95	2.0	20.0	3380	C222_20.0 S2 ME2SB4	C222_20.0 S2 MX2SB4	146	C222_20.0 P80 BE80B4	C222_20.0 P80 BX80B4	147
79	86	2.1	18.1	3350	C222_18.1 S2 ME2SB4	C222_18.1 S2 MX2SB4	146	C222_18.1 P80 BE80B4	C222_18.1 P80 BX80B4	147
83	82	0.9	17.2	1750	C122_17.2 S2 ME2SB4	C122_17.2 S2 MX2SB4	142	C122_17.2 P80 BE80B4	C122_17.2 P80 BX80B4	143
90	75	2.3	15.8	3210	C222_15.8 S2 ME2SB4	C222_15.8 S2 MX2SB4	146	C222_15.8 P80 BE80B4	C222_15.8 P80 BX80B4	147
93	73	1.0	15.4	1920	C122_15.4 S2 ME2SB4	C122_15.4 S2 MX2SB4	142	C122_15.4 P80 BE80B4	C122_15.4 P80 BX80B4	143
98	69	2.4	14.5	3200	C222_14.5 S2 ME2SB4	C222_14.5 S2 MX2SB4	146	C222_14.5 P80 BE80B4	C222_14.5 P80 BX80B4	147
107	64	1.1	13.4	1870	C122_13.4 S2 ME2SB4	C122_13.4 S2 MX2SB4	142	C122_13.4 P80 BE80B4	C122_13.4 P80 BX80B4	143
115	59	2.7	12.4	3030	C222_12.4 S2 ME2SB4	C222_12.4 S2 MX2SB4	146	C222_12.4 P80 BE80B4	C222_12.4 P80 BX80B4	147
120	56	1.2	11.9	1780	C122_11.9 S2 ME2SB4	C122_11.9 S2 MX2SB4	142	C122_11.9 P80 BE80B4	C122_11.9 P80 BX80B4	143
129	53	2.9	11.1	2980	C222_11.1 S2 ME2SB4	C222_11.1 S2 MX2SB4	146	C222_11.1 P80 BE80B4	C222_11.1 P80 BX80B4	147
142	48	1.3	10.1	1760	C122_10.1 S2 ME2SB4	C122_10.1 S2 MX2SB4	142	C122_10.1 P80 BE80B4	C122_10.1 P80 BX80B4	143
148	46	3.2	9.6	2840	C222_9.6 S2 ME2SB4	C222_9.6 S2 MX2SB4	146	C222_9.6 P80 BE80B4	C222_9.6 P80 BX80B4	147
162	42	1.4	8.8	1700	C122_8.8 S2 ME2SB4	C122_8.8 S2 MX2SB4	142	C122_8.8 P80 BE80B4	C122_8.8 P80 BX80B4	143
165	41	3.4	8.7	2760	C222_8.7 S2 ME2SB4	C222_8.7 S2 MX2SB4	146	C222_8.7 P80 BE80B4	C222_8.7 P80 BX80B4	147
188	36	1.5	7.6	1650	C122_7.6 S2 ME2SB4	C122_7.6 S2 MX2SB4	142	C122_7.6 P80 BE80B4	C122_7.6 P80 BX80B4	143
229	30	1.8	6.2	1530	C122_6.2 S2 ME2SB4	C122_6.2 S2 MX2SB4	142	C122_6.2 P80 BE80B4	C122_6.2 P80 BX80B4	143
240	28	2.4	11.9	1520	C122_11.9 S2 ME2SA2		142	C122_11.9 P80 BE80A2		143

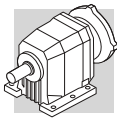


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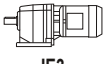
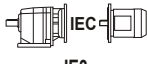
n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
255	27	1.9	5.6	1470	C122_5.6 S2 ME2SB4	C122_5.6 S2 MX2SB4	142	C122_5.6 P80 BE80B4	C122_5.6 P80 BX80B4	143
283	24	2.6	10.1	1490	C122_10.1 S2 ME2SA2		142	C122_10.1 P80 BE80A2		143
294	23	2.1	4.9	1440	C122_4.9 S2 ME2SB4	C122_4.9 S2 MX2SB4	142	C122_4.9 P80 BE80B4	C122_4.9 P80 BX80B4	143
323	21	2.8	8.8	1420	C122_8.8 S2 ME2SA2		142	C122_8.8 P80 BE80A2		143
332	20	2.2	4.3	1370	C122_4.3 S2 ME2SB4	C122_4.3 S2 MX2SB4	142	C122_4.3 P80 BE80B4	C122_4.3 P80 BX80B4	143
374	18	3.1	7.6	1380	C122_7.6 S2 ME2SA2		142	C122_7.6 P80 BE80A2		143
392	17	2.4	3.7	1330	C122_3.7 S2 ME2SB4	C122_3.7 S2 MX2SB4	142	C122_3.7 P80 BE80B4	C122_3.7 P80 BX80B4	143
446	15	2.6	3.2	1280	C122_3.2 S2 ME2SB4	C122_3.2 S2 MX2SB4	142	C122_3.2 P80 BE80B4	C122_3.2 P80 BX80B4	143
457	15	3.6	6.2	1280	C122_6.2 S2 ME2SA2		142	C122_6.2 P80 BE80A2		143
509	13	3.8	5.6	1240	C122_5.6 S2 ME2SA2		142	C122_5.6 P80 BE80A2		143
517	13	2.8	2.8	1230	C122_2.8 S2 ME2SB4	C122_2.8 S2 MX2SB4	142	C122_2.8 P80 BE80B4	C122_2.8 P80 BX80B4	143
585	12	4.1	4.9	1190	C122_4.9 S2 ME2SA2		142	C122_4.9 P80 BE80A2		143
661	10	4.4	4.3	1050	C122_4.3 S2 ME2SA2		142	C122_4.3 P80 BE80A2		143
781	9	4.8	3.7	1090	C122_3.7 S2 ME2SA2		142	C122_3.7 P80 BE80A2		143
889	8	5.2	3.2	1050	C122_3.2 S2 ME2SA2		142	C122_3.2 P80 BE80A2		143
1030	7	5.6	2.8	1010	C122_2.8 S2 ME2SA2		142	C122_2.8 P80 BE80A2		143

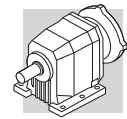
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n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE3			IE3		
0.86	7413	1.6	1081	85000						
0.93	6973	1.0	1006	60000						
1.2	5582	1.3	1240	60000				C904_1240 P80 BXN80MB4		177
1.3	5117	1.4	1137	60000				C904_1137 P80 BXN80MB4		177
1.3	4865	2.5	1081	85000				C1004_1081 P80 BXN80MB4		180
1.4	4528	1.6	1006	60000				C904_1006 P80 BXN80MB4		177
1.4	4517	2.7	1004	85000				C1004_1004 P80 BXN80MB4		180
1.5	4256	0.9	945.7	35000				C804_945.7 P80 BXN80MB4		174
1.6	4150	1.7	922.3	60000				C904_922.3 P80 BXN80MB4		177
1.6	4087	2.9	908.2	85000				C1004_908.2 P80 BXN80MB4		180
1.7	3846	1.0	854.6	35000				C804_854.6 P80 BXN80MB4		174
1.7	3798	1.9	844.0	6000				C904_844.0 P80 BXN80MB4		177
1.8	3525	1.1	783.4	35000				C804_783.4 P80 BXN80MB4		174
1.8	3481	2.1	773.6	60000				C904_773.6 P80 BXN80MB4		177
2.0	3261	1.2	724.7	35000				C804_724.7 P80 BXN80MB4		174
2.0	3205	2.2	712.2	60000				C904_712.2 P80 BXN80MB4		177
2.2	2989	1.3	664.3	35000				C804_664.3 P80 BXN80MB4		174
2.2	2938	2.5	652.8	60000				C904_652.8 P80 BXN80MB4		177
2.5	2623	2.7	582.8	60000				C904_582.8 P80 BXN80MB4		177
2.5	2598	1.5	577.4	35000				C804_577.4 P80 BXN80MB4		174
2.6	2496	0.9	554.7	25000				C704_554.7 P80 BXN80MB4		171
2.7	2404	3.0	534.2	60000				C904_534.2 P80 BXN80MB4		177
2.7	2382	1.7	529.3	35000				C804_529.3 P80 BXN80MB4		174
2.8	2304	1.0	512.0	25000				C704_512.0 P80 BXN80MB4		171
3.1	2049	2.0	455.4	35000				C804_455.4 P80 BXN80MB4		174
3.2	1996	1.2	443.5	25000				C704_443.5 P80 BXN80MB4		171
3.4	1897	0.8	421.5	16000				C614_421.5 P80 BXN80MB4		167
3.4	1879	2.1	417.5	35000				C804_417.5 P80 BXN80MB4		174
3.5	1842	1.2	409.4	25000				C704_409.4 P80 BXN80MB4		171
3.9	1666	1.0	370.1	16000				C614_370.1 P80 BXN80MB4		167
3.9	1696	1.4	239.3	25000						
3.9	1641	2.4	364.7	35000				C804_364.7 P80 BXN80MB4		174
4.2	1550	1.5	344.3	25000				C704_344.3 P80 BXN80MB4		171
4.2	1520	1.1	337.7	16000				C614_337.7 P80 BXN80MB4		167
4.3	1504	2.7	334.3	35000				C804_334.3 P80 BXN80MB4		174
4.3	1529	2.6	215.8	35000						
4.5	1430	1.6	317.9	25000				C704_317.9 P80 BXN80MB4		171
4.7	1358	1.2	301.7	16000				C614_301.7 P80 BXN80MB4		167
4.8	1387	1.2	195.8	16000						
5.2	1239	1.3	275.3	16000				C614_275.3 P80 BXN80MB4		167
5.2	1265	1.3	178.6	16000						
5.3	1225	1.9	272.2	25000				C704_272.2 P80 BXN80MB4		171
5.4	1187	0.8	263.8	10000				C514_263.8 P80 BXN80MB4		163
5.7	1165	1.4	164.5	16000						

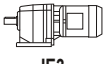
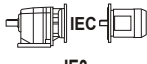


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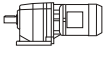

n ₂ min-1	M ₂ Nm	S	i	R _{n2} N	 IE3	 IEC IE3	
5.7	1131	2.0	251.3	25000		C704_251.3 P80 BXN80MB4	171
5.9	1084	0.9	240.9	10000		C514_240.9 P80 BXN80MB4	163
6.0	1113	2.1	239.3	25000		C703_239.3 P80 BXN80MB4	171
6.0	1072	1.5	238.3	16000		C614_238.3 P80 BXN80MB4	167
6.5	1027	2.2	220.9	25000		C703_220.9 P80 BXN80MB4	171
6.6	978	1.6	217.4	16000		C614_217.4 P80 BXN80MB4	167
6.6	1008	1.0	216.7	10000		C513_216.7 P80 BXN80MB4	163
7.2	920	1.1	197.9	10000		C513_197.9 P80 BXN80MB4	163
7.3	881	1.8	195.8	16000		C613_195.8 P80 BXN80MB4	167
7.4	903	2.5	194.1	25000		C703_194.1 P80 BXN80MB4	171
8.0	833	2.8	179.2	25000		C703_179.2 P80 BXN80MB4	171
8.0	804	2.0	178.6	16000		C613_178.6 P80 BXN80MB4	167
8.1	817	1.2	175.8	10000		C513_175.8 P80 BXN80MB4	163
8.7	740	2.2	164.5	16000		C613_164.5 P80 BXN80MB4	167
8.8	757	3.0	162.8	25000		C703_162.8 P80 BXN80MB4	171
8.9	746	1.3	160.5	10000		C513_160.5 P80 BXN80MB4	163
9.5	675	2.4	150.0	16000		C613_150.0 P80 BXN80MB4	167
9.7	686	1.5	147.4	10000		C513_147.4 P80 BXN80MB4	163
10.2	632	2.5	140.5	16000		C613_140.5 P80 BXN80MB4	167
10.6	626	1.6	134.6	10000		C513_134.6 P80 BXN80MB4	163
10.8	618	1.0	132.9	7000		C413_132.9 P80 BXN80MB4	159
11.2	577	2.8	128.1	16000		C613_128.1 P80 BXN80MB4	167
11.5	579	1.7	124.4	10000		C513_124.4 P80 BXN80MB4	163
11.9	561	1.1	120.6	7000		C413_120.6 P80 BXN80MB4	159
12.6	511	3.1	113.6	16000		C613_113.6 P80 BXN80MB4	167
12.6	528	1.9	113.6	10000		C513_113.6 P80 BXN80MB4	163
13.0	512	1.2	110.1	7000		C413_110.1 P80 BXN80MB4	159
13.8	466	3.4	103.6	16000		C613_103.6 P80 BXN80MB4	167
14.0	476	1.3	102.3	7000		C413_102.3 P80 BXN80MB4	159
14.0	475	0.9	102.2	6500		C363_102.2 P80 BXN80MB4	155
14.0	473	2.1	101.8	10000		C513_101.8 P80 BXN80MB4	163
15.3	434	1.4	93.3	7000		C413_93.3 P80 BXN80MB4	159
15.4	432	2.3	93.0	10000		C513_93.0 P80 BXN80MB4	163
15.6	427	1.1	91.9	6500		C363_91.9 P80 BXN80MB4	155
17.2	387	1.2	83.1	6500		C363_83.1 P80 BXN80MB4	155
17.5	379	1.6	81.5	7000		C413_81.5 P80 BXN80MB4	159
17.9	371	2.7	79.9	10000		C513_79.9 P80 BXN80MB4	163
18.4	361	1.2	77.6	6500		C363_77.6 P80 BXN80MB4	155
19.2	346	1.7	74.4	7000		C413_74.4 P80 BXN80MB4	159
19.6	339	2.9	72.9	10000		C513_72.9 P80 BXN80MB4	163
20.2	329	1.4	70.8	6500		C363_70.8 P80 BXN80MB4	155
22.1	300	3.3	64.6	10000		C513_64.6 P80 BXN80MB4	163
22.2	299	2.0	64.3	7000		C413_64.3 P80 BXN80MB4	159
23.0	295	1.0	40.7	5500			
23.1	288	1.6	62.0	6500		C363_62.0 P80 BXN80MB4	155
24.4	273	2.2	58.7	7000		C413_58.7 P80 BXN80MB4	159
25.1	271	2.9	57.0	10000		C512_57.0 P80 BXN80MB4	163
25.5	261	1.7	56.2	6500		C363_56.2 P80 BXN80MB4	155
27.3	249	1.2	52.4	5500	C322_52.4 S2 MXN20MB4	C322_52.4 P80 BXN80MB4	151
27.8	239	2.5	51.5	7000		C413_51.5 P80 BXN80MB4	159
27.8	244	2.9	51.4	10000		C512_51.4 P80 BXN80MB4	163
29.7	224	2.0	48.2	6500		C363_48.2 P80 BXN80MB4	155
29.9	227	3.5	47.8	10000		C512_47.8 P80 BXN80MB4	163
30	218	2.7	47.0	7000		C413_47.0 P80 BXN80MB4	159
32	215	1.4	45.3	5500		C322_45.3 P80 BXN80MB4	151
32	213	2.4	44.8	7000		C412_44.8 P80 BXN80MB4	159
33	202	2.2	43.5	6500		C363_43.5 P80 BXN80MB4	155
33	206	0.9	43.3	3810	C222_43.3 S2 MXN20MB4	C222_43.3 P80 BXN80MB4	147
35	193	1.6	40.7	5500		C322_40.7 P80 BXN80MB4	151
38	177	2.5	38.1	6500		C363_38.1 P80 BXN80MB4	155
39	176	2.8	37.1	7000		C412_37.1 P80 BXN80MB4	159
39	175	1.1	36.8	3750	C222_36.8 S2 MXN20MB4	C222_36.8 P80 BXN80MB4	147
40	171	1.7	36.1	5500		C322_36.1 P80 BXN80MB4	151
41	161	2.8	34.6	6500		C363_34.6 P80 BXN80MB4	155
43	159	3.2	33.4	7000		C412_33.4 P80 BXN80MB4	159
43	157	1.3	33.1	3680	C222_33.1 S2 MXN20MB4	C222_33.1 P80 BXN80MB4	147
43	157	1.9	33.1	5500		C322_33.1 P80 BXN80MB4	151
48	141	2.1	29.8	5500		C322_29.8 P80 BXN80MB4	151
48	141	1.4	29.6	3630	C222_29.6 S2 MXN20MB4	C222_29.6 P80 BXN80MB4	147

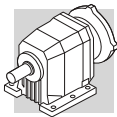


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

n ₂ min-1	M ₂ Nm	S	i	R _{n2} N	 IE3		 IE3	
50	134	3.4	28.7	6490			C363_28.7 P80 BXN80MB4	155
53	129	1.6	27.2	3600	C222_27.2 S2 MXN20MB4	146	C222_27.2 P80 BXN80MB4	147
53	128	2.3	26.9	5500			C322_26.9 P80 BXN80MB4	151
57	119	2.5	25.1	5460			C322_25.1 P80 BXN80MB4	151
59	115	1.7	24.3	3510	C222_24.3 S2 MXN20MB4	146	C222_24.3 P80 BXN80MB4	147
62	109	2.7	22.9	5300			C322_22.9 P80 BXN80MB4	151
67	102	1.9	21.5	3480	C222_21.5 S2 MXN20MB4	146	C222_21.5 P80 BXN80MB4	147
71	95	3.1	20.1	5150			C322_20.1 P80 BXN80MB4	151
71	95	2.0	20.0	3380	C222_20.0 S2 MXN20MB4	146	C222_20.0 P80 BXN80MB4	147
79	86	2.1	18.1	3350	C222_18.1 S2 MXN20MB4	146	C222_18.1 P80 BXN80MB4	147
83	82	0.9	17.2	1750	C122_17.2 S2 MXN20MB4	142	C122_17.2 P80 BXN80MB4	143
90	75	2.3	15.8	3210	C222_15.8 S2 MXN20MB4	146	C222_15.8 P80 BXN80MB4	147
93	73	1.0	15.4	1920	C122_15.4 S2 MXN20MB4	142	C122_15.4 P80 BXN80MB4	143
98	69	2.4	14.5	3200	C222_14.5 S2 MXN20MB4	146	C222_14.5 P80 BXN80MB4	147
107	64	1.1	13.4	1870	C122_13.4 S2 MXN20MB4	142	C122_13.4 P80 BXN80MB4	143
115	59	2.7	12.4	3030	C222_12.4 S2 MXN20MB4	146	C222_12.4 P80 BXN80MB4	147
120	56	1.2	11.9	1780	C122_11.9 S2 MXN20MB4	142	C122_11.9 P80 BXN80MB4	143
129	53	2.9	11.1	2980	C222_11.1 S2 MXN20MB4	146	C222_11.1 P80 BXN80MB4	147
142	48	1.3	10.1	1760	C122_10.1 S2 MXN20MB4	142	C122_10.1 P80 BXN80MB4	143
148	46	3.2	9.6	2840	C222_9.6 S2 MXN20MB4	146	C222_9.6 P80 BXN80MB4	147
162	42	1.4	8.8	1700	C122_8.8 S2 MXN20MB4	142	C122_8.8 P80 BXN80MB4	143
165	41	3.4	8.7	2760	C222_8.7 S2 MXN20MB4	146	C222_8.7 P80 BXN80MB4	147
188	36	1.5	7.6	1650	C122_7.6 S2 MXN20MB4	142	C122_7.6 P80 BXN80MB4	143
229	30	1.8	6.2	1530	C122_6.2 S2 MXN20MB4	142	C122_6.2 P80 BXN80MB4	143
240	28	2.4	11.9	1520				
255	27	1.9	5.6	1470	C122_5.6 S2 MXN20MB4	142	C122_5.6 P80 BXN80MB4	143
283	24	2.6	10.1	1490				
294	23	2.1	4.9	1440	C122_4.9 S2 MXN20MB4	142	C122_4.9 P80 BXN80MB4	143
323	21	2.8	8.8	1420				
332	20	2.2	4.3	1370	C122_4.3 S2 MXN20MB4	142	C122_4.3 P80 BXN80MB4	143
374	18	3.1	7.6	1380				
392	17	2.4	3.7	1330	C122_3.7 S2 MXN20MB4	142	C122_3.7 P80 BXN80MB4	143
446	15	2.6	3.2	1280	C122_3.2 S2 MXN20MB4	142	C122_3.2 P80 BXN80MB4	143
457	15	3.6	6.2	1280				
509	13	3.8	5.6	1240				
517	13	2.8	2.8	1230	C122_2.8 S2 MXN20MB4	142		
585	12	4.1	4.9	1190				
661	10	4.4	4.3	1050				
781	9	4.8	3.7	1090				
889	8	5.2	3.2	1050				
1030	7	5.6	2.8	1010				

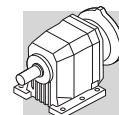
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n ₂ min-1	M ₂ Nm	S	i	R _{n2} N	 IE2		 IE3			
0.87	10815	1.1	1081	85000	C1004_1081 S3 ME3LA6		179	C1004_1081 P100 BE100M6	180	
0.94	10043	1.2	1004	85000	C1004_908.2 S3 ME3LA6		179	C1004_908.2 P100 BE100M6	180	
1.3	7573	1.0	1137	60000	C904_1137 S3 ME3SA4	C904_1137 S3 MX3SA4	176	C904_1137 P90 BE90S4	C904_1137 P90 BX90S4	177
1.3	7200	1.7	1081	85000	C1004_1081 S3 ME3SA4	C1004_1081 S3 MX3SA4	179	C1004_1081 P90 BE90S4	C1004_1081 P90 BX90S4	180
1.4	6701	1.1	1006	60000	C904_1006 S3 ME3SA4	C904_1006 S3 MX3SA4	176	C904_1006 P90 BE90S4	C904_1006 P90 BX90S4	177
1.4	6686	1.8	1004	85000	C1004_1004 S3 ME3SA4	C1004_1004 S3 MX3SA4	179	C1004_1004 P90 BE90S4	C1004_1004 P90 BX90S4	180
1.6	6143	1.2	922.3	60000	C904_922.3 S3 ME3SA4	C904_922.3 S3 MX3SA4	176	C904_922.3 P90 BE90S4	C904_922.3 P90 BX90S4	177
1.6	6049	2.0	908.2	85000	C1004_908.2 S3 ME3SA4	C1004_908.2 S3 MX3SA4	179	C1004_908.2 P90 BE90S4	C1004_908.2 P90 BX90S4	180
1.7	5621	1.3	844.0	60000	C904_844.0 S3 ME3SA4	C904_844.0 S3 MX3SA4	176	C904_844.0 P90 BE90S4	C904_844.0 P90 BX90S4	177
1.7	5617	2.1	843.3	85000	C1004_843.3 S3 ME3SA4	C1004_843.3 S3 MX3SA4	179	C1004_843.3 P90 BE90S4	C1004_843.3 P90 BX90S4	180
1.8	5166	2.3	775.7	85000	C1004_775.7 S3 ME3SA4	C1004_775.7 S3 MX3SA4	179	C1004_775.7 P90 BE90S4	C1004_775.7 P90 BX90S4	180
1.8	5152	1.4	773.6	60000	C904_773.6 S3 ME3SA4	C904_773.6 S3 MX3SA4	176	C904_773.6 P90 BE90S4	C904_773.6 P90 BX90S4	177
2.0	4797	2.5	720.3	85000	C1004_720.3 S3 ME3SA4	C1004_720.3 S3 MX3SA4	179	C1004_720.3 P90 BE90S4	C1004_720.3 P90 BX90S4	180
2.0	4743	1.5	712.2	60000	C904_712.2 S3 ME3SA4	C904_712.2 S3 MX3SA4	176	C904_712.2 P90 BE90S4	C904_712.2 P90 BX90S4	177
2.2	4424	0.9	664.3	35000	C804_664.3 S3 ME3SA4	C804_664.3 S3 MX3SA4	173	C804_664.3 P90 BE90S4	C804_664.3 P90 BX90S4	174
2.2	4348	1.7	652.8	60000	C904_652.8 S3 ME3SA4	C904_652.8 S3 MX3SA4	176	C904_652.8 P90 BE90S4	C904_652.8 P90 BX90S4	177
2.3	4179	2.9	627.4	85000	C1004_627.4 S3 ME3SA4	C1004_627.4 S3 MX3SA4	179	C1004_627.4 P90 BE90S4	C1004_627.4 P90 BX90S4	180
2.5	3881	1.9	582.8	60000	C904_582.8 S3 ME3SA4	C904_582.8 S3 MX3SA4	176	C904_582.8 P90 BE90S4	C904_582.8 P90 BX90S4	177





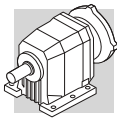
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n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
2.5	3845	1.0	577.4	35000	C804_577.4 S3 ME3SA4	C804_577.4 S3 MX3SA4	173	C804_577.4 P90 BE90S4	C804_577.4 P90 BX90S4	174
2.7	3558	2.0	534.2	60000	C904_534.2 S3 ME3SA4	C904_534.2 S3 MX3SA4	176	C904_534.2 P90 BE90S4	C904_534.2 P90 BX90S4	177
2.7	3525	1.1	529.3	35000	C804_529.3 S3 ME3SA4	C804_529.3 S3 MX3SA4	173	C804_529.3 P90 BE90S4	C804_529.3 P90 BX90S4	174
3.1	3045	2.4	457.1	60000	C904_457.1 S3 ME3SA4	C904_457.1 S3 MX3SA4	176	C904_457.1 P90 BE90S4	C904_457.1 P90 BX90S4	177
3.1	3033	1.3	455.4	35000	C804_455.4 S3 ME3SA4	C804_455.4 S3 MX3SA4	173	C804_455.4 P90 BE90S4	C804_455.4 P90 BX90S4	174
3.4	2791	2.6	419.0	60000	C904_419.0 S3 ME3SA4	C904_419.0 S3 MX3SA4	176	C904_419.0 P90 BE90S4	C904_419.0 P90 BX90S4	177
3.4	2780	1.4	417.5	35000	C804_417.5 S3 ME3SA4	C804_417.5 S3 MX3SA4	173	C804_417.5 P90 BE90S4	C804_417.5 P90 BX90S4	174
3.9	2463	2.9	369.8	60000	C904_369.8 S3 ME3SA4	C904_369.8 S3 MX3SA4	176	C904_369.8 P90 BE90S4	C904_369.8 P90 BX90S4	177
3.9	2429	1.6	364.7	35000	C804_364.7 S3 ME3SA4	C804_364.7 S3 MX3SA4	173	C804_364.7 P90 BE90S4	C804_364.7 P90 BX90S4	174
4.2	2293	1.0	344.3	25000	C704_344.3 S3 ME3SA4	C704_344.3 S3 MX3SA4	170	C704_344.3 P90 BE90S4	C704_344.3 P90 BX90S4	171
4.3	2226	1.8	334.3	35000	C804_334.3 S3 ME3SA4	C804_334.3 S3 MX3SA4	173	C804_334.3 P90 BE90S4	C804_334.3 P90 BX90S4	174
4.5	2117	1.1	317.9	25000	C704_317.9 S3 ME3SA4	C704_317.9 S3 MX3SA4	170	C704_317.9 P90 BE90S4	C704_317.9 P90 BX90S4	171
4.7	2010	0.8	301.7	16000	C614_301.7 S3 ME3SA4	C614_301.7 S3 MX3SA4	166	C614_301.7 P90 BE90S4	C614_301.7 P90 BX90S4	167
5.0	1903	2.1	285.7	35000	C804_285.7 S3 ME3SA4	C804_285.7 S3 MX3SA4	173	C804_285.7 P90 BE90S4	C804_285.7 P90 BX90S4	174
5.2	1833	0.9	275.3	16000	C614_275.3 S3 ME3SA4	C614_275.3 S3 MX3SA4	166	C614_275.3 P90 BE90S4	C614_275.3 P90 BX90S4	167
5.3	1813	1.3	272.2	25000	C704_272.2 S3 ME3SA4	C704_272.2 S3 MX3SA4	170	C704_272.2 P90 BE90S4	C704_272.2 P90 BX90S4	171
5.5	1744	2.3	261.9	35000	C804_261.9 S3 ME3SA4	C804_261.9 S3 MX3SA4	173	C804_261.9 P90 BE90S4	C804_261.9 P90 BX90S4	174
5.7	1674	1.4	251.3	25000	C704_251.3 S3 ME3SA4	C704_251.3 S3 MX3SA4	170	C704_251.3 P90 BE90S4	C704_251.3 P90 BX90S4	171
5.7	1700	0.9	164.5	16000	C613_164.5 S3 ME3LA6		166	C613_164.5 P100 BE100M6		167
6.0	1647	1.4	239.3	25000	C703_239.3 S3 ME3SA4	C703_239.3 S3 MX3SA4	170	C703_239.3 P90 BE90S4	C703_239.3 P90 BX90S4	171
6.0	1587	1.0	238.3	16000	C614_238.3 S3 ME3SA4	C614_238.3 S3 MX3SA4	166	C614_238.3 P90 BE90S4	C614_238.3 P90 BX90S4	167
6.3	1551	1.0	150.0	16000	C613_150.0 S3 ME3LA6		166	C613_150.0 P100 BE100M6		167
6.5	1520	1.5	220.9	25000	C703_220.9 S3 ME3SA4	C703_220.9 S3 MX3SA4	170	C703_220.9 P90 BE90S4	C703_220.9 P90 BX90S4	171
6.6	1448	1.1	217.4	16000	C614_217.4 S3 ME3SA4	C614_217.4 S3 MX3SA4	166	C614_217.4 P90 BE90S4	C614_217.4 P90 BX90S4	167
6.6	1485	2.7	215.8	35000	C803_215.8 S3 ME3SA4	C803_215.8 S3 MX3SA4	173	C803_215.8 P90 BE90S4	C803_215.8 P90 BX90S4	174
7.2	1362	2.8	197.9	35000	C803_197.9 S3 ME3SA4	C803_197.9 S3 MX3SA4	173	C803_197.9 P90 BE90S4	C803_197.9 P90 BX90S4	174
7.3	1304	1.2	195.8	16000	C613_195.8 S3 ME3SA4	C613_195.8 S3 MX3SA4	166	C613_195.8 P90 BE90S4	C613_195.8 P90 BX90S4	167
7.4	1336	1.7	194.1	25000	C703_194.1 S3 ME3SA4	C703_194.1 S3 MX3SA4	170	C703_194.1 P90 BE90S4	C703_194.1 P90 BX90S4	171
8.0	1233	1.9	179.2	25000	C703_179.2 S3 ME3SA4	C703_179.2 S3 MX3SA4	170	C703_179.2 P90 BE90S4	C703_179.2 P90 BX90S4	171
8.0	1189	1.3	178.6	16000	C613_178.6 S3 ME3SA4	C613_178.6 S3 MX3SA4	166	C613_178.6 P90 BE90S4	C613_178.6 P90 BX90S4	167
8.5	1163	3.4	169.0	35000	C803_169.0 S3 ME3SA4	C803_169.0 S3 MX3SA4	173	C803_169.0 P90 BE90S4	C803_169.0 P90 BX90S4	174
8.7	1095	1.5	164.5	16000	C613_164.5 S3 ME3SA4	C613_164.5 S3 MX3SA4	166	C613_164.5 P90 BE90S4	C613_164.5 P90 BX90S4	167
8.8	1121	2.1	162.8	25000	C703_162.8 S3 ME3SA4	C703_162.8 S3 MX3SA4	170	C703_162.8 P90 BE90S4	C703_162.8 P90 BX90S4	171
8.9	1105	0.9	160.5	10000	C513_160.5 S3 ME3SA4	C513_160.5 S3 MX3SA4	162	C513_160.5 P90 BE90S4	C513_160.5 P90 BX90S4	163
9.5	1034	2.2	150.3	25000	C703_150.3 S3 ME3SA4	C703_150.3 S3 MX3SA4	170	C703_150.3 P90 BE90S4	C703_150.3 P90 BX90S4	171
9.5	999	1.6	150.0	16000	C613_150.0 S3 ME3SA4	C613_150.0 S3 MX3SA4	166	C613_150.0 P90 BE90S4	C613_150.0 P90 BX90S4	167
9.7	1015	1.0	147.4	10000	C513_147.4 S3 ME3SA4	C513_147.4 S3 MX3SA4	162	C513_147.4 P90 BE90S4	C513_147.4 P90 BX90S4	163
10.2	935	1.7	140.5	16000	C613_140.5 S3 ME3SA4	C613_140.5 S3 MX3SA4	166	C613_140.5 P90 BE90S4	C613_140.5 P90 BX90S4	167
10.4	946	2.4	137.4	25000	C703_137.4 S3 ME3SA4	C703_137.4 S3 MX3SA4	170	C703_137.4 P90 BE90S4	C703_137.4 P90 BX90S4	171
10.6	926	1.1	134.6	10000	C513_134.6 S3 ME3SA4	C513_134.6 S3 MX3SA4	162	C513_134.6 P90 BE90S4	C513_134.6 P90 BX90S4	163
11.2	853	1.9	128.1	16000	C613_128.1 S3 ME3SA4	C613_128.1 S3 MX3SA4	166	C613_128.1 P90 BE90S4	C613_128.1 P90 BX90S4	167
11.3	873	2.6	126.8	25000	C703_126.8 S3 ME3SA4	C703_126.8 S3 MX3SA4	170	C703_126.8 P90 BE90S4	C703_126.8 P90 BX90S4	171
11.5	856	1.2	124.4	10000	C513_124.4 S3 ME3SA4	C513_124.4 S3 MX3SA4	162	C513_124.4 P90 BE90S4	C513_124.4 P90 BX90S4	163
12.6	757	2.1	113.6	16000	C613_113.6 S3 ME3SA4	C613_113.6 S3 MX3SA4	166	C613_113.6 P90 BE90S4	C613_113.6 P90 BX90S4	167
12.6	782	1.3	113.6	10000	C513_113.6 S3 ME3SA4	C513_113.6 S3 MX3SA4	162	C513_113.6 P90 BE90S4	C513_113.6 P90 BX90S4	163
12.7	774	3.0	112.4	25000	C703_112.4 S3 ME3SA4	C703_112.4 S3 MX3SA4	170	C703_112.4 P90 BE90S4	C703_112.4 P90 BX90S4	171
13.8	690	2.3	103.6	16000	C613_103.6 S3 ME3SA4	C613_103.6 S3 MX3SA4	166	C613_103.6 P90 BE90S4	C613_103.6 P90 BX90S4	167
14.0	701	1.4	101.8	10000	C513_101.8 S3 ME3SA4	C513_101.8 S3 MX3SA4	162	C513_101.8 P90 BE90S4	C513_101.8 P90 BX90S4	163
15.3	642	0.9	93.3	7000	C413_93.3 S3 ME3SA4	C413_93.3 S3 MX3SA4	158	C413_93.3 P90 BE90S4	C413_93.3 P90 BX90S4	159
15.4	640	1.6	93.0	10000	C513_93.0 S3 ME3SA4	C513_93.0 S3 MX3SA4	162	C513_93.0 P90 BE90S4	C513_93.0 P90 BX90S4	163
15.7	606	2.6	91.0	16000	C613_91.0 S3 ME3SA4	C613_91.0 S3 MX3SA4	166	C613_91.0 P90 BE90S4	C613_91.0 P90 BX90S4	167
17.2	553	2.9	83.0	16000	C613_83.0 S3 ME3SA4	C613_83.0 S3 MX3SA4	166	C613_83.0 P90 BE90S4	C613_83.0 P90 BX90S4	167
17.5	561	1.1	81.5	7000	C413_81.5 S3 ME3SA4	C413_81.5 S3 MX3SA4	158	C413_81.5 P90 BE90S4	C413_81.5 P90 BX90S4	159
17.9	550	1.8	79.9	10000	C513_79.9 S3 ME3SA4	C513_79.9 S3 MX3SA4	162	C513_79.9 P90 BE90S4	C513_79.9 P90 BX90S4	163
19.2	512	1.2	74.4	7000	C413_74.4 S3 ME3SA4	C413_74.4 S3 MX3SA4	158	C413_74.4 P90 BE90S4	C413_74.4 P90 BX90S4	159
19.3	494	3.2	74.2	16000	C613_74.2 S3 ME3SA4	C613_74.2 S3 MX3SA4	166	C613_74.2 P90 BE90S4	C613_74.2 P90 BX90S4	167
19.6	502	2.0	72.9	10000	C513_72.9 S3 ME3SA4	C513_72.9 S3 MX3SA4	162	C513_72.9 P90 BE90S4	C513_72.9 P90 BX90S4	163
20.2	487	0.9	70.8	6500	C363_70.8 S3 ME3SA4	C363_70.8 S3 MX3SA4	154	C363_70.8 P90 BE90S4	C363_70.8 P90 BX90S4	155
21.1	451	3.5	67.7	16000	C613_67.7 S3 ME3SA4	C613_67.7 S3 MX3SA4	166	C613_67.7 P90 BE90S4	C613_67.7 P90 BX90S4	167
22.1	445	2.2	64.6	10000	C513_64.6 S3 ME3SA4	C513_64.6 S3 MX3SA4	162	C513_64.6 P90 BE90S4	C513_64.6 P90 BX90S4	163
22.2	442	1.4	64.3	7000	C413_64.3 S3 ME3SA4	C413_64.3 S3 MX3SA4	158	C413_64.3 P90 BE90S4	C413_64.3 P90 BX90S4	159
23.1	427	1.1	62.0	6500	C363_62.0 S3 ME3SA4	C363_62.0 S3 MX3SA4	154	C363_62.0 P90 BE90S4	C363_62.0 P90 BX90S4	155
24.2	406	2.5	59.0	10000	C513_59.0 S3 ME3SA4	C513_59.0 S3 MX3SA4	162	C513_59.0 P90 BE90S4	C513_59.0 P90 BX90S4	163
24.4	404	1.5	58.7	7000	C413_58.7 S3 ME3SA4	C413_58.7 S3 MX3SA4	158	C413_58.7 P90 BE90S4	C413_58.7 P90 BX90S4	159
25.1	401	2.0	57.0	10000	C512_57.0 S3 ME3SA4	C512_57.0 S3 MX3SA4	162	C512_57.0 P90 BE90S4	C512_57.0 P90 BX90S4	163

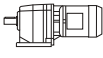





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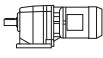



n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
25.5	387	1.2	56.2	6500	C363_56.2 S3 ME3SA4	C363_56.2 S3 MX3SA4	154	C363_56.2 P90 BE90S4	C363_56.2 P90 BX90S4	155
27.8	354	1.7	51.5	7000	C413_51.5 S3 ME3SA4	C413_51.5 S3 MX3SA4	158	C413_51.5 P90 BE90S4	C413_51.5 P90 BX90S4	159
27.8	361	1.9	51.4	10000	C512_51.4 S3 ME3SA4	C512_51.4 S3 MX3SA4	162	C512_51.4 P90 BE90S4	C512_51.4 P90 BX90S4	163
27.9	352	2.8	51.2	10000	C513_51.2 S3 ME3SA4	C513_51.2 S3 MX3SA4	162	C513_51.2 P90 BE90S4	C513_51.2 P90 BX90S4	163
29.7	331	1.4	48.2	6500	C363_48.2 S3 ME3SA4	C363_48.2 S3 MX3SA4	154	C363_48.2 P90 BE90S4	C363_48.2 P90 BX90S4	155
29.9	336	2.4	47.8	10000	C512_47.8 S3 ME3SA4	C512_47.8 S3 MX3SA4	162	C512_47.8 P90 BE90S4	C512_47.8 P90 BX90S4	163
30	323	1.9	47.0	7000	C413_47.0 S3 ME3SA4	C413_47.0 S3 MX3SA4	158	C413_47.0 P90 BE90S4	C413_47.0 P90 BX90S4	159
31	322	3.1	46.7	10000	C513_46.7 S3 ME3SA4	C513_46.7 S3 MX3SA4	162	C513_46.7 P90 BE90S4	C513_46.7 P90 BX90S4	163
32	318	0.9	45.3	5500	C322_45.3 S3 ME3SA4	C322_45.3 S3 MX3SA4	150	C322_45.3 P90 BE90S4	C322_45.3 P90 BX90S4	151
32	315	1.6	44.8	7000	C412_44.8 S3 ME3SA4	C412_44.8 S3 MX3SA4	158	C412_44.8 P90 BE90S4	C412_44.8 P90 BX90S4	159
33	299	1.5	43.5	6500	C363_43.5 S3 ME3SA4	C363_43.5 S3 MX3SA4	154	C363_43.5 P90 BE90S4	C363_43.5 P90 BX90S4	155
33	303	2.5	43.1	10000	C512_43.1 S3 ME3SA4	C512_43.1 S3 MX3SA4	162	C512_43.1 P90 BE90S4	C512_43.1 P90 BX90S4	163
35	286	1.0	40.7	5500	C322_40.7 S3 ME3SA4	C322_40.7 S3 MX3SA4	150	C322_40.7 P90 BE90S4	C322_40.7 P90 BX90S4	151
35	284	2.8	40.4	10000	C512_40.4 S3 ME3SA4	C512_40.4 S3 MX3SA4	162	C512_40.4 P90 BE90S4	C512_40.4 P90 BX90S4	163
35	278	2.2	40.3	7000	C413_40.3 S3 ME3SA4	C413_40.3 S3 MX3SA4	158	C413_40.3 P90 BE90S4	C413_40.3 P90 BX90S4	159
38	262	1.7	38.1	6500	C363_38.1 S3 ME3SA4	C363_38.1 S3 MX3SA4	154	C363_38.1 P90 BE90S4	C363_38.1 P90 BX90S4	155
39	261	1.9	37.1	7000	C412_37.1 S3 ME3SA4	C412_37.1 S3 MX3SA4	158	C412_37.1 P90 BE90S4	C412_37.1 P90 BX90S4	159
39	256	3.1	36.4	10000	C512_36.4 S3 ME3SA4	C512_36.4 S3 MX3SA4	162	C512_36.4 P90 BE90S4	C512_36.4 P90 BX90S4	163
40	254	1.2	36.1	5500	C322_36.1 S3 ME3SA4	C322_36.1 S3 MX3SA4	150	C322_36.1 P90 BE90S4	C322_36.1 P90 BX90S4	151
41	238	1.9	34.6	6300	C363_34.6 S3 ME3SA4	C363_34.6 S3 MX3SA4	154	C363_34.6 P90 BE90S4	C363_34.6 P90 BX90S4	155
43	235	2.1	33.4	7000	C412_33.4 S3 ME3SA4	C412_33.4 S3 MX3SA4	158	C412_33.4 P90 BE90S4	C412_33.4 P90 BX90S4	159
43	233	1.3	33.1	5420	C322_33.1 S3 ME3SA4	C322_33.1 S3 MX3SA4	150	C322_33.1 P90 BE90S4	C322_33.1 P90 BX90S4	151
45	221	2.3	31.4	7000	C412_31.4 S3 ME3SA4	C412_31.4 S3 MX3SA4	158	C412_31.4 P90 BE90S4	C412_31.4 P90 BX90S4	159
48	209	1.4	29.8	5360	C322_29.8 S3 ME3SA4	C322_29.8 S3 MX3SA4	150	C322_29.8 P90 BE90S4	C322_29.8 P90 BX90S4	151
48	208	1.0	29.6	3190	C222_29.6 S3 ME3SA4	C222_29.6 S3 MX3SA4	146	C222_29.6 P90 BE90S4	C222_29.6 P90 BX90S4	147
50	198	2.3	28.7	6190	C363_28.7 S3 ME3SA4	C363_28.7 S3 MX3SA4	154	C363_28.7 P90 BE90S4	C363_28.7 P90 BX90S4	155
51	199	2.5	28.3	7000	C412_28.3 S3 ME3SA4	C412_28.3 S3 MX3SA4	158	C412_28.3 P90 BE90S4	C412_28.3 P90 BX90S4	159
53	191	1.0	27.2	3160	C222_27.2 S3 ME3SA4	C222_27.2 S3 MX3SA4	146	C222_27.2 P90 BE90S4	C222_27.2 P90 BX90S4	147
53	189	1.6	26.9	5220	C322_26.9 S3 ME3SA4	C322_26.9 S3 MX3SA4	150	C322_26.9 P90 BE90S4	C322_26.9 P90 BX90S4	151
55	180	2.4	26.2	5930	C363_26.2 S3 ME3SA4	C363_26.2 S3 MX3SA4	154	C363_26.2 P90 BE90S4	C363_26.2 P90 BX90S4	155
57	177	1.7	25.1	5180	C322_25.1 S3 ME3SA4	C322_25.1 S3 MX3SA4	150	C322_25.1 P90 BE90S4	C322_25.1 P90 BX90S4	151
57	176	2.8	25.0	6950	C412_25.0 S3 ME3SA4	C412_25.0 S3 MX3SA4	158	C412_25.0 P90 BE90S4	C412_25.0 P90 BX90S4	159
59	171	1.2	24.3	3150	C222_24.3 S3 ME3SA4	C222_24.3 S3 MX3SA4	146	C222_24.3 P90 BE90S4	C222_24.3 P90 BX90S4	147
62	161	1.8	22.9	5050	C322_22.9 S3 ME3SA4	C322_22.9 S3 MX3SA4	150	C322_22.9 P90 BE90S4	C322_22.9 P90 BX90S4	151
63	159	3.2	22.6	6810	C412_22.6 S3 ME3SA4	C412_22.6 S3 MX3SA4	158	C412_22.6 P90 BE90S4	C412_22.6 P90 BX90S4	159
65	152	2.8	22.1	5680	C363_22.1 S3 ME3SA4	C363_22.1 S3 MX3SA4	154	C363_22.1 P90 BE90S4	C363_22.1 P90 BX90S4	155
67	151	1.3	21.5	3120	C222_21.5 S3 ME3SA4	C222_21.5 S3 MX3SA4	146	C222_21.5 P90 BE90S4	C222_21.5 P90 BX90S4	147
71	141	2.1	20.1	4920	C322_20.1 S3 ME3SA4	C322_20.1 S3 MX3SA4	150	C322_20.1 P90 BE90S4	C322_20.1 P90 BX90S4	151
71	141	1.3	20.0	3080	C222_20.0 S3 ME3SA4	C222_20.0 S3 MX3SA4	146	C222_20.0 P90 BE90S4	C222_20.0 P90 BX90S4	147
75	134	2.8	19.0	5580	C362_19.0 S3 ME3SA4	C362_19.0 S3 MX3SA4	154	C362_19.0 P90 BE90S4	C362_19.0 P90 BX90S4	155
79	128	2.2	18.2	4760	C322_18.2 S3 ME3SA4	C322_18.2 S3 MX3SA4	150	C322_18.2 P90 BE90S4	C322_18.2 P90 BX90S4	151
79	127	1.4	18.1	3020	C222_18.1 S3 ME3SA4	C222_18.1 S3 MX3SA4	146	C222_18.1 P90 BE90S4	C222_18.1 P90 BX90S4	147
83	121	3.1	17.2	5300	C362_17.2 S3 ME3SA4	C362_17.2 S3 MX3SA4	154	C362_17.2 P90 BE90S4	C362_17.2 P90 BX90S4	155
90	111	1.6	15.8	2970	C222_15.8 S3 ME3SA4	C222_15.8 S3 MX3SA4	146	C222_15.8 P90 BE90S4	C222_15.8 P90 BX90S4	147
92	110	2.5	15.6	4630	C322_15.6 S3 ME3SA4	C322_15.6 S3 MX3SA4	150	C322_15.6 P90 BE90S4	C322_15.6 P90 BX90S4	151
98	102	1.6	14.5	2940	C222_14.5 S3 ME3SA4	C222_14.5 S3 MX3SA4	146	C222_14.5 P90 BE90S4	C222_14.5 P90 BX90S4	147
102	99	2.5	14.1	4480	C322_14.1 S3 ME3SA4	C322_14.1 S3 MX3SA4	150	C322_14.1 P90 BE90S4	C322_14.1 P90 BX90S4	151
115	87	1.8	12.4	2840	C222_12.4 S3 ME3SA4	C222_12.4 S3 MX3SA4	146	C222_12.4 P90 BE90S4	C222_12.4 P90 BX90S4	147
116	87	2.8	12.3	4350	C322_12.3 S3 ME3SA4	C322_12.3 S3 MX3SA4	150	C322_12.3 P90 BE90S4	C322_12.3 P90 BX90S4	151
128	79	2.9	11.2	4200	C322_11.2 S3 ME3SA4	C322_11.2 S3 MX3SA4	150	C322_11.2 P90 BE90S4	C322_11.2 P90 BX90S4	151
129	78	2.0	11.1	2800	C222_11.1 S3 ME3SA4	C222_11.1 S3 MX3SA4	146	C222_11.1 P90 BE90S4	C222_11.1 P90 BX90S4	147
142	71	0.9	10.1	1400	C122_10.1 S3 ME3SA4	C122_10.1 S3 MX3SA4	142	C122_10.1 P90 BE90S4	C122_10.1 P90 BX90S4	143
148	68	2.1	9.6	2700	C222_9.6 S3 ME3SA4	C222_9.6 S3 MX3SA4	146	C222_9.6 P90 BE90S4	C222_9.6 P90 BX90S4	147
154	65	3.4	9.3	4030	C322_6.3 S3 ME3SA4	C322_6.3 S3 MX3SA4	150	C322_6.3 P90 BE90S4	C322_6.3 P90 BX90S4	151
162	62	1.0	8.8	1560	C122_8.8 S3 ME3SA4	C122_8.8 S3 MX3SA4	142	C122_8.8 P90 BE90S4	C122_8.8 P90 BX90S4	143
165	61	2.3	8.7	2630	C222_8.7 S3 ME3SA4	C222_8.7 S3 MX3SA4	146	C222_8.7 P90 BE90S4	C222_8.7 P90 BX90S4	147
188	54	1.0	7.6	1550	C122_7.6 S3 ME3SA4	C122_7.6 S3 MX3SA4	142	C122_7.6 P90 BE90S4	C122_7.6 P90 BX90S4	143
202	50	2.6	7.1	2510	C222_7.1 S3 ME3SA4	C222_7.1 S3 MX3SA4	146	C222_7.1 P90 BE90S4	C222_7.1 P90 BX90S4	147
229	44	1.2	6.2	1220	C122_6.2 S3 ME3SA4	C122_6.2 S3 MX3SA4	142	C122_6.2 P90 BE90S4	C122_6.2 P90 BX90S4	143
235	43	2.5	6.1	2380	C222_6.1 S3 ME3SA4	C222_6.1 S3 MX3SA4	146	C222_6.1 P90 BE90S4	C222_6.1 P90 BX90S4	147
238	42	1.6	11.9	1420	C122_11.9 S2 ME2SB2		142	C122_11.9 P80 BE80B2		143
255	39	3.9	11.1	2980	C222_11.1 S2 ME2SB2		146	C222_11.1 P80 BE80B2		147
255	39	1.3	5.6	1270	C122_5.6 S3 ME3SA4	C122_5.6 S3 MX3SA4	142	C122_5.6 P90 BE90S4	C122_5.6 P90 BX90S4	143
256	39	2.6	5.6	2350	C222_5.6 S3 ME3SA4	C222_5.6 S3 MX3SA4	146	C222_5.6 P90 BE90S4	C222_5.6 P90 BX90S4	147
259	39	1.1	3.7	1320	C122_3.7 S3 ME3LA6		142	C122_3.7 P100 BE100M6		143

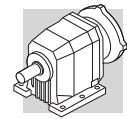


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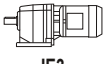
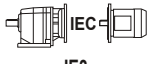
n ₂ min-1	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
281	35	1.8	10.1	1420	C122_10.1 S2 ME2SB2		142	C122_10.1 P80 BE80B2		143
294	34	1.4	4.9	1370	C122_4.9 S3 ME3SA4	C122_4.9 S3 MX3SA4	142	C122_4.9 P90 BE90S4	C122_4.9 P90 BX90S4	143
300	34	3.0	4.8	2240	C222_4.8 S3 ME3SA4	C222_4.8 S3 MX3SA4	146	C222_4.8 P90 BE90S4	C222_4.8 P90 BX90S4	147
320	31	1.9	8.8	1370	C122_8.8 S2 ME2SB2		142	C122_8.8 P80 BE80B2		143
332	30	1.5	4.3	1320	C122_4.3 S3 ME3SA4	C122_4.3 S3 MX3SA4	142	C122_4.3 P90 BE90S4	C122_4.3 P90 BX90S4	143
336	30	3.1	4.3	2200	C222_4.3 S3 ME3SA4	C222_4.3 S3 MX3SA4	146	C222_4.3 P90 BE90S4	C222_4.3 P90 BX90S4	147
341	29	1.3	2.8	1320	C122_2.8 S3 M3SA6		142	C122_2.8 P90 BN90L6		143
347	29	2.8	2.7	2160	C222_2.7 S3 M3SA6		146	C222_2.7 P90 BN90L6		147
371	27	2.1	7.6	1330	C122_7.6 S2 ME2SB2		142	C122_7.6 P80 BE80B2		143
386	26	3.5	3.7	2090	C222_3.7 S3 ME3SA4	C222_3.7 S3 MX3SA4	146	C222_3.7 P90 BE90S4	C222_3.7 P90 BX90S4	147
392	26	1.6	3.7	1280	C122_3.7 S3 ME3SA4	C122_3.7 S3 MX3SA4	142	C122_3.7 P90 BE90S4	C122_3.7 P90 BX90S4	143
446	23	1.8	3.2	1230	C122_3.2 S3 ME3SA4	C122_3.2 S3 MX3SA4	142	C122_3.2 P90 BE90S4	C122_3.2 P90 BX90S4	143
454	22	2.4	6.2	1230	C122_6.2 S2 ME2SB2		142	C122_6.2 P80 BE80B2		143
505	20	2.6	5.6	1190	C122_5.6 S2 ME2SB2		142	C122_5.6 P80 BE80B2		143
517	19	1.9	2.8	1190	C122_2.8 S3 ME3SA4	C122_2.8 S3 MX3SA4	142	C122_2.8 P90 BE90S4	C122_2.8 P90 BX90S4	143
581	17	2.8	4.9	1150	C122_4.9 S2 ME2SB2		142	C122_4.9 P80 BE80B2		143
656	15	3.0	4.3	1110	C122_4.3 S2 ME2SB2		142	C122_4.3 P80 BE80B2		143
775	13	3.3	3.7	1070	C122_3.7 S2 ME2SB2		142	C122_3.7 P80 BE80B2		143
882	11	3.5	3.2	1020	C122_3.2 S2 ME2SB2		142	C122_3.2 P80 BE80B2		143
1023	10	3.8	2.8	980	C122_2.8 S2 ME2SB2		142	C122_2.8 P80 BE80B2		143

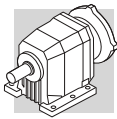
1.1 kW

n ₂ min-1	M ₂ Nm	S	i	R _{n2} N						
					IE3	IE3		IE3	IE3	
0.87	10815	1.1	1081	85000						
0.94	10043	1.2	1004	85000						
1.3	7573	1.0	1137	60000				C904_1137 P90 BXN90S4		177
1.3	7200	1.7	1081	85000				C1004_1081 P90 BXN90S4		180
1.4	6701	1.1	1006	60000				C904_1006 P90 BXN90S4		177
1.4	6686	1.8	1004	85000				C1004_1004 P90 BXN90S4		180
1.6	6143	1.2	922.3	60000				C904_922.3 P90 BXN90S4		177
1.6	6049	2.0	908.2	85000				C1004_908.2 P90 BXN90S4		180
1.7	5621	1.3	844.0	60000				C904_844.0 P90 BXN90S4		177
1.7	5617	2.1	843.3	85000				C1004_843.3 P90 BXN90S4		180
1.8	5166	2.3	775.7	85000				C1004_775.7 P90 BXN90S4		180
1.8	5152	1.4	773.6	60000				C904_773.6 P90 BXN90S4		177
2.0	4797	2.5	720.3	85000				C1004_720.3 P90 BXN90S4		180
2.0	4743	1.5	712.2	60000				C904_712.2 P90 BXN90S4		177
2.2	4424	0.9	664.3	35000				C804_664.3 P90 BXN90S4		174
2.2	4348	1.7	652.8	60000				C904_652.8 P90 BXN90S4		177
2.3	4179	2.9	627.4	85000				C1004_627.4 P90 BXN90S4		180
2.5	3881	1.9	582.8	60000				C904_582.8 P90 BXN90S4		177
2.5	3845	1.0	577.4	35000				C804_577.4 P90 BXN90S4		174
2.7	3558	2.0	534.2	60000				C904_534.2 P90 BXN90S4		177
2.7	3525	1.1	529.3	35000				C804_529.3 P90 BXN90S4		174
3.1	3045	2.4	457.1	60000				C904_457.1 P90 BXN90S4		177
3.1	3033	1.3	455.4	35000				C804_455.4 P90 BXN90S4		174
3.4	2791	2.6	419.0	60000				C904_419.0 P90 BXN90S4		177
3.4	2780	1.4	417.5	35000				C804_417.5 P90 BXN90S4		174
3.9	2463	2.9	369.8	60000				C904_369.8 P90 BXN90S4		177
3.9	2429	1.6	364.7	35000				C804_364.7 P90 BXN90S4		174
4.2	2293	1.0	344.3	25000				C704_344.3 P90 BXN90S4		171
4.3	2226	1.8	334.3	35000				C804_334.3 P90 BXN90S4		174
4.5	2117	1.1	317.9	25000				C704_317.9 P90 BXN90S4		171
4.7	2010	0.8	301.7	16000				C614_301.7 P90 BXN90S4		167
5.0	1903	2.1	285.7	35000				C804_285.7 P90 BXN90S4		174
5.2	1833	0.9	275.3	16000				C614_275.3 P90 BXN90S4		167
5.3	1813	1.3	272.2	25000				C704_272.2 P90 BXN90S4		171
5.5	1744	2.3	261.9	35000				C804_261.9 P90 BXN90S4		174
5.7	1674	1.4	251.3	25000				C704_251.3 P90 BXN90S4		171
5.7	1700	0.9	164.5	16000						

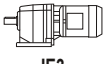
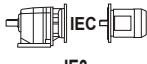


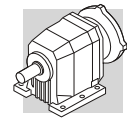
1.1 kW

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N	 IE3		 IEC	
6.0	1647	1.4	239.3	25000			C703_239.3 P90 BXN90S4	171
6.0	1587	1.0	238.3	16000			C614_238.3 P90 BXN90S4	167
6.3	1551	1.0	150.0	16000				
6.5	1520	1.5	220.9	25000			C703_220.9 P90 BXN90S4	171
6.6	1448	1.1	217.4	16000			C614_217.4 P90 BXN90S4	167
6.6	1485	2.7	215.8	35000			C803_215.8 P90 BXN90S4	174
7.2	1362	2.8	197.9	35000			C803_197.9 P90 BXN90S4	174
7.3	1304	1.2	195.8	16000			C613_195.8 P90 BXN90S4	167
7.4	1336	1.7	194.1	25000			C703_194.1 P90 BXN90S4	171
8.0	1233	1.9	179.2	25000			C703_179.2 P90 BXN90S4	171
8.0	1189	1.3	178.6	16000			C613_178.6 P90 BXN90S4	167
8.5	1163	3.4	169.0	35000			C803_169.0 P90 BXN90S4	174
8.7	1095	1.5	164.5	16000			C613_164.5 P90 BXN90S4	167
8.8	1121	2.1	162.8	25000			C703_162.8 P90 BXN90S4	171
8.9	1105	0.9	160.5	10000			C513_160.5 P90 BXN90S4	163
9.5	1034	2.2	150.3	25000			C703_150.3 P90 BXN90S4	171
9.5	999	1.6	150.0	16000			C613_150.0 P90 BXN90S4	167
9.7	1015	1.0	147.4	10000			C513_147.4 P90 BXN90S4	163
10.2	935	1.7	140.5	16000			C613_140.5 P90 BXN90S4	167
10.4	946	2.4	137.4	25000			C703_137.4 P90 BXN90S4	171
10.6	926	1.1	134.6	10000			C513_134.6 P90 BXN90S4	163
11.2	853	1.9	128.1	16000			C613_128.1 P90 BXN90S4	167
11.3	873	2.6	126.8	25000			C703_126.8 P90 BXN90S4	171
11.5	856	1.2	124.4	10000			C513_124.4 P90 BXN90S4	163
12.6	757	2.1	113.6	16000			C613_113.6 P90 BXN90S4	167
12.6	782	1.3	113.6	10000			C513_113.6 P90 BXN90S4	163
12.7	774	3.0	112.4	25000			C703_112.4 P90 BXN90S4	171
13.8	690	2.3	103.6	16000			C613_103.6 P90 BXN90S4	167
14.0	701	1.4	101.8	10000			C513_101.8 P90 BXN90S4	163
15.3	642	0.9	93.3	7000			C413_93.3 P90 BXN90S4	159
15.4	640	1.6	93.0	10000			C513_93.0 P90 BXN90S4	163
15.7	606	2.6	91.0	16000			C613_91.0 P90 BXN90S4	167
17.2	553	2.9	83.0	16000			C613_83.0 P90 BXN90S4	167
17.5	561	1.1	81.5	7000			C413_81.5 P90 BXN90S4	159
17.9	550	1.8	79.9	10000			C513_79.9 P90 BXN90S4	163
19.2	512	1.2	74.4	7000			C413_74.4 P90 BXN90S4	159
19.3	494	3.2	74.2	16000			C613_74.2 P90 BXN90S4	167
19.6	502	2.0	72.9	10000			C513_72.9 P90 BXN90S4	163
20.2	487	0.9	70.8	6500			C363_70.8 P90 BXN90S4	155
21.1	451	3.5	67.7	16000			C613_67.7 P90 BXN90S4	167
22.1	445	2.2	64.6	10000			C513_64.6 P90 BXN90S4	163
22.2	442	1.4	64.3	7000			C413_64.3 P90 BXN90S4	159
23.1	427	1.1	62.0	6500			C363_62.0 P90 BXN90S4	155
24.2	406	2.5	59.0	10000			C513_59.0 P90 BXN90S4	163
24.4	404	1.5	58.7	7000			C413_58.7 P90 BXN90S4	159
25.1	401	2.0	57.0	10000			C512_57.0 P90 BXN90S4	163
25.5	387	1.2	56.2	6500			C363_56.2 P90 BXN90S4	155
27.8	354	1.7	51.5	7000			C413_51.5 P90 BXN90S4	159
27.8	361	1.9	51.4	10000			C512_51.4 P90 BXN90S4	163
27.9	352	2.8	51.2	10000			C513_51.2 P90 BXN90S4	163
29.7	331	1.4	48.2	6500			C363_48.2 P90 BXN90S4	155
29.9	336	2.4	47.8	10000			C512_47.8 P90 BXN90S4	163
30	323	1.9	47.0	7000			C413_47.0 P90 BXN90S4	159
31	322	3.1	46.7	10000			C513_46.7 P90 BXN90S4	163
32	318	0.9	45.3	5500			C322_45.3 P90 BXN90S4	151
32	315	1.6	44.8	7000			C412_44.8 P90 BXN90S4	159
33	299	1.5	43.5	6500			C363_43.5 P90 BXN90S4	155
33	303	2.5	43.1	10000			C512_43.1 P90 BXN90S4	163
35	286	1.0	40.7	5500			C322_40.7 P90 BXN90S4	151
35	284	2.8	40.4	10000			C512_40.4 P90 BXN90S4	163
35	278	2.2	40.3	7000			C413_40.3 P90 BXN90S4	159
38	262	1.7	38.1	6500			C363_38.1 P90 BXN90S4	155
39	261	1.9	37.1	7000			C412_37.1 P90 BXN90S4	159
39	256	3.1	36.4	10000			C512_36.4 P90 BXN90S4	163
40	254	1.2	36.1	5500			C322_36.1 P90 BXN90S4	151

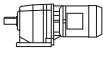




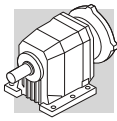
1.1 kW

n ₂ min-1	M ₂ Nm	S	i	R _{n2} N	 IE3	 IEC IE3	
41	238	1.9	34.6	6300		C363_34.6 P90 BXN90S4	155
43	235	2.1	33.4	7000		C412_33.4 P90 BXN90S4	159
43	233	1.3	33.1	5420		C322_33.1 P90 BXN90S4	151
45	221	2.3	31.4	7000		C412_31.4 P90 BXN90S4	159
48	209	1.4	29.8	5360		C322_29.8 P90 BXN90S4	151
48	208	1.0	29.6	3190		C222_29.6 P90 BXN90S4	147
50	198	2.3	28.7	6190		C363_28.7 P90 BXN90S4	155
51	199	2.5	28.3	7000		C412_28.3 P90 BXN90S4	159
53	191	1.0	27.2	3160		C222_27.2 P90 BXN90S4	147
53	189	1.6	26.9	5220		C322_26.9 P90 BXN90S4	151
55	180	2.4	26.2	5930		C363_26.2 P90 BXN90S4	155
57	177	1.7	25.1	5180		C322_25.1 P90 BXN90S4	151
57	176	2.8	25.0	6950		C412_25.0 P90 BXN90S4	159
59	171	1.2	24.3	3150		C222_24.3 P90 BXN90S4	147
62	161	1.8	22.9	5050		C322_22.9 P90 BXN90S4	151
63	159	3.2	22.6	6810		C412_22.6 P90 BXN90S4	159
65	152	2.8	22.1	5680		C363_22.1 P90 BXN90S4	155
67	151	1.3	21.5	3120		C222_21.5 P90 BXN90S4	147
71	141	2.1	20.1	4920		C322_20.1 P90 BXN90S4	151
71	141	1.3	20.0	3080		C222_20.0 P90 BXN90S4	147
75	134	2.8	19.0	5580		C362_19.0 P90 BXN90S4	155
79	128	2.2	18.2	4760		C322_18.2 P90 BXN90S4	151
79	127	1.4	18.1	3020		C222_18.1 P90 BXN90S4	147
83	121	3.1	17.2	5300		C362_17.2 P90 BXN90S4	155
90	111	1.6	15.8	2970		C222_15.8 P90 BXN90S4	147
92	110	2.5	15.6	4630		C322_15.6 P90 BXN90S4	151
98	102	1.6	14.5	2940		C222_14.5 P90 BXN90S4	147
102	99	2.5	14.1	4480		C322_14.1 P90 BXN90S4	151
115	87	1.8	12.4	2840		C222_12.4 P90 BXN90S4	147
116	87	2.8	12.3	4350		C322_12.3 P90 BXN90S4	151
128	79	2.9	11.2	4200		C322_11.2 P90 BXN90S4	151
129	78	2.0	11.1	2800		C222_11.1 P90 BXN90S4	147
142	71	0.9	10.1	1400		C122_10.1 P90 BXN90S4	143
148	68	2.1	9.6	2700		C222_9.6 P90 BXN90S4	147
154	65	3.4	9.3	4030		C322_6.3 P90 BXN90S4	151
162	62	1.0	8.8	1560		C122_8.8 P90 BXN90S4	143
165	61	2.3	8.7	2630		C222_8.7 P90 BXN90S4	147
188	54	1.0	7.6	1550		C122_7.6 P90 BXN90S4	143
202	50	2.6	7.1	2510		C222_7.1 P90 BXN90S4	147
229	44	1.2	6.2	1220		C122_6.2 P90 BXN90S4	143
235	43	2.5	6.1	2380		C222_6.1 P90 BXN90S4	147
238	42	1.6	11.9	1420			
255	39	3.9	11.1	2980			
255	39	1.3	5.6	1270		C122_5.6 P90 BXN90S4	143
256	39	2.6	5.6	2350		C222_5.6 P90 BXN90S4	147
259	39	1.1	3.7	1320			
281	35	1.8	10.1	1420			
294	34	1.4	4.9	1370		C122_4.9 P90 BXN90S4	143
300	34	3.0	4.8	2240		C222_4.8 P90 BXN90S4	147
320	31	1.9	8.8	1370			
332	30	1.5	4.3	1320		C122_4.3 P90 BXN90S4	143
336	30	3.1	4.3	2200		C222_4.3 P90 BXN90S4	147
341	29	1.3	2.8	1320			
347	29	2.8	2.7	2160			
371	27	2.1	7.6	1330			
386	26	3.5	3.7	2090		C222_3.7 P90 BXN90S4	147
392	26	1.6	3.7	1280		C122_3.7 P90 BXN90S4	143
446	23	1.8	3.2	1230		C122_3.2 P90 BXN90S4	143
454	22	2.4	6.2	1230			
505	20	2.6	5.6	1190			
517	19	1.9	2.8	1190		C122_2.8 P90 BXN90S4	143
581	17	2.8	4.9	1150			
656	15	3.0	4.3	1110			
775	13	3.3	3.7	1070			
882	11	3.5	3.2	1020			
1023	10	3.8	2.8	980			



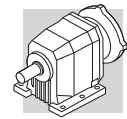
1.5 kW

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N									
					IE2	IE3		IE2	IE3				
1.0	12390	1.0	908.2	85000	C1004_908.2 S3 ME3LB6		179	C1004_908.2 P100 BE100LA6		180			
1.3	9730	1.2	1081	85000	C1004_1081 S3 ME3SB4	C1004_1081 S3 MX3SB4	179	C1004_1081 P90 BE90LA4	C1004_1081 P90 BX90LA4	180			
1.4	9035	1.3	1004	85000	C1004_1004 S3 ME3SB4	C1004_1004 S3 MX3SB4	179	C1004_1004 P90 BE90LA4	C1004_1004 P90 BX90LA4	180			
1.6	8174	1.5	908.2	85000	C1004_908.2 S3 ME3SB4	C1004_908.2 S3 MX3SB4	179	C1004_908.2 P90 BE90LA4	C1004_908.2 P90 BX90LA4	180			
1.7	7596	0.9	844.0	60000	C904_844.0 S3 ME3SB4	C904_844.0 S3 MX3SB4	176	C904_844.0 P90 BE90LA4	C904_844.0 P90 BX90LA4	177			
1.7	7590	1.6	843.3	85000	C1004_843.3 S3 ME3SB4	C1004_843.3 S3 MX3SB4	179	C1004_843.3 P90 BE90LA4	C1004_843.3 P90 BX90LA4	180			
1.8	6981	1.7	775.7	85000	C1004_775.7 S3 ME3SB4	C1004_775.7 S3 MX3SB4	179	C1004_775.7 P90 BE90LA4	C1004_775.7 P90 BX90LA4	180			
1.8	6963	1.0	773.6	60000	C904_773.6 S3 ME3SB4	C904_773.6 S3 MX3SB4	176	C904_773.6 P90 BE90LA4	C904_773.6 P90 BX90LA4	177			
2.0	6483	1.9	720.3	85000	C1004_720.3 S3 ME3SB4	C1004_720.3 S3 MX3SB4	179	C1004_720.3 P90 BE90LA4	C1004_720.3 P90 BX90LA4	180			
2.0	6410	1.1	712.2	60000	C904_712.2 S3 ME3SB4	C904_712.2 S3 MX3SB4	176	C904_712.2 P90 BE90LA4	C904_712.2 P90 BX90LA4	177			
2.2	5875	1.2	652.8	60000	C904_652.8 S3 ME3SB4	C904_652.8 S3 MX3SB4	176	C904_652.8 P90 BE90LA4	C904_652.8 P90 BX90LA4	177			
2.3	5647	2.1	627.4	85000	C1004_627.4 S3 ME3SB4	C1004_627.4 S3 MX3SB4	179	C1004_627.4 P90 BE90LA4	C1004_627.4 P90 BX90LA4	180			
2.5	5245	1.4	582.8	60000	C904_582.8 S3 ME3SB4	C904_582.8 S3 MX3SB4	176	C904_582.8 P90 BE90LA4	C904_582.8 P90 BX90LA4	177			
2.5	5243	2.3	582.6	85000	C1004_582.6 S3 ME3SB4	C1004_582.6 S3 MX3SB4	179	C1004_582.6 P90 BE90LA4	C1004_582.6 P90 BX90LA4	180			
2.7	4808	1.5	534.2	60000	C904_534.2 S3 ME3SB4	C904_534.2 S3 MX3SB4	176	C904_534.2 P90 BE90LA4	C904_534.2 P90 BX90LA4	177			
2.8	4524	2.7	502.6	85000	C1004_502.6 S3 ME3SB4	C1004_502.6 S3 MX3SB4	179	C1004_502.6 P90 BE90LA4	C1004_502.6 P90 BX90LA4	180			
3.1	4201	2.9	466.7	85000	C1004_466.7 S3 ME3SB4	C1004_466.7 S3 MX3SB4	179	C1004_466.7 P90 BE90LA4	C1004_466.7 P90 BX90LA4	180			
3.1	4114	1.8	457.1	60000	C904_457.1 S3 ME3SB4	C904_457.1 S3 MX3SB4	176	C904_457.1 P90 BE90LA4	C904_457.1 P90 BX90LA4	177			
3.1	4099	1.0	455.4	35000	C804_455.4 S3 ME3SB4	C804_455.4 S3 MX3SB4	173	C804_455.4 P90 BE90LA4	C804_455.4 P90 BX90LA4	174			
3.4	3771	1.9	419.0	60000	C904_419.0 S3 ME3SB4	C904_419.0 S3 MX3SB4	176	C904_419.0 P90 BE90LA4	C904_419.0 P90 BX90LA4	177			
3.4	3757	1.1	417.5	35000	C804_417.5 S3 ME3SB4	C804_417.5 S3 MX3SB4	173	C804_417.5 P90 BE90LA4	C804_417.5 P90 BX90LA4	174			
3.9	3328	2.2	369.8	60000	C904_369.8 S3 ME3SB4	C904_369.8 S3 MX3SB4	176	C904_369.8 P90 BE90LA4	C904_369.8 P90 BX90LA4	177			
3.9	3282	1.2	364.7	35000	C804_364.7 S3 ME3SB4	C804_364.7 S3 MX3SB4	173	C804_364.7 P90 BE90LA4	C804_364.7 P90 BX90LA4	174			
4.2	3051	2.4	339.0	60000	C904_339.0 S3 ME3SB4	C904_339.0 S3 MX3SB4	176	C904_339.0 P90 BE90LA4	C904_339.0 P90 BX90LA4	177			
4.3	3008	1.3	334.3	35000	C804_334.3 S3 ME3SB4	C804_334.3 S3 MX3SB4	173	C804_334.3 P90 BE90LA4	C804_334.3 P90 BX90LA4	174			
4.9	2636	2.7	292.9	60000	C904_292.9 S3 ME3SB4	C904_292.9 S3 MX3SB4	176	C904_292.9 P90 BE90LA4	C904_292.9 P90 BX90LA4	177			
5.0	2571	1.6	285.7	35000	C804_285.7 S3 ME3SB4	C804_285.7 S3 MX3SB4	173	C804_285.7 P90 BE90LA4	C804_285.7 P90 BX90LA4	174			
5.3	2450	0.9	272.2	25000	C704_272.2 S3 ME3SB4	C704_272.2 S3 MX3SB4	170	C704_272.2 P90 BE90LA4	C704_272.2 P90 BX90LA4	171			
5.3	2416	3.0	268.5	60000	C904_268.5 S3 ME3SB4	C904_268.5 S3 MX3SB4	176	C904_268.5 P90 BE90LA4	C904_268.5 P90 BX90LA4	177			
5.5	2357	1.7	261.9	35000	C804_261.9 S3 ME3SB4	C804_261.9 S3 MX3SB4	173	C804_261.9 P90 BE90LA4	C804_261.9 P90 BX90LA4	174			
5.7	2262	1.0	251.3	25000	C704_251.3 S3 ME3SB4	C704_251.3 S3 MX3SB4	170	C704_251.3 P90 BE90LA4	C704_251.3 P90 BX90LA4	171			
6.0	2226	1.0	239.3	25000	C703_239.3 S3 ME3SB4	C703_239.3 S3 MX3SB4	170	C703_239.3 P90 BE90LA4	C703_239.3 P90 BX90LA4	171			
6.5	2054	1.1	220.9	25000	C703_220.9 S3 ME3SB4	C703_220.9 S3 MX3SB4	170	C703_220.9 P90 BE90LA4	C703_220.9 P90 BX90LA4	171			
6.6	1957	0.8	217.4	16000	C614_217.4 S3 ME3SB4	C614_217.4 S3 MX3SB4	166	C614_217.4 P90 BE90LA4	C614_217.4 P90 BX90LA4	167			
6.6	2007	2.0	215.8	35000	C803_215.8 S3 ME3SB4	C803_215.8 S3 MX3SB4	173	C803_215.8 P90 BE90LA4	C803_215.8 P90 BX90LA4	174			
7.2	1840	2.1	197.9	35000	C803_197.9 S3 ME3SB4	C803_197.9 S3 MX3SB4	173	C803_197.9 P90 BE90LA4	C803_197.9 P90 BX90LA4	174			
7.3	1762	0.9	195.8	16000	C613_195.8 S3 ME3SB4	C613_195.8 S3 MX3SB4	166	C613_195.8 P90 BE90LA4	C613_195.8 P90 BX90LA4	167			
7.4	1805	1.3	194.1	25000	C703_194.1 S3 ME3SB4	C703_194.1 S3 MX3SB4	170	C703_194.1 P90 BE90LA4	C703_194.1 P90 BX90LA4	171			
7.8	1715	2.3	184.4	35000	C803_184.4 S3 ME3SB4	C803_184.4 S3 MX3SB4	173	C803_184.4 P90 BE90LA4	C803_184.4 P90 BX90LA4	174			
8.0	1666	1.4	179.2	25000	C703_179.2 S3 ME3SB4	C703_179.2 S3 MX3SB4	170	C703_179.2 P90 BE90LA4	C703_179.2 P90 BX90LA4	171			
8.0	1607	1.0	178.6	16000	C613_178.6 S3 ME3SB4	C613_178.6 S3 MX3SB4	166	C613_178.6 P90 BE90LA4	C613_178.6 P90 BX90LA4	167			
8.5	1572	2.5	169.0	35000	C803_169.0 S3 ME3SB4	C803_169.0 S3 MX3SB4	173	C803_169.0 P90 BE90LA4	C803_169.0 P90 BX90LA4	174			
8.7	1480	1.1	164.5	16000	C613_164.5 S3 ME3SB4	C613_164.5 S3 MX3SB4	166	C613_164.5 P90 BE90LA4	C613_164.5 P90 BX90LA4	167			
8.8	1514	1.5	162.8	25000	C703_162.8 S3 ME3SB4	C703_162.8 S3 MX3SB4	170	C703_162.8 P90 BE90LA4	C703_162.8 P90 BX90LA4	171			
9.5	1398	1.6	150.3	25000	C703_150.3 S3 ME3SB4	C703_150.3 S3 MX3SB4	170	C703_150.3 P90 BE90LA4	C703_150.3 P90 BX90LA4	171			
9.5	1350	1.2	150.0	16000	C613_150.0 S3 ME3SB4	C613_150.0 S3 MX3SB4	166	C613_150.0 P90 BE90LA4	C613_150.0 P90 BX90LA4	167			
9.6	1387	2.9	149.1	35000	C803_149.1 S3 ME3SB4	C803_149.1 S3 MX3SB4	173	C803_149.1 P90 BE90LA4	C803_149.1 P90 BX90LA4	174			
10.2	1264	1.3	140.5	16000	C613_140.5 S3 ME3SB4	C613_140.5 S3 MX3SB4	166	C613_140.5 P90 BE90LA4	C613_140.5 P90 BX90LA4	167			
10.4	1278	1.8	137.4	25000	C703_137.4 S3 ME3SB4	C703_137.4 S3 MX3SB4	170	C703_137.4 P90 BE90LA4	C703_137.4 P90 BX90LA4	171			
10.5	1271	3.1	136.7	35000	C803_136.7 S3 ME3SB4	C803_136.7 S3 MX3SB4	173	C803_136.7 P90 BE90LA4	C803_136.7 P90 BX90LA4	174			
11.2	1153	1.4	128.1	16000	C613_128.1 S3 ME3SB4	C613_128.1 S3 MX3SB4	166	C613_128.1 P90 BE90LA4	C613_128.1 P90 BX90LA4	167			
11.3	1180	1.9	126.8	25000	C703_126.8 S3 ME3SB4	C703_126.8 S3 MX3SB4	170	C703_126.8 P90 BE90LA4	C703_126.8 P90 BX90LA4	171			
12.6	1022	1.6	113.6	16000	C613_113.6 S3 ME3SB4	C613_113.6 S3 MX3SB4	166	C613_113.6 P90 BE90LA4	C613_113.6 P90 BX90LA4	167			
12.6	1057	0.9	113.6	10000	C513_113.6 S3 ME3SB4	C513_113.6 S3 MX3SB4	162	C513_113.6 P90 BE90LA4	C513_113.6 P90 BX90LA4	163			
12.7	1046	2.2	112.4	25000	C703_112.4 S3 ME3SB4	C703_112.4 S3 MX3SB4	170	C703_112.4 P90 BE90LA4	C703_112.4 P90 BX90LA4	171			
13.8	965	2.4	103.8	25000	C703_103.8 S3 ME3SB4	C703_103.8 S3 MX3SB4	170	C703_103.8 P90 BE90LA4	C703_103.8 P90 BX90LA4	171			
13.8	933	1.7	103.6	16000	C613_103.6 S3 ME3SB4	C613_103.6 S3 MX3SB4	166	C613_103.6 P90 BE90LA4	C613_103.6 P90 BX90LA4	167			
14.0	947	1.1	101.8	10000	C513_101.8 S3 ME3SB4	C513_101.8 S3 MX3SB4	162	C513_101.8 P90 BE90LA4	C513_101.8 P90 BX90LA4	163			
15.4	865	1.2	93.0	10000	C513_93.0 S3 ME3SB4	C513_93.0 S3 MX3SB4	162	C513_93.0 P90 BE90LA4	C513_93.0 P90 BX90LA4	163			
15.7	819	2.0	91.0	16000	C613_91.0 S3 ME3SB4	C613_91.0 S3 MX3SB4	166	C613_91.0 P90 BE90LA4	C613_91.0 P90 BX90LA4	167			
16.2	820	2.8	88.2	25000	C703_88.2 S3 ME3SB4	C703_88.2 S3 MX3SB4	170	C703_88.2 P90 BE90LA4	C703_88.2 P90 BX90LA4	171			
16.6	821	1.0	57.0	10000	C512_57.0 S3 ME3LB6		162	C512_57.0 P100 BE100LA6		163			
17.2	747	2.1	83.0	16000	C613_83.0 S3 ME3SB4	C613_83.0 S3 MX3SB4	166	C613_83.0 P90 BE90LA4	C613_83.0 P90 BX90LA4	167			
17.6	757	3.0	81.4	25000	C703_81.4 S3 ME3SB4	C703_81.4 S3 MX3SB4	170	C703_81.4 P90 BE90LA4	C703_81.4 P90 BX90LA4	171			
17.9	743	1.3	79.9	10000	C513_79.9 S3 ME3SB4	C513_79.9 S3 MX3SB4	162	C513_79.9 P90 BE90LA4	C513_79.9 P90 BX90LA4	163			

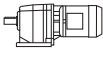





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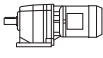



n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N				IEC		
					IE2	IE3		IE2	IE3	
18.4	740	0.9	51.4	10000	C512_51.4 S3 ME3LB6		162	C512_51.4 P100 BE100LA6		163
19.3	668	2.4	74.2	16000	C613_74.2 S3 ME3SB4	C613_74.2 S3 MX3SB4	166	C613_74.2 P90 BE90LA4	C613_74.2 P90 BX90LA4	167
19.6	678	1.5	72.9	10000	C513_72.9 S3 ME3SB4	C513_72.9 S3 MX3SB4	162	C513_72.9 P90 BE90LA4	C513_72.9 P90 BX90LA4	163
19.8	689	1.2	47.8	10000	C512_47.8 S3 ME3LB6		162	C512_47.8 P100 BE100LA6		163
20.0	663	3.5	71.3	25000	C703_71.3 S3 ME3SB4	C703_71.3 S3 MX3SB4	170	C703_71.3 P90 BE90LA4	C703_71.3 P90 BX90LA4	171
21.1	609	2.6	67.7	16000	C613_67.7 S3 ME3SB4	C613_67.7 S3 MX3SB4	166	C613_67.7 P90 BE90LA4	C613_67.7 P90 BX90LA4	167
21.9	621	1.2	43.1	10000	C512_43.1 S3 ME3LB6		162	C512_43.1 P100 BE100LA6		163
22.1	601	1.7	64.6	10000	C513_64.6 S3 ME3SB4	C513_64.6 S3 MX3SB4	162	C513_64.6 P90 BE90LA4	C513_64.6 P90 BX90LA4	163
22.2	598	1.0	64.3	7000	C413_64.3 S3 ME3SB4	C413_64.3 S3 MX3SB4	158	C413_64.3 P90 BE90LA4	C413_64.3 P90 BX90LA4	159
24.2	549	1.8	59.0	10000	C513_59.0 S3 ME3SB4	C513_59.0 S3 MX3SB4	162	C513_59.0 P90 BE90LA4	C513_59.0 P90 BX90LA4	163
24.4	545	1.1	58.7	7000	C413_58.7 S3 ME3SB4	C413_58.7 S3 MX3SB4	158	C413_58.7 P90 BE90LA4	C413_58.7 P90 BX90LA4	159
24.4	527	3.0	58.6	16000	C613_58.6 S3 ME3SB4	C613_58.6 S3 MX3SB4	166	C613_58.6 P90 BE90LA4	C613_58.6 P90 BX90LA4	167
25.1	542	1.4	57.0	10000	C512_57.0 S3 ME3SB4	C512_57.0 S3 MX3SB4	162	C512_57.0 P90 BE90LA4	C512_57.0 P90 BX90LA4	163
26.7	481	3.3	53.5	16000	C613_53.5 S3 ME3SB4	C613_53.5 S3 MX3SB4	166	C613_53.5 P90 BE90LA4	C613_53.5 P90 BX90LA4	167
27.8	479	1.3	51.5	7000	C413_51.5 S3 ME3SB4	C413_51.5 S3 MX3SB4	158	C413_51.5 P90 BE90LA4	C413_51.5 P90 BX90LA4	159
27.8	488	1.4	51.4	10000	C512_51.4 S3 ME3SB4	C512_51.4 S3 MX3SB4	162	C512_51.4 P90 BE90LA4	C512_51.4 P90 BX90LA4	163
27.9	476	2.1	51.2	10000	C513_51.2 S3 ME3SB4	C513_51.2 S3 MX3SB4	162	C513_51.2 P90 BE90LA4	C513_51.2 P90 BX90LA4	163
29.7	448	1.0	48.2	6290	C363_48.2 S3 ME3SB4	C363_48.2 S3 MX3SB4	154	C363_48.2 P90 BE90LA4	C363_48.2 P90 BX90LA4	155
29.9	454	1.8	47.8	10000	C512_47.8 S3 ME3SB4	C512_47.8 S3 MX3SB4	162	C512_47.8 P90 BE90LA4	C512_47.8 P90 BX90LA4	163
30	437	1.4	47.0	7000	C413_47.0 S3 ME3SB4	C413_47.0 S3 MX3SB4	158	C413_47.0 P90 BE90LA4	C413_47.0 P90 BX90LA4	159
31	435	2.3	46.7	10000	C513_46.7 S3 ME3SB4	C513_46.7 S3 MX3SB4	162	C513_46.7 P90 BE90LA4	C513_46.7 P90 BX90LA4	163
32	425	1.2	44.8	7000	C412_44.8 S3 ME3SB4	C412_44.8 S3 MX3SB4	158	C412_44.8 P90 BE90LA4	C412_44.8 P90 BX90LA4	159
33	404	1.1	43.5	6110	C363_43.5 S3 ME3SB4	C363_43.5 S3 MX3SB4	154	C363_43.5 P90 BE90LA4	C363_43.5 P90 BX90LA4	155
33	410	1.9	43.1	10000	C512_43.1 S3 ME3SB4	C512_43.1 S3 MX3SB4	162	C512_43.1 P90 BE90LA4	C512_43.1 P90 BX90LA4	163
35	376	2.7	40.5	10000	C513_40.5 S3 ME3SB4	C513_40.5 S3 MX3SB4	162	C513_40.5 P90 BE90LA4	C513_40.5 P90 BX90LA4	163
35	383	2.1	40.4	10000	C512_40.4 S3 ME3SB4	C512_40.4 S3 MX3SB4	162	C512_40.4 P90 BE90LA4	C512_40.4 P90 BX90LA4	163
35	375	1.6	40.3	7000	C413_40.3 S3 ME3SB4	C413_40.3 S3 MX3SB4	158	C413_40.3 P90 BE90LA4	C413_40.3 P90 BX90LA4	159
38	354	1.3	38.1	6110	C363_38.1 S3 ME3SB4	C363_38.1 S3 MX3SB4	154	C363_38.1 P90 BE90LA4	C363_38.1 P90 BX90LA4	155
39	352	1.4	37.1	7000	C412_37.1 S3 ME3SB4	C412_37.1 S3 MX3SB4	158	C412_37.1 P90 BE90LA4	C412_37.1 P90 BX90LA4	159
39	344	2.9	37.0	10000	C513_37.0 S3 ME3SB4	C513_37.0 S3 MX3SB4	162	C513_37.0 P90 BE90LA4	C513_37.0 P90 BX90LA4	163
39	346	2.3	36.4	10000	C512_36.4 S3 ME3SB4	C512_36.4 S3 MX3SB4	162	C512_36.4 P90 BE90LA4	C512_36.4 P90 BX90LA4	163
40	343	0.9	36.1	5100	C322_36.1 S3 ME3SB4	C322_36.1 S3 MX3SB4	150	C322_36.1 P90 BE90LA4	C322_36.1 P90 BX90LA4	151
41	322	1.4	34.6	5950	C363_34.6 S3 ME3SB4	C363_34.6 S3 MX3SB4	154	C363_34.6 P90 BE90LA4	C363_34.6 P90 BX90LA4	155
43	317	1.6	33.4	7000	C412_33.4 S3 ME3SB4	C412_33.4 S3 MX3SB4	158	C412_33.4 P90 BE90LA4	C412_33.4 P90 BX90LA4	159
43	314	1.0	33.1	5050	C322_33.1 S3 ME3SB4	C322_33.1 S3 MX3SB4	150	C322_33.1 P90 BE90LA4	C322_33.1 P90 BX90LA4	151
43	314	2.5	33.0	10000	C512_33.0 S3 ME3SB4	C512_33.0 S3 MX3SB4	162	C512_33.0 P90 BE90LA4	C512_33.0 P90 BX90LA4	163
45	299	1.7	31.4	6990	C412_31.4 S3 ME3SB4	C412_31.4 S3 MX3SB4	158	C412_31.4 P90 BE90LA4	C412_31.4 P90 BX90LA4	159
48	283	2.8	29.8	10000	C512_29.8 S3 ME3SB4	C512_29.8 S3 MX3SB4	162	C512_29.8 P90 BE90LA4	C512_29.8 P90 BX90LA4	163
48	283	1.1	29.8	4970	C322_29.8 S3 ME3SB4	C322_29.8 S3 MX3SB4	150	C322_29.8 P90 BE90LA4	C322_29.8 P90 BX90LA4	151
50	267	1.7	28.7	5830	C363_28.7 S3 ME3SB4	C363_28.7 S3 MX3SB4	154	C363_28.7 P90 BE90LA4	C363_28.7 P90 BX90LA4	155
51	269	1.9	28.3	6830	C412_28.3 S3 ME3SB4	C412_28.3 S3 MX3SB4	158	C412_28.3 P90 BE90LA4	C412_28.3 P90 BX90LA4	159
53	256	1.2	26.9	4890	C322_26.9 S3 ME3SB4	C322_26.9 S3 MX3SB4	150	C322_26.9 P90 BE90LA4	C322_26.9 P90 BX90LA4	151
55	244	1.8	26.2	5710	C363_26.2 S3 ME3SB4	C363_26.2 S3 MX3SB4	154	C363_26.2 P90 BE90LA4	C363_26.2 P90 BX90LA4	155
55	246	3.2	25.9	10000	C512_25.9 S3 ME3SB4	C512_25.9 S3 MX3SB4	162	C512_25.9 P90 BE90LA4	C512_25.9 P90 BX90LA4	163
57	239	1.3	25.1	4840	C322_25.1 S3 ME3SB4	C322_25.1 S3 MX3SB4	150	C322_25.1 P90 BE90LA4	C322_25.1 P90 BX90LA4	151
57	238	2.1	25.0	6680	C412_25.0 S3 ME3SB4	C412_25.0 S3 MX3SB4	158	C412_25.0 P90 BE90LA4	C412_25.0 P90 BX90LA4	159
62	218	1.4	22.9	4750	C322_22.9 S3 ME3SB4	C322_22.9 S3 MX3SB4	150	C322_22.9 P90 BE90LA4	C322_22.9 P90 BX90LA4	151
63	214	2.3	22.6	6510	C412_22.6 S3 ME3SB4	C412_22.6 S3 MX3SB4	158	C412_22.6 P90 BE90LA4	C412_22.6 P90 BX90LA4	159
65	206	2.1	22.1	5530	C363_22.1 S3 ME3SB4	C363_22.1 S3 MX3SB4	154	C363_22.1 P90 BE90LA4	C363_22.1 P90 BX90LA4	155
67	204	1.0	21.5	2600	C222_21.5 S3 ME3SB4	C222_21.5 S3 MX3SB4	146	C222_21.5 P90 BE90LA4	C222_21.5 P90 BX90LA4	147
71	191	1.5	20.1	4650	C322_20.1 S3 ME3SB4	C322_20.1 S3 MX3SB4	150	C322_20.1 P90 BE90LA4	C322_20.1 P90 BX90LA4	151
71	190	1.0	20.0	2740	C222_20.0 S3 ME3SB4	C222_20.0 S3 MX3SB4	146	C222_20.0 P90 BE90LA4	C222_20.0 P90 BX90LA4	147
72	188	2.6	19.8	6330	C412_19.8 S3 ME3SB4	C412_19.8 S3 MX3SB4	158	C412_19.8 P90 BE90LA4	C412_19.8 P90 BX90LA4	159
75	181	2.1	19.0	5330	C362_19.0 S3 ME3SB4	C362_19.0 S3 MX3SB4	154	C362_19.0 P90 BE90LA4	C362_19.0 P90 BX90LA4	155
79	173	1.6	18.2	4520	C322_18.2 S3 ME3SB4	C322_18.2 S3 MX3SB4	150	C322_18.2 P90 BE90LA4	C322_18.2 P90 BX90LA4	151
79	172	1.1	18.1	2700	C222_18.1 S3 ME3SB4	C222_18.1 S3 MX3SB4	146	C222_18.1 P90 BE90LA4	C222_18.1 P90 BX90LA4	147
80	169	2.8	17.8	6160	C412_17.8 S3 ME3SB4	C412_17.8 S3 MX3SB4	158	C412_17.8 P90 BE90LA4	C412_17.8 P90 BX90LA4	159
83	163	2.3	17.2	5140	C362_17.2 S3 ME3SB4	C362_17.2 S3 MX3SB4	154	C362_17.2 P90 BE90LA4	C362_17.2 P90 BX90LA4	155
90	150	1.2	15.8	2700	C222_15.8 S3 ME3SB4	C222_15.8 S3 MX3SB4	146	C222_15.8 P90 BE90LA4	C222_15.8 P90 BX90LA4	147
90	150	3.0	15.8	6000	C412_15.8 S3 ME3SB4	C412_15.8 S3 MX3SB4	158	C412_15.8 P90 BE90LA4	C412_15.8 P90 BX90LA4	159
92	148	1.8	15.6	4410	C322_15.6 S3 ME3SB4	C322_15.6 S3 MX3SB4	150	C322_15.6 P90 BE90LA4	C322_15.6 P90 BX90LA4	151
97	140	2.7	14.8	5030	C362_14.8 S3 ME3SB4	C362_14.8 S3 MX3SB4	154	C362_14.8 P90 BE90LA4	C362_14.8 P90 BX90LA4	155
98	138	1.2	14.5	2700	C222_14.5 S3 ME3SB4	C222_14.5 S3 MX3SB4	146	C222_14.5 P90 BE90LA4	C222_14.5 P90 BX90LA4	147
100	135	3.3	14.2	5830	C412_14.2 S3 ME3SB4	C412_14.2 S3 MX3SB4	158	C412_14.2 P90 BE90LA4	C412_14.2 P90 BX90LA4	159
102	134	1.9	14.1	4280	C322_14.1 S3 ME3SB4	C322_14.1 S3 MX3SB4	150	C322_14.1 P90 BE90LA4	C322_14.1 P90 BX90LA4	151

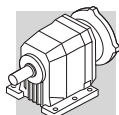


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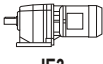
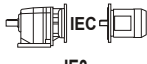


n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
107	127	3.0	13.3	4890	C362_13.3 S3 ME3SB4	C362_13.3 S3 MX3SB4	154	C362_13.3 P90 BE90LA4	C362_13.3 P90 BX90LA4	155
115	118	1.4	12.4	2630	C222_12.4 S3 ME3SB4	C222_12.4 S3 MX3SB4	146	C222_12.4 P90 BE90LA4	C222_12.4 P90 BX90LA4	147
116	117	2.1	12.3	4180	C322_12.3 S3 ME3SB4	C322_12.3 S3 MX3SB4	150	C322_12.3 P90 BE90LA4	C322_12.3 P90 BX90LA4	151
123	111	3.4	11.7	4740	C362_11.7 S3 ME3SB4	C362_11.7 S3 MX3SB4	154	C362_11.7 P90 BE90LA4	C362_11.7 P90 BX90LA4	155
128	106	2.2	11.2	4050	C322_11.2 S3 ME3SB4	C322_11.2 S3 MX3SB4	150	C322_11.2 P90 BE90LA4	C322_11.2 P90 BX90LA4	151
129	105	1.5	11.1	2600	C222_11.1 S3 ME3SB4	C222_11.1 S3 MX3SB4	146	C222_11.1 P90 BE90LA4	C222_11.1 P90 BX90LA4	147
148	92	1.6	9.6	2530	C222_9.6 S3 ME3SB4	C222_9.6 S3 MX3SB4	146	C222_9.6 P90 BE90LA4	C222_9.6 P90 BX90LA4	147
154	88	2.5	9.3	3900	C322_9.3 S3 ME3SB4	C322_9.3 S3 MX3SB4	150	C322_9.3 P90 BE90LA4	C322_9.3 P90 BX90LA4	151
165	82	1.7	8.7	2470	C222_8.7 S3 ME3SB4	C222_8.7 S3 MX3SB4	146	C222_8.7 P90 BE90LA4	C222_8.7 P90 BX90LA4	147
169	81	2.6	8.5	3790	C322_8.5 S3 ME3SB4	C322_8.5 S3 MX3SB4	150	C322_8.5 P90 BE90LA4	C322_8.5 P90 BX90LA4	151
180	75	2.3	15.8	2440	C222_15.8 S3 ME3SA2		146	C222_15.8 P90 BE90SA2		147
191	71	2.2	5.0	3610	C322_5.0 S3 ME3LB6		150	C322_5.0 P100 BE100LA6		151
200	68	2.9	7.2	3640	C322_7.2 S3 ME3SB4	C322_7.2 S3 MX3SB4	150	C322_7.2 P90 BE90LA4	C322_7.2 P90 BX90LA4	151
202	67	1.9	7.1	2380	C222_7.1 S3 ME3SB4	C222_7.1 S3 MX3SB4	146	C222_7.1 P90 BE90LA4	C222_7.1 P90 BX90LA4	147
204	67	3.0	4.6	4050	C362_4.6 S3 ME3LB6		154	C362_4.6 P100 BE100LA6		155
228	60	2.6	6.3	3450	C322_6.3 S3 ME3SB4	C322_6.3 S3 MX3SB4	150	C322_6.3 P90 BE90LA4	C322_6.3 P90 BX90LA4	151
229	59	0.9	6.2	600	C122_6.2 S3 ME3SB4	C122_6.2 S3 MX3SB4	142	C122_6.2 P90 BE90LA4	C122_6.2 P90 BX90LA4	143
235	58	1.8	6.1	2250	C222_6.1 S3 ME3SB4	C222_6.1 S3 MX3SB4	146	C222_6.1 P90 BE90LA4	C222_6.1 P90 BX90LA4	147
240	57	1.2	11.9	1250	C122_11.9 S3 ME3SA2		142	C122_11.9 P90 BE90SA2		143
253	54	2.9	5.7	3320	C322_5.7 S3 ME3SB4	C322_5.7 S3 MX3SB4	150	C322_5.7 P90 BE90LA4	C322_5.7 P90 BX90LA4	151
255	53	1.7	3.7	2210	C222_3.7 S3 ME3LB6		146	C222_3.7 P100 BE100LA6		147
255	53	1.0	5.6	720	C122_5.6 S3 ME3SB4	C122_5.6 S3 MX3SB4	142	C122_5.6 P90 BE90LA4	C122_5.6 P90 BX90LA4	143
256	53	1.9	5.6	2200	C222_5.6 S3 ME3SB4	C222_5.6 S3 MX3SB4	146	C222_5.6 P90 BE90LA4	C222_5.6 P90 BX90LA4	147
284	48	1.3	10.1	1340	C122_10.1 S3 ME3SA2		142	C122_10.1 P90 BE90SA2		143
289	47	3.3	5.0	3240	C322_5.0 S3 ME3SB4	C322_5.0 S3 MX3SB4	150	C322_5.0 P90 BE90LA4	C322_5.0 P90 BX90LA4	151
294	46	1.0	4.9	840	C122_4.9 S3 ME3SB4	C122_4.9 S3 MX3SB4	142	C122_4.9 P90 BE90LA4	C122_4.9 P90 BX90LA4	143
300	45	2.2	4.8	2140	C222_4.8 S3 ME3SB4	C222_4.8 S3 MX3SB4	146	C222_4.8 P90 BE90LA4	C222_4.8 P90 BX90LA4	147
323	42	1.4	8.8	1300	C122_8.8 S3 ME3SA2		142	C122_8.8 P90 BE90SA2		143
330	41	3.3	8.7	2130	C222_8.7 S3 ME3SA2		146	C222_8.7 P90 BE90SA2		147
332	41	1.1	4.3	930	C122_4.3 S3 ME3SB4	C122_4.3 S3 MX3SB4	142	C122_4.3 P90 BE90LA4	C122_4.3 P90 BX90LA4	143
336	40	2.3	4.3	2100	C222_4.3 S3 ME3SB4	C222_4.3 S3 MX3SB4	146	C222_4.3 P90 BE90LA4	C222_4.3 P90 BX90LA4	147
341	40	0.9	2.8	1000	C122_2.8 S3 ME3LB6		142	C122_2.8 P100 BE100LA6		143
347	39	2.0	2.7	2060	C222_2.7 S3 ME3LB6		146	C222_2.7 P100 BE100LA6		147
375	36	1.5	7.6	1270	C122_7.6 S3 ME3SA2		142	C122_7.6 P90 BE90SA2		143
386	35	2.6	3.7	2020	C222_3.7 S3 ME3SB4	C222_3.7 S3 MX3SB4	146	C222_3.7 P90 BE90LA4	C222_3.7 P90 BX90LA4	147
392	35	1.2	3.7	1100	C122_3.7 S3 ME3SB4	C122_3.7 S3 MX3SB4	142	C122_3.7 P90 BE90LA4	C122_3.7 P90 BX90LA4	143
403	34	3.9	7.1	2030	C222_7.1 S3 ME3SA2		146	C222_7.1 P90 BE90SA2		147
430	32	2.7	3.3	2000	C222_3.3 S3 ME3SB4	C222_3.3 S3 MX3SB4	146	C222_3.3 P90 BE90LA4	C222_3.3 P90 BX90LA4	147
446	30	1.3	3.2	1120	C122_3.2 S3 ME3SB4	C122_3.2 S3 MX3SB4	142	C122_3.2 P90 BE90LA4	C122_3.2 P90 BX90LA4	143
458	30	1.8	6.2	1180	C122_6.2 S3 ME3SA2		142	C122_6.2 P90 BE90SA2		143
469	29	3.6	6.1	1920	C222_6.1 S3 ME3SA2		146	C222_6.1 P90 BE90SA2		147
510	27	1.9	5.6	1140	C122_5.6 S3 ME3SA2		142	C122_5.6 P90 BE90SA2		143
511	27	3.8	5.6	1860	C222_5.6 S3 ME3SA2		146	C222_5.6 P90 BE90SA2		147
517	26	1.4	2.8	1140	C122_2.8 S3 ME3SB4	C122_2.8 S3 MX3SB4	142	C122_2.8 P90 BE90LA4	C122_2.8 P90 BX90LA4	143
525	26	3.1	2.7	1870	C222_2.7 S3 ME3SB4	C222_2.7 S3 MX3SB4	146	C222_2.7 P90 BE90LA4	C222_2.7 P90 BX90LA4	147
586	23	2.1	4.9	1110	C122_4.9 S3 ME3SA2		142	C122_4.9 P90 BE90SA2		143
599	23	4.4	4.8	1810	C222_4.8 S3 ME3SA2		146	C222_4.8 P90 BE90SA2		147
662	21	2.2	4.3	1070	C122_4.3 S3 ME3SA2		142	C122_4.3 P90 BE90SA2		143
782	17	2.4	3.7	1030	C122_3.7 S3 ME3SA2		142	C122_3.7 P90 BE90SA2		143
890	15	2.6	3.2	990	C122_3.2 S3 ME3SA2		142	C122_3.2 P90 BE90SA2		143
1032	13	2.8	2.8	960	C122_2.8 S3 ME3SA2		142	C122_2.8 P90 BE90SA2		143

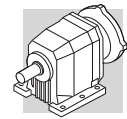
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n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE3	IE3		IE3	IE3	
1.0	12390	1.0	908.2	85000						
1.3	9730	1.2	1081	85000				C1004_1081 P90 BXN90L4		180
1.4	9035	1.3	1004	85000				C1004_1004 P90 BXN90L4		180
1.6	8174	1.5	908.2	85000				C1004_908.2 P90 BXN90L4		180
1.7	7596	0.9	844.0	60000				C904_844.0 P90 BXN90L4		177
1.7	7590	1.6	843.3	85000				C1004_843.3 P90 BXN90L4		180

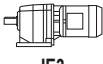
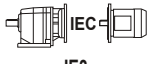


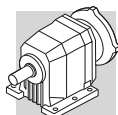
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n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N	 IE3	 IEC IE3	
							
1.8	6981	1.7	775.7	85000		C1004_775.7 P90 BXN90L4	180
1.8	6963	1.0	773.6	60000		C904_773.6 P90 BXN90L4	177
2.0	6483	1.9	720.3	85000		C1004_720.3 P90 BXN90L4	180
2.0	6410	1.1	712.2	60000		C904_712.2 P90 BXN90L4	177
2.2	5875	1.2	652.8	60000		C904_652.8 P90 BXN90L4	177
2.3	5647	2.1	627.4	85000		C1004_627.4 P90 BXN90L4	180
2.5	5245	1.4	582.8	60000		C904_582.8 P90 BXN90L4	177
2.5	5243	2.3	582.6	85000		C1004_582.6 P90 BXN90L4	180
2.7	4808	1.5	534.2	60000		C904_534.2 P90 BXN90L4	177
2.8	4524	2.7	502.6	85000		C1004_502.6 P90 BXN90L4	180
3.1	4201	2.9	466.7	85000		C1004_466.7 P90 BXN90L4	180
3.1	4114	1.8	457.1	60000		C904_457.1 P90 BXN90L4	177
3.1	4099	1.0	455.4	35000		C804_455.4 P90 BXN90L4	174
3.4	3771	1.9	419.0	60000		C904_419.0 P90 BXN90L4	177
3.4	3757	1.1	417.5	35000		C804_417.5 P90 BXN90L4	174
3.9	3328	2.2	369.8	60000		C904_369.8 P90 BXN90L4	177
3.9	3282	1.2	364.7	35000		C804_364.7 P90 BXN90L4	174
4.2	3051	2.4	339.0	60000		C904_339.0 P90 BXN90L4	177
4.3	3008	1.3	334.3	35000		C804_334.3 P90 BXN90L4	174
4.9	2636	2.7	292.9	60000		C904_292.9 P90 BXN90L4	177
5.0	2571	1.6	285.7	35000		C804_285.7 P90 BXN90L4	174
5.3	2450	0.9	272.2	25000		C704_272.2 P90 BXN90L4	171
5.3	2416	3.0	268.5	60000		C904_268.5 P90 BXN90L4	177
5.5	2357	1.7	261.9	35000		C804_261.9 P90 BXN90L4	174
5.7	2262	1.0	251.3	25000		C704_251.3 P90 BXN90L4	171
6.0	2226	1.0	239.3	25000		C703_239.3 P90 BXN90L4	171
6.5	2054	1.1	220.9	25000		C703_220.9 P90 BXN90L4	171
6.6	1957	0.8	217.4	16000		C614_217.4 P90 BXN90L4	167
6.6	2007	2.0	215.8	35000		C803_215.8 P90 BXN90L4	174
7.2	1840	2.1	197.9	35000		C803_197.9 P90 BXN90L4	174
7.3	1762	0.9	195.8	16000		C613_195.8 P90 BXN90L4	167
7.4	1805	1.3	194.1	25000		C703_194.1 P90 BXN90L4	171
7.8	1715	2.3	184.4	35000		C803_184.4 P90 BXN90L4	174
8.0	1666	1.4	179.2	25000		C703_179.2 P90 BXN90L4	171
8.0	1607	1.0	178.6	16000		C613_178.6 P90 BXN90L4	167
8.5	1572	2.5	169.0	35000		C803_169.0 P90 BXN90L4	174
8.7	1480	1.1	164.5	16000		C613_164.5 P90 BXN90L4	167
8.8	1514	1.5	162.8	25000		C703_162.8 P90 BXN90L4	171
9.5	1398	1.6	150.3	25000		C703_150.3 P90 BXN90L4	171
9.5	1350	1.2	150.0	16000		C613_150.0 P90 BXN90L4	167
9.6	1387	2.9	149.1	35000		C803_149.1 P90 BXN90L4	174
10.2	1264	1.3	140.5	16000		C613_140.5 P90 BXN90L4	167
10.4	1278	1.8	137.4	25000		C703_137.4 P90 BXN90L4	171
10.5	1271	3.1	136.7	35000		C803_136.7 P90 BXN90L4	174
11.2	1153	1.4	128.1	16000		C613_128.1 P90 BXN90L4	167
11.3	1180	1.9	126.8	25000		C703_126.8 P90 BXN90L4	171
12.6	1022	1.6	113.6	16000		C613_113.6 P90 BXN90L4	167
12.6	1057	0.9	113.6	10000		C513_113.6 P90 BXN90L4	163
12.7	1046	2.2	112.4	25000		C703_112.4 P90 BXN90L4	171
13.8	965	2.4	103.8	25000		C703_103.8 P90 BXN90L4	171
13.8	933	1.7	103.6	16000		C613_103.6 P90 BXN90L4	167
14.0	947	1.1	101.8	10000		C513_101.8 P90 BXN90L4	163
15.4	865	1.2	93.0	10000		C513_93.0 P90 BXN90L4	163
15.7	819	2.0	91.0	16000		C613_91.0 P90 BXN90L4	167
16.2	820	2.8	88.2	25000		C703_88.2 P90 BXN90L4	171
16.6	821	1.0	57.0	10000			
17.2	747	2.1	83.0	16000		C613_83.0 P90 BXN90L4	167
17.6	757	3.0	81.4	25000		C703_81.4 P90 BXN90L4	171
17.9	743	1.3	79.9	10000		C513_79.9 P90 BXN90L4	163
18.4	740	0.9	51.4	10000			
19.3	668	2.4	74.2	16000		C613_74.2 P90 BXN90L4	167
19.6	678	1.5	72.9	10000		C513_72.9 P90 BXN90L4	163
19.8	689	1.2	47.8	10000			
20.0	663	3.5	71.3	25000		C703_71.3 P90 BXN90L4	171
21.1	609	2.6	67.7	16000		C613_67.7 P90 BXN90L4	167

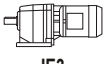
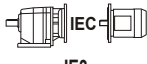


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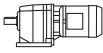


n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N	 IE3		 IE3	
21.9	621	1.2	43.1	10000				163
22.1	601	1.7	64.6	10000			C513_64.6 P90 BXN90L4	163
22.2	598	1.0	64.3	7000			C413_64.3 P90 BXN90L4	159
24.2	549	1.8	59.0	10000			C513_59.0 P90 BXN90L4	163
24.4	545	1.1	58.7	7000			C413_58.7 P90 BXN90L4	159
24.4	527	3.0	58.6	16000			C613_58.6 P90 BXN90L4	167
25.1	542	1.4	57.0	10000			C512_57.0 P90 BXN90L4	163
26.7	481	3.3	53.5	16000			C613_53.5 P90 BXN90L4	167
27.8	479	1.3	51.5	7000			C413_51.5 P90 BXN90L4	159
27.8	488	1.4	51.4	10000			C512_51.4 P90 BXN90L4	163
27.9	476	2.1	51.2	10000			C513_51.2 P90 BXN90L4	163
29.7	448	1.0	48.2	6290			C363_48.2 P90 BXN90L4	155
29.9	454	1.8	47.8	10000			C512_47.8 P90 BXN90L4	163
30	437	1.4	47.0	7000			C413_47.0 P90 BXN90L4	159
31	435	2.3	46.7	10000			C513_46.7 P90 BXN90L4	163
32	425	1.2	44.8	7000			C412_44.8 P90 BXN90L4	159
33	404	1.1	43.5	6110			C363_43.5 P90 BXN90L4	155
33	410	1.9	43.1	10000			C512_43.1 P90 BXN90L4	163
35	376	2.7	40.5	10000			C513_40.5 P90 BXN90L4	163
35	383	2.1	40.4	10000			C512_40.4 P90 BXN90L4	163
35	375	1.6	40.3	7000			C413_40.3 P90 BXN90L4	159
38	354	1.3	38.1	6110			C363_38.1 P90 BXN90L4	155
39	352	1.4	37.1	7000			C412_37.1 P90 BXN90L4	159
39	344	2.9	37.0	10000			C513_37.0 P90 BXN90L4	163
39	346	2.3	36.4	10000			C512_36.4 P90 BXN90L4	163
40	343	0.9	36.1	5100			C322_36.1 P90 BXN90L4	151
41	322	1.4	34.6	5950			C363_34.6 P90 BXN90L4	155
43	317	1.6	33.4	7000			C412_33.4 P90 BXN90L4	159
43	314	1.0	33.1	5050			C322_33.1 P90 BXN90L4	151
43	314	2.5	33.0	10000			C512_33.0 P90 BXN90L4	163
45	299	1.7	31.4	6990			C412_31.4 P90 BXN90L4	159
48	283	2.8	29.8	10000			C512_29.8 P90 BXN90L4	163
48	283	1.1	29.8	4970			C322_29.8 P90 BXN90L4	151
50	267	1.7	28.7	5830			C363_28.7 P90 BXN90L4	155
51	269	1.9	28.3	6830			C412_28.3 P90 BXN90L4	159
53	256	1.2	26.9	4890			C322_26.9 P90 BXN90L4	151
55	244	1.8	26.2	5710			C363_26.2 P90 BXN90L4	155
55	246	3.2	25.9	10000			C512_25.9 P90 BXN90L4	163
57	239	1.3	25.1	4840			C322_25.1 P90 BXN90L4	151
57	238	2.1	25.0	6680			C412_25.0 P90 BXN90L4	159
62	218	1.4	22.9	4750			C322_22.9 P90 BXN90L4	151
63	214	2.3	22.6	6510			C412_22.6 P90 BXN90L4	159
65	206	2.1	22.1	5530			C363_22.1 P90 BXN90L4	155
67	204	1.0	21.5	2600			C222_21.5 P90 BXN90L4	147
71	191	1.5	20.1	4650			C322_20.1 P90 BXN90L4	151
71	190	1.0	20.0	2740			C222_20.0 P90 BXN90L4	147
72	188	2.6	19.8	6330			C412_19.8 P90 BXN90L4	159
75	181	2.1	19.0	5330			C362_19.0 P90 BXN90L4	155
79	173	1.6	18.2	4520			C322_18.2 P90 BXN90L4	151
79	172	1.1	18.1	2700			C222_18.1 P90 BXN90L4	147
80	169	2.8	17.8	6160			C412_17.8 P90 BXN90L4	159
83	163	2.3	17.2	5140			C362_17.2 P90 BXN90L4	155
90	150	1.2	15.8	2700			C222_15.8 P90 BXN90L4	147
90	150	3.0	15.8	6000			C412_15.8 P90 BXN90L4	159
92	148	1.8	15.6	4410			C322_15.6 P90 BXN90L4	151
97	140	2.7	14.8	5030			C362_14.8 P90 BXN90L4	155
98	138	1.2	14.5	2700			C222_14.5 P90 BXN90L4	147
100	135	3.3	14.2	5830			C412_14.2 P90 BXN90L4	159
102	134	1.9	14.1	4280			C322_14.1 P90 BXN90L4	151
107	127	3.0	13.3	4890			C362_13.3 P90 BXN90L4	155
115	118	1.4	12.4	2630			C222_12.4 P90 BXN90L4	147
116	117	2.1	12.3	4180			C322_12.3 P90 BXN90L4	151
123	111	3.4	11.7	4740			C362_11.7 P90 BXN90L4	155
128	106	2.2	11.2	4050			C322_11.2 P90 BXN90L4	151
129	105	1.5	11.1	2600			C222_11.1 P90 BXN90L4	147

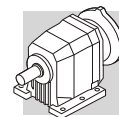


1.5 kW

n ₂ min-1	M ₂ Nm	S	i	R _{n2} N	 IE3		 IEC	
					IE3	IE3	IE3	IE3
148	92	1.6	9.6	2530			C222_9.6 P90 BXN90L4	147
154	88	2.5	9.3	3900			C322_9.3 P90 BXN90L4	151
165	82	1.7	8.7	2470			C222_8.7 P90 BXN90L4	147
169	81	2.6	8.5	3790			C322_8.5 P90 BXN90L4	151
180	75	2.3	15.8	2440				
191	71	2.2	5.0	3610				
200	68	2.9	7.2	3640			C322_7.2 P90 BXN90L4	151
202	67	1.9	7.1	2380			C222_7.1 P90 BXN90L4	147
204	67	3.0	4.6	4050				
228	60	2.6	6.3	3450			C322_6.3 P90 BXN90L4	151
229	59	0.9	6.2	600			C122_6.2 P90 BXN90L4	143
235	58	1.8	6.1	2250			C222_6.1 P90 BXN90L4	147
240	57	1.2	11.9	1250				
253	54	2.9	5.7	3320			C322_5.7 P90 BXN90L4	151
255	53	1.7	3.7	2210				
255	53	1.0	5.6	720			C122_5.6 P90 BXN90L4	143
256	53	1.9	5.6	2200			C222_5.6 P90 BXN90L4	147
284	48	1.3	10.1	1340				
289	47	3.3	5.0	3240			C322_5.0 P90 BXN90L4	151
294	46	1.0	4.9	840			C122_4.9 P90 BXN90L4	143
300	45	2.2	4.8	2140			C222_4.8 P90 BXN90L4	147
323	42	1.4	8.8	1300				
330	41	3.3	8.7	2130				
332	41	1.1	4.3	930			C122_4.3 P90 BXN90L4	143
336	40	2.3	4.3	2100			C222_4.3 P90 BXN90L4	147
341	40	0.9	2.8	1000				
347	39	2.0	2.7	2060				
375	36	1.5	7.6	1270				
386	35	2.6	3.7	2020			C222_3.7 P90 BXN90L4	147
392	35	1.2	3.7	1100			C122_3.7 P90 BXN90L4	143
403	34	3.9	7.1	2030				
430	32	2.7	3.3	2000			C222_3.3 P90 BXN90L4	147
446	30	1.3	3.2	1120			C122_3.2 P90 BXN90L4	143
458	30	1.8	6.2	1180				
469	29	3.6	6.1	1920				
510	27	1.9	5.6	1140				
511	27	3.8	5.6	1860				
517	26	1.4	2.8	1140			C122_2.8 P90 BXN90L4	143
525	26	3.1	2.7	1870			C222_2.7 P90 BXN90L4	147
586	23	2.1	4.9	1110				
599	23	4.4	4.8	1810				
662	21	2.2	4.3	1070				
782	17	2.4	3.7	1030				
890	15	2.6	3.2	990				
1032	13	2.8	2.8	960				

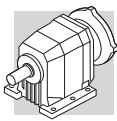
2.2 kW

n ₂ min-1	M ₂ Nm	S	i	R _{n2} N	 IE2		 IE3		 IEC	
					IE2	IE3	IE2	IE3	IE2	IE3
1.4	13281	0.9	1004	85000	C1004_1004 S3 ME3LA4	C1004_1004 S3 MX3LA4	179	C1004_1004 P100 BE100LA4	C1004_1004 P100 BX100LA4	180
1.6	12016	1.0	908.2	85000	C1004_908.2 S3 ME3LA4	C1004_908.2 S3 MX3LA4	179	C1004_908.2 P100 BE100LA4	C1004_908.2 P100 BX100LA4	180
1.7	11157	1.1	843.3	85000	C1004_843.3 S3 ME3LA4	C1004_843.3 S3 MX3LA4	179	C1004_843.3 P100 BE100LA4	C1004_843.3 P100 BX100LA4	180
1.8	10263	1.2	775.7	85000	C1004_775.7 S3 ME3LA4	C1004_775.7 S3 MX3LA4	179	C1004_775.7 P100 BE100LA4	C1004_775.7 P100 BX100LA4	180
2.0	9530	1.3	720.3	85000	C1004_720.3 S3 ME3LA4	C1004_720.3 S3 MX3LA4	179	C1004_720.3 P100 BE100LA4	C1004_720.3 P100 BX100LA4	180
2.3	8301	1.4	627.4	85000	C1004_627.4 S3 ME3LA4	C1004_627.4 S3 MX3LA4	179	C1004_627.4 P100 BE100LA4	C1004_627.4 P100 BX100LA4	180
2.5	7710	0.9	582.8	60000	C904_582.8 S3 ME3LA4	C904_582.8 S3 MX3LA4	176	C904_582.8 P100 BE100LA4	C904_582.8 P100 BX100LA4	177
2.5	7708	1.6	582.6	85000	C1004_582.6 S3 ME3LA4	C1004_582.6 S3 MX3LA4	179	C1004_582.6 P100 BE100LA4	C1004_582.6 P100 BX100LA4	180
2.7	7068	1.0	534.2	60000	C904_534.2 S3 ME3LA4	C904_534.2 S3 MX3LA4	176	C904_534.2 P100 BE100LA4	C904_534.2 P100 BX100LA4	177
2.8	6650	1.8	502.6	85000	C1004_502.6 S3 ME3LA4	C1004_502.6 S3 MX3LA4	179	C1004_502.6 P100 BE100LA4	C1004_502.6 P100 BX100LA4	180
3.1	6175	1.9	466.7	85000	C1004_466.7 S3 ME3LA4	C1004_466.7 S3 MX3LA4	179	C1004_466.7 P100 BE100LA4	C1004_466.7 P100 BX100LA4	180
3.1	6048	1.2	457.1	60000	C904_457.1 S3 ME3LA4	C904_457.1 S3 MX3LA4	176	C904_457.1 P100 BE100LA4	C904_457.1 P100 BX100LA4	177
3.4	5544	1.3	419.0	60000	C904_419.0 S3 ME3LA4	C904_419.0 S3 MX3LA4	176	C904_419.0 P100 BE100LA4	C904_419.0 P100 BX100LA4	177



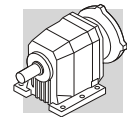
2.2 kW

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{N2} N						
					IE2	IE3		IE2	IE3	
3.5	5421	2.2	409.8	85000	C1004_409.8 S3 ME3LA4	C1004_409.8 S3 MX3LA4	179	C1004_409.8 P100 BE100LA4	C1004_409.8 P100 BX100LA4	180
3.8	5034	2.4	380.5	85000	C1004_380.5 S3 ME3LA4	C1004_380.5 S3 MX3LA4	179	C1004_380.5 P100 BE100LA4	C1004_380.5 P100 BX100LA4	180
3.9	4892	1.5	369.8	60000	C904_369.8 S3 ME3LA4	C904_369.8 S3 MX3LA4	176	C904_369.8 P100 BE100LA4	C904_369.8 P100 BX100LA4	177
4.2	4484	1.6	339.0	60000	C904_339.0 S3 ME3LA4	C904_339.0 S3 MX3LA4	176	C904_339.0 P100 BE100LA4	C904_339.0 P100 BX100LA4	177
4.3	4422	0.9	334.3	35000	C804_334.3 S3 ME3LA4	C804_334.3 S3 MX3LA4	173	C804_334.3 P100 BE100LA4	C804_334.3 P100 BX100LA4	174
4.4	4282	2.8	323.6	85000	C1004_323.6 S3 ME3LA4	C1004_323.6 S3 MX3LA4	179	C1004_323.6 P100 BE100LA4	C1004_323.6 P100 BX100LA4	180
4.9	3875	1.9	292.9	60000	C904_292.9 S3 ME3LA4	C904_292.9 S3 MX3LA4	176	C904_292.9 P100 BE100LA4	C904_292.9 P100 BX100LA4	177
5.0	3779	1.1	285.7	35000	C804_285.7 S3 ME3LA4	C804_285.7 S3 MX3LA4	173	C804_285.7 P100 BE100LA4	C804_285.7 P100 BX100LA4	174
5.3	3552	2.0	268.5	60000	C904_268.5 S3 ME3LA4	C904_268.5 S3 MX3LA4	176	C904_268.5 P100 BE100LA4	C904_268.5 P100 BX100LA4	177
5.5	3464	1.2	261.9	35000	C804_261.9 S3 ME3LA4	C804_261.9 S3 MX3LA4	173	C804_261.9 P100 BE100LA4	C804_261.9 P100 BX100LA4	174
6.2	3065	2.3	231.7	60000	C904_231.7 S3 ME3LA4	C904_231.7 S3 MX3LA4	176	C904_231.7 P100 BE100LA4	C904_231.7 P100 BX100LA4	177
6.6	2951	1.4	215.8	35000	C803_215.8 S3 ME3LA4	C803_215.8 S3 MX3LA4	173	C803_215.8 P100 BE100LA4	C803_215.8 P100 BX100LA4	174
6.7	2810	2.6	212.4	60000	C904_212.4 S3 ME3LA4	C904_212.4 S3 MX3LA4	176	C904_212.4 P100 BE100LA4	C904_212.4 P100 BX100LA4	177
7.2	2705	1.4	197.9	35000	C803_197.9 S3 ME3LA4	C803_197.9 S3 MX3LA4	173	C803_197.9 P100 BE100LA4	C803_197.9 P100 BX100LA4	174
7.8	2520	1.6	184.4	35000	C803_184.4 S3 ME3LA4	C803_184.4 S3 MX3LA4	173	C803_184.4 P100 BE100LA4	C803_184.4 P100 BX100LA4	174
8.0	2450	0.9	179.2	25000	C703_179.2 S3 ME3LA4	C703_179.2 S3 MX3LA4	170	C703_179.2 P100 BE100LA4	C703_179.2 P100 BX100LA4	171
8.5	2310	1.7	169.0	35000	C803_169.0 S3 ME3LA4	C803_169.0 S3 MX3LA4	173	C803_169.0 P100 BE100LA4	C803_169.0 P100 BX100LA4	174
8.8	2226	1.0	162.8	25000	C703_162.8 S3 ME3LA4	C703_162.8 S3 MX3LA4	170	C703_162.8 P100 BE100LA4	C703_162.8 P100 BX100LA4	171
9.5	2055	1.1	150.3	25000	C703_150.3 S3 ME3LA4	C703_150.3 S3 MX3LA4	170	C703_150.3 P100 BE100LA4	C703_150.3 P100 BX100LA4	171
9.6	2038	2.0	149.1	35000	C803_149.1 S3 ME3LA4	C803_149.1 S3 MX3LA4	173	C803_149.1 P100 BE100LA4	C803_149.1 P100 BX100LA4	174
10.4	1878	1.2	137.4	25000	C703_137.4 S3 ME3LA4	C703_137.4 S3 MX3LA4	170	C703_137.4 P100 BE100LA4	C703_137.4 P100 BX100LA4	171
10.5	1869	2.1	136.7	35000	C803_136.7 S3 ME3LA4	C803_136.7 S3 MX3LA4	173	C803_136.7 P100 BE100LA4	C803_136.7 P100 BX100LA4	174
11.2	1695	0.9	128.1	16000	C613_128.1 S3 ME3LA4	C613_128.1 S3 MX3LA4	166	C613_128.1 P100 BE100LA4	C613_128.1 P100 BX100LA4	167
11.3	1734	1.3	126.8	25000	C703_126.8 S3 ME3LA4	C703_126.8 S3 MX3LA4	170	C703_126.8 P100 BE100LA4	C703_126.8 P100 BX100LA4	171
12.0	1633	2.4	119.5	35000	C803_119.5 S3 ME3LA4	C803_119.5 S3 MX3LA4	173	C803_119.5 P100 BE100LA4	C803_119.5 P100 BX100LA4	174
12.6	1503	1.1	113.6	16000	C613_113.6 S3 ME3LA4	C613_113.6 S3 MX3LA4	166	C613_113.6 P100 BE100LA4	C613_113.6 P100 BX100LA4	167
12.7	1537	1.5	112.4	25000	C703_112.4 S3 ME3LA4	C703_112.4 S3 MX3LA4	170	C703_112.4 P100 BE100LA4	C703_112.4 P100 BX100LA4	171
13.1	1497	2.7	109.5	35000	C803_109.5 S3 ME3LA4	C803_109.5 S3 MX3LA4	173	C803_109.5 P100 BE100LA4	C803_109.5 P100 BX100LA4	174
13.8	1419	1.6	103.8	25000	C703_103.8 S3 ME3LA4	C703_103.8 S3 MX3LA4	170	C703_103.8 P100 BE100LA4	C703_103.8 P100 BX100LA4	171
13.8	1371	1.2	103.6	16000	C613_103.6 S3 ME3LA4	C613_103.6 S3 MX3LA4	166	C613_103.6 P100 BE100LA4	C613_103.6 P100 BX100LA4	167
14.7	1331	3.0	97.4	35000	C803_97.4 S3 ME3LA4	C803_97.4 S3 MX3LA4	173	C803_97.4 P100 BE100LA4	C803_97.4 P100 BX100LA4	174
15.7	1204	1.3	91.0	16000	C613_91.0 S3 ME3LA4	C613_91.0 S3 MX3LA4	166	C613_91.0 P100 BE100LA4	C613_91.0 P100 BX100LA4	167
16.0	1220	3.3	89.3	35000	C803_89.3 S3 ME3LA4	C803_89.3 S3 MX3LA4	173	C803_89.3 P100 BE100LA4	C803_89.3 P100 BX100LA4	174
16.2	1206	1.9	88.2	25000	C703_88.2 S3 ME3LA4	C703_88.2 S3 MX3LA4	170	C703_88.2 P100 BE100LA4	C703_88.2 P100 BX100LA4	171
17.2	1099	1.5	83.0	16000	C613_83.0 S3 ME3LA4	C613_83.0 S3 MX3LA4	166	C613_83.0 P100 BE100LA4	C613_83.0 P100 BX100LA4	167
17.6	1113	2.1	81.4	25000	C703_81.4 S3 ME3LA4	C703_81.4 S3 MX3LA4	170	C703_81.4 P100 BE100LA4	C703_81.4 P100 BX100LA4	171
17.9	1092	0.9	79.9	10000	C513_79.9 S3 ME3LA4	C513_79.9 S3 MX3LA4	162	C513_79.9 P100 BE100LA4	C513_79.9 P100 BX100LA4	163
19.3	982	1.6	74.2	16000	C613_74.2 S3 ME3LA4	C613_74.2 S3 MX3LA4	166	C613_74.2 P100 BE100LA4	C613_74.2 P100 BX100LA4	167
19.6	997	1.0	72.9	10000	C513_72.9 S3 ME3LA4	C513_72.9 S3 MX3LA4	162	C513_72.9 P100 BE100LA4	C513_72.9 P100 BX100LA4	163
20.0	975	2.4	71.3	25000	C703_71.3 S3 ME3LA4	C703_71.3 S3 MX3LA4	170	C703_71.3 P100 BE100LA4	C703_71.3 P100 BX100LA4	171
21.1	896	1.8	67.7	16000	C613_67.7 S3 ME3LA4	C613_67.7 S3 MX3LA4	166	C613_67.7 P100 BE100LA4	C613_67.7 P100 BX100LA4	167
21.7	900	2.6	65.9	25000	C703_65.9 S3 ME3LA4	C703_65.9 S3 MX3LA4	170	C703_65.9 P100 BE100LA4	C703_65.9 P100 BX100LA4	171
22.1	883	1.1	64.6	10000	C513_64.6 S3 ME3LA4	C513_64.6 S3 MX3LA4	162	C513_64.6 P100 BE100LA4	C513_64.6 P100 BX100LA4	163
24.2	806	1.2	59.0	10000	C513_59.0 S3 ME3LA4	C513_59.0 S3 MX3LA4	162	C513_59.0 P100 BE100LA4	C513_59.0 P100 BX100LA4	163
24.4	775	2.1	58.6	16000	C613_58.6 S3 ME3LA4	C613_58.6 S3 MX3LA4	166	C613_58.6 P100 BE100LA4	C613_58.6 P100 BX100LA4	167
25.1	796	1.0	57.0	10000	C512_57.0 S3 ME3LA4	C512_57.0 S3 MX3LA4	162	C512_57.0 P100 BE100LA4	C512_57.0 P100 BX100LA4	163
25.3	773	3.0	56.5	25000	C703_56.5 S3 ME3LA4	C703_56.5 S3 MX3LA4	170	C703_56.5 P100 BE100LA4	C703_56.5 P100 BX100LA4	171
26.7	707	2.3	53.5	16000	C613_53.5 S3 ME3LA4	C613_53.5 S3 MX3LA4	166	C613_53.5 P100 BE100LA4	C613_53.5 P100 BX100LA4	167
27.8	718	1.0	51.4	10000	C512_51.4 S3 ME3LA4	C512_51.4 S3 MX3LA4	162	C512_51.4 P100 BE100LA4	C512_51.4 P100 BX100LA4	163
27.9	700	1.4	51.2	10000	C513_51.2 S3 ME3LA4	C513_51.2 S3 MX3LA4	162	C513_51.2 P100 BE100LA4	C513_51.2 P100 BX100LA4	163
29.9	668	1.2	47.8	10000	C512_47.8 S3 ME3LA4	C512_47.8 S3 MX3LA4	162	C512_47.8 P100 BE100LA4	C512_47.8 P100 BX100LA4	163
30	630	2.5	47.6	16000	C613_47.6 S3 ME3LA4	C613_47.6 S3 MX3LA4	166	C613_47.6 P100 BE100LA4	C613_47.6 P100 BX100LA4	167
30	642	0.9	47.0	6440	C413_47.0 S3 ME3LA4	C413_47.0 S3 MX3LA4	158	C413_47.0 P100 BE100LA4	C413_47.0 P100 BX100LA4	159
31	639	1.6	46.7	10000	C513_46.7 S3 ME3LA4	C513_46.7 S3 MX3LA4	162	C513_46.7 P100 BE100LA4	C513_46.7 P100 BX100LA4	163
33	575	2.8	43.4	16000	C613_43.4 S3 ME3LA4	C613_43.4 S3 MX3LA4	166	C613_43.4 P100 BE100LA4	C613_43.4 P100 BX100LA4	167
33	602	1.3	43.1	10000	C512_43.1 S3 ME3LA4	C512_43.1 S3 MX3LA4	162	C512_43.1 P100 BE100LA4	C512_43.1 P100 BX100LA4	163
35	553	1.8	40.5	10000	C513_40.5 S3 ME3LA4	C513_40.5 S3 MX3LA4	162	C513_40.5 P100 BE100LA4	C513_40.5 P100 BX100LA4	163
35	564	1.4	40.4	10000	C512_40.4 S3 ME3LA4	C512_40.4 S3 MX3LA4	162	C512_40.4 P100 BE100LA4	C512_40.4 P100 BX100LA4	163
35	551	1.1	40.3	6460	C413_40.3 S3 ME3LA4	C413_40.3 S3 MX3LA4	158	C413_40.3 P100 BE100LA4	C413_40.3 P100 BX100LA4	159
38	531	2.5	38.0	16000	C612_38.0 S3 ME3LA4	C612_38.0 S3 MX3LA4	166	C612_38.0 P100 BE100LA4	C612_38.0 P100 BX100LA4	167
39	518	1.0	37.1	6370	C412_37.1 S3 ME3LA4	C412_37.1 S3 MX3LA4	158	C412_37.1 P100 BE100LA4	C412_37.1 P100 BX100LA4	159
39	505	2.0	37.0	10000	C513_37.0 S3 ME3LA4	C513_37.0 S3 MX3LA4	162	C513_37.0 P100 BE100LA4	C513_37.0 P100 BX100LA4	163
39	503	1.2	36.8	6390	C413_36.8 S3 ME3LA4	C413_36.8 S3 MX3LA4	158	C413_36.8 P100 BE100LA4	C413_36.8 P100 BX100LA4	159
39	508	1.6	36.4	10000	C512_36.4 S3 ME3LA4	C512_36.4 S3 MX3LA4	162	C512_36.4 P100 BE100LA4	C512_36.4 P100 BX100LA4	163
41	473	1.0	34.6	5350	C363_34.6 S3 ME3LA4	C363_34.6 S3 MX3LA4	154	C363_34.6 P100 BE100LA4	C363_34.6 P100 BX100LA4	155
42	478	2.6	34.2	16000	C612_34.2 S3 ME3LA4	C612_34.2 S3 MX3LA4	166	C612_34.2 P100 BE100LA4	C612_34.2 P100 BX100LA4	167
43	466	1.1	33.4	6290	C412_33.4 S3 ME3LA4	C412_33.4 S3 MX3LA4	158	C412_33.4 P100 BE100LA4	C412_33.4 P100 BX100LA4	159
43	461	1.7	33.0	10000	C512_33.0 S3 ME3LA4	C512_33.0 S3 MX3LA4	162	C512_33.0 P100 BE100LA4	C512_33.0 P100 BX100LA4	163



2.2 kW

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
45	439	1.1	31.4	6290	C412_31.4 S3 ME3LA4	C412_31.4 S3 MX3LA4	158	C412_31.4 P100 BE100LA4	C412_31.4 P100 BX100LA4	159
47	425	3.2	30.4	16000	C612_30.4 S3 ME3LA4	C612_30.4 S3 MX3LA4	166	C612_30.4 P100 BE100LA4	C612_30.4 P100 BX100LA4	167
48	411	2.4	30.1	10000	C513_30.1 S3 ME3LA4	C513_30.1 S3 MX3LA4	162	C513_30.1 P100 BE100LA4	C513_30.1 P100 BX100LA4	163
48	416	1.9	29.8	10000	C512_29.8 S3 ME3LA4	C512_29.8 S3 MX3LA4	162	C512_29.8 P100 BE100LA4	C512_29.8 P100 BX100LA4	163
50	393	1.1	28.7	5220	C363_28.7 S3 ME3LA4	C363_28.7 S3 MX3LA4	154	C363_28.7 P100 BE100LA4	C363_28.7 P100 BX100LA4	155
51	395	1.3	28.3	6190	C412_28.3 S3 ME3LA4	C412_28.3 S3 MX3LA4	158	C412_28.3 P100 BE100LA4	C412_28.3 P100 BX100LA4	159
52	375	2.6	27.4	10000	C513_27.4 S3 ME3LA4	C513_27.4 S3 MX3LA4	162	C513_27.4 P100 BE100LA4	C513_27.4 P100 BX100LA4	163
52	383	3.5	27.4	15900	C612_27.4 S3 ME3LA4	C612_27.4 S3 MX3LA4	166	C612_27.4 P100 BE100LA4	C612_27.4 P100 BX100LA4	167
55	358	1.2	26.2	5140	C363_26.2 S3 ME3LA4	C363_26.2 S3 MX3LA4	154	C363_26.2 P100 BE100LA4	C363_26.2 P100 BX100LA4	155
55	362	2.2	25.9	10000	C512_25.9 S3 ME3LA4	C512_25.9 S3 MX3LA4	162	C512_25.9 P100 BE100LA4	C512_25.9 P100 BX100LA4	163
57	351	0.9	25.1	4270	C322_25.1 S3 ME3LA4	C322_25.1 S3 MX3LA4	150	C322_25.1 P100 BE100LA4	C322_25.1 P100 BX100LA4	151
57	350	1.4	25.0	6120	C412_25.0 S3 ME3LA4	C412_25.0 S3 MX3LA4	158	C412_25.0 P100 BE100LA4	C412_25.0 P100 BX100LA4	159
61	326	2.5	23.4	10000	C512_23.4 S3 ME3LA4	C512_23.4 S3 MX3LA4	162	C512_23.4 P100 BE100LA4	C512_23.4 P100 BX100LA4	163
62	320	0.9	22.9	4240	C322_22.9 S3 ME3LA4	C322_22.9 S3 MX3LA4	150	C322_22.9 P100 BE100LA4	C322_22.9 P100 BX100LA4	151
63	315	1.6	22.6	6000	C412_22.6 S3 ME3LA4	C412_22.6 S3 MX3LA4	158	C412_22.6 P100 BE100LA4	C412_22.6 P100 BX100LA4	159
65	303	1.4	22.1	5060	C363_22.1 S3 ME3LA4	C363_22.1 S3 MX3LA4	154	C363_22.1 P100 BE100LA4	C363_22.1 P100 BX100LA4	155
68	293	2.7	21.0	10000	C512_21.0 S3 ME3LA4	C512_21.0 S3 MX3LA4	162	C512_21.0 P100 BE100LA4	C512_21.0 P100 BX100LA4	163
71	280	1.1	20.1	4200	C322_20.1 S3 ME3LA4	C322_20.1 S3 MX3LA4	150	C322_20.1 P100 BE100LA4	C322_20.1 P100 BX100LA4	151
72	276	1.8	19.8	5890	C412_19.8 S3 ME3LA4	C412_19.8 S3 MX3LA4	158	C412_19.8 P100 BE100LA4	C412_19.8 P100 BX100LA4	159
75	265	1.4	19.0	4920	C362_19.0 S3 ME3LA4	C362_19.0 S3 MX3LA4	154	C362_19.0 P100 BE100LA4	C362_19.0 P100 BX100LA4	155
76	264	3.0	18.9	10000	C512_18.9 S3 ME3LA4	C512_18.9 S3 MX3LA4	162	C512_18.9 P100 BE100LA4	C512_18.9 P100 BX100LA4	163
77	258	1.0	12.3	4100	C322_12.3 S4 ME4SA6		150	C322_12.3 P112 BE112M6		151
79	254	1.1	18.2	4120	C322_18.2 S3 ME3LA4	C322_18.2 S3 MX3LA4	150	C322_18.2 P100 BE100LA4	C322_18.2 P100 BX100LA4	151
80	248	1.9	17.8	5760	C412_17.8 S3 ME3LA4	C412_17.8 S3 MX3LA4	158	C412_17.8 P100 BE100LA4	C412_17.8 P100 BX100LA4	159
83	240	1.6	17.2	4800	C362_17.2 S3 ME3LA4	C362_17.2 S3 MX3LA4	154	C362_17.2 P100 BE100LA4	C362_17.2 P100 BX100LA4	155
85	234	1.0	11.2	4060	C322_11.2 S4 ME4SA6		150	C322_11.2 P112 BE112M6		151
90	221	2.0	15.8	5650	C412_15.8 S3 ME3LA4	C412_15.8 S3 MX3LA4	158	C412_15.8 P100 BE100LA4	C412_15.8 P100 BX100LA4	159
92	218	1.2	15.6	4060	C322_15.6 S3 ME3LA4	C322_15.6 S3 MX3LA4	150	C322_15.6 P100 BE100LA4	C322_15.6 P100 BX100LA4	151
97	206	1.8	14.8	4710	C362_14.8 S3 ME3LA4	C362_14.8 S3 MX3LA4	154	C362_14.8 P100 BE100LA4	C362_14.8 P100 BX100LA4	155
100	199	2.2	14.2	5510	C412_14.2 S3 ME3LA4	C412_14.2 S3 MX3LA4	158	C412_14.2 P100 BE100LA4	C412_14.2 P100 BX100LA4	159
102	197	1.3	14.1	3980	C322_14.1 S3 ME3LA4	C322_14.1 S3 MX3LA4	150	C322_14.1 P100 BE100LA4	C322_14.1 P100 BX100LA4	151
103	194	1.1	9.3	3960	C322_9.3 S4 ME4SA6		150	C322_9.3 P112 BE112M6		151
107	186	2.0	13.3	4590	C362_13.3 S3 ME3LA4	C362_13.3 S3 MX3LA4	154	C362_13.3 P100 BE100LA4	C362_13.3 P100 BX100LA4	155
113	177	1.2	8.5	3890	C322_8.5 S4 ME4SA6		150	C322_8.5 P112 BE112M6		151
115	173	0.9	12.4	2270	C222_12.4 S3 ME3LA4	C222_12.4 S3 MX3LA4	146	C222_12.4 P100 BE100LA4	C222_12.4 P100 BX100LA4	147
115	173	2.5	12.4	5360	C412_12.4 S3 ME3LA4	C412_12.4 S3 MX3LA4	158	C412_12.4 P100 BE100LA4	C412_12.4 P100 BX100LA4	159
116	172	1.4	12.3	3900	C322_12.3 S3 ME3LA4	C322_12.3 S3 MX3LA4	150	C322_12.3 P100 BE100LA4	C322_12.3 P100 BX100LA4	151
123	163	2.3	11.7	4490	C362_11.7 S3 ME3LA4	C362_11.7 S3 MX3LA4	154	C362_11.7 P100 BE100LA4	C362_11.7 P100 BX100LA4	155
128	156	1.5	11.2	3800	C322_11.2 S3 ME3LA4	C322_11.2 S3 MX3LA4	150	C322_11.2 P100 BE100LA4	C322_11.2 P100 BX100LA4	151
128	156	2.7	11.2	5220	C412_11.2 S3 ME3LA4	C412_11.2 S3 MX3LA4	158	C412_11.2 P100 BE100LA4	C412_11.2 P100 BX100LA4	159
129	155	1.0	11.1	2250	C222_11.1 S3 ME3LA4	C222_11.1 S3 MX3LA4	146	C222_11.1 P100 BE100LA4	C222_11.1 P100 BX100LA4	147
133	150	1.3	7.2	3810	C322_7.2 S4 ME4SA6		150	C322_7.2 P112 BE112M6		151
135	148	2.6	10.6	4320	C362_10.6 S3 ME3LA4	C362_10.6 S3 MX3LA4	154	C362_10.6 P100 BE100LA4	C362_10.6 P100 BX100LA4	155
148	135	1.1	9.6	2250	C222_9.6 S3 ME3LA4	C222_9.6 S3 MX3LA4	146	C222_9.6 P100 BE100LA4	C222_9.6 P100 BX100LA4	147
149	134	2.9	9.6	5050	C412_9.6 S3 ME3LA4	C412_9.6 S3 MX3LA4	158	C412_9.6 P100 BE100LA4	C412_9.6 P100 BX100LA4	159
152	131	1.2	6.3	3510	C322_6.3 S4 ME4SA6		150	C322_6.3 P112 BE112M6		151
154	130	1.7	9.3	3690	C322_9.3 S3 ME3LA4	C322_9.3 S3 MX3LA4	150	C322_9.3 P100 BE100LA4	C322_9.3 P100 BX100LA4	151
163	123	3.1	8.8	4210	C362_8.8 S3 ME3LA4	C362_8.8 S3 MX3LA4	154	C362_8.8 P100 BE100LA4	C362_8.8 P100 BX100LA4	155
165	121	1.1	8.7	2220	C222_8.7 S3 ME3LA4	C222_8.7 S3 MX3LA4	146	C222_8.7 P100 BE100LA4	C222_8.7 P100 BX100LA4	147
165	121	3.2	8.6	4850	C412_8.6 S3 ME3LA4	C412_8.6 S3 MX3LA4	158	C412_8.6 P100 BE100LA4	C412_8.6 P100 BX100LA4	159
169	118	1.8	8.5	3600	C322_8.5 S3 ME3LA4	C322_8.5 S3 MX3LA4	150	C322_8.5 P100 BE100LA4	C322_8.5 P100 BX100LA4	151
169	118	1.3	5.7	3450	C322_5.7 S4 ME4SA6		150	C322_5.7 P112 BE112M6		151
193	103	1.5	5.0	3410	C322_5.0 S4 ME4SA6		150	C322_5.0 P112 BE112M6		151
200	100	2.0	7.2	3480	C322_7.2 S3 ME3LA4	C322_7.2 S3 MX3LA4	150	C322_7.2 P100 BE100LA4	C322_7.2 P100 BX100LA4	151
202	99	1.3	7.1	2180	C222_7.1 S3 ME3LA4	C222_7.1 S3 MX3LA4	146	C222_7.1 P100 BE100LA4	C222_7.1 P100 BX100LA4	147
228	87	1.8	6.3	3250	C322_6.3 S3 ME3LA4	C322_6.3 S3 MX3LA4	150	C322_6.3 P100 BE100LA4	C322_6.3 P100 BX100LA4	151
235	85	1.2	6.1	2040	C222_6.1 S3 ME3LA4	C222_6.1 S3 MX3LA4	146	C222_6.1 P100 BE100LA4	C222_6.1 P100 BX100LA4	147
245	82	2.4	5.8	3710	C362_5.8 S3 ME3LA4	C362_5.8 S3 MX3LA4	154	C362_5.8 P100 BE100LA4	C362_5.8 P100 BX100LA4	155
253	79	2.0	5.7	3180	C322_5.7 S3 ME3LA4	C322_5.7 S3 MX3LA4	150	C322_5.7 P100 BE100LA4	C322_5.7 P100 BX100LA4	151
256	78	1.3	5.6	2050	C222_5.6 S3 ME3LA4	C222_5.6 S3 MX3LA4	146	C222_5.6 P100 BE100LA4	C222_5.6 P100 BX100LA4	147
271	74	2.7	5.3	3550	C362_5.3 S3 ME3LA4	C362_5.3 S3 MX3LA4	154	C362_5.3 P100 BE100LA4	C362_5.3 P100 BX100LA4	155
289	69	2.2	5.0	3100	C322_5.0 S3 ME3LA4	C322_5.0 S3 MX3LA4	150	C322_5.0 P100 BE100LA4	C322_5.0 P100 BX100LA4	151
300	67	1.5	4.8	1970	C222_4.8 S3 ME3LA4	C222_4.8 S3 MX3LA4	146	C222_4.8 P100 BE100LA4	C222_4.8 P100 BX100LA4	147
309	65	3.4	9.3	3130	C322_9.3 S3 ME3LA2		150	C322_9.3 P90 BE90L2		151
309	65	3.1	4.6	3490	C362_4.6 S3 ME3LA4	C362_4.6 S3 MX3LA4	154	C362_4.6 P100 BE100LA4	C362_4.6 P100 BX100LA4	155
318	63	2.4	4.5	3000	C322_4.5 S3 ME3LA4	C322_4.5 S3 MX3LA4	150	C322_4.5 P100 BE100LA4	C322_4.5 P100 BX100LA4	151
332	60	2.3	8.7	2000	C222_8.7 S3 ME3LA2		146	C222_8.7 P90 BE90L2		147
336	59	1.6	4.3	1970	C222_4.3 S3 ME3LA4	C222_4.3 S3 MX3LA4	146	C222_4.3 P100 BE100LA4	C222_4.3 P100 BX100LA4	147

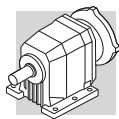


2.2 kW

n ₂ min-1	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
355	56	3.6	2.7	3380	C362_2.7 S4 ME4SA6		154	C362_2.7 P112 BE112M6		155
377	53	1.1	7.6	930	C122_7.6 S3 ME3LA2		142	C122_7.6 P90 BE90L2		143
383	52	2.9	3.7	2890	C322_3.7 S3 ME3LA4	C322_3.7 S3 MX3LA4	150	C322_3.7 P100 BE100LA4	C322_3.7 P100 BX100LA4	151
386	52	1.7	3.7	1890	C222_3.7 S3 ME3LA4	C222_3.7 S3 MX3LA4	146	C222_3.7 P100 BE100LA4	C222_3.7 P100 BX100LA4	147
401	50	4.0	7.2	2920	C322_7.2 S3 ME3LA2		150	C322_7.2 P90 BE90L2		151
405	49	2.6	7.1	1920	C222_7.1 S3 ME3LA2		146	C222_7.1 P90 BE90L2		147
419	48	2.9	3.4	2800	C322_3.4 S3 ME3LA4	C322_3.4 S3 MX3LA4	150	C322_3.4 P100 BE100LA4	C322_3.4 P100 BX100LA4	151
430	46	1.8	3.3	1890	C222_3.3 S3 ME3LA4	C222_3.3 S3 MX3LA4	146	C222_3.3 P100 BE100LA4	C222_3.3 P100 BX100LA4	147
446	45	0.9	3.2	580	C122_3.2 S3 ME3LA4	C122_3.2 S3 MX3LA4	142	C122_3.2 P100 BE100LA4	C122_3.2 P100 BX100LA4	143
458	44	3.6	6.3	2760	C322_6.3 S3 ME3LA2		150	C322_6.3 P90 BE90L2		151
472	42	2.5	6.1	1820	C222_6.1 S3 ME3LA2		146	C222_6.1 P90 BE90L2		147
497	40	3.2	2.9	2700	C322_2.9 S3 ME3LA4	C322_2.9 S3 MX3LA4	150	C322_2.9 P100 BE100LA4	C322_2.9 P100 BX100LA4	151
513	39	2.6	5.6	1770	C222_5.6 S3 ME3LA2		146	C222_5.6 P90 BE90L2		147
517	39	1.0	2.8	690	C122_2.8 S3 ME3LA4	C122_2.8 S3 MX3LA4	142	C122_2.8 P100 BE100LA4	C122_2.8 P100 BX100LA4	143
525	38	2.1	2.7	1770	C222_2.7 S3 ME3LA4	C222_2.7 S3 MX3LA4	146	C222_2.7 P100 BE100LA4	C222_2.7 P100 BX100LA4	147
602	33	3.0	4.8	1720	C222_4.8 S3 ME3LA2		146	C222_4.8 P90 BE90L2		147
674	30	3.2	4.3	1670	C222_4.3 S3 ME3LA2		146	C222_4.3 P90 BE90L2		147
774	26	3.5	3.7	1620	C222_3.7 S3 ME3LA2		146	C222_3.7 P90 BE90L2		147
786	25	1.7	3.7	970	C122_3.7 S3 ME3LA2		142	C122_3.7 P90 BE90L2		143
863	23	3.7	3.3	1550	C222_3.3 S3 ME3LA2		146	C222_3.3 P90 BE90L2		147
895	22	1.8	3.2	940	C122_3.2 S3 ME3LA2		142	C122_3.2 P90 BE90L2		143
1037	19	1.9	2.8	920	C122_2.8 S3 ME3LA2		142	C122_2.8 P90 BE90L2		143
1054	19	4.2	2.7	1490	C222_2.7 S3 ME3LA2		146	C222_2.7 P90 BE90L2		147

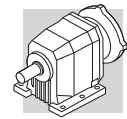
3 kW

n ₂ min-1	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
2.0	12965	0.9	720.3	85000	C1004_720.3 S3 ME3LB4	C1004_720.3 S3 MX3LB4	179	C1004_720.3 P100 BE100LB4	C1004_720.3 P100 BX100LB4	180
2.3	11293	1.1	627.4	85000	C1004_627.4 S3 ME3LB4	C1004_627.4 S3 MX3LB4	179	C1004_627.4 P100 BE100LB4	C1004_627.4 P100 BX100LB4	180
2.5	10487	1.1	582.6	85000	C1004_582.6 S3 ME3LB4	C1004_582.6 S3 MX3LB4	179	C1004_582.6 P100 BE100LB4	C1004_582.6 P100 BX100LB4	180
2.9	9047	1.3	502.6	85000	C1004_502.6 S3 ME3LB4	C1004_502.6 S3 MX3LB4	179	C1004_502.6 P100 BE100LB4	C1004_502.6 P100 BX100LB4	180
3.1	8401	1.4	466.7	85000	C1004_466.7 S3 ME3LB4	C1004_466.7 S3 MX3LB4	179	C1004_466.7 P100 BE100LB4	C1004_466.7 P100 BX100LB4	180
3.4	7543	1.0	419.0	60000	C904_419.0 S3 ME3LB4	C904_419.0 S3 MX3LB4	176	C904_419.0 P100 BE100LB4	C904_419.0 P100 BX100LB4	177
3.5	7376	1.6	409.8	85000	C1004_409.8 S3 ME3LB4	C1004_409.8 S3 MX3LB4	179	C1004_409.8 P100 BE100LB4	C1004_409.8 P100 BX100LB4	180
3.8	6849	1.8	380.5	85000	C1004_380.5 S3 ME3LB4	C1004_380.5 S3 MX3LB4	179	C1004_380.5 P100 BE100LB4	C1004_380.5 P100 BX100LB4	180
3.9	6656	1.1	369.8	60000	C904_369.8 S3 ME3LB4	C904_369.8 S3 MX3LB4	176	C904_369.8 P100 BE100LB4	C904_369.8 P100 BX100LB4	177
4.2	6101	1.2	339.0	60000	C904_339.0 S3 ME3LB4	C904_339.0 S3 MX3LB4	176	C904_339.0 P100 BE100LB4	C904_339.0 P100 BX100LB4	177
4.4	5825	2.1	323.6	85000	C1004_323.6 S3 ME3LB4	C1004_323.6 S3 MX3LB4	179	C1004_323.6 P100 BE100LB4	C1004_323.6 P100 BX100LB4	180
4.8	5409	2.2	300.5	85000	C1004_300.5 S3 ME3LB4	C1004_300.5 S3 MX3LB4	179	C1004_300.5 P100 BE100LB4	C1004_300.5 P100 BX100LB4	180
4.9	5272	1.4	292.9	60000	C904_292.9 S3 ME3LB4	C904_292.9 S3 MX3LB4	176	C904_292.9 P100 BE100LB4	C904_292.9 P100 BX100LB4	177
5.4	4833	1.5	268.5	60000	C904_268.5 S3 ME3LB4	C904_268.5 S3 MX3LB4	176	C904_268.5 P100 BE100LB4	C904_268.5 P100 BX100LB4	177
5.5	4734	2.5	263.0	85000	C1004_263.0 S3 ME3LB4	C1004_263.0 S3 MX3LB4	179	C1004_263.0 P100 BE100LB4	C1004_263.0 P100 BX100LB4	180
5.9	4396	2.7	244.2	85000	C1004_244.2 S3 ME3LB4	C1004_244.2 S3 MX3LB4	179	C1004_244.2 P100 BE100LB4	C1004_244.2 P100 BX100LB4	180
6.2	4170	1.7	231.7	60000	C904_231.7 S3 ME3LB4	C904_231.7 S3 MX3LB4	176	C904_231.7 P100 BE100LB4	C904_231.7 P100 BX100LB4	177
6.7	4015	1.0	215.8	35000	C803_215.8 S3 ME3LB4	C803_215.8 S3 MX3LB4	173	C803_215.8 P100 BE100LB4	C803_215.8 P100 BX100LB4	174
6.8	3823	1.9	212.4	60000	C904_212.4 S3 ME3LB4	C904_212.4 S3 MX3LB4	176	C904_212.4 P100 BE100LB4	C904_212.4 P100 BX100LB4	177
7.3	3680	1.0	197.9	35000	C803_197.9 S3 ME3LB4	C803_197.9 S3 MX3LB4	173	C803_197.9 P100 BE100LB4	C803_197.9 P100 BX100LB4	174
7.8	3429	1.2	184.4	35000	C803_184.4 S3 ME3LB4	C803_184.4 S3 MX3LB4	173	C803_184.4 P100 BE100LB4	C803_184.4 P100 BX100LB4	174
8.4	3201	2.2	172.1	60000	C903_172.1 S3 ME3LB4	C903_172.1 S3 MX3LB4	176	C903_172.1 P100 BE100LB4	C903_172.1 P100 BX100LB4	177
8.5	3143	1.3	169.0	35000	C803_169.0 S3 ME3LB4	C803_169.0 S3 MX3LB4	173	C803_169.0 P100 BE100LB4	C803_169.0 P100 BX100LB4	174
9.1	2934	2.4	157.8	60000	C903_157.8 S3 ME3LB4	C903_157.8 S3 MX3LB4	176	C903_157.8 P100 BE100LB4	C903_157.8 P100 BX100LB4	177
9.7	2773	1.4	149.1	35000	C803_149.1 S3 ME3LB4	C803_149.1 S3 MX3LB4	173	C803_149.1 P100 BE100LB4	C803_149.1 P100 BX100LB4	174
9.8	2722	2.6	146.3	60000	C903_146.3 S3 ME3LB4	C903_146.3 S3 MX3LB4	176	C903_146.3 P100 BE100LB4	C903_146.3 P100 BX100LB4	177
10.5	2542	1.6	136.7	35000	C803_136.7 S3 ME3LB4	C803_136.7 S3 MX3LB4	173	C803_136.7 P100 BE100LB4	C803_136.7 P100 BX100LB4	174
10.7	2495	2.8	134.1	60000	C903_134.1 S3 ME3LB4	C903_134.1 S3 MX3LB4	176	C903_134.1 P100 BE100LB4	C903_134.1 P100 BX100LB4	177
11.4	2359	1.0	126.8	25000	C703_126.8 S3 ME3LB4	C703_126.8 S3 MX3LB4	170	C703_126.8 P100 BE100LB4	C703_126.8 P100 BX100LB4	171
12.1	2222	1.8	119.5	35000	C803_119.5 S3 ME3LB4	C803_119.5 S3 MX3LB4	173	C803_119.5 P100 BE100LB4	C803_119.5 P100 BX100LB4	174



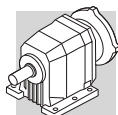
3 kW

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
12.3	2171	3.3	116.7	60000	C903_116.7 S3 ME3LB4	C903_116.7 S3 MX3LB4	176	C903_116.7 P100 BE100LB4	C903_116.7 P100 BX100LB4	177
12.8	2091	1.1	112.4	25000	C703_112.4 S3 ME3LB4	C703_112.4 S3 MX3LB4	170	C703_112.4 P100 BE100LB4	C703_112.4 P100 BX100LB4	171
13.2	2037	2.0	109.5	35000	C803_109.5 S3 ME3LB4	C803_109.5 S3 MX3LB4	173	C803_109.5 P100 BE100LB4	C803_109.5 P100 BX100LB4	174
13.9	1931	1.2	103.8	25000	C703_103.8 S3 ME3LB4	C703_103.8 S3 MX3LB4	170	C703_103.8 P100 BE100LB4	C703_103.8 P100 BX100LB4	171
14.8	1811	2.2	97.4	35000	C803_97.4 S3 ME3LB4	C803_97.4 S3 MX3LB4	173	C803_97.4 P100 BE100LB4	C803_97.4 P100 BX100LB4	174
15.8	1638	1.0	91.0	16000	C613_91.0 S3 ME3LB4	C613_91.0 S3 MX3LB4	166	C613_91.0 P100 BE100LB4	C613_91.0 P100 BX100LB4	167
16.1	1660	2.4	89.3	35000	C803_89.3 S3 ME3LB4	C803_89.3 S3 MX3LB4	173	C803_89.3 P100 BE100LB4	C803_89.3 P100 BX100LB4	174
16.3	1640	1.4	88.2	25000	C703_88.2 S3 ME3LB4	C703_88.2 S3 MX3LB4	170	C703_88.2 P100 BE100LB4	C703_88.2 P100 BX100LB4	171
17.3	1495	1.1	83.0	16000	C613_83.0 S3 ME3LB4	C613_83.0 S3 MX3LB4	166	C613_83.0 P100 BE100LB4	C613_83.0 P100 BX100LB4	167
17.7	1514	1.5	81.4	25000	C703_81.4 S3 ME3LB4	C703_81.4 S3 MX3LB4	170	C703_81.4 P100 BE100LB4	C703_81.4 P100 BX100LB4	171
18.7	1431	2.8	76.9	35000	C803_76.9 S3 ME3LB4	C803_76.9 S3 MX3LB4	173	C803_76.9 P100 BE100LB4	C803_76.9 P100 BX100LB4	174
19.4	1336	1.2	74.2	16000	C613_74.2 S3 ME3LB4	C613_74.2 S3 MX3LB4	166	C613_74.2 P100 BE100LB4	C613_74.2 P100 BX100LB4	167
20.2	1327	1.7	71.3	25000	C703_71.3 S3 ME3LB4	C703_71.3 S3 MX3LB4	170	C703_71.3 P100 BE100LB4	C703_71.3 P100 BX100LB4	171
20.4	1311	3.1	70.5	35000	C803_70.5 S3 ME3LB4	C803_70.5 S3 MX3LB4	173	C803_70.5 P100 BE100LB4	C803_70.5 P100 BX100LB4	174
21.3	1218	1.3	67.7	16000	C613_67.7 S3 ME3LB4	C613_67.7 S3 MX3LB4	166	C613_67.7 P100 BE100LB4	C613_67.7 P100 BX100LB4	167
21.9	1225	1.9	65.9	25000	C703_65.9 S3 ME3LB4	C703_65.9 S3 MX3LB4	170	C703_65.9 P100 BE100LB4	C703_65.9 P100 BX100LB4	171
24.4	1097	0.9	59.0	10000	C513_59.0 S3 ME3LB4	C513_59.0 S3 MX3LB4	162	C513_59.0 P100 BE100LB4	C513_59.0 P100 BX100LB4	163
24.6	1055	1.5	58.6	16000	C613_58.6 S3 ME3LB4	C613_58.6 S3 MX3LB4	166	C613_58.6 P100 BE100LB4	C613_58.6 P100 BX100LB4	167
25.5	1051	2.2	56.5	25000	C703_56.5 S3 ME3LB4	C703_56.5 S3 MX3LB4	170	C703_56.5 P100 BE100LB4	C703_56.5 P100 BX100LB4	171
26.9	962	1.7	53.5	16000	C613_53.5 S3 ME3LB4	C613_53.5 S3 MX3LB4	166	C613_53.5 P100 BE100LB4	C613_53.5 P100 BX100LB4	167
27.6	970	2.4	52.2	25000	C703_52.2 S3 ME3LB4	C703_52.2 S3 MX3LB4	170	C703_52.2 P100 BE100LB4	C703_52.2 P100 BX100LB4	171
28.1	952	1.1	51.2	10000	C513_51.2 S3 ME3LB4	C513_51.2 S3 MX3LB4	162	C513_51.2 P100 BE100LB4	C513_51.2 P100 BX100LB4	163
30	857	1.9	47.6	16000	C613_47.6 S3 ME3LB4	C613_47.6 S3 MX3LB4	166	C613_47.6 P100 BE100LB4	C613_47.6 P100 BX100LB4	167
31	869	1.2	46.7	10000	C513_46.7 S3 ME3LB4	C513_46.7 S3 MX3LB4	162	C513_46.7 P100 BE100LB4	C513_46.7 P100 BX100LB4	163
32	831	2.8	44.7	25000	C703_44.7 S3 ME3LB4	C703_44.7 S3 MX3LB4	170	C703_44.7 P100 BE100LB4	C703_44.7 P100 BX100LB4	171
33	782	2.0	43.4	16000	C613_43.4 S3 ME3LB4	C613_43.4 S3 MX3LB4	166	C613_43.4 P100 BE100LB4	C613_43.4 P100 BX100LB4	167
33	819	0.9	43.1	10000	C512_43.1 S3 ME3LB4	C512_43.1 S3 MX3LB4	162	C512_43.1 P100 BE100LB4	C512_43.1 P100 BX100LB4	163
35	767	3.0	41.3	25000	C703_41.3 S3 ME3LB4	C703_41.3 S3 MX3LB4	170	C703_41.3 P100 BE100LB4	C703_41.3 P100 BX100LB4	171
36	753	1.3	40.5	10000	C513_40.5 S3 ME3LB4	C513_40.5 S3 MX3LB4	162	C513_40.5 P100 BE100LB4	C513_40.5 P100 BX100LB4	163
36	767	1.0	40.4	10000	C512_40.4 S3 ME3LB4	C512_40.4 S3 MX3LB4	162	C512_40.4 P100 BE100LB4	C512_40.4 P100 BX100LB4	163
38	722	1.9	38.0	16000	C612_38.0 S3 ME3LB4	C612_38.0 S3 MX3LB4	166	C612_38.0 P100 BE100LB4	C612_38.0 P100 BX100LB4	167
39	687	1.5	37.0	10000	C513_37.0 S3 ME3LB4	C513_37.0 S3 MX3LB4	162	C513_37.0 P100 BE100LB4	C513_37.0 P100 BX100LB4	163
40	691	1.1	36.4	10000	C512_36.4 S3 ME3LB4	C512_36.4 S3 MX3LB4	162	C512_36.4 P100 BE100LB4	C512_36.4 P100 BX100LB4	163
40	651	2.4	36.1	16000	C613_36.1 S3 ME3LB4	C613_36.1 S3 MX3LB4	166	C613_36.1 P100 BE100LB4	C613_36.1 P100 BX100LB4	167
42	650	1.9	34.2	16000	C612_34.2 S3 ME3LB4	C612_34.2 S3 MX3LB4	166	C612_34.2 P100 BE100LB4	C612_34.2 P100 BX100LB4	167
44	628	1.3	33.0	10000	C512_33.0 S3 ME3LB4	C512_33.0 S3 MX3LB4	162	C512_33.0 P100 BE100LB4	C512_33.0 P100 BX100LB4	163
44	594	2.6	33.0	16000	C613_33.0 S3 ME3LB4	C613_33.0 S3 MX3LB4	166	C613_33.0 P100 BE100LB4	C613_33.0 P100 BX100LB4	167
46	581	1.0	31.2	5550	C413_31.2 S3 ME3LB4	C413_31.2 S3 MX3LB4	158	C413_31.2 P100 BE100LB4	C413_31.2 P100 BX100LB4	159
47	578	2.3	30.4	15900	C612_30.4 S3 ME3LB4	C612_30.4 S3 MX3LB4	166	C612_30.4 P100 BE100LB4	C612_30.4 P100 BX100LB4	167
48	559	1.8	30.1	10000	C513_30.1 S3 ME3LB4	C513_30.1 S3 MX3LB4	162	C513_30.1 P100 BE100LB4	C513_30.1 P100 BX100LB4	163
48	566	1.4	29.8	10000	C512_29.8 S3 ME3LB4	C512_29.8 S3 MX3LB4	162	C512_29.8 P100 BE100LB4	C512_29.8 P100 BX100LB4	163
51	538	0.9	28.3	5460	C412_28.3 S3 ME3LB4	C412_28.3 S3 MX3LB4	158	C412_28.3 P100 BE100LB4	C412_28.3 P100 BX100LB4	159
52	511	1.9	27.4	10000	C513_27.4 S3 ME3LB4	C513_27.4 S3 MX3LB4	162	C513_27.4 P100 BE100LB4	C513_27.4 P100 BX100LB4	163
53	521	2.6	27.4	15400	C612_27.4 S3 ME3LB4	C612_27.4 S3 MX3LB4	166	C612_27.4 P100 BE100LB4	C612_27.4 P100 BX100LB4	167
55	487	0.9	26.2	4500	C363_26.2 S3 ME3LB4	C363_26.2 S3 MX3LB4	154	C363_26.2 P100 BE100LB4	C363_26.2 P100 BX100LB4	155
56	492	1.6	25.9	10000	C512_25.9 S3 ME3LB4	C512_25.9 S3 MX3LB4	162	C512_25.9 P100 BE100LB4	C512_25.9 P100 BX100LB4	163
57	476	1.1	25.0	5480	C412_25.0 S3 ME3LB4	C412_25.0 S3 MX3LB4	158	C412_25.0 P100 BE100LB4	C412_25.0 P100 BX100LB4	159
58	472	2.9	24.8	15100	C612_24.8 S3 ME3LB4	C612_24.8 S3 MX3LB4	166	C612_24.8 P100 BE100LB4	C612_24.8 P100 BX100LB4	167
62	444	1.8	23.4	10000	C512_23.4 S3 ME3LB4	C512_23.4 S3 MX3LB4	162	C512_23.4 P100 BE100LB4	C512_23.4 P100 BX100LB4	163
64	429	1.2	22.6	5420	C412_22.6 S3 ME3LB4	C412_22.6 S3 MX3LB4	158	C412_22.6 P100 BE100LB4	C412_22.6 P100 BX100LB4	159
64	425	3.2	22.4	14600	C612_22.4 S3 ME3LB4	C612_22.4 S3 MX3LB4	166	C612_22.4 P100 BE100LB4	C612_22.4 P100 BX100LB4	167
65	412	1.0	22.1	4530	C363_22.1 S3 ME3LB4	C363_22.1 S3 MX3LB4	154	C363_22.1 P100 BE100LB4	C363_22.1 P100 BX100LB4	155
69	398	2.0	21.0	10000	C512_21.0 S3 ME3LB4	C512_21.0 S3 MX3LB4	162	C512_21.0 P100 BE100LB4	C512_21.0 P100 BX100LB4	163
73	375	1.3	19.8	5390	C412_19.8 S3 ME3LB4	C412_19.8 S3 MX3LB4	158	C412_19.8 P100 BE100LB4	C412_19.8 P100 BX100LB4	159
76	361	1.1	19.0	4450	C362_19.0 S3 ME3LB4	C362_19.0 S3 MX3LB4	154	C362_19.0 P100 BE100LB4	C362_19.0 P100 BX100LB4	155
76	359	2.2	18.9	10000	C512_18.9 S3 ME3LB4	C512_18.9 S3 MX3LB4	162	C512_18.9 P100 BE100LB4	C512_18.9 P100 BX100LB4	163
81	338	1.4	17.8	5300	C412_17.8 S3 ME3LB4	C412_17.8 S3 MX3LB4	158	C412_17.8 P100 BE100LB4	C412_17.8 P100 BX100LB4	159





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

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
84	327	1.2	17.2	4400	C362_17.2 S3 ME3LB4	C362_17.2 S3 MX3LB4	154	C362_17.2 P100 BE100LB4	C362_17.2 P100 BX100LB4	155
87	315	2.5	16.6	9790	C512_16.6 S3 ME3LB4	C512_16.6 S3 MX3LB4	162	C512_16.6 P100 BE100LB4	C512_16.6 P100 BX100LB4	163
91	301	1.5	15.8	5240	C412_15.8 S3 ME3LB4	C412_15.8 S3 MX3LB4	158	C412_15.8 P100 BE100LB4	C412_15.8 P100 BX100LB4	159
92	296	0.9	15.6	3680	C322_15.6 S3 ME3LB4	C322_15.6 S3 MX3LB4	150	C322_15.6 P100 BE100LB4	C322_15.6 P100 BX100LB4	151
96	284	2.8	15.0	9540	C512_15.0 S3 ME3LB4	C512_15.0 S3 MX3LB4	162	C512_15.0 P100 BE100LB4	C512_15.0 P100 BX100LB4	163
98	280	1.4	14.8	4340	C362_14.8 S3 ME3LB4	C362_14.8 S3 MX3LB4	154	C362_14.8 P100 BE100LB4	C362_14.8 P100 BX100LB4	155
101	271	1.6	14.2	5140	C412_14.2 S3 ME3LB4	C412_14.2 S3 MX3LB4	158	C412_14.2 P100 BE100LB4	C412_14.2 P100 BX100LB4	159
102	267	0.9	14.1	3650	C322_14.1 S3 ME3LB4	C322_14.1 S3 MX3LB4	150	C322_14.1 P100 BE100LB4	C322_14.1 P100 BX100LB4	151
108	253	1.5	13.3	4260	C362_13.3 S3 ME3LB4	C362_13.3 S3 MX3LB4	154	C362_13.3 P100 BE100LB4	C362_13.3 P100 BX100LB4	155
110	249	3.0	13.1	9200	C512_13.1 S3 ME3LB4	C512_13.1 S3 MX3LB4	162	C512_13.1 P100 BE100LB4	C512_13.1 P100 BX100LB4	163
116	235	1.8	12.4	5040	C412_12.4 S3 ME3LB4	C412_12.4 S3 MX3LB4	158	C412_12.4 P100 BE100LB4	C412_12.4 P100 BX100LB4	159
117	234	1.0	12.3	3580	C322_12.3 S3 ME3LB4	C322_12.3 S3 MX3LB4	150	C322_12.3 P100 BE100LB4	C322_12.3 P100 BX100LB4	151
123	222	1.7	11.7	4200	C362_11.7 S3 ME3LB4	C362_11.7 S3 MX3LB4	154	C362_11.7 P100 BE100LB4	C362_11.7 P100 BX100LB4	155
129	213	1.1	11.2	3520	C322_11.2 S3 ME3LB4	C322_11.2 S3 MX3LB4	150	C322_11.2 P100 BE100LB4	C322_11.2 P100 BX100LB4	151
129	212	2.0	11.2	4930	C412_11.2 S3 ME3LB4	C412_11.2 S3 MX3LB4	158	C412_11.2 P100 BE100LB4	C412_11.2 P100 BX100LB4	159
136	201	1.9	10.6	4100	C362_10.6 S3 ME3LB4	C362_10.6 S3 MX3LB4	154	C362_10.6 P100 BE100LB4	C362_10.6 P100 BX100LB4	155
143	190	1.6	20.1	3480	C322_20.1 S3 ME3LB2		150	C322_20.1 P100 BE100L2		151
150	182	2.1	9.6	4800	C412_9.6 S3 ME3LB4	C412_9.6 S3 MX3LB4	158	C412_9.6 P100 BE100LB4	C412_9.6 P100 BX100LB4	159
155	177	1.2	9.3	3450	C322_9.3 S3 ME3LB4	C322_9.3 S3 MX3LB4	150	C322_9.3 P100 BE100LB4	C322_9.3 P100 BX100LB4	151
158	172	1.6	18.2	3410	C322_18.2 S3 ME3LB2		150	C322_18.2 P100 BE100L2		151
164	167	2.3	8.8	3990	C362_8.8 S3 ME3LB4	C362_8.8 S3 MX3LB4	154	C362_8.8 P100 BE100LB4	C362_8.8 P100 BX100LB4	155
167	164	2.3	8.6	4600	C412_8.6 S3 ME3LB4	C412_8.6 S3 MX3LB4	158	C412_8.6 P100 BE100LB4	C412_8.6 P100 BX100LB4	159
170	161	1.3	8.5	3400	C322_8.5 S3 ME3LB4	C322_8.5 S3 MX3LB4	150	C322_8.5 P100 BE100LB4	C322_8.5 P100 BX100LB4	151
179	153	2.4	8.0	3840	C362_8.0 S3 ME3LB4	C362_8.0 S3 MX3LB4	154	C362_8.0 P100 BE100LB4	C362_8.0 P100 BX100LB4	155
182	150	1.2	15.8	1940	C222_15.8 S3 ME3LB2		146	C222_15.8 P100 BE100L2		147
185	147	1.8	15.6	3340	C322_15.6 S3 ME3LB2		150	C322_15.6 P100 BE100L2		151
201	136	1.5	7.2	3300	C322_7.2 S3 ME3LB4	C322_7.2 S3 MX3LB4	150	C322_7.2 P100 BE100LB4	C322_7.2 P100 BX100LB4	151
203	135	1.0	7.1	1940	C222_7.1 S3 ME3LB4	C222_7.1 S3 MX3LB4	146	C222_7.1 P100 BE100LB4	C222_7.1 P100 BX100LB4	147
204	134	2.6	7.1	4490	C412_7.1 S3 ME3LB4	C412_7.1 S3 MX3LB4	158	C412_7.1 P100 BE100LB4	C412_7.1 P100 BX100LB4	159
205	133	1.9	14.1	3250	C322_14.1 S3 ME3LB2		150	C322_14.1 P100 BE100L2		151
212	129	2.8	6.8	3780	C362_6.8 S3 ME3LB4	C362_6.8 S3 MX3LB4	154	C362_6.8 P100 BE100LB4	C362_6.8 P100 BX100LB4	155
226	121	2.9	6.4	4370	C412_6.4 S3 ME3LB4	C412_6.4 S3 MX3LB4	158	C412_6.4 P100 BE100LB4	C412_6.4 P100 BX100LB4	159
230	119	1.3	6.3	3100	C322_6.3 S3 ME3LB4	C322_6.3 S3 MX3LB4	150	C322_6.3 P100 BE100LB4	C322_6.3 P100 BX100LB4	151
234	116	2.1	12.3	3190	C322_12.3 S3 ME3LB2		150	C322_12.3 P100 BE100L2		151
237	116	0.9	6.1	1600	C222_6.1 S3 ME3LB4	C222_6.1 S3 MX3LB4	146	C222_6.1 P100 BE100LB4	C222_6.1 P100 BX100LB4	147
242	113	2.3	6.0	4090	C412_6.0 S3 ME3LB4	C412_6.0 S3 MX3LB4	158	C412_6.0 P100 BE100LB4	C412_6.0 P100 BX100LB4	159
246	111	1.8	5.8	3530	C362_5.8 S3 ME3LB4	C362_5.8 S3 MX3LB4	154	C362_5.8 P100 BE100LB4	C362_5.8 P100 BX100LB4	155
255	107	1.4	5.7	3040	C322_5.7 S3 ME3LB4	C322_5.7 S3 MX3LB4	150	C322_5.7 P100 BE100LB4	C322_5.7 P100 BX100LB4	151
257	106	2.2	11.2	3090	C322_11.2 S3 ME3LB2		150	C322_11.2 P100 BE100L2		151
258	106	1.0	5.6	1750	C222_5.6 S3 ME3LB4	C222_5.6 S3 MX3LB4	146	C222_5.6 P100 BE100LB4	C222_5.6 P100 BX100LB4	147
260	105	1.5	11.1	1850	C222_11.1 S3 ME3LB2		146	C222_11.1 P100 BE100L2		147
273	100	2.0	5.3	3380	C362_5.3 S3 ME3LB4	C362_5.3 S3 MX3LB4	154	C362_5.3 P100 BE100LB4	C362_5.3 P100 BX100LB4	155
291	94	1.6	5.0	2950	C322_5.0 S3 ME3LB4	C322_5.0 S3 MX3LB4	150	C322_5.0 P100 BE100LB4	C322_5.0 P100 BX100LB4	151
299	91	1.6	9.6	1880	C222_9.6 S3 ME3LB2		146	C222_9.6 P100 BE100L2		147
302	91	1.1	4.8	1780	C222_4.8 S3 ME3LB4	C222_4.8 S3 MX3LB4	146	C222_4.8 P100 BE100LB4	C222_4.8 P100 BX100LB4	147
309	89	2.9	4.7	3880	C412_4.7 S3 ME3LB4	C412_4.7 S3 MX3LB4	158	C412_4.7 P100 BE100LB4	C412_4.7 P100 BX100LB4	159
310	88	2.5	9.3	2990	C322_9.3 S3 ME3LB2		150	C322_9.3 P100 BE100L2		151
312	88	2.3	4.6	3270	C362_4.6 S3 ME3LB4	C362_4.6 S3 MX3LB4	154	C362_4.6 P100 BE100LB4	C362_4.6 P100 BX100LB4	155
320	85	1.8	4.5	2880	C322_4.5 S3 ME3LB4	C322_4.5 S3 MX3LB4	150	C322_4.5 P100 BE100LB4	C322_4.5 P100 BX100LB4	151
333	82	1.7	8.7	1840	C222_8.7 S3 ME3LB2		146	C222_8.7 P100 BE100L2		147
338	81	1.2	4.3	1800	C222_4.3 S3 ME3LB4	C222_4.3 S3 MX3LB4	146	C222_4.3 P100 BE100LB4	C222_4.3 P100 BX100LB4	147
339	80	2.6	8.5	2900	C322_8.5 S3 ME3LB2		150	C322_8.5 P100 BE100L2		151
343	80	2.5	4.2	3190	C362_4.2 S3 ME3LB4	C362_4.2 S3 MX3LB4	154	C362_4.2 P100 BE100LB4	C362_4.2 P100 BX100LB4	155
386	71	2.1	3.7	2780	C322_3.7 S3 ME3LB4	C322_3.7 S3 MX3LB4	150	C322_3.7 P100 BE100LB4	C322_3.7 P100 BX100LB4	151
388	70	1.3	3.7	1740	C222_3.7 S3 ME3LB4	C222_3.7 S3 MX3LB4	146	C222_3.7 P100 BE100LB4	C222_3.7 P100 BX100LB4	147
402	68	3.0	7.2	2810	C322_7.2 S3 ME3LB2		150	C322_7.2 P100 BE100L2		151
407	67	1.9	7.1	1800	C222_7.1 S3 ME3LB2		146	C222_7.1 P100 BE100L2		147

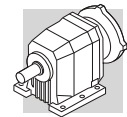


3 kW

n ₂ min-1	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
413	66	3.0	3.5	3130	C362_3.5 S3 ME3LB4	C362_3.5 S3 MX3LB4	154	C362_3.5 P100 BE100LB4	C362_3.5 P100 BX100LB4	155
422	65	2.1	3.4	2690	C322_3.4 S3 ME3LB4	C322_3.4 S3 MX3LB4	150	C322_3.4 P100 BE100LB4	C322_3.4 P100 BX100LB4	151
433	63	1.3	3.3	1740	C222_3.3 S3 ME3LB4	C222_3.3 S3 MX3LB4	146	C222_3.3 P100 BE100LB4	C222_3.3 P100 BX100LB4	147
460	59	2.6	6.3	2650	C322_6.3 S3 ME3LB2		150	C322_6.3 P100 BE100L2		151
473	58	1.8	6.1	1690	C222_6.1 S3 ME3LB2		146	C222_6.1 P100 BE100L2		147
500	55	2.4	2.9	2610	C322_2.9 S3 ME3LB4	C322_2.9 S3 MX3LB4	150	C322_2.9 P100 BE100LB4	C322_2.9 P100 BX100LB4	151
509	53	2.9	5.7	2570	C322_5.7 S3 ME3LB2		150	C322_5.7 P100 BE100L2		151
515	53	1.9	5.6	1650	C222_5.6 S3 ME3LB2		146	C222_5.6 P100 BE100L2		147
529	52	1.5	2.7	1660	C222_2.7 S3 ME3LB4	C222_2.7 S3 MX3LB4	146	C222_2.7 P100 BE100LB4	C222_2.7 P100 BX100LB4	147
582	47	3.3	5.0	2500	C322_5.0 S3 ME3LB2		150	C322_5.0 P100 BE100L2		151
604	45	2.2	4.8	1620	C222_4.8 S3 ME3LB2		146	C222_4.8 P100 BE100L2		147
640	43	3.6	4.5	2400	C322_4.5 S3 ME3LB2		150	C322_4.5 P100 BE100L2		151
676	40	2.3	4.3	1580	C222_4.3 S3 ME3LB2		146	C222_4.3 P100 BE100L2		147
771	35	4.2	3.7	2320	C322_3.7 S3 ME3LB2		150	C322_3.7 P100 BE100L2		151
777	35	2.6	3.7	1540	C222_3.7 S3 ME3LB2		146	C222_3.7 P100 BE100L2		147
789	35	1.2	3.7	560	C122_3.7 S3 ME3LB2		142	C122_3.7 P100 BE100L2		143
866	31	2.7	3.3	1480	C222_3.3 S3 ME3LB2		146	C222_3.3 P100 BE100L2		147
898	30	1.3	3.2	630	C122_3.2 S3 ME3LB2		142	C122_3.2 P100 BE100L2		143
1041	26	1.4	2.8	750	C122_2.8 S3 ME3LB2		142	C122_2.8 P100 BE100L2		143
1058	26	3.1	2.7	1430	C222_2.7 S3 ME3LB2		146	C222_2.7 P100 BE100L2		147

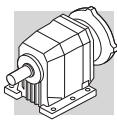
4 kW

n ₂ min-1	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
2.9	12214	1.0	502.6	85000	C1004_502.6 S4 ME4SA4	C1004_502.6 S4 MX4SA4	179	C1004_502.6 P112 BE112M4	C1004_502.6 P112 BX112M4	180
3.1	11342	1.1	466.7	85000	C1004_466.7 S4 ME4SA4	C1004_466.7 S4 MX4SA4	179	C1004_466.7 P112 BE112M4	C1004_466.7 P112 BX112M4	180
3.5	9957	1.2	409.8	85000	C1004_409.8 S4 ME4SA4	C1004_409.8 S4 MX4SA4	179	C1004_409.8 P112 BE112M4	C1004_409.8 P112 BX112M4	180
3.8	9246	1.3	380.5	85000	C1004_380.5 S4 ME4SA4	C1004_380.5 S4 MX4SA4	179	C1004_380.5 P112 BE112M4	C1004_380.5 P112 BX112M4	180
4.4	7864	1.5	323.6	85000	C1004_323.6 S4 ME4SA4	C1004_323.6 S4 MX4SA4	179	C1004_323.6 P112 BE112M4	C1004_323.6 P112 BX112M4	180
4.8	7302	1.6	300.5	85000	C1004_300.5 S4 ME4SA4	C1004_300.5 S4 MX4SA4	179	C1004_300.5 P112 BE112M4	C1004_300.5 P112 BX112M4	180
4.9	7118	1.0	292.9	60000	C904_292.9 S4 ME4SA4	C904_292.9 S4 MX4SA4	176	C904_292.9 P112 BE112M4	C904_292.9 P112 BX112M4	177
5.4	6524	1.1	268.5	60000	C904_268.5 S4 ME4SA4	C904_268.5 S4 MX4SA4	176	C904_268.5 P112 BE112M4	C904_268.5 P112 BX112M4	177
5.5	6391	1.9	263.0	85000	C1004_263.0 S4 ME4SA4	C1004_263.0 S4 MX4SA4	179	C1004_263.0 P112 BE112M4	C1004_263.0 P112 BX112M4	180
5.9	5934	2.0	244.2	85000	C1004_244.2 S4 ME4SA4	C1004_244.2 S4 MX4SA4	179	C1004_244.2 P112 BE112M4	C1004_244.2 P112 BX112M4	180
6.2	5630	1.3	231.7	60000	C904_231.7 S4 ME4SA4	C904_231.7 S4 MX4SA4	176	C904_231.7 P112 BE112M4	C904_231.7 P112 BX112M4	177
6.8	5161	1.4	212.4	60000	C904_212.4 S4 ME4SA4	C904_212.4 S4 MX4SA4	176	C904_212.4 P112 BE112M4	C904_212.4 P112 BX112M4	177
7.2	4851	2.5	199.6	85000	C1004_199.6 S4 ME4SA4	C1004_199.6 S4 MX4SA4	179	C1004_199.6 P112 BE112M4	C1004_199.6 P112 BX112M4	180
7.8	4504	2.7	185.4	85000	C1004_185.4 S4 ME4SA4	C1004_185.4 S4 MX4SA4	179	C1004_185.4 P112 BE112M4	C1004_185.4 P112 BX112M4	180
8.4	4322	1.7	172.1	60000	C903_172.1 S4 ME4SA4	C903_172.1 S4 MX4SA4	176	C903_172.1 P112 BE112M4	C903_172.1 P112 BX112M4	177
8.5	4243	0.9	169.0	35000	C803_169.0 S4 ME4SA4	C803_169.0 S4 MX4SA4	173	C803_169.0 P112 BE112M4	C803_169.0 P112 BX112M4	174
9.1	3961	1.8	157.8	60000	C903_157.8 S4 ME4SA4	C903_157.8 S4 MX4SA4	176	C903_157.8 P112 BE112M4	C903_157.8 P112 BX112M4	177
9.7	3744	1.1	149.1	35000	C803_149.1 S4 ME4SA4	C803_149.1 S4 MX4SA4	173	C803_149.1 P112 BE112M4	C803_149.1 P112 BX112M4	174
9.8	3674	2.0	146.3	60000	C903_146.3 S4 ME4SA4	C903_146.3 S4 MX4SA4	176	C903_146.3 P112 BE112M4	C903_146.3 P112 BX112M4	177
10.5	3432	1.2	136.7	35000	C803_136.7 S4 ME4SA4	C803_136.7 S4 MX4SA4	173	C803_136.7 P112 BE112M4	C803_136.7 P112 BX112M4	174
10.7	3368	2.1	134.1	60000	C903_134.1 S4 ME4SA4	C903_134.1 S4 MX4SA4	176	C903_134.1 P112 BE112M4	C903_134.1 P112 BX112M4	177
12.1	3000	1.3	119.5	35000	C803_119.5 S4 ME4SA4	C803_119.5 S4 MX4SA4	173	C803_119.5 P112 BE112M4	C803_119.5 P112 BX112M4	174
12.3	2931	2.5	116.7	60000	C903_116.7 S4 ME4SA4	C903_116.7 S4 MX4SA4	176	C903_116.7 P112 BE112M4	C903_116.7 P112 BX112M4	177
13.2	2750	1.5	109.5	35000	C803_109.5 S4 ME4SA4	C803_109.5 S4 MX4SA4	173	C803_109.5 P112 BE112M4	C803_109.5 P112 BX112M4	174
13.5	2687	2.6	107.0	60000	C903_107.0 S4 ME4SA4	C903_107.0 S4 MX4SA4	176	C903_107.0 P112 BE112M4	C903_107.0 P112 BX112M4	177
14.8	2445	1.6	97.4	35000	C803_97.4 S4 ME4SA4	C803_97.4 S4 MX4SA4	173	C803_97.4 P112 BE112M4	C803_97.4 P112 BX112M4	174
15.0	2417	3.0	96.2	60000	C903_96.2 S4 ME4SA4	C903_96.2 S4 MX4SA4	176	C903_96.2 P112 BE112M4	C903_96.2 P112 BX112M4	177
16.1	2242	1.8	89.3	35000	C803_89.3 S4 ME4SA4	C803_89.3 S4 MX4SA4	173	C803_89.3 P112 BE112M4	C803_89.3 P112 BX112M4	174
16.3	2215	1.0	88.2	25000	C703_88.2 S4 ME4SA4	C703_88.2 S4 MX4SA4	170	C703_88.2 P112 BE112M4	C703_88.2 P112 BX112M4	171



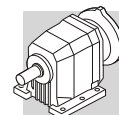
4 kW

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
17.7	2044	1.1	81.4	25000	C703_81.4 S4 ME4SA4	C703_81.4 S4 MX4SA4	170	C703_81.4 P112 BE112M4	C703_81.4 P112 BX112M4	171
18.7	1931	2.1	76.9	35000	C803_76.9 S4 ME4SA4	C803_76.9 S4 MX4SA4	173	C803_76.9 P112 BE112M4	C803_76.9 P112 BX112M4	174
20.2	1791	1.3	71.3	25000	C703_71.3 S4 ME4SA4	C703_71.3 S4 MX4SA4	170	C703_71.3 P112 BE112M4	C703_71.3 P112 BX112M4	171
20.4	1770	2.3	70.5	35000	C803_70.5 S4 ME4SA4	C803_70.5 S4 MX4SA4	173	C803_70.5 P112 BE112M4	C803_70.5 P112 BX112M4	174
21.3	1645	1.0	67.7	16000	C613_67.7 S4 ME4SA4	C613_67.7 S4 MX4SA4	166	C613_67.7 P112 BE112M4	C613_67.7 P112 BX112M4	167
21.9	1654	1.4	65.9	25000	C703_65.9 S4 ME4SA4	C703_65.9 S4 MX4SA4	170	C703_65.9 P112 BE112M4	C703_65.9 P112 BX112M4	171
23.0	1570	2.5	62.5	35000	C803_62.5 S4 ME4SA4	C803_62.5 S4 MX4SA4	173	C803_62.5 P112 BE112M4	C803_62.5 P112 BX112M4	174
24.6	1424	1.1	58.6	16000	C613_58.6 S4 ME4SA4	C613_58.6 S4 MX4SA4	166	C613_58.6 P112 BE112M4	C613_58.6 P112 BX112M4	167
25.1	1439	2.8	57.3	35000	C803_57.3 S4 ME4SA4	C803_57.3 S4 MX4SA4	173	C803_57.3 P112 BE112M4	C803_57.3 P112 BX112M4	174
25.5	1419	1.6	56.5	25000	C703_56.5 S4 ME4SA4	C703_56.5 S4 MX4SA4	170	C703_56.5 P112 BE112M4	C703_56.5 P112 BX112M4	171
26.9	1299	1.2	53.5	16000	C613_53.5 S4 ME4SA4	C613_53.5 S4 MX4SA4	166	C613_53.5 P112 BE112M4	C613_53.5 P112 BX112M4	167
27.6	1310	1.8	52.2	25000	C703_52.2 S4 ME4SA4	C703_52.2 S4 MX4SA4	170	C703_52.2 P112 BE112M4	C703_52.2 P112 BX112M4	171
30	1157	1.4	47.6	16000	C613_47.6 S4 ME4SA4	C613_47.6 S4 MX4SA4	166	C613_47.6 P112 BE112M4	C613_47.6 P112 BX112M4	167
30	1191	3.2	47.4	35000	C803_47.4 S4 ME4SA4	C803_47.4 S4 MX4SA4	173	C803_47.4 P112 BE112M4	C803_47.4 P112 BX112M4	174
32	1122	2.0	44.7	25000	C703_44.7 S4 ME4SA4	C703_44.7 S4 MX4SA4	170	C703_44.7 P112 BE112M4	C703_44.7 P112 BX112M4	171
33	1092	3.5	43.5	35000	C803_43.5 S4 ME4SA4	C803_43.5 S4 MX4SA4	173	C803_43.5 P112 BE112M4	C803_43.5 P112 BX112M4	174
33	1056	1.5	43.4	16000	C613_43.4 S4 ME4SA4	C613_43.4 S4 MX4SA4	166	C613_43.4 P112 BE112M4	C613_43.4 P112 BX112M4	167
35	1036	2.2	41.3	25000	C703_41.3 S4 ME4SA4	C703_41.3 S4 MX4SA4	170	C703_41.3 P112 BE112M4	C703_41.3 P112 BX112M4	171
36	1016	1.0	40.5	10000	C513_40.5 S4 ME4SA4	C513_40.5 S4 MX4SA4	162	C513_40.5 P112 BE112M4	C513_40.5 P112 BX112M4	163
38	975	1.4	38.0	16000	C612_38.0 S4 ME4SA4	C612_38.0 S4 MX4SA4	166	C612_38.0 P112 BE112M4	C612_38.0 P112 BX112M4	167
39	928	1.1	37.0	10000	C513_37.0 S4 ME4SA4	C513_37.0 S4 MX4SA4	162	C513_37.0 P112 BE112M4	C513_37.0 P112 BX112M4	163
40	878	1.8	36.1	15700	C613_36.1 S4 ME4SA4	C613_36.1 S4 MX4SA4	166	C613_36.1 P112 BE112M4	C613_36.1 P112 BX112M4	167
41	891	2.4	34.7	23400	C702_34.7 S4 ME4SA4	C702_34.7 S4 MX4SA4	170	C702_34.7 P112 BE112M4	C702_34.7 P112 BX112M4	171
42	878	1.4	34.2	15700	C612_34.2 S4 ME4SA4	C612_34.2 S4 MX4SA4	166	C612_34.2 P112 BE112M4	C612_34.2 P112 BX112M4	167
44	847	0.9	33.0	10000	C512_33.0 S4 ME4SA4	C512_33.0 S4 MX4SA4	162	C512_33.0 P112 BE112M4	C512_33.0 P112 BX112M4	163
44	801	1.9	33.0	15500	C613_33.0 S4 ME4SA4	C613_33.0 S4 MX4SA4	166	C613_33.0 P112 BE112M4	C613_33.0 P112 BX112M4	167
47	781	1.7	30.4	15300	C612_30.4 S4 ME4SA4	C612_30.4 S4 MX4SA4	166	C612_30.4 P112 BE112M4	C612_30.4 P112 BX112M4	167
48	755	1.3	30.1	9880	C513_30.1 S4 ME4SA4	C513_30.1 S4 MX4SA4	162	C513_30.1 P112 BE112M4	C513_30.1 P112 BX112M4	163
48	764	1.0	29.8	10000	C512_29.8 S4 ME4SA4	C512_29.8 S4 MX4SA4	162	C512_29.8 P112 BE112M4	C512_29.8 P112 BX112M4	163
52	711	3.0	27.7	22300	C702_27.7 S4 ME4SA4	C702_27.7 S4 MX4SA4	170	C702_27.7 P112 BE112M4	C702_27.7 P112 BX112M4	171
52	689	1.4	27.4	9550	C513_27.4 S4 ME4SA4	C513_27.4 S4 MX4SA4	162	C513_27.4 P112 BE112M4	C513_27.4 P112 BX112M4	163
53	703	1.9	27.4	14900	C612_27.4 S4 ME4SA4	C612_27.4 S4 MX4SA4	166	C612_27.4 P112 BE112M4	C612_27.4 P112 BX112M4	167
54	651	2.2	26.8	14700	C613_26.8 S4 ME4SA4	C613_26.8 S4 MX4SA4	166	C613_26.8 P112 BE112M4	C613_26.8 P112 BX112M4	167
56	665	1.2	25.9	10000	C512_25.9 S4 ME4SA4	C512_25.9 S4 MX4SA4	162	C512_25.9 P112 BE112M4	C512_25.9 P112 BX112M4	163
58	637	2.1	24.8	14600	C612_24.8 S4 ME4SA4	C612_24.8 S4 MX4SA4	166	C612_24.8 P112 BE112M4	C612_24.8 P112 BX112M4	167
60	600	1.5	23.9	9250	C513_23.9 S4 ME4SA4	C513_23.9 S4 MX4SA4	162	C513_23.9 P112 BE112M4	C513_23.9 P112 BX112M4	163
62	599	1.3	23.4	10000	C512_23.4 S4 ME4SA4	C512_23.4 S4 MX4SA4	162	C512_23.4 P112 BE112M4	C512_23.4 P112 BX112M4	163
64	573	2.4	22.4	14200	C612_22.4 S4 ME4SA4	C612_22.4 S4 MX4SA4	166	C612_22.4 P112 BE112M4	C612_22.4 P112 BX112M4	167
69	538	1.5	21.0	9920	C512_21.0 S4 ME4SA4	C512_21.0 S4 MX4SA4	162	C512_21.0 P112 BE112M4	C512_21.0 P112 BX112M4	163
73	507	1.0	19.8	4760	C412_19.8 S4 ME4SA4	C412_19.8 S4 MX4SA4	158	C412_19.8 P112 BE112M4	C412_19.8 P112 BX112M4	159
73	503	2.7	19.6	13800	C612_19.6 S4 ME4SA4	C612_19.6 S4 MX4SA4	166	C612_19.6 P112 BE112M4	C612_19.6 P112 BX112M4	167
76	485	1.7	18.9	9730	C512_18.9 S4 ME4SA4	C512_18.9 S4 MX4SA4	162	C512_18.9 P112 BE112M4	C512_18.9 P112 BX112M4	163
81	456	1.1	17.8	4720	C412_17.8 S4 ME4SA4	C412_17.8 S4 MX4SA4	158	C412_17.8 P112 BE112M4	C412_17.8 P112 BX112M4	159
82	453	3.0	17.7	13400	C612_17.7 S4 ME4SA4	C612_17.7 S4 MX4SA4	166	C612_17.7 P112 BE112M4	C612_17.7 P112 BX112M4	167
87	426	1.9	16.6	9440	C512_16.6 S4 ME4SA4	C512_16.6 S4 MX4SA4	162	C512_16.6 P112 BE112M4	C512_16.6 P112 BX112M4	163
90	409	3.3	15.9	13100	C612_15.9 S4 ME4SA4	C612_15.9 S4 MX4SA4	166	C612_15.9 P112 BE112M4	C612_15.9 P112 BX112M4	167
91	406	1.1	15.8	4740	C412_15.8 S4 ME4SA4	C412_15.8 S4 MX4SA4	158	C412_15.8 P112 BE112M4	C412_15.8 P112 BX112M4	159
96	384	2.1	15.0	9230	C512_15.0 S4 ME4SA4	C512_15.0 S4 MX4SA4	162	C512_15.0 P112 BE112M4	C512_15.0 P112 BX112M4	163
98	378	1.0	14.8	3880	C362_14.8 S4 ME4SA4	C362_14.8 S4 MX4SA4	154	C362_14.8 P112 BE112M4	C362_14.8 P112 BX112M4	155
101	365	1.2	14.2	4690	C412_14.2 S4 ME4SA4	C412_14.2 S4 MX4SA4	158	C412_14.2 P112 BE112M4	C412_14.2 P112 BX112M4	159
108	342	1.1	13.3	3840	C362_13.3 S4 ME4SA4	C362_13.3 S4 MX4SA4	154	C362_13.3 P112 BE112M4	C362_13.3 P112 BX112M4	155
110	337	2.2	13.1	8930	C512_13.1 S4 ME4SA4	C512_13.1 S4 MX4SA4	162	C512_13.1 P112 BE112M4	C512_13.1 P112 BX112M4	163
116	318	1.3	12.4	4660	C412_12.4 S4 ME4SA4	C412_12.4 S4 MX4SA4	158	C412_12.4 P112 BE112M4	C412_12.4 P112 BX112M4	159
122	304	2.5	11.8	8720	C512_11.8 S4 ME4SA4	C512_11.8 S4 MX4SA4	162	C512_11.8 P112 BE112M4	C512_11.8 P112 BX112M4	163
123	299	1.3	11.7	3840	C362_11.7 S4 ME4SA4	C362_11.7 S4 MX4SA4	154	C362_11.7 P112 BE112M4	C362_11.7 P112 BX112M4	155
129	286	1.5	11.2	4580	C412_11.2 S4 ME4SA4	C412_11.2 S4 MX4SA4	158	C412_11.2 P112 BE112M4	C412_11.2 P112 BX112M4	159
136	272	1.4	10.6	3780	C362_10.6 S4 ME4SA4	C362_10.6 S4 MX4SA4	154	C362_10.6 P112 BE112M4	C362_10.6 P112 BX112M4	155

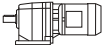





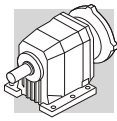
4 kW

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
148	250	2.7	9.8	8290	C512_9.8 S4 ME4SA4	C512_9.8 S4 MX4SA4	162	C512_9.8 P112 BE112M4	C512_9.8 P112 BX112M4	163
150	246	1.6	9.6	4510	C412_9.6 S4 ME4SA4	C412_9.6 S4 MX4SA4	158	C412_9.6 P112 BE112M4	C412_9.6 P112 BX112M4	159
155	238	0.9	9.3	3150	C322_9.3 S4 ME4SA4	C322_9.3 S4 MX4SA4	150	C322_9.3 P112 BE112M4	C322_9.3 P112 BX112M4	151
164	226	1.7	8.8	3720	C362_8.8 S4 ME4SA4	C362_8.8 S4 MX4SA4	154	C362_8.8 P112 BE112M4	C362_8.8 P112 BX112M4	155
164	225	3.0	8.8	8070	C512_8.8 S4 ME4SA4	C512_8.8 S4 MX4SA4	162	C512_8.8 P112 BE112M4	C512_8.8 P112 BX112M4	163
167	222	1.7	8.6	4420	C412_8.6 S4 ME4SA4	C412_8.6 S4 MX4SA4	158	C412_8.6 P112 BE112M4	C412_8.6 P112 BX112M4	159
170	218	1.0	8.5	3110	C322_8.5 S4 ME4SA4	C322_8.5 S4 MX4SA4	150	C322_8.5 P112 BE112M4	C322_8.5 P112 BX112M4	151
179	206	1.8	8.0	3650	C362_8.0 S4 ME4SA4	C362_8.0 S4 MX4SA4	154	C362_8.0 P112 BE112M4	C362_8.0 P112 BX112M4	155
186	199	3.2	7.8	7800	C512_7.8 S4 ME4SA4	C512_7.8 S4 MX4SA4	162	C512_7.8 P112 BE112M4	C512_7.8 P112 BX112M4	163
186	195	1.4	15.6	3090	C322_15.6 S4 ME4SA2		150	C322_15.6 P112 BE112M2		151
201	184	1.1	7.2	3070	C322_7.2 S4 ME4SA4	C322_7.2 S4 MX4SA4	150	C322_7.2 P112 BE112M4	C322_7.2 P112 BX112M4	151
204	181	2.0	7.1	4280	C412_7.1 S4 ME4SA4	C412_7.1 S4 MX4SA4	158	C412_7.1 P112 BE112M4	C412_7.1 P112 BX112M4	159
206	176	1.4	14.1	3040	C322_14.1 S4 ME4SA2		150	C322_14.1 P112 BE112M2		151
206	179	3.5	7.0	7580	C512_7.0 S4 ME4SA4	C512_7.0 S4 MX4SA4	162	C512_7.0 P112 BE112M4	C512_7.0 P112 BX112M4	163
212	174	2.0	6.8	3580	C362_6.8 S4 ME4SA4	C362_6.8 S4 MX4SA4	154	C362_6.8 P112 BE112M4	C362_6.8 P112 BX112M4	155
226	163	2.1	6.4	4180	C412_6.4 S4 ME4SA4	C412_6.4 S4 MX4SA4	158	C412_6.4 P112 BE112M4	C412_6.4 P112 BX112M4	159
230	161	1.0	6.3	2840	C322_6.3 S4 ME4SA4	C322_6.3 S4 MX4SA4	150	C322_6.3 P112 BE112M4	C322_6.3 P112 BX112M4	151
235	154	1.6	12.3	2990	C322_12.3 S4 ME4SA2		150	C322_12.3 P112 BE112M2		151
242	153	1.7	6.0	3840	C412_6.0 S4 ME4SA4	C412_6.0 S4 MX4SA4	158	C412_6.0 P112 BE112M4	C412_6.0 P112 BX112M4	159
246	150	1.3	5.8	3310	C362_5.8 S4 ME4SA4	C362_5.8 S4 MX4SA4	154	C362_5.8 P112 BE112M4	C362_5.8 P112 BX112M4	155
255	145	1.1	5.7	2780	C322_5.7 S4 ME4SA4	C322_5.7 S4 MX4SA4	150	C322_5.7 P112 BE112M4	C322_5.7 P112 BX112M4	151
259	140	1.6	11.2	2900	C322_11.2 S4 ME4SA2		150	C322_11.2 P112 BE112M2		151
273	135	1.5	5.3	3200	C362_5.3 S4 ME4SA4	C362_5.3 S4 MX4SA4	154	C362_5.3 P112 BE112M4	C362_5.3 P112 BX112M4	155
291	127	1.2	5.0	2760	C322_5.0 S4 ME4SA4	C322_5.0 S4 MX4SA4	150	C322_5.0 P112 BE112M4	C322_5.0 P112 BX112M4	151
301	121	1.2	9.6	1680				C222_9.6 P112 BE112M2		147
309	120	2.2	4.7	3500	C412_4.7 S4 ME4SA4	C412_4.7 S4 MX4SA4	158	C412_4.7 P112 BE112M4	C412_4.7 P112 BX112M4	159
312	119	1.7	4.6	3180	C362_4.6 S4 ME4SA4	C362_4.6 S4 MX4SA4	154	C362_4.6 P112 BE112M4	C362_4.6 P112 BX112M4	155
312	116	1.9	9.3	2840	C322_9.3 S4 ME4SA2		150	C322_9.3 P112 BE112M2		151
320	115	1.3	4.5	2690	C322_4.5 S4 ME4SA4	C322_4.5 S4 MX4SA4	150	C322_4.5 P112 BE112M4	C322_4.5 P112 BX112M4	151
335	108	1.3	8.7	1660				C222_8.7 P112 BE112M2		147
338	109	0.9	4.3	1300				C222_4.3 P112 BE112M4	C222_4.3 P112 BX112M4	147
342	106	2.0	8.5	2750	C322_8.5 S4 ME4SA2		150	C322_8.5 P112 BE112M2		151
343	108	1.9	4.2	3060	C362_4.2 S4 ME4SA4	C362_4.2 S4 MX4SA4	154	C362_4.2 P112 BE112M4	C362_4.2 P112 BX112M4	155
386	96	1.6	3.7	2640	C322_3.7 S4 ME4SA4	C322_3.7 S4 MX4SA4	150	C322_3.7 P112 BE112M4	C322_3.7 P112 BX112M4	151
388	95	0.9	3.7	1560				C222_3.7 P112 BE112M4	C222_3.7 P112 BX112M4	147
399	93	2.8	3.6	3180	C412_3.6 S4 ME4SA4	C412_3.6 S4 MX4SA4	158	C412_3.6 P112 BE112M4	C412_3.6 P112 BX112M4	159
405	90	2.2	7.2	2690	C322_7.2 S4 ME4SA2		150	C322_7.2 P112 BE112M2		151
409	89	1.5	7.1	1650				C222_7.1 P112 BE112M2		147
413	89	2.2	3.5	3010	C362_3.5 S4 ME4SA4	C362_3.5 S4 MX4SA4	154	C362_3.5 P112 BE112M4	C362_3.5 P112 BX112M4	155
422	87	1.6	3.4	2580	C322_3.4 S4 ME4SA4	C322_3.4 S4 MX4SA4	150	C322_3.4 P112 BE112M4	C322_3.4 P112 BX112M4	151
433	85	1.0	3.3	1540				C222_3.3 P112 BE112M4	C222_3.3 P112 BX112M4	147
453	82	2.5	3.2	2890	C362_3.2 S4 ME4SA4	C362_3.2 S4 MX4SA4	154	C362_3.2 P112 BE112M4	C362_3.2 P112 BX112M4	155
463	78	2.0	6.3	2530	C322_6.3 S4 ME4SA2		150	C322_6.3 P112 BE112M2		151
476	76	1.4	6.1	1540				C222_6.1 P112 BE112M2		147
500	74	1.8	2.9	2500	C322_2.9 S4 ME4SA4	C322_2.9 S4 MX4SA4	150	C322_2.9 P112 BE112M4	C322_2.9 P112 BX112M4	151
519	70	1.5	5.6	1520				C222_5.6 P112 BE112M2		147
529	70	1.1	2.7	1530				C222_2.7 P112 BE112M4	C222_2.7 P112 BX112M4	147
536	69	2.9	2.7	2840	C362_2.7 S4 ME4SA4	C362_2.7 S4 MX4SA4	154	C362_2.7 P112 BE112M4	C362_2.7 P112 BX112M4	155
586	62	2.4	5.0	2410	C322_5.0 S4 ME4SA2		150	C322_5.0 P112 BE112M2		151
608	60	1.7	4.8	1500				C222_4.8 P112 BE112M2		147
644	56	2.7	4.5	2330	C322_4.5 S4 ME4SA2		150	C322_4.5 P112 BE112M2		151
681	53	1.8	4.3	1470				C222_4.3 P112 BE112M2		147
776	47	3.2	3.7	2250	C322_3.7 S4 ME4SA2		150	C322_3.7 P112 BE112M2		151
782	46	1.9	3.7	1450				C222_3.7 P112 BE112M2		147
851	43	3.2	3.4	2170	C322_3.4 S4 ME4SA2		150	C322_3.4 P112 BE112M2		151
872	42	2.0	3.3	1410				C222_3.3 P112 BE112M2		147
1007	36	3.6	2.9	2100	C322_2.9 S4 ME4SA2		150	C322_2.9 P112 BE112M2		151
1065	34	2.3	2.7	1370				C222_2.7 P112 BE112M2		147



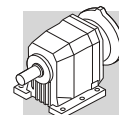
5.5 kW

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
3.6	13276	0.9	409.8	85000	C1004_409.8 S4 ME4SB4	C1004_409.8 S4 MX4SB4	179	C1004_409.8 P132 BE132S4	C1004_409.8 P132 BX132SB4	180
3.8	12328	1.0	380.5	85000	C1004_380.5 S4 ME4SB4	C1004_380.5 S4 MX4SB4	179	C1004_380.5 P132 BE132S4	C1004_380.5 P132 BX132SB4	180
4.5	10485	1.1	323.6	85000	C1004_323.6 S4 ME4SB4	C1004_323.6 S4 MX4SB4	179	C1004_323.6 P132 BE132S4	C1004_323.6 P132 BX132SB4	180
4.9	9736	1.2	300.5	85000	C1004_300.5 S4 ME4SB4	C1004_300.5 S4 MX4SB4	179	C1004_300.5 P132 BE132S4	C1004_300.5 P132 BX132SB4	180
5.6	8521	1.4	263.0	85000	C1004_263.0 S4 ME4SB4	C1004_263.0 S4 MX4SB4	179	C1004_263.0 P132 BE132S4	C1004_263.0 P132 BX132SB4	180
6.0	7913	1.5	244.2	85000	C1004_244.2 S4 ME4SB4	C1004_244.2 S4 MX4SB4	179	C1004_244.2 P132 BE132S4	C1004_244.2 P132 BX132SB4	180
6.3	7507	1.0	231.7	60000	C904_231.7 S4 ME4SB4	C904_231.7 S4 MX4SB4	176	C904_231.7 P132 BE132S4	C904_231.7 P132 BX132SB4	177
6.9	6881	1.0	212.4	60000	C904_212.4 S4 ME4SB4	C904_212.4 S4 MX4SB4	176	C904_212.4 P132 BE132S4	C904_212.4 P132 BX132SB4	177
7.3	6468	1.9	199.6	85000	C1004_199.6 S4 ME4SB4	C1004_199.6 S4 MX4SB4	179	C1004_199.6 P132 BE132S4	C1004_199.6 P132 BX132SB4	180
7.9	6006	2.0	185.4	85000	C1004_185.4 S4 ME4SB4	C1004_185.4 S4 MX4SB4	179	C1004_185.4 P132 BE132S4	C1004_185.4 P132 BX132SB4	180
8.5	5762	1.2	172.1	60000	C903_172.1 S4 ME4SB4	C903_172.1 S4 MX4SB4	176	C903_172.1 P132 BE132S4	C903_172.1 P132 BX132SB4	177
9.0	5252	2.3	162.1	85000	C1004_162.1 S4 ME4SB4	C1004_162.1 S4 MX4SB4	179	C1004_162.1 P132 BE132S4	C1004_162.1 P132 BX132SB4	180
9.3	5282	1.3	157.8	60000	C903_157.8 S4 ME4SB4	C903_157.8 S4 MX4SB4	176	C903_157.8 P132 BE132S4	C903_157.8 P132 BX132SB4	177
9.7	5036	2.4	150.4	85000	C1003_150.4 S4 ME4SB4	C1003_150.4 S4 MX4SB4	179	C1003_150.4 P132 BE132S4	C1003_150.4 P132 BX132SB4	180
10.0	4899	1.5	146.3	60000	C903_146.3 S4 ME4SB4	C903_146.3 S4 MX4SB4	176	C903_146.3 P132 BE132S4	C903_146.3 P132 BX132SB4	177
10.5	4677	2.4	139.7	85000	C1003_139.7 S4 ME4SB4	C1003_139.7 S4 MX4SB4	179	C1003_139.7 P132 BE132S4	C1003_139.7 P132 BX132SB4	180
10.9	4491	1.6	134.1	60000	C903_134.1 S4 ME4SB4	C903_134.1 S4 MX4SB4	176	C903_134.1 P132 BE132S4	C903_134.1 P132 BX132SB4	177
12.1	4035	3.0	120.5	85000	C1003_120.5 S4 ME4SB4	C1003_120.5 S4 MX4SB4	179	C1003_120.5 P132 BE132S4	C1003_120.5 P132 BX132SB4	180
12.2	3999	1.0	119.5	35000	C803_119.5 S4 ME4SB4	C803_119.5 S4 MX4SB4	173	C803_119.5 P132 BE132S4	C803_119.5 P132 BX132SB4	174
12.5	3908	1.8	116.7	60000	C903_116.7 S4 ME4SB4	C903_116.7 S4 MX4SB4	176	C903_116.7 P132 BE132S4	C903_116.7 P132 BX132SB4	177
13.3	3666	1.1	109.5	35000	C803_109.5 S4 ME4SB4	C803_109.5 S4 MX4SB4	173	C803_109.5 P132 BE132S4	C803_109.5 P132 BX132SB4	174
13.6	3582	2.0	107.0	60000	C903_107.0 S4 ME4SB4	C903_107.0 S4 MX4SB4	176	C903_107.0 P132 BE132S4	C903_107.0 P132 BX132SB4	177
15.0	3260	1.2	97.4	35000	C803_97.4 S4 ME4SB4	C803_97.4 S4 MX4SB4	173	C803_97.4 P132 BE132S4	C803_97.4 P132 BX132SB4	174
15.2	3222	2.2	96.2	60000	C903_96.2 S4 ME4SB4	C903_96.2 S4 MX4SB4	176	C903_96.2 P132 BE132S4	C903_96.2 P132 BX132SB4	177
16.4	2989	1.3	89.3	35000	C803_89.3 S4 ME4SB4	C803_89.3 S4 MX4SB4	173	C803_89.3 P132 BE132S4	C803_89.3 P132 BX132SB4	174
16.5	2954	2.4	88.2	60000	C903_88.2 S4 ME4SB4	C903_88.2 S4 MX4SB4	176	C903_88.2 P132 BE132S4	C903_88.2 P132 BX132SB4	177
18.0	2719	2.6	81.2	59100	C903_81.2 S4 ME4SB4	C903_81.2 S4 MX4SB4	176	C903_81.2 P132 BE132S4	C903_81.2 P132 BX132SB4	177
19.0	2575	1.6	76.9	35000	C803_76.9 S4 ME4SB4	C803_76.9 S4 MX4SB4	173	C803_76.9 P132 BE132S4	C803_76.9 P132 BX132SB4	174
19.6	2492	2.8	74.4	58200	C903_74.4 S4 ME4SB4	C903_74.4 S4 MX4SB4	176	C903_74.4 P132 BE132S4	C903_74.4 P132 BX132SB4	177
20.5	2388	1.0	71.3	25000	C703_71.3 S4 ME4SB4	C703_71.3 S4 MX4SB4	170	C703_71.3 P132 BE132S4	C703_71.3 P132 BX132SB4	171
20.7	2360	1.7	70.5	35000	C803_70.5 S4 ME4SB4	C803_70.5 S4 MX4SB4	173	C803_70.5 P132 BE132S4	C803_70.5 P132 BX132SB4	174
22.2	2205	1.0	65.9	25000	C703_65.9 S4 ME4SB4	C703_65.9 S4 MX4SB4	170	C703_65.9 P132 BE132S4	C703_65.9 P132 BX132SB4	171
23.4	2093	1.9	62.5	35000	C803_62.5 S4 ME4SB4	C803_62.5 S4 MX4SB4	173	C803_62.5 P132 BE132S4	C803_62.5 P132 BX132SB4	174
25.5	1918	2.1	57.3	35000	C803_57.3 S4 ME4SB4	C803_57.3 S4 MX4SB4	173	C803_57.3 P132 BE132S4	C803_57.3 P132 BX132SB4	174
25.8	1892	1.2	56.5	25000	C703_56.5 S4 ME4SB4	C703_56.5 S4 MX4SB4	170	C703_56.5 P132 BE132S4	C703_56.5 P132 BX132SB4	171
27.3	1732	0.9	53.5	15000	C613_53.5 S4 ME4SB4	C613_53.5 S4 MX4SB4	166	C613_53.5 P132 BE132S4	C613_53.5 P132 BX132SB4	167
28.0	1746	1.3	52.2	24700	C703_52.2 S4 ME4SB4	C703_52.2 S4 MX4SB4	170	C703_52.2 P132 BE132S4	C703_52.2 P132 BX132SB4	171
31	1543	1.0	47.6	15300	C613_47.6 S4 ME4SB4	C613_47.6 S4 MX4SB4	166	C613_47.6 P132 BE132S4	C613_47.6 P132 BX132SB4	167
31	1588	2.4	47.4	35000	C803_47.4 S4 ME4SB4	C803_47.4 S4 MX4SB4	173	C803_47.4 P132 BE132S4	C803_47.4 P132 BX132SB4	174
33	1497	1.5	44.7	24100	C703_44.7 S4 ME4SB4	C703_44.7 S4 MX4SB4	170	C703_44.7 P132 BE132S4	C703_44.7 P132 BX132SB4	171
34	1456	2.6	43.5	35000	C803_43.5 S4 ME4SB4	C803_43.5 S4 MX4SB4	173	C803_43.5 P132 BE132S4	C803_43.5 P132 BX132SB4	174
34	1408	1.1	43.4	15000	C613_43.4 S4 ME4SB4	C613_43.4 S4 MX4SB4	166	C613_43.4 P132 BE132S4	C613_43.4 P132 BX132SB4	167
35	1381	1.7	41.3	23800	C703_41.3 S4 ME4SB4	C703_41.3 S4 MX4SB4	170	C703_41.3 P132 BE132S4	C703_41.3 P132 BX132SB4	171
37	1338	2.4	39.1	35000	C802_39.1 S4 ME4SB4	C802_39.1 S4 MX4SB4	173	C802_39.1 P132 BE132S4	C802_39.1 P132 BX132SB4	174
38	1300	1.0	38.0	14800	C612_38.0 S4 ME4SB4	C612_38.0 S4 MX4SB4	166	C612_38.0 P132 BE132S4	C612_38.0 P132 BX132SB4	167
40	1171	1.3	36.1	14800	C613_36.1 S4 ME4SB4	C613_36.1 S4 MX4SB4	166	C613_36.1 P132 BE132S4	C613_36.1 P132 BX132SB4	167
42	1188	1.8	34.7	22100	C702_34.7 S4 ME4SB4	C702_34.7 S4 MX4SB4	170	C702_34.7 P132 BE132S4	C702_34.7 P132 BX132SB4	171
43	1170	1.0	34.2	14500	C612_34.2 S4 ME4SB4	C612_34.2 S4 MX4SB4	166	C612_34.2 P132 BE132S4	C612_34.2 P132 BX132SB4	167
44	1068	1.4	33.0	14500	C613_33.0 S4 ME4SB4	C613_33.0 S4 MX4SB4	166	C613_33.0 P132 BE132S4	C613_33.0 P132 BX132SB4	167
47	1072	3.5	31.3	33400	C802_31.3 S4 ME4SB4	C802_31.3 S4 MX4SB4	173	C802_31.3 P132 BE132S4	C802_31.3 P132 BX132SB4	174
48	1041	1.3	30.4	14300	C612_30.4 S4 ME4SB4	C612_30.4 S4 MX4SB4	166	C612_30.4 P132 BE132S4	C612_30.4 P132 BX132SB4	167
49	1006	1.0	30.1	9610	C513_30.1 S4 ME4SB4	C513_30.1 S4 MX4SB4	162	C513_30.1 P132 BE132S4	C513_30.1 P132 BX132SB4	163
53	948	2.2	27.7	21200	C702_27.7 S4 ME4SB4	C702_27.7 S4 MX4SB4	170	C702_27.7 P132 BE132S4	C702_27.7 P132 BX132SB4	171
53	919	1.1	27.4	9490	C513_27.4 S4 ME4SB4	C513_27.4 S4 MX4SB4	162	C513_27.4 P132 BE132S4	C513_27.4 P132 BX132SB4	163
53	938	1.4	27.4	13900	C612_27.4 S4 ME4SB4	C612_27.4 S4 MX4SB4	166	C612_27.4 P132 BE132S4	C612_27.4 P132 BX132SB4	167
56	886	0.9	25.9	9350	C512_25.9 S4 ME4SB4	C512_25.9 S4 MX4SB4	162	C512_25.9 P132 BE132S4	C512_25.9 P132 BX132SB4	163
59	849	1.6	24.8	13700	C612_24.8 S4 ME4SB4	C612_24.8 S4 MX4SB4	166	C612_24.8 P132 BE132S4	C612_24.8 P132 BX132SB4	167



5.5 kW

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
61	800	1.2	23.9	9540	C513_23.9 S4 ME4SB4	C513_23.9 S4 MX4SB4	162	C513_23.9 P132 BE132S4	C513_23.9 P132 BX132SB4	163
63	799	1.0	23.4	9310	C512_23.4 S4 ME4SB4	C512_23.4 S4 MX4SB4	162	C512_23.4 P132 BE132S4	C512_23.4 P132 BX132SB4	163
64	782	2.7	22.9	20400	C702_22.9 S4 ME4SB4	C702_22.9 S4 MX4SB4	170	C702_22.9 P132 BE132S4	C702_22.9 P132 BX132SB4	171
65	764	1.8	22.4	13400	C612_22.4 S4 ME4SB4	C612_22.4 S4 MX4SB4	166	C612_22.4 P132 BE132S4	C612_22.4 P132 BX132SB4	167
70	717	1.1	21.0	9150	C512_21.0 S4 ME4SB4	C512_21.0 S4 MX4SB4	162	C512_21.0 P132 BE132S4	C512_21.0 P132 BX132SB4	163
74	670	2.0	19.6	13100	C612_19.6 S4 ME4SB4	C612_19.6 S4 MX4SB4	166	C612_19.6 P132 BE132S4	C612_19.6 P132 BX132SB4	167
76	660	3.2	19.3	19700	C702_19.3 S4 ME4SB4	C702_19.3 S4 MX4SB4	170	C702_19.3 P132 BE132S4	C702_19.3 P132 BX132SB4	171
77	646	1.2	18.9	9030	C512_18.9 S4 ME4SB4	C512_18.9 S4 MX4SB4	162	C512_18.9 P132 BE132S4	C512_18.9 P132 BX132SB4	163
83	604	2.2	17.7	12700	C612_17.7 S4 ME4SB4	C612_17.7 S4 MX4SB4	166	C612_17.7 P132 BE132S4	C612_17.7 P132 BX132SB4	167
88	568	1.4	16.6	8810	C512_16.6 S4 ME4SB4	C512_16.6 S4 MX4SB4	162	C512_16.6 P132 BE132S4	C512_16.6 P132 BX132SB4	163
92	545	2.5	15.9	12500	C612_15.9 S4 ME4SB4	C612_15.9 S4 MX4SB4	166	C612_15.9 P132 BE132S4	C612_15.9 P132 BX132SB4	167
98	512	1.6	15.0	8660	C512_15.0 S4 ME4SB4	C512_15.0 S4 MX4SB4	162	C512_15.0 P132 BE132S4	C512_15.0 P132 BX132SB4	163
102	491	2.8	14.3	12100	C612_14.3 S4 ME4SB4	C612_14.3 S4 MX4SB4	166	C612_14.3 P132 BE132S4	C612_14.3 P132 BX132SB4	167
102	487	0.9	14.2	4000	C412_14.2 S4 ME4SB4	C412_14.2 S4 MX4SB4	158	C412_14.2 P132 BE132S4	C412_14.2 P132 BX132SB4	159
111	449	1.7	13.1	8420	C512_13.1 S4 ME4SB4	C512_13.1 S4 MX4SB4	162	C512_13.1 P132 BE132S4	C512_13.1 P132 BX132SB4	163
118	424	1.0	12.4	4060	C412_12.4 S4 ME4SB4	C412_12.4 S4 MX4SB4	158	C412_12.4 P132 BE132S4	C412_12.4 P132 BX132SB4	159
121	414	3.3	12.1	11600	C612_12.1 S4 ME4SB4	C612_12.1 S4 MX4SB4	166	C612_12.1 P132 BE132S4	C612_12.1 P132 BX132SB4	167
123	405	1.9	11.8	8250	C512_11.8 S4 ME4SB4	C512_11.8 S4 MX4SB4	162	C512_11.8 P132 BE132S4	C512_11.8 P132 BX132SB4	163
125	399	1.0	11.7	3380	C362_11.7 S4 ME4SB4	C362_11.7 S4 MX4SB4	154	C362_11.7 P132 BE132S4	C362_11.7 P132 BX132SB4	155
131	382	1.1	11.2	4030	C412_11.2 S4 ME4SB4	C412_11.2 S4 MX4SB4	158	C412_11.2 P132 BE132S4	C412_11.2 P132 BX132SB4	159
138	363	1.0	10.6	3350	C362_10.6 S4 ME4SB4	C362_10.6 S4 MX4SB4	154	C362_10.6 P132 BE132S4	C362_10.6 P132 BX132SB4	155
150	334	2.1	9.8	7890	C512_9.8 S4 ME4SB4	C512_9.8 S4 MX4SB4	162	C512_9.8 P132 BE132S4	C512_9.8 P132 BX132SB4	163
152	328	1.2	9.6	4030	C412_9.6 S4 ME4SB4	C412_9.6 S4 MX4SB4	158	C412_9.6 P132 BE132S4	C412_9.6 P132 BX132SB4	159
166	301	1.3	8.8	3350	C362_8.8 S4 ME4SB4	C362_8.8 S4 MX4SB4	154	C362_8.8 P132 BE132S4	C362_8.8 P132 BX132SB4	155
166	301	2.3	8.8	7700	C512_8.8 S4 ME4SB4	C512_8.8 S4 MX4SB4	162	C512_8.8 P132 BE132S4	C512_8.8 P132 BX132SB4	163
182	275	1.3	8.0	3330	C362_8.0 S4 ME4SB4	C362_8.0 S4 MX4SB4	154	C362_8.0 P132 BE132S4	C362_8.0 P132 BX132SB4	155
188	265	2.4	7.8	7460	C512_7.8 S4 ME4SB4	C512_7.8 S4 MX4SB4	162	C512_7.8 P132 BE132S4	C512_7.8 P132 BX132SB4	163
207	242	1.5	7.1	3920	C412_7.1 S4 ME4SB4	C412_7.1 S4 MX4SB4	158	C412_7.1 P132 BE132S4	C412_7.1 P132 BX132SB4	159
209	239	2.6	7.0	7280	C512_7.0 S4 ME4SB4	C512_7.0 S4 MX4SB4	162	C512_7.0 P132 BE132S4	C512_7.0 P132 BX132SB4	163
215	232	1.5	6.8	3280	C362_6.8 S4 ME4SB4	C362_6.8 S4 MX4SB4	154	C362_6.8 P132 BE132S4	C362_6.8 P132 BX132SB4	155
229	218	1.6	6.4	3840	C412_6.4 S4 ME4SB4	C412_6.4 S4 MX4SB4	158	C412_6.4 P132 BE132S4	C412_6.4 P132 BX132SB4	159
243	205	3.2	6.0	9480	C612_6.0 S4 ME4SB4	C612_6.0 S4 MX4SB4	166	C612_6.0 P132 BE132S4	C612_6.0 P132 BX132SB4	167
245	204	1.3	6.0	3430	C412_6.0 S4 ME4SB4	C412_6.0 S4 MX4SB4	158	C412_6.0 P132 BE132S4	C412_6.0 P132 BX132SB4	159
250	200	1.0	5.8	3020	C362_5.8 S4 ME4SB4	C362_5.8 S4 MX4SB4	154	C362_5.8 P132 BE132S4	C362_5.8 P132 BX132SB4	155
259	193	2.3	5.6	6720	C512_5.6 S4 ME4SB4	C512_5.6 S4 MX4SB4	162	C512_5.6 P132 BE132S4	C512_5.6 P132 BX132SB4	163
262	190	2.2	11.2	3770	C412_11.2 S4 ME4SB2		158	C412_11.2 P132 BE132SA2		159
277	181	1.1	5.3	2930	C362_5.3 S4 ME4SB4	C362_5.3 S4 MX4SB4	154	C362_5.3 P132 BE132S4	C362_5.3 P132 BX132SB4	155
292	171	2.5	3.3	6530	C512_3.3 S5 ME5SA6		162	C512_3.3 P160 BE160MA6		163
295	169	0.9	5.0	2480	C322_5.0 S4 ME4SB4	C322_5.0 S4 MX4SB4	150	C322_5.0 P132 BE132S4	C322_5.0 P132 BX132SB4	151
305	164	2.4	9.6	3680	C412_9.6 S4 ME4SB2		158	C412_9.6 P132 BE132SA2		159
313	159	1.6	4.7	3360	C412_4.7 S4 ME4SB4	C412_4.7 S4 MX4SB4	158	C412_4.7 P132 BE132S4	C412_4.7 P132 BX132SB4	159
316	158	1.3	4.6	2860	C362_4.6 S4 ME4SB4	C362_4.6 S4 MX4SB4	154	C362_4.6 P132 BE132S4	C362_4.6 P132 BX132SB4	155
324	154	1.0	4.5	2500	C322_4.5 S4 ME4SB4	C322_4.5 S4 MX4SB4	150	C322_4.5 P132 BE132S4	C322_4.5 P132 BX132SB4	151
328	152	2.9	4.5	6330	C512_4.5 S4 ME4SB4	C512_4.5 S4 MX4SB4	162	C512_4.5 P132 BE132S4	C512_4.5 P132 BX132SB4	163
338	147	2.6	8.6	3600	C412_8.6 S4 ME4SB2		158	C412_8.6 P132 BE132SA2		159
348	144	1.4	4.2	2830	C362_4.2 S4 ME4SB4	C362_4.2 S4 MX4SB4	154	C362_4.2 P132 BE132S4	C362_4.2 P132 BX132SB4	155
364	137	2.7	8.0	2850	C362_8.0 S4 ME4SB2		154	C362_8.0 P132 BE132SA2		155
367	136	2.9	2.6	6150	C512_2.6 S5 ME5SA6		162	C512_2.6 P160 BE160MA6		163
391	128	1.2	3.7	2410	C322_3.7 S4 ME4SB4	C322_3.7 S4 MX4SB4	150	C322_3.7 P132 BE132S4	C322_3.7 P132 BX132SB4	151
404	123	2.1	3.6	3240	C412_3.6 S4 ME4SB4	C412_3.6 S4 MX4SB4	158	C412_3.6 P132 BE132S4	C412_3.6 P132 BX132SB4	159
414	121	2.9	7.1	3460	C412_7.1 S4 ME4SB2		158	C412_7.1 P132 BE132SA2		159
419	119	1.7	3.5	2750	C362_3.5 S4 ME4SB4	C362_3.5 S4 MX4SB4	154	C362_3.5 P132 BE132S4	C362_3.5 P132 BX132SB4	155
428	117	1.2	3.4	2370	C322_3.4 S4 ME4SB4	C322_3.4 S4 MX4SB4	150	C322_3.4 P132 BE132S4	C322_3.4 P132 BX132SB4	151
431	116	3.1	6.8	2750	C362_6.8 S4 ME4SB2		154	C362_6.8 P132 BE132SA2		155
459	109	1.8	3.2	2700	C362_3.2 S4 ME4SB4	C362_3.2 S4 MX4SB4	154	C362_3.2 P132 BE132S4	C362_3.2 P132 BX132SB4	155
460	109	3.2	6.4	3370	C412_6.4 S4 ME4SB2		158	C412_6.4 P132 BE132SA2		159
491	102	2.6	6.0	3140	C412_6.0 S4 ME4SB2		158	C412_6.0 P132 BE132SA2		159

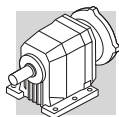


5.5 kW

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N				IEC		
					IE2	IE3		IE2	IE3	
500	100	2.0	5.8	2620	C362_5.8 S4 ME4SB2		154	C362_5.8 P132 BE132SA2		155
507	98	1.3	2.9	2310	C322_2.9 S4 ME4SB4	C322_2.9 S4 MX4SB4	150	C322_2.9 P132 BE132S4	C322_2.9 P132 BX132SB4	151
543	92	2.2	2.7	2620	C362_2.7 S4 ME4SB4	C362_2.7 S4 MX4SB4	154	C362_2.7 P132 BE132S4	C362_2.7 P132 BX132SB4	155
549	91	2.7	2.7	3070	C412_2.7 S4 ME4SB4	C412_2.7 S4 MX4SB4	158	C412_2.7 P132 BE132S4	C412_2.7 P132 BX132SB4	159
554	90	2.2	5.3	2550	C362_5.3 S4 ME4SB2		154	C362_5.3 P132 BE132SA2		155
591	84	1.8	5.0	2230	C322_5.0 S4 ME4SB2		150	C322_5.0 P132 BE132SA2		151
627	80	3.3	4.7	2990	C412_4.7 S4 ME4SB2		158	C412_4.7 P132 BE132SA2		159
650	77	2.0	4.5	2190	C322_4.5 S4 ME4SB2		150	C322_4.5 P132 BE132SA2		151
783	64	2.4	3.7	2120	C322_3.7 S4 ME4SB2		150	C322_3.7 P132 BE132SA2		151
858	58	2.4	3.4	2080	C322_3.4 S4 ME4SB2		150	C322_3.4 P132 BE132SA2		151
1016	49	2.6	2.9	2000	C322_2.9 S4 ME4SB2		150	C322_2.9 P132 BE132SA2		151

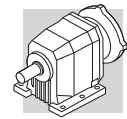
7.5 kW

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N				IEC		
					IE2	IE3		IE2	IE3	
4.8	13252	0.9	300.5	85000	C1004_300.5 S4 ME4LA4	C1004_300.5 S4 MX4LA4	179	C1004_300.5 P132 BE132MA4	C1004_300.5 P132 BX132MA4	180
5.5	11598	1.0	263.0	85000	C1004_263.0 S4 ME4LA4	C1004_263.0 S4 MX4LA4	179	C1004_263.0 P132 BE132MA4	C1004_263.0 P132 BX132MA4	180
6.0	10770	1.1	244.2	85000	C1004_244.2 S4 ME4LA4	C1004_244.2 S4 MX4LA4	179	C1004_244.2 P132 BE132MA4	C1004_244.2 P132 BX132MA4	180
7.3	8804	1.4	199.6	85000	C1004_199.6 S4 ME4LA4	C1004_199.6 S4 MX4LA4	179	C1004_199.6 P132 BE132MA4	C1004_199.6 P132 BX132MA4	180
7.8	8175	1.5	185.4	85000	C1004_185.4 S4 ME4LA4	C1004_185.4 S4 MX4LA4	179	C1004_185.4 P132 BE132MA4	C1004_185.4 P132 BX132MA4	180
8.5	7843	0.9	172.1	60000	C903_172.1 S4 ME4LA4	C903_172.1 S4 MX4LA4	176	C903_172.1 P132 BE132MA4	C903_172.1 P132 BX132MA4	177
9.0	7149	1.7	162.1	85000	C1004_162.1 S4 ME4LA4	C1004_162.1 S4 MX4LA4	179	C1004_162.1 P132 BE132MA4	C1004_162.1 P132 BX132MA4	180
9.2	7189	1.0	157.8	60000	C903_157.8 S4 ME4LA4	C903_157.8 S4 MX4LA4	176	C903_157.8 P132 BE132MA4	C903_157.8 P132 BX132MA4	177
9.7	6855	1.8	150.4	85000	C1003_150.4 S4 ME4LA4	C1003_150.4 S4 MX4LA4	179	C1003_150.4 P132 BE132MA4	C1003_150.4 P132 BX132MA4	180
9.9	6668	1.1	146.3	59600	C903_146.3 S4 ME4LA4	C903_146.3 S4 MX4LA4	176	C903_146.3 P132 BE132MA4	C903_146.3 P132 BX132MA4	177
10.4	6365	1.7	139.7	85000	C1003_139.7 S4 ME4LA4	C1003_139.7 S4 MX4LA4	179	C1003_139.7 P132 BE132MA4	C1003_139.7 P132 BX132MA4	180
10.8	6113	1.2	134.1	59400	C903_134.1 S4 ME4LA4	C903_134.1 S4 MX4LA4	176	C903_134.1 P132 BE132MA4	C903_134.1 P132 BX132MA4	177
12.1	5492	2.2	120.5	85000	C1003_120.5 S4 ME4LA4	C1003_120.5 S4 MX4LA4	179	C1003_120.5 P132 BE132MA4	C1003_120.5 P132 BX132MA4	180
12.5	5319	1.4	116.7	58600	C903_116.7 S4 ME4LA4	C903_116.7 S4 MX4LA4	176	C903_116.7 P132 BE132MA4	C903_116.7 P132 BX132MA4	177
13.0	5100	2.4	111.9	85000	C1003_111.9 S4 ME4LA4	C1003_111.9 S4 MX4LA4	179	C1003_111.9 P132 BE132MA4	C1003_111.9 P132 BX132MA4	180
13.6	4876	1.5	107.0	58200	C903_107.0 S4 ME4LA4	C903_107.0 S4 MX4LA4	176	C903_107.0 P132 BE132MA4	C903_107.0 P132 BX132MA4	177
14.6	4548	2.6	99.8	85000	C1003_99.8 S4 ME4LA4	C1003_99.8 S4 MX4LA4	179	C1003_99.8 P132 BE132MA4	C1003_99.8 P132 BX132MA4	180
14.9	4438	0.9	97.4	34500	C803_97.4 S4 ME4LA4	C803_97.4 S4 MX4LA4	173	C803_97.4 P132 BE132MA4	C803_97.4 P132 BX132MA4	174
15.1	4386	1.6	96.2	57500	C903_96.2 S4 ME4LA4	C903_96.2 S4 MX4LA4	176	C903_96.2 P132 BE132MA4	C903_96.2 P132 BX132MA4	177
15.7	4223	2.8	92.7	85000	C1003_92.7 S4 ME4LA4	C1003_92.7 S4 MX4LA4	179	C1003_92.7 P132 BE132MA4	C1003_92.7 P132 BX132MA4	180
16.3	4068	1.0	89.3	35000	C803_89.3 S4 ME4LA4	C803_89.3 S4 MX4LA4	173	C803_89.3 P132 BE132MA4	C803_89.3 P132 BX132MA4	174
16.5	4020	1.8	88.2	56600	C903_88.2 S4 ME4LA4	C903_88.2 S4 MX4LA4	176	C903_88.2 P132 BE132MA4	C903_88.2 P132 BX132MA4	177
17.0	3899	3.1	85.6	85000	C1003_85.6 S4 ME4LA4	C1003_85.6 S4 MX4LA4	179	C1003_85.6 P132 BE132MA4	C1003_85.6 P132 BX132MA4	180
17.9	3701	1.9	81.2	56100	C903_81.2 S4 ME4LA4	C903_81.2 S4 MX4LA4	176	C903_81.2 P132 BE132MA4	C903_81.2 P132 BX132MA4	177
18.9	3505	1.1	76.9	35000	C803_76.9 S4 ME4LA4	C803_76.9 S4 MX4LA4	173	C803_76.9 P132 BE132MA4	C803_76.9 P132 BX132MA4	174
19.5	3392	2.1	74.4	55200	C903_74.4 S4 ME4LA4	C903_74.4 S4 MX4LA4	176	C903_74.4 P132 BE132MA4	C903_74.4 P132 BX132MA4	177
20.6	3213	1.2	70.5	35000	C803_70.5 S4 ME4LA4	C803_70.5 S4 MX4LA4	173	C803_70.5 P132 BE132MA4	C803_70.5 P132 BX132MA4	174
22.5	2943	2.4	64.6	54000	C903_64.6 S4 ME4LA4	C903_64.6 S4 MX4LA4	176	C903_64.6 P132 BE132MA4	C903_64.6 P132 BX132MA4	177
23.3	2848	1.4	62.5	35000	C803_62.5 S4 ME4LA4	C803_62.5 S4 MX4LA4	173	C803_62.5 P132 BE132MA4	C803_62.5 P132 BX132MA4	174
24.6	2698	2.6	59.2	53000	C903_59.2 S4 ME4LA4	C903_59.2 S4 MX4LA4	176	C903_59.2 P132 BE132MA4	C903_59.2 P132 BX132MA4	177
25.4	2611	1.5	57.3	35000	C803_57.3 S4 ME4LA4	C803_57.3 S4 MX4LA4	173	C803_57.3 P132 BE132MA4	C803_57.3 P132 BX132MA4	174
26.5	2501	2.9	54.9	52400	C903_54.9 S4 ME4LA4	C903_54.9 S4 MX4LA4	176	C903_54.9 P132 BE132MA4	C903_54.9 P132 BX132MA4	177
27.9	2377	1.0	52.2	22900	C703_52.2 S4 ME4LA4	C703_52.2 S4 MX4LA4	170	C703_52.2 P132 BE132MA4	C703_52.2 P132 BX132MA4	171
31	2162	1.8	47.4	35000	C803_47.4 S4 ME4LA4	C803_47.4 S4 MX4LA4	173	C803_47.4 P132 BE132MA4	C803_47.4 P132 BX132MA4	174
33	2037	1.1	44.7	22500	C703_44.7 S4 ME4LA4	C703_44.7 S4 MX4LA4	170	C703_44.7 P132 BE132MA4	C703_44.7 P132 BX132MA4	171
33	1982	1.9	43.5	35000	C803_43.5 S4 ME4LA4	C803_43.5 S4 MX4LA4	173	C803_43.5 P132 BE132MA4	C803_43.5 P132 BX132MA4	174
35	1880	1.2	41.3	22300	C703_41.3 S4 ME4LA4	C703_41.3 S4 MX4LA4	170	C703_41.3 P132 BE132MA4	C703_41.3 P132 BX132MA4	171
37	1821	1.8	39.1	33600	C802_39.1 S4 ME4LA4	C802_39.1 S4 MX4LA4	173	C802_39.1 P132 BE132MA4	C802_39.1 P132 BX132MA4	174



7.5 kW

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
40	1594	1.0	36.1	13300	C613_36.1 S4 ME4LA4	C613_36.1 S4 MX4LA4	166	C613_36.1 P132 BE132MA4	C613_36.1 P132 BX132MA4	167
41	1634	3.3	35.1	47300	C902_35.1 S4 ME4LA4	C902_35.1 S4 MX4LA4	176	C902_35.1 P132 BE132MA4	C902_35.1 P132 BX132MA4	177
42	1617	1.3	34.7	20500	C702_34.7 S4 ME4LA4	C702_34.7 S4 MX4LA4	170	C702_34.7 P132 BE132MA4	C702_34.7 P132 BX132MA4	171
44	1454	1.0	33.0	13100	C613_33.0 S4 ME4LA4	C613_33.0 S4 MX4LA4	166	C613_33.0 P132 BE132MA4	C613_33.0 P132 BX132MA4	167
46	1459	2.5	31.3	32200	C802_31.3 S4 ME4LA4	C802_31.3 S4 MX4LA4	173	C802_31.3 P132 BE132MA4	C802_31.3 P132 BX132MA4	174
48	1417	1.0	30.4	13000	C612_30.4 S4 ME4LA4	C612_30.4 S4 MX4LA4	166	C612_30.4 P132 BE132MA4	C612_30.4 P132 BX132MA4	167
50	1295	1.1	29.4	13100	C613_29.4 S4 ME4LA4	C613_29.4 S4 MX4LA4	166	C613_29.4 P132 BE132MA4	C613_29.4 P132 BX132MA4	167
52	1290	1.6	27.7	20000	C702_27.7 S4 ME4LA4	C702_27.7 S4 MX4LA4	170	C702_27.7 P132 BE132MA4	C702_27.7 P132 BX132MA4	171
53	1276	1.1	27.4	12800	C612_27.4 S4 ME4LA4	C612_27.4 S4 MX4LA4	166	C612_27.4 P132 BE132MA4	C612_27.4 P132 BX132MA4	167
56	1208	3.1	25.9	31000	C802_25.9 S4 ME4LA4	C802_25.9 S4 MX4LA4	173	C802_25.9 P132 BE132MA4	C802_25.9 P132 BX132MA4	174
59	1155	1.2	24.8	12700	C612_24.8 S4 ME4LA4	C612_24.8 S4 MX4LA4	166	C612_24.8 P132 BE132MA4	C612_24.8 P132 BX132MA4	167
61	1115	3.2	24.0	30500	C802_24.0 S4 ME4LA4	C802_24.0 S4 MX4LA4	173	C802_24.0 P132 BE132MA4	C802_24.0 P132 BX132MA4	174
64	1064	2.0	22.9	19400	C702_22.9 S4 ME4LA4	C702_22.9 S4 MX4LA4	170	C702_22.9 P132 BE132MA4	C702_22.9 P132 BX132MA4	171
65	1040	1.3	22.4	12500	C612_22.4 S4 ME4LA4	C612_22.4 S4 MX4LA4	166	C612_22.4 P132 BE132MA4	C612_22.4 P132 BX132MA4	167
65	1035	3.6	22.2	30000	C802_22.2 S4 ME4LA4	C802_22.2 S4 MX4LA4	173	C802_22.2 P132 BE132MA4	C802_22.2 P132 BX132MA4	174
67	994	0.9	21.8	7200	C513_21.8 S4 ME4LA4	C513_21.8 S4 MX4LA4	162	C513_21.8 P132 BE132MA4	C513_21.8 P132 BX132MA4	163
74	912	1.5	19.6	12300	C612_19.6 S4 ME4LA4	C612_19.6 S4 MX4LA4	166	C612_19.6 P132 BE132MA4	C612_19.6 P132 BX132MA4	167
75	898	2.3	19.3	18900	C702_19.3 S4 ME4LA4	C702_19.3 S4 MX4LA4	170	C702_19.3 P132 BE132MA4	C702_19.3 P132 BX132MA4	171
77	879	0.9	18.9	7100	C512_18.9 S4 ME4LA4	C512_18.9 S4 MX4LA4	162	C512_18.9 P132 BE132MA4	C512_18.9 P132 BX132MA4	163
82	822	1.6	17.7	12000	C612_17.7 S4 ME4LA4	C612_17.7 S4 MX4LA4	166	C612_17.7 P132 BE132MA4	C612_17.7 P132 BX132MA4	167
87	778	2.6	16.7	18200	C702_16.7 S4 ME4LA4	C702_16.7 S4 MX4LA4	170	C702_16.7 P132 BE132MA4	C702_16.7 P132 BX132MA4	171
88	773	1.0	16.6	8070	C512_16.6 S4 ME4LA4	C512_16.6 S4 MX4LA4	162	C512_16.6 P132 BE132MA4	C512_16.6 P132 BX132MA4	163
91	742	1.8	15.9	11800	C612_15.9 S4 ME4LA4	C612_15.9 S4 MX4LA4	166	C612_15.9 P132 BE132MA4	C612_15.9 P132 BX132MA4	167
95	714	2.9	15.3	18000	C702_15.3 S4 ME4LA4	C702_15.3 S4 MX4LA4	170	C702_15.3 P132 BE132MA4	C702_15.3 P132 BX132MA4	171
97	697	1.1	15.0	8000	C512_15.0 S4 ME4LA4	C512_15.0 S4 MX4LA4	162	C512_15.0 P132 BE132MA4	C512_15.0 P132 BX132MA4	163
101	668	2.0	14.3	11500	C612_14.3 S4 ME4LA4	C612_14.3 S4 MX4LA4	166	C612_14.3 P132 BE132MA4	C612_14.3 P132 BX132MA4	167
111	611	1.2	13.1	7840	C512_13.1 S4 ME4LA4	C512_13.1 S4 MX4LA4	162	C512_13.1 P132 BE132MA4	C512_13.1 P132 BX132MA4	163
120	563	2.4	12.1	11100	C612_12.1 S4 ME4LA4	C612_12.1 S4 MX4LA4	166	C612_12.1 P132 BE132MA4	C612_12.1 P132 BX132MA4	167
123	551	1.4	11.8	7730	C512_11.8 S4 ME4LA4	C512_11.8 S4 MX4LA4	162	C512_11.8 P132 BE132MA4	C512_11.8 P132 BX132MA4	163
134	507	2.7	10.9	10900	C612_10.9 S4 ME4LA4	C612_10.9 S4 MX4LA4	166	C612_10.9 P132 BE132MA4	C612_10.9 P132 BX132MA4	167
148	457	3.0	9.8	10600	C612_9.8 S4 ME4LA4	C612_9.8 S4 MX4LA4	166	C612_9.8 P132 BE132MA4	C612_9.8 P132 BX132MA4	167
149	454	1.5	9.8	7450	C512_9.8 S4 ME4LA4	C512_9.8 S4 MX4LA4	162	C512_9.8 P132 BE132MA4	C512_9.8 P132 BX132MA4	163
152	447	0.9	9.6	3300	C412_9.6 S4 ME4LA4	C412_9.6 S4 MX4LA4	158	C412_9.6 P132 BE132MA4	C412_9.6 P132 BX132MA4	159
165	412	3.3	8.8	10300	C612_8.8 S4 ME4LA4	C612_8.8 S4 MX4LA4	166	C612_8.8 P132 BE132MA4	C612_8.8 P132 BX132MA4	167
165	410	0.9	8.8	2880	C362_8.8 S4 ME4LA4	C362_8.8 S4 MX4LA4	154	C362_8.8 P132 BE132MA4	C362_8.8 P132 BX132MA4	155
166	409	1.7	8.8	7320	C512_8.8 S4 ME4LA4	C512_8.8 S4 MX4LA4	162	C512_8.8 P132 BE132MA4	C512_8.8 P132 BX132MA4	163
168	402	1.0	8.6	3430	C412_8.6 S4 ME4LA4	C412_8.6 S4 MX4LA4	158	C412_8.6 P132 BE132MA4	C412_8.6 P132 BX132MA4	159
181	374	1.0	8.0	2900	C362_8.0 S4 ME4LA4	C362_8.0 S4 MX4LA4	154	C362_8.0 P132 BE132MA4	C362_8.0 P132 BX132MA4	155
188	361	1.8	7.8	7120	C512_7.8 S4 ME4LA4	C512_7.8 S4 MX4LA4	162	C512_7.8 P132 BE132MA4	C512_7.8 P132 BX132MA4	163
206	329	1.1	7.1	3470	C412_7.1 S4 ME4LA4	C412_7.1 S4 MX4LA4	158	C412_7.1 P132 BE132MA4	C412_7.1 P132 BX132MA4	159
208	325	1.9	7.0	6970	C512_7.0 S4 ME4LA4	C512_7.0 S4 MX4LA4	162	C512_7.0 P132 BE132MA4	C512_7.0 P132 BX132MA4	163
215	316	1.1	6.8	2900	C362_6.8 S4 ME4LA4	C362_6.8 S4 MX4LA4	154	C362_6.8 P132 BE132MA4	C362_6.8 P132 BX132MA4	155
229	296	1.2	6.4	3440	C412_6.4 S4 ME4LA4	C412_6.4 S4 MX4LA4	158	C412_6.4 P132 BE132MA4	C412_6.4 P132 BX132MA4	159
242	279	2.4	6.0	9180	C612_6.0 S4 ME4LA4	C612_6.0 S4 MX4LA4	166	C612_6.0 P132 BE132MA4	C612_6.0 P132 BX132MA4	167
244	277	0.9	6.0	2920	C412_6.0 S4 ME4LA4	C412_6.0 S4 MX4LA4	158	C412_6.0 P132 BE132MA4	C412_6.0 P132 BX132MA4	159
258	262	1.7	5.6	6410	C512_5.6 S4 ME4LA4	C512_5.6 S4 MX4LA4	162	C512_5.6 P132 BE132MA4	C512_5.6 P132 BX132MA4	163
312	217	1.2	4.7	2960	C412_4.7 S4 ME4LA4	C412_4.7 S4 MX4LA4	158	C412_4.7 P132 BE132MA4	C412_4.7 P132 BX132MA4	159
315	215	0.9	4.6	2600	C362_4.6 S4 ME4LA4	C362_4.6 S4 MX4LA4	154	C362_4.6 P132 BE132MA4	C362_4.6 P132 BX132MA4	155
319	212	3.1	4.6	8550	C612_4.6 S4 ME4LA4	C612_4.6 S4 MX4LA4	166	C612_4.6 P132 BE132MA4	C612_4.6 P132 BX132MA4	167
327	207	2.1	4.5	6090	C512_4.5 S4 ME4LA4	C512_4.5 S4 MX4LA4	162	C512_4.5 P132 BE132MA4	C512_4.5 P132 BX132MA4	163
342	199	3.3	2.8	8390	C612_2.8 S5 ME5SB6		166	C612_2.8 P160 BE160MB6		167
346	196	1.0	4.2	2550	C362_4.2 S4 ME4LA4	C362_4.2 S4 MX4LA4	154	C362_4.2 P132 BE132MA4	C362_4.2 P132 BX132MA4	155
367	185	2.2	2.6	5920	C512_2.6 S5 ME5SB6		162	C512_2.6 P160 BE160MB6		163
403	168	1.5	3.6	2930	C412_3.6 S4 ME4LA4	C412_3.6 S4 MX4LA4	158	C412_3.6 P132 BE132MA4	C412_3.6 P132 BX132MA4	159
414	164	2.2	7.1	3240	C412_7.1 S4 ME4LA2		158	C412_7.1 P132 BE132SB2		159
417	162	1.2	3.5	2500	C362_3.5 S4 ME4LA4	C362_3.5 S4 MX4LA4	154	C362_3.5 P132 BE132MA4	C362_3.5 P132 BX132MA4	155
440	154	2.7	3.3	5660	C512_3.3 S4 ME4LA4	C512_3.3 S4 MX4LA4	162	C512_3.3 P132 BE132MA4	C512_3.3 P132 BX132MA4	163

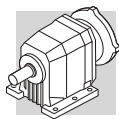


7.5 kW

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
457	148	1.4	3.2	2500	C362_3.2 S4 ME4LA4	C362_3.2 S4 MX4LA4	154	C362_3.2 P132 BE132MA4	C362_3.2 P132 BX132MA4	155
460	148	2.3	6.4	3170	C412_6.4 S4 ME4LA2		158	C412_6.4 P132 BE132SB2		159
491	138	1.9	6.0	2880	C412_6.0 S4 ME4LA2		158	C412_6.0 P132 BE132SB2		159
505	134	1.0	2.9	2100	C322_2.9 S4 ME4LA4	C322_2.9 S4 MX4LA4	150	C322_2.9 P132 BN132MA4	C322_2.9 P132 BX132MA4	151
519	131	3.3	5.6	5420	C512_5.6 S4 ME4LA2		162	C512_5.6 P132 BE132SB2		163
542	125	1.6	2.7	2440	C362_2.7 S4 ME4LA4	C362_2.7 S4 MX4LA4	154	C362_2.7 P132 BE132MA4	C362_2.7 P132 BX132MA4	155
547	124	2.0	2.7	2840	C412_2.7 S4 ME4LA4	C412_2.7 S4 MX4LA4	158	C412_2.7 P132 BE132MA4	C412_2.7 P132 BX132MA4	159
553	122	3.3	2.6	5330	C512_2.6 S4 ME4LA4	C512_2.6 S4 MX4LA4	162	C512_2.6 P132 BE132MA4	C512_2.6 P132 BX132MA4	163
554	123	1.6	5.3	2370	C362_5.3 S4 ME4LA2		154	C362_5.3 P132 BE132SB2		155
627	108	2.4	4.7	2790	C412_4.7 S4 ME4LA2		158	C412_4.7 P132 BE132SB2		159
633	108	1.9	4.6	2330	C362_4.6 S4 ME4LA2		154	C362_4.6 P132 BE132SB2		155
696	98	2.0	4.2	2290	C362_4.2 S4 ME4LA2		154	C362_4.2 P132 BE132SB2		155
810	84	3.0	3.6	2670	C412_3.6 S4 ME4LA2		158	C412_3.6 P132 BE132SB2		159
839	81	2.5	3.5	2210	C362_3.5 S4 ME4LA2		154	C362_3.5 P132 BE132SB2		155
919	74	2.7	3.2	2170	C362_3.2 S4 ME4LA2		154	C362_3.2 P132 BE132SB2		155
1089	62	3.2	2.7	2100	C362_2.7 S4 ME4LA2		154	C362_2.7 P132 BE132SB2		155

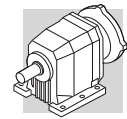
9.2 kW

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
5.9	13408	0.9	244.2	85000	C1004_244.2 S4 ME4LB4		179	C1004_244.2 P132 BE132MB4	C1004_244.2 P160 BX160MA4	180
7.3	10960	1.1	199.6	85000	C1004_199.6 S4 ME4LB4		179	C1004_199.6 P132 BE132MB4	C1004_199.6 P160 BX160MA4	180
7.8	10177	1.2	185.4	85000	C1004_185.4 S4 ME4LB4		179	C1004_185.4 P132 BE132MB4	C1004_185.4 P160 BX160MA4	180
8.9	8900	1.3	162.1	85000	C1004_162.1 S4 ME4LB4		179	C1004_162.1 P132 BE132MB4	C1004_162.1 P160 BX160MA4	180
9.6	8534	1.4	150.4	85000	C1003_150.4 S4 ME4LB4	C1003_150.4 S5 MX5SA4	179	C1003_150.4 P132 BE132MB4	C1003_150.4 P160 BX160MA4	180
10.4	7924	1.4	139.7	85000	C1003_139.7 S4 ME4LB4	C1003_139.7 S5 MX5SA4	179	C1003_139.7 P132 BE132MB4	C1003_139.7 P160 BX160MA4	180
10.8	7610	0.9	134.1	54900	C903_134.1 S4 ME4LB4	C903_134.1 S5 MX5SA4	176	C903_134.1 P132 BE132MB4	C903_134.1 P160 BX160MA4	177
12.0	6837	1.8	120.5	85000	C1003_120.5 S4 ME4LB4	C1003_120.5 S5 MX5SA4	179	C1003_120.5 P132 BE132MB4	C1003_120.5 P160 BX160MA4	180
12.4	6622	1.1	116.7	54800	C903_116.7 S4 ME4LB4	C903_116.7 S5 MX5SA4	176	C903_116.7 P132 BE132MB4	C903_116.7 P160 BX160MA4	177
13.0	6348	1.9	111.9	85000	C1003_111.9 S4 ME4LB4	C1003_111.9 S5 MX5SA4	179	C1003_111.9 P132 BE132MB4	C1003_111.9 P160 BX160MA4	180
13.6	6070	1.2	107.0	54600	C903_107.0 S4 ME4LB4	C903_107.0 S5 MX5SA4	176	C903_107.0 P132 BE132MB4	C903_107.0 P160 BX160MA4	177
14.5	5662	2.1	99.8	85000	C1003_99.8 S4 ME4LB4	C1003_99.8 S5 MX5SA4	179	C1003_99.8 P132 BE132MB4	C1003_99.8 P160 BX160MA4	180
15.1	5460	1.3	96.2	54200	C903_96.2 S4 ME4LB4	C903_96.2 S5 MX5SA4	176	C903_96.2 P132 BE132MB4	C903_96.2 P160 BX160MA4	177
15.6	5257	2.3	92.7	85000	C1003_92.7 S4 ME4LB4	C1003_92.7 S5 MX5SA4	179	C1003_92.7 P132 BE132MB4	C1003_92.7 P160 BX160MA4	180
16.4	5005	1.4	88.2	53700	C903_88.2 S4 ME4LB4	C903_88.2 S5 MX5SA4	176	C903_88.2 P132 BE132MB4	C903_88.2 P160 BX160MA4	177
16.9	4854	2.5	85.6	85000	C1003_85.6 S4 ME4LB4	C1003_85.6 S5 MX5SA4	179	C1003_85.6 P132 BE132MB4	C1003_85.6 P160 BX160MA4	180
17.9	4607	1.6	81.2	53300	C903_81.2 S4 ME4LB4	C903_81.2 S5 MX5SA4	176	C903_81.2 P132 BE132MB4	C903_81.2 P160 BX160MA4	177
18.3	4507	2.7	79.4	85000	C1003_79.4 S4 ME4LB4	C1003_79.4 S5 MX5SA4	179	C1003_79.4 P132 BE132MB4	C1003_79.4 P160 BX160MA4	180
18.9	4363	0.9	76.9	33700	C803_76.9 S4 ME4LB4	C803_76.9 S5 MX5SA4	173	C803_76.9 P132 BE132MB4	C803_76.9 P160 BX160MA4	174
19.5	4223	1.7	74.4	52700	C903_74.4 S4 ME4LB4	C903_74.4 S5 MX5SA4	176	C903_74.4 P132 BE132MB4	C903_74.4 P160 BX160MA4	177
20.6	4000	1.0	70.5	35000	C803_70.5 S4 ME4LB4	C803_70.5 S5 MX5SA4	173	C803_70.5 P132 BE132MB4	C803_70.5 P160 BX160MA4	174
22.5	3664	2.0	64.6	51800	C903_64.6 S4 ME4LB4	C903_64.6 S5 MX5SA4	176	C903_64.6 P132 BE132MB4	C903_64.6 P160 BX160MA4	177
23.2	3546	1.1	62.5	35000	C803_62.5 S4 ME4LB4	C803_62.5 S5 MX5SA4	173	C803_62.5 P132 BE132MB4	C803_62.5 P160 BX160MA4	174
24.5	3358	2.1	59.2	51100	C903_59.2 S4 ME4LB4	C903_59.2 S5 MX5SA4	176	C903_59.2 P132 BE132MB4	C903_59.2 P160 BX160MA4	177
25.3	3250	1.2	57.3	35000	C803_57.3 S4 ME4LB4	C803_57.3 S5 MX5SA4	173	C803_57.3 P132 BE132MB4	C803_57.3 P160 BX160MA4	174
26.4	3113	2.3	54.9	50500	C903_54.9 S4 ME4LB4	C903_54.9 S5 MX5SA4	176	C903_54.9 P132 BE132MB4	C903_54.9 P160 BX160MA4	177
28.8	2854	2.5	50.3	49700	C903_50.3 S4 ME4LB4	C903_50.3 S5 MX5SA4	176	C903_50.3 P132 BE132MB4	C903_50.3 P160 BX160MA4	177
31	2692	1.4	47.4	34900	C803_47.4 S4 ME4LB4	C803_47.4 S5 MX5SA4	173	C803_47.4 P132 BE132MB4	C803_47.4 P160 BX160MA4	174
32	2536	0.9	44.7	21100	C703_44.7 S4 ME4LB4	C703_44.7 S5 MX5SA4	170	C703_44.7 P132 BE132MB4	C703_44.7 P160 BX160MA4	171
33	2467	1.5	43.5	34400	C803_43.5 S4 ME4LB4	C803_43.5 S5 MX5SA4	173	C803_43.5 P132 BE132MB4	C803_43.5 P160 BX160MA4	174
34	2439	3.0	43.0	48300	C903_43.0 S4 ME4LB4	C903_43.0 S5 MX5SA4	176	C903_43.0 P132 BE132MB4	C903_43.0 P160 BX160MA4	177
35	2341	1.0	41.3	21000	C703_41.3 S4 ME4LB4	C703_41.3 S5 MX5SA4	170	C703_41.3 P132 BE132MB4	C703_41.3 P160 BX160MA4	171
37	2266	1.4	39.1	32300	C802_39.1 S4 ME4LB4	C802_39.1 S5 MX5SA4	173	C802_39.1 P132 BE132MB4	C802_39.1 P160 BX160MA4	174



9.2 kW

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
41	2034	2.7	35.1	46200	C902_35.1 S4 ME4LB4	C902_35.1 S5 MX5SA4	176	C902_35.1 P132 BE132MB4	C902_35.1 P160 BX160MA4	177
42	2014	1.0	34.7	19200	C702_34.7 S4 ME4LB4	C702_34.7 S5 MX5SA4	170	C702_34.7 P132 BE132MB4	C702_34.7 P160 BX160MA4	171
46	1816	2.0	31.3	31100	C802_31.3 S4 ME4LB4	C802_31.3 S5 MX5SA4	173	C802_31.3 P132 BE132MB4	C802_31.3 P160 BX160MA4	174
49	1706	3.5	29.4	44600	C902_29.4 S4 ME4LB4	C902_29.4 S5 MX5SA4	176	C902_29.4 P132 BE132MB4	C902_29.4 P160 BX160MA4	177
49	1612	0.9	29.4	10500	C613_29.4 S4 ME4LB4	C613_29.4 S5 MX5SA4	166	C613_29.4 P132 BE132MB4	C613_29.4 P160 BX160MA4	167
52	1606	1.3	27.7	18900	C702_27.7 S4 ME4LB4	C702_27.7 S5 MX5SA4	170	C702_27.7 P132 BE132MB4	C702_27.7 P160 BX160MA4	171
54	1470	1.0	26.8	11400	C613_26.8 S4 ME4LB4	C613_26.8 S5 MX5SA4	166	C613_26.8 P132 BE132MB4	C613_26.8 P160 BX160MA4	167
56	1504	2.5	25.9	30300	C802_25.9 S4 ME4LB4	C802_25.9 S5 MX5SA4	173	C802_25.9 P132 BE132MB4	C802_25.9 P160 BX160MA4	174
58	1438	0.9	24.8	11800	C612_24.8 S4 ME4LB4	C612_24.8 S5 MX5SA4	166	C612_24.8 P132 BE132MB4	C612_24.8 P160 BX160MA4	167
61	1388	2.6	24.0	30000	C802_24.0 S4 ME4LB4	C802_24.0 S5 MX5SA4	173	C802_24.0 P132 BE132MB4	C802_24.0 P160 BX160MA4	174
63	1324	1.6	22.9	18500	C702_22.9 S4 ME4LB4	C702_22.9 S5 MX5SA4	170	C702_22.9 P132 BE132MB4	C702_22.9 P160 BX160MA4	171
65	1295	1.0	22.4	11700	C612_22.4 S4 ME4LB4	C612_22.4 S5 MX5SA4	166	C612_22.4 P132 BE132MB4	C612_22.4 P160 BX160MA4	167
65	1289	2.9	22.2	29200	C802_22.2 S4 ME4LB4	C802_22.2 S5 MX5SA4	173	C802_22.2 P132 BE132MB4	C802_22.2 P160 BX160MA4	174
71	1190	3.0	20.5	28900	C802_20.5 S4 ME4LB4	C802_20.5 S5 MX5SA4	173	C802_20.5 P132 BE132MB4	C802_20.5 P160 BX160MA4	174
74	1136	1.2	19.6	11600	C612_19.6 S4 ME4LB4	C612_19.6 S5 MX5SA4	166	C612_19.6 P132 BE132MB4	C612_19.6 P160 BX160MA4	167
75	1118	1.9	19.3	18100	C702_19.3 S4 ME4LB4	C702_19.3 S5 MX5SA4	170	C702_19.3 P132 BE132MB4	C702_19.3 P160 BX160MA4	171
82	1023	1.3	17.7	11400	C612_17.7 S4 ME4LB4	C612_17.7 S5 MX5SA4	166	C612_17.7 P132 BE132MB4	C612_17.7 P160 BX160MA4	167
87	968	2.1	16.7	17500	C702_16.7 S4 ME4LB4	C702_16.7 S5 MX5SA4	170	C702_16.7 P132 BE132MB4	C702_16.7 P160 BX160MA4	171
91	923	1.5	15.9	11200	C612_15.9 S4 ME4LB4	C612_15.9 S5 MX5SA4	166	C612_15.9 P132 BE132MB4	C612_15.9 P160 BX160MA4	167
95	889	2.4	15.3	17500	C702_15.3 S4 ME4LB4	C702_15.3 S5 MX5SA4	170	C702_15.3 P132 BE132MB4	C702_15.3 P160 BX160MA4	171
97	867	0.9	15.0	7430	C512_15.0 S4 ME4LB4	C512_15.0 S5 MX5SA4	162	C512_15.0 P132 BE132MB4	C512_15.0 P160 BX160MA4	163
101	831	1.6	14.3	11000	C612_14.3 S4 ME4LB4	C612_14.3 S5 MX5SA4	166	C612_14.3 P132 BE132MB4	C612_14.3 P160 BX160MA4	167
103	817	2.6	14.1	17000	C702_14.1 S4 ME4LB4	C702_14.1 S5 MX5SA4	170	C702_14.1 P132 BE132MB4	C702_14.1 P160 BX160MA4	171
110	761	1.0	13.1	7340	C512_13.1 S4 ME4LB4	C512_13.1 S5 MX5SA4	162	C512_13.1 P132 BE132MB4	C512_13.1 P160 BX160MA4	163
111	755	2.8	13.0	17000	C702_13.0 S4 ME4LB4	C702_13.0 S5 MX5SA4	170	C702_13.0 P132 BE132MB4	C702_13.0 P160 BX160MA4	171
120	701	1.9	12.1	10700	C612_12.1 S4 ME4LB4	C612_12.1 S5 MX5SA4	166	C612_12.1 P132 BE132MB4	C612_12.1 P160 BX160MA4	167
123	686	1.1	11.8	7280	C512_11.8 S4 ME4LB4	C512_11.8 S5 MX5SA4	162	C512_11.8 P132 BE132MB4	C512_11.8 P160 BX160MA4	163
128	653	3.2	22.9	16500	C702_22.9 S4 ME4LB2	C702_22.9 S5 ME4LB2	170	C702_22.9 P132 BE132MB2	C702_22.9 P160 BE132MB2	171
133	631	2.1	10.9	10500	C612_10.9 S4 ME4LB4	C612_10.9 S5 MX5SA4	166	C612_10.9 P132 BE132MB4	C612_10.9 P160 BX160MA4	167
148	569	2.4	9.8	10300	C612_9.8 S4 ME4LB4	C612_9.8 S5 MX5SA4	166	C612_9.8 P132 BE132MB4	C612_9.8 P160 BX160MA4	167
149	565	1.2	9.8	7080	C512_9.8 S4 ME4LB4	C512_9.8 S5 MX5SA4	162	C512_9.8 P132 BE132MB4	C512_9.8 P160 BX160MA4	163
164	512	2.6	8.8	10000	C612_8.8 S4 ME4LB4	C612_8.8 S5 MX5SA4	166	C612_8.8 P132 BE132MB4	C612_8.8 P160 BX160MA4	167
165	509	1.3	8.8	6990	C512_8.8 S4 ME4LB4	C512_8.8 S5 MX5SA4	162	C512_8.8 P132 BE132MB4	C512_8.8 P160 BX160MA4	163
187	449	1.4	7.8	6820	C512_7.8 S4 ME4LB4	C512_7.8 S5 MX5SA4	162	C512_7.8 P132 BE132MB4	C512_7.8 P160 BX160MA4	163
194	434	3.1	7.5	9670	C612_7.5 S4 ME4LB4	C612_7.5 S5 MX5SA4	166	C612_7.5 P132 BE132MB4	C612_7.5 P160 BX160MA4	167
208	405	1.6	7.0	6710	C512_7.0 S4 ME4LB4	C512_7.0 S5 MX5SA4	162	C512_7.0 P132 BE132MB4	C512_7.0 P160 BX160MA4	163
215	391	3.5	6.7	9410	C612_6.7 S4 ME4LB4	C612_6.7 S5 MX5SA4	166	C612_6.7 P132 BE132MB4	C612_6.7 P160 BX160MA4	167
228	369	0.9	6.4	3100	C412_6.4 S4 ME4LB4		158	C412_6.4 P132 BE132MB4		159
242	348	1.9	6.0	8930	C612_6.0 S4 ME4LB4	C612_6.0 S5 MX5SA4	166	C612_6.0 P132 BE132MB4	C612_6.0 P160 BX160MA4	167
258	326	1.3	5.6	6150	C512_5.6 S4 ME4LB4	C512_5.6 S5 MX5SA4	162	C512_5.6 P132 BE132MB4	C512_5.6 P160 BX160MA4	163
262	319	1.3	11.2	3110	C412_11.2 S4 ME4LB2		158	C412_11.2 P132 BE132MB2		159
311	270	1.0	4.7	2620	C412_4.7 S4 ME4LB4		158	C412_4.7 P132 BE132MB4		159
318	264	2.5	4.6	8360	C612_4.6 S4 ME4LB4	C612_4.6 S5 MX5SA4	166	C612_4.6 P132 BE132MB4	C612_4.6 P160 BX160MA4	167
326	258	1.7	4.5	5880	C512_4.5 S4 ME4LB4	C512_4.5 S5 MX5SA4	162	C512_4.5 P132 BE132MB4	C512_5.6 P160 BX160MA4	163
338	247	1.6	8.6	3090	C412_8.6 S4 ME4LB2		158	C412_8.6 P132 BE132MB2		159
377	222	2.9	7.8	5870	C512_7.8 S4 ME4LB2		162	C512_7.8 P132 BE132MB2		163
402	209	1.2	3.6	2670	C412_3.6 S4 ME4LB4		158	C412_3.6 P132 BE132MB4		159
413	202	1.8	7.1	3050	C412_7.1 S4 ME4LB2		158	C412_7.1 P132 BE132MB2		159
416	202	1.0	3.5	2300	C362_3.5 S4 ME4LB4		154	C362_3.5 P132 BE132MB4		155
418	200	3.2	7.0	5730	C512_7.0 S4 ME4LB2		162	C512_7.0 P132 BE132MB2		163
438	192	2.2	3.3	5510	C512_3.3 S4 ME4LB4	C512_3.3 S5 MX5SA4	162	C512_3.3 P132 BE132MB4	C512_3.3 P160 BX160MA4	163
456	184	1.1	3.2	2300	C362_3.2 S4 ME4LB4		154	C362_3.2 P132 BE132MB4		155
459	182	1.9	6.4	3000	C412_6.4 S4 ME4LB2		158	C412_6.4 P132 BE132MB2		159
491	170	1.5	6.0	2660	C412_6.0 S4 ME4LB2		158	C412_6.0 P132 BE132MB2		159
519	161	2.7	5.6	5290	C512_5.6 S4 ME4LB2		162	C512_5.6 P132 BE132MB2		163
540	156	1.3	2.7	2280	C362_2.7 S4 ME4LB4		154	C362_2.7 P132 BE132MB4		155
545	154	1.6	2.7	2650	C412_2.7 S4 ME4LB4		158	C412_2.7 P132 BE132MB4		159

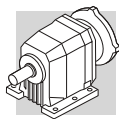


9.2 kW

n ₂ min-1	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
552	152	2.6	2.6	5210	C512_2.6 S4 ME4LB4	C512_2.6 S5 MX5SA4	162	C512_2.6 P132 BE132MB4	C512_2.6 P160 BX160MA4	163
626	133	2.0	4.7	2620	C412_4.7 S4 ME4LB2		158	C412_4.7 P132 BE132MB2		159
656	127	3.4	4.5	4980	C512_4.5 S4 ME4LB2		162	C512_4.5 P132 BE132MB2		163
695	120	1.7	4.2	2180	C362_4.2 S4 ME4LB2		154	C362_4.2 P132 BE132MB2		155
809	103	2.5	3.6	2540	C412_3.6 S4 ME4LB2		158	C412_3.6 P132 BE132MB2		159
838	100	2.0	3.5	2120	C362_3.5 S4 ME4LB2		154	C362_3.5 P132 BE132MB2		155
918	91	2.2	3.2	2090	C362_3.2 S4 ME4LB2		154	C362_3.2 P132 BE132MB2		155
1087	77	2.6	2.7	2020	C362_2.7 S4 ME4LB2		154	C362_2.7 P132 BE132MB2		155
1098	76	3.2	2.7	2410	C412_2.7 S4 ME4LB2		158	C412_2.7 P132 BE132MB2		159

11 kW

n ₂ min-1	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
7.4	12936	0.9	199.6	85000	C1004_199.6 S5 ME5SA4	C1004_199.6 S5 MX5SB4	179	C1004_199.6 P160 BE160M4	C1004_199.6 P160 BX160MB4	180
7.9	12012	1.0	185.4	85000	C1004_185.4 S5 ME5SA4	C1004_185.4 S5 MX5SB4	179	C1004_185.4 P160 BE160M4	C1004_185.4 P160 BX160MB4	180
9.1	10504	1.1	162.1	85000	C1004_162.1 S5 ME5SA4	C1004_162.1 S5 MX5SB4	179	C1004_162.1 P160 BE160M4	C1004_162.1 P160 BX160MB4	180
9.8	10073	1.2	150.4	85000	C1003_150.4 S5 ME5SA4	C1003_150.4 S5 MX5SB4	179	C1003_150.4 P160 BE160M4	C1003_150.4 P160 BX160MB4	180
10.5	9353	1.2	139.7	85000	C1003_139.7 S5 ME5SA4	C1003_139.7 S5 MX5SB4	179	C1003_139.7 P160 BE160M4	C1003_139.7 P160 BX160MB4	180
12.2	8070	1.5	120.5	85000	C1003_120.5 S5 ME5SA4	C1003_120.5 S5 MX5SB4	179	C1003_120.5 P160 BE160M4	C1003_120.5 P160 BX160MB4	180
12.6	7816	0.9	116.7	50800	C903_116.7 S5 ME5SA4	C903_116.7 S5 MX5SB4	176	C903_116.7 P160 BE160M4	C903_116.7 P160 BX160MB4	177
13.1	7493	1.6	111.9	85000	C1003_111.9 S5 ME5SA4	C1003_111.9 S5 MX5SB4	179	C1003_111.9 P160 BE160M4	C1003_111.9 P160 BX160MB4	180
13.7	7165	1.0	107.0	51000	C903_107.0 S5 ME5SA4	C903_107.0 S5 MX5SB4	176	C903_107.0 P160 BE160M4	C903_107.0 P160 BX160MB4	177
14.7	6683	1.8	99.8	85000	C1003_99.8 S5 ME5SA4	C1003_99.8 S5 MX5SB4	179	C1003_99.8 P160 BE160M4	C1003_99.8 P160 BX160MB4	180
15.3	6444	1.1	96.2	50800	C903_96.2 S5 ME5SA4	C903_96.2 S5 MX5SB4	176	C903_96.2 P160 BE160M4	C903_96.2 P160 BX160MB4	177
15.9	6205	1.9	92.7	85000	C1003_92.7 S5 ME5SA4	C1003_92.7 S5 MX5SB4	179	C1003_92.7 P160 BE160M4	C1003_92.7 P160 BX160MB4	180
16.7	5907	1.2	88.2	50700	C903_88.2 S5 ME5SA4	C903_88.2 S5 MX5SB4	176	C903_88.2 P160 BE160M4	C903_88.2 P160 BX160MB4	177
17.2	5729	2.1	85.6	85000	C1003_85.6 S5 ME5SA4	C1003_85.6 S5 MX5SB4	179	C1003_85.6 P160 BE160M4	C1003_85.6 P160 BX160MB4	180
18.1	5438	1.3	81.2	50700	C903_81.2 S5 ME5SA4	C903_81.2 S5 MX5SB4	176	C903_81.2 P160 BE160M4	C903_81.2 P160 BX160MB4	177
18.5	5320	2.3	79.4	85000	C1003_79.4 S5 ME5SA4	C1003_79.4 S5 MX5SB4	179	C1003_79.4 P160 BE160M4	C1003_79.4 P160 BX160MB4	180
19.7	4985	1.4	74.4	50200	C903_74.4 S5 ME5SA4	C903_74.4 S5 MX5SB4	176	C903_74.4 P160 BE160M4	C903_74.4 P160 BX160MB4	177
21.2	4649	2.6	69.4	84800	C1003_69.4 S5 ME5SA4	C1003_69.4 S5 MX5SB4	179	C1003_69.4 P160 BE160M4	C1003_69.4 P160 BX160MB4	180
22.8	4324	1.7	64.6	50000	C903_64.6 S5 ME5SA4	C903_64.6 S5 MX5SB4	176	C903_64.6 P160 BE160M4	C903_64.6 P160 BX160MB4	177
22.8	4317	2.8	64.5	83100	C1003_64.5 S5 ME5SA4	C1003_64.5 S5 MX5SB4	179	C1003_64.5 P160 BE160M4	C1003_64.5 P160 BX160MB4	180
23.5	4185	1.0	62.5	33000	C803_62.5 S5 ME5SA4	C803_62.5 S5 MX5SB4	173	C803_62.5 P160 BE160M4	C803_62.5 P160 BX160MB4	174
24.8	3964	1.8	59.2	49000	C903_59.2 S5 ME5SA4	C903_59.2 S5 MX5SB4	176	C903_59.2 P160 BE160M4	C903_59.2 P160 BX160MB4	177
25.7	3837	1.0	57.3	34200	C803_57.3 S5 ME5SA4	C803_57.3 S5 MX5SB4	173	C803_57.3 P160 BE160M4	C803_57.3 P160 BX160MB4	174
26.8	3674	2.0	54.9	48800	C903_54.9 S5 ME5SA4	C903_54.9 S5 MX5SB4	176	C903_54.9 P160 BE160M4	C903_54.9 P160 BX160MB4	177
29.2	3368	2.1	50.3	48000	C903_50.3 S5 ME5SA4	C903_50.3 S5 MX5SB4	176	C903_50.3 P160 BE160M4	C903_50.3 P160 BX160MB4	177
31	3177	1.2	47.4	33500	C803_47.4 S5 ME5SA4	C803_47.4 S5 MX5SB4	173	C803_47.4 P160 BE160M4	C803_47.4 P160 BX160MB4	174
34	2912	1.3	43.5	33100	C803_43.5 S5 ME5SA4	C803_43.5 S5 MX5SB4	173	C803_43.5 P160 BE160M4	C803_43.5 P160 BX160MB4	174
34	2878	2.5	43.0	47000	C903_43.0 S5 ME5SA4	C903_43.0 S5 MX5SB4	176	C903_43.0 P160 BE160M4	C903_43.0 P160 BX160MB4	177
37	2638	2.7	39.4	46100	C903_39.4 S5 ME5SA4	C903_39.4 S5 MX5SB4	176	C903_39.4 P160 BE160M4	C903_39.4 P160 BX160MB4	177
38	2675	1.2	39.1	30900	C802_39.1 S5 ME5SA4	C802_39.1 S5 MX5SB4	173	C802_39.1 P160 BE160M4	C802_39.1 P160 BX160MB4	174
42	2401	2.2	35.1	45000	C902_35.1 S5 ME5SA4	C902_35.1 S5 MX5SB4	176	C902_35.1 P160 BE160M4	C902_35.1 P160 BX160MB4	177
47	2143	1.7	31.3	30000	C802_31.3 S5 ME5SA4	C802_31.3 S5 MX5SB4	173	C802_31.3 P160 BE160M4	C802_31.3 P160 BX160MB4	174
50	2013	2.9	29.4	43400	C902_29.4 S5 ME5SA4	C902_29.4 S5 MX5SB4	176	C902_29.4 P160 BE160M4	C902_29.4 P160 BX160MB4	177
53	1896	1.1	27.7	17800	C702_27.7 S5 ME5SA4	C702_27.7 S5 MX5SB4	170	C702_27.7 P160 BE160M4	C702_27.7 P160 BX160MB4	171
54	1859	3.0	27.2	42700	C902_27.2 S5 ME5SA4	C902_27.2 S5 MX5SB4	176	C902_27.2 P160 BE160M4	C902_27.2 P160 BX160MB4	177
57	1775	2.1	25.9	29200	C802_25.9 S5 ME5SA4	C802_25.9 S5 MX5SB4	173	C802_25.9 P160 BE160M4	C802_25.9 P160 BX160MB4	174
61	1638	2.2	24.0	28700	C802_24.0 S5 ME5SA4	C802_24.0 S5 MX5SB4	173	C802_24.0 P160 BE160M4	C802_24.0 P160 BX160MB4	174
64	1563	1.3	22.9	17600	C702_22.9 S5 ME5SA4	C702_22.9 S5 MX5SB4	170	C702_22.9 P160 BE160M4	C702_22.9 P160 BX160MB4	171
66	1522	2.4	22.2	28400	C802_22.2 S5 ME5SA4	C802_22.2 S5 MX5SB4	173	C802_22.2 P160 BE160M4	C802_22.2 P160 BX160MB4	174
72	1404	2.5	20.5	28000	C802_20.5 S5 ME5SA4	C802_20.5 S5 MX5SB4	173	C802_20.5 P160 BE160M4	C802_20.5 P160 BX160MB4	174

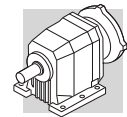


11 kW

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
75	1341	1.0	19.6	10800	C612_19.6 S5 ME5SA4	C612_19.6 S5 MX5SB4	166	C612_19.6 P160 BE160M4	C612_19.6 P160 BX160MB4	167
76	1319	1.6	19.3	17300	C702_19.3 S5 ME5SA4	C702_19.3 S5 MX5SB4	170	C702_19.3 P160 BE160M4	C702_19.3 P160 BX160MB4	171
81	1235	3.0	18.1	27300	C802_18.1 S5 ME5SA4	C802_18.1 S5 MX5SB4	173	C802_18.1 P160 BE160M4	C802_18.1 P160 BX160MB4	174
83	1207	1.1	17.7	10700	C612_17.7 S5 ME5SA4	C612_17.7 S5 MX5SB4	166	C612_17.7 P160 BE160M4	C612_17.7 P160 BX160MB4	167
88	1143	1.8	16.7	16800	C702_16.7 S5 ME5SA4	C702_16.7 S5 MX5SB4	170	C702_16.7 P160 BE160M4	C702_16.7 P160 BX160MB4	171
88	1140	3.1	16.7	26900	C802_16.7 S5 ME5SA4	C802_16.7 S5 MX5SB4	173	C802_16.7 P160 BE160M4	C802_16.7 P160 BX160MB4	174
92	1090	1.2	15.9	10700	C612_15.9 S5 ME5SA4	C612_15.9 S5 MX5SB4	166	C612_15.9 P160 BE160M4	C612_15.9 P160 BX160MB4	167
96	1049	2.0	15.3	16800	C702_15.3 S5 ME5SA4	C702_15.3 S5 MX5SB4	170	C702_15.3 P160 BE160M4	C702_15.3 P160 BX160MB4	171
102	981	1.4	14.3	10500	C612_14.3 S5 ME5SA4	C612_14.3 S5 MX5SB4	166	C612_14.3 P160 BE160M4	C612_14.3 P160 BX160MB4	167
104	964	2.2	14.1	16400	C702_14.1 S5 ME5SA4	C702_14.1 S5 MX5SB4	170	C702_14.1 P160 BE160M4	C702_14.1 P160 BX160MB4	171
113	891	2.4	13.0	16400	C702_13.0 S5 ME5SA4	C702_13.0 S5 MX5SB4	170	C702_13.0 P160 BE160M4	C702_13.0 P160 BX160MB4	171
122	827	1.6	12.1	10300	C612_12.1 S5 ME5SA4	C612_12.1 S5 MX5SB4	166	C612_12.1 P160 BE160M4	C612_12.1 P160 BX160MB4	167
124	810	1.0	11.8	6810	C512_11.8 S5 ME5SA4	C512_11.8 S5 MX5SB4	162	C512_11.8 P160 BE160M4	C512_11.8 P160 BX160MB4	163
131	767	2.8	11.2	15800	C702_11.2 S5 ME5SA4	C702_11.2 S5 MX5SB4	170	C702_11.2 P160 BE160M4	C702_11.2 P160 BX160MB4	171
135	745	1.8	10.9	10100	C612_10.9 S5 ME5SA4	C612_10.9 S5 MX5SB4	166	C612_10.9 P160 BE160M4	C612_10.9 P160 BX160MB4	167
144	698	3.0	10.2	15700	C702_10.2 S5 ME5SA4	C702_10.2 S5 MX5SB4	170	C702_10.2 P160 BE160M4	C702_10.2 P160 BX160MB4	171
150	672	2.0	9.8	9910	C612_9.8 S5 ME5SA4	C612_9.8 S5 MX5SB4	166	C612_9.8 P160 BE160M4	C612_9.8 P160 BX160MB4	167
151	667	1.0	9.8	6690	C512_9.8 S5 ME5SA4	C512_9.8 S5 MX5SB4	162	C512_9.8 P160 BE160M4	C512_9.8 P160 BX160MB4	163
154	651	3.3	9.5	15400	C702_9.5 S5 ME5SA4	C702_9.5 S5 MX5SB4	170	C702_9.5 P160 BE160M4	C702_9.5 P160 BX160MB4	171
166	605	2.2	8.8	9690	C612_8.8 S5 ME5SA4	C612_8.8 S5 MX5SB4	166	C612_8.8 P160 BE160M4	C612_8.8 P160 BX160MB4	167
167	601	1.1	8.8	6640	C512_8.8 S5 ME5SA4	C512_8.8 S5 MX5SB4	162	C512_8.8 P160 BE160M4	C512_8.8 P160 BX160MB4	163
190	530	1.2	7.8	6510	C512_7.8 S5 ME5SA4	C512_7.8 S5 MX5SB4	162	C512_7.8 P160 BE160M4	C512_7.8 P160 BX160MB4	163
196	512	2.6	7.5	9390	C612_7.5 S5 ME5SA4	C612_7.5 S5 MX5SB4	166	C612_7.5 P160 BE160M4	C612_7.5 P160 BX160MB4	167
210	478	1.3	7.0	6430	C512_7.0 S5 ME5SA4	C512_7.0 S5 MX5SB4	162	C512_7.0 P160 BE160M4	C512_7.0 P160 BX160MB4	163
218	461	2.9	6.7	9150	C612_6.7 S5 ME5SA4	C612_6.7 S5 MX5SB4	166	C612_6.7 P160 BE160M4	C612_6.7 P160 BX160MB4	167
245	411	1.6	6.0	8670	C612_6.0 S5 ME5SA4	C612_6.0 S5 MX5SB4	166	C612_6.0 P160 BE160M4	C612_6.0 P160 BX160MB4	167
261	385	1.1	5.6	5880	C512_5.6 S5 ME5SA4	C512_5.6 S5 MX5SB4	162	C512_5.6 P160 BE160M4	C512_5.6 P160 BX160MB4	163
323	312	2.1	4.6	8160	C612_4.6 S5 ME5SA4	C612_4.6 S5 MX5SB4	166	C612_4.6 P160 BE160M4	C612_4.6 P160 BX160MB4	167
330	305	1.4	4.5	5660	C512_4.5 S5 ME5SA4	C512_4.5 S5 MX5SB4	162	C512_4.5 P160 BE160M4	C512_4.5 P160 BX160MB4	163
397	253	2.6	3.7	7760	C612_3.7 S5 ME5SA4	C612_3.7 S5 MX5SB4	166	C612_3.7 P160 BE160M4	C612_3.7 P160 BX160MB4	167
444	226	1.9	3.3	5340	C512_3.3 S5 ME5SA4	C512_3.3 S5 MX5SB4	162	C512_3.3 P160 BE160M4	C512_3.3 P160 BX160MB4	163
521	193	3.4	2.8	7240	C612_2.8 S5 ME5SA4	C612_2.8 S5 MX5SB4	166	C612_2.8 P160 BE160M4	C612_2.8 P160 BX160MB4	167
522	191	2.3	5.6	5140	C512_5.6 S5 ME5SA2		162	C512_5.6 P160 BE160MA2		163
559	180	2.2	2.6	5080	C512_2.6 S5 ME5SA4	C512_2.6 S5 MX5SB4	162	C512_2.6 P160 BE160M4	C512_2.6 P160 BX160MB4	163
660	151	2.9	4.5	4870	C512_4.5 S5 ME5SA2		162	C512_4.5 P160 BE160MA2		163

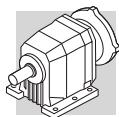
15 kW

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
12.2	10984	1.1	120.5	83800	C1003_120.5 S5 ME5LA4	C1003_120.5 S5 MX5LA4	179	C1003_120.5 P160 BE160L4	C1003_120.5 P160 BX160L4	180
13.1	10199	1.2	111.9	83300	C1003_111.9 S5 ME5LA4	C1003_111.9 S5 MX5LA4	179	C1003_111.9 P160 BE160L4	C1003_111.9 P160 BX160L4	180
14.7	9096	1.3	99.8	82700	C1003_99.8 S5 ME5LA4	C1003_99.8 S5 MX5LA4	179	C1003_99.8 P160 BE160L4	C1003_99.8 P160 BX160L4	180
15.9	8446	1.4	92.7	82400	C1003_92.7 S5 ME5LA4	C1003_92.7 S5 MX5LA4	179	C1003_92.7 P160 BE160L4	C1003_92.7 P160 BX160L4	180
17.2	7798	1.5	85.6	81500	C1003_85.6 S5 ME5LA4	C1003_85.6 S5 MX5LA4	179	C1003_85.6 P160 BE160L4	C1003_85.6 P160 BX160L4	180
18.1	7402	1.0	81.2	44300	C903_81.2 S5 ME5LA4	C903_81.2 S5 MX5LA4	176	C903_81.2 P160 BE160L4	C903_81.2 P160 BX160L4	177
18.5	7241	1.7	79.4	81000	C1003_79.4 S5 ME5LA4	C1003_79.4 S5 MX5LA4	179	C1003_79.4 P160 BE160L4	C1003_79.4 P160 BX160L4	180
19.7	6785	1.0	74.4	44800	C903_74.4 S5 ME5LA4	C903_74.4 S5 MX5LA4	176	C903_74.4 P160 BE160L4	C903_74.4 P160 BX160L4	177
21.2	6328	1.9	69.4	79500	C1003_69.4 S5 ME5LA4	C1003_69.4 S5 MX5LA4	179	C1003_69.4 P160 BE160L4	C1003_69.4 P160 BX160L4	180
22.8	5886	1.2	64.6	44500	C903_64.6 S5 ME5LA4	C903_64.6 S5 MX5LA4	176	C903_64.6 P160 BE160L4	C903_64.6 P160 BX160L4	177
22.8	5876	2.0	64.5	78600	C1003_64.5 S5 ME5LA4	C1003_64.5 S5 MX5LA4	179	C1003_64.5 P160 BE160L4	C1003_64.5 P160 BX160L4	180
24.8	5396	1.3	59.2	44400	C903_59.2 S5 ME5LA4	C903_59.2 S5 MX5LA4	176	C903_59.2 P160 BE160L4	C903_59.2 P160 BX160L4	177
25.6	5227	2.3	57.4	77400	C1003_57.4 S5 ME5LA4	C1003_57.4 S5 MX5LA4	179	C1003_57.4 P160 BE160L4	C1003_57.4 P160 BX160L4	180
26.8	5001	1.4	54.9	44300	C903_54.9 S5 ME5LA4	C903_54.9 S5 MX5LA4	176	C903_54.9 P160 BE160L4	C903_54.9 P160 BX160L4	177
27.6	4854	2.5	53.3	76200	C1003_53.3 S5 ME5LA4	C1003_53.3 S5 MX5LA4	179	C1003_53.3 P160 BE160L4	C1003_53.3 P160 BX160L4	180
29.2	4584	1.5	50.3	44100	C903_50.3 S5 ME5LA4	C903_50.3 S5 MX5LA4	176	C903_50.3 P160 BE160L4	C903_50.3 P160 BX160L4	177



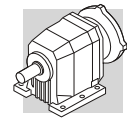
15 kW

n ₂ min-1	M ₂ Nm	S	i	R _{n2} N						
					IE2	IE3		IE2	IE3	
32	4213	2.8	46.2	74500	C1003_46.2 S5 ME5LA4	C1003_46.2 S5 MX5LA4	179	C1003_46.2 P160 BE160L4	C1003_46.2 P160 BX160L4	180
34	3964	1.0	43.5	30300	C803_43.5 S5 ME5LA4	C803_43.5 S5 MX5LA4	173	C803_43.5 P160 BE160L4	C803_43.5 P160 BX160L4	174
34	3918	1.8	43.0	44100	C903_43.0 S5 ME5LA4	C903_43.0 S5 MX5LA4	176	C903_43.0 P160 BE160L4	C903_43.0 P160 BX160L4	177
37	3591	2.0	39.4	43000	C903_39.4 S5 ME5LA4	C903_39.4 S5 MX5LA4	176	C903_39.4 P160 BE160L4	C903_39.4 P160 BX160L4	177
38	3641	0.9	39.1	27300	C802_39.1 S5 ME5LA4	C802_39.1 S5 MX5LA4	173	C802_39.1 P160 BE160L4	C802_39.1 P160 BX160L4	174
42	3268	1.7	35.1	42200	C902_35.1 S5 ME5LA4	C902_35.1 S5 MX5LA4	176	C902_35.1 P160 BE160L4	C902_35.1 P160 BX160L4	177
47	2917	1.3	31.3	27500	C802_31.3 S5 ME5LA4	C802_31.3 S5 MX5LA4	173	C802_31.3 P160 BE160L4	C802_31.3 P160 BX160L4	174
50	2740	2.2	29.4	41100	C902_29.4 S5 ME5LA4	C902_29.4 S5 MX5LA4	176	C902_29.4 P160 BE160L4	C902_29.4 P160 BX160L4	177
54	2530	2.2	27.2	40700	C902_27.2 S5 ME5LA4	C902_27.2 S5 MX5LA4	176	C902_27.2 P160 BE160L4	C902_27.2 P160 BX160L4	177
57	2416	1.5	25.9	27100	C802_25.9 S5 ME5LA4	C802_25.9 S5 MX5LA4	173	C802_25.9 P160 BE160L4	C802_25.9 P160 BX160L4	174
59	2311	2.9	24.8	40000	C902_24.8 S5 ME5LA4	C902_24.8 S5 MX5LA4	176	C902_24.8 P160 BE160L4	C902_24.8 P160 BX160L4	177
61	2230	1.6	24.0	26900	C802_24.0 S5 ME5LA4	C802_24.0 S5 MX5LA4	173	C802_24.0 P160 BE160L4	C802_24.0 P160 BX160L4	174
64	2134	2.9	22.9	39500	C902_22.9 S5 ME5LA4	C902_22.9 S5 MX5LA4	176	C902_22.9 P160 BE160L4	C902_22.9 P160 BX160L4	177
64	2128	1.0	22.9	15400	C702_22.9 S5 ME5LA4	C702_22.9 S5 MX5LA4	170	C702_22.9 P160 BE160L4	C702_22.9 P160 BX160L4	171
66	2071	1.8	22.2	26600	C802_22.2 S5 ME5LA4	C802_22.2 S5 MX5LA4	173	C802_22.2 P160 BE160L4	C802_22.2 P160 BX160L4	174
72	1912	1.9	20.5	26200	C802_20.5 S5 ME5LA4	C802_20.5 S5 MX5LA4	173	C802_20.5 P160 BE160L4	C802_20.5 P160 BX160L4	174
73	1884	3.5	20.2	38500	C902_20.2 S5 ME5LA4	C902_20.2 S5 MX5LA4	176	C902_20.2 P160 BE160L4	C902_20.2 P160 BX160L4	177
76	1795	1.2	19.3	15600	C702_19.3 S5 ME5LA4	C702_19.3 S5 MX5LA4	170	C702_19.3 P160 BE160L4	C702_19.3 P160 BX160L4	171
81	1681	2.2	18.1	25800	C802_18.1 S5 ME5LA4	C802_18.1 S5 MX5LA4	173	C802_18.1 P160 BE160L4	C802_18.1 P160 BX160L4	174
88	1555	1.3	16.7	15400	C702_16.7 S5 ME5LA4	C702_16.7 S5 MX5LA4	170	C702_16.7 P160 BE160L4	C702_16.7 P160 BX160L4	171
88	1551	2.3	16.7	25500	C802_16.7 S5 ME5LA4	C802_16.7 S5 MX5LA4	173	C802_16.7 P160 BE160L4	C802_16.7 P160 BX160L4	174
92	1483	0.9	15.9	9350	C612_15.9 S5 ME5LA4	C612_15.9 S5 MX5LA4	166	C612_15.9 P160 BE160L4	C612_15.9 P160 BX160L4	167
96	1428	1.5	15.3	15400	C702_15.3 S5 ME5LA4	C702_15.3 S5 MX5LA4	170	C702_15.3 P160 BE160L4	C702_15.3 P160 BX160L4	171
99	1388	2.7	14.9	25000	C802_14.9 S5 ME5LA4	C802_14.9 S5 MX5LA4	173	C802_14.9 P160 BE160L4	C802_14.9 P160 BX160L4	174
102	1336	1.0	14.3	9280	C612_14.3 S5 ME5LA4	C612_14.3 S5 MX5LA4	166	C612_14.3 P160 BE160L4	C612_14.3 P160 BX160L4	167
104	1312	1.6	14.1	15300	C702_14.1 S5 ME5LA4	C702_14.1 S5 MX5LA4	170	C702_14.1 P160 BE160L4	C702_14.1 P160 BX160L4	171
107	1281	2.7	13.8	25000	C802_13.8 S5 ME5LA4	C802_13.8 S5 MX5LA4	173	C802_13.8 P160 BE160L4	C802_13.8 P160 BX160L4	174
113	1213	1.7	13.0	15200	C702_13.0 S5 ME5LA4	C702_13.0 S5 MX5LA4	170	C702_13.0 P160 BE160L4	C702_13.0 P160 BX160L4	171
122	1126	1.2	12.1	9270	C612_12.1 S5 ME5LA4	C612_12.1 S5 MX5LA4	166	C612_12.1 P160 BE160L4	C612_12.1 P160 BX160L4	167
131	1044	2.1	11.2	14700	C702_11.2 S5 ME5LA4	C702_11.2 S5 MX5LA4	170	C702_11.2 P160 BE160L4	C702_11.2 P160 BX160L4	171
135	1014	1.3	10.9	9140	C612_10.9 S5 ME5LA4	C612_10.9 S5 MX5LA4	166	C612_10.9 P160 BE160L4	C612_10.9 P160 BX160L4	167
144	950	2.2	10.2	14600	C702_10.2 S5 ME5LA4	C702_10.2 S5 MX5LA4	170	C702_10.2 P160 BE160L4	C702_10.2 P160 BX160L4	171
150	914	1.5	9.8	9090	C612_9.8 S5 ME5LA4	C612_9.8 S5 MX5LA4	166	C612_9.8 P160 BE160L4	C612_9.8 P160 BX160L4	167
154	887	2.4	9.5	14400	C702_9.5 S5 ME5LA4	C702_9.5 S5 MX5LA4	170	C702_9.5 P160 BE160L4	C702_9.5 P160 BX160L4	171
166	823	1.6	8.8	8930	C612_8.8 S5 ME5LA4	C612_8.8 S5 MX5LA4	166	C612_8.8 P160 BE160L4	C612_8.8 P160 BX160L4	167
184	745	2.8	8.0	14200			20	C702_8.0 P160 BE160L4	C702_8.0 P160 BX160L4	171
196	697	1.9	7.5	8760	C612_7.5 S5 ME5LA4	C612_7.5 S5 MX5LA4	166	C612_7.5 P160 BE160L4	C612_7.5 P160 BX160L4	167
197	695	3.0	7.5	14000	C702_7.5 S5 ME5LA4	C702_7.5 S5 MX5LA4	170	C702_7.5 P160 BE160L4	C702_7.5 P160 BX160L4	171
210	650	1.0	7.0	5800	C512_7.0 S5 ME5LA4	C512_7.0 S5 MX5LA4	162	C512_7.0 P160 BE160L4	C512_7.0 P160 BX160L4	163
218	628	2.2	6.7	8570	C612_6.7 S5 ME5LA4	C612_6.7 S5 MX5LA4	166	C612_6.7 P160 BE160L4	C612_6.7 P160 BX160L4	167
224	608	1.2	13.1	5760	C512_13.1 S5 ME5SB2		162	C512_13.1 P160 BE160MB2		163
243	560	2.4	12.1	8430	C612_12.1 S5 ME5SB2		166	C612_12.1 P160 BE160MB2		167
245	559	1.2	6.0	8130	C612_6.0 S5 ME5LA4	C612_6.0 S5 MX5LA4	166	C612_6.0 P160 BE160L4	C612_6.0 P160 BX160L4	167
248	548	1.4	11.8	5720	C512_11.8 S5 ME5SB2		162	C512_11.8 P160 BE160MB2		163
270	504	2.7	10.9	8230	C612_10.9 S5 ME5SB2		166	C612_10.9 P160 BE160MB2		167
299	454	3.0	9.8	8090	C612_9.8 S5 ME5SB2		166	C612_9.8 P160 BE160MB2		167
301	451	1.5	9.8	5570	C512_9.8 S5 ME5SB2		162	C512_9.8 P160 BE160MB2		163
323	424	1.6	4.6	7690	C612_4.6 S5 ME5LA4	C612_4.6 S5 MX5LA4	166	C612_4.6 P160 BE160L4	C612_4.6 P160 BX160L4	167
330	415	1.0	4.5	5250	C512_4.5 S5 ME5LA4	C512_4.5 S5 MX5LA4	162	C512_4.5 P160 BE160L4	C512_4.5 P160 BX160L4	163
333	409	3.3	8.8	7880	C612_8.8 S5 ME5SB2		166	C612_8.8 P160 BE160MB2		167
334	407	1.7	8.8	5490	C512_8.8 S5 ME5SB2		162	C512_8.8 P160 BE160MB2		163
379	359	1.8	7.8	5370	C512_7.8 S5 ME5SB2		162	C512_7.8 P160 BE160MB2		163
397	344	1.9	3.7	7370	C612_3.7 S5 ME5LA4	C612_3.7 S5 MX5LA4	166	C612_3.7 P160 BE160L4	C612_3.7 P160 BX160L4	167
421	323	1.9	7.0	5280	C512_7.0 S5 ME5SB2		162	C512_7.0 P160 BE160MB2		163
444	308	1.4	3.3	5080	C512_3.3 S5 ME5LA4	C512_3.3 S5 MX5LA4	162	C512_3.3 P160 BE160L4	C512_3.3 P160 BX160L4	163
490	278	2.4	6.0	7030	C612_6.0 S5 ME5SB2		166	C612_6.0 P160 BE160MB2		167
521	263	2.5	2.8	6940	C612_2.8 S5 ME5LA4	C612_2.8 S5 MX5LA4	166	C612_2.8 P160 BE160L4	C612_2.8 P160 BX160L4	167
522	261	1.7	5.6	4840	C512_5.6 S5 ME5SB2		162	C512_5.6 P160 BE160MB2		163
559	245	1.6	2.6	4940	C512_2.6 S5 ME5LA4	C512_2.6 S5 MX5LA4	162	C512_2.6 P160 BE160L4	C512_2.6 P160 BX160L4	163
645	211	3.2	4.6	6580	C612_4.6 S5 ME5SB2		166	C612_4.6 P160 BE160MB2		167
660	206	2.1	4.5	4630	C512_4.5 S5 ME5SB2		162	C512_4.5 P160 BE160MB2		163
889	153	2.7	3.3	4330	C512_3.3 S5 ME5SB2		162	C512_3.3 P160 BE160MB2		163
1118	122	3.3	2.6	4100	C512_2.6 S5 ME5SB2		162	C512_2.6 P160 BE160MB2		163

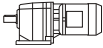



18.5 kW

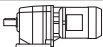

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N					
					IE2	IE3	IE2	IE3	
13.1	12489	1.0	111.9	76600			C1003_111.9 P180 BE180M4	C1003_111.9 P180 BX180M4	180
14.7	11138	1.1	99.8	76700			C1003_99.8 P180 BE180M4	C1003_99.8 P180 BX180M4	180
15.9	10342	1.2	92.7	76700			C1003_92.7 P180 BE180M4	C1003_92.7 P180 BX180M4	180
17.2	9548	1.3	85.6	76400			C1003_85.6 P180 BE180M4	C1003_85.6 P180 BX180M4	180
18.5	8866	1.4	79.4	76100			C1003_79.4 P180 BE180M4	C1003_79.4 P180 BX180M4	180
21.2	7748	1.5	69.4	75400			C1003_69.4 P180 BE180M4	C1003_69.4 P180 BX180M4	180
22.8	7207	1.0	64.6	40300			C903_64.6 P180 BE180M4	C903_64.6 P180 BX180M4	177
22.8	7195	1.7	64.5	74800			C1003_64.5 P180 BE180M4	C1003_64.5 P180 BX180M4	180
24.8	6607	1.1	59.2	40500			C903_59.2 P180 BE180M4	C903_59.2 P180 BX180M4	177
25.6	6400	1.9	57.4	73700			C1003_57.4 P180 BE180M4	C1003_57.4 P180 BX180M4	180
26.8	6124	1.2	54.9	40700			C903_54.9 P180 BE180M4	C903_54.9 P180 BX180M4	177
27.6	5943	2.0	53.3	73100			C1003_53.3 P180 BE180M4	C1003_53.3 P180 BX180M4	180
29.2	5614	1.3	50.3	40700			C903_50.3 P180 BE180M4	C903_50.3 P180 BX180M4	177
32	5159	2.3	46.2	71600			C1003_46.2 P180 BE180M4	C1003_46.2 P180 BX180M4	180
34	4797	1.5	43.0	40600			C903_43.0 P180 BE180M4	C903_43.0 P180 BX180M4	177
34	4790	2.5	42.9	70800			C1003_42.9 P180 BE180M4	C1003_42.9 P180 BX180M4	180
37	4397	1.6	39.4	40500			C903_39.4 P180 BE180M4	C903_39.4 P180 BX180M4	177
40	4122	2.9	36.9	69000			C1003_36.9 P180 BE180M4	C1003_36.9 P180 BX180M4	180
42	4001	1.3	35.1	39800			C902_35.1 P180 BE180M4	C902_35.1 P180 BX180M4	177
43	3828	3.1	34.3	68100			C1003_34.3 P180 BE180M4	C1003_34.3 P180 BX180M4	180
47	3572	1.0	31.3	25000			C802_31.3 P180 BE180M4	C802_31.3 P180 BX180M4	174
50	3298	2.8	29.6	65800			C1002_29.6 P180 BE180M4	C1002_29.6 P180 BX180M4	180
50	3356	1.8	29.4	39100			C902_29.4 P180 BE180M4	C902_29.4 P180 BX180M4	177
54	3098	1.8	27.2	38800			C902_27.2 P180 BE180M4	C902_27.2 P180 BX180M4	177
57	2958	1.3	25.9	25300			C802_25.9 P180 BE180M4	C802_25.9 P180 BX180M4	174
59	2830	2.3	24.8	38400			C902_24.8 P180 BE180M4	C902_24.8 P180 BX180M4	177
61	2731	1.3	24.0	25000			C802_24.0 P180 BE180M4	C802_24.0 P180 BX180M4	174
64	2613	2.4	22.9	37900			C902_22.9 P180 BE180M4	C902_22.9 P180 BX180M4	177
66	2536	1.5	22.2	25100			C802_22.2 P180 BE180M4	C802_22.2 P180 BX180M4	174
72	2341	1.5	20.5	24900			C802_20.5 P180 BE180M4	C802_20.5 P180 BX180M4	174
73	2307	2.9	20.2	37200			C902_20.2 P180 BE180M4	C902_20.2 P180 BX180M4	177
76	2198	1.0	19.3	14100			C702_19.3 P180 BE180M4	C702_19.3 P180 BX180M4	171
79	2130	2.9	18.7	36700			C902_18.7 P180 BE180M4	C902_18.7 P180 BX180M4	177
81	2058	1.8	18.1	24700			C802_18.1 P180 BE180M4	C802_18.1 P180 BX180M4	174
85	1973	3.3	17.3	36200			C902_17.3 P180 BE180M4	C902_17.3 P180 BX180M4	177
88	1904	1.1	16.7	13800			C702_16.7 P180 BE180M4	C702_16.7 P180 BX180M4	171
88	1900	1.8	16.7	24400			C802_16.7 P180 BE180M4	C802_16.7 P180 BX180M4	174
96	1748	1.2	15.3	13800			C702_15.3 P180 BE180M4	C702_15.3 P180 BX180M4	171
99	1700	2.2	14.9	24000			C802_14.9 P180 BE180M4	C802_14.9 P180 BX180M4	174
104	1607	1.3	14.1	13900			C702_14.1 P180 BE180M4	C702_14.1 P180 BX180M4	171
107	1569	2.2	13.8	23700			C802_13.8 P180 BE180M4	C802_13.8 P180 BX180M4	174
113	1485	1.4	13.0	13800			C702_13.0 P180 BE180M4	C702_13.0 P180 BX180M4	171
122	1378	1.0	12.1	8420			C612_12.1 P180 BE180M4	C612_12.1 P180 BX180M4	167
122	1370	2.7	12.0	23500			C802_12.0 P180 BE180M4	C802_12.0 P180 BX180M4	174
131	1278	1.7	11.2	13800			C702_11.2 P180 BE180M4	C702_11.2 P180 BX180M4	171
133	1265	2.8	11.1	22900			C802_11.1 P180 BE180M4	C802_11.1 P180 BX180M4	174
135	1241	1.1	10.9	8360			C612_10.9 P180 BE180M4	C612_10.9 P180 BX180M4	167
144	1164	1.8	10.2	13700			C702_10.2 P180 BE180M4	C702_10.2 P180 BX180M4	171
150	1119	1.2	9.8	8400			C612_9.8 P180 BE180M4	C612_9.8 P180 BX180M4	167
154	1086	2.0	9.5	13600			C702_9.5 P180 BE180M4	C702_9.5 P180 BX180M4	171
166	1008	1.3	8.8	8300			C612_8.8 P180 BE180M4	C612_8.8 P180 BX180M4	167
184	912	2.3	8.0	13500			C702_8.0 P180 BE180M4	C702_8.0 P180 BX180M4	171
196	853	1.6	7.5	8230			C612_7.5 P180 BE180M4	C612_7.5 P180 BX180M4	167
197	850	2.4	7.5	13400			C702_7.5 P180 BE180M4	C702_7.5 P180 BX180M4	171
218	768	1.8	6.7	8090			C612_6.7 P180 BE180M4	C612_6.7 P180 BX180M4	167
235	713	2.7	6.3	13300			C702_6.3 P180 BE180M4	C702_6.3 P180 BX180M4	171
245	684	1.0	6.0	7550			C612_6.0 P180 BE180M4	C612_6.0 P180 BX180M4	167

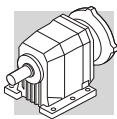


18.5 kW

n ₂ min-1	M ₂ Nm	S	i	R _{n2} N					
					IE2	IE3	IE2	IE3	
251	667	2.8	5.9	13200			C702_5.9 P180 BE180M4	C702_5.9 P180 BX180M4	171
270	621	2.2	10.9	7840	C612_10.9 S5 ME5LA2		166 C612_10.9 P160 BE160L2		167
300	560	2.4	9.8	7740	C612_9.8 S5 ME5LA2		166 C612_9.8 P160 BE160L2		167
302	556	1.2	9.8	5190	C512_9.8 S5 ME5LA2		162 C512_9.8 P160 BE160L2		163
322	521	3.3	4.6	13000			C702_4.6 P180 BE180M4	C702_4.6 P180 BX180M4	171
323	519	1.3	4.6	7300			C612_4.6 P180 BE180M4	C612_4.6 P180 BX180M4	167
333	504	2.7	8.8	7570	C612_8.8 S5 ME5LA2		166 C612_8.8 P160 BE160L2		167
335	501	1.4	8.8	5160	C512_8.8 S5 ME5LA2		162 C512_8.8 P160 BE160L2		163
380	442	1.4	7.8	5070	C512_7.8 S5 ME5LA2		162 C512_7.8 P160 BE160L2		163
393	427	3.2	7.5	7350	C612_7.5 S5 ME5LA2		166 C612_7.5 P160 BE160L2		167
397	422	1.6	3.7	7060			C612_3.7 P180 BE180M4	C612_3.7 P180 BX180M4	167
422	398	1.6	7.0	5010	C512_7.0 S5 ME5LA2		162 C512_7.0 P160 BE160L2		163
437	384	3.5	6.7	7170	C612_6.7 S5 ME5LA2		166 C612_6.7 P160 BE160L2		167
444	377	1.1	3.3	4750			C512_3.3 P180 BE180M4	C512_3.3 P180 BX180M4	163
491	342	1.9	6.0	6780	C612_6 S5 ME5LA2		166 C612_6.0 P160 BE160L2		167
521	321	2.1	2.8	6700			C612_2.8 P180 BE180M4		167
523	321	1.4	5.6	4580	C512_5.6 S5 ME5LA2		162 C512_5.6 P160 BE160L2		163
559	300	1.3	2.6	4600			C512_2.6 P180 BE180M4	C512_2.6 P180 BX180M4	163
646	260	2.6	4.6	6390	C612_4.6 S5 ME5LA2		166 C612_4.6 P160 BE160L2		167
661	254	1.7	4.5	4420	C512_4.5 S5 ME5LA2		162 C512_4.5 P160 BE160L2		163
796	211	3.2	3.7	6080	C612_3.7 S5 ME5LA2		166 C612_3.7 P160 BE160L2		167
890	188	2.2	3.3	4180	C512_3.3 S5 ME5LA2		162 C512_3.3 P160 BE160L2		163
1120	150	2.7	2.6	3980	C512_2.6 S5 ME5LA2		162 C512_2.6 P160 BE160L2		163

22 kW

n ₂ min-1	M ₂ Nm	S	i	R _{n2} N					
					IE2	IE3	IE2	IE3	
14.7	13273	0.9	99.8	70600			C1003_99.8 P180 BE180L4	C1003_99.8 P180 BX180L4	180
15.9	12325	1.0	92.7	70900			C1003_92.7 P180 BE180L4	C1003_92.7 P180 BX180L4	180
17.2	11378	1.1	85.6	71100			C1003_85.6 P180 BE180L4	C1003_85.6 P180 BX180L4	180
18.5	10565	1.1	79.4	71200			C1003_79.4 P180 BE180L4	C1003_79.4 P180 BX180L4	180
21.2	9233	1.3	69.4	71000			C1003_69.4 P180 BE180L4	C1003_69.4 P180 BX180L4	180
22.8	8574	1.4	64.5	70800			C1003_64.5 P180 BE180L4	C1003_64.5 P180 BX180L4	180
24.8	7873	0.9	59.2	36700			C903_59.2 P180 BE180L4	C903_59.2 P180 BX180L4	177
25.6	7627	1.6	57.4	70300			C1003_57.4 P180 BE180L4	C1003_57.4 P180 BX180L4	180
26.8	7298	1.0	54.9	36000			C903_54.9 P180 BE180L4	C903_54.9 P180 BX180L4	177
27.6	7082	1.7	53.3	69800			C1003_53.3 P180 BE180L4	C1003_53.3 P180 BX180L4	180
29.2	6690	1.1	50.3	37400			C903_50.3 P180 BE180L4	C903_50.3 P180 BX180L4	177
32	6147	2.0	46.2	68800			C1003_46.2 P180 BE180L4	C1003_46.2 P180 BX180L4	180
34	5716	1.3	43.0	37500			C903_43.0 P180 BE180L4	C903_43.0 P180 BX180L4	177
34	5708	2.1	42.9	68100			C1003_42.9 P180 BE180L4	C1003_42.9 P180 BX180L4	180
37	5240	1.4	39.4	37500			C903_39.4 P180 BE180L4	C903_39.4 P180 BX180L4	177
40	4912	2.4	36.9	66700			C1003_36.9 P180 BE180L4	C1003_36.9 P180 BX180L4	180
42	4768	1.1	35.1	37400			C902_35.1 P180 BE180L4	C902_35.1 P180 BX180L4	177
43	4561	2.6	34.3	65900			C1003_34.3 P180 BE180L4	C1003_34.3 P180 BX180L4	180
50	3931	2.3	29.6	64100			C1002_29.6 P180 BE180L4	C1002_29.6 P180 BX180L4	180
50	3999	1.5	29.4	37100			C902_29.4 P180 BE180L4	C902_29.4 P180 BX180L4	177
54	3691	1.5	27.2	36900			C902_27.2 P180 BE180L4	C902_27.2 P180 BX180L4	177
57	3525	1.0	25.9	23000			C802_25.9 P180 BE180L4	C802_25.9 P180 BX180L4	174
59	3373	2.0	24.8	36600			C902_24.8 P180 BE180L4	C902_24.8 P180 BX180L4	177
61	3254	1.1	24.0	23700			C802_24.0 P180 BE180L4	C802_24.0 P180 BX180L4	174
64	3113	2.0	22.9	36400			C902_22.9 P180 BE180L4	C902_22.9 P180 BX180L4	177
66	3022	1.2	22.2	23500			C802_22.2 P180 BE180L4	C802_22.2 P180 BX180L4	174
72	2789	1.3	20.5	23400			C802_20.5 P180 BE180L4	C802_20.5 P180 BX180L4	174
73	2749	2.4	20.2	35800			C902_20.2 P180 BE180L4	C902_20.2 P180 BX180L4	177
79	2538	2.4	18.7	35400			C902_18.7 P180 BE180L4	C902_18.7 P180 BX180L4	177
81	2452	1.5	18.1	23300			C802_18.1 P180 BE180L4	C802_18.1 P180 BX180L4	174



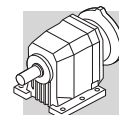
22 kW

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N					
					IE2	IE3	IE2	IE3	
85	2352	2.8	17.3	34900			C902_17.3 P180 BE180L4	C902_17.3 P180 BX180L4	177
88	2269	0.9	16.7	12400			C702_16.7 P180 BE180L4	C702_16.7 P180 BX180L4	171
88	2264	1.5	16.7	23100			C802_16.7 P180 BE180L4	C802_16.7 P180 BX180L4	174
92	2171	2.9	16.0	34600			C902_16.0 P180 BE180L4	C902_16.0 P180 BX180L4	177
96	2083	1.0	15.3	12400			C702_15.3 P180 BE180L4	C702_15.3 P180 BX180L4	171
99	2026	1.8	14.9	22900			C802_14.9 P180 BE180L4	C802_14.9 P180 BX180L4	174
104	1915	1.1	14.1	12700			C702_14.1 P180 BE180L4	C702_14.1 P180 BX180L4	171
106	1882	3.2	13.9	33700			C902_13.9 P180 BE180L4	C902_13.9 P180 BX180L4	177
107	1870	1.9	13.8	22700			C802_13.8 P180 BE180L4	C802_13.8 P180 BX180L4	174
113	1770	1.2	13.0	12700			C702_13.0 P180 BE180L4	C702_13.0 P180 BX180L4	171
122	1633	2.3	12.0	22500			C802_12.0 P180 BE180L4	C802_12.0 P180 BX180L4	174
131	1523	1.4	11.2	12900			C702_11.2 P180 BE180L4	C702_11.2 P180 BX180L4	171
133	1507	2.3	11.1	22100			C802_11.1 P180 BE180L4	C802_11.1 P180 BX180L4	174
135	1479	0.9	10.9	7580			C612_10.9 P180 BE180L4	C612_10.9 P180 BX180L4	167
144	1387	1.5	10.2	12800			C702_10.2 P180 BE180L4	C702_10.2 P180 BX180L4	171
150	1334	1.0	9.8	7710			C612_9.8 P180 BE180L4	C612_9.8 P180 BX180L4	167
153	1305	2.8	9.6	21900			C802_9.6 P180 BE180L4	C802_9.6 P180 BX180L4	174
154	1294	1.7	9.5	12800			C702_9.5 P180 BE180L4	C702_9.5 P180 BX180L4	171
166	1204	2.9	8.9	21300			C802_8.9 P180 BE180L4	C802_8.9 P180 BX180L4	174
166	1201	1.1	8.8	7660			C612_8.8 P180 BE180L4	C612_8.8 P180 BX180L4	167
184	1087	1.9	8.0	12700			C702_8.0 P180 BE180L4	C702_8.0 P180 BX180L4	171
196	1017	1.3	7.5	7690			C612_7.5 P180 BE180L4	C612_7.5 P180 BX180L4	167
197	1013	2.0	7.5	12700			C702_7.5 P180 BE180L4	C702_7.5 P180 BX180L4	171
218	916	1.5	6.7	7600			C612_6.7 P180 BE180L4	C612_6.7 P180 BX180L4	167
235	850	2.3	6.3	12500			C702_6.3 P180 BE180L4	C702_6.3 P180 BX180L4	171
251	795	2.4	5.9	12300			C702_5.9 P180 BE180L4	C702_5.9 P180 BX180L4	171
322	621	2.7	4.6	11900			C702_4.6 P180 BE180L4	C702_4.6 P180 BX180L4	171
323	619	1.1	4.6	6910			C612_4.6 P180 BE180L4	C612_4.6 P180 BX180L4	167
397	503	1.3	3.7	6740			C612_3.7 P180 BE180L4	C612_3.7 P180 BX180L4	167
444	449	0.9	3.3	4350			C512_3.3 P180 BE180L4	C512_3.3 P180 BX180L4	163
521	383	1.7	2.8	6450			C612_2.8 P180 BE180L4	C612_2.8 P180 BX180L4	167
559	357	1.1	2.6	4290			C512_2.6 P180 BE180L4	C512_2.6 P180 BX180L4	163

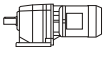




30 kW

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N					
					IE...		IE2*	IE3	
21.2	12584	1.0	69.4	61300			C1003_69.4 P200 IEC200L4	C1003_69.4 P200 BX200LA4	180
25.6	10395	1.2	57.4	62200			C1003_57.4 P200 IEC200L4	C1003_57.4 P200 BX200LA4	180
32	8379	1.4	46.2	62300			C1003_46.2 P200 IEC200L4	C1003_46.2 P200 BX200LA4	180
37	7142	1.0	39.4	31900			C903_39.4 P200 IEC200L4	C903_39.4 P200 BX200LA4	177
50	5472	1.7	29.6	59800			C1002_29.6 P200 IEC200L4	C1002_29.6 P200 BX200LA4	180
50	5450	1.1	29.4	32600			C902_29.4 P200 IEC200L4	C902_29.4 P200 BX200LA4	177
64	4243	1.5	22.9	32900			C902_22.9 P200 IEC200L4	C902_22.9 P200 BX200LA4	177
66	4119	2.4	22.2	57700			C1002_22.2 P200 IEC200L4	C1002_22.2 P200 BX200LA4	180
79	3459	1.8	18.7	32600			C902_18.7 P200 IEC200L4	C902_18.7 P200 BX200LA4	177
79	3456	3.1	18.7	56000			C1002_18.7 P200 IEC200L4	C1002_18.7 P200 BX200LA4	180
99	2761	1.3	14.9	20600			C802_14.9 P200 IEC200L4	C802_14.9 P200 BX200LA4	174
106	2566	2.4	13.9	31500			C902_13.9 P200 IEC200L4	C902_13.9 P200 BX200LA4	177
122	2225	1.7	12.0	20500			C802_12.0 P200 IEC200L4	C802_12.0 P200 BX200LA4	174
131	2079	2.7	11.2	30600			C902_11.2 P200 IEC200L4	C902_11.2 P200 BX200LA4	177
153	1778	2.1	9.6	20100			C802_9.6 P200 IEC200L4	C802_9.6 P200 BX200LA4	174
154	1763	1.2	9.5	11000			C702_9.5 P200 IEC200L4	C702_9.5 P200 BX200LA4	171
184	1482	1.4	8.0	11600			C702_8.0 P200 IEC200L4	C702_8.0 P200 BX200LA4	171
193	1412	2.4	7.6	19500			C802_7.6 P200 IEC200L4	C802_7.6 P200 BX200LA4	174
209	1303	2.6	7.0	19300			C802_7.0 P200 IEC200L4	C802_7.0 P200 BX200LA4	174
235	1158	1.7	6.3	11500			C702_6.3 P200 IEC200L4	C702_6.3 P200 BX200LA4	171
241	1131	2.8	6.1	18900			C802_6.1 P200 IEC200L4	C802_6.1 P200 BX200LA4	174
261	1044	3.0	5.6	18600			C802_5.6 P200 IEC200L4	C802_5.6 P200 BX200LA4	174
322	846	2.0	4.6	11000			C702_4.6 P200 IEC200L4	C702_4.6 P200 BX200LA4	171

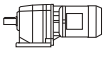




*The technical information shall be considered as indicative, the configurations should be matching the data provided by motors manufacturers on rated powers greater than 22 kW.



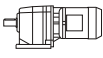




37 kW

n ₂ min-1	M ₂ Nm	S	i	R _{n2} N			IEC		
									
25.8	12734	0.9	57.4	55300			C1003_57.4 P225 IEC225S4	C1003_57.4 P225 BX225SA4	180
32	10264	1.2	46.2	56600			C1003_46.2 P225 IEC225S4	C1003_46.2 P225 BX225SA4	180
40	8201	1.4	36.9	57000			C1003_36.9 P225 IEC225S4	C1003_36.9 P225 BX225SA4	180
60	5631	1.2	24.8	29500			C902_24.8 P225 IEC225S4	C902_24.8 P225 BX225SA4	177
61	5467	2.0	24.1	55200			C1002_24.1 P225 IEC225S4	C1002_24.1 P225 BX225SA4	180
79	4237	1.5	18.7	30100			C902_18.7 P225 IEC225S4	C902_18.7 P225 BX225SA4	177
79	4234	2.5	18.7	53600			C1002_18.7 P225 IEC225S4	C1002_18.7 P225 BX225SA4	180
89	3779	0.9	16.7	18500			C802_16.7 P225 IEC225S4	C802_16.7 P225 BX225SA4	174
107	3143	1.9	13.9	29700			C902_13.9 P225 IEC225S4	C902_13.9 P225 BX225SA4	177
108	3122	1.1	13.8	18800			C802_13.8 P225 IEC225S4	C802_13.8 P225 BX225SA4	174
123	2726	1.4	12.0	18800			C802_12.0 P225 IEC225S4	C802_12.0 P225 BX225SA4	174
132	2546	2.2	11.2	29100			C902_11.2 P225 IEC225S4	C902_11.2 P225 BX225SA4	177
154	2178	1.7	9.6	18800			C802_9.6 P225 IEC225S4	C802_9.6 P225 BX225SA4	174
164	2046	2.5	9.0	28300			C902_9.0 P225 IEC225S4	C902_9.0 P225 BX225SA4	177
194	1730	2.0	7.6	18500			C802_7.6 P225 IEC225S4	C802_7.6 P225 BX225SA4	174
202	1661	2.9	7.3	27400			C902_7.3 P225 IEC225S4	C902_7.3 P225 BX225SA4	177
242	1386	2.3	6.1	18000			C802_6.1 P225 IEC225S4	C802_6.1 P225 BX225SA4	174
264	1271	3.5	5.6	26100			C902_5.6 P225 IEC225S4	C902_5.6 P225 BX225SA4	177
286	1173	3.7	5.2	25700			C902_5.2 P225 IEC225S4	C902_5.2 P225 BX225SA4	177

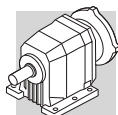
45 kW

n ₂ min-1	M ₂ Nm	S	i	R _{n2} N			IEC		
									
32	12483	1.0	46.2	50200			C1003_46.2 P225 IEC225M4	C1003_46.2 P225 BX225SB4	180
40	9974	1.2	36.9	51900			C1003_36.9 P225 IEC225M4	C1003_36.9 P225 BX225SB4	180
50	8153	1.1	29.6	51900			C1002_29.6 P225 IEC225M4	C1002_29.6 P225 BX225SB4	180
65	6322	1.0	22.9	26400			C902_22.9 P225 IEC225M4	C902_22.9 P225 BX225SB4	177
67	6137	1.6	22.2	51700			C1002_22.2 P225 IEC225M4	C1002_22.2 P225 BX225SB4	180
79	5153	1.2	18.7	27200			C902_18.7 P225 IEC225M4	C902_18.7 P225 BX225SB4	177
79	5149	2.1	18.7	51000			C1002_18.7 P225 IEC225M4	C1002_18.7 P225 BX225SB4	180
107	3822	1.6	13.9	27600			C902_13.9 P225 IEC225M4	C902_13.9 P225 BX225SB4	177
108	3797	0.9	13.8	16700			C802_13.8 P225 IEC225M4	C802_13.8 P225 BX225SB4	174
123	3315	1.1	12.0	17000			C802_12.0 P225 IEC225M4	C802_12.0 P225 BX225SB4	174
132	3097	1.8	11.2	27400			C902_11.2 P225 IEC225M4	C902_11.2 P225 BX225SB4	177
154	2649	1.4	9.6	17300			C802_9.6 P225 IEC225M4	C802_9.6 P225 BX225SB4	174
164	2488	2.1	9.0	26900			C902_9.0 P225 IEC225M4	C902_9.0 P225 BX225SB4	177
194	2104	1.6	7.6	17300			C802_7.6 P225 IEC225M4	C802_7.6 P225 BX225SB4	174
202	2020	2.4	7.3	26300			C902_7.3 P225 IEC225M4	C902_7.3 P225 BX225SB4	177
262	1556	2.0	5.6	17000			C802_5.6 P225 IEC225M4	C802_5.6 P225 BX225SB4	174
264	1546	2.8	5.6	25200			C902_5.6 P225 IEC225M4	C902_5.6 P225 BX225SB4	177
279	1464	2.9	5.2	25200			C902_5.2 P225 IEC225M4	C902_5.2 P225 BX225SB4	177

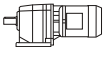




55 kW

n ₂ min-1	M ₂ Nm	S	i	R _{n2} N			IEC		
									
40	12191	1.0	36.9	45400			C1003_36.9 P250 IEC250M4	C1003_36.9 P250 BX250MA4	180
50	9965	0.9	29.6	46700			C1002_29.6 P250 IEC250M4	C1002_29.6 P250 BX250MA4	180
61	8126	1.3	24.1	47500			C1002_24.1 P250 IEC250M4	C1002_24.1 P250 BX250MA4	180
79	6298	1.0	18.7	22200			C902_18.7 P250 IEC250M4	C902_18.7 P250 BX250MA4	177
79	6294	1.7	18.7	47700			C1002_18.7 P250 IEC250M4	C1002_18.7 P250 BX250MA4	180
107	4672	1.3	13.9	24900			C902_13.9 P250 IEC250M4	C902_13.9 P250 BX250MA4	177
110	4549	2.1	13.5	46500			C1002_13.5 P250 IEC250M4	C1002_13.5 P250 BX250MA4	180
135	3686	2.4	10.9	45400			C1002_10.9 P250 IEC250M4	C1002_10.9 P250 BX250MA4	180
164	3050	2.7	9.0	44100			C1002_9.0 P250 IEC250M4	C1002_9.0 P250 BX250MA4	180
164	3041	1.7	9.0	25200			C902_9.0 P250 IEC250M4	C902_9.0 P250 BX250MA4	177
202	2468	2.0	7.3	24900			C902_7.3 P250 IEC250M4	C902_7.3 P250 BX250MA4	177
209	2383	3.2	7.1	42300			C1002_7.1 P250 IEC250M4	C1002_7.1 P250 BX250MA4	180
264	1889	2.3	5.6	24200			C902_5.6 P250 IEC250M4	C902_5.6 P250 BX250MA4	177
286	1744	2.5	5.2	24000			C902_5.2 P250 IEC250M4	C902_5.2 P250 BX250MA4	177

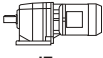




*The technical information shall be considered as indicative, the configurations should be matching the data provided by motors manufacturers on rated powers greater than 22 kW.



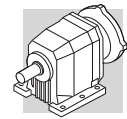
75 kW

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N	 		 		
					IE...		IE2*	IE3	
62	11044	1.0	24.1	38100			C1002_24.1 P280 IEC280S4	C1002_24.1 P280 BX280SA4	183
67	10194	1.0	22.2	40000			C1002_22.2 P280 IEC280S4	C1002_22.2 P280 BX280SA4	183
73	9266	1.2	20.2	40500			C1002_20.2 P280 IEC280S4	C1002_20.2 P280 BX280SA4	183
80	8553	1.3	18.7	41100			C1002_18.7 P280 IEC280S4	C1002_18.7 P280 BX280SA4	183
90	7552	1.3	16.5	41400			C1002_16.5 P280 IEC280S4	C1002_16.5 P280 BX280SA4	183
98	6971	1.4	15.2	41800			C1002_15.2 P280 IEC280S4	C1002_15.2 P280 BX280SA4	183
110	6182	1.5	13.5	41700			C1002_13.5 P280 IEC280S4	C1002_13.5 P280 BX280SA4	183
119	5707	1.6	12.5	41800			C1002_12.5 P280 IEC280S4	C1002_12.5 P280 BX280SA4	183
136	5010	1.8	10.9	41500			C1002_10.9 P280 IEC280S4	C1002_10.9 P280 BX280SA4	183
147	4624	1.9	10.1	41400			C1002_10.1 P280 IEC280S4	C1002_10.1 P280 BX280SA4	183
164	4146	2.0	9.0	40900			C1002_9.0 P280 IEC280S4	C1002_9.0 P280 BX280SA4	183
178	3827	2.1	8.4	40600			C1002_8.4 P280 IEC280S4	C1002_8.4 P280 BX280SA4	183
210	3238	2.4	7.1	39700			C1002_7.1 P280 IEC280S4	C1002_7.1 P280 BX280SA4	183
228	2989	2.5	6.5	39300			C1002_6.5 P280 IEC280S4	C1002_6.5 P280 BX280SA4	183
278	2444	2.8	5.3	38100			C1002_5.3 P280 IEC280S4	C1002_5.3 P280 BX280SA4	183
302	2256	3.0	4.9	37600			C1002_4.9 P280 IEC280S4	C1002_4.9 P280 BX280SA4	183

90 kW

n ₂ min ⁻¹	M ₂ Nm	S	i	R _{n2} N	 		 		
					IE...		IE2*	IE3	
73	11119	1.0	20.2	30600			C1002_20.2 P280 IEC280M4	C1002_20.2 P280 BX280SB4	183
80	10264	1.0	18.7	35500			C1002_18.7 P280 IEC280M4	C1002_18.7 P280 BX280SB4	183
90	9062	1.1	16.5	37100			C1002_16.5 P280 IEC280M4	C1002_16.5 P280 BX280SB4	183
98	8365	1.2	15.2	37800			C1002_15.2 P280 IEC280M4	C1002_15.2 P280 BX280SB4	180
110	7419	1.3	13.5	38100			C1002_13.5 P280 IEC280M4	C1002_13.5 P280 BX280SB4	180
119	6848	1.4	12.5	38500			C1002_12.5 P280 IEC280M4	C1002_12.5 P280 BX280SB4	183
136	6012	1.5	10.9	38600			C1002_10.9 P280 IEC280M4	C1002_10.9 P280 BX280SB4	180
147	5549	1.6	10.1	38700			C1002_10.1 P280 IEC280M4	C1002_10.1 P280 BX280SB4	183
164	4975	1.7	9.0	38500			C1002_9.0 P280 IEC280M4	C1002_9.0 P280 BX280SB4	180
178	4592	1.8	8.4	38400			C1002_8.4 P280 IEC280M4	C1002_8.4 P280 BX280SB4	183
210	3886	2.0	7.1	37800			C1002_7.1 P280 IEC280M4	C1002_7.1 P280 BX280SB4	180
228	3587	2.1	6.5	37600			C1002_6.5 P280 IEC280M4	C1002_6.5 P280 BX280SB4	177
278	2933	2.4	5.3	36600			C1002_5.3 P280 IEC280M4	C1002_5.3 P280 BX280SB4	177
302	2707	2.5	4.9	36300			C1002_4.9 P280 IEC280M4	C1002_4.9 P280 BX280SB4	174

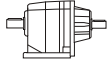

*The technical information shall be considered as indicative, the configurations should be matching the data provided by motors manufacturers on rated powers greater than 22 kW.

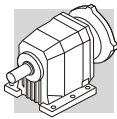


26 GEARBOX RATING CHARTS

C 12

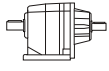

100 Nm

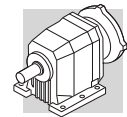
	i	$n_1 = 2800 \text{ min}^{-1}$					$n_1 = 1400 \text{ min}^{-1}$					
		n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	
C 12 2_2.8	2.8	1012	30	3.3	750	600	506	37	2.1	990	790	145
C 12 2_3.2	3.2	873	32	3.1	730	600	436	40	1.9	960	790	
C 12 2_3.7	3.7	767	34	2.9	720	610	383	42	1.8	960	800	
C 12 2_4.3	4.3	649	36	2.6	710	630	325	45	1.6	890	800	
C 12 2_4.9	4.9	575	38	2.4	710	640	288	48	1.5	880	800	
C 12 2_5.6	5.6	500	40	2.2	680	650	250	51	1.4	840	810	
C 12 2_6.2	6.2	449	42	2.1	650	660	225	53	1.3	810	830	
C 12 2_7.6	7.6	367	45	1.8	1140	1220	184	56	1.1	1300	1540	
C 12 2_8.8	8.8	317	47	1.6	1140	1280	158	59	1.0	1300	1620	
C 12 2_10.1	10.1	278	49	1.5	1150	1340	139	63	0.97	1300	1680	
C 12 2_11.9	11.9	236	53	1.4	1140	1390	118	67	0.87	1300	1760	
C 12 2_13.4	13.4	209	55	1.3	1140	1460	104	70	0.81	1300	1840	
C 12 2_15.4	15.4	182	58	1.2	1130	1500	91	73	0.73	1300	1930	
C 12 2_17.2	17.2	163	60	1.1	1130	1590	82	76	0.68	1300	2000	
C 12 2_18.4	18.4	152	62	1.0	1120	1620	76	78	0.65	1300	2000	
C 12 2_20.6	20.6	136	65	1.0	1110	1670	68	82	0.61	1300	2000	
C 12 2_23.2	23.2	120	67	0.89	1110	1720	60	85	0.56	1300	2000	
C 12 2_25.4	25.4	110	69	0.84	1110	1800	55	88	0.54	1300	2000	
C 12 2_29.5	29.5	95	74	0.77	1100	1880	47	93	0.49	1300	2000	
C 12 2_32.8	32.8	85	75	0.71	1090	1970	43	90	0.42	1300	2000	
C 12 2_37.0	37.0	76	79	0.66	1070	2000	38	90	0.38	1300	2000	
C 12 2_42.3	42.3	66	84	0.61	1060	2000	33	100	0.36	1300	2000	
C 12 2_47.6	47.6	59	85	0.55	1050	2000	29.4	90	0.29	1300	2000	
C 12 2_55.2	55.2	51	89	0.50	1030	2000	25.4	90	0.25	1300	2000	
C 12 2_66.2	66.2	42	86	0.40	1060	2000	21.2	90	0.21	1300	2000	



C 12

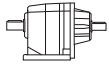

100 Nm

	i	$n_1 = 900 \text{ min}^{-1}$					$n_1 = 500 \text{ min}^{-1}$					
		n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	
C 12 2_2.8	2.8	325	43	1.5	1140	910	181	53	1.1	1300	1080	145
C 12 2_3.2	3.2	281	46	1.4	1100	910	156	57	1.0	1300	1080	
C 12 2_3.7	3.7	246	49	1.3	1090	920	137	60	0.91	1300	1100	
C 12 2_4.3	4.3	209	52	1.2	1050	920	116	64	0.82	1280	1100	
C 12 2_4.9	4.9	185	55	1.1	1050	960	103	67	0.76	1280	1160	
C 12 2_5.6	5.6	161	58	1.0	1000	980	89	69	0.68	1300	1280	
C 12 2_6.2	6.2	144	61	1.0	960	980	80	70	0.62	1300	1390	
C 12 2_7.6	7.6	118	65	0.85	1300	1780	66	79	0.57	1300	2000	
C 12 2_8.8	8.8	102	69	0.77	1300	1830	57	84	0.52	1300	2000	
C 12 2_10.1	10.1	89	72	0.71	1300	1950	50	88	0.48	1300	2000	
C 12 2_11.9	11.9	76	77	0.64	1300	2000	42	89	0.41	1300	2000	
C 12 2_13.4	13.4	67	81	0.60	1300	2000	37	90	0.37	1300	2000	
C 12 2_15.4	15.4	58	85	0.55	1300	2000	32	89	0.32	1300	2000	
C 12 2_17.2	17.2	52	88	0.51	1300	2000	29.1	90	0.29	1300	2000	
C 12 2_18.4	18.4	49	88	0.47	1300	2000	27.2	89	0.27	1300	2000	
C 12 2_20.6	20.6	44	89	0.43	1300	2000	24.2	89	0.24	1300	2000	
C 12 2_23.2	23.2	39	89	0.38	1300	2000	21.5	89	0.21	1300	2000	
C 12 2_25.4	25.4	35	89	0.35	1300	2000	19.7	89	0.19	1300	2000	
C 12 2_29.5	29.5	31	100	0.34	1300	2000	16.9	100	0.19	1300	2000	
C 12 2_32.8	32.8	27.5	90	0.27	1300	2000	15.3	90	0.15	1300	2000	
C 12 2_37.0	37.0	24.3	90	0.24	1300	2000	13.5	90	0.13	1300	2000	
C 12 2_42.3	42.3	21.3	100	0.23	1300	2000	11.8	100	0.13	1300	2000	
C 12 2_47.6	47.6	18.9	90	0.19	1300	2000	10.5	90	0.10	1300	2000	
C 12 2_55.2	55.2	16.3	90	0.16	1300	2000	9.1	90	0.09	1300	2000	
C 12 2_66.2	66.2	13.6	90	0.13	1300	2000	7.6	90	0.07	1300	2000	

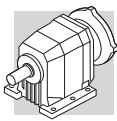


C 22

200 Nm

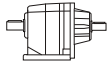

	i	$n_1 = 2800 \text{ min}^{-1}$					$n_1 = 1400 \text{ min}^{-1}$					
		n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	
C 22 2_2.7	2.7	1029	65	7.4	—	1150	514	80	4.5	—	1460	149
C 22 2_3.3	3.3	842	68	6.3	—	1230	421	85	3.9	—	1560	
C 22 2_3.7	3.7	755	70	5.8	—	1290	378	90	3.7	—	1610	
C 22 2_4.3	4.3	658	75	5.4	—	1320	329	94	3.4	—	1650	
C 22 2_4.8	4.8	587	80	5.2	—	1370	294	100	3.2	—	1730	
C 22 2_5.6	5.6	501	82	4.5	—	1410	250	102	2.8	—	1790	
C 22 2_6.1	6.1	460	85	4.3	—	1500	230	105	2.7	—	1900	
C 22 2_7.1	7.1	395	105	4.6	1090	1570	198	130	2.8	1420	1990	
C 22 2_8.7	8.7	324	110	3.9	1130	1680	162	138	2.5	1430	2090	
C 22 2_9.6	9.6	290	115	3.7	1160	1750	145	145	2.3	1460	2200	
C 22 2_11.1	11.1	253	120	3.3	1130	1820	126	153	2.1	1390	2270	
C 22 2_12.4	12.4	226	125	3.1	1160	1900	113	160	2.0	1420	2380	
C 22 2_14.5	14.5	193	133	2.8	1090	1980	96	168	1.8	1360	2450	
C 22 2_15.8	15.8	177	140	2.7	1030	2030	88	175	1.7	1320	2570	
C 22 2_18.1	18.1	154	145	2.5	1000	2140	77	183	1.6	1250	2650	
C 22 2_20.0	20.0	140	150	2.3	1000	2210	70	190	1.5	1250	2770	
C 22 2_21.5	21.5	131	153	2.2	970	2250	65	194	1.4	1190	2820	
C 22 2_24.3	24.3	115	160	2.0	980	2350	58	200	1.3	1250	2970	
C 22 2_27.2	27.2	103	166	1.9	960	2420	52	200	1.1	1340	3110	
C 22 2_29.6	29.6	95	175	1.8	850	2490	47	200	1.0	1350	3270	
C 22 2_33.1	33.1	85	178	1.7	840	2590	42	200	0.93	1390	3400	
C 22 2_36.8	36.8	76	185	1.6	750	2690	38	200	0.84	1400	3610	
C 22 2_43.3	43.3	65	185	1.3	830	2910	32	190	0.68	1610	3950	
C 22 2_48.6	48.6	58	150	0.95	1300	3300	28.8	155	0.49	1740	4400	
C 22 2_54.7	54.7	51	150	0.85	1320	3470	25.6	155	0.44	1770	4600	
C 22 2_63.3	63.3	44	125	0.61	1400	3860	22.1	130	0.32	1820	5000	
C 22 3_60.0	60.0	47	180	0.93	840	3400	23.3	190	0.49	1230	4500	
C 22 3_65.3	65.3	43	200	0.94	880	3440	21.4	200	0.47	1270	4670	
C 22 3_74.8	74.8	37	200	0.83	940	3600	18.7	200	0.41	1270	4800	
C 22 3_82.6	82.6	34	200	0.75	1010	3820	16.9	200	0.37	1300	5000	
C 22 3_88.5	88.5	32	200	0.70	1040	3900	15.8	200	0.35	1300	5000	
C 22 3_100.2	100.2	28.0	200	0.62	1090	4160	14.0	200	0.31	1300	5000	
C 22 3_112.0	112.0	25.0	200	0.55	1130	4300	12.5	200	0.28	1300	5000	
C 22 3_122.2	122.2	22.9	200	0.51	1160	4540	11.5	200	0.25	1300	5000	
C 22 3_136.5	136.5	20.5	200	0.45	1180	4700	10.3	200	0.23	1300	5000	
C 22 3_151.7	151.7	18.5	200	0.41	1220	4980	9.2	200	0.20	1300	5000	
C 22 3_178.5	178.5	15.7	200	0.35	1260	5000	7.8	200	0.17	1300	5000	
C 22 3_200.7	200.7	14.0	190	0.29	1280	5000	7.0	190	0.15	1300	5000	
C 22 3_225.8	225.8	12.4	180	0.25	1300	5000	6.2	185	0.13	1300	5000	
C 22 3_261.0	261.0	10.7	145	0.17	1300	5000	5.4	155	0.09	1300	5000	

(—) Contact our technical service department advising radial load data (rotation direction, orientation, position)

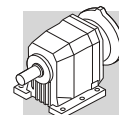


C 22

200 Nm

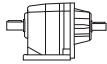

	i	$n_1 = 900 \text{ min}^{-1}$					$n_1 = 500 \text{ min}^{-1}$					
		n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	
C 22 2_2.7	2.7	331	95	3.5	—	1670	184	100	2.0	400	2150	149
C 22 2_3.3	3.3	271	100	3.0	—	1760	150	103	1.7	570	2300	
C 22 2_3.7	3.7	243	105	2.8	—	1850	135	105	1.6	800	2430	
C 22 2_4.3	4.3	211	105	2.4	—	1980	117	105	1.4	940	2550	
C 22 2_4.8	4.8	189	105	2.2	170	2090	105	105	1.2	1200	2710	
C 22 2_5.6	5.6	161	105	1.9	200	2250	89	112	1.1	1020	2850	
C 22 2_6.1	6.1	148	110	1.8	200	2290	82	116	1.1	980	2930	
C 22 2_7.1	7.1	127	150	2.1	1650	2310	71	180	1.4	2060	2820	
C 22 2_8.7	8.7	104	160	1.8	1650	2440	58	190	1.2	2100	3000	
C 22 2_9.6	9.6	93	170	1.7	1650	2530	52	200	1.1	2130	3130	
C 22 2_11.1	11.1	81	176	1.6	1640	2650	45	200	0.99	2170	3270	
C 22 2_12.4	12.4	73	185	1.5	1650	2760	40	200	0.89	2200	3520	
C 22 2_14.5	14.5	62	193	1.3	1610	2850	34	200	0.76	2200	3670	
C 22 2_15.8	15.8	57	200	1.3	1580	2990	32	200	0.70	2200	3920	
C 22 2_18.1	18.1	50	200	1.1	1650	3150	27.6	200	0.61	2200	4200	
C 22 2_20.0	20.0	45	200	0.99	1750	3340	25.0	200	0.55	2200	4350	
C 22 2_21.5	21.5	42	200	0.92	1760	3450	23.3	200	0.51	2200	4550	
C 22 2_24.3	24.3	37	200	0.82	1900	3650	20.6	200	0.45	2200	4720	
C 22 2_27.2	27.2	33	200	0.73	1950	3820	18.4	200	0.41	2200	5000	
C 22 2_29.6	29.6	30	200	0.67	1980	3990	16.9	200	0.37	2200	5000	
C 22 2_33.1	33.1	27.2	200	0.60	1970	4200	15.1	200	0.33	2200	5000	
C 22 2_36.8	36.8	24.5	200	0.54	1990	4390	13.6	200	0.30	2200	5000	
C 22 2_43.3	43.3	20.8	190	0.44	2020	4770	11.6	190	0.24	2200	5000	
C 22 2_48.6	48.6	18.5	160	0.33	2050	5000	10.3	170	0.19	2200	5000	
C 22 2_54.7	54.7	16.4	160	0.29	2090	5000	9.1	170	0.17	2200	5000	
C 22 2_63.3	63.3	14.2	135	0.21	2140	5000	7.9	140	0.12	2200	5000	
C 22 3_60.0	60.0	15.0	190	0.31	1300	5000	8.3	200	0.18	1300	5000	
C 22 3_65.3	65.3	13.8	200	0.31	1300	5000	7.7	200	0.17	1300	5000	
C 22 3_74.8	74.8	12.0	200	0.27	1300	5000	6.7	200	0.15	1300	5000	
C 22 3_82.6	82.6	10.9	200	0.25	1300	5000	6.1	200	0.14	1300	5000	
C 22 3_88.5	88.5	10.2	200	0.22	1300	5000	5.6	200	0.12	1300	5000	
C 22 3_100.2	100.2	9.0	200	0.20	1300	5000	5.0	200	0.11	1300	5000	
C 22 3_112.0	112.0	8.0	200	0.18	1300	5000	4.5	200	0.10	1300	5000	
C 22 3_122.2	122.2	7.4	200	0.17	1300	5000	4.1	200	0.09	1300	5000	
C 22 3_136.5	136.5	6.6	200	0.15	1300	5000	3.7	200	0.08	1300	5000	
C 22 3_151.7	151.7	5.9	200	0.13	1300	5000	3.3	200	0.07	1300	5000	
C 22 3_178.5	178.5	5.0	200	0.11	1300	5000	2.8	200	0.06	1300	5000	
C 22 3_200.7	200.7	4.5	195	0.10	1300	5000	2.5	200	0.05	1300	5000	
C 22 3_225.8	225.8	4.0	195	0.09	1300	5000	2.2	200	0.05	1300	5000	
C 22 3_261.0	261.0	3.4	160	0.06	1300	5000	1.9	165	0.04	1300	5000	

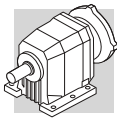
(—) Contact our technical service department advising radial load data (rotation direction, orientation, position)



C 32

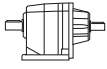

300 Nm

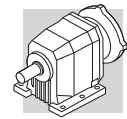
	i	$n_1 = 2800 \text{ min}^{-1}$					$n_1 = 1400 \text{ min}^{-1}$					
		n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	
C 32 2_2.9	2.9	973	105	11.3	670	1710	486	130	7.0	940	2170	153
C 32 2_3.4	3.4	821	116	10.5	480	1770	411	138	6.2	900	2280	
C 32 2_3.7	3.7	750	120	9.9	560	1830	375	150	6.2	750	2310	
C 32 2_4.5	4.5	622	129	8.8	450	1930	311	152	5.2	970	2500	
C 32 2_5.0	5.0	565	135	8.4	470	1990	283	155	4.8	1100	2600	
C 32 2_5.7	5.7	495	141	7.7	380	2080	248	155	4.2	1250	2760	
C 32 2_6.3	6.3	447	150	7.4	300	2130	223	155	3.8	1450	2890	
C 32 2_7.2	7.2	391	160	6.9	1890	2370	195	200	4.3	2200	2990	
C 32 2_8.5	8.5	330	168	6.1	1900	2510	165	209	3.8	2200	3180	
C 32 2_9.3	9.3	301	175	5.8	1910	2580	151	220	3.7	2200	3260	
C 32 2_11.2	11.2	250	187	5.2	1910	2740	125	231	3.2	2200	3480	
C 32 2_12.3	12.3	227	195	4.9	1910	2820	114	245	3.1	2200	3560	
C 32 2_14.1	14.1	199	205	4.5	1900	2940	99	251	2.8	2200	3750	
C 32 2_15.6	15.6	180	215	4.3	1900	3030	90	270	2.7	2200	3820	
C 32 2_18.2	18.2	154	223	3.8	1900	3210	77	275	2.3	2200	4070	
C 32 2_20.1	20.1	139	235	3.6	1900	3290	70	295	2.3	2200	4160	
C 32 2_22.9	22.9	122	240	3.2	1880	3470	61	295	2.0	2200	4400	
C 32 2_25.1	25.1	111	250	3.1	1890	3560	56	300	1.8	2200	4570	
C 32 2_26.9	26.9	104	255	2.9	1880	3650	52	300	1.7	2200	4700	
C 32 2_29.8	29.8	94	265	2.7	1880	3770	47	300	1.6	2200	4920	
C 32 2_33.1	33.1	85	270	2.5	1880	3920	42	300	1.4	2200	5150	
C 32 2_36.1	36.1	78	280	2.4	1870	4030	39	300	1.3	2200	5350	
C 32 2_40.7	40.7	69	290	2.2	1860	4200	34	300	1.1	2200	5500	
C 32 2_45.3	45.3	62	300	2.0	1860	4360	31	300	1.0	2200	5500	
C 32 2_52.4	52.4	53	300	1.8	1860	4650	26.7	300	0.88	2200	5500	
C 32 2_59.4	59.4	47	205	1.1	2020	5000	23.6	215	0.56	2200	5500	
C 32 2_66.8	66.8	42	205	0.95	2020	5500	21.0	215	0.50	2200	5500	
C 32 3_74.7	74.7	37	280	1.2	750	5500	18.7	290	0.60	1170	5500	
C 32 3_82.6	82.6	34	300	1.1	820	5500	17.0	300	0.56	1240	5500	
C 32 3_94.2	94.2	29.7	300	0.98	900	5500	14.9	300	0.49	1270	5500	
C 32 3_103.3	103.3	27.1	300	0.90	980	5500	13.6	300	0.45	1300	5500	
C 32 3_110.6	110.6	25.3	300	0.84	1000	5500	12.7	300	0.42	1300	5500	
C 32 3_122.4	122.4	22.9	300	0.76	1060	5500	11.4	300	0.38	1300	5500	
C 32 3_136.0	136.0	20.6	300	0.68	1110	5500	10.3	300	0.34	1300	5500	
C 32 3_148.4	148.4	18.9	300	0.62	1130	5500	9.4	300	0.31	1300	5500	
C 32 3_167.4	167.4	16.7	300	0.55	1180	5500	8.4	300	0.28	1300	5500	
C 32 3_186.0	186.0	15.1	300	0.50	1200	5500	7.5	300	0.25	1300	5500	
C 32 3_215.6	215.6	13.0	300	0.43	1240	5500	6.5	300	0.21	1300	5500	
C 32 3_244.2	244.2	11.5	240	0.30	1280	5500	5.7	255	0.16	1300	5500	
C 32 3_274.7	274.7	10.2	240	0.27	1300	5500	5.1	255	0.14	1300	5500	



C 32

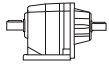

300 Nm

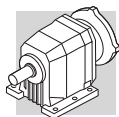
	i	$n_1 = 900 \text{ min}^{-1}$					$n_1 = 500 \text{ min}^{-1}$					
		n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	
C 32 2_2.9	2.9	313	150	5.2	1120	2510	174	155	3.0	2200	3220	
C 32 2_3.4	3.4	264	152	4.4	1390	2690	147	167	2.7	2200	3390	
C 32 2_3.7	3.7	241	155	4.1	1570	2790	134	175	2.6	2200	3480	
C 32 2_4.5	4.5	200	158	3.5	1750	3010	111	188	2.3	2200	3690	
C 32 2_5.0	5.0	182	162	3.2	1870	3120	101	198	2.2	2200	3790	
C 32 2_5.7	5.7	159	171	3.0	1730	3250	88	198	1.9	2200	4010	
C 32 2_6.3	6.3	144	178	2.8	1730	3350	80	200	1.8	2200	4180	
C 32 2_7.2	7.2	126	235	3.3	2200	3450	70	285	2.2	2200	4200	
C 32 2_8.5	8.5	106	246	2.9	2200	3660	59	288	1.9	2200	4520	
C 32 2_9.3	9.3	97	260	2.8	2200	3750	54	300	1.8	2200	4640	
C 32 2_11.2	11.2	80	272	2.4	2200	4010	45	300	1.5	2200	5030	
C 32 2_12.3	12.3	73	285	2.3	2200	4120	41	300	1.3	2200	5250	
C 32 2_14.1	14.1	64	290	2.0	2200	4340	36	300	1.2	2200	5500	
C 32 2_15.6	15.6	58	300	1.9	2200	4500	32	300	1.1	2200	5500	
C 32 2_18.2	18.2	50	300	1.6	2200	4810	27.5	300	0.91	2200	5500	
C 32 2_20.1	20.1	45	300	1.5	2200	5030	24.9	300	0.82	2200	5500	
C 32 2_22.9	22.9	39	300	1.3	2200	5300	21.8	300	0.72	2200	5500	
C 32 2_25.1	25.1	36	300	1.2	2200	5500	19.9	300	0.66	2200	5500	
C 32 2_26.9	26.9	33	300	1.1	2200	5500	18.6	300	0.61	2200	5500	
C 32 2_29.8	29.8	30	300	1.0	2200	5500	16.8	300	0.56	2200	5500	
C 32 2_33.1	33.1	27.2	300	0.90	2200	5500	15.1	300	0.50	2200	5500	
C 32 2_36.1	36.1	24.9	300	0.82	2200	5500	13.9	300	0.46	2200	5500	
C 32 2_40.7	40.7	22.1	300	0.73	2200	5500	12.3	300	0.41	2200	5500	
C 32 2_45.3	45.3	19.9	300	0.66	2200	5500	11.0	300	0.37	2200	5500	
C 32 2_52.4	52.4	17.2	300	0.57	2200	5500	9.5	300	0.32	2200	5500	
C 32 2_59.4	59.4	15.2	220	0.37	2200	5500	8.4	230	0.21	2200	5500	
C 32 2_66.8	66.8	13.5	220	0.33	2200	5500	7.5	230	0.19	2200	5500	
C 32 3_74.7	74.7	12.0	290	0.38	1300	5500	6.7	300	0.22	1300	5500	
C 32 3_82.6	82.6	10.9	300	0.36	1300	5500	6.1	300	0.20	1300	5500	
C 32 3_94.2	94.2	9.6	300	0.32	1300	5500	5.3	300	0.18	1300	5500	
C 32 3_103.3	103.3	8.7	300	0.29	1300	5500	4.8	300	0.16	1300	5500	
C 32 3_110.6	110.6	8.1	300	0.27	1300	5500	4.5	300	0.15	1300	5500	
C 32 3_122.4	122.4	7.4	300	0.24	1300	5500	4.1	300	0.14	1300	5500	
C 32 3_136.0	136.0	6.6	300	0.22	1300	5500	3.7	300	0.12	1300	5500	
C 32 3_148.4	148.4	6.1	300	0.20	1300	5500	3.4	300	0.11	1300	5500	
C 32 3_167.4	167.4	5.4	300	0.18	1300	5500	3.0	300	0.10	1300	5500	
C 32 3_186.0	186.0	4.8	300	0.16	1300	5500	2.7	300	0.09	1300	5500	
C 32 3_215.6	215.6	4.2	300	0.14	1300	5500	2.3	300	0.08	1300	5500	
C 32 3_244.2	244.2	3.7	260	0.11	1300	5500	2.0	275	0.06	1300	5500	
C 32 3_274.7	274.7	3.3	260	0.09	1300	5500	1.8	275	0.06	1300	5500	



C 36

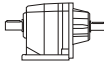

450 Nm

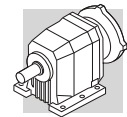
	i	$n_1 = 2800 \text{ min}^{-1}$					$n_1 = 1400 \text{ min}^{-1}$					
		n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	
C 36 2_2.7	2.7	1042	140	16.1	670	1750	521	170	9.8	1150	2240	157
C 36 2_3.2	3.2	880	145	14.1	790	1870	440	177	8.6	1240	2380	
C 36 2_3.5	3.5	803	150	13.3	910	1920	402	185	8.2	1320	2440	
C 36 2_4.2	4.2	667	157	11.5	920	2050	333	192	7.1	1410	2620	
C 36 2_4.6	4.6	606	165	11.0	920	2110	303	200	6.7	1470	2700	
C 36 2_5.3	5.3	530	167	9.8	990	2230	265	200	5.8	1650	2870	
C 36 2_5.8	5.8	479	170	9.0	1160	2330	239	200	5.3	1990	3020	
C 36 2_6.8	6.8	413	285	13.0	1750	2130	206	355	8.1	2220	2710	
C 36 2_8.0	8.0	349	297	11.4	1770	2270	174	365	7.0	2250	2910	
C 36 2_8.8	8.8	318	310	10.9	1780	2330	159	380	6.7	2270	3000	
C 36 2_10.6	10.6	264	325	9.5	1790	2500	132	380	5.5	2320	3290	
C 36 2_11.7	11.7	240	340	9.0	1790	2560	120	380	5.0	2370	3460	
C 36 2_13.3	13.3	210	350	8.1	1800	2700	105	380	4.4	2400	3670	
C 36 2_14.8	14.8	190	360	7.5	1800	2810	95	380	4.0	2440	3890	
C 36 2_17.2	17.2	163	370	6.6	1810	3000	81	380	3.4	2460	4200	
C 36 2_19.0	19.0	147	380	6.2	1820	3110	74	380	3.1	2500	4400	
C 36 3_22.1	22.1	127	340	4.7	2300	3570	63	430	3.0	2900	4490	
C 36 3_26.2	26.2	107	355	4.2	2300	3790	53	440	2.6	2910	4810	
C 36 3_28.7	28.7	98	385	4.1	2300	3820	49	450	2.4	2930	4980	
C 36 3_34.6	34.6	81	400	3.6	2300	4100	40	450	2.0	2950	5420	
C 36 3_38.1	38.1	74	435	3.5	2300	4140	37	450	1.8	2970	5690	
C 36 3_43.5	43.5	64	440	3.1	2300	4450	32	450	1.6	2980	6050	
C 36 3_48.2	48.2	58	450	2.9	2310	4580	29.1	450	1.4	2990	6330	
C 36 3_56.2	56.2	50	450	2.5	2320	4970	24.9	450	1.2	2990	6500	
C 36 3_62.0	62.0	45	450	2.2	2330	5170	22.6	450	1.1	3000	6500	
C 36 3_70.8	70.8	40	450	2.0	2340	5520	19.8	450	0.98	3000	6500	
C 36 3_77.6	77.6	36	450	1.8	2350	5740	18.0	450	0.90	3000	6500	
C 36 3_83.1	83.1	34	450	1.7	2350	5930	16.8	450	0.84	3000	6500	
C 36 3_91.9	91.9	30	450	1.5	2360	6200	15.2	450	0.76	3000	6500	
C 36 3_102.2	102.2	27.4	450	1.4	2360	6400	13.7	450	0.68	3000	6500	
C 36 3_111.5	111.5	25.1	450	1.2	2360	6500	12.6	450	0.62	3000	6500	
C 36 3_125.8	125.8	22.3	450	1.1	2370	6500	11.1	450	0.55	3000	6500	
C 36 3_139.8	139.8	20.0	450	0.99	2370	6500	10.0	450	0.50	3000	6500	
C 36 3_162.0	162.0	17.3	450	0.86	2380	6500	8.6	450	0.43	3000	6500	
C 36 3_183.5	183.5	15.3	450	0.76	2380	6500	7.6	450	0.38	3000	6500	
C 36 3_206.4	206.4	13.6	450	0.67	2380	6500	6.8	450	0.34	3000	6500	
C 36 4_230.9	230.9	12.1	450	0.60	1150	6500	6.1	450	0.30	1300	6500	
C 36 4_255.0	255.0	11.0	450	0.54	1190	6500	5.5	450	0.27	1300	6500	
C 36 4_290.9	290.9	9.6	450	0.48	1210	6500	4.8	450	0.24	1300	6500	
C 36 4_318.9	318.9	8.8	450	0.44	1230	6500	4.4	450	0.22	1300	6500	
C 36 4_341.7	341.7	8.2	450	0.41	1240	6500	4.1	450	0.20	1300	6500	
C 36 4_377.9	377.9	7.4	450	0.37	1260	6500	3.7	450	0.18	1300	6500	
C 36 4_420.2	420.2	6.7	450	0.33	1270	6500	3.3	450	0.17	1300	6500	
C 36 4_458.4	458.4	6.1	450	0.30	1280	6500	3.1	450	0.15	1300	6500	
C 36 4_517.2	517.2	5.4	450	0.27	1300	6500	2.7	450	0.13	1300	6500	
C 36 4_574.7	574.7	4.9	450	0.24	1300	6500	2.4	450	0.12	1300	6500	
C 36 4_665.9	665.9	4.2	450	0.21	1300	6500	2.1	450	0.10	1300	6500	
C 36 4_754.2	754.2	3.7	450	0.18	1300	6500	1.9	450	0.09	1300	6500	
C 36 4_848.5	848.5	3.3	450	0.16	1300	6500	1.6	450	0.08	1300	6500	



C 36

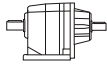

450 Nm

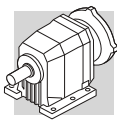
	i	$n_1 = 900 \text{ min}^{-1}$					$n_1 = 500 \text{ min}^{-1}$					
		n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	
C 36 2_2.7	2.7	335	190	7.0	1670	2640	186	200	4.1	3000	3390	
C 36 2_3.2	3.2	283	190	5.9	2080	2790	157	200	3.5	3000	3650	
C 36 2_3.5	3.5	258	200	5.7	2160	2920	143	200	3.2	3000	3810	
C 36 2_4.2	4.2	214	200	4.7	2410	3170	119	200	2.6	3000	4100	
C 36 2_4.6	4.6	195	200	4.3	2590	3320	108	200	2.4	3000	4300	
C 36 2_5.3	5.3	171	200	3.8	2630	3500	95	200	2.1	3000	4520	
C 36 2_5.8	5.8	154	200	3.4	2680	3690	86	200	1.9	3000	4740	
C 36 2_6.8	6.8	133	380	5.6	2660	3290	74	380	3.1	3000	4400	
C 36 2_8.0	8.0	112	380	4.7	2720	3580	62	380	2.6	3000	4750	
C 36 2_8.8	8.8	102	380	4.3	2790	3750	57	380	2.4	3000	4960	
C 36 2_10.6	10.6	85	380	3.6	2850	4110	47	380	2.0	3000	5360	
C 36 2_11.7	11.7	77	380	3.2	2900	4300	43	380	1.8	3000	5630	
C 36 2_13.3	13.3	68	380	2.8	2930	4590	38	380	1.6	3000	5930	
C 36 2_14.8	14.8	61	380	2.6	2970	4800	34	380	1.4	3000	6240	
C 36 2_17.2	17.2	52	380	2.2	2980	5100	29.1	380	1.2	3000	6330	
C 36 2_19.0	19.0	47	380	2.0	3000	5390	26.3	380	1.1	3000	6500	
C 36 3_22.1	22.1	41	450	2.0	3000	5430	22.6	450	1.1	3000	6500	
C 36 3_26.2	26.2	34	450	1.7	3000	5850	19.1	450	0.95	3000	6500	
C 36 3_28.7	28.7	31	450	1.6	3000	6120	17.4	450	0.86	3000	6500	
C 36 3_34.6	34.6	26.0	450	1.3	3000	6500	14.5	450	0.72	3000	6500	
C 36 3_38.1	38.1	23.6	450	1.2	3000	6500	13.1	450	0.65	3000	6500	
C 36 3_43.5	43.5	20.7	450	1.0	3000	6500	11.5	450	0.57	3000	6500	
C 36 3_48.2	48.2	18.7	450	0.93	3000	6500	10.4	450	0.52	3000	6500	
C 36 3_56.2	56.2	16.0	450	0.79	3000	6500	8.9	450	0.44	3000	6500	
C 36 3_62.0	62.0	14.5	450	0.72	3000	6500	8.1	450	0.40	3000	6500	
C 36 3_70.8	70.8	12.7	450	0.63	3000	6500	7.1	450	0.35	3000	6500	
C 36 3_77.6	77.6	11.6	450	0.58	3000	6500	6.4	450	0.32	3000	6500	
C 36 3_83.1	83.1	10.8	450	0.54	3000	6500	6.0	450	0.30	3000	6500	
C 36 3_91.9	91.9	9.8	450	0.49	3000	6500	5.4	450	0.27	3000	6500	
C 36 3_102.2	102.2	8.8	450	0.44	3000	6500	4.9	450	0.24	3000	6500	
C 36 3_111.5	111.5	8.1	450	0.40	3000	6500	4.5	450	0.22	3000	6500	
C 36 3_125.8	125.8	7.2	450	0.35	3000	6500	4.0	450	0.20	3000	6500	
C 36 3_139.8	139.8	6.4	450	0.32	3000	6500	3.6	450	0.18	3000	6500	
C 36 3_162.0	162.0	5.6	450	0.28	3000	6500	3.1	450	0.15	3000	6500	
C 36 3_183.5	183.5	4.9	450	0.24	3000	6500	2.7	450	0.14	3000	6500	
C 36 3_206.4	206.4	4.4	450	0.22	3000	6500	2.4	450	0.12	3000	6500	
C 36 4_230.9	230.9	3.9	450	0.19	1300	6500	2.2	450	0.11	1300	6500	
C 36 4_255.0	255.0	3.5	450	0.18	1300	6500	2.0	450	0.10	1300	6500	
C 36 4_290.9	290.9	3.1	450	0.15	1300	6500	1.7	450	0.09	1300	6500	
C 36 4_318.9	318.9	2.8	450	0.14	1300	6500	1.6	450	0.08	1300	6500	
C 36 4_341.7	341.7	2.6	450	0.13	1300	6500	1.5	450	0.07	1300	6500	
C 36 4_377.9	377.9	2.4	450	0.12	1300	6500	1.3	450	0.07	1300	6500	
C 36 4_420.2	420.2	2.1	450	0.11	1300	6500	1.2	450	0.06	1300	6500	
C 36 4_458.4	458.4	2.0	450	0.10	1300	6500	1.1	450	0.05	1300	6500	
C 36 4_517.2	517.2	1.7	450	0.09	1300	6500	1.0	450	0.05	1300	6500	
C 36 4_574.7	574.7	1.6	450	0.08	1300	6500	0.9	450	0.04	1300	6500	
C 36 4_665.9	665.9	1.4	450	0.07	1300	6500	0.8	450	0.04	1300	6500	
C 36 4_754.2	754.2	1.2	450	0.06	1300	6500	0.7	450	0.03	1300	6500	
C 36 4_848.5	848.5	1.1	450	0.05	1300	6500	0.6	450	0.03	1300	6500	



C 41

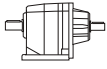

600 Nm

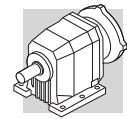
	i	$n_1 = 2800 \text{ min}^{-1}$					$n_1 = 1400 \text{ min}^{-1}$					
		n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	
C 41 2_2.7	2.7	1037	245	28	980	1290	519	245	14.0	1390	2060	161
C 41 2_3.6	3.6	778	255	22	1070	1540	389	255	10.9	1650	2390	
C 41 2_4.7	4.7	596	260	17.1	1170	1800	298	260	8.5	2010	2730	
C 41 2_6.0	6.0	467	260	13.4	1290	2100	233	260	6.7	2400	3110	
C 41 2_6.4	6.4	438	275	13.3	2270	2590	219	345	8.3	2860	3260	
C 41 2_7.1	7.1	394	285	12.4	2360	2700	197	355	7.7	2980	3420	
C 41 2_8.6	8.6	326	305	10.9	2300	2860	163	385	6.9	2900	3600	
C 41 2_9.6	9.6	292	310	10.0	2410	3010	146	390	6.3	3030	3800	
C 41 2_11.2	11.2	250	335	9.2	2310	3100	125	420	5.8	2910	3920	
C 41 2_12.4	12.4	226	340	8.5	2440	3270	113	425	5.3	3070	4140	
C 41 2_14.2	14.2	197	355	7.7	2330	3410	99	445	4.8	2980	4300	
C 41 2_15.8	15.8	177	360	7.0	2460	3590	89	450	4.4	3120	4540	
C 41 2_17.8	17.8	157	380	6.6	2330	3680	79	480	4.2	3050	4630	
C 41 2_19.8	19.8	141	385	6.0	2460	3880	71	485	3.8	3180	4890	
C 41 2_22.6	22.6	124	410	5.6	2320	3990	62	500	3.4	3110	5110	
C 41 2_25.0	25.0	112	415	5.1	2460	4210	56	500	3.1	3230	5420	
C 41 2_28.3	28.3	99	445	4.9	2310	4290	49	500	2.7	3180	5710	
C 41 2_31.4	31.4	89	445	4.4	2440	4550	45	500	2.5	3300	6040	
C 41 2_33.4	33.4	84	465	4.3	2390	4560	42	500	2.3	3220	6170	
C 41 2_37.1	37.1	75	470	3.9	2440	4810	38	500	2.1	3320	6520	
C 41 2_44.8	44.8	63	500	3.4	2660	5130	31	500	1.7	3500	7000	
C 41 3_28.5	28.5	98	445	4.9	3060	4300	49	560	3.1	3500	5420	
C 41 3_31.2	31.2	90	450	4.5	3090	4510	45	570	2.9	3500	5670	
C 41 3_36.8	36.8	76	480	4.1	3070	4710	38	600	2.6	3500	5960	
C 41 3_40.3	40.3	69	485	3.8	3100	4940	35	600	2.3	3500	6280	
C 41 3_47.0	47.0	60	515	3.5	3070	5140	29.8	600	2.0	3500	6720	
C 41 3_51.5	51.5	54	525	3.2	3090	5360	27.2	600	1.8	3500	7000	
C 41 3_58.7	58.7	48	550	3.0	3070	5550	23.9	600	1.6	3500	7000	
C 41 3_64.3	64.3	44	560	2.7	3090	5800	21.8	600	1.5	3500	7000	
C 41 3_74.4	74.4	38	590	2.5	3060	6040	18.8	600	1.3	3500	7000	
C 41 3_81.5	81.5	34	600	2.3	3090	6310	17.2	600	1.2	3500	7000	
C 41 3_93.3	93.3	30	600	2.0	3080	6700	15.0	600	1.0	3500	7000	
C 41 3_102.3	102.3	27.4	600	1.8	3110	7000	13.7	600	0.92	3500	7000	
C 41 3_110.1	110.1	25.4	600	1.7	3090	7000	12.7	600	0.86	3500	7000	
C 41 3_120.6	120.6	23.2	600	1.6	3110	7000	11.6	600	0.78	3500	7000	
C 41 3_132.9	132.9	21.1	600	1.4	3090	7000	10.5	600	0.71	3500	7000	
C 41 3_145.6	145.6	19.2	600	1.3	3120	7000	9.6	600	0.65	3500	7000	
C 41 3_164.1	164.1	17.1	600	1.2	3100	7000	8.5	600	0.58	3500	7000	
C 41 3_179.9	179.9	15.6	600	1.1	3120	7000	7.8	600	0.53	3500	7000	
C 41 3_190.8	190.8	14.7	600	0.99	3110	7000	7.3	600	0.50	3500	7000	
C 41 3_209.1	209.1	13.4	600	0.90	3130	7000	6.7	600	0.45	3500	7000	
C 41 4_239.9	239.9	11.7	600	0.81	1480	7000	5.8	600	0.40	1910	7000	
C 41 4_263.0	263.0	10.6	600	0.74	1500	7000	5.3	600	0.37	1920	7000	
C 41 4_304.2	304.2	9.2	600	0.64	1520	7000	4.6	600	0.32	1950	7000	
C 41 4_333.4	333.4	8.4	600	0.58	1530	7000	4.2	600	0.29	1960	7000	
C 41 4_381.8	381.8	7.3	600	0.51	1540	7000	3.7	600	0.25	1970	7000	
C 41 4_418.5	418.5	6.7	600	0.46	1550	7000	3.3	600	0.23	1980	7000	
C 41 4_450.2	450.2	6.2	600	0.43	1560	7000	3.1	600	0.21	1990	7000	
C 41 4_493.5	493.5	5.7	600	0.39	1570	7000	2.8	600	0.20	2000	7000	
C 41 4_543.5	543.5	5.2	600	0.36	1570	7000	2.6	600	0.18	2000	7000	
C 41 4_595.8	595.8	4.7	600	0.32	1580	7000	2.3	600	0.16	2010	7000	
C 41 4_671.3	671.3	4.2	600	0.29	1590	7000	2.1	600	0.14	2020	7000	
C 41 4_735.9	735.9	3.8	600	0.26	1590	7000	1.9	600	0.13	2020	7000	
C 41 4_780.4	780.4	3.6	600	0.25	1600	7000	1.8	600	0.12	2030	7000	
C 41 4_855.5	855.5	3.3	600	0.23	1600	7000	1.6	600	0.11	2030	7000	



C 41

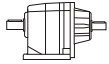

600 Nm

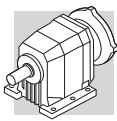
	i	$n_1 = 900 \text{ min}^{-1}$					$n_1 = 500 \text{ min}^{-1}$					
		n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	
C 41 2_2.7	2.7	333	245	9.0	2560	2650	185	245	5.0	3500	3590	161
C 41 2_3.6	3.6	250	255	7.0	2710	3050	139	255	3.9	3500	4090	
C 41 2_4.7	4.7	191	260	5.5	2900	3440	106	260	3.0	3500	4570	
C 41 2_6.0	6.0	150	260	4.3	3080	3890	83	260	2.4	3500	5110	
C 41 2_6.4	6.4	141	400	6.2	3310	3780	78	490	4.2	3500	4580	
C 41 2_7.1	7.1	127	415	5.8	3460	3940	70	500	3.9	3500	4820	
C 41 2_8.6	8.6	105	445	5.1	3360	4180	58	500	3.2	3500	5290	
C 41 2_9.6	9.6	94	450	4.7	3500	4410	52	500	2.9	3500	5600	
C 41 2_11.2	11.2	80	490	4.3	3500	4520	45	500	2.5	3500	5980	
C 41 2_12.4	12.4	73	495	4.0	3500	4780	40	500	2.2	3500	6320	
C 41 2_14.2	14.2	63	500	3.5	3500	5060	35	500	1.9	3500	6700	
C 41 2_15.8	15.8	57	500	3.1	3500	5370	32	500	1.7	3500	7000	
C 41 2_17.8	17.8	51	500	2.8	3500	5650	28.1	500	1.5	3500	7000	
C 41 2_19.8	19.8	45	500	2.5	3500	5970	25.3	500	1.4	3500	7000	
C 41 2_22.6	22.6	40	500	2.2	3500	6320	22.1	500	1.2	3500	7000	
C 41 2_25.0	25.0	36	500	2.0	3500	6670	20.0	500	1.1	3500	7000	
C 41 2_28.3	28.3	32	500	1.8	3500	7000	17.7	500	0.97	3500	7000	
C 41 2_31.4	31.4	28.7	500	1.6	3500	7000	15.9	500	0.88	3500	7000	
C 41 2_33.4	33.4	26.9	500	1.5	3500	7000	15.0	500	0.83	3500	7000	
C 41 2_37.1	37.1	24.3	500	1.3	3500	7000	13.5	500	0.74	3500	7000	
C 41 2_44.8	44.8	20.1	500	1.1	3500	7000	11.2	500	0.62	3500	7000	
C 41 3_28.5	28.5	32	600	2.1	3500	6530	17.5	600	1.2	3500	7000	
C 41 3_31.2	31.2	28.8	600	1.9	3500	6870	16.0	600	1.1	3500	7000	
C 41 3_36.8	36.8	24.5	600	1.7	3500	7000	13.6	600	0.92	3500	7000	
C 41 3_40.3	40.3	22.3	600	1.5	3500	7000	12.4	600	0.84	3500	7000	
C 41 3_47.0	47.0	19.1	600	1.3	3500	7000	10.6	600	0.72	3500	7000	
C 41 3_51.5	51.5	17.5	600	1.2	3500	7000	9.7	600	0.66	3500	7000	
C 41 3_58.7	58.7	15.3	600	1.0	3500	7000	8.5	600	0.58	3500	7000	
C 41 3_64.3	64.3	14.0	600	0.95	3500	7000	7.8	600	0.53	3500	7000	
C 41 3_74.4	74.4	12.1	600	0.82	3500	7000	6.7	600	0.45	3500	7000	
C 41 3_81.5	81.5	11.0	600	0.75	3500	7000	6.1	600	0.41	3500	7000	
C 41 3_93.3	93.3	9.6	600	0.65	3500	7000	5.4	600	0.36	3500	7000	
C 41 3_102.3	102.3	8.8	600	0.59	3500	7000	4.9	600	0.33	3500	7000	
C 41 3_110.1	110.1	8.2	600	0.55	3500	7000	4.5	600	0.31	3500	7000	
C 41 3_120.6	120.6	7.5	600	0.50	3500	7000	4.1	600	0.28	3500	7000	
C 41 3_132.9	132.9	6.8	600	0.46	3500	7000	3.8	600	0.25	3500	7000	
C 41 3_145.6	145.6	6.2	600	0.42	3500	7000	3.4	600	0.23	3500	7000	
C 41 3_164.1	164.1	5.5	600	0.37	3500	7000	3.0	600	0.21	3500	7000	
C 41 3_179.9	179.9	5.0	600	0.34	3500	7000	2.8	600	0.19	3500	7000	
C 41 3_190.8	190.8	4.7	600	0.32	3500	7000	2.6	600	0.18	3500	7000	
C 41 3_209.1	209.1	4.3	600	0.29	3500	7000	2.4	600	0.16	3500	7000	
C 41 4_239.9	239.9	3.8	600	0.26	2200	7000	2.1	600	0.14	2200	7000	
C 41 4_263.0	263.0	3.4	600	0.24	2200	7000	1.9	600	0.13	2200	7000	
C 41 4_304.2	304.2	3.0	600	0.20	2200	7000	1.6	600	0.11	2200	7000	
C 41 4_333.4	333.4	2.7	600	0.19	2200	7000	1.5	600	0.10	2200	7000	
C 41 4_381.8	381.8	2.4	600	0.16	2200	7000	1.3	600	0.09	2200	7000	
C 41 4_418.5	418.5	2.2	600	0.15	2200	7000	1.2	600	0.08	2200	7000	
C 41 4_450.2	450.2	2.0	600	0.14	2200	7000	1.1	600	0.08	2200	7000	
C 41 4_493.5	493.5	1.8	600	0.13	2200	7000	1.0	600	0.07	2200	7000	
C 41 4_543.5	543.5	1.7	600	0.11	2200	7000	0.92	600	0.06	2200	7000	
C 41 4_595.8	595.8	1.5	600	0.10	2200	7000	0.84	600	0.06	2200	7000	
C 41 4_671.3	671.3	1.3	600	0.09	2200	7000	0.74	600	0.05	2200	7000	
C 41 4_735.9	735.9	1.2	600	0.08	2200	7000	0.68	600	0.05	2200	7000	
C 41 4_780.4	780.4	1.2	600	0.08	2200	7000	0.64	600	0.04	2200	7000	
C 41 4_855.5	855.5	1.1	600	0.07	2200	7000	0.58	600	0.04	2200	7000	



C 51

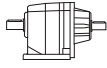

1000 Nm

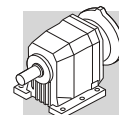
	i	$n_1 = 2800 \text{ min}^{-1}$					$n_1 = 1400 \text{ min}^{-1}$					
		n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	
C 51 2_2.6	2.6	1077	315	37	980	3340	538	400	24	1390	4200	165
C 51 2_3.3	3.3	848	340	32	1070	3610	424	420	19.6	1650	4580	
C 51 2_4.5	4.5	622	370	25	1170	4010	311	435	14.9	2010	5180	
C 51 2_5.6	5.6	500	390	21	1290	4380	250	435	12.0	2400	5760	
C 51 2_7.0	7.0	400	500	22	2270	4760	200	630	13.9	2860	6000	
C 51 2_7.8	7.8	359	510	20	2360	4940	179	640	12.7	2980	6230	
C 51 2_8.8	8.8	318	545	19.1	2300	5120	159	685	12.0	2900	6450	
C 51 2_9.8	9.8	286	545	17.2	2410	5350	143	685	10.8	3030	6750	
C 51 2_11.8	11.8	237	610	16.0	2310	5620	119	770	10.1	2910	7080	
C 51 2_13.1	13.1	214	595	14.0	2440	5930	107	750	8.8	3070	7470	
C 51 2_15.0	15.0	187	660	13.6	2330	6080	93	800	8.2	2980	7770	
C 51 2_16.6	16.6	169	640	11.9	2460	6420	84	795	7.4	3120	8130	
C 51 2_18.9	18.9	148	695	11.3	2330	6630	74	800	6.5	3050	8620	
C 51 2_21.0	21.0	133	675	9.9	2460	7000	67	795	5.8	3180	9020	
C 51 2_23.4	23.4	120	735	9.7	2320	7160	60	800	5.3	3110	9460	
C 51 2_25.9	25.9	108	715	8.5	2460	7550	54	795	4.7	3230	9890	
C 51 2_29.8	29.8	94	795	8.2	2310	7770	47	800	4.1	3180	10000	
C 51 2_33.0	33.0	85	775	7.2	2440	8190	42	795	3.7	3300	10000	
C 51 2_36.4	36.4	77	750	6.4	2390	8660	38	790	3.3	3220	10000	
C 51 2_40.4	40.4	69	795	6.1	2440	8870	35	795	3.0	3320	10000	
C 51 2_43.1	43.1	65	730	5.2	2450	9380	32	770	2.8	3280	10000	
C 51 2_47.8	47.8	59	800	5.2	2460	9530	29.3	800	2.6	3350	10000	
C 51 2_51.4	51.4	54	665	4.0	2550	10000	27.2	700	2.1	3390	10000	
C 51 2_57.0	57.0	49	745	4.0	2540	10000	24.6	785	2.1	3380	10000	
C 51 3_21.8	21.8	128	720	10.4	2870	6940	64	905	6.5	3500	8750	
C 51 3_23.9	23.9	117	730	9.6	2910	7230	59	920	6.1	3500	9110	
C 51 3_27.4	27.4	102	770	8.9	2890	7510	51	970	5.6	3500	9470	
C 51 3_30.1	30.1	93	780	8.2	2930	7830	47	1000	5.2	3500	9810	
C 51 3_37.0	37.0	76	840	7.2	2910	8330	38	1000	4.3	3500	10000	
C 51 3_40.5	40.5	69	855	6.7	2940	8670	35	1000	3.9	3500	10000	
C 51 3_46.7	46.7	60	905	6.1	2920	9020	30	1000	3.4	3500	10000	
C 51 3_51.2	51.2	55	920	5.7	2950	9390	27.3	1000	3.1	3500	10000	
C 51 3_59.0	59.0	47	970	5.2	2910	9780	23.7	1000	2.7	3500	10000	
C 51 3_64.6	64.6	43	1000	4.9	2940	10000	21.7	1000	2.4	3500	10000	
C 51 3_72.9	72.9	38	1000	4.3	2920	10000	19.2	1000	2.2	3500	10000	
C 51 3_79.9	79.9	35	1000	3.9	2960	10000	17.5	1000	2.0	3500	10000	
C 51 3_93.0	93.0	30	1000	3.4	2950	10000	15.1	1000	1.7	3500	10000	
C 51 3_101.8	101.8	27.5	1000	3.1	2990	10000	13.8	1000	1.5	3500	10000	
C 51 3_113.6	113.6	24.6	1000	2.8	2960	10000	12.3	1000	1.4	3500	10000	
C 51 3_124.4	124.4	22.5	1000	2.5	3000	10000	11.3	1000	1.3	3500	10000	
C 51 3_134.6	134.6	20.8	1000	2.3	2970	10000	10.4	1000	1.2	3500	10000	
C 51 3_147.4	147.4	19.0	1000	2.1	3010	10000	9.5	1000	1.1	3500	10000	
C 51 3_160.5	160.5	17.4	1000	2.0	2980	10000	8.7	1000	0.98	3500	10000	
C 51 3_175.8	175.8	15.9	1000	1.8	3020	10000	8.0	1000	0.90	3500	10000	
C 51 3_197.9	197.9	14.1	1000	1.6	2980	10000	7.1	1000	0.80	3500	10000	
C 51 3_216.7	216.7	12.9	1000	1.5	3020	10000	6.5	1000	0.73	3500	10000	
C 51 4_240.9	240.9	11.6	1000	1.3	2100	10000	5.8	1000	0.67	2200	10000	
C 51 4_263.8	263.8	10.6	1000	1.2	2120	10000	5.3	1000	0.61	2200	10000	
C 51 4_297.8	297.8	9.4	1000	1.1	2140	10000	4.7	1000	0.54	2200	10000	
C 51 4_326.1	326.1	8.6	1000	0.99	2160	10000	4.3	1000	0.49	2200	10000	
C 51 4_379.6	379.6	7.4	1000	0.85	2190	10000	3.7	1000	0.42	2200	10000	
C 51 4_415.7	415.7	6.7	1000	0.78	2200	10000	3.4	1000	0.39	2200	10000	
C 51 4_463.9	463.9	6.0	1000	0.69	2200	10000	3.0	1000	0.35	2200	10000	
C 51 4_508.0	508.0	5.5	1000	0.63	2200	10000	2.8	1000	0.32	2200	10000	
C 51 4_549.7	549.7	5.1	1000	0.59	2200	10000	2.5	1000	0.29	2200	10000	
C 51 4_602.0	602.0	4.7	1000	0.54	2200	10000	2.3	1000	0.27	2200	10000	
C 51 4_655.4	655.4	4.3	1000	0.49	2200	10000	2.1	1000	0.25	2200	10000	
C 51 4_717.7	717.7	3.9	1000	0.45	2200	10000	2.0	1000	0.22	2200	10000	
C 51 4_808.0	808.0	3.5	1000	0.40	2200	10000	1.7	1000	0.20	2200	10000	
C 51 4_884.9	884.9	3.2	1000	0.36	2200	10000	1.6	1000	0.18	2200	10000	



C 51

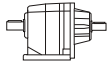

1000 Nm

	i	$n_1 = 900 \text{ min}^{-1}$					$n_1 = 500 \text{ min}^{-1}$					
		n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	
C 51 2_2.6	2.6	346	400	15.3	2560	5130	192	400	8.5	3500	6620	165
C 51 2_3.3	3.3	273	420	12.6	2710	5590	152	420	7.0	3500	7200	
C 51 2_4.5	4.5	200	435	9.6	2900	6300	111	435	5.3	3500	8070	
C 51 2_5.6	5.6	161	435	7.7	3080	6970	89	435	4.3	3500	8880	
C 51 2_7.0	7.0	129	730	10.3	3310	6950	71	800	6.3	3500	8760	
C 51 2_7.8	7.8	115	740	9.4	3460	7220	64	800	5.7	3500	9140	
C 51 2_8.8	8.8	102	795	9.0	3360	7470	57	800	5.0	3500	9680	
C 51 2_9.8	9.8	92	800	8.1	3500	7790	51	800	4.5	3500	10000	
C 51 2_11.8	11.8	76	800	6.7	3500	8530	42	800	3.7	3500	10000	
C 51 2_13.1	13.1	69	800	6.1	3500	8900	38	800	3.4	3500	10000	
C 51 2_15.0	15.0	60	800	5.3	3500	9450	33	800	2.9	3500	10000	
C 51 2_16.6	16.6	54	800	4.8	3500	9850	30	800	2.7	3500	10000	
C 51 2_18.9	18.9	48	800	4.2	3500	10000	26.5	800	2.3	3500	10000	
C 51 2_21.0	21.0	43	800	3.8	3500	10000	23.8	800	2.1	3500	10000	
C 51 2_23.4	23.4	38	800	3.4	3500	10000	21.4	800	1.9	3500	10000	
C 51 2_25.9	25.9	35	800	3.1	3500	10000	19.3	800	1.7	3500	10000	
C 51 2_29.8	29.8	30	800	2.7	3500	10000	16.8	800	1.5	3500	10000	
C 51 2_33.0	33.0	27.3	800	2.4	3500	10000	15.2	800	1.3	3500	10000	
C 51 2_36.4	36.4	24.7	800	2.2	3500	10000	13.7	800	1.2	3500	10000	
C 51 2_40.4	40.4	22.3	800	2.0	3500	10000	12.4	800	1.1	3500	10000	
C 51 2_43.1	43.1	20.9	800	1.8	3500	10000	11.6	800	1.0	3500	10000	
C 51 2_47.8	47.8	18.8	800	1.7	3500	10000	10.5	800	0.92	3500	10000	
C 51 2_51.4	51.4	17.5	725	1.4	3500	10000	9.7	755	0.81	3500	10000	
C 51 2_57.0	57.0	15.8	795	1.4	3500	10000	8.8	795	0.77	3500	10000	
C 51 3_21.8	21.8	41	1000	4.6	3500	10000	22.9	1000	2.6	3500	10000	
C 51 3_23.9	23.9	38	1000	4.2	3500	10000	20.9	1000	2.4	3500	10000	
C 51 3_27.4	27.4	33	1000	3.7	3500	10000	18.2	1000	2.1	3500	10000	
C 51 3_30.1	30.1	29.9	1000	3.4	3500	10000	16.6	1000	1.9	3500	10000	
C 51 3_37.0	37.0	24.3	1000	2.7	3500	10000	13.5	1000	1.5	3500	10000	
C 51 3_40.5	40.5	22.2	1000	2.5	3500	10000	12.3	1000	1.4	3500	10000	
C 51 3_46.7	46.7	19.3	1000	2.2	3500	10000	10.7	1000	1.2	3500	10000	
C 51 3_51.2	51.2	17.6	1000	2.0	3500	10000	9.8	1000	1.1	3500	10000	
C 51 3_59.0	59.0	15.3	1000	1.7	3500	10000	8.5	1000	0.95	3500	10000	
C 51 3_64.6	64.6	13.9	1000	1.6	3500	10000	7.7	1000	0.87	3500	10000	
C 51 3_72.9	72.9	12.3	1000	1.4	3500	10000	6.9	1000	0.77	3500	10000	
C 51 3_79.9	79.9	11.3	1000	1.3	3500	10000	6.3	1000	0.70	3500	10000	
C 51 3_93.0	93.0	9.7	1000	1.1	3500	10000	5.4	1000	0.61	3500	10000	
C 51 3_101.8	101.8	8.8	1000	1.0	3500	10000	4.9	1000	0.55	3500	10000	
C 51 3_113.6	113.6	7.9	1000	0.89	3500	10000	4.4	1000	0.50	3500	10000	
C 51 3_124.4	124.4	7.2	1000	0.81	3500	10000	4.0	1000	0.45	3500	10000	
C 51 3_134.6	134.6	6.7	1000	0.75	3500	10000	3.7	1000	0.42	3500	10000	
C 51 3_147.4	147.4	6.1	1000	0.69	3500	10000	3.4	1000	0.38	3500	10000	
C 51 3_160.5	160.5	5.6	1000	0.63	3500	10000	3.1	1000	0.35	3500	10000	
C 51 3_175.8	175.8	5.1	1000	0.58	3500	10000	2.8	1000	0.32	3500	10000	
C 51 3_197.9	197.9	4.5	1000	0.51	3500	10000	2.5	1000	0.28	3500	10000	
C 51 3_216.7	216.7	4.2	1000	0.47	3500	10000	2.3	1000	0.26	3500	10000	
C 51 4_240.9	240.9	3.7	1000	0.43	2200	10000	2.1	1000	0.24	2200	10000	
C 51 4_263.8	263.8	3.4	1000	0.39	2200	10000	1.9	1000	0.22	2200	10000	
C 51 4_297.8	297.8	3.0	1000	0.35	2200	10000	1.7	1000	0.19	2200	10000	
C 51 4_326.1	326.1	2.8	1000	0.32	2200	10000	1.5	1000	0.18	2200	10000	
C 51 4_379.6	379.6	2.4	1000	0.27	2200	10000	1.3	1000	0.15	2200	10000	
C 51 4_415.7	415.7	2.2	1000	0.25	2200	10000	1.2	1000	0.14	2200	10000	
C 51 4_463.9	463.9	1.9	1000	0.22	2200	10000	1.1	1000	0.12	2200	10000	
C 51 4_508.0	508.0	1.8	1000	0.20	2200	10000	1.0	1000	0.11	2200	10000	
C 51 4_549.7	549.7	1.6	1000	0.19	2200	10000	0.91	1000	0.10	2200	10000	
C 51 4_602.0	602.0	1.5	1000	0.17	2200	10000	0.83	1000	0.10	2200	10000	
C 51 4_655.4	655.4	1.4	1000	0.16	2200	10000	0.76	1000	0.09	2200	10000	
C 51 4_717.7	717.7	1.3	1000	0.14	2200	10000	0.70	1000	0.08	2200	10000	
C 51 4_808.0	808.0	1.1	1000	0.13	2200	10000	0.62	1000	0.07	2200	10000	
C 51 4_884.9	884.9	1.0	1000	0.12	2200	10000	0.57	1000	0.07	2200	10000	

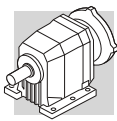


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1600 Nm

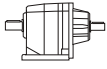

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		n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	
C 61 2_2.8	2.8	1000	445	49	—	4670	500	550	30	770	5930	169
C 61 2_3.7	3.7	757	530	44	—	4950	378	575	24	1730	6600	
C 61 2_4.6	4.6	609	575	39	—	5280	304	600	20	2150	7130	
C 61 2_6.0	6.0	467	575	30	—	6000	233	625	16.1	2700	7950	
C 61 2_6.7	6.7	418	900	41	2230	5600	209	1130	26	2850	7060	
C 61 2_7.5	7.5	373	1000	41	2220	5620	187	1250	26	2900	7110	
C 61 2_8.8	8.8	318	1000	35	2290	6080	159	1250	22	2980	7690	
C 61 2_9.8	9.8	286	1100	35	2380	6140	143	1350	21	3330	7850	
C 61 2_10.9	10.9	257	1050	30	2530	6590	128	1350	19.1	2940	8210	
C 61 2_12.1	12.1	231	1150	29	2670	6670	116	1350	17.2	3600	8730	
C 61 2_14.3	14.3	196	1150	25	2450	7220	98	1350	14.6	3590	9430	
C 61 2_15.9	15.9	176	1250	24	2660	7350	88	1350	13.1	3780	9990	
C 61 2_17.7	17.7	158	1200	21	2540	7850	79	1350	11.8	3700	10400	
C 61 2_19.6	19.6	143	1300	20	2780	8000	71	1350	10.6	3890	11000	
C 61 2_22.4	22.4	125	1250	17.2	2630	8650	63	1350	9.3	3810	11600	
C 61 2_24.8	24.8	113	1350	16.8	2840	8840	56	1350	8.4	3980	12300	
C 61 2_27.4	27.4	102	1300	14.6	2600	9390	51	1350	7.6	3880	12800	
C 61 2_30.4	30.4	92	1350	13.7	2900	9770	46	1350	6.9	4050	13500	
C 61 2_34.2	34.2	82	1165	10.5	3020	10900	41	1225	5.5	4090	14500	
C 61 2_38.0	38.0	74	1280	10.4	3030	11100	37	1350	5.5	4100	14800	
C 61 3_26.8	26.8	104	1140	13.4	3740	9810	52	1435	8.4	4700	12400	
C 61 3_29.4	29.4	95	1160	12.4	3780	10200	48	1465	7.9	4700	12900	
C 61 3_33.0	33.0	85	1210	11.6	3750	10600	42	1525	7.3	4700	13300	
C 61 3_36.1	36.1	78	1235	10.8	3800	11000	39	1555	6.8	4700	13800	
C 61 3_43.4	43.4	65	1315	9.6	3760	11600	32	1600	5.8	4700	14800	
C 61 3_47.6	47.6	59	1340	8.9	3810	12100	29.4	1600	5.3	4700	15500	
C 61 3_53.5	53.5	52	1400	8.2	3760	12500	26.2	1600	4.7	4700	16000	
C 61 3_58.6	58.6	48	1430	7.7	3810	13000	23.9	1600	4.3	4700	16000	
C 61 3_67.7	67.7	41	1505	7.0	3750	13500	20.7	1600	3.7	4700	16000	
C 61 3_74.2	74.2	38	1535	6.5	3800	14100	18.9	1600	3.4	4700	16000	
C 61 3_83.0	83.0	34	1600	6.1	3740	14500	16.9	1600	3.0	4700	16000	
C 61 3_91.0	91.0	31	1600	5.5	3800	15200	15.4	1600	2.8	4700	16000	
C 61 3_103.6	103.6	27.0	1600	4.9	3760	16000	13.5	1600	2.4	4700	16000	
C 61 3_113.6	113.6	24.6	1600	4.4	3820	16000	12.3	1600	2.2	4700	16000	
C 61 3_128.1	128.1	21.9	1600	3.9	3790	16000	10.9	1600	2.0	4700	16000	
C 61 3_140.5	140.5	19.9	1600	3.6	3840	16000	10.0	1600	1.8	4700	16000	
C 61 3_150.0	150.0	18.7	1600	3.4	3800	16000	9.3	1600	1.7	4700	16000	
C 61 3_164.5	164.5	17.0	1600	3.1	3850	16000	8.5	1600	1.5	4700	16000	
C 61 3_178.6	178.6	15.7	1600	2.8	3800	16000	7.8	1600	1.4	4700	16000	
C 61 3_195.8	195.8	14.3	1600	2.6	3860	16000	7.2	1600	1.3	4700	16000	
C 61 4_217.4	217.4	12.9	1600	2.4	3020	16000	6.4	1600	1.2	3500	16000	
C 61 4_238.3	238.3	11.7	1600	2.2	3060	16000	5.9	1600	1.1	3500	16000	
C 61 4_275.3	275.3	10.2	1600	1.9	3100	16000	5.1	1600	0.94	3500	16000	
C 61 4_301.7	301.7	9.3	1600	1.7	3130	16000	4.6	1600	0.85	3500	16000	
C 61 4_337.7	337.7	8.3	1600	1.5	3160	16000	4.1	1600	0.76	3500	16000	
C 61 4_370.1	370.1	7.6	1600	1.4	3180	16000	3.8	1600	0.70	3500	16000	
C 61 4_421.5	421.5	6.6	1600	1.2	3200	16000	3.3	1600	0.61	3500	16000	
C 61 4_462.0	462.0	6.1	1600	1.1	3220	16000	3.0	1600	0.56	3500	16000	
C 61 4_521.1	521.1	5.4	1600	0.99	3240	16000	2.7	1600	0.49	3500	16000	
C 61 4_571.2	571.2	4.9	1600	0.90	3250	16000	2.5	1600	0.45	3500	16000	
C 61 4_610.1	610.1	4.6	1600	0.84	3260	16000	2.3	1600	0.42	3500	16000	
C 61 4_668.8	668.8	4.2	1600	0.77	3280	16000	2.1	1600	0.39	3500	16000	
C 61 4_726.3	726.3	3.9	1600	0.71	3290	16000	1.9	1600	0.35	3500	16000	
C 61 4_796.1	796.1	3.5	1600	0.65	3300	16000	1.8	1600	0.32	3500	16000	

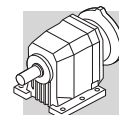
(—) Contact our technical service department advising radial load data (rotation direction, orientation, position)



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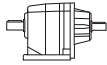

1600 Nm

	i	$n_1 = 900 \text{ min}^{-1}$					$n_1 = 500 \text{ min}^{-1}$					
		n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	
C 61 2_2.8	2.8	321	565	20	2840	7150	179	665	13.1	4050	8790	169
C 61 2_3.7	3.7	243	625	16.8	3000	7800	135	665	9.9	4700	9860	
C 61 2_4.6	4.6	196	665	14.3	3170	8380	109	665	8.0	4700	10760	
C 61 2_6.0	6.0	150	665	11.0	4120	9440	83	665	6.1	4700	12000	
C 61 2_6.7	6.7	134	1350	20	2850	8050	75	1350	11.1	4700	10800	
C 61 2_7.5	7.5	120	1350	17.9	4010	8560	67	1350	9.9	4700	11400	
C 61 2_8.8	8.8	102	1350	15.2	4070	9240	57	1350	8.5	4700	12200	
C 61 2_9.8	9.8	92	1350	13.7	4310	9790	51	1350	7.6	4700	12900	
C 61 2_10.9	10.9	83	1350	12.3	4270	10200	46	1350	6.8	4700	13400	
C 61 2_12.1	12.1	74	1350	11.1	4480	10800	41	1350	6.1	4700	14100	
C 61 2_14.3	14.3	63	1350	9.4	4470	11600	35	1350	5.2	4700	15100	
C 61 2_15.9	15.9	57	1350	8.4	4660	12300	31	1350	4.7	4700	15900	
C 61 2_17.7	17.7	51	1350	7.6	4580	12800	28.2	1350	4.2	4700	16000	
C 61 2_19.6	19.6	46	1350	6.8	4700	13500	25.5	1350	3.8	4700	16000	
C 61 2_22.4	22.4	40	1350	6.0	4690	14200	22.3	1350	3.3	4700	16000	
C 61 2_24.8	24.8	36	1350	5.4	4700	14900	20.2	1350	3.0	4700	16000	
C 61 2_27.4	27.4	33	1350	4.9	4700	15500	18.2	1350	2.7	4700	16000	
C 61 2_30.4	30.4	29.6	1350	4.4	4700	16000	16.4	1350	2.4	4700	16000	
C 61 2_34.2	34.2	26.3	1265	3.7	4700	16000	14.6	1325	2.1	4700	16000	
C 61 2_38.0	38.0	23.7	1350	3.5	4700	16000	13.2	1350	2.0	4700	16000	
C 61 3_26.8	26.8	34	1600	6.0	4700	14500	18.7	1600	3.4	4700	16000	
C 61 3_29.4	29.4	31	1600	5.5	4700	15200	17.0	1600	3.1	4700	16000	
C 61 3_33.0	33.0	27.3	1600	4.9	4700	15900	15.2	1600	2.7	4700	16000	
C 61 3_36.1	36.1	24.9	1600	4.5	4700	16000	13.9	1600	2.5	4700	16000	
C 61 3_43.4	43.4	20.7	1600	3.7	4700	16000	11.5	1600	2.1	4700	16000	
C 61 3_47.6	47.6	18.9	1600	3.4	4700	16000	10.5	1600	1.9	4700	16000	
C 61 3_53.5	53.5	16.8	1600	3.0	4700	16000	9.3	1600	1.7	4700	16000	
C 61 3_58.6	58.6	15.4	1600	2.8	4700	16000	8.5	1600	1.5	4700	16000	
C 61 3_67.7	67.7	13.3	1600	2.4	4700	16000	7.4	1600	1.3	4700	16000	
C 61 3_74.2	74.2	12.1	1600	2.2	4700	16000	6.7	1600	1.2	4700	16000	
C 61 3_83.0	83.0	10.8	1600	2.0	4700	16000	6.0	1600	1.1	4700	16000	
C 61 3_91.0	91.0	9.9	1600	1.8	4700	16000	5.5	1600	0.99	4700	16000	
C 61 3_103.6	103.6	8.7	1600	1.6	4700	16000	4.8	1600	0.87	4700	16000	
C 61 3_113.6	113.6	7.9	1600	1.4	4700	16000	4.4	1600	0.79	4700	16000	
C 61 3_128.1	128.1	7.0	1600	1.3	4700	16000	3.9	1600	0.70	4700	16000	
C 61 3_140.5	140.5	6.4	1600	1.2	4700	16000	3.6	1600	0.64	4700	16000	
C 61 3_150.0	150.0	6.0	1600	1.1	4700	16000	3.3	1600	0.60	4700	16000	
C 61 3_164.5	164.5	5.5	1600	0.99	4700	16000	3.0	1600	0.55	4700	16000	
C 61 3_178.6	178.6	5.0	1600	0.91	4700	16000	2.8	1600	0.50	4700	16000	
C 61 3_195.8	195.8	4.6	1600	0.83	4700	16000	2.6	1600	0.46	4700	16000	
C 61 4_217.4	217.4	4.1	1600	0.76	3500	16000	2.3	1600	0.42	3500	16000	
C 61 4_238.3	238.3	3.8	1600	0.70	3500	16000	2.1	1600	0.39	3500	16000	
C 61 4_275.3	275.3	3.3	1600	0.60	3500	16000	1.8	1600	0.33	3500	16000	
C 61 4_301.7	301.7	3.0	1600	0.55	3500	16000	1.7	1600	0.31	3500	16000	
C 61 4_337.7	337.7	2.7	1600	0.49	3500	16000	1.5	1600	0.27	3500	16000	
C 61 4_370.1	370.1	2.4	1600	0.45	3500	16000	1.4	1600	0.25	3500	16000	
C 61 4_421.5	421.5	2.1	1600	0.39	3500	16000	1.2	1600	0.22	3500	16000	
C 61 4_462.0	462.0	1.9	1600	0.36	3500	16000	1.1	1600	0.20	3500	16000	
C 61 4_521.1	521.1	1.7	1600	0.32	3500	16000	1.0	1600	0.18	3500	16000	
C 61 4_571.2	571.2	1.6	1600	0.29	3500	16000	0.88	1600	0.16	3500	16000	
C 61 4_610.1	610.1	1.5	1600	0.27	3500	16000	0.82	1600	0.15	3500	16000	
C 61 4_668.8	668.8	1.3	1600	0.25	3500	16000	0.75	1600	0.14	3500	16000	
C 61 4_726.3	726.3	1.2	1600	0.23	3500	16000	0.69	1600	0.13	3500	16000	
C 61 4_796.1	796.1	1.1	1600	0.21	3500	16000	0.63	1600	0.12	3500	16000	

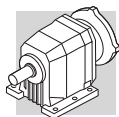


C 70

2300 Nm

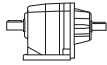

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		n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	
C 70 2_4.6	4.6	613	1400	95	—	5590	306	1700	57	—	7100	
C 70 2_5.9	5.9	479	1550	82	—	5610	239	1900	50	—	6990	
C 70 2_6.3	6.3	448	1600	79	1980	6570	224	1950	48	2630	8250	
C 70 2_7.5	7.5	375	1550	64	—	7130	188	1950	40	—	8400	
C 70 2_8.0	8.0	350	1750	68	1760	6840	175	2100	41	2670	8880	
C 70 2_9.5	9.5	294	1600	52	770	8260	147	2000	32	620	9910	
C 70 2_10.2	10.2	274	1900	57	2000	7200	137	2100	32	4470	10800	
C 70 2_11.2	11.2	250	1600	44	1130	9350	125	2000	28	1070	11300	
C 70 2_13.0	13.0	215	2050	49	1860	7700	107	2100	25	5600	12900	
C 70 2_14.1	14.1	199	1700	37	1100	10100	99	2100	23	1280	12400	
C 70 2_15.3	15.3	183	2100	42	1810	8540	91	2100	21	5860	14300	
C 70 2_16.7	16.7	168	1700	31	1570	11400	84	2050	18.9	2350	14300	
C 70 2_19.3	19.3	145	2100	34	2730	10400	73	2100	16.8	6000	16300	
C 70 2_22.9	22.9	123	2100	28	3160	11800	61	2100	14.2	6060	18000	
C 70 2_27.7	27.7	101	2100	23	3570	13400	51	2100	11.7	6120	19900	
C 70 2_34.7	34.7	81	2100	18.7	3960	15400	40	2100	9.3	6180	22200	
C 70 3_41.3	41.3	68	1900	14.5	5670	18400	34	2300	8.8	7000	22800	
C 70 3_44.7	44.7	63	1900	13.4	5700	19100	31	2300	8.1	7000	23800	
C 70 3_52.2	52.2	54	2050	12.4	5680	19600	26.8	2300	7.0	7000	25000	
C 70 3_56.5	56.5	50	2050	11.4	5710	20400	24.8	2300	6.4	7000	25000	
C 70 3_65.9	65.9	43	2200	10.5	5670	21000	21.3	2300	5.5	7000	25000	
C 70 3_71.3	71.3	39	2200	9.7	5710	21900	19.6	2300	5.1	7000	25000	
C 70 3_81.4	81.4	34	2300	8.9	5680	22700	17.2	2300	4.5	7000	25000	
C 70 3_88.2	88.2	32	2300	8.2	5710	23600	15.9	2300	4.1	7000	25000	
C 70 3_103.8	103.8	27.0	2300	7.0	5700	25000	13.5	2300	3.5	7000	25000	
C 70 3_112.4	112.4	24.9	2300	6.4	5740	25000	12.5	2300	3.2	7000	25000	
C 70 3_126.8	126.8	22.1	2300	5.7	5720	25000	11.0	2300	2.9	7000	25000	
C 70 3_137.4	137.4	20.4	2300	5.3	5750	25000	10.2	2300	2.6	7000	25000	
C 70 3_150.3	150.3	18.6	2300	4.8	5730	25000	9.3	2300	2.4	7000	25000	
C 70 3_162.8	162.8	17.2	2300	4.5	5760	25000	8.6	2300	2.2	7000	25000	
C 70 3_179.2	179.2	15.6	2300	4.0	5740	25000	7.8	2300	2.0	7000	25000	
C 70 3_194.1	194.1	14.4	2300	3.7	5770	25000	7.2	2300	1.9	7000	25000	
C 70 3_220.9	220.9	12.7	2250	3.2	5750	25000	6.3	2250	1.6	7000	25000	
C 70 3_239.3	239.3	11.7	2300	3.0	5770	25000	5.8	2300	1.5	7000	25000	
C 70 4_251.3	251.3	11.1	2300	2.9	2000	25000	5.6	2300	1.5	2620	25000	
C 70 4_272.2	272.2	10.3	2300	2.7	2030	25000	5.1	2300	1.4	2650	25000	
C 70 4_317.9	317.9	8.8	2300	2.3	2030	25000	4.4	2300	1.2	2650	25000	
C 70 4_344.3	344.3	8.1	2300	2.2	2050	25000	4.1	2300	1.1	2670	25000	
C 70 4_409.4	409.4	6.8	2300	1.8	2050	25000	3.4	2300	0.90	2670	25000	
C 70 4_443.5	443.5	6.3	2300	1.7	2070	25000	3.2	2300	0.80	2700	25000	
C 70 4_512.0	512.0	5.5	2300	1.4	2070	25000	2.7	2300	0.70	2680	25000	
C 70 4_554.7	554.7	5.0	2300	1.3	2090	25000	2.5	2300	0.70	2710	25000	
C 70 4_606.8	606.8	4.6	2300	1.2	2080	25000	2.3	2300	0.60	2700	25000	
C 70 4_657.3	657.3	4.3	2300	1.1	2100	25000	2.1	2300	0.60	2720	25000	
C 70 4_736.0	736.0	3.8	2300	1.0	2090	25000	1.9	2300	0.50	2700	25000	
C 70 4_797.3	797.3	3.5	2300	0.90	2110	25000	1.8	2300	0.50	2720	25000	
C 70 4_922.6	922.6	3.0	2300	0.80	2100	25000	1.5	2300	0.40	2710	25000	
C 70 4_999.5	999.5	2.8	2300	0.70	2110	25000	1.4	2300	0.40	2730	25000	
C 70 4_1069	1069	2.6	2300	0.70	2100	25000	1.3	2300	0.30	2720	25000	
C 70 4_1158	1158	2.4	2300	0.60	2100	25000	1.2	2300	0.30	2800	25000	
C 70 4_1362	1362	2.1	2300	0.50	2100	25000	1.0	2300	0.30	2800	25000	
C 70 4_1476	1476	1.9	2300	0.50	2100	25000	0.90	2300	0.30	2800	25000	

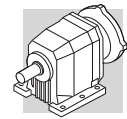
(—) Contact our technical service department advising radial load data (rotation direction, orientation, position)



C 70

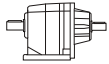

2300 Nm

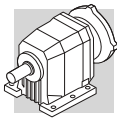
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		n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	
C 70 2_4.6	4.6	197	1800	39	650	9360	109	1800	22	5500	13900	
C 70 2_5.9	5.9	154	1950	33	560	9980	85	2150	20	2890	13400	
C 70 2_6.3	6.3	144	2100	33	4260	10400	80	2100	18.5	7000	15500	
C 70 2_7.5	7.5	121	2100	28	1120	10800	67	2150	15.9	5400	15600	
C 70 2_8.0	8.0	113	2100	26	5800	12500	63	2100	14.5	7000	17800	
C 70 2_9.5	9.5	95	2150	22	2140	12400	53	2150	12.4	6990	18100	
C 70 2_10.2	10.2	88	2100	20	6870	14600	49	2100	11.3	7000	20200	
C 70 2_11.2	11.2	80	2150	19.0	2620	14000	45	2150	10.6	7000	19800	
C 70 2_13.0	13.0	69	2100	16.0	7000	16900	38	2100	8.9	7000	22800	
C 70 2_14.1	14.1	64	2150	15.1	3900	16000	35	2150	8.4	7000	22300	
C 70 2_15.3	15.3	59	2100	13.6	7000	18400	33	2100	7.5	7000	24600	
C 70 2_16.7	16.7	54	2050	12.2	5470	18500	29.9	2050	6.8	7000	25000	
C 70 2_19.3	19.3	47	2100	10.8	7000	20700	25.9	2100	6.0	7000	25000	
C 70 2_22.9	22.9	39	2100	9.1	7000	22500	21.9	2100	5.1	7000	25000	
C 70 2_27.7	27.7	32	2100	7.5	7000	24600	18.0	2100	4.2	7000	25000	
C 70 2_34.7	34.7	25.9	2100	6.0	7000	25000	14.4	2100	3.3	7000	25000	
C 70 3_41.3	41.3	21.8	2300	5.6	7000	25000	12.1	2300	3.1	7000	25000	
C 70 3_44.7	44.7	20.1	2300	5.2	7000	25000	11.2	2300	2.9	7000	25000	
C 70 3_52.2	52.2	17.3	2300	4.5	7000	25000	9.6	2300	2.5	7000	25000	
C 70 3_56.5	56.5	15.9	2300	4.1	7000	25000	8.8	2300	2.3	7000	25000	
C 70 3_65.9	65.9	13.7	2300	3.5	7000	25000	7.6	2300	2.0	7000	25000	
C 70 3_71.3	71.3	12.6	2300	3.3	7000	25000	7.0	2300	1.8	7000	25000	
C 70 3_81.4	81.4	11.1	2300	2.9	7000	25000	6.1	2300	1.6	7000	25000	
C 70 3_88.2	88.2	10.2	2300	2.6	7000	25000	5.7	2300	1.5	7000	25000	
C 70 3_103.8	103.8	8.7	2300	2.2	7000	25000	4.8	2300	1.2	7000	25000	
C 70 3_112.4	112.4	8.0	2300	2.1	7000	25000	4.4	2300	1.2	7000	25000	
C 70 3_126.8	126.8	7.1	2300	1.8	7000	25000	3.9	2300	1.0	7000	25000	
C 70 3_137.4	137.4	6.6	2300	1.7	7000	25000	3.6	2300	0.90	7000	25000	
C 70 3_150.3	150.3	6.0	2300	1.6	7000	25000	3.3	2300	0.90	7000	25000	
C 70 3_162.8	162.8	5.5	2300	1.4	7000	25000	3.1	2300	0.80	7000	25000	
C 70 3_179.2	179.2	5.0	2300	1.3	7000	25000	2.8	2300	0.70	7000	25000	
C 70 3_194.1	194.1	4.6	2300	1.2	7000	25000	2.6	2300	0.70	7000	25000	
C 70 3_220.9	220.9	4.1	2250	1.0	7000	25000	2.3	2250	0.60	7000	25000	
C 70 3_239.3	239.3	3.8	2300	1.0	7000	25000	2.1	2300	0.50	7000	25000	
C 70 4_251.3	251.3	3.6	2300	0.90	2000	25000	2.0	2300	0.50	2620	25000	
C 70 4_272.2	272.2	3.3	2300	0.90	2030	25000	1.8	2300	0.50	2650	25000	
C 70 4_317.9	317.9	2.8	2300	0.70	2030	25000	1.6	2300	0.40	2650	25000	
C 70 4_344.3	344.3	2.6	2300	0.70	2050	25000	1.5	2300	0.40	2670	25000	
C 70 4_409.4	409.4	2.2	2300	0.60	2050	25000	1.2	2300	0.30	2670	25000	
C 70 4_443.5	443.5	2.0	2300	0.50	2070	25000	1.1	2300	0.30	2700	25000	
C 70 4_512.0	512.0	1.8	2300	0.50	2070	25000	1.0	2300	0.30	2680	25000	
C 70 4_554.7	554.7	1.6	2300	0.40	2090	25000	0.90	2300	0.20	2710	25000	
C 70 4_606.8	606.8	1.5	2300	0.40	2080	25000	0.80	2300	0.20	2700	25000	
C 70 4_657.3	657.3	1.4	2300	0.40	2100	25000	0.80	2300	0.20	2720	25000	
C 70 4_736.0	736.0	1.2	2300	0.30	2090	25000	0.70	2300	0.20	2700	25000	
C 70 4_797.3	797.3	1.1	2300	0.30	2110	25000	0.60	2300	0.20	2720	25000	
C 70 4_922.6	922.6	1.0	2300	0.30	2100	25000	0.50	2300	0.10	2710	25000	
C 70 4_999.5	999.5	0.90	2300	0.20	2110	25000	0.50	2300	0.10	2730	25000	
C 70 4_1069	1069	0.80	2300	0.20	2100	25000	0.50	2300	0.10	2720	25000	
C 70 4_1158	1158	0.80	2300	0.20	2100	25000	0.40	2300	0.10	2800	25000	
C 70 4_1362	1362	0.70	2300	0.20	2100	25000	0.40	2300	0.10	2800	25000	
C 70 4_1476	1476	0.60	2300	0.20	2100	25000	0.30	2300	0.10	2800	25000	



C 80

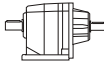

4000 Nm

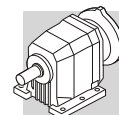
	i	$n_1 = 2800 \text{ min}^{-1}$					$n_1 = 1400 \text{ min}^{-1}$					
		n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	
C 80 2_5.6	5.6	496	2400	131	370	10900	248	3100	85	690	12300	175
C 80 2_6.1	6.1	458	2450	124	890	11000	229	3150	80	1380	12700	
C 80 2_7.0	7.0	398	2650	116	350	11000	199	3350	73	910	12900	
C 80 2_7.6	7.6	367	2700	109	890	11300	183	3400	69	1600	13300	
C 80 2_8.9	8.9	316	2800	98	420	12100	158	3500	61	1120	14500	
C 80 2_9.6	9.6	292	3000	96	520	11300	146	3700	59	1380	13900	
C 80 2_11.1	11.1	252	2800	78	1110	14200	126	3500	49	1950	17100	
C 80 2_12.0	12.0	233	3000	77	1200	13500	116	3700	48	2190	16600	
C 80 2_13.8	13.8	203	2800	63	1420	16400	102	3500	39	2330	19800	
C 80 2_14.9	14.9	188	3000	62	1510	15800	94	3700	38	2560	19300	
C 80 2_16.7	16.7	168	2800	52	1840	18500	84	3500	32	2840	22300	
C 80 2_18.1	18.1	155	3000	50	1930	17900	78	3700	32	3060	22000	
C 80 2_20.5	20.5	136	2850	43	2000	20500	68	3550	27	3060	24800	
C 80 2_22.2	22.2	126	3000	42	2210	20300	63	3700	26	3400	24900	
C 80 2_24.0	24.0	117	2850	37	2090	22400	58	3550	23	3180	27000	
C 80 2_25.9	25.9	108	3000	36	2300	22300	54	3700	22	3510	27200	
C 80 2_31.3	31.3	89	3000	30	2480	24700	45	3700	18.2	3730	30000	
C 80 2_39.1	39.1	72	2500	19.7	3820	31000	36	3200	12.6	5060	35000	
C 80 3_43.5	43.5	64	3100	23	5610	28700	32	3800	13.8	7000	34800	
C 80 3_47.4	47.4	59	3100	21	5660	30000	29.5	3800	12.6	7000	35000	
C 80 3_57.3	57.3	49	3400	18.7	5620	30500	24.4	4000	11.0	7000	35000	
C 80 3_62.5	62.5	45	3400	17.1	5670	31800	22.4	4000	10.1	7000	35000	
C 80 3_70.5	70.5	40	3650	16.3	5620	32200	19.9	4000	8.9	7000	35000	
C 80 3_76.9	76.9	36	3600	14.8	5670	33900	18.2	4000	8.2	7000	35000	
C 80 3_89.3	89.3	31	3900	13.8	5620	34700	15.7	4000	7.1	7000	35000	
C 80 3_97.4	97.4	28.7	3900	12.6	5670	35000	14.4	4000	6.5	7000	35000	
C 80 3_109.5	109.5	25.5	4000	11.5	5630	35000	12.8	4000	5.8	7000	35000	
C 80 3_119.5	119.5	23.4	4000	10.6	5680	35000	11.7	4000	5.3	7000	35000	
C 80 3_136.7	136.7	20.5	4000	9.2	5660	35000	10.2	4000	4.6	7000	35000	
C 80 3_149.1	149.1	18.8	4000	8.5	5700	35000	9.4	4000	4.2	7000	35000	
C 80 3_169.0	169.0	16.6	4000	7.5	5680	35000	8.3	4000	3.7	7000	35000	
C 80 3_184.4	184.4	15.2	4000	6.8	5720	35000	7.6	4000	3.4	7000	35000	
C 80 3_197.9	197.9	14.2	3800	6.1	5710	35000	7.1	3800	3.0	7000	35000	
C 80 3_215.8	215.8	13.0	4000	5.8	5730	35000	6.5	4000	2.9	7000	35000	
C 80 4_261.9	261.9	10.7	4000	4.9	1850	35000	5.3	4000	2.5	2470	35000	
C 80 4_285.7	285.7	9.8	4000	4.5	1890	35000	4.9	4000	2.3	2510	35000	
C 80 4_334.3	334.3	8.4	4000	3.9	1880	35000	4.2	4000	1.9	2500	35000	
C 80 4_364.7	364.7	7.7	4000	3.5	1920	35000	3.8	4000	1.8	2540	35000	
C 80 4_417.5	417.5	6.7	4000	3.1	1910	35000	3.4	4000	1.5	2530	35000	
C 80 4_455.4	455.4	6.1	4000	2.8	1950	35000	3.1	4000	1.4	2570	35000	
C 80 4_529.3	529.3	5.3	4000	2.4	1940	35000	2.6	4000	1.2	2550	35000	
C 80 4_577.4	577.4	4.8	4000	2.2	1970	35000	2.4	4000	1.1	2590	35000	
C 80 4_664.3	664.3	4.2	4000	1.9	1960	35000	2.1	4000	1.0	2570	35000	
C 80 4_724.7	724.7	3.9	4000	1.8	1990	35000	1.9	4000	0.90	2610	35000	
C 80 4_783.4	783.4	3.6	4000	1.6	1970	35000	1.8	4000	0.80	2590	35000	
C 80 4_854.6	854.6	3.3	4000	1.5	2000	35000	1.6	4000	0.80	2620	35000	
C 80 4_945.7	945.7	3.0	4000	1.4	1980	35000	1.5	4000	0.70	2600	35000	
C 80 4_1032	1032	2.7	4000	1.2	2010	35000	1.4	4000	0.60	2630	35000	
C 80 4_1168	1168	2.4	4000	1.1	1980	35000	1.2	4000	0.60	2600	35000	
C 80 4_1274	1274	2.2	4000	1.0	2020	35000	1.1	4000	0.50	2640	35000	
C 80 4_1358	1358	2.1	4000	0.90	1990	35000	1.0	4000	0.50	2610	35000	
C 80 4_1481	1481	1.9	4000	0.90	2030	35000	0.90	4000	0.40	2640	35000	



C 80

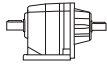

4000 Nm

	i	$n_1 = 900 \text{ min}^{-1}$					$n_1 = 500 \text{ min}^{-1}$					
		n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	
C 80 2_5.6	5.6	160	3500	62	1480	14400	89	3500	34	4970	21600	175
C 80 2_6.1	6.1	147	3600	58	2100	14400	82	3700	33	5270	21200	
C 80 2_7.0	7.0	128	3500	49	2630	17000	71	3500	27	6130	24600	
C 80 2_7.6	7.6	118	3650	47	3060	16800	66	3650	26	6550	24600	
C 80 2_8.9	8.9	102	3500	39	3330	19900	56	3500	22	6800	27800	
C 80 2_9.6	9.6	94	3700	38	3590	19400	52	3700	21	7000	27700	
C 80 2_11.1	11.1	81	3500	31	4160	22800	45	3500	17.4	7000	31200	
C 80 2_12.0	12.0	75	3700	31	4400	22500	42	3700	17.0	7000	31200	
C 80 2_13.8	13.8	65	3500	25	4540	25700	36	3500	14.0	7000	34700	
C 80 2_14.9	14.9	60	3700	25	4770	25500	34	3700	13.7	7000	34700	
C 80 2_16.7	16.7	54	3500	21	5050	28500	30	3500	11.6	7000	35000	
C 80 2_18.1	18.1	50	3700	20	5280	28400	27.7	3700	11.3	7000	35000	
C 80 2_20.5	20.5	44	3550	17.2	5270	31400	24.4	3550	9.5	7000	35000	
C 80 2_22.2	22.2	40	3700	16.5	5610	31600	22.5	3700	9.2	7000	35000	
C 80 2_24.0	24.0	38	3550	14.7	5390	33800	20.9	3550	8.2	7000	35000	
C 80 2_25.9	25.9	35	3700	14.1	5730	34200	19.3	3700	7.9	7000	35000	
C 80 2_31.3	31.3	28.7	3700	11.7	5940	35000	16.0	3700	6.5	7000	35000	
C 80 2_39.1	39.1	23.0	3200	8.1	7000	35000	12.8	3200	4.5	7000	35000	
C 80 3_43.5	43.5	20.7	4000	9.3	7000	35000	11.5	4000	5.2	7000	35000	
C 80 3_47.4	47.4	19.0	4000	8.5	7000	35000	10.5	4000	4.7	7000	35000	
C 80 3_57.3	57.3	15.7	4000	7.1	7000	35000	8.7	4000	3.9	7000	35000	
C 80 3_62.5	62.5	14.4	4000	6.5	7000	35000	8.0	4000	3.6	7000	35000	
C 80 3_70.5	70.5	12.8	4000	5.7	7000	35000	7.1	4000	3.2	7000	35000	
C 80 3_76.9	76.9	11.7	4000	5.3	7000	35000	6.5	4000	2.9	7000	35000	
C 80 3_89.3	89.3	10.1	4000	4.5	7000	35000	5.6	4000	2.5	7000	35000	
C 80 3_97.4	97.4	9.2	4000	4.2	7000	35000	5.1	4000	2.3	7000	35000	
C 80 3_109.5	109.5	8.2	4000	3.7	7000	35000	4.6	4000	2.1	7000	35000	
C 80 3_119.5	119.5	7.5	4000	3.4	7000	35000	4.2	4000	1.9	7000	35000	
C 80 3_136.7	136.7	6.6	4000	3.0	7000	35000	3.7	4000	1.6	7000	35000	
C 80 3_149.1	149.1	6.0	4000	2.7	7000	35000	3.4	4000	1.5	7000	35000	
C 80 3_169.0	169.0	5.3	4000	2.4	7000	35000	3.0	4000	1.3	7000	35000	
C 80 3_184.4	184.4	4.9	4000	2.2	7000	35000	2.7	4000	1.2	7000	35000	
C 80 3_197.9	197.9	4.5	3800	1.9	7000	35000	2.5	3800	1.1	7000	35000	
C 80 3_215.8	215.8	4.2	4000	1.9	7000	35000	2.3	4000	1.0	7000	35000	
C 80 4_261.9	261.9	3.4	4000	1.6	2950	35000	1.9	4000	0.90	3500	35000	
C 80 4_285.7	285.7	3.2	4000	1.4	2990	35000	1.8	4000	0.80	3500	35000	
C 80 4_334.3	334.3	2.7	4000	1.2	2980	35000	1.5	4000	0.70	3500	35000	
C 80 4_364.7	364.7	2.5	4000	1.1	3020	35000	1.4	4000	0.60	3500	35000	
C 80 4_417.5	417.5	2.2	4000	1.0	3000	35000	1.2	4000	0.60	3500	35000	
C 80 4_455.4	455.4	2.0	4000	0.90	3050	35000	1.1	4000	0.50	3500	35000	
C 80 4_529.3	529.3	1.7	4000	0.80	3030	35000	0.90	4000	0.40	3500	35000	
C 80 4_577.4	577.4	1.6	4000	0.70	3070	35000	0.90	4000	0.40	3500	35000	
C 80 4_664.3	664.3	1.4	4000	0.60	3050	35000	0.80	4000	0.30	3500	35000	
C 80 4_724.7	724.7	1.2	4000	0.60	3090	35000	0.70	4000	0.30	3500	35000	
C 80 4_783.4	783.4	1.1	4000	0.50	3060	35000	0.60	4000	0.30	3500	35000	
C 80 4_854.6	854.6	1.1	4000	0.50	3100	35000	0.60	4000	0.30	3500	35000	
C 80 4_945.7	945.7	1.0	4000	0.40	3070	35000	0.50	4000	0.20	3500	35000	
C 80 4_1032	1032	0.90	4000	0.40	3110	35000	0.50	4000	0.20	3500	35000	
C 80 4_1168	1168	0.80	4000	0.40	3080	35000	0.40	4000	0.20	3500	35000	
C 80 4_1274	1274	0.70	4000	0.30	3110	35000	0.40	4000	0.20	3500	35000	
C 80 4_1358	1358	0.70	4000	0.30	3090	35000	0.40	4000	0.20	3500	35000	
C 80 4_1481	1481	0.60	4000	0.30	3120	35000	0.30	4000	0.20	3500	35000	

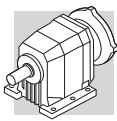


C 90

7200 Nm

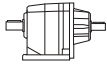

	i	$n_1 = 2800 \text{ min}^{-1}$					$n_1 = 1400 \text{ min}^{-1}$					
		n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	
C 90 2_5.2	5.2	542	3500	209	1700	12800	271	4300	128	2170	15800	
C 90 2_5.6	5.6	500	3600	198	3240	12800	250	4400	121	4250	16000	
C 90 2_6.8	6.8	414	3850	176	1860	13400	207	4750	108	2210	16400	
C 90 2_7.3	7.3	383	3950	167	3470	13500	191	4850	102	4360	16700	
C 90 2_8.3	8.3	336	4150	154	2010	13800	168	5100	94	2540	17100	
C 90 2_9.0	9.0	310	4250	145	3660	14000	155	5200	89	4720	17500	
C 90 2_10.4	10.4	270	4500	134	990	14200	135	5550	83	1150	17400	
C 90 2_11.2	11.2	249	4600	126	2750	14400	125	5650	78	3460	17800	
C 90 2_12.8	12.8	219	4850	117	580	14700	109	5950	72	840	18200	
C 90 2_13.9	13.9	202	4900	109	2700	15300	101	6050	67	3220	18700	
C 90 2_16.0	16.0	175	5050	98	690	16800	88	6200	60	950	20800	
C 90 2_17.3	17.3	162	5300	94	1670	15900	81	6500	58	2200	19800	
C 90 2_18.7	18.7	150	5050	83	1140	19600	75	6200	51	1500	24300	
C 90 2_20.2	20.2	138	5400	82	1540	17900	69	6600	50	2160	22500	
C 90 2_22.9	22.9	122	5050	68	2110	22400	61	6200	42	2700	27600	
C 90 2_24.8	24.8	113	5400	67	2500	21900	56	6600	41	3340	27300	
C 90 2_27.2	27.2	103	4500	51	6160	26000	52	5500	31	7820	32200	
C 90 2_29.4	29.4	95	4800	50	6560	26000	48	5900	31	8130	32000	
C 90 2_35.1	35.1	80	4400	39	8090	29400	40	5400	24	11100	36300	
C 90 3_39.4	39.4	71	6350	51	10800	23900	36	7100	28	13700	32900	
C 90 3_43.0	43.0	65	6500	48	10800	24700	33	7200	26	13800	34000	
C 90 3_50.3	50.3	56	6800	43	10800	26000	27.8	7100	22	13800	37000	
C 90 3_54.9	54.9	51	7000	40	10900	26500	25.5	7200	21	13900	38300	
C 90 3_59.2	59.2	47	7100	38	10800	27700	23.6	7100	18.9	13900	40000	
C 90 3_64.6	64.6	43	7200	35	10900	29100	21.7	7200	17.6	14000	41300	
C 90 3_74.4	74.4	38	7100	30	10900	31900	18.8	7100	15.0	14000	44400	
C 90 3_81.2	81.2	34	7200	28	10900	33000	17.2	7200	14.0	14100	45900	
C 90 3_88.2	88.2	32	7100	25	11000	34800	15.9	7100	12.7	14000	47900	
C 90 3_96.2	96.2	29.1	7200	24	11000	35900	14.5	7200	11.8	14100	49400	
C 90 3_107.0	107.0	26.2	7100	21	11000	38100	13.1	7100	10.5	14100	52100	
C 90 3_116.7	116.7	24.0	7200	19.4	11000	39400	12.0	7200	9.7	14100	53700	
C 90 3_134.1	134.1	20.9	7100	16.7	11000	42400	10.4	7100	8.3	14100	57300	
C 90 3_146.3	146.3	19.1	7200	15.5	11000	43800	9.6	7200	7.8	14200	59000	
C 90 3_157.8	157.8	17.7	7100	14.2	11000	45600	8.9	7100	7.1	14100	60000	
C 90 3_172.1	172.1	16.3	7200	13.2	11000	47100	8.1	7200	6.6	14200	60000	
C 90 4_212.4	212.4	13.2	7200	10.9	—	60000	6.6	7200	5.5	1180	60000	
C 90 4_231.7	231.7	12.1	7200	10.0	—	60000	6.0	7200	5.0	1560	60000	
C 90 4_268.5	268.5	10.4	7200	8.6	—	60000	5.2	7200	4.3	1540	60000	
C 90 4_292.9	292.9	9.6	7200	7.9	—	60000	4.8	7200	4.0	1880	60000	
C 90 4_339.0	339.0	8.3	7200	6.8	—	60000	4.1	7200	3.4	1720	60000	
C 90 4_369.8	369.8	7.6	7200	6.3	—	60000	3.8	7200	3.1	2050	60000	
C 90 4_419.0	419.0	6.7	7200	5.5	—	60000	3.3	7200	2.8	1890	60000	
C 90 4_457.1	457.1	6.1	7200	5.1	—	60000	3.1	7200	2.5	2210	60000	
C 90 4_534.2	534.2	5.2	7200	4.3	—	60000	2.6	7200	2.2	2090	60000	
C 90 4_582.8	582.8	4.8	7200	4.0	—	60000	2.4	7200	2.0	2270	60000	
C 90 4_652.8	652.8	4.3	7200	3.6	—	60000	2.1	7200	1.8	2160	60000	
C 90 4_712.2	712.2	3.9	7200	3.3	—	60000	2.0	7200	1.6	2290	60000	
C 90 4_773.6	773.6	3.3	7200	3.0	—	60000	1.8	7200	1.5	2250	60000	
C 90 4_844.0	844.0	3.0	7200	2.7	—	60000	1.7	7200	1.4	2310	60000	
C 90 4_922.3	922.3	2.8	7200	2.5	—	60000	1.5	7200	1.3	2260	60000	
C 90 4_1006	1006	2.5	7200	2.3	—	60000	1.4	7200	1.2	2320	60000	
C 90 4_1137	1137	2.3	7200	2.0	—	60000	1.2	7200	1.0	2270	60000	
C 90 4_1240	1240	2.2	7200	1.9	—	60000	1.1	7200	0.90	2230	60000	

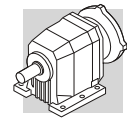
(—) Contact our technical service department advising radial load data (rotation direction, orientation, position)



C 90

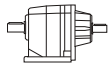

7200 Nm

	i	$n_1 = 900 \text{ min}^{-1}$					$n_1 = 500 \text{ min}^{-1}$					
		n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	
C 90 2_5.2	5.2	174	4900	94	2560	18200	97	5850	62	3010	21600	178
C 90 2_5.6	5.6	161	5050	89	4640	18100	89	6000	59	5720	21800	
C 90 2_6.8	6.8	133	5450	80	2310	18500	74	6200	51	5130	24600	
C 90 2_7.3	7.3	123	5550	75	4890	18900	68	6550	49	6340	23200	
C 90 2_8.3	8.3	108	5850	70	2700	19300	60	6200	41	8870	27800	
C 90 2_9.0	9.0	100	5950	65	5300	19800	55	6600	40	9660	27600	
C 90 2_10.4	10.4	87	6200	59	2250	21000	48	6200	33	11000	31000	
C 90 2_11.2	11.2	80	6450	57	3960	20400	45	6600	32	11700	30800	
C 90 2_12.8	12.8	70	6250	48	4500	25300	39	6250	27	13200	34100	
C 90 2_13.9	13.9	65	6550	47	5830	24400	36	6550	26	14600	34300	
C 90 2_16.0	16.0	56	6200	38	6570	28700	31	6200	21	15000	38000	
C 90 2_17.3	17.3	52	6550	38	7530	28600	28.9	6550	21	15000	38100	
C 90 2_18.7	18.7	48	6200	33	7120	31000	26.7	6200	18.3	15000	40700	
C 90 2_20.2	20.2	44	6600	32	7780	30800	24.8	6600	18.0	15000	40700	
C 90 2_22.9	22.9	39	6200	27	8310	34200	21.8	6200	14.9	15000	44500	
C 90 2_24.8	24.8	36	6600	26	8950	34100	20.2	6600	14.6	15000	44600	
C 90 2_27.2	27.2	33	5500	20	13400	39200	18.4	5500	11.2	15000	50000	
C 90 2_29.4	29.4	31	5900	19.9	13700	39100	17.0	5900	11.0	15000	50200	
C 90 2_35.1	35.1	25.6	5400	15.3	14100	43800	14.2	5400	8.5	15000	55500	
C 90 3_39.4	39.4	22.8	7100	18.3	15000	40600	12.7	7100	10.1	15000	40600	
C 90 3_43.0	43.0	20.9	7200	17.0	15000	42000	11.6	7200	9.4	15000	42000	
C 90 3_50.3	50.3	17.9	7100	14.3	15000	45400	9.9	7100	7.9	15000	45400	
C 90 3_54.9	54.9	16.4	7200	13.3	15000	46900	9.1	7200	7.4	15000	46900	
C 90 3_59.2	59.2	15.2	7100	12.2	15000	48800	8.4	7100	6.8	15000	48800	
C 90 3_64.6	64.6	13.9	7200	11.3	15000	50400	7.7	7200	6.3	15000	50400	
C 90 3_74.4	74.4	12.1	7100	9.7	15000	53800	6.7	7100	5.4	15000	53800	
C 90 3_81.2	81.2	11.1	7200	9.0	15000	55500	6.2	7200	5.0	15000	55500	
C 90 3_88.2	88.2	10.2	7100	8.2	15000	57800	5.7	7100	4.5	15000	57800	
C 90 3_96.2	96.2	9.4	7200	7.6	15000	59600	5.2	7200	4.2	15000	59600	
C 90 3_107.0	107.0	8.4	7100	6.7	15000	60000	4.7	7100	3.7	15000	60000	
C 90 3_116.7	116.7	7.7	7200	6.3	15000	60000	4.3	7200	3.5	15000	60000	
C 90 3_134.1	134.1	6.7	7100	5.4	15000	60000	3.7	7100	3.0	15000	60000	
C 90 3_146.3	146.3	6.2	7200	5.0	15000	60000	3.4	7200	2.8	15000	60000	
C 90 3_157.8	157.8	5.7	7100	4.6	15000	60000	3.2	7100	2.5	15000	60000	
C 90 3_172.1	172.1	5.2	7200	4.2	15000	60000	2.9	7200	2.4	15000	60000	
C 90 4_212.4	212.4	4.2	7200	3.5	2090	60000	2.4	7200	2.0	3210	60000	
C 90 4_231.7	231.7	3.9	7200	3.2	2460	60000	2.2	7200	1.8	3290	60000	
C 90 4_268.5	268.5	3.4	7200	2.8	2440	60000	1.9	7200	1.5	3300	60000	
C 90 4_292.9	292.9	3.1	7200	2.5	2620	60000	1.7	7200	1.4	3370	60000	
C 90 4_339.0	339.0	2.7	7200	2.2	2590	60000	1.5	7200	1.2	3340	60000	
C 90 4_369.8	369.8	2.4	7200	2.0	2660	60000	1.4	7200	1.1	3420	60000	
C 90 4_419.0	419.0	2.1	7200	1.8	2630	60000	1.2	7200	1.0	3390	60000	
C 90 4_457.1	457.1	2.0	7200	1.6	2700	60000	1.1	7200	0.90	3460	60000	
C 90 4_534.2	534.2	1.7	7200	1.4	2680	60000	0.90	7200	0.80	3380	60000	
C 90 4_582.8	582.8	1.5	7200	1.3	2750	60000	0.90	7200	0.70	3500	60000	
C 90 4_652.8	652.8	1.4	7200	1.1	2700	60000	0.80	7200	0.60	3450	60000	
C 90 4_712.2	712.2	1.3	7200	1.0	2760	60000	0.70	7200	0.60	3500	60000	
C 90 4_773.6	773.6	1.2	7200	1.0	2720	60000	0.60	7200	0.50	3480	60000	
C 90 4_844.0	844.0	1.1	7200	0.90	2790	60000	0.60	7200	0.50	3500	60000	
C 90 4_922.3	922.3	1.0	7200	0.80	2730	60000	0.50	7200	0.40	3490	60000	
C 90 4_1006	1006	0.90	7200	0.70	2800	60000	0.50	7200	0.40	3500	60000	
C 90 4_1137	1137	0.80	7200	0.70	2740	60000	0.40	7200	0.40	3500	60000	
C 90 4_1240	1240	0.70	7200	0.60	2800	60000	0.40	7200	0.30	3500	60000	

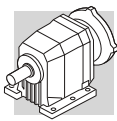


C 100

12000 Nm

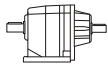

	i	$n_1 = 2800 \text{ min}^{-1}$					$n_1 = 1400 \text{ min}^{-1}$					
		n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	
C 100 2_4.9	4.9	569	5500	345	1900	20600	285	6800	213	3790	25300	181
C 100 2_5.3	5.3	525	5650	327	2790	21000	263	6950	201	4940	25800	
C 100 2_6.5	6.5	429	6150	291	1920	21800	215	7550	179	3950	27000	
C 100 2_7.1	7.1	396	6200	271	3100	22700	198	7650	167	5270	27900	
C 100 2_8.4	8.4	335	6700	248	1870	22800	168	8200	152	3970	28500	
C 100 2_9.0	9.0	309	6800	232	2950	23500	155	8350	142	5190	29200	
C 100 2_10.1	10.1	278	7100	217	1930	24100	139	8750	134	3900	29500	
C 100 2_10.9	10.9	256	7100	200	3240	25700	128	8750	124	5460	31600	
C 100 2_12.5	12.5	225	7650	190	1360	24900	112	9400	117	3260	30800	
C 100 2_13.5	13.5	208	7700	176	2600	26300	104	9500	109	4680	32100	
C 100 2_15.2	15.2	184	8100	164	1270	26600	92	10000	101	2680	32500	
C 100 2_16.5	16.5	170	8250	154	2320	27200	85	10150	95	4420	33600	
C 100 2_18.7	18.7	150	8200	136	1500	30800	75	10000	83	3600	38000	
C 100 2_20.2	20.2	138	8100	124	3047	32200	69	10000	76	5210	39600	
C 100 2_22.2	22.2	126	7500	104	3570	35800	63	9200	64	5960	44100	
C 100 2_24.1	24.1	116	8100	104	3620	35200	58	10000	64	5900	43300	
C 100 2_29.6	29.6	95	6900	72	6380	42400	47	8500	44	9220	52200	
C 100 3_34.3	34.3	82	10350	95	9790	33300	41	11700	54	13000	46400	
C 100 3_36.9	36.9	76	10650	91	10200	34500	38	11800	50	13100	48000	
C 100 3_42.9	42.9	65	11350	83	9640	33200	33	12000	44	13100	51200	
C 100 3_46.2	46.2	61	11700	80	10100	33100	30	12000	41	13300	53100	
C 100 3_53.3	53.3	53	12000	71	9450	36400	26.3	12000	36	13200	56900	
C 100 3_57.4	57.4	49	12000	66	10200	39500	24.4	12000	33	13400	59000	
C 100 3_64.5	64.5	43	12000	59	9950	44100	21.7	12000	29	13400	62300	
C 100 3_69.4	69.4	40	12000	54	10400	45900	20.2	12000	27	13500	64500	
C 100 3_79.4	79.4	35	12000	48	10300	49200	17.6	12000	24	13500	68600	
C 100 3_85.6	85.6	33	12000	44	10400	51100	16.4	12000	22	13600	70900	
C 100 3_92.7	92.7	30	12000	41	10400	53200	15.1	12000	20	13500	73500	
C 100 3_99.8	99.8	28.1	12000	38	10500	55200	14.0	12000	19.0	13600	75900	
C 100 3_111.9	111.9	25.0	12000	34	10400	58300	12.5	12000	16.9	13500	79800	
C 100 3_120.5	120.5	23.2	12000	31	10500	60400	11.6	12000	15.7	13700	82400	
C 100 3_139.7	139.7	20.0	11050	25	10600	67400	10.0	11050	12.5	13700	85000	
C 100 3_150.4	150.4	18.6	12000	25	10600	66900	9.3	12000	12.6	13700	85000	
C 100 4_162.1	162.1	17.3	12000	24	—	85000	8.6	12000	11.9	—	85000	
C 100 4_185.4	185.4	15.1	12000	21	—	85000	7.6	12000	10.4	—	85000	
C 100 4_199.6	199.6	14.0	12000	19.4	—	85000	7.0	12000	9.7	—	85000	
C 100 4_244.2	244.2	11.5	12000	15.8	—	85000	5.7	12000	7.9	—	85000	
C 100 4_263.0	263.0	10.6	12000	14.7	—	85000	5.3	12000	7.4	—	85000	
C 100 4_300.5	300.5	9.3	12000	12.9	—	85000	4.7	12000	6.4	—	85000	
C 100 4_323.6	323.6	8.7	12000	11.9	—	85000	4.3	12000	6.0	—	85000	
C 100 4_380.5	380.5	7.4	12000	10.2	—	85000	3.7	12000	5.1	—	85000	
C 100 4_409.8	409.8	6.8	12000	9.4	—	85000	3.4	12000	4.7	—	85000	
C 100 4_466.7	466.7	6.0	12000	8.3	—	85000	3.0	12000	4.1	—	85000	
C 100 4_502.6	502.6	5.6	12000	7.7	—	85000	2.8	12000	3.8	—	85000	
C 100 4_582.6	582.6	4.8	12000	6.6	—	85000	2.4	12000	3.3	—	85000	
C 100 4_627.4	627.4	4.5	12000	6.2	—	85000	2.2	12000	3.1	—	85000	
C 100 4_720.3	720.3	3.9	12000	5.4	—	85000	1.9	12000	2.7	—	85000	
C 100 4_775.7	775.7	3.6	12000	5.0	—	85000	1.8	12000	2.5	—	85000	
C 100 4_843.3	843.3	3.3	12000	4.6	—	85000	1.7	12000	2.3	—	85000	
C 100 4_908.2	908.2	3.1	12000	4.3	—	85000	1.5	12000	2.1	830	85000	
C 100 4_1004	1004	2.8	12000	3.9	—	85000	1.4	12000	1.9	—	85000	
C 100 4_1081	1081	2.6	12000	3.6	—	85000	1.3	12000	1.8	870	85000	

(—) Contact our technical service department advising radial load data (rotation direction, orientation, position)

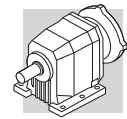


C 100

12000 Nm

	i	$n_1 = 900 \text{ min}^{-1}$					$n_1 = 500 \text{ min}^{-1}$					
		n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	n_2 min ⁻¹	M_{n2} Nm	P_{n1} kW	R_{n1} N	R_{n2} N	
C 100 2_4.9	4.9	183	7800	157	5310	28800	102	9300	104	6720	34400	181
C 100 2_5.3	5.3	169	7950	148	6680	29500	94	9450	98	9740	35200	
C 100 2_6.5	6.5	138	8600	131	5670	31000	77	10250	87	7540	37000	
C 100 2_7.1	7.1	127	8750	123	7050	31800	71	10450	81	10100	37800	
C 100 2_8.4	8.4	108	9350	111	5670	32600	60	10950	72	8530	40100	
C 100 2_9.0	9.0	99	9500	104	7080	33600	55	11350	69	10100	39900	
C 100 2_10.1	10.1	89	10000	98	5540	33600	50	10900	60	10600	44500	
C 100 2_10.9	10.9	82	10150	92	6980	34700	46	11500	58	11300	44300	
C 100 2_12.5	12.5	72	10700	85	3910	35400	40	10850	48	11700	49600	
C 100 2_13.5	13.5	67	10850	80	6440	36700	37	11450	47	12300	49500	
C 100 2_15.2	15.2	59	10800	70	5940	40800	33	10800	39	13000	54700	
C 100 2_16.5	16.5	55	11500	69	6320	39100	30	11500	38	13400	54500	
C 100 2_18.7	18.7	48	10900	58	6310	45100	26.8	10900	32	13400	59800	
C 100 2_20.2	20.2	45	11500	56	6890	45000	24.7	11500	31	14000	60100	
C 100 2_22.2	22.2	40	9850	44	9170	52200	22.5	9850	24	15000	67800	
C 100 2_24.1	24.1	37	10800	44	8930	51200	20.7	10800	25	15000	67200	
C 100 2_29.6	29.6	30	9100	31	12600	61400	16.9	9100	17.0	15000	78300	
C 100 3_34.3	34.3	26.2	11700	35	15000	57800	14.6	11700	19.2	15000	75500	
C 100 3_36.9	36.9	24.4	11800	32	15000	59600	13.5	11800	18.0	15000	77700	
C 100 3_42.9	42.9	21.0	12000	28	15000	63400	11.6	12000	15.7	15000	82300	
C 100 3_46.2	46.2	19.5	12000	26	15000	65600	10.8	12000	14.6	15000	84900	
C 100 3_53.3	53.3	16.9	12000	23	15000	69900	9.4	12000	12.7	15000	85000	
C 100 3_57.4	57.4	15.7	12000	21	15000	72300	8.7	12000	11.8	15000	85000	
C 100 3_64.5	64.5	14.0	12000	18.6	15000	76100	7.8	12000	10.5	15000	85000	
C 100 3_69.4	69.4	13.0	12000	17.5	15000	78600	7.2	12000	9.7	15000	85000	
C 100 3_79.4	79.4	11.3	12000	15.3	15000	83300	6.3	12000	8.5	15000	85000	
C 100 3_85.6	85.6	10.5	12000	14.2	15000	85000	5.8	12000	7.9	15000	85000	
C 100 3_92.7	92.7	9.7	12000	13.1	15000	85000	5.4	12000	7.3	15000	85000	
C 100 3_99.8	99.8	9.0	12000	12.2	15000	85000	5.0	12000	6.8	15000	85000	
C 100 3_111.9	111.9	8.0	12000	10.9	15000	85000	4.5	12000	6.0	15000	85000	
C 100 3_120.5	120.5	7.5	12000	10.1	15000	85000	4.1	12000	5.6	15000	85000	
C 100 3_139.7	139.7	6.4	11500	8.0	15000	85000	3.6	11050	4.5	15000	85000	
C 100 3_150.4	150.4	6.0	12000	8.1	15000	85000	3.3	12000	4.5	15000	85000	
C 100 4_162.1	162.1	5.6	12000	7.7	—	85000	3.1	12000	4.3	—	85000	
C 100 4_185.4	185.4	4.9	12000	6.7	—	85000	2.7	12000	3.7	920	85000	
C 100 4_199.6	199.6	4.5	12000	6.2	—	85000	2.5	12000	3.5	1430	85000	
C 100 4_244.2	244.2	3.7	12000	5.1	—	85000	2.0	12000	2.8	1490	85000	
C 100 4_263.0	263.0	3.4	12000	4.7	—	85000	1.9	12000	2.6	1950	85000	
C 100 4_300.5	300.5	3.0	12000	4.1	—	85000	1.7	12000	2.3	1840	85000	
C 100 4_323.6	323.6	2.8	12000	3.8	850	85000	1.5	12000	2.1	2280	85000	
C 100 4_380.5	380.5	2.4	12000	3.3	700	85000	1.3	12000	1.8	2130	85000	
C 100 4_409.8	409.8	2.2	12000	3.0	1120	85000	1.2	12000	1.7	2550	85000	
C 100 4_466.7	466.7	1.9	12000	2.7	910	85000	1.1	12000	1.5	2340	85000	
C 100 4_502.6	502.6	1.8	12000	2.5	1320	85000	1.0	12000	1.4	2740	85000	
C 100 4_582.6	582.6	1.5	12000	2.1	1100	85000	0.90	12000	1.2	2520	85000	
C 100 4_627.4	627.4	1.4	12000	2.0	1490	85000	0.80	12000	1.1	2910	85000	
C 100 4_720.3	720.3	1.2	12000	1.7	1270	85000	0.70	12000	1.0	2700	85000	
C 100 4_775.7	775.7	1.2	12000	1.6	1650	85000	0.60	12000	0.90	3070	85000	
C 100 4_843.3	843.3	1.1	12000	1.5	1360	85000	0.60	12000	0.80	2790	85000	
C 100 4_908.2	908.2	1.0	12000	1.4	1730	85000	0.60	12000	0.80	3160	85000	
C 100 4_1004	1004	0.90	12000	1.2	1400	85000	0.50	12000	0.70	2830	85000	
C 100 4_1081	1081	0.90	12000	1.1	1770	85000	0.50	12000	0.60	3170	85000	

(—) Contact our technical service department advising radial load data (rotation direction, orientation, position)



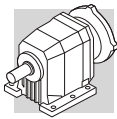
27 MOTOR AVAILABILITY

Please be aware that motor-gearbox combinations resulting from the following charts are purely based on geometrical compatibility.

When selecting a gearmotor, refer to procedure specified at paragraph 12 and observe particularly the condition $S \geq f_s$.

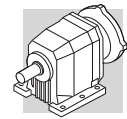
(B 22)

		IEC_ (IM B5)																			
		BN	BE	BXN	BN	BE	BXN	BN	BE	BX	BXN	BN	BE	BX	BXN	BN	BE	BX	BN	BE	BX
P _{n1} (#) [kW]	2p	0.37	—	—	0.75	—	—	1.5	1.1	—	—	2.2	2.2	—	—	4	3	—	4	4	—
	4p	0.25	0.18	0.18	0.55	0.37	0.37	1.1	0.75	0.75	0.75	1.85	1.5	1.5	1.5	3	3	3	4	4	4
	6p	0.12	—	—	0.37	—	—	0.75	—	—	—	1.1	0.75	—	—	1.85	1.5	—	2.2	2.2	—
		P63			P71			P80			P90			P100			P112				
C 12 2		2.8_66.2						2.8_47.6						2.8_47.6							
C 22 2		3.7_63.3 ⊖ (7.1_8.7)						2.7_54.7						2.7_54.7							
C 22 3		60.0_261.0						60.0_261.0						60.0_261.0							
C 32 2		5.0_66.8 ⊖ (7.2_11.2)						2.9_66.8						2.9_66.8							
C 32 3		74.7_274.7						74.7_274.7						74.7_274.7							
C 36 2		4.6_19.0 ⊖ (6.8_10.6)						2.7_19.0						2.7_19.0							
C 36 3		38.1_206.4						22.1_206.4						22.1_206.4							
C 36 4		230.9_848.5						230.9_848.5						230.9_848.5							
C 41 2		14.2_44.8						2.7_44.8						2.7_44.8							
C 41 3		47.0_209.1						28.5_209.1						28.5_209.1							
C 41 4		239.9_855.5						239.9_855.5						239.9_855.5							
C 51 2		18.9_57.0						2.6_57.0						2.6_57.0							
C 51 3		59.0_216.7						21.8_216.7						21.8_216.7							
C 51 4		240.9_884.9						240.9_884.9						240.9_884.9							
C 61 2	i =	22.4_38.0						3.7_38.0 ⊖ (6.7_7.5)						3.7_38.0 ⊖ (6.7_7.5)							
C 61 3		67.7_195.8						26.8_195.8						26.8_195.8							
C 61 4		217.4_796.1						217.4_796.1						217.4_796.1							
C 70 2								14.1_34.7 ⊖ (15.3)						14.1_34.7 ⊖ (15.3)							
C 70 3								41.3_239.3						41.3_239.3							
C 70 4		251.3_1476						251.3_1476						251.3_1476							
C 80 2								20.5_39.1						20.5_39.1							
C 80 3								43.5_215.8						43.5_215.8							
C 80 4		334.3_1481						261.9_1481						261.9_1481							
C 90 2								22.9_35.1						22.9_35.1							
C 90 3								74.4_172.1						74.4_172.1							
C 90 4		339.0_1240						212.4_1240						212.4_1240							
C 100 2														29.6							
C 100 3														79.4_150.4							
C 100 4		380.5_1081						162.1_1081						162.1_1081							



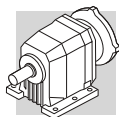
		IEC_  (IM B5)																	
		BN	BE	BX	BN	BE	BX	BN	BE	BX	BN	BX	BX	IEC	BX	IEC	BX	IEC	
P _{n1} (#) [kW]	2p	9.2	9.2	—	18.5	18.5	—	22	—	—	30	—	—	45	—	55	—	90	
	4p	9.2	9.2	7.5	15	15	15	22	22	22	30	30	45	45	55	55	90	90	
	6p	5.5	4	—	11	7.5	—	15	—	—	18.5	—	—	30	—	37	—	55	
		P132			P160			P180			P200			P225		P250		P280	
C 12 2																			
C 22 2																			
C 22 3																			
C 32 2		2.9_25.1																	
C 32 3																			
C 36 2		2.7_19.0																	
C 36 3		22.1_77.6																	
C 36 4																			
C 41 2		2.7_31.4																	
C 41 3		28.5_102.3																	
C 41 4																			
C 51 2		2.6_40.4		2.6_40.4			2.6_40.4												
C 51 3		21.8_124.4		21.8_124.4			21.8_124.4												
C 51 4																			
C 61 2	i =	2.8_38.0		2.8_38.0			2.8_38.0												
C 61 3		26.8_140.5		26.8_140.5			26.8_140.5												
C 61 4																			
C 70 2		7.5_34.7 ⊖(8.0)		4.6_34.7			4.6_34.7			4.6_10.2 ⊖(9.5)									
C 70 3		41.3_137.4		41.3_137.4			41.3_137.4												
C 70 4		251.3_554.7																	
C 80 2		11.1_39.1		7.0_39.1			5.6_39.1			5.6_25.9		5.6_25.9							
C 80 3		43.5_184.4		43.5_184.4			43.5_184.4												
C 80 4		261.9_724.7																	
C 90 2		12.8_35.1		10.4_35.1			10.4_35.1			5.2_29.4		5.2_29.4		5.2_29.4					
C 90 3		39.4_172.1		39.4_172.1			39.4_172.1			39.4_96.2		39.4_96.2		39.4_96.2					
C 90 4		212.4_712.2		212.4_712.2			212.4_712.2												
C 100 2		15.2_29.6		12.5_29.6			12.5_29.6			4.9_29.6		4.9_29.6		4.9_29.6		4.9_29.6			
C 100 3		42.9_150.4		34.3_150.4			34.3_150.4			34.3_99.8		34.3_99.8		34.3_99.8		34.3_99.8			
C 100 4		162.1_775.7		162.1_775.7			162.1_775.7												

(#) P_{n1} = maximum installable power on input P_{_}



(B 23)

		M0	M05 - ME05 - MXN05	M1 - ME1 - MXN10	ME2 - MX2 - MXN20	ME3 - MX3	ME4 - MX4	ME5 - MX5
C 05 2	i =	27.1_44.7	5.5_44.7	5.5_44.7				
C 12 2			2.8_66.2	2.8_37.0	2.8_47.6	2.8_47.6		
C 22 2			3.7_63.3 ⊖(7.1_8.7)	3.7_43.3 ⊖(7.1_8.7)	2.7_54.7	2.7_54.7		
C 22 3			60.0_261.0	60.0_261.0	60.0_261.0	60.0_261.0		
C 32 2				5.0_52.4 ⊖(7.2_11.2)	2.9_66.8	2.9_66.8	2.9_25.1	
C 32 3			74.7_274.7	74.7_274.7	74.7_274.7	74.7_274.7		
C 36 2				4.6_19.0 ⊖(6.8_10.6)	2.7_19.0	2.7_19.0	2.7_19.0	
C 36 3				38.1_162.0	22.1_206.4	22.1_206.4	22.1_77.6	
C 36 4			230.9_848.5	230.9_848.5	230.9_848.5	230.9_848.5		
C 41 2				14.2_44.8	2.7_44.8	2.7_44.8	2.7_31.4	
C 41 3				47.0_209.1	28.5_209.1	28.5_209.1	28.5_102.3	
C 41 4			239.9_855.5	239.9_855.5	239.9_855.5	239.9_855.5		
C 51 2				18.9_57.0	2.6_57.0	2.6_57.0	2.6_40.4	2.6_40.4
C 51 3				59.0_216.7	21.8_216.7	21.8_216.7	21.8_124.4	21.8_124.4
C 51 4				240.9_884.9	240.9_884.9	240.9_884.9		
C 61 2					3.7_38.0 ⊖(6.7_7.5)	3.7_38.0 ⊖(6.7_7.5)	2.8_38.0	2.8_38.0
C 61 3					26.8_195.8	26.8_195.8	26.8_140.5	26.8_140.5
C 61 4				217.4_796.1	217.4_796.1	217.4_796.1		
C 70 2					14.1_34.7 ⊖(15.3)	14.1_34.7 ⊖(15.3)	7.5_34.7 ⊖(8.0)	7.5_34.7 ⊖(8.0)
C 70 3					41.3_239.3	41.3_239.3	41.3_137.4	41.3_137.4
C 70 4				251.3_1476	251.3_1476	251.3_1476	251.3_554.7	
C 80 2						20.5_39.1	11.1_39.1	11.1_39.1
C 80 3						43.5_215.8	43.5_184.4	43.5_184.4
C 80 4				334.3_1481	261.9_1481	261.9_1481	261.9_724.7	
C 90 2						22.9_35.1	12.8_35.1	12.8_35.1
C 90 3						74.4_172.1	39.4_172.1	39.4_172.1
C 90 4				339.0_1240	212.4_1240	212.4_1240	212.4_712.2	
C 100 2							15.2_29.6	15.2_29.6
C 100 3							42.9_150.4	42.9_150.4
C 100 4				380.5_1081	162.1_1081	162.1_1081	162.1_775.7	



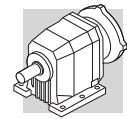
Motor adapters matching the most popular brands of servomotors are available for units size C12... C61. Dimensions of servomotor inputs are provided within the drawing section for each frame size. The code **SK** applies for inputs featuring a conventional keyway, while through the specification of the **SC** code the input shaft will feature a clamping device instead.

(B 24)

		SERVO INPUT							
		SK60A	SK60B	SK80A	SK80B	SK80C	SK95A	SK95B	SK95C
		SC60A	SC60B	SC80A	SC80B	SC80C	SC95A	SC95B	SC95C
C 12 2		2.8_66.2	2.8_66.2	2.8_66.2		2.8_47.6	2.8_66.2	2.8_47.6	2.8_47.6
C 22 2		3.7_63.3 ⌀ (7.1_8.7)	3.7_63.3 ⌀ (7.1_8.7)	3.7_63.3 ⌀ (7.1_8.7)		2.7_54.7	3.7_63.3 ⌀ (7.1_8.7)	2.7_54.7	2.7_54.7
C 22 3		60.0_261.0	60.0_261.0	60.0_261.0		60.0_261.0	60.0_261.0	60.0_261.0	60.0_261.0
C 32 2		5.0_66.8 ⌀ (7.2_11.2)	5.0_66.8 ⌀ (7.2_11.2)	5.0_66.8 ⌀ (7.2_11.2)		2.9_66.8	5.0_66.8 ⌀ (7.2_11.2)	2.9_66.8	2.9_66.8
C 32 3		74.7_274.7	74.7_274.7	74.7_274.7		74.7_274.7	74.7_274.7	74.7_274.7	74.7_274.7
C 36 2		4.6_19.0 ⌀ (6.8_10.6)	4.6_19.0 ⌀ (6.8_10.6)	4.6_19.0 ⌀ (6.8_10.6)		2.7_19.0	4.6_19.0 ⌀ (6.8_10.6)	2.7_19.0	2.7_19.0
C 36 3		38.1_206.4	38.1_206.4	38.1_206.4		22.1_206.4	38.1_206.4	22.1_206.4	22.1_206.4
C 36 4		230.9_848.5	230.9_848.5	230.9_848.5		230.9_848.5	230.9_848.5	230.9_848.5	230.9_848.5
C 41 2	i =				6.0_44.8 ⌀ (6.4_12.4)	2.7_44.8	6.0_44.8 ⌀ (6.4_12.4)	2.7_44.8	2.7_44.8
C 41 3					47.0_209.1	28.5_209.1	47.0_209.1	28.5_209.1	28.5_209.1
C 41 4			239.9_855.5	239.9_855.5	239.9_855.5		239.9_855.5	239.9_855.5	239.9_855.5
C 51 2					18.9_57.0	2.6_57.0	18.9_57.0	2.6_57.0	2.6_57.0
C 51 3					59.0_216.7	21.8_216.7	59.0_216.7	21.8_216.7	21.8_216.7
C 51 4						240.9_884.9	240.9_884.9	240.9_884.9	240.9_884.9
C 61 2						3.7_38.0 ⌀ (6.7_7.5)	22.4_38.0	3.7_38.0 ⌀ (6.7_7.5)	3.7_38.0 ⌀ (6.7_7.5)
C 61 3						26.8_195.8	67.7_195.8	26.8_195.8	26.8_195.8
C 61 4					217.4_796.1	217.4_796.1	217.4_796.1	217.4_796.1	217.4_796.1

(B 25)

		SK110A	SK110B	SK130A	SK130B	SK180A	SK180B	
		SC110A	SC110B	SC130A	SC130B	SC180A	SC180B	
C 12 2		2.8_47.6	2.8_47.6					
C 22 2		2.7_54.7	2.7_54.7					
C 22 3		60.0_261.0	60.0_261.0					
C 32 2		2.9_66.8	2.9_66.8	2.9_66.8				
C 32 3		74.7_274.7	74.7_274.7					
C 36 2		2.7_19.0	2.7_19.0	2.7_19.0				
C 36 3		22.1_206.4	22.1_206.4	22.1_206.4				
C 36 4		230.9_848.5	230.9_848.5					
C 41 2	i =	2.7_44.8	2.7_44.8	2.7_44.8	2.7_31.4	2.7_31.4	2.7_31.4	
C 41 3			28.5_209.1	28.5_209.1	28.5_209.1	28.5_102.3	28.5_102.3	28.5_102.3
C 41 4			239.9_855.5	239.9_855.5				
C 51 2			2.6_57.0	2.6_57.0	2.6_57.0	2.6_40.4	2.6_40.4	2.6_40.4
C 51 3			21.8_216.7	21.8_216.7	21.8_216.7	21.8_124.4	21.8_124.4	21.8_124.4
C 51 4			240.9_884.9	240.9_884.9	240.9_884.9			
C 61 2			3.7_38.0 ⌀ (6.7_7.5)	3.7_38.0 ⌀ (6.7_7.5)	3.7_38.0 ⌀ (6.7_7.5)	2.8_38.0	2.8_38.0	2.8_38.0
C 61 3			26.8_195.8	26.8_195.8	26.8_195.8	26.8_140.5	26.8_140.5	26.8_140.5
C 61 4			217.4_796.1	217.4_796.1	217.4_796.1			

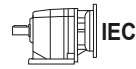


28 MOMENT OF INERTIA

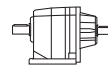
The following charts indicate moment of inertia values J_r [kgm²] referred to the gear unit high speed shaft. A key to the symbols used follows:



Values under this icon refer to compact gear units, without motor. To obtain the overall moment of inertia for the gearmotor just add the value of the inertia for the specific compact motor, given in the relevant rating chart.



Values under this symbol refer to gearboxes with IEC motor adaptor (IEC size...).



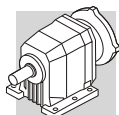
This symbol refers to gearbox values.



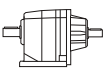


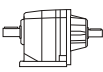
Values under this symbol refer to gear unit with servomotor input adapter.

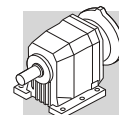
C 05

	i	J ($\cdot 10^{-4}$) [kgm ²]
		J_r
C 05_5.5	5.5	0.29
C 05_6.7	6.7	0.29
C 05_7.4	7.4	0.28
C 05_9.3	9.3	0.17
C 05_11.2	11.2	0.16
C 05_12.5	12.5	0.16
C 05_15.6	15.6	0.09
C 05_18.9	18.9	0.09
C 05_21.0	21.0	0.08
C 05_27.1	27.1	0.04
C 05_32.8	32.8	0.04
C 05_36.4	36.4	0.04
C 05_40.3	40.3	0.03
C 05_44.7	44.7	0.03




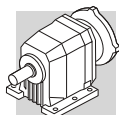
C 12

	i	J ($\cdot 10^{-4}$) [kgm ²]							
			 IEC						
			63	71	80	90	100	112	
C 12 2_2.8	2.8	0.44	1.9	1.9	3.3	3.2	4.5	4.5	1.3
C 12 2_3.2	3.2	0.34	1.8	1.8	3.2	3.1	4.4	4.4	1.2
C 12 2_3.7	3.7	0.29	1.8	1.7	3.1	3.1	4.4	4.4	1.2
C 12 2_4.3	4.3	0.21	1.7	1.7	3.1	3.0	4.3	4.3	1.1
C 12 2_4.9	4.9	0.19	1.7	1.7	3.0	3.0	4.3	4.3	1.1
C 12 2_5.6	5.6	0.15	1.6	1.6	3.0	2.9	4.2	4.2	1.0
C 12 2_6.2	6.2	0.12	1.6	1.6	3.0	2.9	4.2	4.2	1.0
C 12 2_7.6	7.6	0.33	1.8	1.8	3.2	3.1	4.4	4.4	1.2
C 12 2_8.8	8.8	0.32	1.8	1.8	3.2	3.1	4.4	4.4	1.2
C 12 2_10.1	10.1	0.23	1.7	1.7	3.1	3.0	4.3	4.3	1.1
C 12 2_11.9	11.9	0.17	1.6	1.6	3.0	3.0	4.2	4.2	1.1
C 12 2_13.4	13.4	0.16	1.6	1.6	3.0	2.9	4.2	4.2	1.1
C 12 2_15.4	15.4	0.12	1.6	1.6	3.0	2.9	4.2	4.2	1.0
C 12 2_17.2	17.2	0.10	1.6	1.6	2.9	2.9	4.2	4.2	1.0
C 12 2_18.4	18.4	0.08	1.6	1.5	2.9	2.9	4.2	4.2	0.98
C 12 2_20.6	20.6	0.08	1.5	1.5	2.9	2.9	4.2	4.2	0.98
C 12 2_23.2	23.2	0.07	1.5	1.5	2.9	2.9	4.1	4.1	0.97
C 12 2_25.4	25.4	0.06	1.5	1.5	2.9	2.8	4.1	4.1	0.96
C 12 2_29.5	29.5	0.05	1.5	1.5	2.9	2.8	4.1	4.1	0.95
C 12 2_32.8	32.8	0.04	1.5	1.5	2.9	2.8	4.1	4.1	0.94
C 12 2_37.0	37.0	0.03	1.5	1.5	2.9	2.8	4.1	4.1	0.93
C 12 2_42.3	42.3	0.03	1.5	1.5	2.9	2.8	4.1	4.1	0.93
C 12 2_47.6	47.6	0.02	1.5	1.5	2.9	2.8	4.1	4.1	0.92
C 12 2_55.2	55.2	0.02	1.5	1.5	—	—	—	—	0.92
C 12 2_66.2	66.2	0.01	1.5	1.5	—	—	—	—	0.91

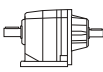


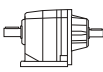


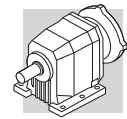
C 12

		J ($\cdot 10^{-4}$) [kgm ²]									
		 SERVO									
	i	60A		60B 80A		95A		80C 95B 110A		95C 110B	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
C 12 2_2.8	2.8	0.71	0.97	0.73	1.2	3.3	3.7	3.3	3.8	3.2	4.2
C 12 2_3.2	3.2	0.61	0.87	0.63	1.1	3.2	3.6	3.2	3.7	3.1	4.1
C 12 2_3.7	3.7	0.56	0.82	0.58	1.0	3.1	3.5	3.1	3.6	3.1	4.1
C 12 2_4.3	4.3	0.48	0.74	0.50	0.94	3.0	3.5	3.1	3.6	3.0	4.0
C 12 2_4.9	4.9	0.46	0.72	0.48	0.92	3.0	3.4	3.0	3.5	3.0	4.0
C 12 2_5.6	5.6	0.42	0.68	0.44	0.88	3.0	3.4	3.0	3.5	2.9	3.9
C 12 2_6.2	6.2	0.39	0.65	0.41	0.85	2.9	3.4	3.0	3.5	2.9	3.9
C 12 2_7.6	7.6	0.60	0.86	0.62	1.1	3.2	3.6	3.2	3.7	3.1	4.1
C 12 2_8.8	8.8	0.59	0.85	0.61	1.0	3.1	3.6	3.2	3.7	3.1	4.1
C 12 2_10.1	10.1	0.50	0.76	0.52	0.96	3.1	3.5	3.1	3.6	3.0	4.0
C 12 2_11.9	11.9	0.44	0.70	0.46	0.90	3.0	3.4	3.0	3.5	3.0	4.0
C 12 2_13.4	13.4	0.43	0.69	0.45	0.83	3.0	3.4	3.0	3.5	2.9	3.9
C 12 2_15.4	15.4	0.39	0.65	0.41	0.85	2.9	3.4	3.0	3.5	2.9	3.9
C 12 2_17.2	17.2	0.37	0.63	0.39	0.83	2.9	3.4	2.9	3.4	2.9	3.9
C 12 2_18.4	18.4	0.35	0.61	0.37	0.81	2.9	3.3	2.9	3.4	2.9	3.9
C 12 2_20.6	20.6	0.35	0.61	0.37	0.81	2.9	3.3	2.9	3.4	2.9	3.9
C 12 2_23.2	23.2	0.34	0.60	0.36	0.80	2.9	3.3	2.9	3.4	2.9	3.9
C 12 2_25.4	25.4	0.33	0.59	0.35	0.79	2.9	3.3	2.9	3.4	2.8	3.8
C 12 2_29.5	29.5	0.32	0.58	0.34	0.78	2.9	3.3	2.9	3.4	2.8	3.8
C 12 2_32.8	32.8	0.34	0.60	0.33	0.77	2.9	3.3	2.9	3.4	2.8	3.8
C 12 2_37.0	37.0	0.30	0.56	0.32	0.76	2.9	3.3	2.9	3.4	2.8	3.8
C 12 2_42.3	42.3	0.30	0.56	0.32	0.76	2.9	3.3	2.9	3.4	2.8	3.8
C 12 2_47.6	47.6	0.29	0.55	0.31	0.75	2.8	3.3	2.9	3.4	2.8	3.8
C 12 2_55.2	55.2	0.29	0.55	0.31	0.75	2.8	3.3	—	—	—	—
C 12 2_66.2	66.2	0.28	0.54	0.30	0.74	2.8	3.3	—	—	—	—




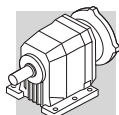
C 22

	i	J (•10 ⁻⁴) [kgm ²]							
			 IEC						
			63	71	80	90	100		
C 22 2_2.7	2.7	1.2	—	—	4.0	4.0	5.3	5.3	3.1
C 22 2_3.3	3.3	0.83	—	—	3.7	3.6	4.9	4.9	2.7
C 22 2_3.7	3.7	0.72	2.2	2.2	3.6	3.5	4.8	4.8	2.6
C 22 2_4.3	4.3	0.56	2.0	2.0	3.4	3.3	4.6	4.6	2.4
C 22 2_4.8	4.8	0.48	2.0	1.9	3.3	3.3	4.6	4.6	2.4
C 22 2_5.6	5.6	0.36	1.8	1.8	3.2	3.2	4.4	4.4	2.2
C 22 2_6.1	6.1	0.29	1.8	1.7	3.1	3.1	4.4	4.4	2.2
C 22 2_7.1	7.1	0.77	—	—	3.6	3.6	4.8	4.8	2.6
C 22 2_8.7	8.7	0.55	—	—	3.4	3.3	4.6	4.6	2.4
C 22 2_9.6	9.6	0.50	2.0	2.0	3.3	3.3	4.6	4.6	2.4
C 22 2_11.1	11.1	0.39	1.9	1.8	3.2	3.2	4.5	4.5	2.3
C 22 2_12.4	12.4	0.35	1.8	1.8	3.2	3.1	4.4	4.4	2.2
C 22 2_14.5	14.5	0.36	1.7	1.7	3.1	3.1	4.3	4.3	2.1
C 22 2_15.8	15.8	0.20	1.7	1.7	3.1	3.0	4.3	4.3	2.1
C 22 2_18.1	18.1	0.18	1.6	1.6	3.0	3.0	4.3	4.3	2.0
C 22 2_20.0	20.0	0.15	1.6	1.6	3.0	2.9	4.2	4.2	2.0
C 22 2_21.5	21.5	0.13	1.6	1.6	3.0	2.9	4.2	4.2	2.0
C 22 2_24.3	24.3	0.12	1.6	1.6	3.0	2.9	4.2	4.2	2.0
C 22 2_27.2	27.2	0.10	1.6	1.6	3.0	2.9	4.2	4.2	2.0
C 22 2_29.6	29.6	0.09	1.6	1.5	2.9	2.9	4.2	4.2	2.0
C 22 2_33.1	33.1	0.07	1.5	1.5	2.9	2.9	4.2	4.2	1.9
C 22 2_36.8	36.8	0.06	1.5	1.5	2.9	2.8	4.1	4.1	1.9
C 22 2_43.3	43.3	0.05	1.5	1.5	2.9	2.8	4.1	4.1	1.9
C 22 2_48.6	48.6	0.04	1.5	1.5	2.9	2.8	4.1	4.1	1.9
C 22 2_54.7	54.7	0.03	1.5	1.5	2.9	2.8	4.1	4.1	1.9
C 22 2_63.3	63.3	0.02	1.5	1.5	—	—	—	—	1.9
C 22 3_60.0	60.0	0.04	1.5	1.5	2.9	2.8	4.1	4.1	0.94
C 22 3_65.3	65.3	0.03	1.5	1.5	2.9	2.8	4.1	4.1	0.93
C 22 3_74.8	74.8	0.03	1.5	1.5	2.9	2.8	4.1	4.1	0.93
C 22 3_82.6	82.6	0.03	1.5	1.5	2.9	2.8	4.1	4.1	0.93
C 22 3_88.5	88.5	0.03	1.5	1.5	2.9	2.8	4.1	4.1	0.93
C 22 3_100.2	100.2	0.03	1.5	1.5	2.9	2.8	4.1	4.1	0.93
C 22 3_112.0	112.0	0.03	1.5	1.5	2.9	2.8	4.1	4.1	0.93
C 22 3_122.2	122.2	0.03	1.5	1.5	2.9	2.8	4.1	4.1	0.93
C 22 3_136.5	136.5	0.02	1.5	1.5	2.9	2.8	4.1	4.1	0.92
C 22 3_151.7	151.7	0.02	1.5	1.5	2.9	2.8	4.1	4.1	0.92
C 22 3_178.5	178.5	0.02	1.5	1.5	2.9	2.8	4.1	4.1	0.92
C 22 3_200.7	200.7	0.02	1.5	1.5	2.9	2.8	4.1	4.1	0.92
C 22 3_225.8	225.8	0.02	1.5	1.5	2.9	2.8	4.1	4.1	0.92
C 22 3_261.0	261.0	0.02	1.5	1.5	2.9	2.8	4.1	4.1	0.92

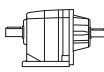



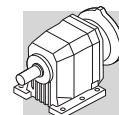
C 22

		J ($\cdot 10^{-4}$) [kgm ²]									
		 SERVO									
i		60A		60B 80A		95A		80C 95B 110A		95C 110B	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
C 22 2_2.7	2.7	—	—	—	—	—	—	4.0	4.5	4.0	5.0
C 22 2_3.3	3.3	—	—	—	—	—	—	3.7	4.2	3.6	4.6
C 22 2_3.7	3.7	0.99	1.3	1.0	1.4	3.5	4.0	3.6	4.1	3.5	4.5
C 22 2_4.3	4.3	0.83	1.1	0.85	1.3	3.4	3.8	3.4	3.9	3.3	4.3
C 22 2_4.8	4.8	0.75	1.0	0.77	1.2	3.3	3.7	3.3	3.8	3.3	4.3
C 22 2_5.6	5.6	0.63	0.89	0.65	1.1	3.2	3.6	3.2	3.7	3.2	4.2
C 22 2_6.1	6.1	0.56	0.82	0.58	1.0	3.1	3.5	3.1	3.6	3.1	4.1
C 22 2_7.1	7.1	—	—	—	—	—	—	3.6	4.1	3.6	4.6
C 22 2_8.7	8.7	—	—	—	—	—	—	3.4	3.9	3.3	4.3
C 22 2_9.6	9.6	0.77	1.0	0.79	1.2	3.3	3.8	3.3	3.8	3.3	4.3
C 22 2_11.1	11.1	0.66	0.92	0.68	1.1	3.2	3.6	3.2	3.7	3.2	4.2
C 22 2_12.4	12.4	0.62	0.88	0.64	1.1	3.2	3.6	3.2	3.7	3.1	4.1
C 22 2_14.5	14.5	0.63	0.89	0.65	1.1	3.2	3.6	3.1	3.6	3.1	4.1
C 22 2_15.8	15.8	0.47	0.73	0.49	0.93	3.0	3.5	3.1	3.6	3.0	4.0
C 22 2_18.1	18.1	0.45	0.71	0.47	0.91	3.0	3.4	3.0	3.5	3.0	4.0
C 22 2_20.0	20.0	0.42	0.68	0.44	0.88	3.0	3.4	3.0	3.5	2.9	3.9
C 22 2_21.5	21.5	0.40	0.66	0.42	0.86	3.0	3.4	3.0	3.5	2.9	3.9
C 22 2_24.3	24.3	0.39	0.65	0.41	0.85	2.9	3.4	3.0	3.5	2.9	3.9
C 22 2_27.2	27.2	0.37	0.63	0.39	0.83	2.9	3.4	3.0	3.5	2.9	3.9
C 22 2_29.6	29.6	0.36	0.62	0.38	0.82	2.9	3.3	2.9	3.4	2.9	3.9
C 22 2_33.1	33.1	0.34	0.60	0.36	0.80	2.9	3.3	2.9	3.4	2.9	3.9
C 22 2_36.8	36.8	0.33	0.59	0.35	0.79	2.9	3.3	2.9	3.4	2.8	3.8
C 22 2_43.3	43.3	0.32	0.58	0.34	0.78	2.9	3.3	2.9	3.4	2.8	3.8
C 22 2_48.6	48.6	0.31	0.57	0.33	0.77	2.9	3.3	2.9	3.4	2.8	3.8
C 22 2_54.7	54.7	0.30	0.56	0.32	0.76	2.9	3.3	2.9	3.4	2.8	3.8
C 22 2_63.3	63.3	0.29	0.55	0.31	0.75	2.8	3.3	—	—	—	—
C 22 3_60.0	60.0	0.31	0.57	0.33	0.77	2.9	3.3	2.9	3.4	2.8	3.8
C 22 3_65.3	65.3	0.30	0.56	0.32	0.76	2.9	3.3	2.9	3.4	2.8	3.8
C 22 3_74.8	74.8	0.30	0.56	0.32	0.76	2.9	3.3	2.9	3.4	2.8	3.8
C 22 3_82.6	82.6	0.30	0.56	0.32	0.76	2.9	3.3	2.9	3.4	2.8	3.8
C 22 3_88.5	88.5	0.30	0.56	0.32	0.76	2.9	3.3	2.9	3.4	2.8	3.8
C 22 3_100.2	100.2	0.30	0.56	0.32	0.76	2.9	3.3	2.9	3.4	2.8	3.8
C 22 3_112.0	112.0	0.30	0.56	0.32	0.76	2.9	3.3	2.9	3.4	2.8	3.8
C 22 3_122.2	122.2	0.30	0.56	0.32	0.76	2.9	3.3	2.9	3.4	2.8	3.8
C 22 3_136.5	136.5	0.29	0.55	0.31	0.75	2.8	3.3	2.9	3.4	2.8	3.8
C 22 3_151.7	151.7	0.29	0.55	0.31	0.75	2.8	3.3	2.9	3.4	2.8	3.8
C 22 3_178.5	178.5	0.29	0.55	0.31	0.75	2.8	3.3	2.9	3.4	2.8	3.8
C 22 3_200.7	200.7	0.29	0.55	0.31	0.75	2.8	3.3	2.9	3.4	2.8	3.8
C 22 3_225.8	225.8	0.29	0.55	0.31	0.75	2.8	3.3	2.9	3.4	2.8	3.8
C 22 3_261.0	261.0	0.29	0.55	0.31	0.75	2.8	3.3	2.9	3.4	2.8	3.8




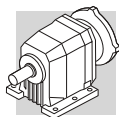
C 32

	i	J ($\cdot 10^{-4}$) [kgm ²]								
			63	71	80	90	100	112	132	
C 32 2_2.9	2.9	2.3	—	—	5.2	5.1	6.4	6.4	20	4.6
C 32 2_3.4	3.4	1.8	—	—	4.6	4.6	5.9	5.9	20	4.0
C 32 2_3.7	3.7	1.6	—	—	4.4	4.3	5.6	5.6	20	3.8
C 32 2_4.5	4.5	1.2	—	—	4.0	4.0	5.2	5.2	19	3.4
C 32 2_5.0	5.0	0.87	2.3	2.3	3.7	3.7	5.0	5.0	19	3.1
C 32 2_5.7	5.7	0.82	2.3	2.3	3.7	3.6	4.9	4.9	19	3.0
C 32 2_6.3	6.3	0.63	2.1	2.1	3.5	3.4	4.7	4.7	18	2.8
C 32 2_7.2	7.2	1.5	—	—	4.4	4.3	5.6	5.6	19	3.7
C 32 2_8.5	8.5	1.2	—	—	4.1	4.0	5.3	5.3	19	3.4
C 32 2_9.3	9.3	1.1	—	—	3.9	3.9	5.1	5.1	19	3.3
C 32 2_11.2	11.2	0.83	—	—	3.7	3.6	4.9	4.9	19	3.0
C 32 2_12.3	12.3	0.60	2.1	2.1	3.4	3.4	4.7	4.7	18	2.8
C 32 2_14.1	14.1	0.61	2.1	2.1	3.5	3.4	4.7	4.7	18	2.8
C 32 2_15.6	15.6	0.46	1.9	1.9	3.3	3.2	4.5	4.5	18	2.7
C 32 2_18.2	18.2	0.42	1.9	1.9	3.3	3.2	4.5	4.5	18	2.6
C 32 2_20.1	20.1	0.34	1.8	1.8	3.2	3.1	4.4	4.4	18	2.6
C 32 2_22.9	22.9	0.31	1.8	1.8	3.2	3.1	4.4	4.4	17	2.5
C 32 2_25.1	25.1	0.25	1.7	1.7	3.1	3.0	4.3	4.3	17	2.5
C 32 2_26.9	26.9	0.24	1.7	1.7	3.1	3.0	4.3	4.3	—	2.5
C 32 2_29.8	29.8	0.19	1.7	1.7	3.0	3.0	4.3	4.3	—	2.4
C 32 2_33.1	33.1	0.19	1.7	1.7	3.0	3.0	4.3	4.3	—	2.4
C 32 2_36.1	36.1	0.14	1.6	1.6	3.0	2.9	4.2	4.2	—	2.4
C 32 2_40.7	40.7	0.14	1.6	1.6	3.0	2.9	4.2	4.2	—	2.4
C 32 2_45.3	45.3	0.10	1.6	1.6	3.0	2.9	4.2	4.2	—	2.3
C 32 2_52.4	52.4	0.08	1.6	1.6	2.9	2.9	4.2	4.2	—	2.3
C 32 2_59.4	59.4	0.07	1.5	1.5	2.9	2.9	4.2	4.2	—	2.3
C 32 2_66.8	66.8	0.05	1.5	1.5	2.9	2.8	4.1	4.1	—	2.3
C 32 3_74.7	74.7	0.06	1.5	1.5	2.9	2.9	4.1	4.1	—	0.96
C 32 3_82.6	82.6	0.06	1.5	1.5	2.9	2.8	4.1	4.1	—	0.96
C 32 3_94.2	94.2	0.06	1.5	1.5	2.9	2.8	4.1	4.1	—	0.96
C 32 3_103.3	103.3	0.05	1.5	1.5	2.9	2.8	4.1	4.1	—	0.95
C 32 3_110.6	110.6	0.05	1.5	1.5	2.9	2.8	4.1	4.1	—	0.95
C 32 3_122.4	122.4	0.05	1.5	1.5	2.9	2.8	4.1	4.1	—	0.95
C 32 3_136.0	136.0	0.05	1.5	1.5	2.9	2.8	4.1	4.1	—	0.95
C 32 3_148.4	148.4	0.05	1.5	1.5	2.9	2.8	4.1	4.1	—	0.95
C 32 3_167.4	167.4	0.05	1.5	1.5	2.9	2.8	4.1	4.1	—	0.95
C 32 3_186.0	186.0	0.04	1.5	1.5	2.9	2.8	4.1	4.1	—	0.94
C 32 3_215.6	215.6	0.04	1.5	1.5	2.9	2.8	4.1	4.1	—	0.94
C 32 3_244.2	244.2	0.04	1.5	1.5	2.9	2.8	4.1	4.1	—	0.94
C 32 3_274.7	274.7	0.04	1.5	1.5	2.9	2.8	4.1	4.1	—	0.94

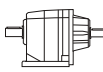


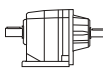


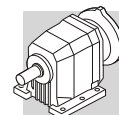
C 32

		J ($\cdot 10^{-4}$) [kgm ²]											
		 SERVO											
	i	60A		60B 80A		95A		80C 95B 110A		95C 110B		130A	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
C 32 2_2.9	2.9	—	—	—	—	—	—	5.2	5.7	5.1	6.1	5.1	6.1
C 32 2_3.4	3.4	—	—	—	—	—	—	4.6	5.1	4.6	5.6	4.6	5.6
C 32 2_3.7	3.7	—	—	—	—	—	—	4.4	4.9	4.3	5.3	4.3	5.3
C 32 2_4.5	4.5	—	—	—	—	—	—	4.0	4.5	4.0	5.0	4.0	5.0
C 32 2_5.0	5.0	1.1	1.4	1.2	1.6	3.7	4.1	3.7	4.2	3.7	4.7	3.7	4.7
C 32 2_5.7	5.7	1.1	1.4	1.1	1.5	3.6	4.1	3.7	4.2	3.6	4.6	3.6	4.6
C 32 2_6.3	6.3	0.90	1.2	0.92	1.4	3.5	3.9	3.5	4.0	3.4	4.4	3.4	4.4
C 32 2_7.2	7.2	—	—	—	—	—	—	4.4	4.9	4.3	5.3	4.3	5.3
C 32 2_8.5	8.5	—	—	—	—	—	—	4.1	4.6	4.0	5.0	4.0	5.0
C 32 2_9.3	9.3	—	—	—	—	—	—	3.9	4.4	3.9	4.9	3.9	4.9
C 32 2_11.2	11.2	—	—	—	—	—	—	3.7	4.2	3.6	4.6	3.6	4.6
C 32 2_12.3	12.3	0.87	1.1	0.89	1.3	3.4	3.9	3.4	3.9	3.4	4.4	3.4	4.4
C 32 2_14.1	14.1	0.88	1.1	0.90	1.3	3.4	3.9	3.5	4.0	3.4	4.4	3.4	4.4
C 32 2_15.6	15.6	0.73	0.99	0.75	1.2	3.3	3.7	3.3	3.8	3.2	4.2	3.2	4.2
C 32 2_18.2	18.2	0.69	0.95	0.71	1.1	3.2	3.7	3.3	3.8	3.2	4.2	3.2	4.2
C 32 2_20.1	20.1	0.61	0.87	0.63	1.1	3.2	3.6	3.2	3.7	3.1	4.1	3.1	4.1
C 32 2_22.9	22.9	0.58	0.84	0.60	1.0	3.1	3.6	3.2	3.7	3.1	4.1	3.1	4.1
C 32 2_25.1	25.1	0.52	0.78	0.54	0.98	3.1	3.5	3.1	3.6	3.0	4.0	3.0	4.0
C 32 2_26.9	26.9	0.51	0.77	0.53	0.97	3.1	3.5	3.1	3.6	3.0	4.0	3.0	4.0
C 32 2_29.8	29.8	0.46	0.72	0.48	0.92	3.0	3.4	3.0	3.5	3.0	4.0	3.0	4.0
C 32 2_33.1	33.1	0.46	0.72	0.48	0.92	3.0	3.4	3.0	3.5	3.0	4.0	3.0	4.0
C 32 2_36.1	36.1	0.41	0.67	0.43	0.87	3.0	3.4	3.0	3.5	2.9	3.9	2.9	3.9
C 32 2_40.7	40.7	0.41	0.67	0.43	0.87	3.0	3.4	3.0	3.5	2.9	3.9	2.9	3.9
C 32 2_45.3	45.3	0.37	0.63	0.39	0.83	2.9	3.4	3.0	3.5	2.9	3.9	2.9	3.9
C 32 2_52.4	52.4	0.35	0.61	0.37	0.81	2.9	3.3	2.9	3.4	2.9	3.9	2.9	3.9
C 32 2_59.4	59.4	0.34	0.60	0.36	0.80	2.9	3.3	2.9	3.4	2.9	3.9	2.9	3.9
C 32 2_66.8	66.8	0.32	0.58	0.34	0.78	2.9	3.3	2.9	3.4	2.8	3.8	2.8	3.8
C 32 3_74.7	74.7	0.33	0.59	0.35	0.79	2.9	3.3	2.9	3.4	2.9	3.9	—	—
C 32 3_82.6	82.6	0.33	0.59	0.35	0.79	2.9	3.3	2.9	3.4	2.8	3.8	—	—
C 32 3_94.2	94.2	0.33	0.59	0.35	0.79	2.9	3.3	2.9	3.4	2.8	3.8	—	—
C 32 3_103.3	103.3	0.32	0.58	0.34	0.78	2.9	3.3	2.9	3.4	2.8	3.8	—	—
C 32 3_110.6	110.6	0.32	0.58	0.34	0.78	2.9	3.3	2.9	3.4	2.8	3.8	—	—
C 32 3_122.4	122.4	0.32	0.58	0.34	0.78	2.9	3.3	2.9	3.4	2.8	3.8	—	—
C 32 3_136.0	136.0	0.32	0.58	0.34	0.78	2.9	3.3	2.9	3.4	2.8	3.8	—	—
C 32 3_148.4	148.4	0.32	0.58	0.34	0.78	2.9	3.3	2.9	3.4	2.8	3.8	—	—
C 32 3_167.4	167.4	0.32	0.58	0.34	0.78	2.9	3.3	2.9	3.4	2.8	3.8	—	—
C 32 3_186.0	186.0	0.31	0.57	0.33	0.77	2.9	3.3	2.9	3.4	2.8	3.8	—	—
C 32 3_215.6	215.6	0.31	0.57	0.33	0.77	2.9	3.3	2.9	3.4	2.8	3.8	—	—
C 32 3_244.2	244.2	0.31	0.57	0.33	0.77	2.9	3.3	2.9	3.4	2.8	3.8	—	—
C 32 3_274.7	274.7	0.31	0.57	0.33	0.77	2.9	3.3	2.9	3.4	2.8	3.8	—	—




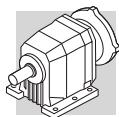
C 36

	i	J ($\cdot 10^{-4}$) [kgm ²]								
			 IEC							
			63	71	80	90	100	112	132	
C 36 2_2.7	2.7	3.6	—	—	6.5	6.4	7.7	7.7	22	14
C 36 2_3.2	3.2	2.5	—	—	5.4	5.3	6.6	6.6	21	13
C 36 2_3.5	3.5	2.4	—	—	5.3	5.2	6.5	6.5	20	13
C 36 2_4.2	4.2	1.6	—	—	4.5	4.4	5.7	5.7	20	12
C 36 2_4.6	4.6	1.5	3.0	3.0	4.4	4.3	5.6	5.6	19	12
C 36 2_5.3	5.3	1.1	2.6	2.6	4.0	3.9	5.2	5.2	19	12
C 36 2_5.8	5.8	0.98	2.5	2.5	3.9	3.8	5.1	5.1	19	12
C 36 2_6.8	6.8	2.2	—	—	5.1	5.0	6.3	6.3	20	13
C 36 2_8.0	8.0	1.6	—	—	4.4	4.3	5.6	5.6	20	12
C 36 2_8.8	8.8	1.5	—	—	4.4	4.3	5.6	5.6	19	12
C 36 2_10.6	10.6	1.1	—	—	3.9	3.8	5.1	5.1	19	12
C 36 2_11.7	11.7	1.0	2.5	2.5	3.9	3.8	5.1	5.1	19	12
C 36 2_13.3	13.3	0.69	2.2	2.2	3.6	3.5	4.8	4.8	19	11
C 36 2_14.8	14.8	0.68	2.2	2.2	3.6	3.5	4.8	4.8	19	11
C 36 2_17.2	17.2	0.47	2.0	2.0	3.4	3.3	4.6	4.6	18	11
C 36 2_19.0	19.0	0.47	2.0	2.0	3.4	3.3	4.6	4.6	18	11
C 36 3_22.1	22.1	1.8	—	—	4.7	4.6	5.9	5.9	19	12
C 36 3_26.2	26.2	1.3	—	—	4.2	4.1	5.4	5.4	19	12
C 36 3_28.7	28.7	1.3	—	—	4.2	4.1	5.4	5.4	19	12
C 36 3_34.6	34.6	0.88	—	—	3.8	3.7	5.0	5.0	19	11
C 36 3_38.1	38.1	0.90	2.4	2.4	3.8	3.7	5.0	5.0	19	11
C 36 3_43.5	43.5	0.59	2.1	2.1	3.5	3.4	4.7	4.7	19	11
C 36 3_48.2	48.2	0.60	2.1	2.1	3.5	3.4	4.7	4.7	19	11
C 36 3_56.2	56.2	0.41	1.9	1.9	3.3	3.2	4.5	4.5	18	11
C 36 3_62.0	62.0	0.42	1.9	1.9	3.3	3.2	4.5	4.5	18	11
C 36 3_70.8	70.8	0.30	1.8	1.8	3.2	3.1	4.4	4.4	18	11
C 36 3_77.6	77.6	0.28	1.8	1.8	3.2	3.1	4.4	4.4	17	11
C 36 3_83.1	83.1	0.24	1.7	1.7	3.1	3.0	4.3	4.3	—	11
C 36 3_91.9	91.9	0.21	1.7	1.7	3.1	3.0	4.3	4.3	—	11
C 36 3_102.2	102.2	0.19	1.7	1.7	3.1	3.0	4.3	4.3	—	11
C 36 3_111.5	111.5	0.16	1.7	1.7	3.1	3.0	4.3	4.3	—	11
C 36 3_125.8	125.8	0.14	1.6	1.6	3.0	2.9	4.2	4.2	—	11
C 36 3_139.8	139.8	0.11	1.6	1.6	3.0	2.9	4.2	4.2	—	11
C 36 3_162.0	162.0	0.09	1.6	1.6	3.0	2.9	4.2	4.2	—	11
C 36 3_183.5	183.5	0.07	1.6	1.6	3.0	2.9	4.2	4.2	—	11
C 36 3_206.4	206.4	0.06	1.6	1.6	3.0	2.9	4.2	4.2	—	11
C 36 4_230.9	230.9	0.08	—	—	—	—	—	—	—	—
C 36 4_255.0	255.0	0.08	1.6	1.6	3.0	2.9	4.2	4.2	—	0.90
C 36 4_290.9	290.9	0.07	1.6	1.6	3.0	2.9	4.2	4.2	—	0.89
C 36 4_318.9	318.9	0.07	1.6	1.6	3.0	2.9	4.2	4.2	—	0.89
C 36 4_341.7	341.7	0.07	1.6	1.6	3.0	2.9	4.2	4.2	—	0.89
C 36 4_377.9	377.9	0.07	1.6	1.6	3.0	2.9	4.2	4.2	—	0.89
C 36 4_420.2	420.2	0.06	1.6	1.6	3.0	2.9	4.2	4.2	—	0.88
C 36 4_458.4	458.4	0.06	1.6	1.6	3.0	2.9	4.2	4.2	—	0.88
C 36 4_517.2	517.2	0.06	1.6	1.6	3.0	2.9	4.2	4.2	—	0.88
C 36 4_574.7	574.7	0.06	1.6	1.6	3.0	2.9	4.2	4.2	—	0.88
C 36 4_665.9	665.9	0.06	1.6	1.6	3.0	2.9	4.2	4.2	—	0.88
C 36 4_754.2	754.2	0.06	1.6	1.6	3.0	2.9	4.2	4.2	—	0.88
C 36 4_848.5	848.5	0.06	1.6	1.6	3.0	2.9	4.2	4.2	—	0.88





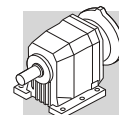
C 36

		J ($\cdot 10^{-4}$) [kgm ²]											
		 SERVO											
i		60A		60B 80A		95A		80C 95B 110A		95C 110B		130A	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
C 36 2_2.7	2.7	—	—	—	—	—	—	6.5	7.0	6.4	7.4	6.4	7.4
C 36 2_3.2	3.2	—	—	—	—	—	—	5.4	5.9	5.3	6.3	5.3	6.3
C 36 2_3.5	3.5	—	—	—	—	—	—	5.3	5.8	5.2	6.2	5.2	6.2
C 36 2_4.2	4.2	—	—	—	—	—	—	4.5	5.0	4.4	5.4	4.4	5.4
C 36 2_4.6	4.6	1.8	2.0	1.8	2.2	4.3	4.7	4.4	4.9	4.3	5.3	4.3	5.3
C 36 2_5.3	5.3	1.4	1.6	1.4	1.8	3.9	4.4	4.0	4.5	3.9	4.9	3.9	4.9
C 36 2_5.8	5.8	1.3	1.5	1.3	1.7	3.8	4.2	3.9	4.4	3.8	4.8	3.8	4.8
C 36 2_6.8	6.8	—	—	—	—	—	—	5.1	5.6	5.0	6.0	5.0	6.0
C 36 2_8.0	8.0	—	—	—	—	—	—	4.4	4.9	4.3	5.3	4.3	5.3
C 36 2_8.8	8.8	—	—	—	—	—	—	4.4	4.9	4.3	5.3	4.3	5.3
C 36 2_10.6	10.6	—	—	—	—	—	—	3.9	4.4	3.8	4.8	3.8	4.8
C 36 2_11.7	11.7	1.3	1.5	1.3	1.7	3.8	4.3	3.9	4.4	3.8	4.8	3.8	4.8
C 36 2_13.3	13.3	0.96	1.2	0.98	1.4	3.5	3.9	3.6	4.1	3.5	4.5	3.5	4.5
C 36 2_14.8	14.8	0.95	1.2	0.97	1.4	3.5	3.9	3.6	4.1	3.5	4.5	3.5	4.5
C 36 2_17.2	17.2	0.74	1.0	0.76	1.2	3.3	3.7	3.4	3.9	3.3	4.3	3.3	4.3
C 36 2_19.0	19.0	0.74	1.0	0.76	1.2	3.3	3.7	3.4	3.9	3.3	4.3	3.3	4.3
C 36 3_22.1	22.1	—	—	—	—	—	—	4.7	5.2	4.6	5.6	4.6	5.6
C 36 3_26.2	26.2	—	—	—	—	—	—	4.2	4.7	4.1	5.1	4.1	5.1
C 36 3_28.7	28.7	—	—	—	—	—	—	4.2	4.7	4.1	5.1	4.1	5.1
C 36 3_34.6	34.6	—	—	—	—	—	—	3.8	4.3	3.7	4.7	3.7	4.7
C 36 3_38.1	38.1	1.2	1.4	1.2	1.6	3.7	4.2	3.8	4.3	3.7	4.7	3.7	4.7
C 36 3_43.5	43.5	0.86	1.1	0.88	1.3	3.4	3.8	3.5	4.0	3.4	4.4	3.4	4.4
C 36 3_48.2	48.2	0.87	1.1	0.89	1.3	3.4	3.9	3.5	4.0	3.4	4.4	3.4	4.4
C 36 3_56.2	56.2	0.68	0.94	0.70	1.1	3.2	3.7	3.3	3.8	3.2	4.2	3.2	4.2
C 36 3_62.0	62.0	0.69	0.95	0.71	1.1	3.2	3.7	3.3	3.8	3.2	4.2	3.2	4.2
C 36 3_70.8	70.8	0.57	0.83	0.59	1.0	3.1	3.6	3.2	3.7	3.1	4.1	3.1	4.1
C 36 3_77.6	77.6	0.55	0.81	0.57	1.0	3.1	3.5	3.2	3.7	3.1	4.1	3.1	4.1
C 36 3_83.1	83.1	0.51	0.77	0.53	0.97	3.1	3.5	3.1	3.6	3.0	4.0	3.0	4.0
C 36 3_91.9	91.9	0.48	0.74	0.50	0.94	3.0	3.5	3.1	3.6	3.0	4.0	3.0	4.0
C 36 3_102.2	102.2	0.46	0.72	0.48	0.92	3.0	3.4	3.1	3.6	3.0	4.0	3.0	4.0
C 36 3_111.5	111.5	0.43	0.69	0.45	0.89	3.0	3.4	3.1	3.6	3.0	4.0	3.0	4.0
C 36 3_125.8	125.8	0.41	0.67	0.43	0.87	3.0	3.4	3.0	3.5	2.9	3.9	2.9	3.9
C 36 3_139.8	139.8	0.38	0.64	0.40	0.84	2.9	3.4	3.0	3.5	2.9	3.9	2.9	3.9
C 36 3_162.0	162.0	0.36	0.62	0.38	0.82	2.9	3.3	3.0	3.5	2.9	3.9	2.9	3.9
C 36 3_183.5	183.5	0.34	0.60	0.36	0.80	2.9	3.3	3.0	3.5	2.9	3.9	2.9	3.9
C 36 3_206.4	206.4	0.33	0.59	0.35	0.79	2.9	3.3	3.0	3.5	2.9	3.9	2.9	3.9
C 36 4_230.9	230.9	0.35	0.61	0.37	0.81	2.9	3.3	3.0	3.5	2.9	3.9	—	—
C 36 4_255.0	255.0	0.35	0.61	0.37	0.81	2.9	3.3	3.0	3.5	2.9	3.9	—	—
C 36 4_290.9	290.9	0.34	0.60	0.36	0.80	2.9	3.3	3.0	3.5	2.9	3.9	—	—
C 36 4_318.9	318.9	0.34	0.60	0.36	0.80	2.9	3.3	3.0	3.5	2.9	3.9	—	—
C 36 4_341.7	341.7	0.34	0.60	0.36	0.80	2.9	3.3	3.0	3.5	2.9	3.9	—	—
C 36 4_377.9	377.9	0.34	0.60	0.36	0.80	2.9	3.3	3.0	3.5	2.9	3.9	—	—
C 36 4_420.2	420.2	0.33	0.59	0.35	0.79	2.9	3.3	3.0	3.5	2.9	3.9	—	—
C 36 4_458.4	458.4	0.33	0.59	0.35	0.79	2.9	3.3	3.0	3.5	2.9	3.9	—	—
C 36 4_517.2	517.2	0.33	0.59	0.35	0.79	2.9	3.3	3.0	3.5	2.9	3.9	—	—
C 36 4_574.7	574.7	0.33	0.59	0.35	0.79	2.9	3.3	3.0	3.5	2.9	3.9	—	—
C 36 4_665.9	665.9	0.33	0.59	0.35	0.79	2.9	3.3	3.0	3.5	2.9	3.9	—	—
C 36 4_754.2	754.2	0.33	0.59	0.35	0.79	2.9	3.3	3.0	3.5	2.9	3.9	—	—
C 36 4_848.5	848.5	0.33	0.59	0.35	0.79	2.9	3.3	3.0	3.5	2.9	3.9	—	—




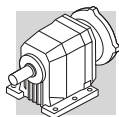
C 41

	i	J (•10 ⁻⁴) [kgm ²]								
		f	 IEC							
			63	71	80	90	100	112	132	
C 41 2_2.7	2.7	10	—	—	13	13	14	14	29	21
C 41 2_3.6	3.6	6.0	—	—	8.9	8.8	10	10	25	17
C 41 2_4.7	4.7	3.7	—	—	6.6	6.5	7.8	7.8	23	14
C 41 2_6.0	6.0	2.5	—	—	5.4	5.3	6.6	6.6	21	13
C 41 2_6.4	6.4	4.3	—	—	7.2	7.1	8.4	8.4	23	15
C 41 2_7.1	7.1	4.1	—	—	7.0	6.9	8.2	8.2	23	15
C 41 2_8.6	8.6	2.9	—	—	5.8	5.7	7.0	7.0	22	13
C 41 2_9.6	9.6	2.8	—	—	5.7	5.6	6.9	6.9	22	13
C 41 2_11.2	11.2	1.8	—	—	4.7	4.6	5.9	5.9	21	12
C 41 2_12.4	12.4	1.8	—	—	4.7	4.6	5.9	5.9	21	12
C 41 2_14.2	14.2	1.4	2.9	2.9	4.3	4.2	5.5	5.5	20	12
C 41 2_15.8	15.8	1.3	2.8	2.8	4.2	4.1	5.4	5.4	20	12
C 41 2_17.8	17.8	1.0	2.5	2.5	3.9	3.8	5.1	5.1	20	12
C 41 2_19.8	19.8	0.98	2.5	2.5	3.9	3.8	5.1	5.1	20	12
C 41 2_22.6	22.6	0.60	2.1	2.1	3.5	3.4	4.7	4.7	20	11
C 41 2_25.0	25.0	0.60	2.1	2.1	3.5	3.4	4.7	4.7	20	11
C 41 2_28.3	28.3	0.44	1.9	1.9	3.3	3.2	4.5	4.5	19	11
C 41 2_31.4	31.4	0.43	1.9	1.9	3.3	3.2	4.5	4.5	19	11
C 41 2_33.4	33.4	0.34	1.8	1.8	3.2	3.1	4.4	4.4	—	11
C 41 2_37.1	37.1	0.33	1.8	1.8	3.2	3.1	4.4	4.4	—	11
C 41 2_44.8	44.8	0.27	1.8	1.8	3.2	3.1	4.4	4.4	—	11
C 41 3_28.5	28.5	2.5	—	—	5.4	5.3	6.6	6.6	21	13
C 41 3_31.2	31.2	2.5	—	—	5.4	5.3	6.6	6.6	21	13
C 41 3_36.8	36.8	1.6	—	—	4.5	4.4	5.7	5.7	21	12
C 41 3_40.3	40.3	1.6	—	—	4.5	4.4	5.7	5.7	21	12
C 41 3_47.0	47.0	1.2	2.7	2.7	4.1	4.0	5.3	5.3	20	12
C 41 3_51.5	51.5	1.2	2.7	2.7	4.1	4.0	5.3	5.3	20	12
C 41 3_58.7	58.7	0.90	2.4	2.4	3.8	3.7	5.0	5.0	20	11
C 41 3_64.3	64.3	0.90	2.4	2.4	3.8	3.7	5.0	5.0	20	11
C 41 3_74.4	74.4	0.60	2.1	2.1	3.5	3.4	4.7	4.7	20	11
C 41 3_81.5	81.5	0.60	2.1	2.1	3.5	3.4	4.7	4.7	20	11
C 41 3_93.9	93.9	0.40	1.9	1.9	3.3	3.2	4.5	4.5	19	11
C 41 3_102.3	102.3	0.40	1.9	1.9	3.3	3.2	4.5	4.5	19	11
C 41 3_110.1	110.1	0.30	1.8	1.8	3.2	3.1	4.4	4.4	—	11
C 41 3_120.6	120.6	0.30	1.8	1.8	3.2	3.1	4.4	4.4	—	11
C 41 3_132.9	132.9	0.30	1.8	1.8	3.2	3.1	4.4	4.4	—	11
C 41 3_145.6	145.6	0.30	1.8	1.8	3.2	3.1	4.4	4.4	—	11
C 41 3_164.1	164.1	0.20	1.7	1.7	3.1	3.0	4.3	4.3	—	11
C 41 3_179.9	179.9	0.20	1.7	1.7	3.1	3.0	4.3	4.3	—	11
C 41 3_190.8	190.8	0.10	1.6	1.6	3.0	2.9	4.2	4.2	—	11
C 41 3_209.1	209.1	0.10	1.6	1.6	3.0	2.9	4.2	4.2	—	11
C 41 4_239.9	239.9	0.15	1.7	1.7	3.1	3.0	4.3	4.3	—	2.1
C 41 4_263.0	263.0	0.15	1.7	1.7	3.1	3.0	4.3	4.3	—	2.1
C 41 4_304.2	304.2	0.13	1.6	1.6	3.0	2.9	4.2	4.2	—	2.0
C 41 4_333.4	333.4	0.13	1.6	1.6	3.0	2.9	4.2	4.2	—	2.0
C 41 4_382.0	382.0	0.12	1.6	1.6	3.0	2.9	4.2	4.2	—	2.0
C 41 4_419.0	419.0	0.12	1.6	1.6	3.0	2.9	4.2	4.2	—	2.0
C 41 4_450.2	450.2	0.12	1.6	1.6	3.0	2.9	4.2	4.2	—	2.0
C 41 4_493.5	493.5	0.12	1.6	1.6	3.0	2.9	4.2	4.2	—	2.0
C 41 4_543.5	543.5	0.12	1.6	1.6	3.0	2.9	4.2	4.2	—	2.0
C 41 4_595.8	595.8	0.12	1.6	1.6	3.0	2.9	4.2	4.2	—	2.0
C 41 4_671.3	671.3	0.10	1.6	1.6	3.0	2.9	4.2	4.2	—	2.0
C 41 4_735.9	735.9	0.10	1.6	1.6	3.0	2.9	4.2	4.2	—	2.0
C 41 4_780.4	780.4	0.10	1.6	1.6	3.0	2.9	4.2	4.2	—	2.0
C 41 4_855.5	855.5	0.10	1.6	1.6	3.0	2.9	4.2	4.2	—	2.0

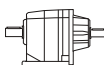


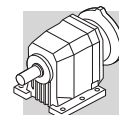
C 41

		J ($\cdot 10^{-4}$) [kgm ²]																	
		 SERVO																	
		60A		60B 80A		80B		95A		80C 95B 110A		95C 110B		130A		130B 180A		180B	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
C 41 2_2.7	2.7	—	—	—	—	—	—	—	—	13	14	13	14	13	14	27	29	29	34
C 41 2_3.6	3.6	—	—	—	—	—	—	—	—	8.9	9.4	8.8	9.8	8.8	9.8	23	25	25	30
C 41 2_4.7	4.7	—	—	—	—	—	—	—	—	6.6	7.1	6.5	7.5	6.5	7.5	21	23	23	28
C 41 2_6.0	6.0	—	—	—	—	5.3	5.8	5.3	5.8	5.4	5.9	5.3	6.3	5.3	6.3	19	22	21	26
C 41 2_6.4	6.4	—	—	—	—	—	—	—	—	7.2	7.7	7.1	8.1	7.1	8.1	21	24	23	28
C 41 2_7.1	7.1	—	—	—	—	—	—	—	—	7.0	7.5	6.9	7.9	6.9	7.9	21	24	23	28
C 41 2_8.6	8.6	—	—	—	—	—	—	—	—	5.8	6.3	5.7	6.7	5.7	6.7	20	22	22	27
C 41 2_9.6	9.6	—	—	—	—	—	—	—	—	5.7	6.2	5.6	6.6	5.6	6.6	20	22	22	27
C 41 2_11.2	11.2	—	—	—	—	—	—	—	—	4.7	5.2	4.6	5.6	4.6	5.6	19	21	21	26
C 41 2_12.4	12.4	—	—	—	—	—	—	—	—	4.7	5.2	4.6	5.6	4.6	5.6	19	21	21	26
C 41 2_14.2	14.2	—	—	—	—	4.2	4.7	4.2	4.7	4.3	4.8	4.2	5.2	4.2	5.2	18	21	20	25
C 41 2_15.8	15.8	—	—	—	—	4.1	4.6	4.1	4.6	4.2	4.7	4.1	5.1	4.1	5.1	18	21	20	25
C 41 2_17.8	17.8	—	—	—	—	3.8	5.3	3.8	5.3	3.9	4.4	3.8	4.8	3.8	4.8	18	20	20	25
C 41 2_19.8	19.8	—	—	—	—	3.8	4.2	3.8	4.2	3.9	4.4	3.8	4.8	3.8	4.8	18	20	20	25
C 41 2_22.6	22.6	—	—	—	—	3.4	3.9	3.4	3.9	3.5	4.0	3.4	4.4	3.4	4.4	18	20	20	25
C 41 2_25.0	25.0	—	—	—	—	3.4	3.9	3.4	3.9	3.5	4.0	3.4	4.4	3.4	4.4	18	20	20	25
C 41 2_28.3	28.3	—	—	—	—	3.3	3.7	3.3	3.7	3.3	3.8	3.2	4.2	3.2	4.2	17	20	19	24
C 41 2_31.4	31.4	—	—	—	—	3.3	3.7	3.3	3.7	3.3	3.8	3.2	4.2	3.2	4.2	17	20	19	24
C 41 2_33.4	33.4	—	—	—	—	3.2	3.6	3.2	3.6	3.2	3.7	3.1	4.1	3.1	4.1	—	—	—	—
C 41 2_37.1	37.1	—	—	—	—	3.2	3.6	3.2	3.6	3.2	3.7	3.1	4.1	3.1	4.1	—	—	—	—
C 41 2_44.8	44.8	—	—	—	—	3.1	3.5	3.1	3.5	3.2	3.7	3.1	4.1	3.1	4.1	—	—	—	—
C 41 3_28.5	28.5	—	—	—	—	—	—	—	—	5.4	5.9	5.3	6.3	5.3	6.3	19	22	21	26
C 41 3_31.2	31.2	—	—	—	—	—	—	—	—	5.4	5.9	5.3	6.3	5.3	6.3	19	22	21	26
C 41 3_36.8	36.8	—	—	—	—	—	—	—	—	4.5	5.0	4.4	5.4	4.4	5.4	19	21	21	26
C 41 3_40.3	40.3	—	—	—	—	—	—	—	—	4.5	5.0	4.4	5.4	4.4	5.4	19	21	21	26
C 41 3_47.0	47.0	—	—	—	—	4.0	4.5	4.0	4.5	4.1	4.6	4.0	5.0	4.0	5.0	18	21	20	25
C 41 3_51.5	51.5	—	—	—	—	4.0	4.5	4.0	4.5	4.1	4.6	4.0	5.0	4.0	5.0	18	21	20	25
C 41 3_58.7	58.7	—	—	—	—	3.7	4.2	3.7	4.2	3.8	4.3	3.7	4.7	3.7	4.7	18	20	20	25
C 41 3_64.3	64.3	—	—	—	—	3.7	4.2	3.7	4.2	3.8	4.3	3.7	4.7	3.7	4.7	18	20	20	25
C 41 3_74.4	74.4	—	—	—	—	3.4	3.9	3.4	3.9	3.5	4.0	3.4	4.4	3.4	4.4	18	20	20	25
C 41 3_81.5	81.5	—	—	—	—	3.4	3.9	3.4	3.9	3.5	4.0	3.4	4.4	3.4	4.4	18	20	20	25
C 41 3_93.9	93.9	—	—	—	—	3.2	3.7	3.2	3.7	3.3	3.8	3.2	4.2	3.2	4.2	17	20	19	24
C 41 3_102.3	102.3	—	—	—	—	3.2	3.7	3.2	3.7	3.3	3.8	3.2	4.2	3.2	4.2	17	20	19	24
C 41 3_110.1	110.1	—	—	—	—	3.1	3.6	3.1	3.6	3.2	3.7	3.1	4.1	3.1	4.1	—	—	—	—
C 41 3_120.6	120.6	—	—	—	—	3.1	3.6	3.1	3.6	3.2	3.7	3.1	4.1	3.1	4.1	—	—	—	—
C 41 3_132.9	132.9	—	—	—	—	3.1	3.6	3.1	3.6	3.2	3.7	3.1	4.1	3.1	4.1	—	—	—	—
C 41 3_145.6	145.6	—	—	—	—	3.1	3.6	3.1	3.6	3.2	3.7	3.1	4.1	3.1	4.1	—	—	—	—
C 41 3_164.1	164.1	—	—	—	—	3.0	3.5	3.0	3.5	3.1	3.6	3.0	4.0	3.0	4.0	—	—	—	—
C 41 3_179.9	179.9	—	—	—	—	3.0	3.5	3.0	3.5	3.1	3.6	3.0	4.0	3.0	4.0	—	—	—	—
C 41 3_190.8	190.8	—	—	—	—	2.9	3.4	2.9	3.4	3.0	3.5	2.9	3.9	2.9	3.9	—	—	—	—
C 41 3_209.1	209.1	—	—	—	—	2.9	3.4	2.9	3.4	3.0	3.5	2.9	3.9	2.9	3.9	—	—	—	—
C 41 4_239.9	239.9	0.42	0.68	0.44	0.88	—	—	3.0	3.4	3.1	3.6	3.0	4.0	—	—	—	—	—	—
C 41 4_263.0	263.0	0.42	0.68	0.44	0.88	—	—	3.0	3.4	3.1	3.6	3.0	4.0	—	—	—	—	—	—
C 41 4_304.2	304.2	0.40	0.66	0.42	0.86	—	—	3.0	3.4	3.0	3.5	2.9	3.9	—	—	—	—	—	—
C 41 4_333.4	333.4	0.40	0.66	0.42	0.86	—	—	3.0	3.4	3.0	3.5	2.9	3.9	—	—	—	—	—	—
C 41 4_382.0	382.0	0.39	0.65	0.41	0.85	—	—	2.9	3.4	3.0	3.5	2.9	3.9	—	—	—	—	—	—
C 41 4_419.0	419.0	0.39	0.65	0.41	0.85	—	—	2.9	3.4	3.0	3.5	2.9	3.9	—	—	—	—	—	—
C 41 4_450.2	450.2	0.39	0.65	0.41	0.85	—	—	2.9	3.4	3.0	3.5	2.9	3.9	—	—	—	—	—	—
C 41 4_493.5	493.5	0.39	0.65	0.41	0.85	—	—	2.9	3.4	3.0	3.5	2.9	3.9	—	—	—	—	—	—
C 41 4_543.5	543.5	0.39	0.65	0.41	0.85	—	—	2.9	3.4	3.0	3.5	2.9	3.9	—	—	—	—	—	—
C 41 4_595.8	595.8	0.39	0.65	0.41	0.85	—	—	2.9	3.4	3.0	3.5	2.9	3.9	—	—	—	—	—	—
C 41 4_671.3	671.3	0.37	0.63	0.39	0.83	—	—	2.9	3.4	3.0	3.5	2.9	3.9	—	—	—	—	—	—
C 41 4_735.9	735.9	0.37	0.63	0.39	0.83	—	—	2.9	3.4	3.0	3.5	2.9	3.9	—	—	—	—	—	—
C 41 4_780.4	780.4	0.37	0.63	0.39	0.83	—	—	2.9	3.4	3.0	3.5	2.9	3.9	—	—	—	—	—	—
C 41 4_855.5	855.5	0.37	0.63	0.39	0.83	—	—	2.9	3.4	3.0	3.5	2.9	3.9	—	—	—	—	—	—




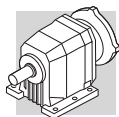
C 51

	i	J (•10 ⁻⁴) [kgm ²]											
		f	IEC										
			63	71	80	90	100	112	132	160	180		
C 51 2_2.6	2.6	15	—	—	17	17	19	19	33	79	76	25	
C 51 2_3.3	3.3	10	—	—	13	13	14	14	29	75	72	21	
C 51 2_4.5	4.5	6.3	—	—	9.2	9.1	10	10	25	71	68	17	
C 51 2_5.6	5.6	4.1	—	—	7.0	6.9	8.2	8.2	23	69	66	15	
C 51 2_7.0	7.0	8.1	—	—	11	11	12	12	27	73	70	19	
C 51 2_7.8	7.8	7.8	—	—	11	11	12	12	27	73	70	18	
C 51 2_8.8	8.8	6.0	—	—	8.9	8.8	10	10	25	71	68	17	
C 51 2_9.8	9.8	5.8	—	—	8.7	8.6	9.9	9.9	25	71	68	16	
C 51 2_11.8	11.8	4.1	—	—	7.0	6.9	8.2	8.2	23	69	66	15	
C 51 2_13.1	13.1	4.0	—	—	6.9	6.8	8.1	8.1	23	69	66	15	
C 51 2_15.0	15.0	2.7	—	—	5.6	5.5	6.8	6.8	22	68	65	13	
C 51 2_16.6	16.6	2.6	—	—	5.5	5.4	6.7	6.7	22	68	65	13	
C 51 2_18.9	18.9	2.0	3.5	3.5	4.9	4.8	6.1	6.1	21	67	64	13	
C 51 2_21.0	21.0	1.9	3.4	3.4	4.8	4.7	6.0	6.0	21	67	64	12	
C 51 2_23.4	23.4	1.5	3.0	3.0	4.4	4.3	5.6	5.6	20	66	63	12	
C 51 2_25.9	25.9	1.4	2.9	2.9	4.3	4.2	5.5	5.5	20	66	63	12	
C 51 2_29.8	29.8	0.90	2.4	2.4	3.8	3.7	5.0	5.0	20	66	63	11	
C 51 2_33.0	33.0	0.90	2.4	2.4	3.8	3.7	5.0	5.0	20	66	63	11	
C 51 2_36.4	36.4	0.70	2.2	2.2	3.6	3.5	4.8	4.8	20	66	63	11	
C 51 2_40.4	40.4	0.70	2.2	2.2	3.6	3.5	4.8	4.8	20	66	63	11	
C 51 2_43.1	43.1	0.50	2.0	2.0	3.4	3.3	4.6	4.6	—	—	—	11	
C 51 2_47.8	47.8	0.50	2.0	2.0	3.4	3.3	4.6	4.6	—	—	—	11	
C 51 2_51.4	51.4	0.40	1.9	1.9	3.3	3.2	4.5	4.5	—	—	—	11	
C 51 2_57.0	57.0	0.40	1.9	1.9	3.3	3.2	4.5	4.5	—	—	—	11	
C 51 3_21.8	21.8	6.8	—	—	9.7	9.6	11	11	26	72	69	17	
C 51 3_23.9	23.9	6.8	—	—	9.7	9.6	11	11	26	72	69	17	
C 51 3_27.4	27.4	5.2	—	—	8.1	8.0	9.3	9.3	24	70	67	16	
C 51 3_30.1	30.1	5.2	—	—	8.1	8.0	9.3	9.3	24	70	67	16	
C 51 3_37.0	37.0	3.6	—	—	6.5	6.4	7.7	7.7	23	69	66	14	
C 51 3_40.5	40.5	3.6	—	—	6.5	6.4	7.7	7.7	23	69	66	14	
C 51 3_46.7	46.7	2.4	—	—	5.3	5.2	6.5	6.5	21	67	64	13	
C 51 3_51.2	51.2	2.4	—	—	5.3	5.2	6.5	6.5	21	67	64	13	
C 51 3_59.0	59.0	1.8	3.3	3.3	4.7	4.6	5.9	5.9	21	67	64	12	
C 51 3_64.6	64.6	1.8	3.3	3.3	4.7	4.6	5.9	5.9	21	67	64	12	
C 51 3_72.9	72.9	1.3	2.8	2.8	4.2	4.1	5.4	5.4	20	66	63	12	
C 51 3_79.9	79.9	1.3	2.8	2.8	4.2	4.1	5.4	5.4	20	66	63	12	
C 51 3_93.0	93.0	0.80	2.3	2.3	3.7	3.6	4.9	4.9	20	66	63	11	
C 51 3_101.8	101.8	0.80	2.3	2.3	3.7	3.6	4.9	4.9	20	66	63	11	
C 51 3_113.6	113.6	0.60	2.1	2.1	3.5	3.4	4.7	4.7	20	66	63	11	
C 51 3_124.4	124.4	0.60	2.1	2.1	3.5	3.4	4.7	4.7	20	66	63	11	
C 51 3_134.6	134.6	0.50	2.0	2.0	3.4	3.3	4.6	4.6	—	—	—	11	
C 51 3_147.4	147.4	0.50	2.0	2.0	3.4	3.3	4.6	4.6	—	—	—	11	
C 51 3_160.5	160.5	0.40	1.9	1.9	3.3	3.2	4.5	4.5	—	—	—	11	
C 51 3_175.8	175.8	0.40	1.9	1.9	3.3	3.2	4.5	4.5	—	—	—	11	
C 51 3_197.9	197.9	0.30	1.8	1.8	3.2	3.1	4.4	4.4	—	—	—	11	
C 51 3_216.7	216.7	0.30	1.8	1.8	3.2	3.1	4.4	4.4	—	—	—	11	
C 51 4_240.9	240.9	0.30	1.8	1.8	3.2	3.1	4.4	4.4	—	—	—	1.2	
C 51 4_263.8	263.8	0.30	1.8	1.8	3.2	3.1	4.4	4.4	—	—	—	1.2	
C 51 4_297.8	297.8	0.30	1.8	1.8	3.2	3.1	4.4	4.4	—	—	—	1.2	
C 51 4_326.1	326.1	0.30	1.8	1.8	3.2	3.1	4.4	4.4	—	—	—	1.2	
C 51 4_380.0	380.0	0.20	1.7	1.7	3.1	3.0	4.3	4.3	—	—	—	1.1	
C 51 4_416.0	416.0	0.20	1.7	1.7	3.1	3.0	4.3	4.3	—	—	—	1.1	
C 51 4_463.9	463.9	0.20	1.7	1.7	3.1	3.0	4.3	4.3	—	—	—	1.1	
C 51 4_508.0	508.0	0.20	1.7	1.7	3.1	3.0	4.3	4.3	—	—	—	1.1	
C 51 4_549.7	549.7	0.20	1.7	1.7	3.1	3.0	4.3	4.3	—	—	—	1.1	
C 51 4_602.0	602.0	0.20	1.7	1.7	3.1	3.0	4.3	4.3	—	—	—	1.1	
C 51 4_655.4	655.4	0.20	1.7	1.7	3.1	3.0	4.3	4.3	—	—	—	1.1	
C 51 4_717.7	717.7	0.20	1.7	1.7	3.1	3.0	4.3	4.3	—	—	—	1.1	
C 51 4_808.0	808.0	0.20	1.7	1.7	3.1	3.0	4.3	4.3	—	—	—	1.1	
C 51 4_884.9	884.9	0.20	1.7	1.7	3.1	3.0	4.3	4.3	—	—	—	1.1	



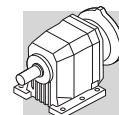
C 51

		J ($\cdot 10^{-4}$) [kgm ²]											
		 SERVO											
i		80B		95A		80C 95B 110A		95C 110B 130A		130B 180A		180B	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
C 51 2_2.6	2.6	—	—	—	—	17	18	17	18	32	34	33	38
C 51 2_3.3	3.3	—	—	—	—	13	14	13	14	27	29	29	34
C 51 2_4.5	4.5	—	—	—	—	9.2	9.7	9.1	10	23	26	25	30
C 51 2_5.6	5.6	—	—	—	—	7.0	7.5	6.9	7.9	21	24	23	28
C 51 2_7.0	7.0	—	—	—	—	11	12	11	12	25	28	27	32
C 51 2_7.8	7.8	—	—	—	—	11	12	11	12	25	27	27	32
C 51 2_8.8	8.8	—	—	—	—	8.9	9.4	8.8	9.8	23	25	25	30
C 51 2_9.8	9.8	—	—	—	—	8.7	9.2	8.6	9.6	23	25	25	30
C 51 2_11.8	11.8	—	—	—	—	7.0	7.5	6.9	7.9	21	24	23	28
C 51 2_13.1	13.1	—	—	—	—	6.9	7.4	6.8	7.8	21	23	23	28
C 51 2_15.0	15.0	—	—	—	—	5.6	6.1	5.5	6.5	20	22	22	27
C 51 2_16.6	16.6	—	—	—	—	5.5	6.0	5.4	6.4	20	22	22	27
C 51 2_18.9	18.9	4.8	5.3	4.8	5.3	4.9	5.4	4.8	5.8	19	21	21	26
C 51 2_21.0	21.0	4.7	5.2	4.7	5.2	4.8	5.3	4.7	5.7	19	21	21	26
C 51 2_23.4	23.4	4.3	4.8	4.3	4.8	4.4	4.3	4.3	5.3	18	21	20	25
C 51 2_25.9	25.9	4.2	4.7	4.2	4.7	4.3	4.8	4.2	5.2	18	21	20	25
C 51 2_29.8	29.8	3.7	4.2	3.7	4.2	3.8	4.3	3.7	4.7	18	20	20	25
C 51 2_33.0	33.0	3.7	4.2	3.7	4.2	3.8	4.3	3.7	4.7	18	20	20	25
C 51 2_36.4	36.4	3.5	4.0	3.5	4.0	3.6	4.1	3.5	4.5	18	20	20	25
C 51 2_40.4	40.4	3.5	4.0	3.5	4.0	3.6	4.1	3.5	4.5	18	20	20	25
C 51 2_43.1	43.1	3.3	3.8	3.3	3.8	3.4	3.9	3.3	4.3	—	—	—	—
C 51 2_47.8	47.8	3.3	3.8	3.3	3.8	3.4	3.9	3.3	4.3	—	—	—	—
C 51 2_51.4	51.4	3.2	3.7	3.2	3.7	3.3	3.8	3.2	4.2	—	—	—	—
C 51 2_57.0	57.0	3.2	3.7	3.2	3.7	3.3	3.8	3.2	4.2	—	—	—	—
C 51 3_21.8	21.8	—	—	—	—	9.7	10	9.6	11	24	26	26	31
C 51 3_23.9	23.9	—	—	—	—	9.7	10	9.6	11	24	26	26	31
C 51 3_27.4	27.4	—	—	—	—	8.1	8.6	8.0	9.0	22	25	24	29
C 51 3_30.1	30.1	—	—	—	—	8.1	8.6	8.0	9.0	22	25	24	29
C 51 3_37.0	37.0	—	—	—	—	6.5	7.0	6.4	7.4	21	23	23	28
C 51 3_40.5	40.5	—	—	—	—	6.5	7.0	6.4	7.4	21	23	23	28
C 51 3_46.7	46.7	—	—	—	—	5.3	5.8	5.2	6.2	19	22	21	26
C 51 3_51.2	51.2	—	—	—	—	5.3	5.8	5.2	6.2	19	22	21	26
C 51 3_59.0	59.0	4.6	5.1	4.6	5.1	4.7	5.2	4.6	5.6	19	21	21	26
C 51 3_64.6	64.6	4.6	5.1	4.6	5.1	4.7	5.2	4.6	5.6	19	21	21	26
C 51 3_72.9	72.9	4.1	4.6	4.1	4.6	4.2	5.2	4.1	5.1	18	21	20	25
C 51 3_79.9	79.9	4.1	4.6	4.1	4.6	4.2	5.2	4.1	5.1	18	21	20	25
C 51 3_93.0	93.0	3.6	4.1	3.6	4.1	3.7	4.2	3.6	4.6	18	20	20	25
C 51 3_101.8	101.8	3.6	4.1	3.6	4.1	3.7	4.2	3.6	4.6	18	20	20	25
C 51 3_113.6	113.6	3.4	3.9	3.4	3.9	3.5	4.0	3.4	4.4	18	20	20	25
C 51 3_124.4	124.4	3.4	3.9	3.4	3.9	3.5	4.0	3.4	4.4	18	20	20	25
C 51 3_134.6	134.6	3.3	3.8	3.3	3.8	3.4	3.9	3.3	4.3	—	—	—	—
C 51 3_147.4	147.4	3.3	3.8	3.3	3.8	3.4	3.9	3.3	4.3	—	—	—	—
C 51 3_160.5	160.5	3.2	3.7	3.2	3.7	3.3	3.8	3.2	4.2	—	—	—	—
C 51 3_175.8	175.8	3.2	3.7	3.2	3.7	3.3	3.8	3.2	4.2	—	—	—	—
C 51 3_197.9	197.9	3.1	3.6	3.1	3.6	3.2	3.7	3.1	4.1	—	—	—	—
C 51 3_216.7	216.7	3.1	3.6	3.1	3.6	3.2	3.7	3.1	4.1	—	—	—	—
C 51 4_240.9	240.9	—	—	3.1	3.6	3.2	3.7	3.1	4.1	—	—	—	—
C 51 4_263.8	263.8	—	—	3.1	3.6	3.2	3.7	3.1	4.1	—	—	—	—
C 51 4_297.8	297.8	—	—	3.1	3.6	3.2	3.7	3.1	4.1	—	—	—	—
C 51 4_326.1	326.1	—	—	3.1	3.6	3.2	3.7	3.1	4.1	—	—	—	—
C 51 4_380.0	380.0	—	—	3.0	3.5	3.1	3.6	3.0	4.0	—	—	—	—
C 51 4_416.0	416.0	—	—	3.0	3.5	3.1	3.6	3.0	4.0	—	—	—	—
C 51 4_463.9	463.9	—	—	3.0	3.5	3.1	3.6	3.0	4.0	—	—	—	—
C 51 4_508.0	508.0	—	—	3.0	3.5	3.1	3.6	3.0	4.0	—	—	—	—
C 51 4_549.7	549.7	—	—	3.0	3.5	3.1	3.6	3.0	4.0	—	—	—	—
C 51 4_602.0	602.0	—	—	3.0	3.5	3.1	3.6	3.0	4.0	—	—	—	—
C 51 4_655.4	655.4	—	—	3.0	3.5	3.1	3.6	3.0	4.0	—	—	—	—
C 51 4_717.7	717.7	—	—	3.0	3.5	3.1	3.6	3.0	4.0	—	—	—	—
C 51 4_808.0	808.0	—	—	3.0	3.5	3.1	3.6	3.0	4.0	—	—	—	—
C 51 4_884.9	884.9	—	—	3.0	3.5	3.1	3.6	3.0	4.0	—	—	—	—




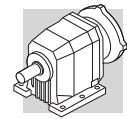
C 61

	i	J ($\cdot 10^{-4}$) [kgm ²]											
		f	IEC										
			63	71	80	90	100	112	132	160	180		
C 61 2_2.8	2.8	30	—	—	—	—	—	—	49	78	76	52	
C 61 2_3.7	3.7	19	—	—	22	22	23	23	38	78	76	41	
C 61 2_4.6	4.6	14	—	—	17	17	18	18	33	78	76	36	
C 61 2_6.0	6.0	8.8	—	—	12	12	13	13	28	78	76	31	
C 61 2_6.7	6.7	14	—	—	—	—	—	—	33	78	76	36	
C 61 2_7.5	7.5	13	—	—	—	—	—	—	32	78	76	35	
C 61 2_8.8	8.8	13	—	—	16	16	17	17	32	78	76	35	
C 61 2_9.8	9.8	12	—	—	15	15	16	16	31	78	76	34	
C 61 2_10.9	10.9	9.6	—	—	13	12	14	14	29	78	76	31	
C 61 2_12.1	12.1	9.2	—	—	12	12	13	13	28	78	76	31	
C 61 2_14.3	14.3	5.8	—	—	8.7	8.6	9.9	9.9	25	78	76	28	
C 61 2_15.9	15.9	5.6	—	—	8.5	8.4	9.7	9.7	25	78	76	27	
C 61 2_17.7	17.7	4.4	—	—	7.3	7.2	8.5	8.5	23	78	76	26	
C 61 2_19.6	19.6	4.3	—	—	7.2	7.1	8.4	8.4	23	78	76	26	
C 61 2_22.4	22.4	3.2	4.7	4.7	6.1	6.0	7.3	7.3	22	78	76	25	
C 61 2_24.8	24.8	3.1	4.6	4.6	6.0	5.9	7.2	7.2	22	78	76	25	
C 61 2_27.4	27.4	2.1	3.6	3.6	5.0	4.9	6.2	6.2	21	78	76	24	
C 61 2_30.4	30.4	2.2	3.7	3.7	5.1	5.0	6.3	6.3	21	78	76	24	
C 61 2_34.2	34.2	1.5	3.0	3.0	4.4	4.3	5.6	5.6	20	78	76	23	
C 61 2_38.0	38.0	1.5	3.0	3.0	4.4	4.3	5.6	5.6	20	78	76	23	
C 61 3_26.8	26.8	10	—	—	13	13	14	14	29	78	76	32	
C 61 3_29.4	29.4	10	—	—	13	13	14	14	29	78	76	32	
C 61 3_33.0	33.0	8.1	—	—	11	11	12	12	27	78	76	30	
C 61 3_36.1	36.1	8.1	—	—	11	11	12	12	27	78	76	30	
C 61 3_43.4	43.4	5.0	—	—	7.9	7.8	9.1	9.1	24	78	76	27	
C 61 3_47.6	47.6	5.0	—	—	7.9	7.8	9.1	9.1	24	78	76	27	
C 61 3_53.5	53.5	3.9	—	—	6.8	6.7	8.0	8.0	23	78	76	26	
C 61 3_58.6	58.6	3.8	—	—	6.7	6.6	7.9	7.9	23	78	76	26	
C 61 3_67.7	67.7	2.8	4.3	4.3	5.7	5.6	6.9	6.9	22	78	76	25	
C 61 3_74.2	74.2	2.8	4.3	4.3	5.7	5.6	6.9	6.9	22	78	76	25	
C 61 3_83.0	83.0	1.9	3.4	3.4	4.8	4.7	6.0	6.0	21	78	76	24	
C 61 3_91.0	91.0	1.9	3.4	3.4	4.8	4.7	6.0	6.0	21	78	76	24	
C 61 3_103.6	103.6	1.3	2.8	2.8	4.2	4.1	5.4	5.4	20	78	76	23	
C 61 3_113.6	113.6	1.3	2.8	2.8	4.2	4.1	5.4	5.4	20	78	76	23	
C 61 3_128.1	128.1	1.0	2.5	2.5	3.9	3.8	5.1	5.1	20	78	76	23	
C 61 3_140.5	140.5	1.0	2.5	2.5	3.9	3.8	5.1	5.1	20	78	76	23	
C 61 3_150.0	150.0	0.70	2.2	2.2	3.6	3.5	4.8	4.8	—	—	—	23	
C 61 3_164.5	164.5	0.70	2.2	2.2	3.6	3.5	4.8	4.8	—	—	—	23	
C 61 3_178.6	178.6	0.60	2.1	2.1	3.5	3.4	4.7	4.7	—	—	—	22	
C 61 3_195.8	195.8	0.60	2.1	2.1	3.5	3.4	4.7	4.7	—	—	—	22	
C 61 4_217.4	217.4	0.67	2.2	2.2	3.6	3.5	4.8	4.8	—	—	—	11	
C 61 4_238.3	238.3	0.67	2.2	2.2	3.6	3.5	4.8	4.8	—	—	—	11	
C 61 4_275.3	275.3	0.81	2.3	2.3	3.7	3.6	4.9	4.9	—	—	—	11	
C 61 4_301.7	301.7	0.81	2.3	2.3	3.7	3.6	4.9	4.9	—	—	—	11	
C 61 4_337.7	337.7	0.56	2.1	2.1	3.5	3.4	4.7	4.7	—	—	—	11	
C 61 4_370.1	370.1	0.56	2.1	2.1	3.5	3.4	4.7	4.7	—	—	—	11	
C 61 4_421.5	421.5	0.53	2.0	2.0	3.4	3.3	4.6	4.6	—	—	—	11	
C 61 4_462.0	462.0	0.53	2.0	2.0	3.4	3.3	4.6	4.6	—	—	—	11	
C 61 4_521.1	521.1	0.51	2.0	2.0	3.4	3.3	4.6	4.6	—	—	—	11	
C 61 4_571.2	571.2	0.51	2.0	2.0	3.4	3.3	4.6	4.6	—	—	—	11	
C 61 4_610.1	610.1	0.49	2.0	2.0	3.4	3.3	4.6	4.6	—	—	—	11	
C 61 4_668.8	668.8	0.49	2.0	2.0	3.4	3.3	4.6	4.6	—	—	—	11	
C 61 4_726.3	726.3	0.48	2.0	2.0	3.4	3.3	4.6	4.6	—	—	—	11	
C 61 4_796.1	796.1	0.48	2.0	2.0	3.4	3.3	4.6	4.6	—	—	—	11	

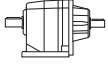



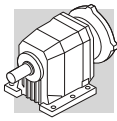
C 61

		J ($\cdot 10^{-4}$) [kgm ²]											
		 SERVO											
i		80B		95A		80C 95B 110A		95C 110B 130A		130B 180A		180B	
		SK	SC	SK	SC	SK	SC	SK	SC	SK	SC	SK	SC
C 61 2_2.8	2.8	—	—	—	—	—	—	—	—	47	49	49	54
C 61 2_3.7	3.7	—	—	—	—	22	23	22	23	36	38	38	43
C 61 2_4.6	4.6	—	—	—	—	17	18	17	18	31	33	33	38
C 61 2_6.0	6.0	—	—	—	—	12	13	12	13	26	28	28	33
C 61 2_6.7	6.7	—	—	—	—	—	—	—	—	31	33	33	38
C 61 2_7.5	7.5	—	—	—	—	—	—	—	—	30	32	32	37
C 61 2_8.8	8.8	—	—	—	—	16	17	16	17	30	32	32	37
C 61 2_9.8	9.8	—	—	—	—	15	16	15	16	23	31	31	36
C 61 2_10.9	10.9	—	—	—	—	13	14	12	13	27	29	29	34
C 61 2_12.1	12.1	—	—	—	—	12	13	12	13	26	29	28	33
C 61 2_14.3	14.3	—	—	—	—	8.7	9.2	8.6	9.6	23	25	25	30
C 61 2_15.9	15.9	—	—	—	—	8.5	9.0	8.4	9.4	23	25	25	30
C 61 2_17.7	17.7	—	—	—	—	7.3	7.8	7.2	8.2	21	24	23	28
C 61 2_19.6	19.6	—	—	—	—	7.2	7.7	7.1	8.1	21	24	23	28
C 61 2_22.4	22.4	—	—	6.0	6.5	6.1	6.6	6.0	7.0	20	23	22	27
C 61 2_24.8	24.8	—	—	5.9	6.4	6.0	6.5	5.9	6.9	20	23	22	27
C 61 2_27.4	27.4	—	—	4.9	5.4	5.0	5.5	4.9	5.9	19	22	21	26
C 61 2_30.4	30.4	—	—	5.0	5.5	5.1	5.6	5.0	6.0	19	22	21	26
C 61 2_34.2	34.2	—	—	4.3	4.8	4.4	4.9	4.3	5.3	18	21	20	25
C 61 2_38.0	38.0	—	—	4.3	4.8	4.4	4.9	4.3	5.3	18	21	20	25
C 61 3_26.8	26.8	—	—	—	—	13	14	13	14	27	29	29	34
C 61 3_29.4	29.4	—	—	—	—	13	14	13	14	27	29	29	34
C 61 3_33.0	33.0	—	—	—	—	11	12	11	12	25	28	27	32
C 61 3_36.1	36.1	—	—	—	—	11	12	11	12	25	28	27	32
C 61 3_43.4	43.4	—	—	—	—	7.9	8.4	7.8	8.8	22	24	24	29
C 61 3_47.6	47.6	—	—	—	—	7.9	8.4	7.8	8.8	22	24	24	29
C 61 3_53.5	53.5	—	—	—	—	6.8	7.3	6.7	7.7	21	23	23	28
C 61 3_58.6	58.6	—	—	—	—	6.7	7.2	6.6	7.6	21	23	23	28
C 61 3_67.7	67.7	—	—	5.6	6.1	5.7	6.2	5.6	6.6	20	22	22	27
C 61 3_74.2	74.2	—	—	5.6	6.1	5.7	6.2	5.6	6.6	20	22	22	27
C 61 3_83.0	83.0	—	—	4.7	5.2	4.8	5.3	4.7	5.7	19	21	21	26
C 61 3_91.0	91.0	—	—	4.7	5.2	4.8	5.3	4.7	5.7	19	21	21	26
C 61 3_103.6	103.6	—	—	4.1	4.6	4.2	4.7	4.1	5.1	18	21	20	25
C 61 3_113.6	113.6	—	—	4.1	4.6	4.2	4.7	4.1	5.1	18	21	20	25
C 61 3_128.1	128.1	—	—	3.8	4.3	3.9	4.4	3.8	4.8	18	20	20	25
C 61 3_140.5	140.5	—	—	3.8	4.3	3.9	4.4	3.8	4.8	18	20	20	25
C 61 3_150.0	150.0	—	—	3.5	4.0	3.6	4.1	3.5	4.5	—	—	—	—
C 61 3_164.5	164.5	—	—	3.5	4.0	3.6	4.1	3.5	4.5	—	—	—	—
C 61 3_178.6	178.6	—	—	3.4	3.9	3.5	4.0	3.4	4.4	—	—	—	—
C 61 3_195.8	195.8	—	—	3.4	3.9	3.5	4.0	3.4	4.4	—	—	—	—
C 61 4_217.4	217.4	3.5	3.9	3.5	3.9	3.6	4.1	3.5	4.5	—	—	—	—
C 61 4_238.3	238.3	3.5	3.9	3.5	3.9	3.6	4.1	3.5	4.5	—	—	—	—
C 61 4_275.3	275.3	3.6	4.1	3.6	4.1	3.7	4.2	3.6	4.6	—	—	—	—
C 61 4_301.7	301.7	3.6	4.1	3.6	4.1	3.7	4.2	3.6	4.6	—	—	—	—
C 61 4_337.7	337.7	3.4	3.8	3.4	3.8	3.5	4.0	3.4	4.4	—	—	—	—
C 61 4_370.1	370.1	3.4	3.8	3.4	3.8	3.5	4.0	3.4	4.4	—	—	—	—
C 61 4_421.5	421.5	3.4	3.8	3.4	3.8	3.4	3.9	3.3	4.3	—	—	—	—
C 61 4_462.0	462.0	3.4	3.8	3.4	3.8	3.4	3.9	3.3	4.3	—	—	—	—
C 61 4_521.1	521.1	3.3	3.8	3.3	3.8	3.4	3.9	3.3	4.3	—	—	—	—
C 61 4_571.2	571.2	3.3	3.8	3.3	3.8	3.4	3.9	3.3	4.3	—	—	—	—
C 61 4_610.1	610.1	3.3	3.7	3.3	3.7	3.4	3.9	3.3	4.3	—	—	—	—
C 61 4_668.8	668.8	3.3	3.7	3.3	3.7	3.4	3.9	3.3	4.3	—	—	—	—
C 61 4_726.3	726.3	3.3	3.7	3.3	3.7	3.4	3.9	3.3	4.3	—	—	—	—
C 61 4_796.1	796.1	3.3	3.7	3.3	3.7	3.4	3.9	3.3	4.3	—	—	—	—



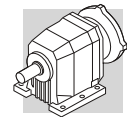
C 80

	i	J ($\cdot 10^{-4}$) [kgm ²]												
		 IEC												
		63	71	80	90	100 112	132	160	180	200	225	250	280	
C 80 2_5.6	5.6	—	—	—	—	—	—	—	197	211	489	—	—	164
C 80 2_6.1	6.1	—	—	—	—	—	—	—	193	210	485	—	—	159
C 80 2_7.0	7.0	—	—	—	—	—	—	—	160	161	174	452	—	127
C 80 2_7.6	7.6	—	—	—	—	—	—	—	158	158	172	449	—	124
C 80 2_8.9	8.9	—	—	—	—	—	—	—	137	135	146	429	—	101
C 80 2_9.6	9.6	—	—	—	—	—	—	—	136	133	144	427	—	99
C 80 2_11.1	11.1	38	—	—	—	—	—	56	116	113	124	408	—	79
C 80 2_12.0	12.0	36	—	—	—	—	—	55	115	112	123	407	—	78
C 80 2_13.8	13.8	28	—	—	—	—	—	47	106	104	135	398	—	69
C 80 2_14.9	14.9	27	—	—	—	—	—	46	106	103	134	397	—	69
C 80 2_16.7	16.7	21	—	—	—	—	—	40	100	97	127	391	—	63
C 80 2_18.1	18.1	21	—	—	—	—	—	40	99	97	127	390	—	62
C 80 2_20.5	20.5	14	—	—	17	17	18	33	93	90	120	383	—	55
C 80 2_22.2	22.2	14	—	—	16	16	18	33	92	90	120	383	—	55
C 80 2_24.0	24.0	13	—	—	16	16	17	32	91	89	119	382	—	54
C 80 2_25.9	25.9	13	—	—	16	15	17	32	91	89	118	382	—	54
C 80 2_31.3	31.3	8.7	—	—	12	11	13	28	87	85	—	—	—	50
C 80 2_39.1	39.1	5.2	—	—	8.0	8.0	9.2	24	84	81	—	—	—	46
C 80 3_43.5	43.5	9.6	—	—	12	12	14	29	88	86	—	—	—	51
C 80 3_47.4	47.4	9.1	—	—	12	12	13	28	87	85	—	—	—	50
C 80 3_57.3	57.3	5.7	—	—	8.5	8.5	9.7	25	84	82	—	—	—	47
C 80 3_62.5	62.5	5.4	—	—	8.2	8.2	9.5	24	84	82	—	—	—	47
C 80 3_70.5	70.5	4.3	—	—	7.1	7.0	8.3	23	83	80	—	—	—	45
C 80 3_76.9	76.9	4.1	—	—	7.0	6.9	8.2	23	82	80	—	—	—	45
C 80 3_89.3	89.3	3.0	—	—	5.9	5.8	7.1	22	81	79	—	—	—	44
C 80 3_97.4	97.4	2.9	—	—	5.8	5.7	7.0	22	81	79	—	—	—	44
C 80 3_109.5	109.5	2.0	—	—	4.8	4.8	6.1	21	80	78	—	—	—	43
C 80 3_119.5	119.5	1.9	—	—	4.8	4.7	6.0	21	80	79	—	—	—	43
C 80 3_136.7	136.7	1.4	—	—	4.3	4.2	5.5	20	80	78	—	—	—	43
C 80 3_149.1	149.1	1.4	—	—	4.2	4.2	5.5	20	80	77	—	—	—	43
C 80 3_169.0	169.0	1.0	—	—	3.9	3.8	5.1	20	80	77	—	—	—	42
C 80 3_184.4	184.4	1.0	—	—	3.9	3.8	5.1	20	80	77	—	—	—	42
C 80 3_197.9	197.9	0.80	—	—	3.7	3.6	4.9	—	—	—	—	—	—	42
C 80 3_215.8	215.8	0.80	—	—	3.6	3.6	4.9	—	—	—	—	—	—	42
C 80 4_261.9	261.9	1.7	—	—	4.6	4.5	5.8	21	—	—	—	—	—	12
C 80 4_285.7	285.7	1.7	—	—	4.6	4.5	5.8	21	—	—	—	—	—	12
C 80 4_334.3	334.3	1.2	2.7	2.7	4.0	4.0	5.3	20	—	—	—	—	—	11
C 80 4_364.7	364.7	1.2	2.7	2.6	4.0	4.0	5.3	20	—	—	—	—	—	11
C 80 4_417.5	417.5	0.90	2.4	2.3	3.7	3.7	5.0	20	—	—	—	—	—	11
C 80 4_455.4	455.4	0.90	2.3	2.3	3.7	3.7	5.5	20	—	—	—	—	—	11
C 80 4_529.3	529.3	0.50	2.0	2.0	3.4	3.3	4.6	19	—	—	—	—	—	11
C 80 4_577.4	577.4	0.50	2.0	2.0	3.4	3.3	4.6	19	—	—	—	—	—	11
C 80 4_664.3	664.3	0.40	2.0	1.9	3.3	3.2	4.5	19	—	—	—	—	—	11
C 80 4_724.7	724.7	0.40	2.0	1.9	3.3	3.2	4.5	19	—	—	—	—	—	11
C 80 4_783.4	783.4	0.30	2.0	1.8	3.2	3.1	4.4	—	—	—	—	—	—	9.4
C 80 4_854.6	854.6	0.30	2.0	1.8	3.2	3.1	4.4	—	—	—	—	—	—	9.4
C 80 4_945.7	945.7	0.20	1.7	1.7	3.1	3.0	4.3	—	—	—	—	—	—	9.3
C 80 4_1032	1032	0.20	1.7	1.7	3.1	3.0	4.3	—	—	—	—	—	—	9.3
C 80 4_1168	1168	0.20	1.6	1.6	3.0	3.0	4.2	—	—	—	—	—	—	9.2
C 80 4_1274	1274	0.20	1.6	1.6	3.0	3.0	4.2	—	—	—	—	—	—	9.2
C 80 4_1358	1358	0.10	1.6	1.6	3.0	2.9	4.2	—	—	—	—	—	—	9.2
C 80 4_1481	1481	0.10	1.6	1.6	3.0	2.9	4.2	—	—	—	—	—	—	9.2

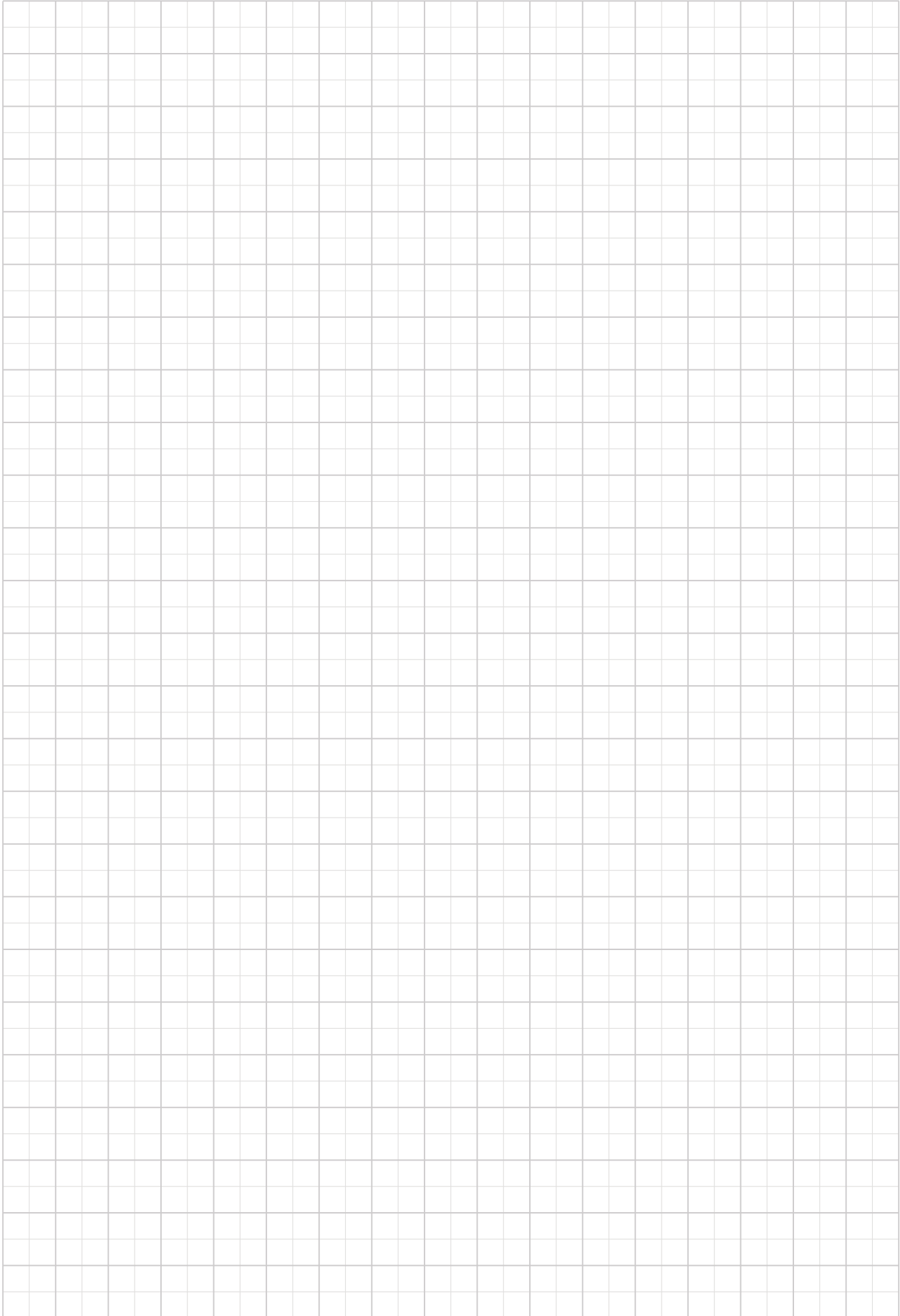
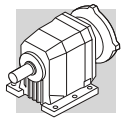


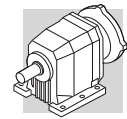
29 EXACT RATIOS

i_N	C12	C22	C32	C36	C41	C51	C61	C70	C80	C90	C100
2.5						2.62895					
2.8	2.76731	2.72212	2.87879	2.68687	2.65909		2.82011				
3.2	3.20743	3.32609		3.18182		3.30758					
3.5	3.65132	3.70709	3.40909	3.48617	3.61111		3.69925				
4.0			3.73518	4.20000							
4.5	4.31203	4.25831	4.50000	4.62201	4.66304	4.45370	4.55556	4.57143			
5.0	4.86842	4.76902	4.95215	5.27807						5.17231	4.92308
5.6	5.59868	5.59006	5.65508	5.84659	5.95263	5.63043		5.85034	5.64103	5.60333	5.33333
6.3	6.23158	6.08696	6.26420		6.36364		6.00176 6.74074	6.25455	6.11111	6.75824	6.52308
7.1		7.08300	7.16498	6.78114	7.06612	6.98684	7.48485	7.46032	7.04000	7.32143	7.06667
8.0	7.62201		8.48485	8.03030		7.75120		8.00433	7.62667	8.32615	8.35165
9.0	8.83422	8.65455	9.29644	8.79842	8.64198	8.79040	8.84211	9.52381	8.86447	9.02000	9.04762
10.0	10.05682	9.64593		10.60000	9.59596	9.75207	9.81818	10.20707	9.60317	10.36264	10.09231
11.2		11.08021	11.20000	11.66507	11.15942	11.83642	10.88889	11.20879	11.09402	11.22619	10.93333
12.5	11.87662	12.40909	12.32536	13.32086	12.39130	13.13131	12.09091	13.03030	12.01852	12.79060	12.45421
14.0	13.40909	14.54545	14.07487	14.75568	14.24561	14.96377	14.34568	14.09524	13.76410 14.91111	13.85648	13.49206
16.0	15.42045	15.83838	15.59091		15.81818	16.60079	15.92929	15.33566 16.70330	16.66272	15.97949	15.21368 16.48148
18.0	17.16364 18.38961	18.13636	18.18182	17.20779	17.79167	18.89035	17.65217		18.05128	17.31111 18.68047	18.66667
20.0	20.62937	20.02424	20.08081	19.00505	19.75568	20.95694 21.81606	19.60079	19.28485	20.53333	20.23718	20.22222
22.4	23.24242	21.45455	22.90909	22.13187	22.55556	23.35417 23.89242	22.35088	22.85315	22.24444	22.91795	22.24852
25.0	25.35537	24.27972	25.11515	26.20879	25.04545	25.90909	24.81818 26.77895		23.95266 25.94872	24.82778	24.10256
28.0	29.50000	27.15152 29.61983	26.90909	28.71572	28.31111 28.49003	27.44759 29.77315	27.41667 29.35385	27.71901		27.17160 29.43590	29.55556
31.5	32.77778	33.09091	29.76224 33.09091		31.22945 31.43636	30.05994 33.03030	30.44318 32.97778		31.33333		
35.5	37.00909	36.76768	36.09917	34.59560	33.38462 36.78930	36.38333 36.95862	34.22222 36.14872	34.74747		35.09848	34.29705 36.93529
40.0	42.31313		40.72727	38.07172	37.06993 40.32673	40.36364 40.47619	38.00000	41.26263	39.11111	39.40239	42.92328
45.0		43.27273	45.25253	43.47576	44.75207 46.96356	43.11538 46.72360	43.44691	44.70118	43.49074	42.98443	46.22507
50.0	47.60227	48.64646	52.43636	48.15865	51.47929	47.83217 51.40152	47.62450	52.16479	47.44444	50.30093	53.25397
56.0	55.16883	54.72727	59.39394	56.16170	58.65385	57.02479 58.98416	53.46087 58.60134	56.51186	57.29733	54.87374 59.20032	57.35043
63.0	66.15152	60.00000 63.27273	66.81818	62.02747	64.29364	64.59803		65.85315	62.50617	64.58217	64.46886
71.0		65.33333 74.81250	74.74747	70.76374	74.35897	72.92219	67.69123 74.20000	71.34091	70.50362	74.44537	69.42801
80.0		82.60000	82.55443	77.57802 83.11931	81.50888	79.86264	83.03333	81.41434	76.91304	81.21313	79.44444
90.0		88.50000	94.18182	91.93238	93.33333	92.96514	91.01731	88.19886	89.27047	88.22009	85.55556 92.67399
100.0		100.15385	103.25118	102.21429	102.30769	101.81319	103.64444	103.79138	97.38596	96.24009	99.80276



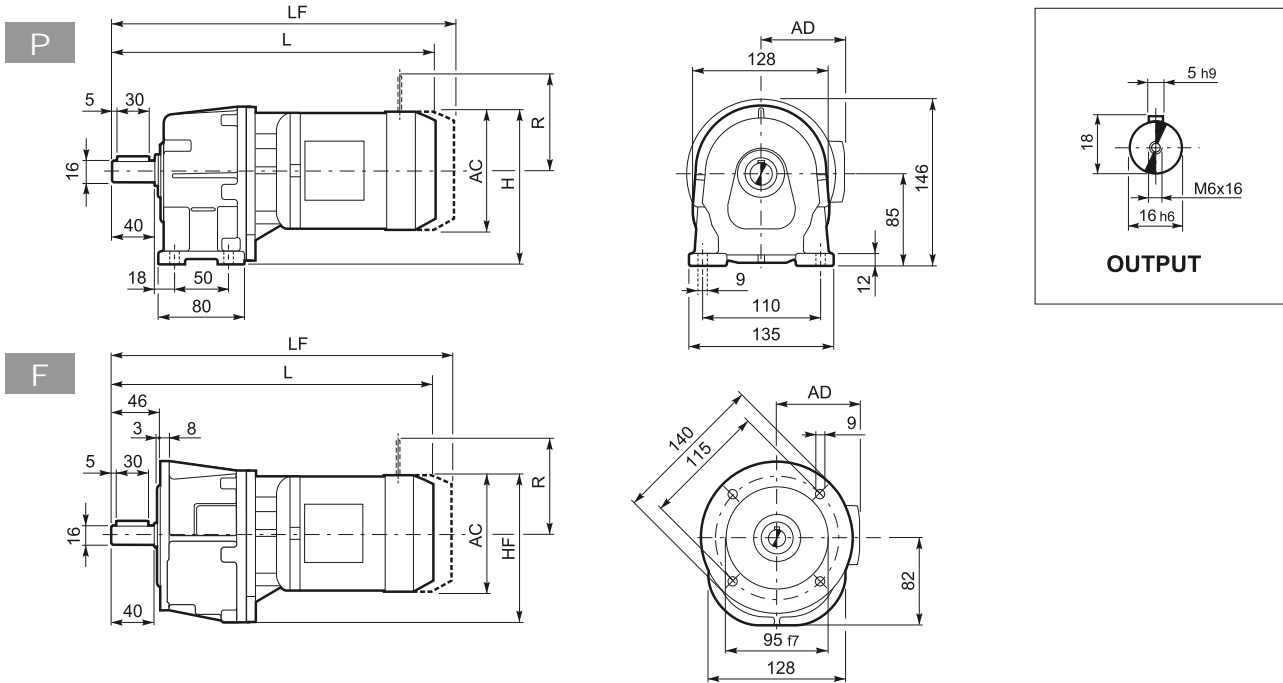
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125.5		122.18182	122.35587	125.80220	120.64178	124.41758	128.14222	126.83497	119.45833		120.51282
140.0		136.50000	136.04040 148.40771	139.78022	132.86713 145.64282	134.62559 147.43872	140.46359	137.40455	136.68519 149.11111	134.13580 146.32997	139.68254
160.0		151.66667	167.43434	161.97033	164.10256	160.49861	150.03077 164.45680	150.30339 162.82867	168.99259	157.76199	150.42735 162.10526
180.0		178.50000	186.03816	183.46154	179.88166	175.77423	178.59394	179.18945	184.35556	172.10399	185.37037
200.0		200.66667		206.39423	190.76923 209.11243	197.87075	195.76643	194.12190	197.85897	212.38169	199.62963
225.0		225.75000	215.57172	230.88697		216.70330	217.40754	220.91375	215.84615	231.68911	
250.0		261.00000	244.17508	255.00183	239.94755	240.85197 263.77530	238.31211	239.32323 251.28438	261.85613	268.49591	244.21811 263.00412
280.0			274.69697	290.91758	263.01943		275.27766	272.22475	285.66123	292.90463	300.50725
315.0				318.93187	304.19580 333.44540	297.76563 326.10577	301.74667	317.86109	334.27376	338.95085	323.62319
355.0				341.71272			337.66889 370.13705	344.34951	364.66228	369.76457	380.49708
400.0				377.94421 420.21429	381.81818 418.53147	379.60764 415.73718	421.48741	409.39931	417.48199	419.04541	409.76608
450.0				458.41558	450.24207	463.88750	462.01504	443.51592	455.43490	457.14044	466.73611
500.0				517.18681	493.53457	508.03846	521.11170	512.03745	529.26678		502.63889
560.0				574.65201	543.54736	549.72115	571.21860	554.70724	577.38194	534.22163 582.78723	582.59259
630.0				665.87802	595.81153	602.04142 655.36932	610.12513 668.79101	606.78035 657.34538	664.32106	652.82863	627.40741
710.0				754.23077	671.32867 735.87951	717.74476	726.28202	735.97521	724.71389	712.17669	720.29630
800.0				848.50962	780.41958	807.97222	796.11683	797.30647	783.37099	773.62229 843.95159	775.70370 843.33333
900.0					855.45992	884.87179		922.59000	854.58654 945.71181	922.30089	908.20513
1000.0								999.47250 1069.05117	1031.68561	1006.14643	1003.88889
1125.0								1158.13876	1168.03704	1137.05888	1081.11111
1250.0									1274.22222	1240.42787	
1400.0								1362.26180 1475.78362	1357.84306		



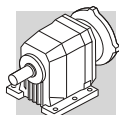


30 DIMENSIONS

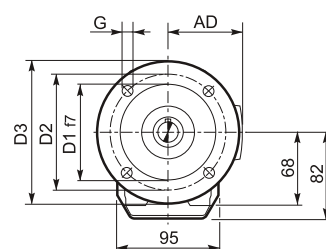
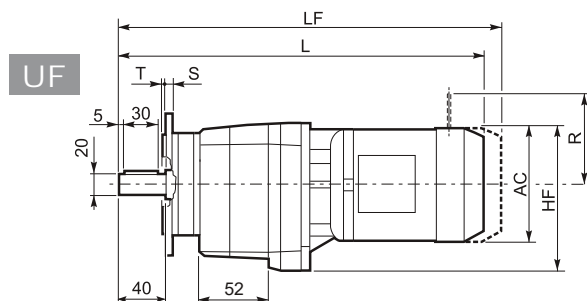
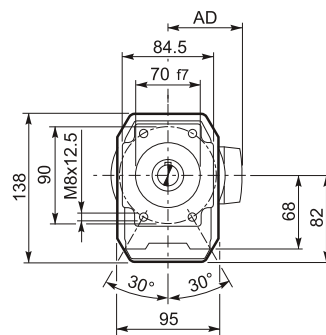
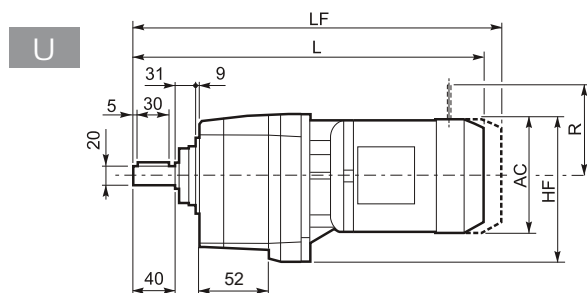
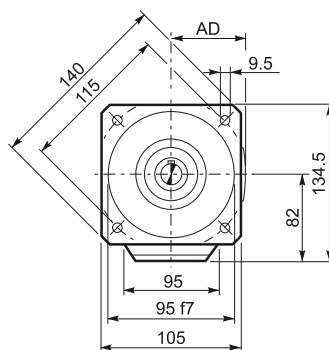
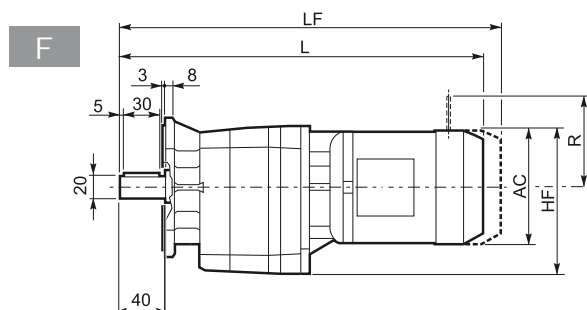
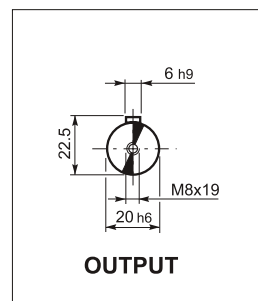
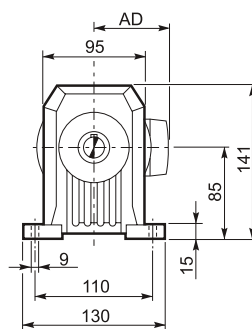
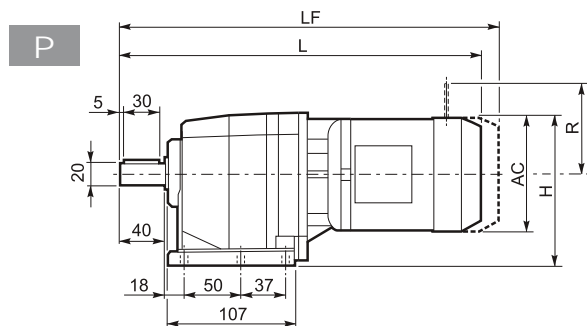
C 05...M/ME/MXN



			AC	H	HF	L	AD		M...FD M...FA		M...FD		M...FA	
									LF		R	AD	R	AD
C 05 2	S0	M0	110	140	137	287	91	7	—	—	—	—	—	—
C 05 2	S05	M05	121	145.5	142.5	332	95	8	398	10	96	122	116	95
C 05 2	S05	ME05	121	145.5	142.5	332	95	8	398	10	96	119	116	119
C 05 2	S05	MXN05	123	146.5	142.5	378.5	136	9.8	425.5	11.1	96	136	116	136
C 05 2	S1	M1	138	154	151	360.5	108	11	423	13	103	135	124	108
C 05 2	S1	ME1	138	154	151	360.5	108	11	423	13	103	135	124	135
C 05 2	S10	MXN10	138	154	151	389.5	108	12.8	482	15.4	103	138	121	138

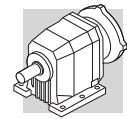


C 12...M/ME/MX/MXN



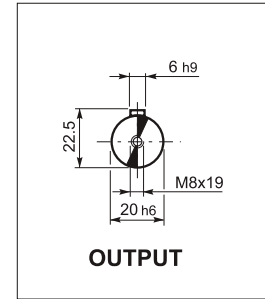
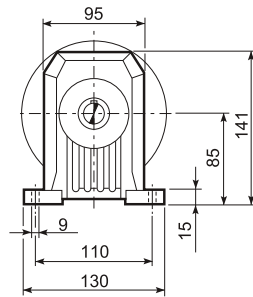
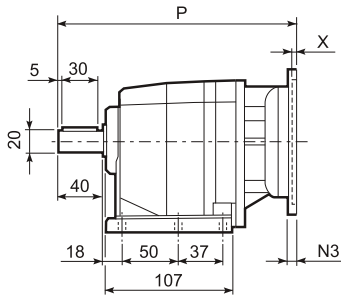
C 12 2_U						
	D1	D2	D3	G	T	S
FA	80	100	120	7	3	8
FB	95	115	140	9	3	10
FC	110	130	160	9	3	10

			AC	H	HF	L	AD		M...FD M...FA		M...FD		M...FA	
									LF		R	AD	R	AD
C 12 2	S05	M05	121	145.5	142.5	370.5	95	9	436.5	10	96	122	116	95
C 12 2	S05	ME05	121	145.5	142.5	370.5	95	9	436.5	10	96	119	116	119
C 12 2	S05	MXN05	123	146.5	142.5	417	136	10.8	—	—	—	—	—	—
C 12 2	S1	M1	138	154	151	404.5	108	11	460.5	13	103	135	124	108
C 12 2	S1	ME1	138	154	151	404.5	108	11.4	460.5	13	103	135	124	135
C 12 2	S10	MXN10	138	154	151	433.5	137	13.8	—	—	—	—	—	—
C 12 2	S2	M2S	156	163	160	428.5	119	15	498.5	18	129	146	134	119
C 12 2	S2	ME2S	156	163	160	428.5	119	18	498.5	21.9	129	143	134	143
C 12 2	S2	MX2S	156	163	160	472.5	119	20.1	544	19.9	129	143	134	143
C 12 2	S20	MXN20	158	164	160	526	146	22.3	—	—	—	—	—	—
C 12 2	S3	ME3S	195	182.5	179.5	471.5	142	21.5	552	24	160	155	160	155
C 12 2	S3	MX3S	195	182.5	179.5	503.5	142	24.5	581	27	160	155	160	155
C 12 2	S3	ME3L	195	182.5	179.5	503.5	142	22	579	28	160	155	160	155
C 12 2	S3	MX3L	195	182.5	179.5	547.5	142	28	623	36	160	155	160	155

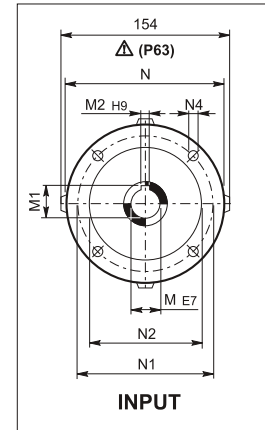
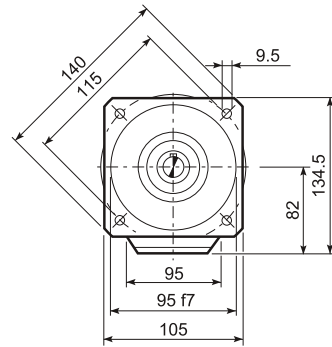
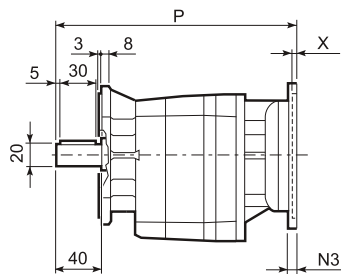


C 12...P (IEC)

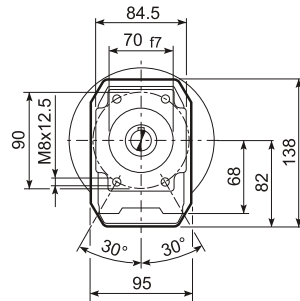
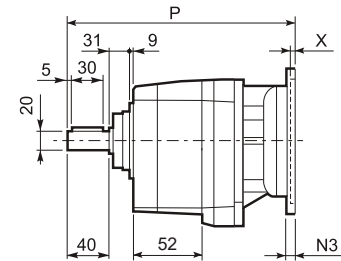
P



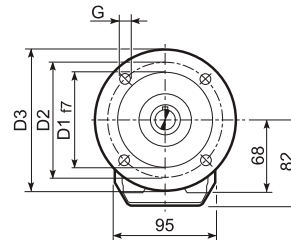
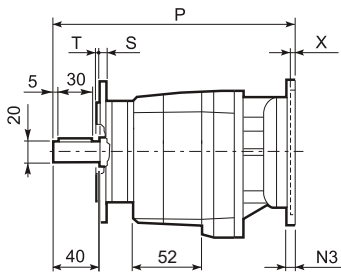
F



U

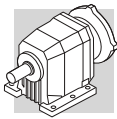


UF

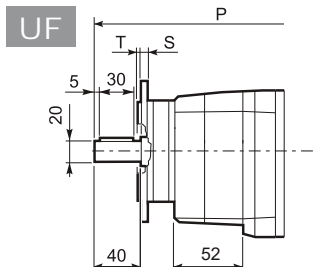
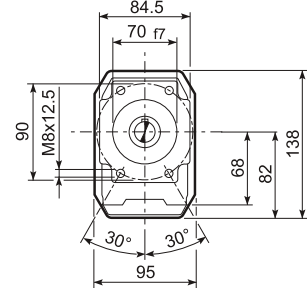
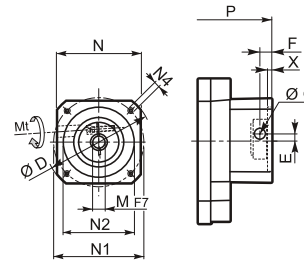
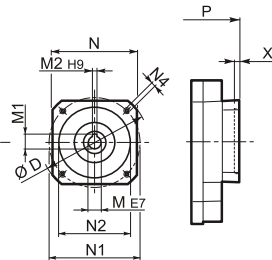
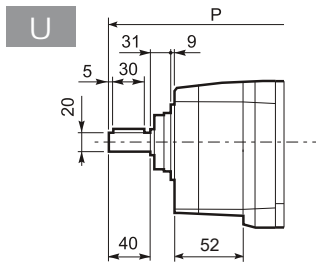
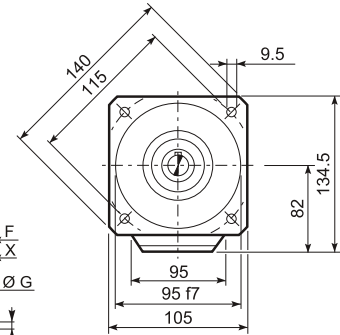
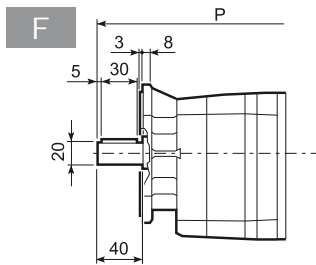
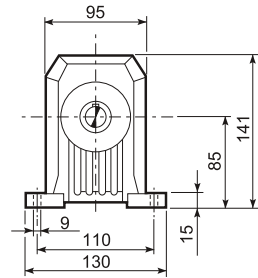
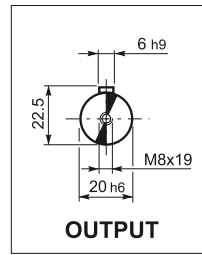
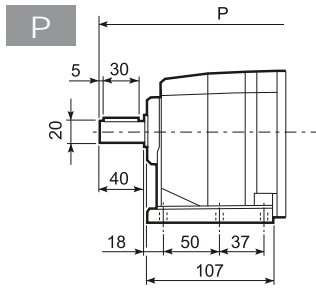


C 12 2_U						
	D1	D2	D3	G	T	S
FA	80	100	120	7	3	8
FB	95	115	140	9	3	10
FC	110	130	160	9	3	10

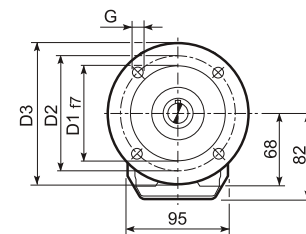
		M	M1	M2	N	N1	N2	N3	N4	X	P	
C 12 2	P63	11	12.8	4	140	115	95	—	M8x19	4	244.5	6
C 12 2	P71	14	16.3	5	160	130	110	—	M8x16	4.5	244.5	6
C 12 2	P80	19	21.8	6	200	165	130	—	M10x14.5	4	264	7
C 12 2	P90	24	27.3	8	200	165	130	—	M10x14.5	4	264	7
C 12 2	P100	28	31.3	8	250	215	180	—	M12x16	4.5	274	11
C 12 2	P112	28	31.3	8	250	215	180	—	M12x16	4.5	274	11



C 12...SK / SC

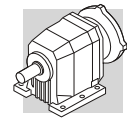


C 12 2_U						
	D1	D2	D3	G	T	S
FA	80	100	120	7	3	8
FB	95	115	140	9	3	10
FC	110	130	160	9	3	10



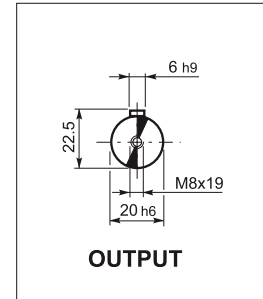
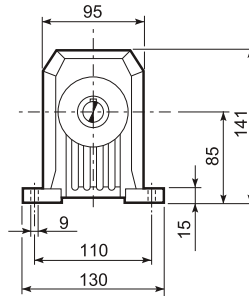
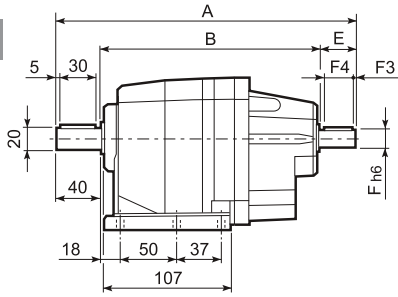
		D	M	M1	M2	N	N1	N2	N4	X	P	
C 12 2	SK60A	102	11	12.8	4	82	75	60	M5x10	3.5	216	6
C 12 2	SK60B	102	14	16.3	5	82	75	60	M5x10	4	223	5
C 12 2	SK80A	115	14	16.3	5	90	100	80	M6x12	4	223	5
C 12 2	SK80C	120	19	21.8	6	96	100	80	M6x12	4	264	7
C 12 2	SK95A	130	14	16.3	5	102	115	95	M8x12	4	264	6
C 12 2	SK95B	130	19	21.8	6	102	115	95	M8x12	4	264	7
C 12 2	SK95C	130	24	27.3	8	102	115	95	M8x12	4	264	7
C 12 2	SK110A	150	19	21.8	6	120	130	110	M8x12	5	264	7
C 12 2	SK110B	150	24	27.3	8	120	130	110	M8x12	5	264	7

			Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	P	
C 12 2	SC60A	M6	15	102	7	12.5	12.5	11	82	75	60	M5x10	4	243	7
C 12 2	SC60B	M6	15	102	7	12.5	12.5	14	82	75	60	M5x10	4	243	6
C 12 2	SC80A	M6	15	115	6	12.5	12.5	14	90	100	80	M6x12	4	243	6
C 12 2	SC80C	M6	15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	287.5	8
C 12 2	SC95A	M6	15	130	16.5	15	17.75	14	102	115	95	M8x16	4	287.5	7
C 12 2	SC95B	M6	15	130	16.5	15	17.75	19	102	115	95	M8x16	4	287.5	8
C 12 2	SC95C	M6	15	130	16.5	15	17.75	24	102	115	95	M8x16	4	287.5	8
C 12 2	SC110A	M6	15	150	16.5	16	17.75	19	120	130	110	M8x16	5	287.5	10
C 12 2	SC110B	M6	15	150	16.5	16	17.75	24	120	130	110	M8x16	5	287.5	10

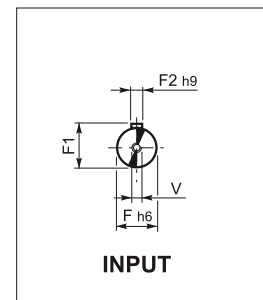
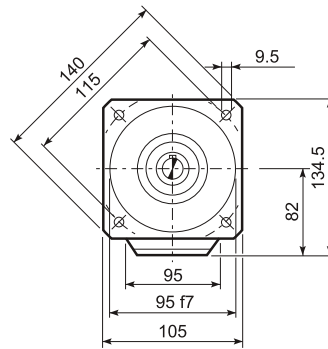
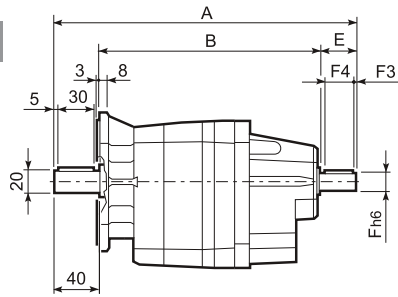


C 12...HS

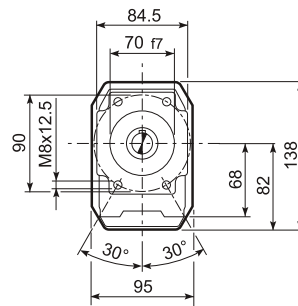
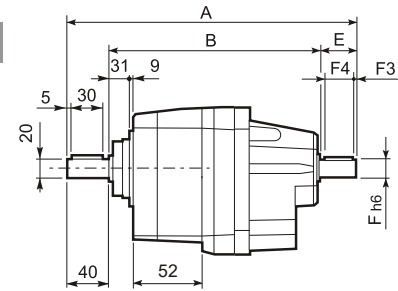
P



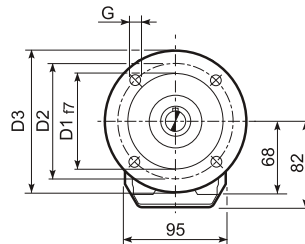
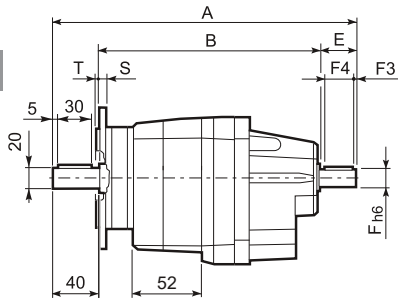
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U

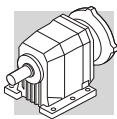


UF

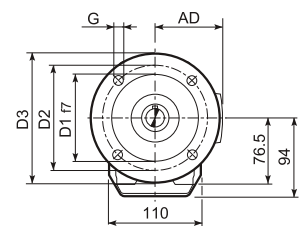
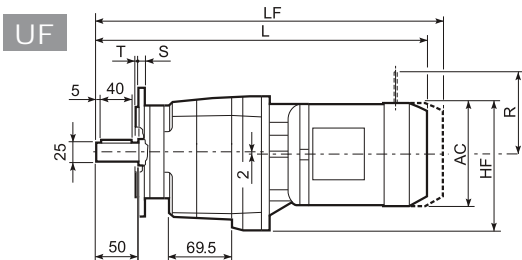
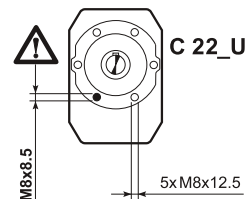
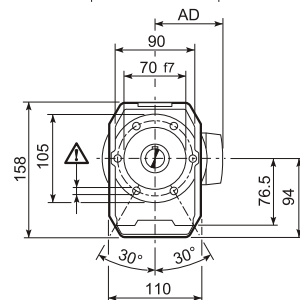
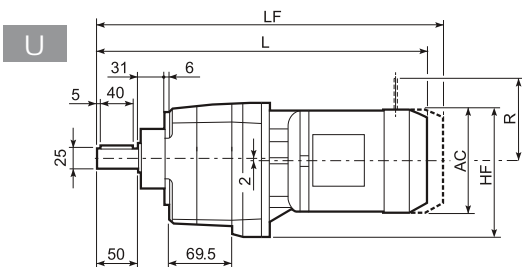
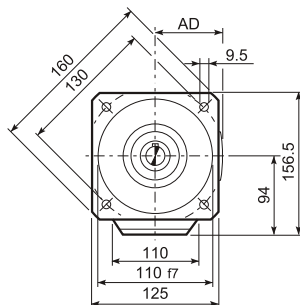
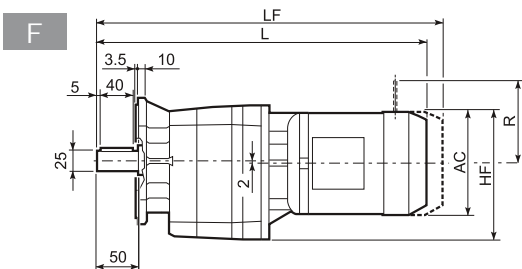
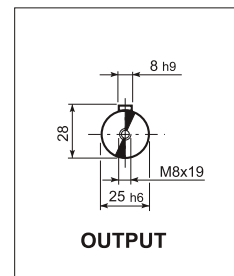
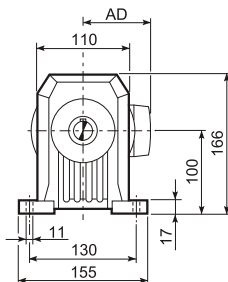
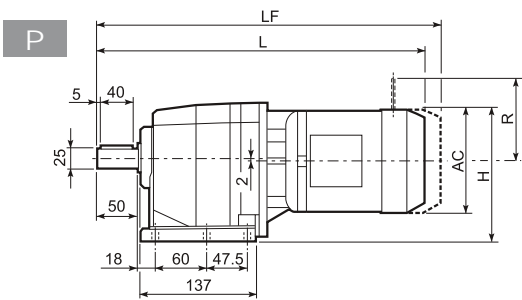


C 12 2_U						
	D1	D2	D3	G	T	S
FA	80	100	120	7	3	8
FB	95	115	140	9	3	10
FC	110	130	160	9	3	10

		A	B	E	F	F1	F2	F3	F4	V	
C 12 2	HS	251.5	171.5	40	16	18	5	2.5	35	M6x16	7.8

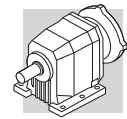


C 22..M/ME/MX/MXN



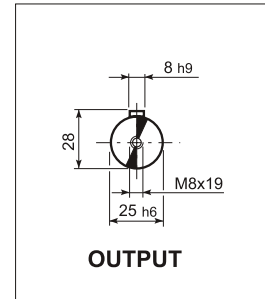
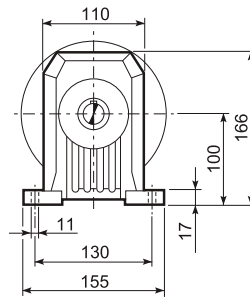
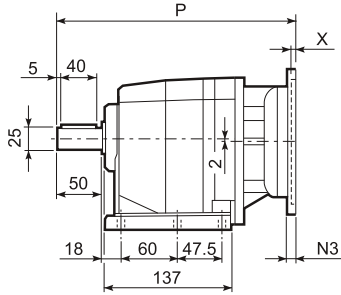
C 22_U						
	D1	D2	D3	G	T	S
FA	95	115	140	9	3	10
FB	110	130	160	9	3	10
FC	130	165	200	11	3.5	11

			AC	H	HF	L	AD		LF		M...FD		M...FA	
											R	AD	R	AD
C 22 2	S05	M05	121	160.5	154.5	399	95	8	465	10	96	119	116	95
C 22 2	S05	ME05	121	160.5	154.5	399	95	8	465	10	96	119	116	119
C 22 2	S05	MXN05	123	161.5	154.5	445.5	136	9.8	492.5	10.9	96	136	116	136
C 22 2	S1	M1	138	169	163	428	108	11	489	14	103	135	124	108
C 22 2	S1	ME1	138	169	163	428	108	11.4	489	14	103	135	124	135
C 22 2	S10	MXN10	138	169	163	457	137	13.8	516	16.2	103	138	121	138
C 22 2	S2	M2S	156	178	170	456	119	16	527	19	129	146	134	119
C 22 2	S2	ME2S	156	178	170	456	119	17.6	527	20.6	129	143	134	143
C 22 2	S2	MX2S	156	178	170	500	119	21.1	572	24.4	129	143	134	143
C 22 2	S20	MXN20	158	179	170	553.5	146	23.3	624.5	25.5	129	148	131	148
C 22 2	S3	ME3S	195	197.5	191.5	500	142	22.5	596	22.1	160	155	160	155
C 22 2	S3	MX3S	195	197.5	191.5	532	142	25.5	622	25.1	160	155	160	155
C 22 2	S3	ME3L	195	197.5	191.5	532	142	27	623	26.1	160	155	160	155
C 22 2	S3	MX3L	195	197.5	191.5	576	142	33	668	34	160	155	160	155
C 22 3	S05	M05	121	160.5	154.5	454.5	95	11	520.5	12	96	122	116	95
C 22 3	S05	ME05	121	160.5	154.5	454.5	95	11	527.5	12	96	119	116	119
C 22 3	S05	MXN05	123	161.5	154.5	501	136	12.8	548	13.9	96	136	116	136
C 22 3	S1	M1	138	169	163	483.5	108	13	544.5	15	103	135	124	108
C 22 3	S1	ME1	138	169	163	483.5	108	13	544.5	15	103	135	124	135
C 22 3	S10	MXN10	138	169	163	512.5	137	15.4	571.5	17.8	103	138	121	138
C 22 3	S2	ME2S	156	178	170	511.5	119	18	581.5	20.3	129	143	134	143
C 22 3	S2	MX2S	156	178	170	555.5	119	23.1	627.5	24.1	129	143	134	143
C 22 3	S20	MXN20	156	178	170	609	146	25.3	680	27.5	129	148	131	148
C 22 3	S3	ME3S	195	197.5	191.5	555.5	142	24.5	651.5	25.1	160	155	160	155
C 22 3	S3	MX3S	195	197.5	191.5	587.5	142	27.5	677.5	28.1	160	155	160	155
C 22 3	S3	ME3L	195	197.5	191.5	587.5	142	29	678.5	29.1	160	155	160	155
C 22 3	S3	MX3L	195	197.5	191.5	631.5	142	35	723.5	37	160	155	160	155

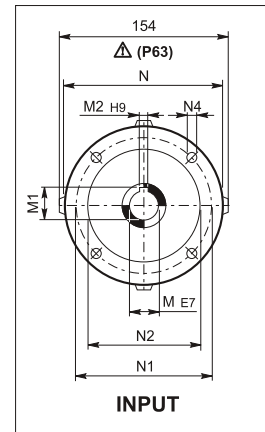
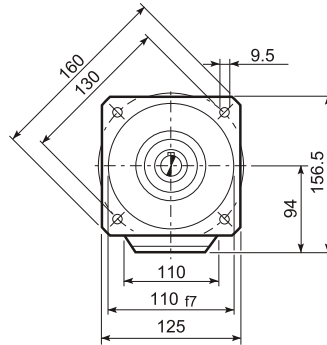
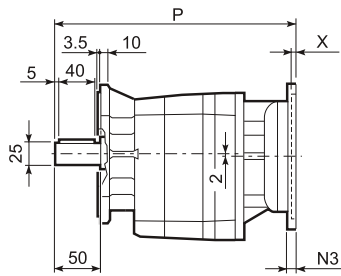


C 22...P(IEC)

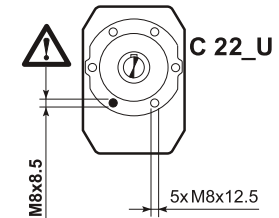
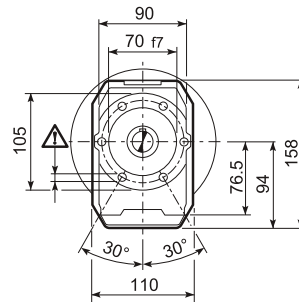
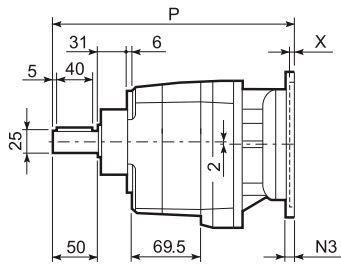
P



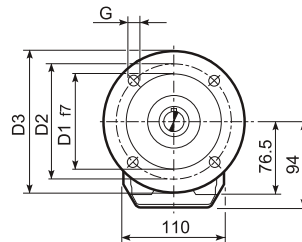
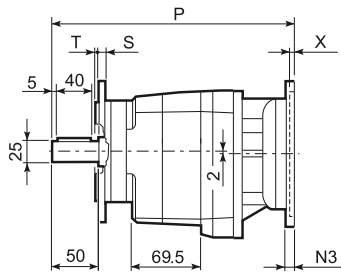
F



U

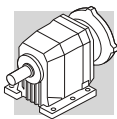


UF

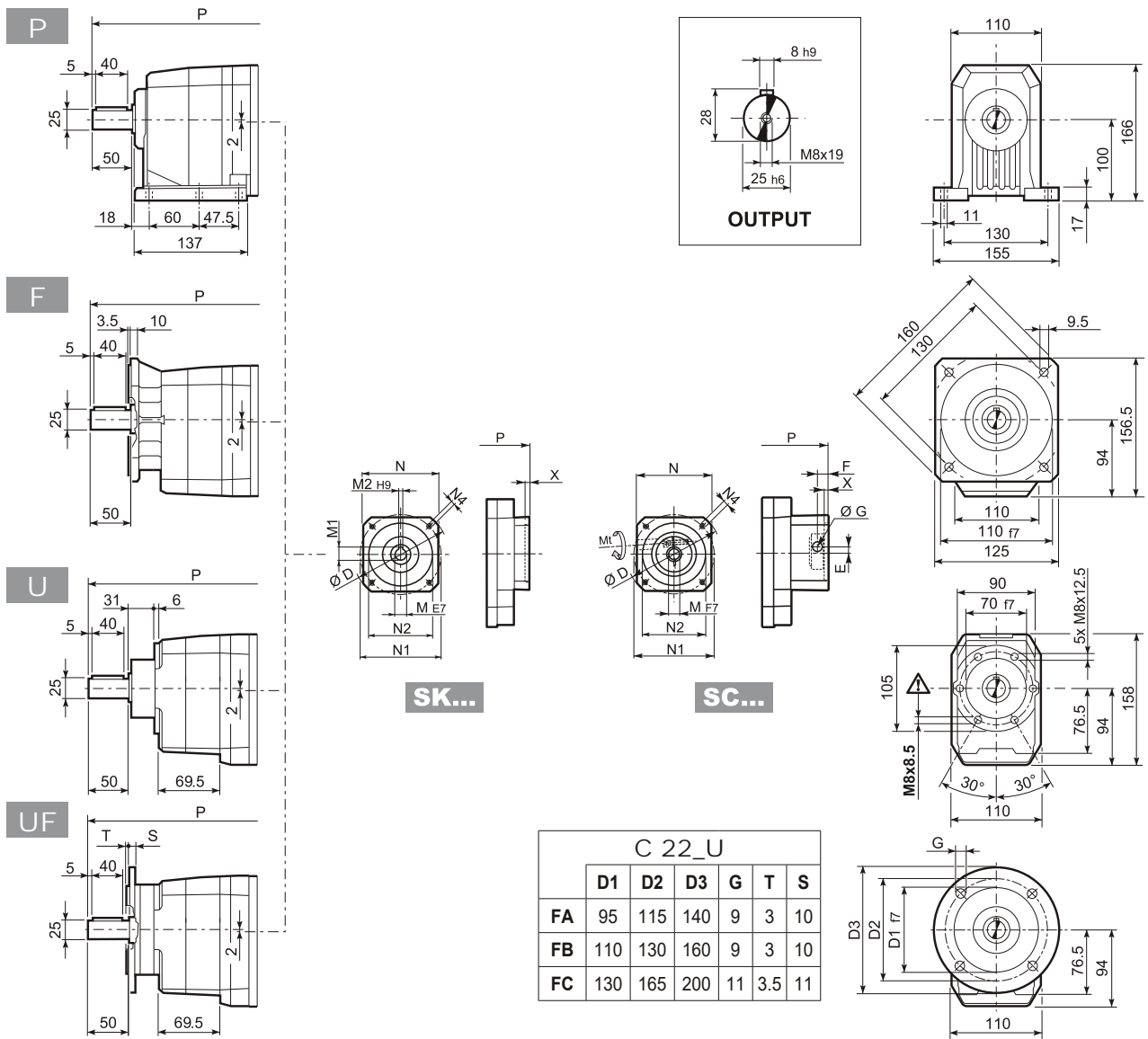


C 22_U						
	D1	D2	D3	G	T	S
FA	95	115	140	9	3	10
FB	110	130	160	9	3	10
FC	130	165	200	11	3.5	11

		M	M1	M2	N	N1	N2	N3	N4	X	P	
C 22 2	P63	11	12.8	4	140	115	95	—	M8x19	4	273	7
C 22 2	P71	14	16.3	5	160	130	110	—	M8x16	4.5	273	7
C 22 2	P80	19	21.8	6	200	165	130	—	M10x14.5	4	292.5	8
C 22 2	P90	24	27.3	8	200	165	130	—	M10x14.5	4	292.5	8
C 22 2	P100	28	31.3	8	250	215	180	—	M12x16	4.5	302.5	12
C 22 2	P112	28	31.3	8	250	215	180	—	M12x16	4.5	302.5	12
C 22 3	P63	11	12.8	4	140	115	95	—	M8x19	4	328.5	8
C 22 3	P71	14	16.3	5	160	130	110	—	M8x16	4.5	328.5	8
C 22 3	P80	19	21.8	6	200	165	130	—	M10x14.5	4	348	9
C 22 3	P90	24	27.3	8	200	165	130	—	M10x14.5	4	348	9
C 22 3	P100	28	31.3	8	250	215	180	—	M12x16	4.5	358	13
C 22 3	P112	28	31.3	8	250	215	180	—	M12x16	4.5	358	13



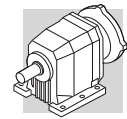
C 22...SK / SC



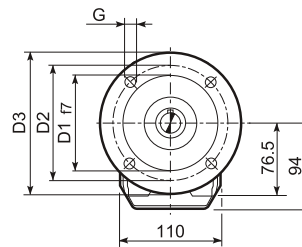
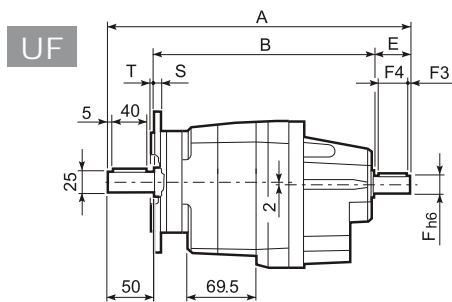
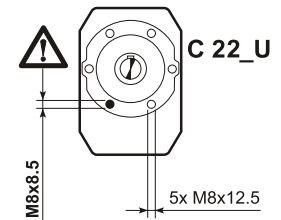
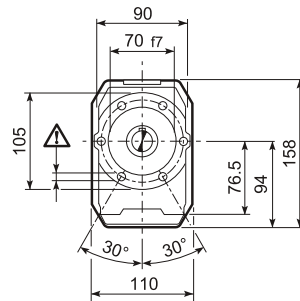
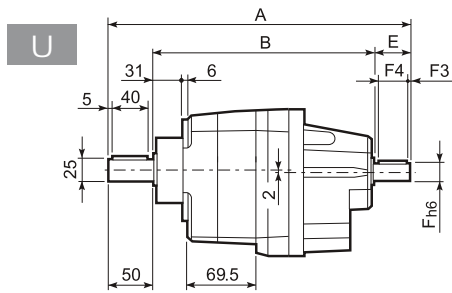
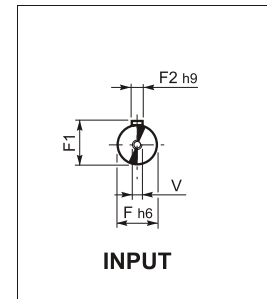
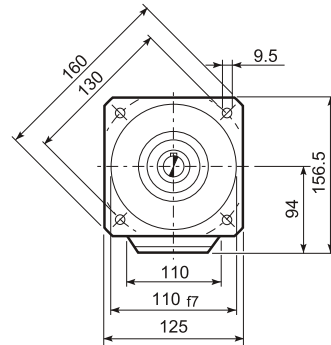
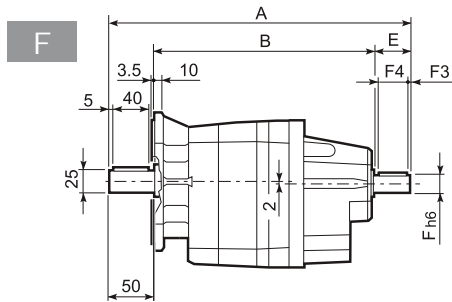
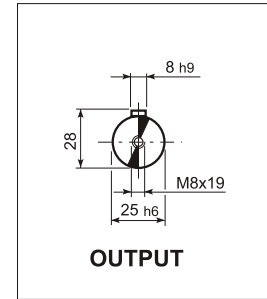
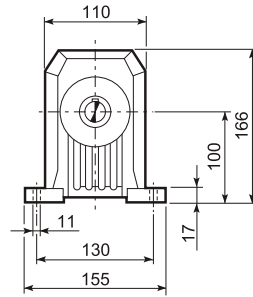
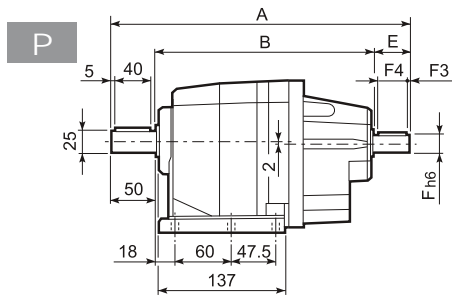
		D	M	M1	M2	N	N1	N2	N4	X	P		
											2x	3x	
C 22 2/3	SK60A*	102	11	12.8	4	82	75	60	M5x10	3.5	224.5	300	6/9
C 22 2/3	SK60B*	102	14	16.3	5	82	75	60	M5x10	4	251.5	307	7/8
C 22 2/3	SK80A*	115	14	16.3	5	90	100	80	M6x12	4	251.5	307	7/8
C 22 2/3	SK80C	120	19	21.8	6	96	100	80	M6x12	4	292.5	348	8/9
C 22 2/3	SK95A	130	14	16.3	5	102	115	95	M8x12	4	292.5	348	8/9
C 22 2/3	SK95B	130	19	21.8	6	102	115	95	M8x12	4	292.5	348	8/9
C 22 2/3	SK95C	130	24	27.3	8	102	115	95	M8x12	4	292.5	348	8/9
C 22 2/3	SK110A	150	19	21.8	6	120	130	110	M8x12	5	292.5	348	8/9
C 22 2/3	SK110B	150	24	27.3	8	120	130	110	M8x12	5	292.5	348	8/9

			Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	P		
														2x	3x	
C 22 2/3	SC60A*	M6	15	102	7	12.5	12.5	11	82	75	60	M5x10	4	271.5	327	7/8
C 22 2/3	SC60B*	M6	15	102	7	12.5	12.5	14	82	75	60	M5x10	4	271.5	327	8/9
C 22 2/3	SC80A*	M6	15	115	6	12.5	12.5	14	90	100	80	M6x12	4	271.5	327	8/9
C 22 2/3	SC80C	M6	15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	316	371.5	9/10
C 22 2/3	SC95A	M6	15	130	16.5	15	17.75	14	102	115	95	M8x16	4	316	371.5	9/10
C 22 2/3	SC95B	M6	15	130	16.5	15	17.75	19	102	115	95	M8x16	4	316	371.5	9/10
C 22 2/3	SC95C	M6	15	130	16.5	15	17.75	24	102	115	95	M8x16	4	316	371.5	9/10
C 22 2/3	SC110A	M6	15	150	16.5	16	17.75	19	120	130	110	M8x16	5	316	371.5	10/11
C 22 2/3	SC110B	M6	15	150	16.5	16	17.75	24	120	130	110	M8x16	5	316	371.5	10/11

* Contact our technical service department advising application data

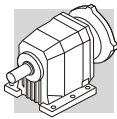


C 22...HS

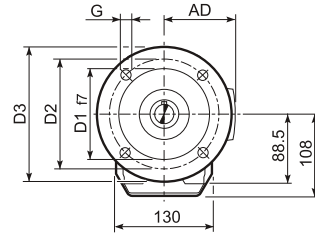
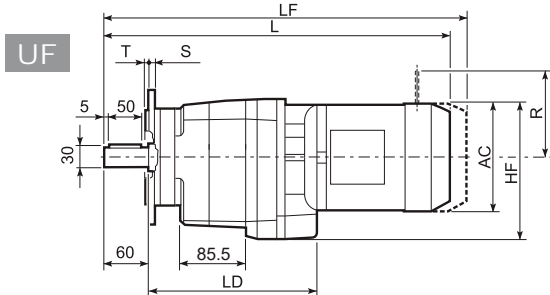
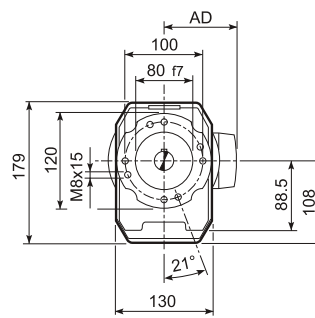
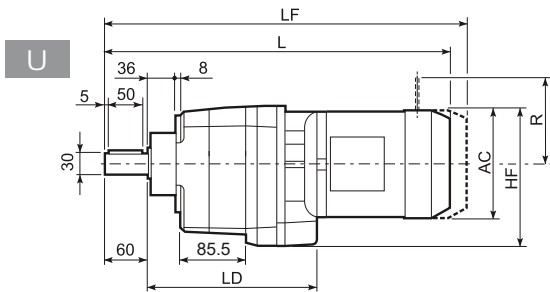
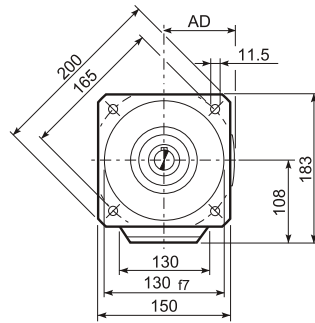
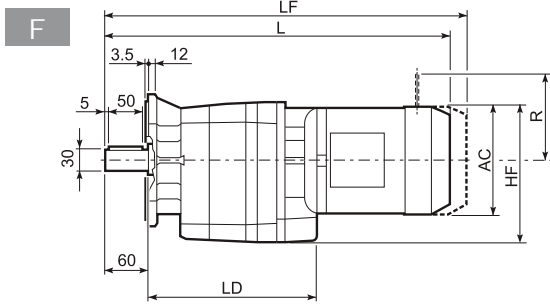
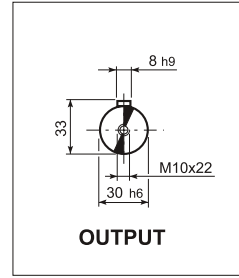
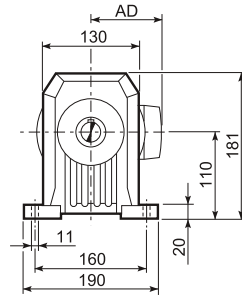
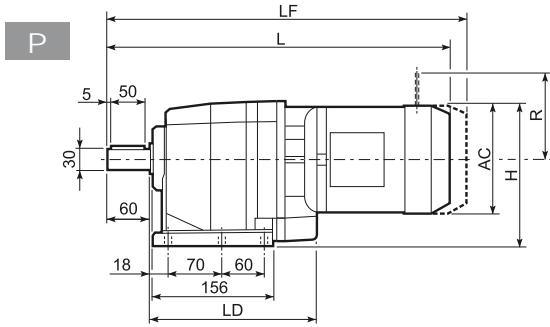


C 22_U						
	D1	D2	D3	G	T	S
FA	95	115	140	9	3	10
FB	110	130	160	9	3	10
FC	130	165	200	11	3.5	11

		A	B	E	F	F1	F2	F3	F4	V	
C 22 2	HS	323	233	40	19	21.5	6	2.5	35	M6x16	7.2
C 22 3		335.5	245.5	40	16	18	6	2.5	36	M6x16	7.5

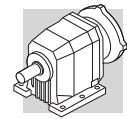


C 32...M/ME/MX/MXN



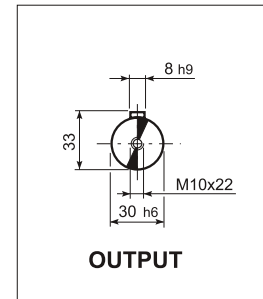
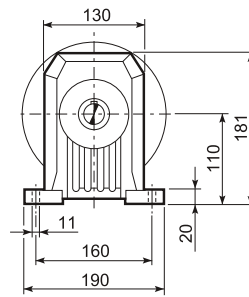
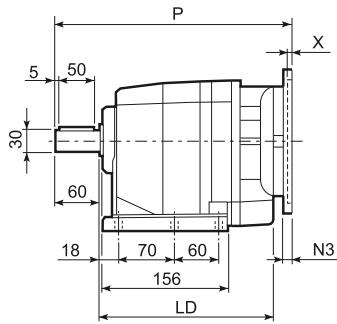
C 32_U						
	D1	D2	D3	G	T	S
FA	110	130	160	9	3	10
FB	130	165	200	11	3.5	11
FC	180	215	250	14	4	13

				AC	H	HF	L	LD	AD		LF		M...FD		M...FA	
													M...FD	M...FA	R	AD
C 32 2	S1	M1		138	179	177	462.5	205.5	108	14	523.5	16	103	135	124	108
C 32 2	S1	ME1		138	179	177	462.5	205.5	108	14	523.5	16	103	135	124	135
C 32 2	S1	MXN10		138	179	177	491	205.5	137	15.8	252.5	16.9	103	138	121	138
C 32 2	S2	ME2S		156	188	186	490.5	217.5	119	18	561.5	21	129	146	134	119
C 32 2	S2	ME2S		156	188	186	490.5	217.5	119	19.6	560.5	23.2	129	143	134	143
C 32 2	S2	MX2S		156	188	186	534.5	217.5	119	23.1	606.5	27	129	143	134	143
C 32 2	S3	ME3S		195	207.5	205.5	534.5	227.5	142	24.5	630.5	31	160	155	160	155
C 32 2	S3	ME3L	MX3S	195	207.5	205.5	566.5	227.5	142	32	656.5	35	160	155	160	155
C 32 2	S3	MX3L		195	207.5	205.5	610.5	227.5	142	38	702.5	36	160	155	160	155
C 32 2	S4	ME4	MX4	258	239	237	674.5	—	193	66	783.5	65	204	210	200	210
C 32 2	S4	ME4LB	MX4LA	258	239	237	709.5	—	193	74	807.5	87	226	210	217	210
C 32 3	S05	M05		121	170.5	168.5	491	—	95	13	557	15	96	122	116	95
C 32 3	S05	ME05		121	170.5	168.5	491	—	95	13	557	15	96	119	116	119
C 32 3	S05	MXN05		123	171.5	168.5	537.5	—	136	14.8	538.6	15.9	96	136	116	136
C 32 3	S1	M1		138	179	177	520	—	108	15	581	17	103	135	124	108
C 32 3	S1	ME1		138	179	177	520	—	108	15	581	17	103	135	124	135
C 32 3	S10	MXN10		138	179	177	549	—	137	17.4	608	19.8	103	138	121	138
C 32 3	S2	ME2S		156	188	186	548	—	119	18	618	26.2	129	143	134	143
C 32 3	S2	MX2S		156	188	186	592	—	119	23.1	664	30	129	143	134	143
C 32 3	S20	MXN20		158	189	186	645.5	—	146	25.3	716.5	27.5	129	148	131	148
C 32 3	S3	ME3S		195	207.5	205.5	592	—	142	25.5	688	34	160	155	160	155
C 32 3	S3	ME3L	MX3S	195	207.5	205.5	624	—	142	33	714	38	160	155	160	155
C 32 3	S3	MX3L		195	207.5	205.5	668	—	142	39	760	46	160	155	160	155

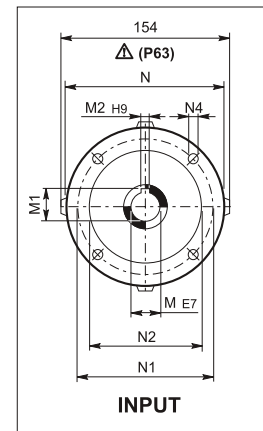
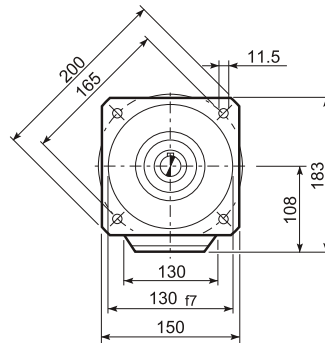
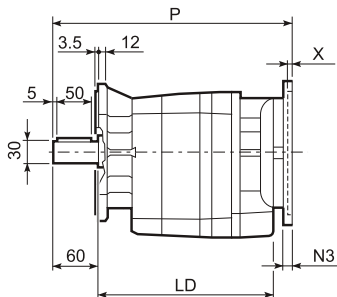


C 32...P(IEC)

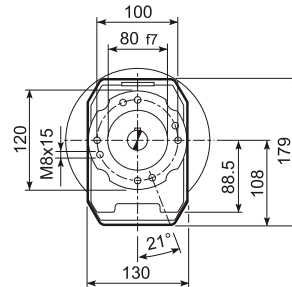
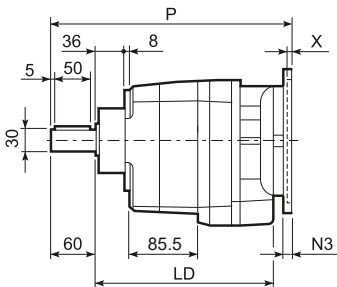
P



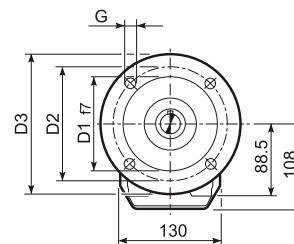
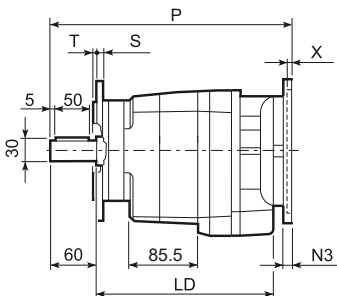
F



U

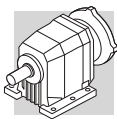


UF

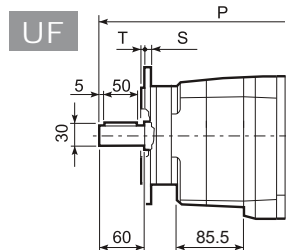
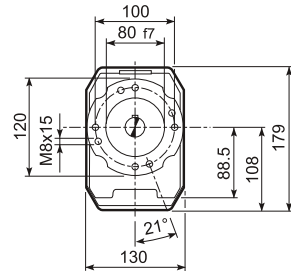
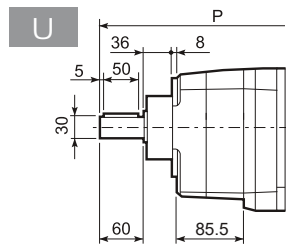
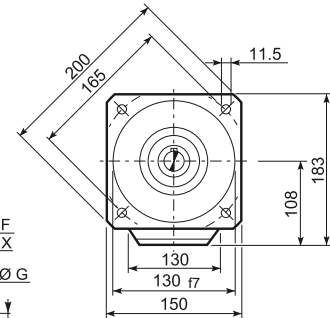
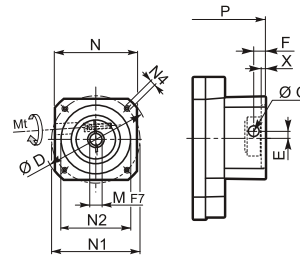
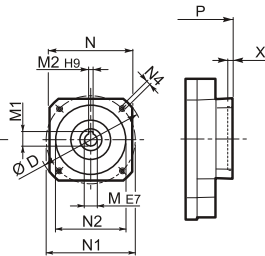
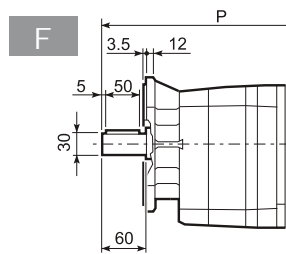
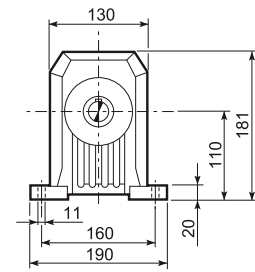
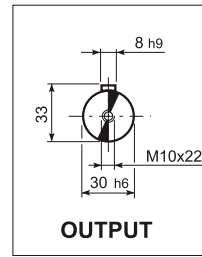
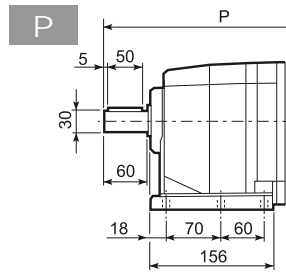


C 32_U						
	D1	D2	D3	G	T	S
FA	110	130	160	9	3	10
FB	130	165	200	11	3.5	11
FC	180	215	250	14	4	13

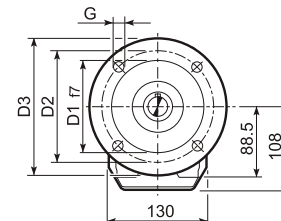
		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	
C 32 2	P63	217.5	11	12.8	4	140	115	95	—	M8x19	4	307.5	9
C 32 2	P71	217.5	14	16.3	5	160	130	110	—	M8x16	4.5	307.5	9
C 32 2	P80	227.5	19	21.8	6	200	165	130	—	M10x14.5	4	327	10
C 32 2	P90	227.5	24	27.3	8	200	165	130	—	M10x14.5	4	327	10
C 32 2	P100	227.5	28	31.3	8	250	215	180	—	M12x16	4.5	337	14
C 32 2	P112	227.5	28	31.3	8	250	215	180	—	M12x16	4.5	337	14
C 32 2	P132	—	38	41.3	10	300	265	230	16	14	5	373	17
C 32 3	P63	—	11	12.8	4	140	115	95	—	M8x19	4	365	10
C 32 3	P71	—	14	16.3	5	160	130	110	—	M8x16	4.5	365	10
C 32 3	P80	—	19	21.8	6	200	165	130	—	M10x14.5	4	384.5	11
C 32 3	P90	—	24	27.3	8	200	165	130	—	M10x14.5	4	384.5	11
C 32 3	P100	—	28	31.3	8	250	215	180	—	M12x16	4.5	394.5	15
C 32 3	P112	—	28	31.3	8	250	215	180	—	M12x16	4.5	394.5	15



C 32...SK / SC

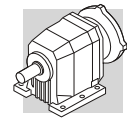


C 32_U						
	D1	D2	D3	G	T	S
FA	110	130	160	9	3	10
FB	130	165	200	11	3.5	11
FC	180	215	250	14	4	13

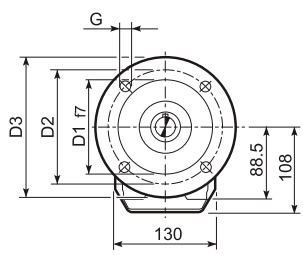
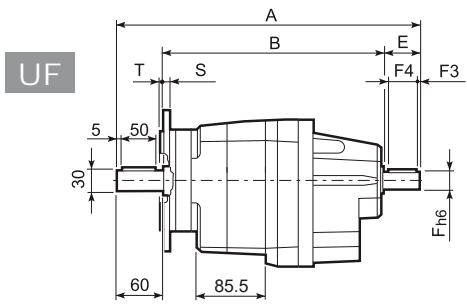
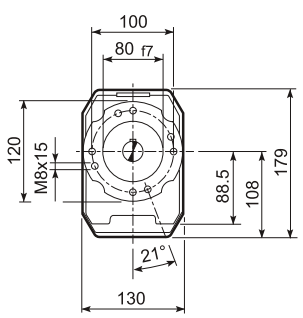
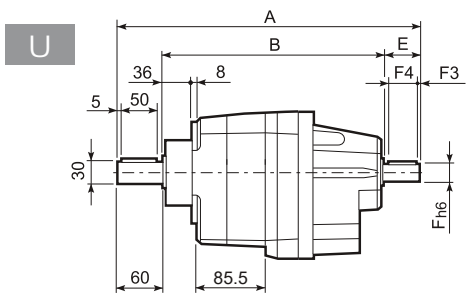
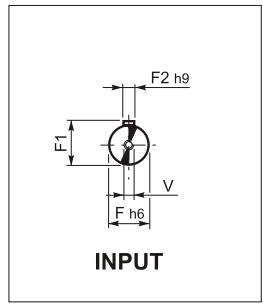
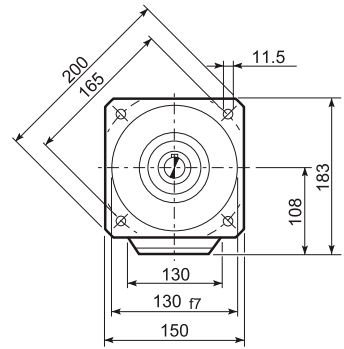
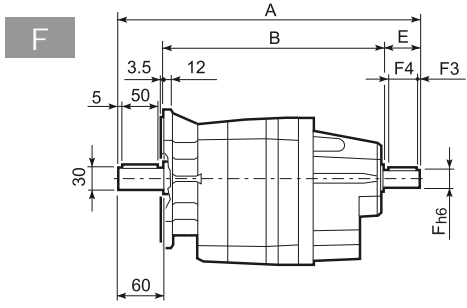
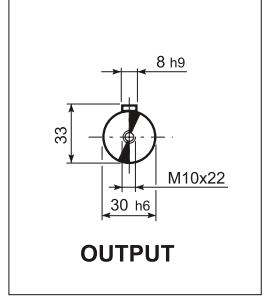
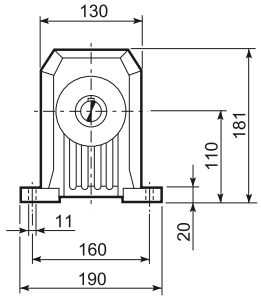
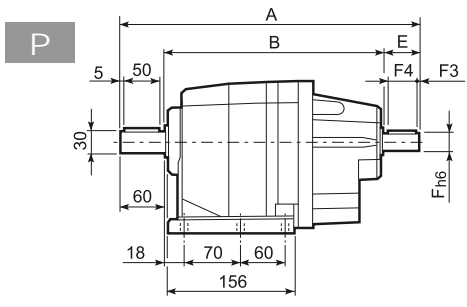


		D	M	M1	M2	N	N1	N2	N4	X	P		
											2x	3x	
C 32 2/3	SK60A	102	11	12.8	4	82	75	60	M5x10	3.5	279	336.5	8/9
C 32 2/3	SK60B	102	14	16.3	5	82	75	60	M5x10	4	286	343.5	9/10
C 32 2/3	SK80A	115	14	16.3	5	90	100	80	M6x12	4	286	343.5	9/10
C 32 2/3	SK80C	120	19	21.8	6	96	100	80	M6x12	4	327	384.5	10/11
C 32 2/3	SK95A	130	14	16.3	5	102	115	95	M8x12	4	327	384.5	10/11
C 32 2/3	SK95B	130	19	21.8	6	102	115	95	M8x12	4	327	384.5	10/11
C 32 2/3	SK95C	130	24	27.3	8	102	115	95	M8x12	4	327	384.5	10/11
C 32 2/3	SK110A	150	19	21.8	6	120	130	110	M8x12	5	327	384.5	10/11
C 32 2/3	SK110B	150	24	27.3	8	120	130	110	M8x12	5	327	384.5	10/11
C 32 2	SK130A	188	24	27.3	8	142	165	130	M10x20	5	327	—	11

		Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	P		
													2x	3x	
C 32 2/3	SC60A	M6 15	102	7	12.5	12.5	11	82	75	60	M5x10	4	306	363.5	9/10
C 32 2/3	SC60B	M6 15	102	7	12.5	12.5	14	82	75	60	M5x10	4	306	363.5	10/11
C 32 2/3	SC80A	M6 15	115	6	12.5	12.5	14	90	100	80	M6x12	4	306	363.5	10/11
C 32 2/3	SC80C	M6 15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	350.5	408	11/12
C 32 2/3	SC95A	M6 15	130	16.5	15	17.75	14	102	115	95	M8x16	4	350.5	408	11/12
C 32 2/3	SC95B	M6 15	130	16.5	15	17.75	19	102	115	95	M8x16	4	350.5	408	11/12
C 32 2/3	SC95C	M6 15	130	16.5	15	17.75	24	102	115	95	M8x16	4	350.5	408	11/12
C 32 2/3	SC 110A	M6 15	150	16.5	16	17.75	19	120	130	110	M8x16	5	350.5	408	12/13
C 32 2/3	SC 110B	M6 15	150	16.5	16	17.75	24	120	130	110	M8x16	5	350.5	408	12/13
C 32 2	SC 130A	M6 15	188	19	16	17.75	24	142	165	130	M10x20	5	350.5	—	13

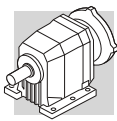


C 32...HS

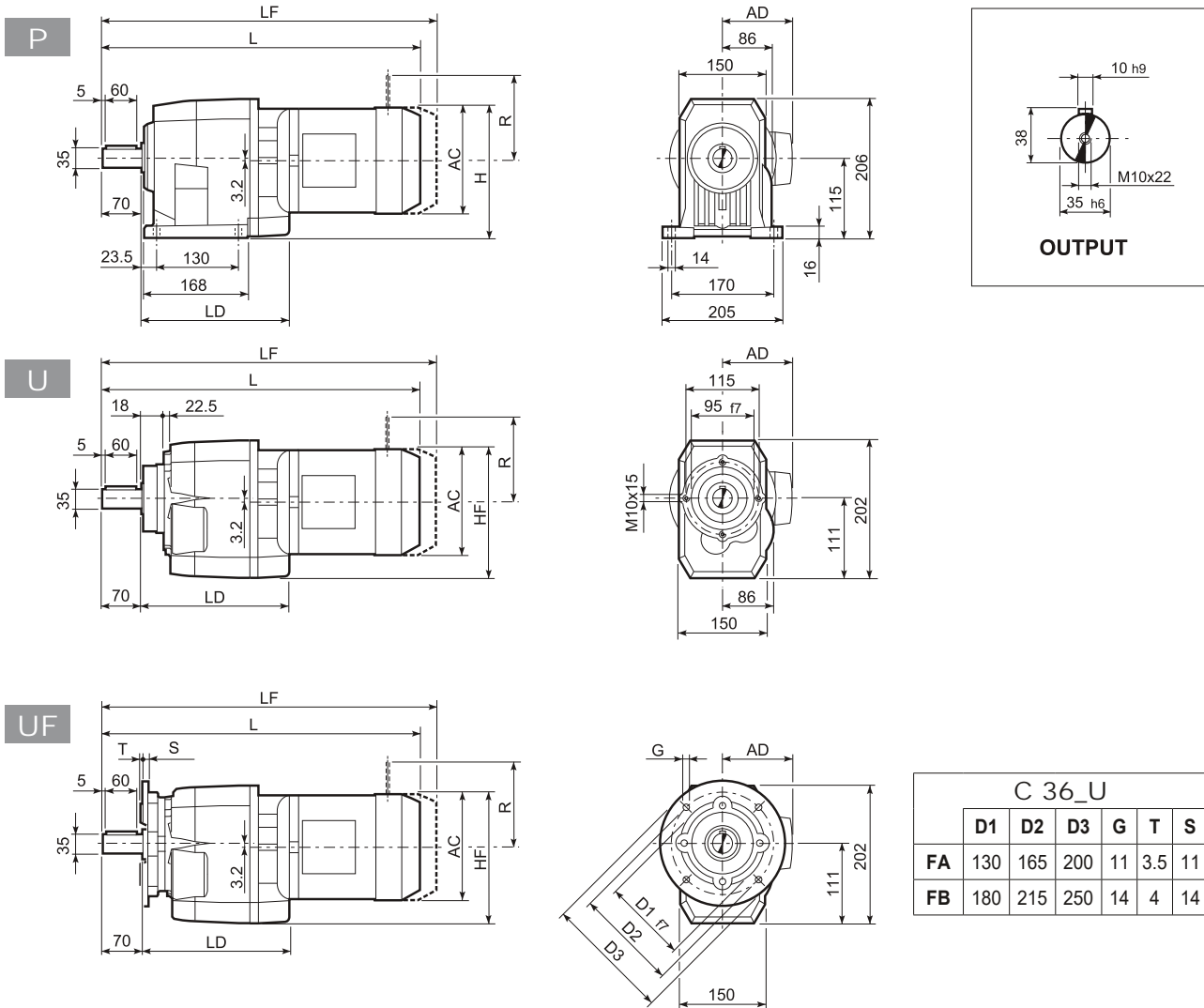


C 32_U						
	D1	D2	D3	G	T	S
FA	110	130	160	9	3	10
FB	130	165	200	11	3.5	11
FC	180	215	250	14	4	13

		A	B	E	F	F1	F2	F3	F4	V	
C 32 2	HS	357.5	257.5	40	19	21.5	6	2.5	35	M6x16	11.1
C 32 3		372	272	40	16	18	5	2.5	35	M6x16	10.6

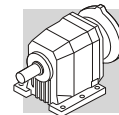


C 36...M/ME/MX/MXN



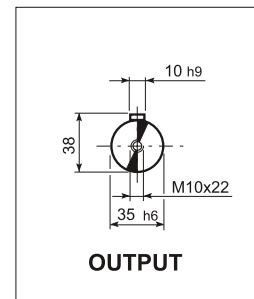
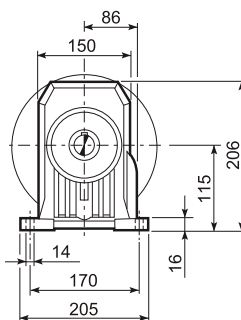
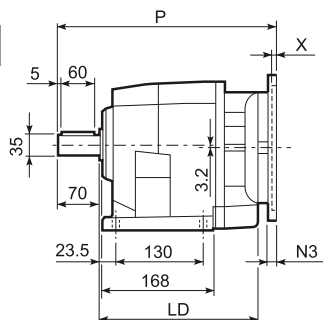
C 36_U					
	D1	D2	D3	G	S
FA	130	165	200	11	3.5
FB	180	215	250	14	4

			AC	H	HF	L	LD	AD		M...FD M...FA		M...FD		M...FA	
										LF		R	AD	R	AD
C 36 2/3	S1	M1	138	184	177	481	214	108	20	542	21	103	135	124	108
C 36 2/3	S1	ME1	138	184	177	481	214	108	19	542	21	103	135	124	135
C 36 2/3	S10	MXN10	138	184	177	510	214	137	21.4	569	23.5	103	138	121	138
C 36 2/3	S2	ME2S	156	193	186	509	226	119	23	579	29.2	129	143	134	143
C 36 2/3	S2	MX2S	156	193	186	553	226	119	28.1	625	33	129	155	134	155
C 36 2/3	S3	ME3S	195	212.5	205.5	553	236	142	29.5	649	37	160	155	160	155
C 36 2/3	S3	ME3L	195	212.5	205.5	585	236	142	37	675	41	160	155	160	155
C 36 2/3	S3	MX3L	195	212.5	205.5	629	236	142	43	721	49	160	155	160	155
C 36 2/3	S4	ME4	258	244	240	693.5	—	193	71	802.5	83	204	210	200	210
C 36 2/3	S4	ME4LB	258	244	240	728.5	—	193	79	826.5	93	204	210	226	210
C 36 4	S05	M05	121	175.5	168.5	509.5	—	95	19	575.5	20	96	122	116	95
C 36 4	S05	ME05	121	175.5	168.5	509.5	—	95	19	575.5	20	96	119	116	119
C 36 4	S05	MXN05	123	176.5	168.5	556	—	136	20.8	603	21.9	96	136	116	136
C 36 4	S1	M1	138	184	177	538.5	—	108	21	599.5	22	103	135	124	108
C 36 4	S1	ME1	138	184	177	538.5	—	108	21	599.5	22	103	135	124	135
C 36 4	S10	MXN10	138	184	177	567.5	—	137	23.4	626.5	25.8	103	138	121	138
C 36 4	S2	ME2S	156	193	186	566.5	—	119	24	636.5	30	129	143	134	143
C 36 4	S2	MX2S	156	193	186	610.5	—	119	29.1	682.5	34	129	155	134	155
C 36 4	S20	MXN20	158	194	186	663.5	—	146	31.3	734.5	33.5	129	148	131	148
C 36 4	S3	ME3S	195	212.5	205.5	610.5	—	142	31	706.5	38	160	155	160	155
C 36 4	S3	ME3L	195	212.5	205.5	642.5	—	142	38	732.5	42	160	155	160	155
C 36 4	S3	MX3L	195	212.5	205.5	686.5	—	142	44	778.5	50	160	155	160	155

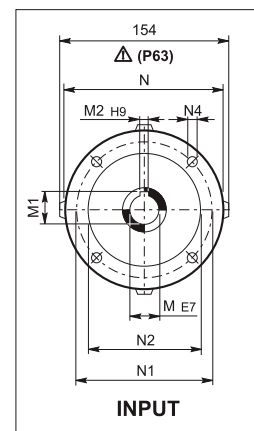
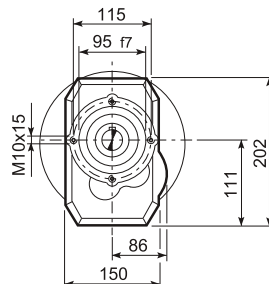
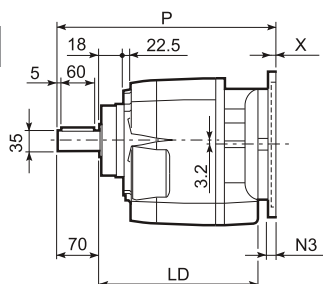


C 36...P(IEC)

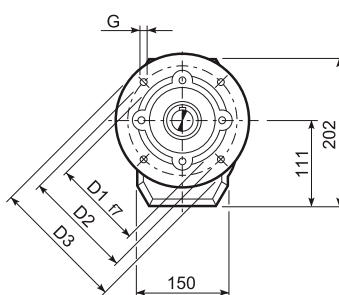
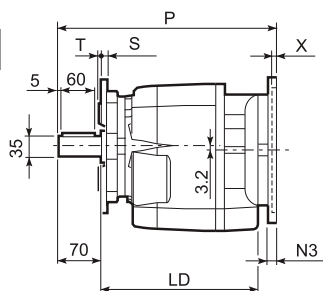
P




U

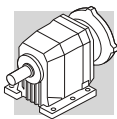


UF

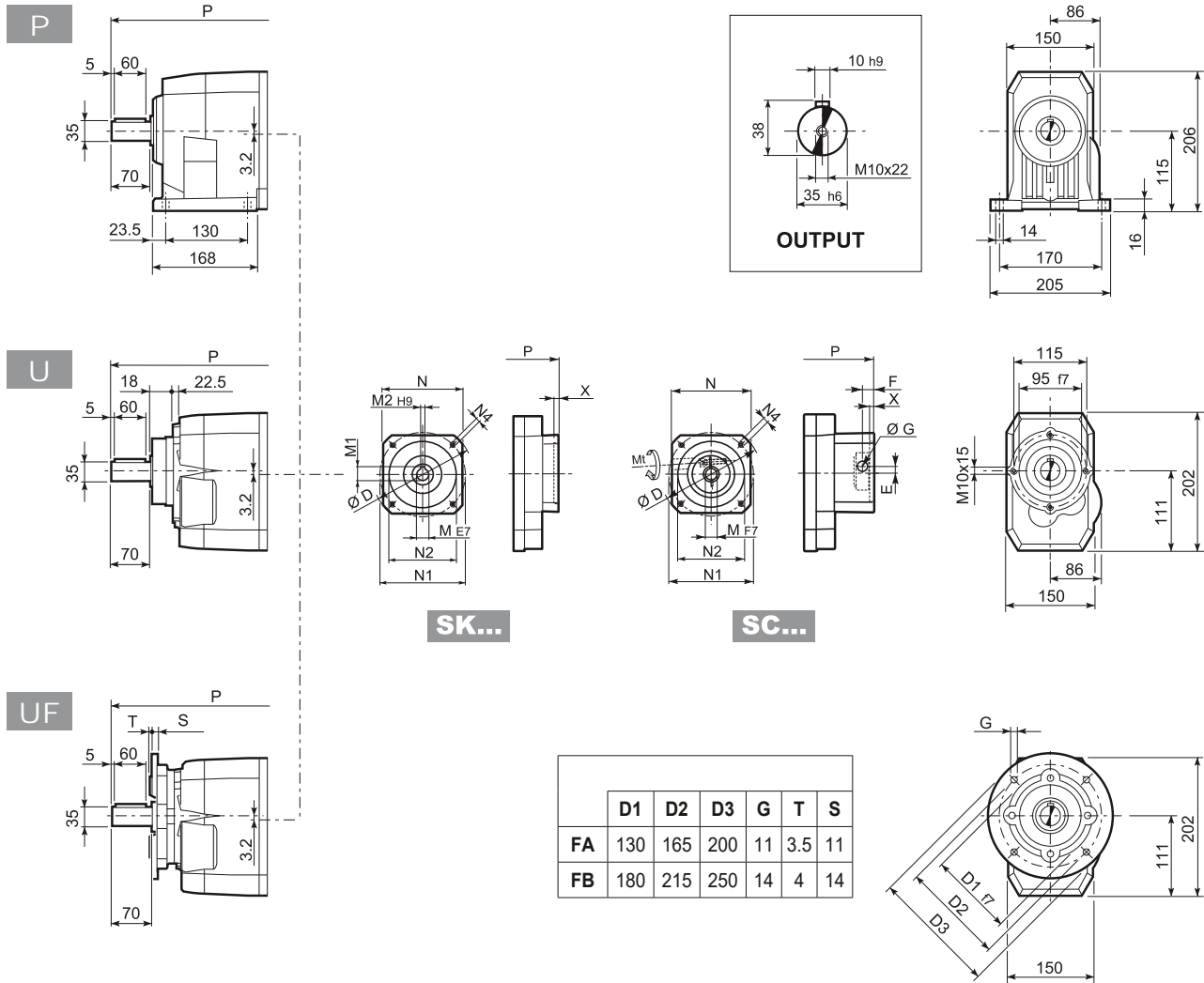


C 36_U		D1	D2	D3	G	T	S
FA	130	165	200	11	3.5	11	
FB	180	215	250	14	4	14	

		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	
C 36 2/3	P63	226	11	12.8	4	140	115	95	—	M8x19	4	326	17
C 36 2/3	P71	226	14	16.3	5	160	130	110	—	M8x16	4.5	326	17
C 36 2/3	P80	236	19	21.8	6	200	165	130	—	M10x14.5	4	345.5	18
C 36 2/3	P90	236	24	27.3	8	200	165	130	—	M10x14.5	4	345.5	18
C 36 2/3	P100	236	28	31.3	8	250	215	180	—	M12x16	4.5	355.5	22
C 36 2/3	P112	236	28	31.3	8	250	215	180	—	M12x16	4.5	355.5	22
C 36 2/3	P132	—	38	41.3	10	300	265	230	16	14	5	392.5	25
C 36 4	P63	—	11	12.8	4	140	115	95	—	M8x19	4	383.5	20
C 36 4	P71	—	14	16.3	5	160	130	110	—	M8x16	4.5	383.5	20
C 36 4	P80	—	19	21.8	6	200	165	130	—	M10x14.5	4	403	21
C 36 4	P90	—	24	27.3	8	200	165	130	—	M10x14.5	4	403	21
C 36 4	P100	—	28	31.3	8	250	215	180	—	M12x16	4.5	413	25
C 36 4	P112	—	28	31.3	8	250	215	180	—	M12x16	4.5	413	25

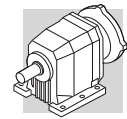


C 36...SK / SC



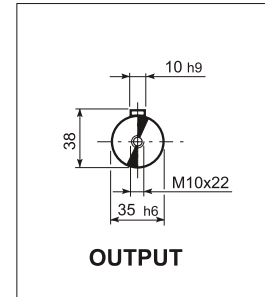
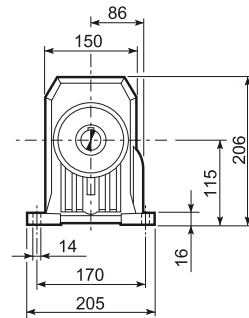
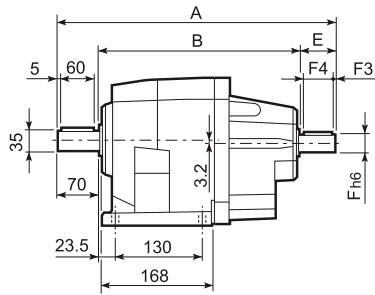
		D	M	M1	M2	N	N1	N2	N4	X	P		
											2/3x	4x	
C 36 2/3/4	SK60A	102	11	12.8	4	82	75	60	M5x10	3.5	297.5	355	16/16/19
C 36 2/3/4	SK60B	102	14	16.3	5	82	75	60	M5x10	4	304.5	362	17/17/20
C 36 2/3/4	SK80A	115	14	16.3	5	90	100	80	M6x12	4	304.5	362	18/18/21
C 36 2/3/4	SK80C	120	19	21.8	6	96	100	80	M6x12	4	304.5	403	18/18/21
C 36 2/3/4	SK95A	130	14	16.3	5	102	115	95	M8x12	4	345.5	403	18/18/21
C 36 2/3/4	SK95B	130	19	21.8	6	102	115	95	M8x12	4	345.5	403	18/18/21
C 36 2/3/4	SK95C	130	24	27.3	8	102	115	95	M8x12	4	345.5	403	18/18/21
C 36 2/3/4	SK110A	150	19	21.8	6	120	130	110	M8x12	5	345.5	403	18/18/21
C 36 2/3/4	SK110B	150	24	27.3	8	120	130	110	M8x12	5	345.5	403	18/18/21
C 36 2/3	SK130A	188	24	27.3	8	142	165	130	M10x20	5	345.5	—	19/19

			Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	P		
														2/3x	4x	
C 36 2/3/4	SC60A	M6	15	102	7	12.5	12.5	11	82	75	60	M5x10	4	324.5	382	17/17/20
C 36 2/3/4	SC60B	M6	15	102	7	12.5	12.5	14	82	75	60	M5x10	4	324.5	382	18/18/21
C 36 2/3/4	SC80A	M6	15	115	6	12.5	12.5	14	90	100	80	M6x12	4	324.5	426.5	18/18/21
C 36 2/3/4	SC80C	M6	15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	369	426.5	19/19/22
C 36 2/3/4	SC95A	M6	15	130	16.5	15	17.75	14	102	115	95	M8x16	4	369	426.5	19/19/22
C 36 2/3/4	SC95B	M6	15	130	16.5	15	17.75	19	102	115	95	M8x16	4	369	426.5	19/19/22
C 36 2/3/4	SC95C	M6	15	130	16.5	15	17.75	24	102	115	95	M8x16	4	369	426.5	19/19/22
C 36 2/3/4	SC110A	M6	15	150	16.5	16	17.75	19	120	130	110	M8x16	5	369	426.5	21/21/24
C 36 2/3/4	SC110B	M6	15	150	16.5	16	17.75	24	120	130	110	M8x16	5	369	426.5	21/21/24
C 36 2/3	SC130A	M6	15	188	19	16	17.75	24	142	165	130	M10x20	5	369	—	22/22

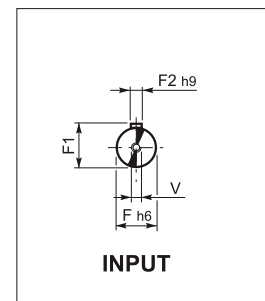
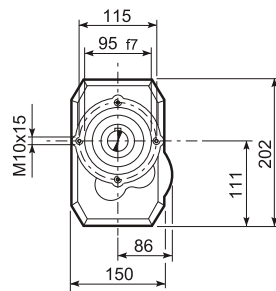
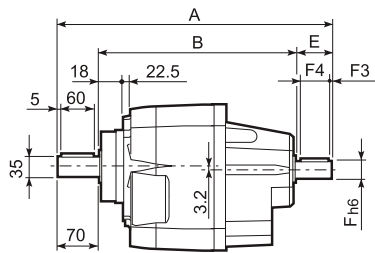


C 36...HS

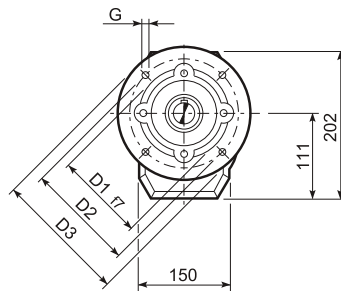
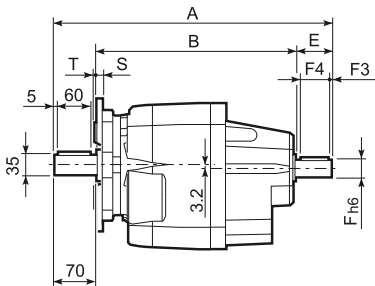
P



U

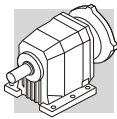


UF

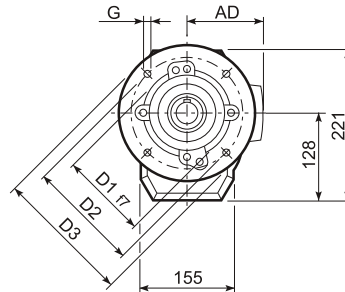
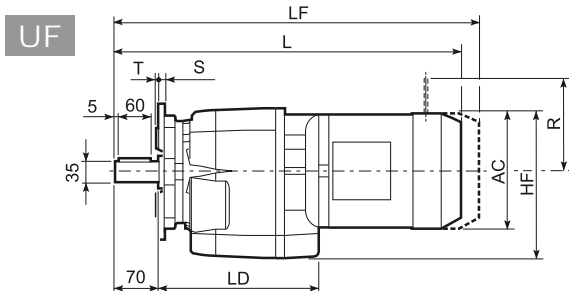
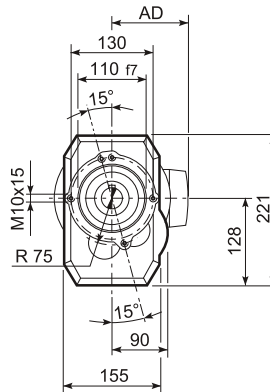
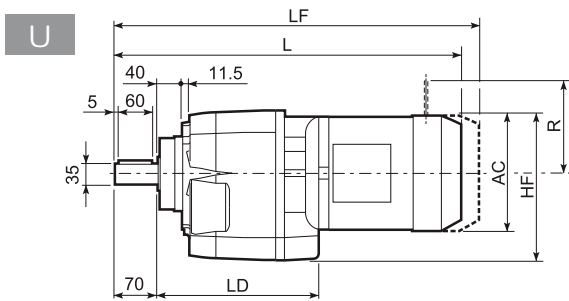
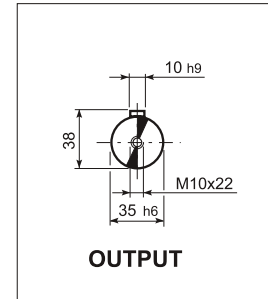
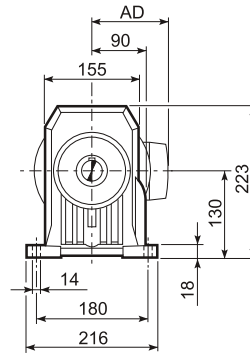
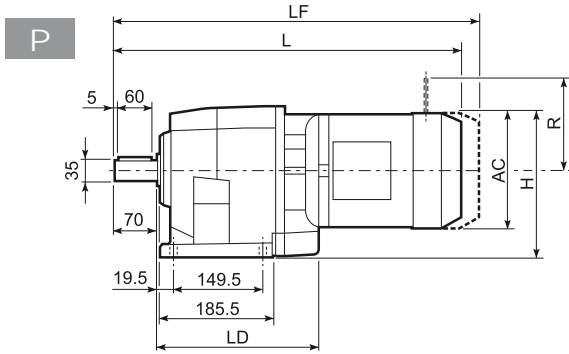


C 36_U						
	D1	D2	D3	G	T	S
FA	130	165	200	11	3.5	11
FB	180	215	250	14	4	14

		A	B	E	F	F1	F2	F3	F4	V	
C 36 2	HS	415.5	295.5	50	24	27	8	2.5	45	M8x19	25.5
C 36 3		415.5	295.5	50	24	27	8	2.5	45	M8x19	25.5
C 36 4		390.5	280.5	40	16	18	5	2.5	36	M6x16	26.5

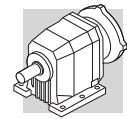


C 41...M/ME/MX/MXN



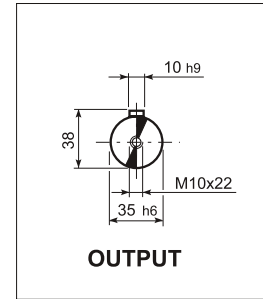
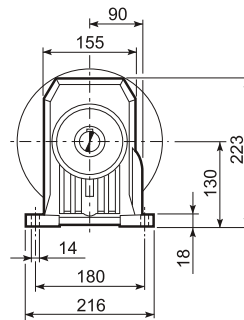
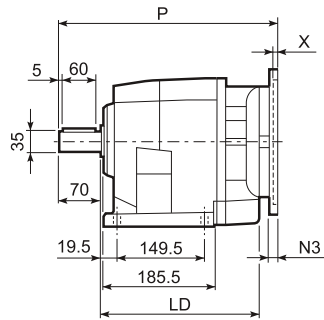
C 41_U					
	D1	D2	D3	G	S
FA	130	165	200	11	3.5
FB	180	215	250	14	4

			AC	H	HF	L	LD	AD		M...FD M...FA		M...FD		M...FA	
										LF		R	AD	R	AD
C 41 2/3	S1	M1	138	199	197	491.5	220	108	25	552.5	28	103	135	124	108
C 41 2/3	S1	ME1	138	199	197	491.5	220	108	24	552.5	28	103	135	124	135
C 41 2/3	S2	ME2S	156	208	206	519.5	235.5	119	31	576.5	34	129	143	134	143
C 41 2/3	S2	MX2S	156	208	206	563.5	235.5	119	36	635.5	38	129	143	134	143
C 41 2/3	S3	ME3S	195	227.5	225.5	563.5	251.5	142	38	659.5	41	160	155	160	155
C 41 2/3	S3	ME3L	195	227.5	225.5	595.5	251.5	142	45	685.5	46	160	155	160	155
C 41 2/3	S3	MX3L	195	227.5	225.5	639.5	251.5	142	51	701.5	54	160	155	160	155
C 41 2/3	S4	ME4	258	259	257	703.5	—	193	71	812.5	88	204	210	200	210
C 41 2/3	S4	ME4LB	258	259	257	739	—	193	78	837	98	204	210	226	210
C 41 4	S05	M05	121	245.5	243.5	524	—	95	27	590	28	96	122	116	95
C 41 4	S05	ME05	121	245.5	243.5	524	—	95	27	590	28	96	119	116	119
C 41 4	S05	MXN05	123	246.5	243.5	570.5	—	136	28.8	617.5	29.9	96	136	116	136
C 41 4	S1	M1	138	199	197	553	—	108	28	614	31	103	135	124	108
C 41 4	S1	ME1	138	199	197	553	—	108	27	614	31	103	135	124	135
C 41 4	S10	MXN10	138	199	197	582	—	137	29.4	641	31.8	103	138	121	138
C 41 4	S2	ME2S	156	208	206	581	—	119	34	651	37	129	143	134	143
C 41 4	S2	MX2S	156	208	206	625	—	119	39	697	41	129	143	134	143
C 41 4	S20	MXN20	158	209	206	677.5	—	146	41.2	748.5	43.4	129	148	131	148
C 41 4	S3	ME3S	195	227.5	225.5	625	—	142	41	721	44	160	155	160	155
C 41 4	S3	ME3L	195	227.5	225.5	657	—	142	48	747	49	160	155	160	155
C 41 4	S3	MX3L	195	227.5	225.5	701	—	142	54	793	57	160	155	160	155

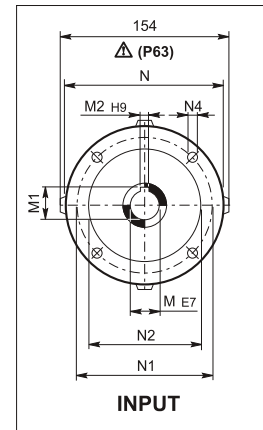
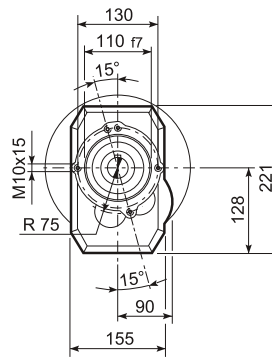
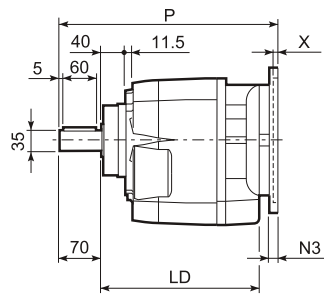


C 41...P(IEC)

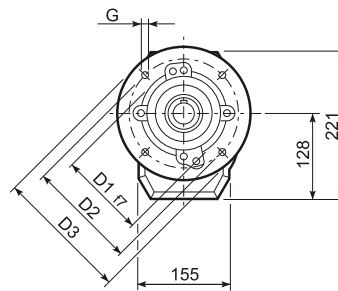
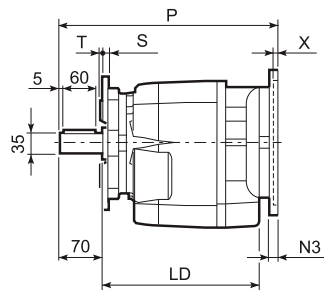
P




U

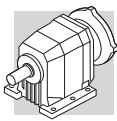


UF

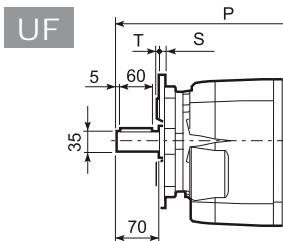
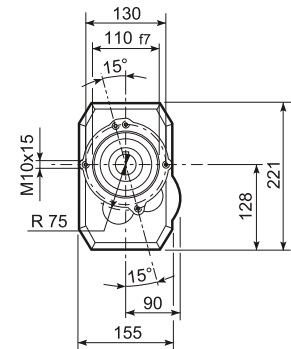
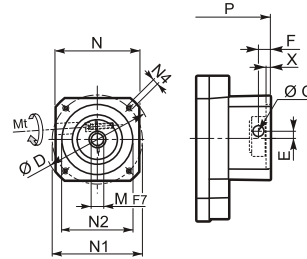
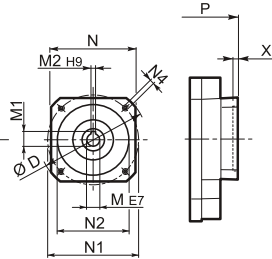
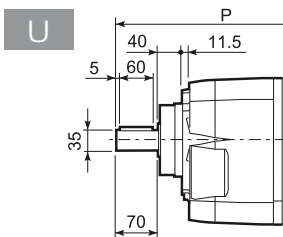
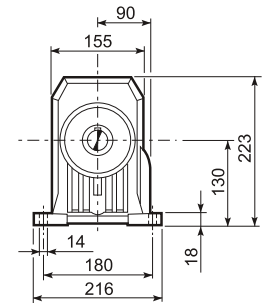
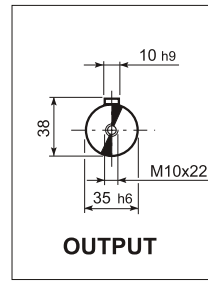
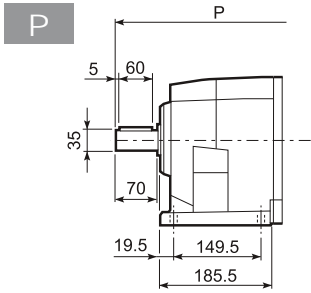


C 41_U						
	D1	D2	D3	G	T	S
FA	130	165	200	11	3.5	11
FB	180	215	250	14	4	13

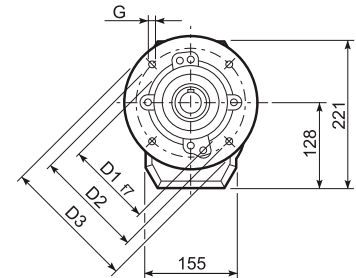
		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	
C 41 2/3	P63	235.5	11	12.8	4	140	115	95	—	M8x19	4	336.5	27
C 41 2/3	P71	235.5	14	16.3	5	160	130	110	—	M8x16	4.5	336.5	28
C 41 2/3	P80	251.5	19	21.8	6	200	165	130	—	M10x14.5	4	356	29
C 41 2/3	P90	251.5	24	27.3	8	200	165	130	—	M10x14.5	4	356	29
C 41 2/3	P100	—	28	31.3	8	250	215	180	—	M12x16	4.5	366	33
C 41 2/3	P112	—	28	31.3	8	250	215	180	—	M12x16	4.5	366	33
C 41 2/3	P132	—	38	41.3	10	300	265	230	16	14	5	402.5	35
C 41 4	P63	—	11	12.8	4	140	115	95	—	M8x19	4	395	30
C 41 4	P71	—	14	16.3	5	160	130	110	—	M8x16	4.5	395	31
C 41 4	P80	—	19	21.8	6	200	165	130	—	M10x14.5	4	414.5	32
C 41 4	P90	—	24	27.3	8	200	165	130	—	M10x14.5	4	414.5	32
C 41 4	P100	—	28	31.3	8	250	215	180	—	M12x16	4.5	424.5	36
C 41 4	P112	—	28	31.3	8	250	215	180	—	M12x16	4.5	424.5	36



C 41...SK / SC

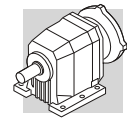


C 41_U					
	D1	D2	D3	G	S
FA	130	165	200	11	3.5
FB	180	215	250	14	4



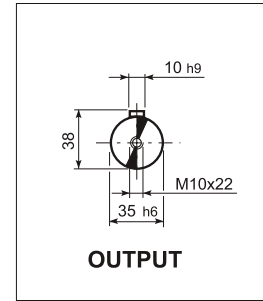
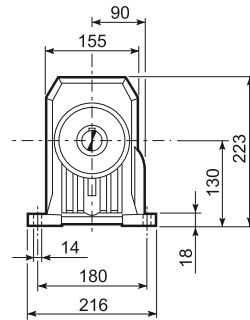
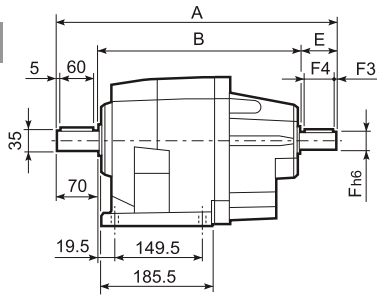
		D	M	M1	M2	N	N1	N2	N4	X	P		
											2/3x	4x	
C41 4	SK60A	102	11	12.8	4	82	75	60	M5x10	3.5	—	370	31
C41 4	SK60B	102	14	16.3	5	82	75	60	M5x10	4	—	377	32
C41 4	SK80A	115	14	16.3	5	90	100	80	M6x12	4	—	377	32
C41 2/3	SK80B	120	14	16.3	5	96	100	80	M6x12	4	356.5	—	29/29
C41 2/3/4	SK80C	120	19	21.8	6	96	100	80	M6x12	4	356.5	418	29/29/32
C41 2/3/4	SK95A	130	14	16.3	5	102	115	95	M8x12	4	356.5	418	29/29/32
C41 2/3/4	SK95B	130	19	21.8	6	102	115	95	M8x12	4	356.5	418	29/29/33
C41 2/3/4	SK95C	130	24	27.3	8	102	115	95	M8x12	4	356.5	418	29/29/36
C41 2/3/4	SK110A	150	19	21.8	6	120	130	110	M8x12	5	356.5	418	29/29/36
C41 2/3/4	SK110B	150	24	27.3	8	120	130	110	M8x12	5	356.5	418	29/29/36
C41 2/3	SK130A	188	24	27.3	8	142	165	130	M10x20	5	356.5	—	31/31
C41 2/3	SK130B	189	32	35.3	10	160	165	130	M10x20	5	403	—	33/33
C41 2/3	SK180A	240	32	35.3	10	192	215	180	M12x19	5	403	—	33/33
C41 2/3	SK180B	240	38	41.3	10	192	215	180	M12x19	5	403	—	38/38

			Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	P		
														2/3x	4x	
C41 4	SC60A	M6	15	102	7	12.5	12.5	11	82	75	60	M5x10	4	—	397	32
C41 4	SC60B	M6	15	102	7	12.5	12.5	14	82	75	60	M5x10	4	—	397	33
C41 4	SC80A	M6	15	115	6	12.5	12.5	14	90	100	80	M6x12	4	—	397	33
C41 2/3	SC80B	M6	15	120	15.5	14.5	17.75	14	96	100	80	M6x12	4	380	—	30/30
C41 2/3/4	SC80C	M6	15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	380	441.5	30/30/33
C41 2/3/4	SC95A	M6	15	130	16.5	15	17.75	14	102	115	95	M8x16	4	380	441.5	30/30/34
C41 2/3/4	SC95B	M6	15	130	16.5	15	17.75	19	102	115	95	M8x16	4	380	441.5	30/30/34
C41 2/3/4	SC95C	M6	15	130	16.5	15	17.75	24	102	115	95	M8x16	4	380	441.5	30/30/35
C41 2/3/4	SC110A	M6	15	150	16.5	16	17.75	19	120	130	110	M8x16	5	380	441.5	31/31/39
C41 2/3/4	SC110B	M6	15	150	16.5	16	17.75	24	120	130	110	M8x16	5	380	441.5	31/31/39
C41 2/3	SC130A	M6	15	188	19	16	17.75	24	142	165	130	M10x20	5	380	—	32/32
C41 2/3	SC130B	M8	36	189	20	17	17.75	32	160	165	130	M10x20	5	426	—	36/36
C41 2/3	SC180A	M8	36	240	20	17.5	17.75	32	192	215	180	M12x24	5	430	—	36/36
C41 2/3	SC180B	M8	36	240	20	17.5	17.75	38	192	215	180	M12x24	5	430	—	35/35

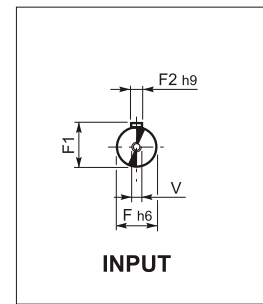
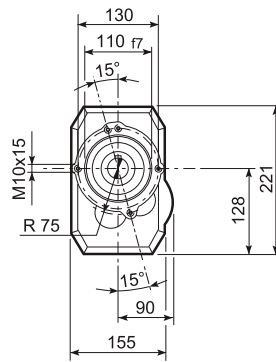
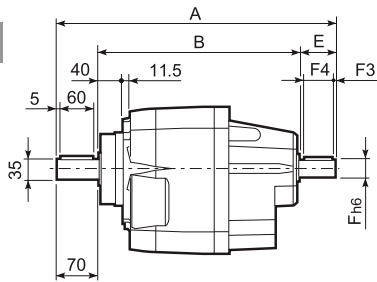


C 41...HS

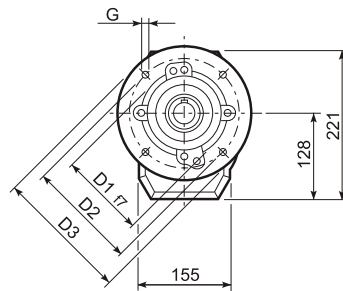
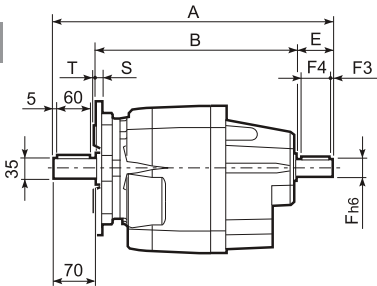
P




U

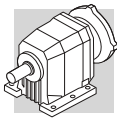


UF

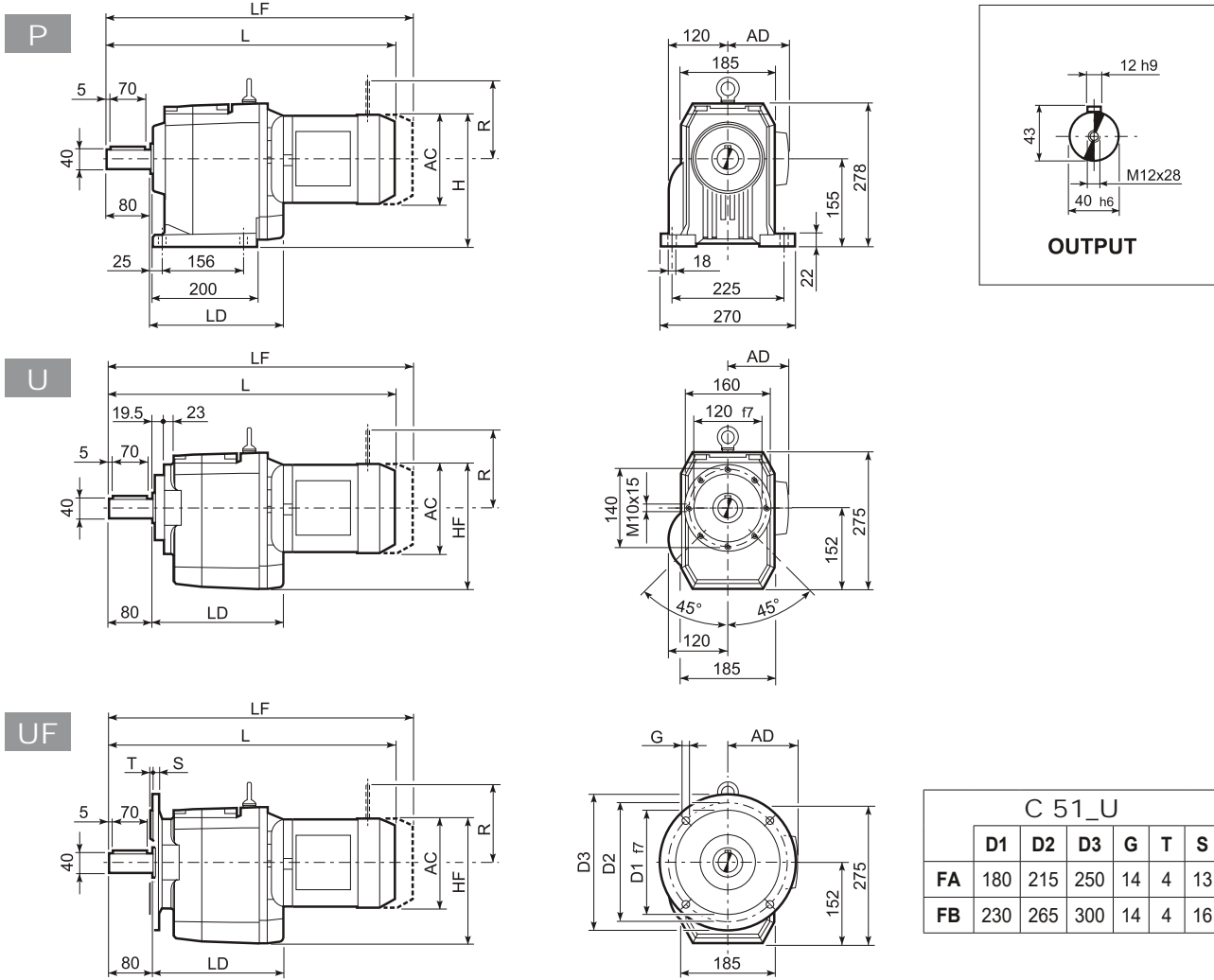


C 41_U		D1	D2	D3	G	T	S
FA	130	165	200	11	3.5	11	
FB	180	215	250	14	4	13	

		A	B	E	F	F1	F2	F3	F4	V	
C 41 2	HS	425.5	305.5	50	24	27	8	2.5	45	M8x19	30
C 41 3		425.5	305.5	50	24	27	8	2.5	45	M8x19	30
C 41 4		448	338	40	19	21.5	6	2.5	35	M6x16	33

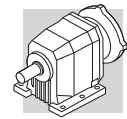


C 51...M/ME/MX/MXN



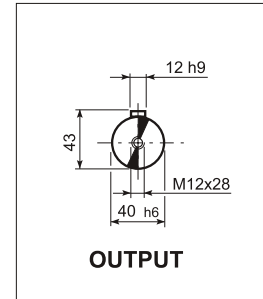
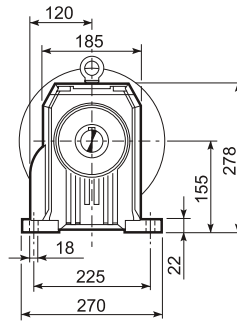
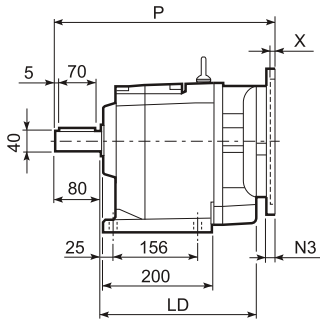
C 51_U						
	D1	D2	D3	G	T	S
FA	180	215	250	14	4	13
FB	230	265	300	14	4	16

				AC	H	HF	L	LD	AD		M...FD M...FA		M...FD		M...FA	
											LF		R	AD	R	AD
C 51 2/3	S1	M1		138	224	221	517.5	—	108	49	578.5	52	103	135	124	108
C 51 2/3	S1	ME1		138	224	221	517.5	—	108	48	578.5	52	103	135	124	135
C 51 2/3	S2	ME2S		156	233	230	545.5	252.5	119	53	615.5	58	129	143	134	143
C 51 2/3	S2	MX2S		156	233	230	589.5	252.5	119	53	661.5	62	129	143	134	143
C 51 2/3	S3	ME3S		195	252.5	249.5	589.5	267.5	142	60	685.5	66	160	155	160	155
C 51 2/3	S3	ME3L	MX3S	195	252.5	249.5	621.5	267.5	142	65	711.5	70	160	155	160	155
C 51 2/3	S3	MX3L		195	252.5	249.5	665.5	267.5	142	65	757.5	78	160	155	160	155
C 51 2/3	S4	ME4	MX4	258	284	281	729.5	—	193	99	838.5	112	204	210	200	210
C 51 2/3	S4	ME4LB	MX4LA	258	284	281	764.5	—	193	107	862.5	122	204	210	226	210
C 51 2/3	S5	ME5S	MX5S	310	310	307	816	—	245	127	956	182	266	245	247	245
C 51 2/3	S5	ME5L	MX5L	310	310	307	860	—	245	143	994	193	266	245	247	245
C 51 4	S1	M1		138	224	221	589	—	108	52	650	55	103	135	124	108
C 51 4	S1	ME1		138	224	221	589	—	108	51	650	55	103	135	124	135
C 51 4	S10	MXN10		138	224	221	618	—	137	53.4	677	55.8	103	138	121	138
C 51 4	S2	ME2S		156	233	230	617	—	119	56	687	61	129	143	134	143
C 51 4	S2	MX2S		156	233	230	661	—	119	56	733	65	129	143	134	143
C 51 4	S3	ME3S		195	252.5	249.5	661	—	142	63	757	69	160	155	160	155
C 51 4	S3	ME3L	MX3S	195	252.5	249.5	693	—	142	68	783	73	160	155	160	155
C 51 4	S3	MX3L		195	252.5	249.5	737	—	142	68	829	81	160	155	160	155

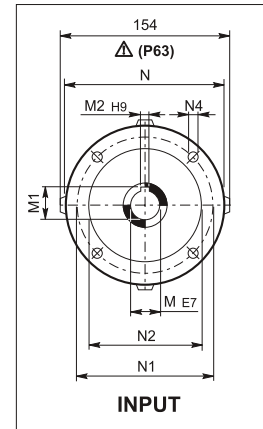
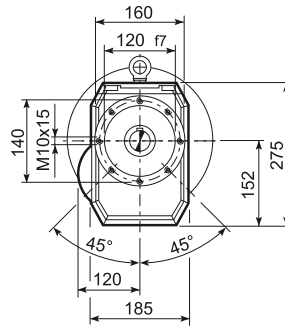
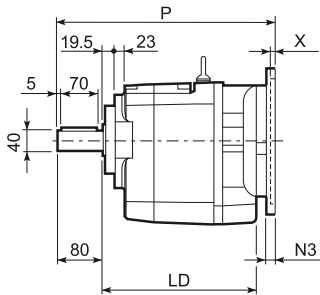


C 51...P(IEC)

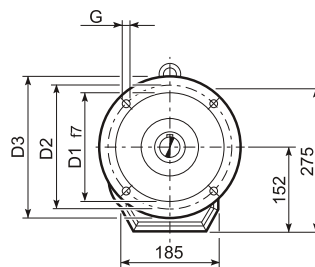
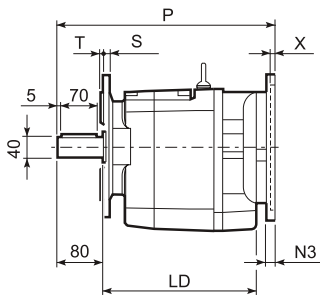
P



U

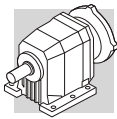


UF

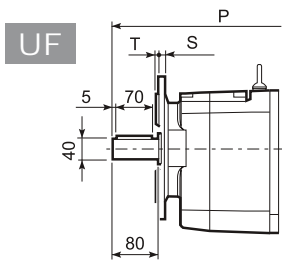
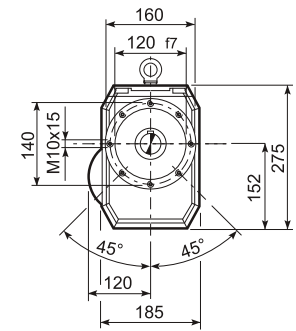
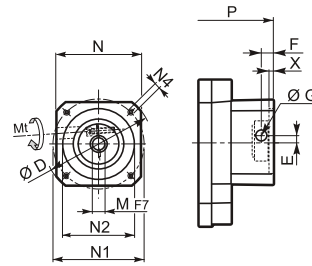
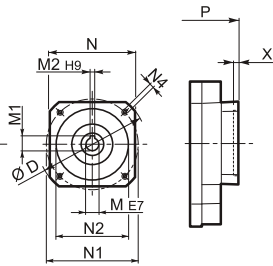
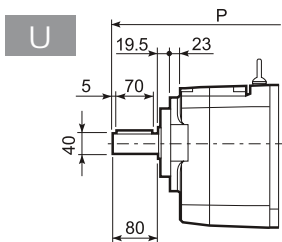
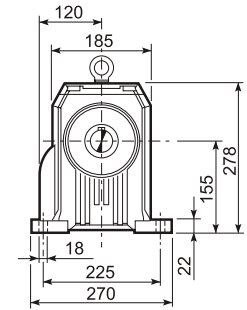
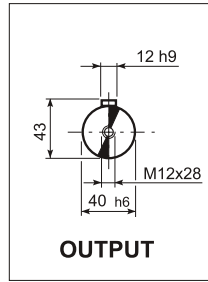
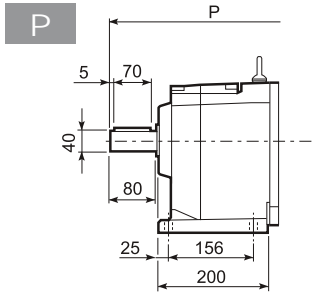


C 51_U		D1	D2	D3	G	T	S
FA	180	215	250	14	4	13	
FB	230	265	300	14	4	16	

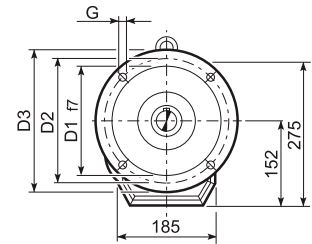
		LD	M	M1	M2	N	N1	N2	N3	N4	X	P	
C 51 2/3	P63	252.5	11	12.8	4	140	115	95	—	M8x19	4	362.5	45
C 51 2/3	P71	252.5	14	16.3	5	160	130	110	—	M8x16	4.5	362.5	45
C 51 2/3	P80	267.5	19	21.8	6	200	165	130	—	M10x14.5	4	382	47
C 51 2/3	P90	267.5	24	27.3	8	200	165	130	—	M10x14.5	4	382	47
C 51 2/3	P100	252.5	28	31.3	8	250	215	180	—	M12x16	4.5	392	51
C 51 2/3	P112	252.5	28	31.3	8	250	215	180	—	M12x16	4.5	392	51
C 51 2/3	P132	252.5	38	41.3	10	300	265	230	16	14	5	428.5	54
C 51 2/3	P160	—	42	45.3	12	350	300	250	23	18	5.5	479	58
C 51 2/3	P180	—	48	51.8	14	350	300	250	23	18	5.5	479	58
C 51 4	P63	—	11	12.8	4	140	115	95	—	M8x19	4	434	47
C 51 4	P71	—	14	16.3	5	160	130	110	—	M8x16	4.5	434	47
C 51 4	P80	—	19	21.8	6	200	165	130	—	M10x14.5	4	453.5	49
C 51 4	P90	—	24	27.3	8	200	165	130	—	M10x14.5	4	463.5	49
C 51 4	P100	—	28	31.3	8	250	215	180	—	M12x16	4.5	463.5	53
C 51 4	P112	—	28	31.3	8	250	215	180	—	M12x16	4.5	463.5	53



C 51...SK / SC

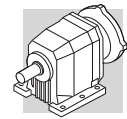


C 51_U						
	D1	D2	D3	G	T	S
FA	180	215	250	14	4	13
FB	230	265	300	14	4	16

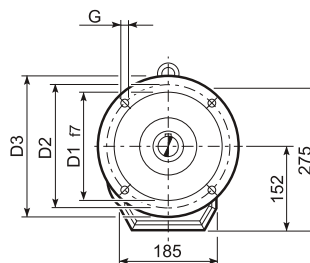
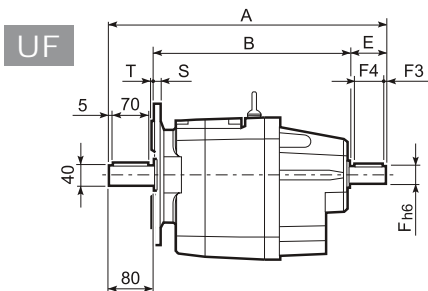
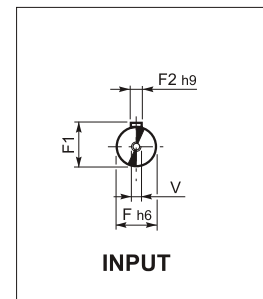
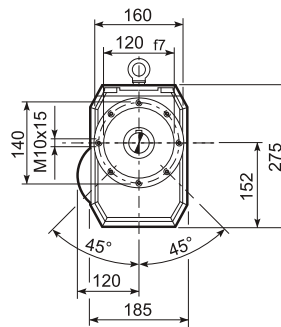
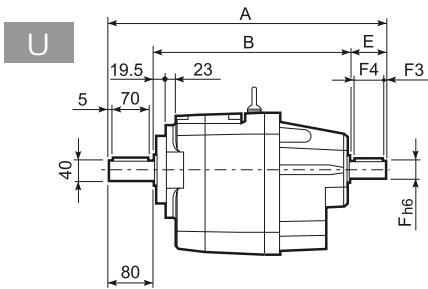
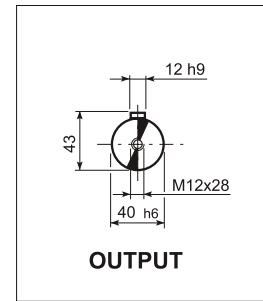
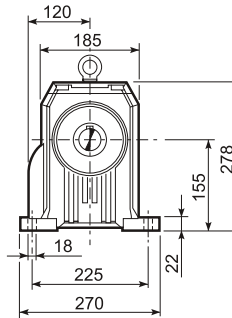
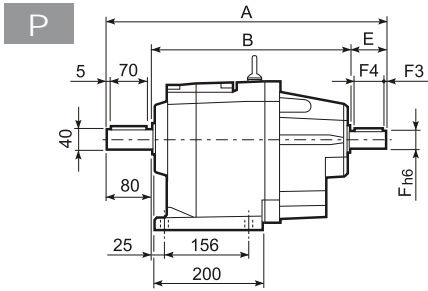


		D	M	M1	M2	N	N1	N2	N4	X	P		
											2/3x	4x	
C 51 2/3	SK80B	120	14	16.3	5	96	100	80	M6x12	4	382	—	46/46
C 51 2/3/4	SK80C	120	19	21.8	6	96	100	80	M6x12	4	382	453.5	47/47/49
C 51 2/3/4	SK95A	130	14	16.3	5	102	115	95	M8x12	4	382	453.5	46/46/48
C 51 2/3/4	SK95B	130	19	21.8	6	102	115	95	M8x12	4	382	453.5	47/47/49
C 51 2/3/4	SK95C	130	24	27.3	8	102	115	95	M8x12	4	382	453.5	47/47/49
C 51 2/3/4	SK110A	150	19	21.8	6	120	130	110	M8x12	5	382	453.5	47/47/51
C 51 2/3/4	SK110B	150	24	27.3	8	120	130	110	M8x12	5	382	453.5	47/47/51
C 51 2/3/4	SK130A	188	24	27.3	8	142	165	130	M10x20	5	382	453.5	49/49/52
C 51 2/3	SK130B	189	32	35.3	10	160	165	130	M10x20	5	428.5	—	55/55
C 51 2/3	SK180A	240	32	35.3	10	192	215	180	M12x19	5	428.5	—	55/55
C 51 2/3	SK180B	240	38	41.3	10	192	215	180	M12x19	5	428.5	—	55/55

			Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	P		
														2/3x	4x	
C 51 2/3	SC80B	M6	15	120	15.5	14.5	17.75	14	96	100	80	M6x12	4	405.5	—	47/47
C 51 2/3/4	SC80C	M6	15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	405.5	477	48/48/50
C 51 2/3/4	SC95A	M6	15	130	16.5	15	17.75	14	102	115	95	M8x16	4	405.5	477	47/47/49
C 51 2/3/4	SC95B	M6	15	130	16.5	15	17.75	19	102	115	95	M8x16	4	405.5	477	48/48/50
C 51 2/3/4	SC95C	M6	15	130	16.5	15	17.75	24	102	115	95	M8x16	4	405.5	477	48/48/50
C 51 2/3/4	SC110A	M6	15	150	16.5	16	17.75	19	120	130	110	M8x16	5	405.5	477	49/49/52
C 51 2/3/4	SC110B	M6	15	150	16.5	16	17.75	24	120	130	110	M8x16	5	405.5	477	49/49/52
C 51 2/3/4	SC130A	M6	15	188	19	16	17.75	24	142	165	130	M10x20	5	405.5	477	50/50/53
C 51 2/3	SC130B	M8	36	189	20	17	17.75	32	160	165	130	M10x20	5	451.5	—	54/54
C 51 2/3	SC180A	M8	36	240	20	17.5	17.75	32	192	215	180	M12x24	5	455.5	—	54/54
C 51 2/3	SC180B	M8	36	240	20	17.5	17.75	38	192	215	180	M12x24	5	455.5	—	54/54

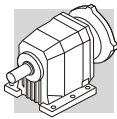


C 51...HS



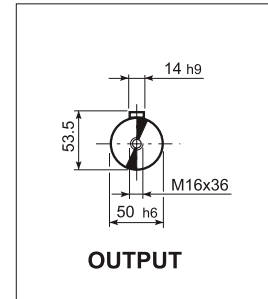
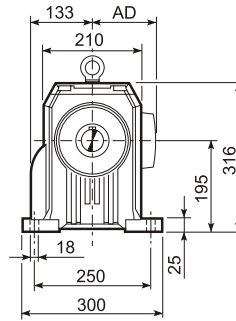
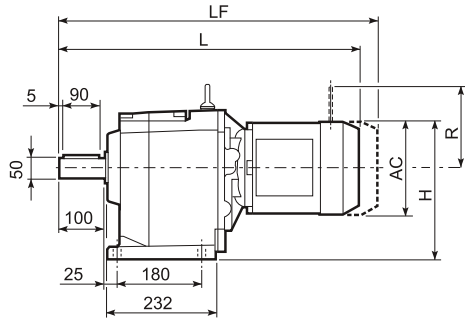
C 51_U						
	D1	D2	D3	G	T	S
FA	180	215	250	14	4	13
FB	230	265	300	14	4	16

		A	B	E	F	F1	F2	F3	F4	V	
C 51 2	HS	451.5	322	50	24	24	8	2.5	45	M8x19	45
C 51 3		451.5	322	50	24	24	8	2.5	45	M8x19	45
C 51 4		484	364	40	19	21.5	6	2.5	35	M6x16	48

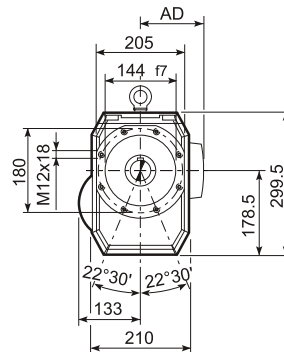
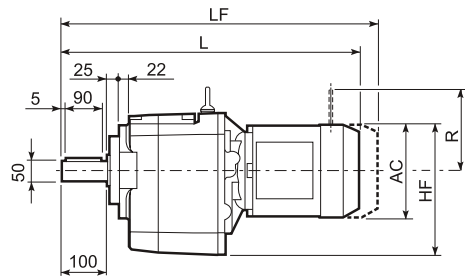


C 61...M/ME/MX

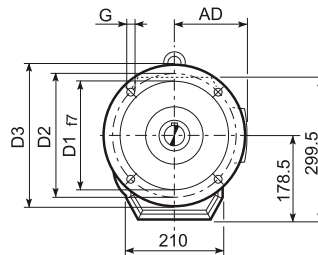
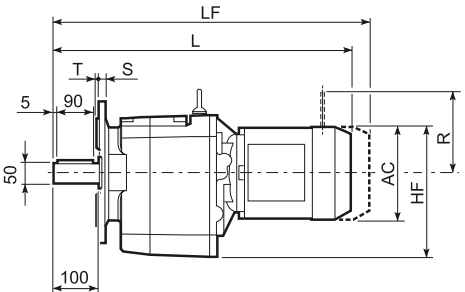
P



U

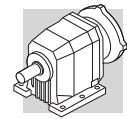


UF



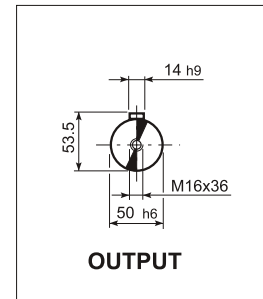
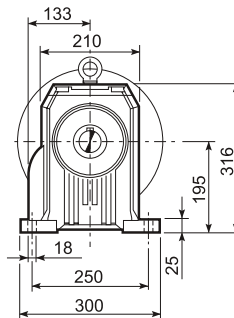
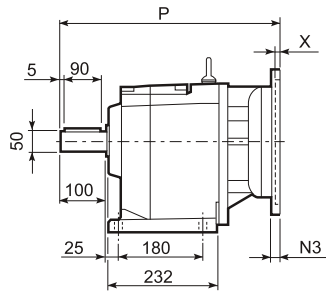
C 61_U						
	D1	D2	D3	G	T	S
FA	230	265	300	14	4	16
FB	250	300	350	18	5	18

			AC	H	HF	L	AD		M...FD M...FA		M...FD		M...FA	
									LF		R	AD	R	AD
C 61 2/3	S2	ME2S	156	273	256.5	598.5	119	61	668.5	65	129	143	134	143
C 61 2/3	S2	MX2S	156	273	256.5	642.5	119	66	714.5	69	129	143	134	143
C 61 2/3	S3	ME3S	195	292.5	276	642.5	142	68	738.5	73	160	155	160	150
C 61 2/3	S3	ME3L	195	292.5	276	674.5	142	74	764.5	77	160	155	160	150
C 61 2/3	S3	MX3L	195	292.5	276	718.5	142	80	810.5	85	160	155	160	150
C 61 2/3	S4	ME4	258	324	307.5	782.5	193	108	891.5	119	204	210	200	210
C 61 2/3	S4	ME4LB	258	324	307.5	817.5	193	116	915.5	129	204	210	226	210
C 61 2/3	S5	ME5S	310	350	333.5	869	245	136	1009	189	266	245	247	245
C 61 2/3	S5	ME5L	310	350	333.5	913	245	152	1047	200	266	245	247	245
C 61 4	S1	M1	138	264	247.5	641	108	71	702	74	103	135	124	108
C 61 4	S1	ME1	138	264	247.5	641	108	70	702	74	103	135	124	135
C 61 4	S2	ME2S	156	273	256.5	669	119	75	739	80	129	143	134	143
C 61 4	S2	MX2S	156	273	256.5	713	119	80	785	84	129	143	134	143
C 61 4	S3	ME3S	195	292.5	276	713	142	81	809	88	160	155	160	155
C 61 4	S3	ME3L	195	292.5	276	745	142	87	835	92	160	155	160	155
C 61 4	S3	MX3L	195	292.5	276	789	142	93	881	100	160	155	160	155

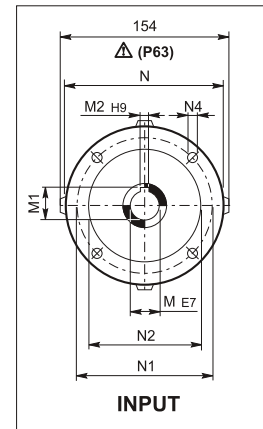
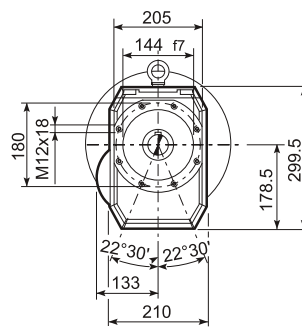
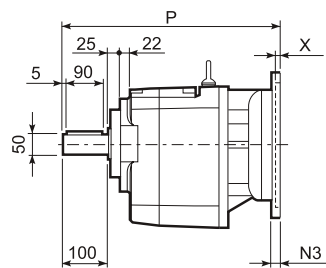


C 61...P(IEC)

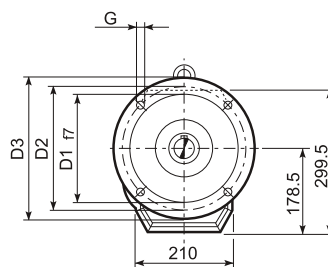
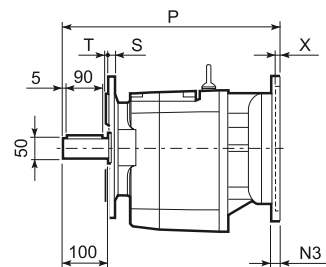
P



U

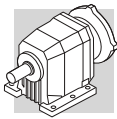


UF

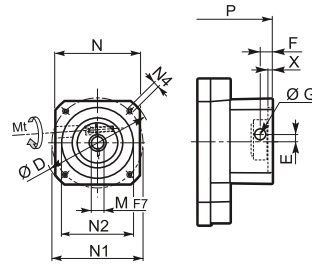
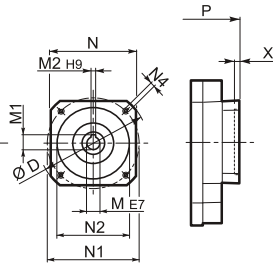
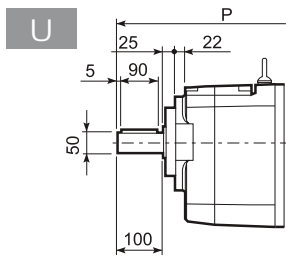
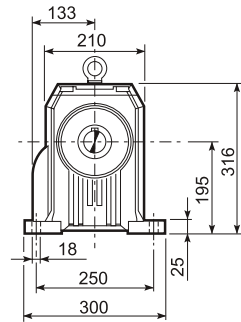
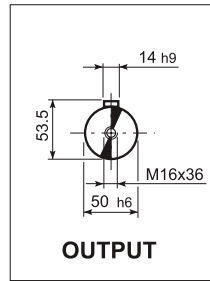
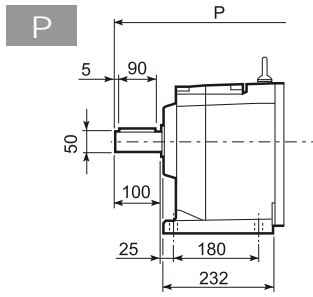


C 61_U		D1	D2	D3	G	T	S
FA		230	265	300	14	4	16
FB		250	300	350	18	5	18

		M	M1	M2	N	N1	N2	N3	N4	X	P	
C 61 2/3	P63	11	12.8	4	140	115	95	—	M8x19	4	415.5	55
C 61 2/3	P71	14	16.3	5	160	130	110	—	M8x16	4.5	415.5	57
C 61 2/3	P80	19	21.8	6	200	165	130	—	M10x14.5	4	435	61
C 61 2/3	P90	24	27.3	8	200	165	130	—	M10x14.5	4	435	61
C 61 2/3	P100	28	31.3	8	250	215	180	—	M12x16	4.5	444	65
C 61 2/3	P112	28	31.3	8	250	215	180	—	M12x16	4.5	444	65
C 61 2/3	P132	38	41.3	10	300	265	230	16	14	5	481.5	68
C 61 2/3	P160	42	45.3	12	350	300	250	23	18	5.5	532	73
C 61 2/3	P180	48	51.8	14	350	300	250	23	18	5.5	532	73
C 61 4	P63	11	12.8	4	140	115	95	—	M8x19	4	486	61
C 61 4	P71	14	16.3	5	160	130	110	—	M8x16	4.5	489	63
C 61 4	P80	19	21.8	6	200	165	130	—	M10x14.5	4	505.5	67
C 61 4	P90	24	27.3	8	200	165	130	—	M10x14.5	4	505.5	67
C 61 4	P100	28	31.3	8	250	215	180	—	M12x16	4.5	515.5	71
C 61 4	P112	28	31.3	8	250	215	180	—	M12x16	4.5	515.5	71

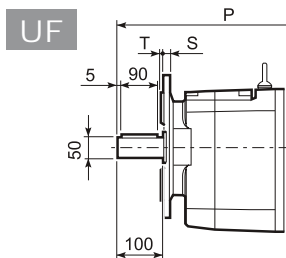
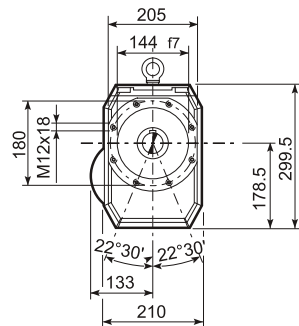


C 61...SK / SC

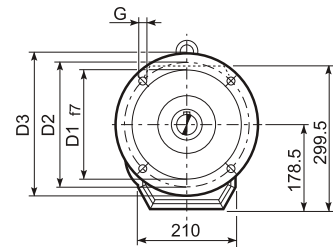


SK...

SC...

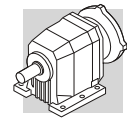


C 61_U						
	D1	D2	D3	G	T	S
FA	230	265	300	14	4	16
FB	250	300	350	18	5	18



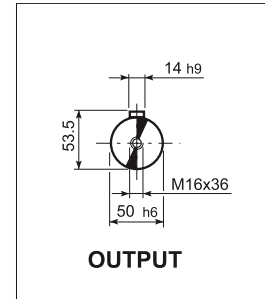
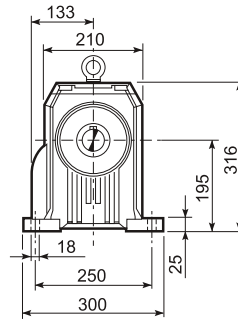
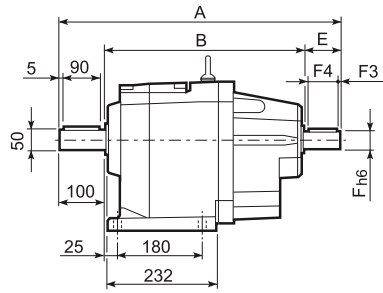
		D	M	M1	M2	N	N1	N2	N4	X	P		
											2/3x	4x	
C 61 4	SK80B	120	14	16.3	5	96	100	80	M6x12	4	—	505.5	62
C 61 2/3/4	SK80C	120	19	21.8	6	96	100	80	M6x12	4	435	505.5	63/63/69
C 61 2/3/4	SK95A	130	14	16.3	5	102	115	95	M8x12	4	435	505.5	60/60/67
C 61 2/3/4	SK95B	130	19	21.8	6	102	115	95	M8x12	4	435	505.5	63/63/69
C 61 2/3/4	SK95C	130	24	27.3	8	102	115	95	M8x12	4	435	505.5	63/63/69
C 61 2/3/4	SK110A	140	19	21.8	6	120	130	110	M8x12	5	435	505.5	63/63/69
C 61 2/3/4	SK110B	140	24	27.3	8	120	130	110	M8x12	5	435	505.5	63/63/69
C 61 2/3/4	SK130A	188	24	27.3	8	142	165	130	M10x20	5	435	505.5	67/67/80
C 61 2/3	SK130B	189	32	35.3	10	160	165	130	M10x20	5	481.5	—	72/72
C 61 2/3	SK180A	240	32	35.3	10	192	215	180	M12x19	5	481.5	—	72/72
C 61 2/3	SK180B	240	38	41.3	10	192	215	180	M12x19	5	481.5	—	66/66

			Mt [Nm]	D	E	F	G	M	N	N1	N2	N4	X	P		
														2/3x	4x	
C 61 4	SC80B	M6	15	120	15.5	14.5	17.75	14	96	100	80	M6x12	4	—	529	63
C 61 2/3/4	SC80C	M6	15	120	15.5	14.5	17.75	19	96	100	80	M6x12	4	458.5	529	64/64/70
C 61 2/3/4	SC95A	M6	15	130	16.5	15	17.75	14	102	115	95	M8x16	4	458.5	529	61/61/68
C 61 2/3/4	SC95B	M6	15	130	16.5	15	17.75	19	102	115	95	M8x16	4	458.5	529	64/64/70
C 61 2/3/4	SC95C	M6	15	130	16.5	15	17.75	24	102	115	95	M8x16	4	458.5	529	64/64/70
C 61 2/3/4	SC110A	M6	15	140	16.5	16	17.75	19	120	130	110	M8x16	5	458.5	529	65/65/70
C 61 2/3/4	SC110B	M6	15	140	16.5	16	17.75	24	120	130	110	M8x16	5	458.5	529	65/65/70
C 61 2/3/4	SC130A	M6	15	188	19	16	17.75	24	142	165	130	M10x20	5	458.5	529	66/66/81
C 61 2/3	SC130B	M8	36	189	20	17	17.75	32	160	165	130	M10x20	5	504.5	—	75/75
C 61 2/3	SC180A	M8	36	240	20	17.5	17.75	32	192	215	180	M12x24	5	508.5	—	75/75
C 61 2/3	SC180B	M8	36	240	20	17.5	17.75	38	192	215	180	M12x24	5	508.5	—	69/69

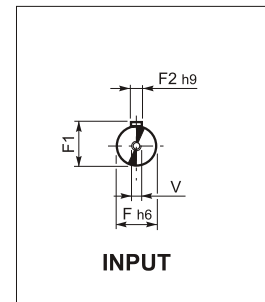
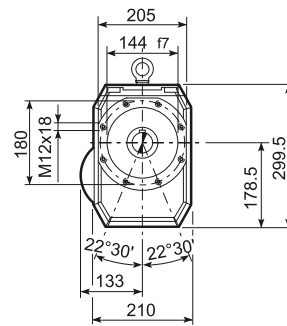
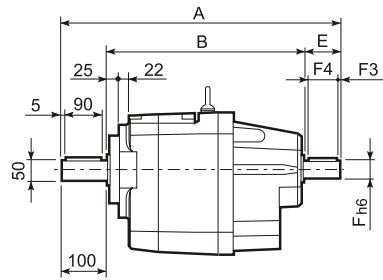


C 61...HS

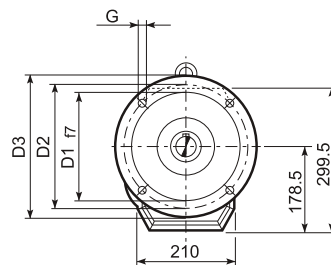
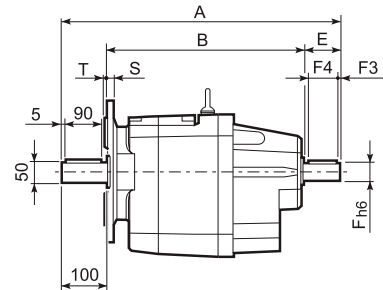
P



U

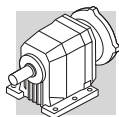


UF



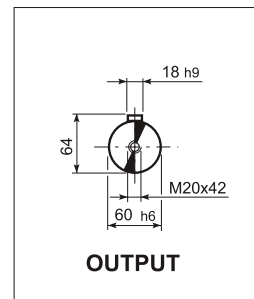
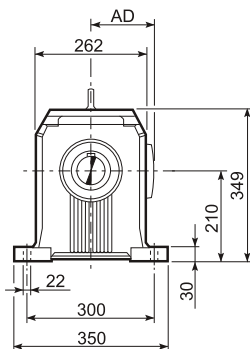
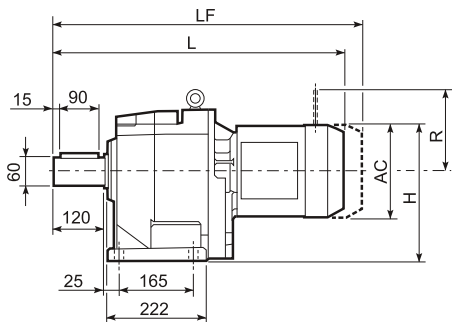
C 61_U		D1	D2	D3	G	T	S
FA	230	265	300	14	4	16	
FB	250	300	350	18	5	18	

		A	B	E	F	F1	F2	F3	F4	V	
C 61 2	HS	532	372	60	28	31	8	5	50	M10x22	66
C 61 3		532	372	60	28	31	8	5	50	M10x22	66
C 61 4		575	425	50	24	27	8	2.5	45	M8x19	72

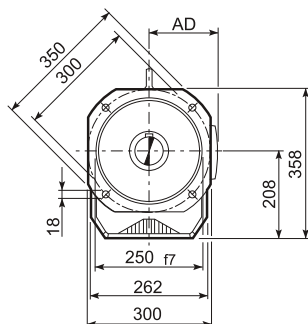
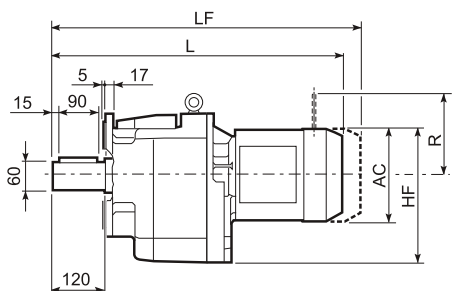


C 70...M/ME/MX

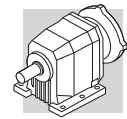
P



F

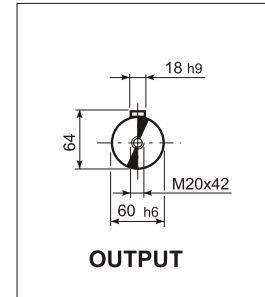
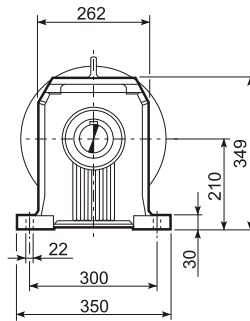
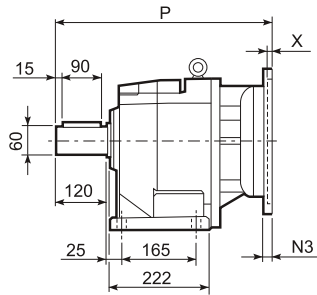


				AC	H	HF	L	AD		M...FD		M...FD		M...FA	
										M...FA		R	AD	R	AD
C 70 2/3	S2	ME2S		156	288	286	636.5	119	88	706.5	92	129	143	134	143
C 70 2/3	S2	MX2S		156	288	286	680.5	119	93	752.5	96	129	143	134	143
C 70 2/3	S3	ME3S		195	307.5	305.5	680.5	142	95	776.5	100	160	155	160	155
C 70 2/3	S3	MX3S		195	307.5	305.5	715.5	142	98	805.5	103	160	155	160	155
C 70 2/3	S3	ME3L		195	307.5	305.5	712.5	142	101	803.5	104	160	155	160	155
C 70 2/3	S3	MX3L		195	307.5	305.5	756.5	142	107	857.5	112	160	155	160	155
C 70 2/3	S4	ME4	MX4	258	339	337	820.5	193	135	929.5	146	204	210	200	210
C 70 2/3	S4	ME4LB	MX4LA	258	339	337	855.5	193	143	953.5	159	204	210	226	210
C 70 2/3	S5	ME5S	MX5S	310	365	363	907	245	163	1047	216	266	245	247	245
C 70 2/3	S5	ME5L	MX5L	310	365	363	951	245	179	1085	227	266	245	247	245
C 70 4	S1	M1		138	279	277	659.5	108	88	720.5	91	103	135	124	108
C 70 4	S1	ME1		138	279	277	659.5	108	88	720.5	91	103	135	124	135
C 70 4	S2	ME2S		156	288	286	687.5	119	92	757.5	97	129	143	134	143
C 70 4	S2	MX2S		156	288	286	731.5	119	97	803.5	101	129	143	134	143
C 70 4	S3	ME3S		195	307.5	305.5	731.5	142	99	827.5	105	160	155	160	155
C 70 4	S3	ME3L	MX3S	195	307.5	305.5	763.5	142	104	853.5	109	160	155	160	155
C 70 4	S3	MX3L		195	307.5	305.5	807.5	142	110	899.5	117	160	155	160	155
C 70 4	S4	ME4	MX4	258	339	337	871.5	193	138	980.5	151	204	210	200	210
C 70 4	S4	ME4LB	MX4LA	258	339	337	906.5	193	146	1004.5	161	204	210	226	210

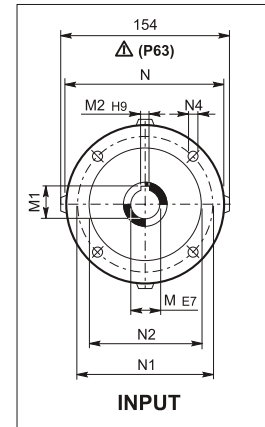
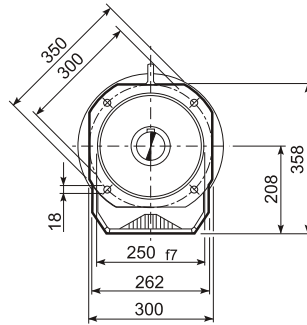
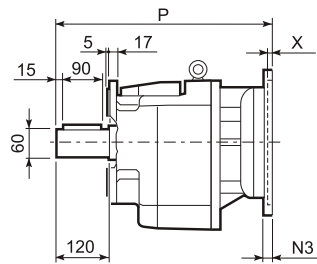


C 70...P(IEC)

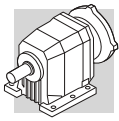
P



F

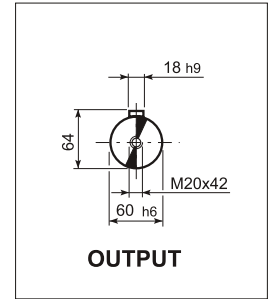
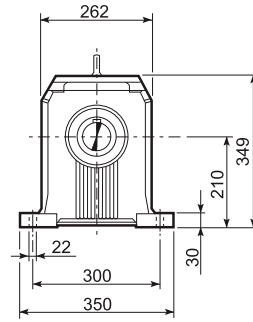
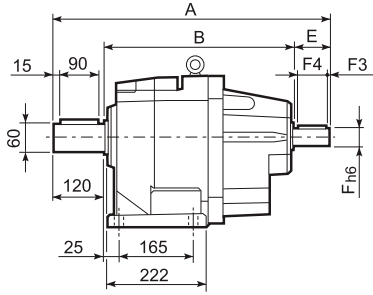


		M	M1	M2	N	N1	N2	N3	N4	X	P	
C 70 2/3	P80	19	21.8	6	200	165	130	—	M10x14.5	4	473	88
C 70 2/3	P90	24	27.3	8	200	165	130	—	M10x14.5	4	473	88
C 70 2/3	P100	28	31.3	8	250	215	180	—	M12x16	4.5	483	92
C 70 2/3	P112	28	31.3	8	250	215	180	—	M12x16	4.5	483	92
C 70 2/3	P132	38	41.3	10	300	265	230	16	14	5	519.5	95
C 70 2/3	P160	42	45.3	12	350	300	250	23	18	6	575	107
C 70 2/3	P180	48	51.8	14	350	300	250	23	18	6	575	107
C 70 2	P200	55	59.3	16	400	350	300	—	M16x25	7	600	129
C 70 4	P63	11	12.8	4	140	115	95	—	M8x19	4	504.5	91
C 70 4	P71	14	16.3	5	160	130	110	—	M8x16	4.5	504.5	91
C 70 4	P80	19	21.8	6	200	165	130	—	M10x14.5	4	524	92
C 70 4	P90	24	27.3	8	200	165	130	—	M10x14.5	4	524	92
C 70 4	P100	28	31.3	8	250	215	180	—	M12x16	4.5	534	96
C 70 4	P112	28	31.3	8	250	215	180	—	M12x16	4.5	534	96
C 70 4	P132	38	41.3	10	300	265	230	16	14	5	570.5	98

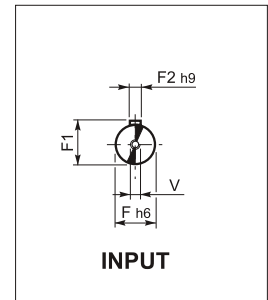
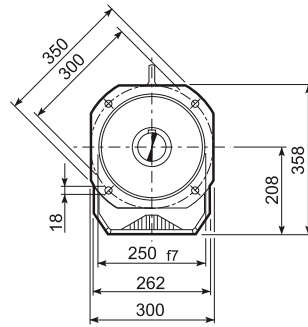
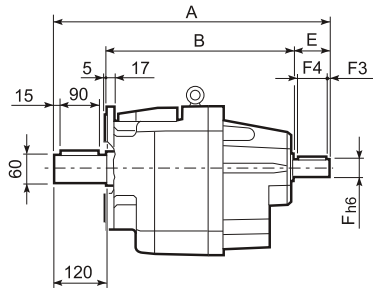



C 70...HS

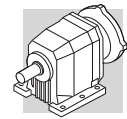
P



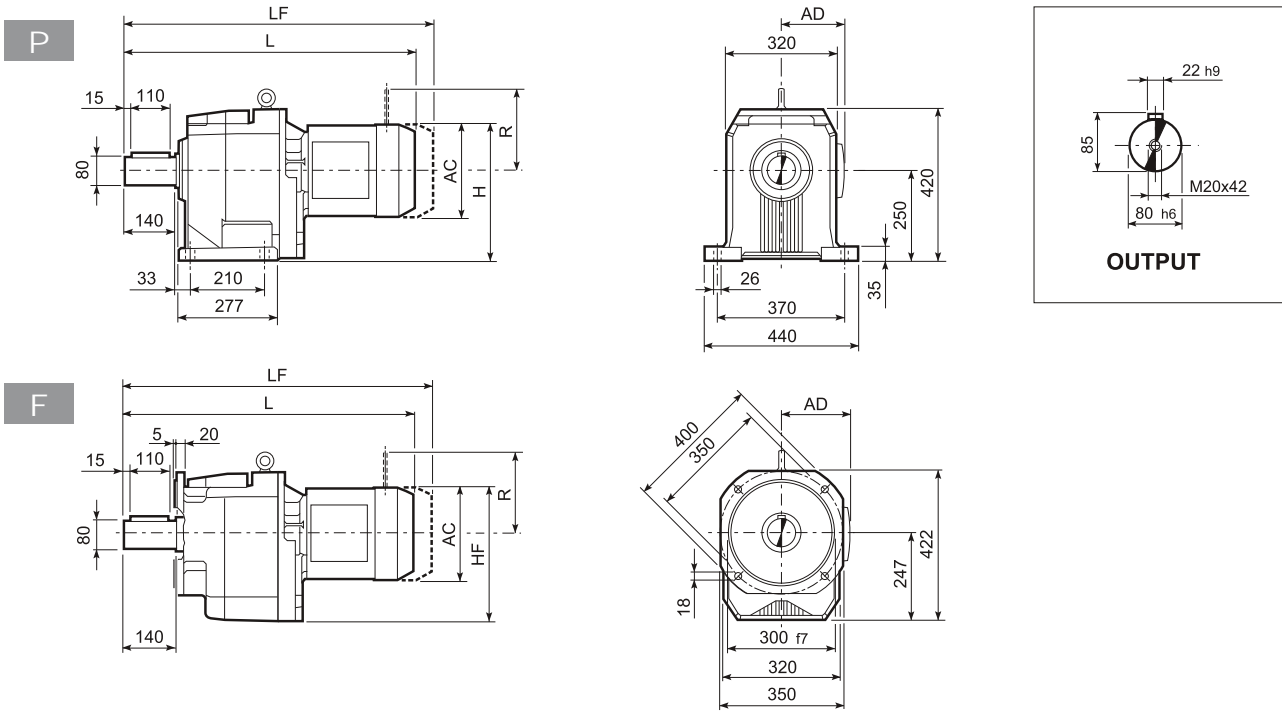
F



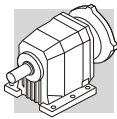
		A	B	E	F	F1	F2	F3	F4	V	
C 70 2	HS	657.5	427.5	110	42	45	12	10	90	M12x28	108
C 70 3		657.5	427.5	110	42	45	12	10	90	M12x28	108
C 70 4		593.5	423.5	50	24	27	8	2.5	45	M8x19	94



C 80...M/ME/MX

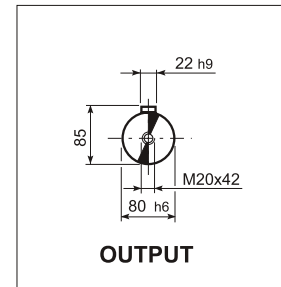
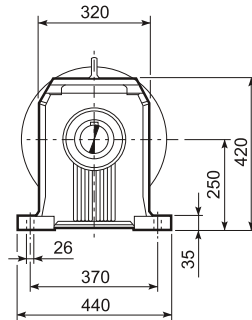
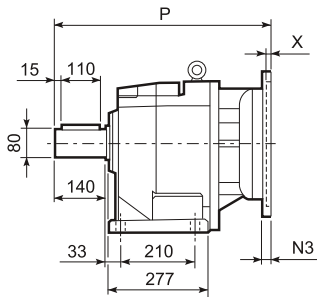


				AC	H	HF	L	AD		M...FD M...FA		M...FD		M...FA	
										LF		R	AD	R	AD
C 80 2/3	S3	ME3S		195	347.5	344.5	742.5	142	141	838.5	148	160	155	160	155
C 80 2/3	S3	ME3L	MX3S	195	347.5	344.5	774.5	142	146	864.5	152	160	155	160	155
C 80 2/3	S3	MX3L		195	347.5	344.5	818.5	142	152	910.5	160	160	155	160	155
C 80 2/3	S4	ME4	MX4	258	379	376	882.5	193	180	991.5	194	204	210	200	210
C 80 2/3	S4	ME4LB	MX4LA	258	379	376	917.5	193	188	1015.5	204	204	210	226	210
C 80 2/3	S5	ME5S	MX5S	310	405	402	969	245	208	1109	264	266	245	247	245
C 80 2/3	S5	ME5L	MX5L	310	405	402	1013	245	224	1147	275	266	245	247	245
C 80 4	S1	M1		138	319	316	733.5	108	133	794.5	111	103	135	124	108
C 80 4	S1	ME1		138	319	316	733.5	108	133	794.5	111	103	135	124	135
C 80 4	S2	ME2S		156	328	325	761.5	119	137	831.5	117	129	143	134	143
C 80 4	S2	MX2S		156	328	325	805.5	119	142	877.5	121	129	143	134	143
C 80 4	S3	ME3S		195	347.5	344.5	805.5	142	144	901.5	125	160	155	160	155
C 80 4	S3	ME3L	MX3S	195	347.5	344.5	837.5	142	149	927.5	129	160	155	160	155
C 80 4	S3	MX3L		195	347.5	344.5	881.5	142	155	973.5	137	160	155	160	155
C 80 4	S4	ME4	MX4	258	379	376	945.5	193	183	1054.5	171	204	210	200	210
C 80 4	S4	ME4LB	MX4LA	258	379	376	980.5	193	191	1078.5	181	204	210	226	210

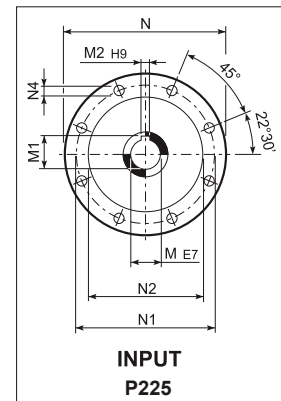
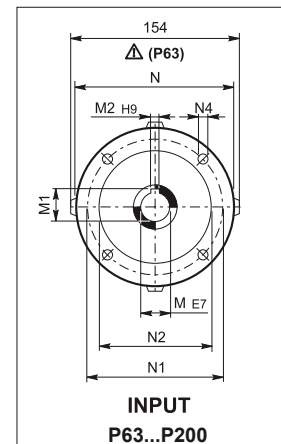
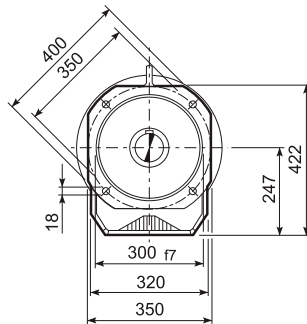
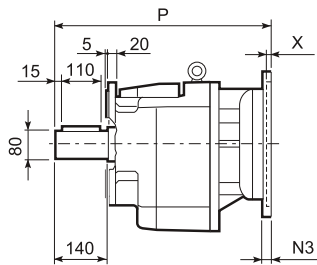



C 80...P(IEC)

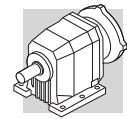
P



F

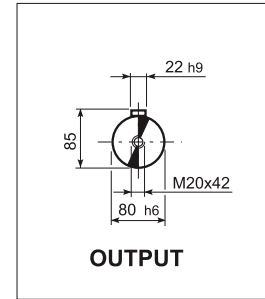
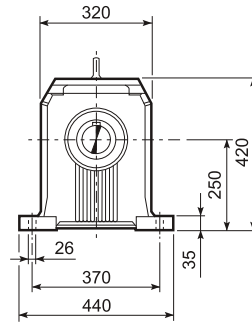
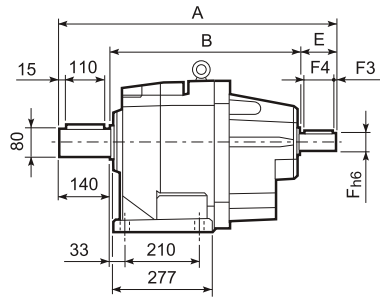


		M	M1	M2	N	N1	N2	N3	N4	X	P	
C 80 2/3	P80	19	21.8	6	200	165	130	—	M10x14.5	4	533	135
C 80 2/3	P90	24	27.3	8	200	165	130	—	M10x14.5	4	533	135
C 80 2/3	P100	28	31.3	8	250	215	180	—	M12x16	4.5	543	139
C 80 2/3	P112	28	31.3	8	250	215	180	—	M12x16	4.5	543	139
C 80 2/3	P132	38	41.3	10	300	265	230	16	14	5	579.5	141
C 80 2/3	P160	42	45.3	12	350	300	250	23	18	6	635	154
C 80 2/3	P180	48	51.8	14	350	300	250	23	18	6	635	154
C 80 2	P200	55	59.3	16	400	350	300	—	M16x25	7	660	176
C 80 2	P225	60	64.4	18	450	400	350	25	18	6	705.5	178
C 80 4	P63	11	12.8	4	140	115	95	—	M8x19	4	576.5	138
C 80 4	P71	14	16.3	5	160	130	110	—	M8x16	4.5	576.5	138
C 80 4	P80	19	21.8	6	200	165	130	—	M10x14.5	4	596	140
C 80 4	P90	24	27.3	8	200	165	130	—	M10x14.5	4	596	140
C 80 4	P100	28	31.3	8	250	215	180	—	M12x16	4.5	606	144
C 80 4	P112	28	31.3	8	250	215	180	—	M12x16	4.5	606	144
C 80 4	P132	38	41.3	10	300	265	230	16	M12x16	5	642.5	146

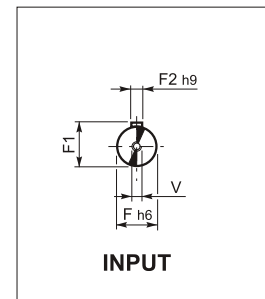
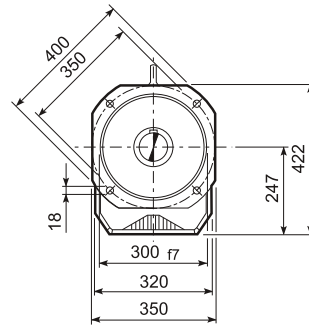
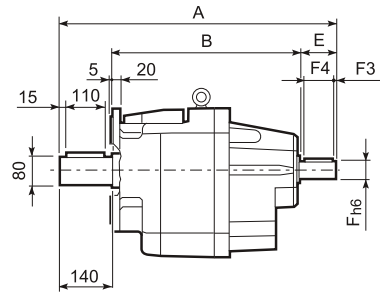



C 80...HS

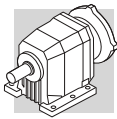
P



F

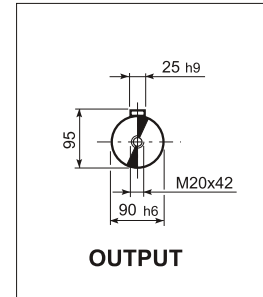
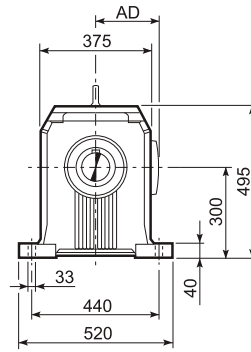
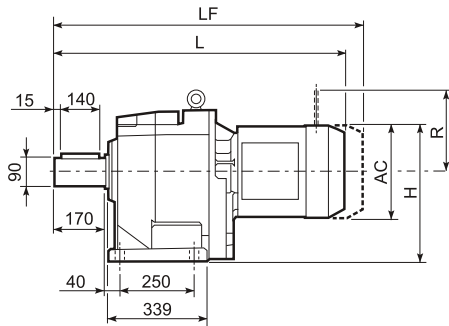


		A	B	E	F	F1	F2	F3	F4	V	
C 80 2	HS	718.5	468.5	110	42	45	12	10	90	M12x28	154
C 80 3		718.5	468.5	110	42	45	12	10	90	M12x28	154
C 80 4		666.5	476.5	50	24	27	8	2.5	45	M8x19	141

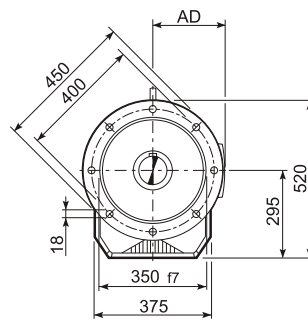
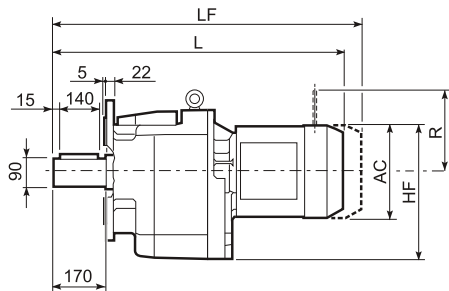


C 90...M/ME/MX

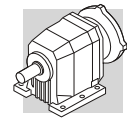
P



F

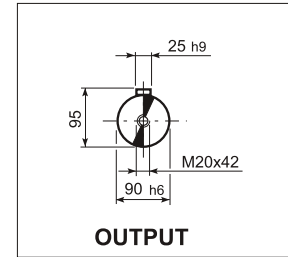
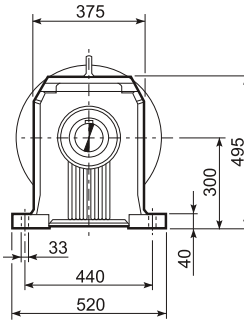
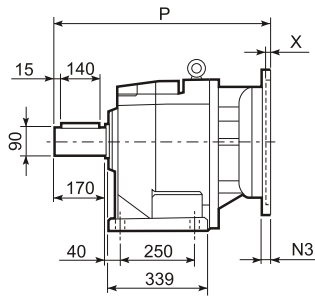


				AC	H	HF	L	AD		M...FD M...FA		M...FD		M...FA	
										LF		R	AD	R	AD
C 90 2/3	S3	ME3S		195	397.5	392.5	852	142	229.5	948	236.5	160	155	160	155
C 90 2/3	S3	ME3L	MX3S	195	397.5	392.5	884	142	236	974	240.5	160	155	160	155
C 90 2/3	S3	MX3L		195	397.5	392.5	987	142	242	1079	248.5	160	155	160	155
C 90 2/3	S4	ME4	MX4	258	429	424	992	193	270	1101	282.5	204	210	200	210
C 90 2/3	S4	ME4LB	MX4LA	258	429	424	1027	193	278	1125	292.5	204	210	226	210
C 90 2/3	S5	ME5S	MX5S	310	455	450	1078.5	245	298	1218.5	352.5	266	245	247	245
C 90 2/3	S5	ME5L	MX5L	310	455	450	1122.5	245	314	1256.5	363.5	266	245	247	245
C 90 4	S1	M1		138	369	364	862	108	226	923	228	103	135	124	108
C 90 4	S1	ME1		138	369	364	862	108	226	923	228	103	135	124	135
C 90 4	S2	M2S		156	378	373	891	119	234	962	238	129	146	134	119
C 90 4	S2	ME2S		156	378	373	891	119	234	961	235.2	129	143	134	143
C 90 4	S2	MX2S		156	378	373	935	119	239.1	1007	239	129	143	134	143
C 90 4	S3	ME3S		195	397.5	392.5	935	142	240.5	1031	243.1	160	155	160	155
C 90 4	S3	ME3L	MX3S	195	397.5	392.5	967	142	246	1057	247.1	160	155	160	155
C 90 4	S3	MX3L		195	397.5	392.5	1011	142	252	1103	255.1	160	155	160	155
C 90 4	S4	ME4	MX4	258	429	424	1075	193	280	1184	289.1	204	210	200	210
C 90 4	S4	ME4LB	MX4LA	258	429	424	1126.5	193	288	1224.5	299.1	204	210	226	210

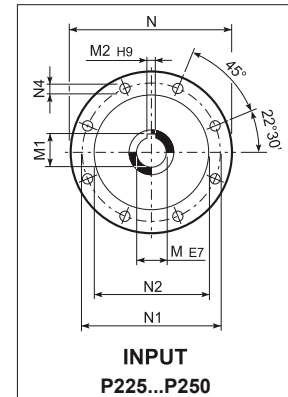
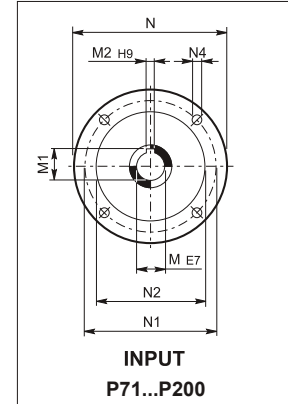
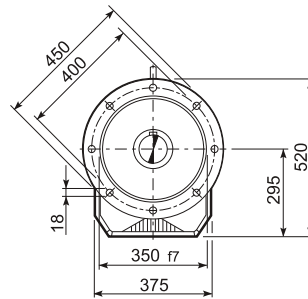
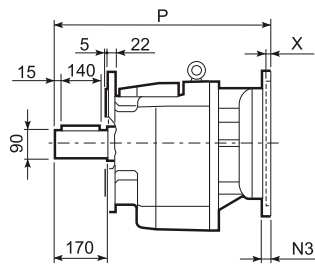



C 90...P(IEC)

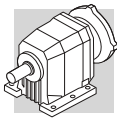
P



F

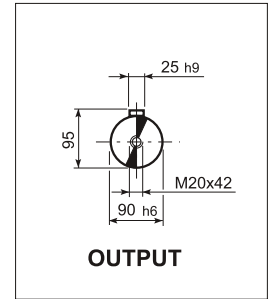
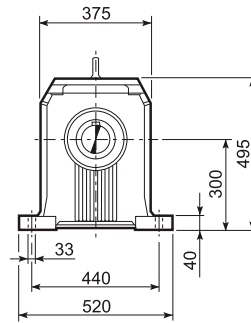
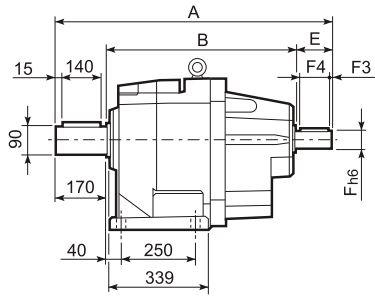


		M	M1	M2	N	N1	N2	N3	N4	X	P	
C 90 2/3	P80	19	21.8	6	200	165	130	—	M10x14.5	4	644.5	229
C 90 2/3	P90	24	27.3	8	200	165	130	—	M10x14.5	4	644.5	229
C 90 2/3	P100	28	31.3	8	250	215	180	—	M12x16	4.5	654.5	234
C 90 2/3	P112	28	31.3	8	250	215	180	—	M12x16	4.5	654.5	234
C 90 2/3	P132	38	41.3	10	300	265	230	16	14	5	691	236
C 90 2/3	P160	42	45.3	12	350	300	250	23	18	6	746.5	251
C 90 2/3	P180	48	51.8	14	350	300	250	23	18	6	746.5	251
C 90 2/3	P200	55	59.3	16	400	350	300	—	M16x25	7	771.5	272
C 90 2/3	P225	60	64.4	18	450	400	350	30	18	6	817	273
C 90 2/3	P250	65	69.4	18	550	500	450	30	18	6	847	295
C 90 4	P63	11	12.8	4	140	115	95	—	M8x19	4	707.5	236
C 90 4	P71	14	16.3	5	160	130	110	—	M8x16	4.5	707.5	236
C 90 4	P80	19	21.8	6	200	165	130	—	M10x14.5	4	727	238
C 90 4	P90	24	27.3	8	200	165	130	—	M10x14.5	4	727	238
C 90 4	P100	28	31.3	8	250	215	180	—	M12x16	4.5	737	242
C 90 4	P112	28	31.3	8	250	215	180	—	M12x16	4.5	737	242
C 90 4	P132	38	41.3	10	300	265	230	16	14	5	773.5	244
C 90 4	P160	42	45.3	12	350	300	250	23	18	5.5	824	248
C 90 4	P180	48	51.8	14	350	300	250	23	18	5.5	824	248

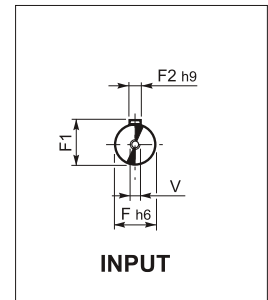
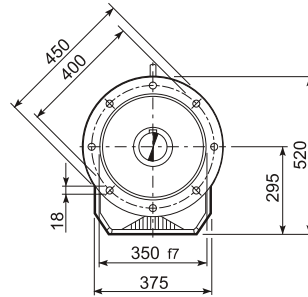
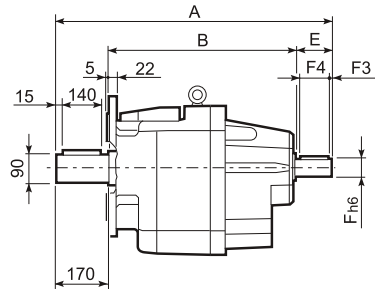



C 90...HS

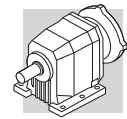
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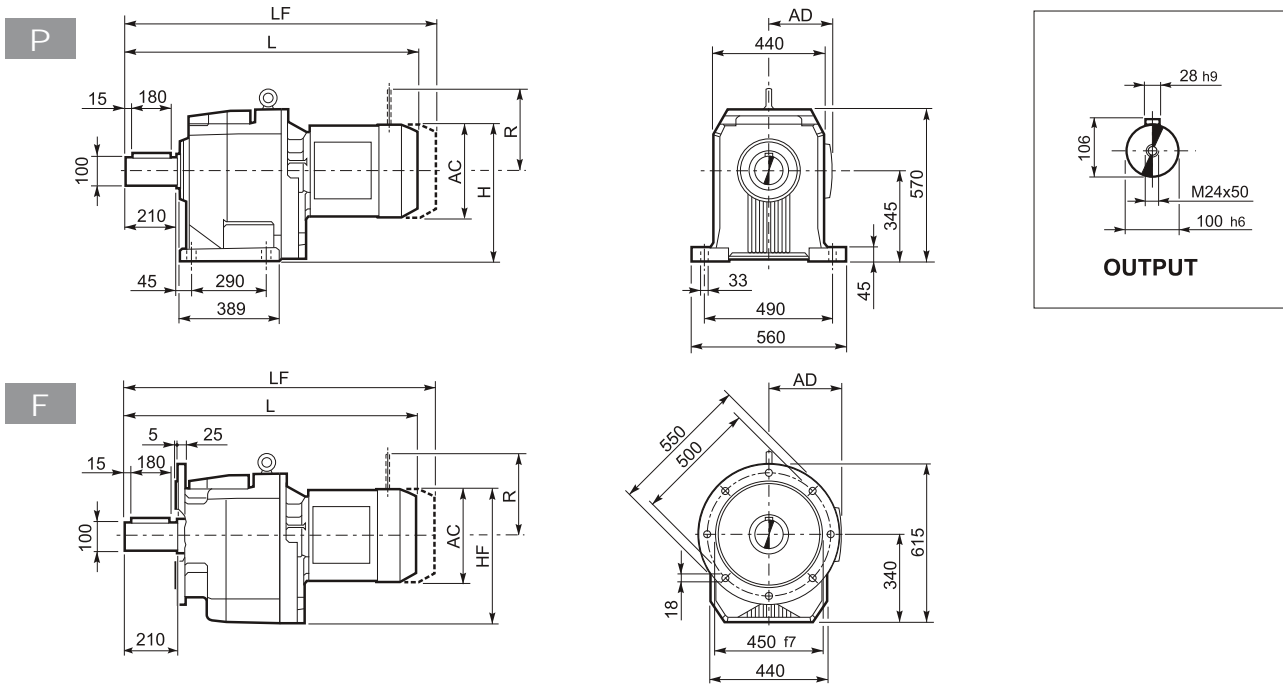
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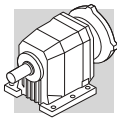
		A	B	E	F	F1	F2	F3	F4	V	
C 90 2	HS	930.5	620.5	140	60	64	18	10	120	M16x36	273
C 90 3		930.5	620.5	140	60	64	18	10	120	M16x36	273
C 90 4		797	577	50	24	27	8	2.5	45	M8x19	240



C 100...M/ME/MX

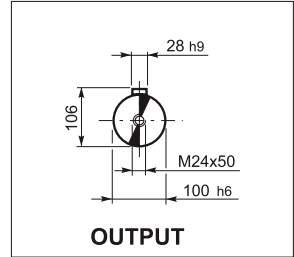
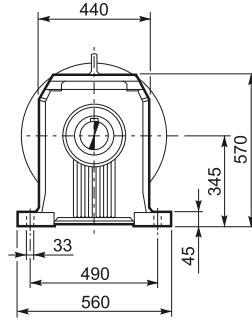
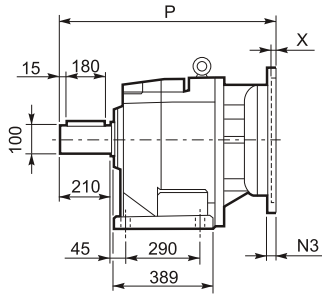


				AC	H	HF	L	AD		M...FD M...FA		M...FD		M...FA	
										LF		R	AD	R	AD
C 100 2/3	S4	ME4	MX4	258	474	469	1087	193	392	1196	405	204	210	200	210
C 100 2/3	S4	ME4LB	MX4LA	258	474	469	1122	193	400	1220	415	204	210	226	210
C 100 2/3	S5	ME5S	MX5S	310	500	495	1173.5	245	420	1313.5	475	266	245	247	245
C 100 2/3	S5	ME5L	MX5L	310	500	495	1217.5	245	436	1351.5	486	266	245	247	245
C 100 4	S1	M1		138	414	409	956.5	108	346	1027.5	348	103	135	124	108
C 100 4	S1	ME1		138	414	409	956.5	108	346	1027.5	348	103	135	124	135
C 100 4	S2	M2S		156	423	418	985.5	119	354	1056.5	357	129	146	134	119
C 100 4	S2	ME2S		156	423	418	985.5	119	354	1055.5	355	129	143	134	143
C 100 4	S2	MX2S		156	423	418	1029.5	119	359	1101.5	359	129	143	134	143
C 100 4	S3	ME3S		195	442.5	437.5	1029.5	142	360	1125.5	363	160	150	160	155
C 100 4	S3	ME3L	MX3S	195	442.5	437.5	1061.5	142	366	1151.5	367	160	150	160	155
C 100 4	S3	MX3L		195	442.5	437.5	1105.5	142	372	1197.5	375	160	150	160	155
C 100 4	S4	ME4	MX4	258	474	469	1169.5	193	400	1278.5	409	204	210	200	210
C 100 4	S4	ME4LB	MX4LA	258	474	469	1204.5	245	408	1338.5	419	204	210	226	210

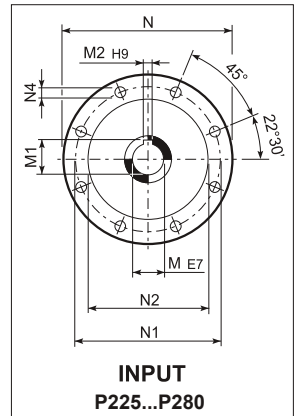
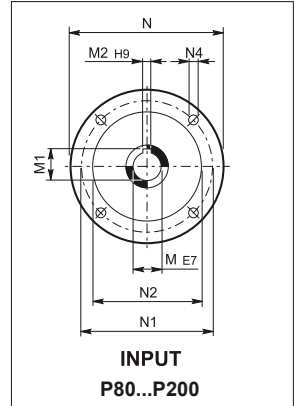
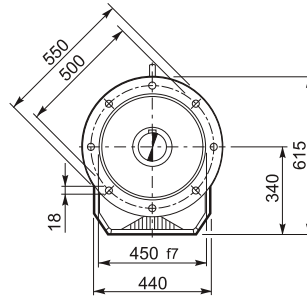
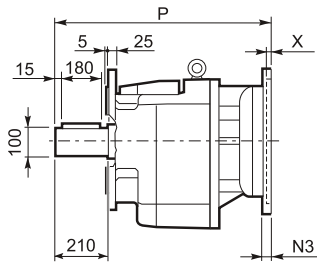



C 100...P(IEC)

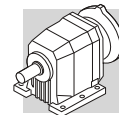
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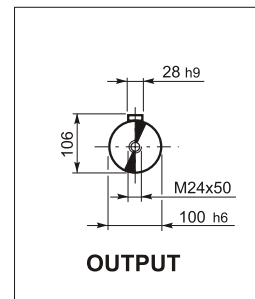
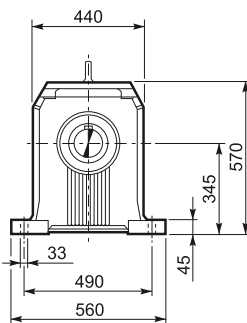
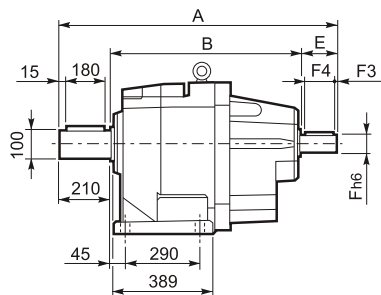


		M	M1	M2	N	N1	N2	N3	N4	X	P	
C 100 2/3	P100	28	31.3	8	250	215	180	—	M12x16	4.5	749.5	364
C 100 2/3	P112	28	31.3	8	250	215	180	—	M12x16	4.5	749.5	364
C 100 2/3	P132	38	41.3	10	300	265	230	16	14	5	786	367
C 100 2/3	P160	42	45.3	12	350	300	250	23	18	6	841.5	382
C 100 2/3	P180	48	51.8	14	350	300	250	23	18	6	841.5	382
C 100 2/3	P200	55	59.3	16	400	350	300	—	M16x25	7	866.5	403
C 100 2/3	P225	60	64.4	18	450	400	350	30	18	7	912	403
C 100 2/3	P250	65	69.4	18	550	500	450	30	18	7	942	426
C 100 2/3	P280	75	79.9	20	550	500	450	30	18	6	942	426
C 100 4	P63	11	12.8	4	140	115	95	—	M8x19	4	803	369
C 100 4	P71	14	16.3	5	160	130	110	—	M8x16	4.5	803	369
C 100 4	P80	19	21.8	6	200	165	130	—	M10x14.5	4	822.5	371
C 100 4	P90	24	27.3	8	200	165	130	—	M10x14.5	4	822.5	371
C 100 4	P100	28	31.3	8	250	215	180	—	M12x16	4.5	832.5	375
C 100 4	P112	28	31.3	8	250	215	180	—	M12x16	4.5	832.5	375
C 100 4	P132	38	41.3	10	300	265	230	16	14	5	869	377
C 100 4	P160	42	45.3	12	350	300	250	23	18	5.5	919.5	381
C 100 4	P180	48	51.8	14	350	300	250	23	18	5.5	919.5	381

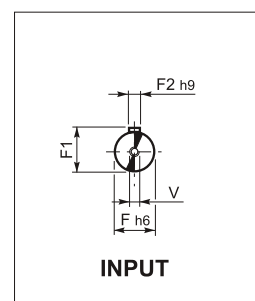
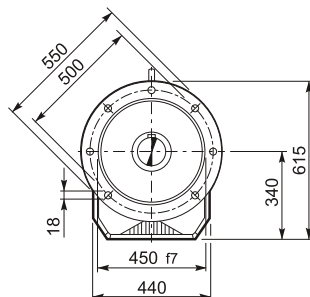
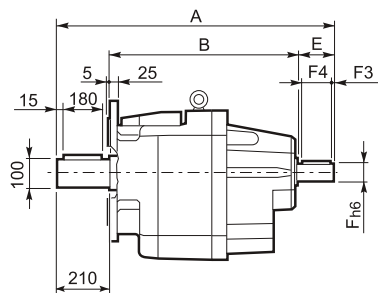



C 100...HS

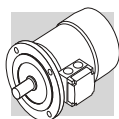
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F



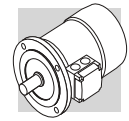
		A	B	E	F	F1	F2	F3	F4	V	
C 100 2	HS	1025.5	676	140	60	64	18	10	120	M16x36	409
C 100 3		1025.5	676	140	60	64	18	10	120	M16x36	409
C 100 4		892	632	50	24	27	8	2.5	45	M8x19	372



ELECTRIC MOTORS

M1 SYMBOLS AND UNITS OF MEASUREMENT

Symbols	Units of Measure	Description	Symbols	Units of Measure	Description
$\cos\varphi$	–	Power factor	n	$[\text{min}^{-1}]$	Rated speed
η	–	Efficiency	P_B	[W]	Power drawn by the brake at 20°C
f_m	–	Power adjusting factor	P_n	[kW]	Motor rated power
l	–	Cyclic duration factor	P_r	[kW]	Required power
I_N	[A]	Rated current	t_1	[ms]	Brake response time with one-way rectifier
I_s	[A]	Locked rotor current	t_{1s}	[ms]	Brake response time with electronic-controlled rectifier
J_C	[Kgm ²]	Load moment of inertia	t_2	[ms]	Brake reaction time with a.c. disconnect
J_M	[Kgm ²]	Moment of inertia	t_{2c}	[ms]	Brake reaction time with a.c. and d.c. disconnect
K_C	–	Torque factor	t_a	[°C]	Ambient temperature
K_d	–	Load factor	t_f	[min]	Work time at constant load
K_J	–	Inertia factor	t_r	[min]	Rest time
M_A	[Nm]	Mean breakaway torque	W	[J]	Braking work between service interval
M_B	[Nm]	Brake torque	W_{\max}	[J]	Maximum brake work for each braking
M_N	[Nm]	Rated torque	Z	[1/h]	Permissible starting frequency, loaded
M_L	[Nm]	Counter-torque during acceleration	Z_0	[1/h]	Max. permissible unloaded starting frequency ($l = 50\%$)
M_S	[Nm]	Starting torque			



M2 INTRODUCTION

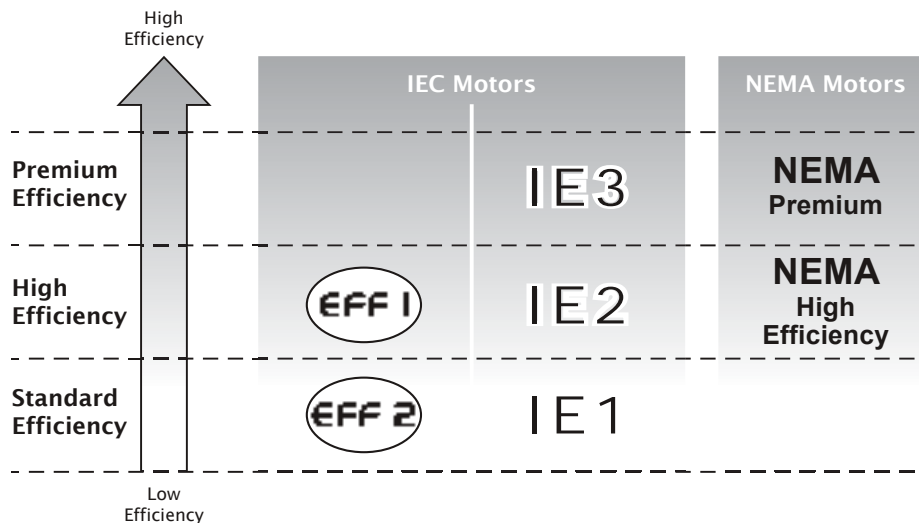
Efficiency classes and test methods

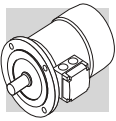
Efficiency classes characterise the efficiency with which an electric motor converts electrical energy into mechanical energy. In Europe, the energy efficiency of low voltage electric motors used to be classified using the voluntary Eff1/Eff2/Eff3 system. Outside Europe, other countries used to apply their own national systems, often very different to the European system. This uncertainty in standards led manufacturers to develop a harmonised international standard, and push for the issue of IEC (International Electrotechnical Commission) standard IEC 60034-30-1, "Efficiency classes of single-speed, three-phase, cage-induction motors (IE code)".

This new standard:

- defines new classes of efficiency
- **IE1** (standard efficiency)
- **IE2** (high efficiency)
- **IE3** (premium efficiency)
- provides a common, international reference system for the classification of electric motors
- and for national legislation
- introduces a new efficiency measurement method in conformity with standard IEC 60034-1-2:2007

The following table shows the correspondence among the main classes.





European Commission regulation 640/2009

IEC standard 60034-30-1 establishes technical guidelines for efficiency classification but does not impose any legal requirements for the adoption of any particular efficiency class. These are laid down by European Directives and national laws.

The EC Regulation applying Directive 2005/32/EC was adopted on the 22nd July 2009. This establishes the legal requirements and eco-compatible design criteria for electric motors, and imposes minimum efficiency limits according to the following schedule:

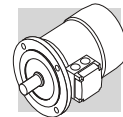
- **16/06/2011:** Electric motors must have a minimum efficiency level equivalent to class **IE2**
- **01/01/2015:** Electric motors with a rated power output between 7.5 kW and 375 kW must have a minimum efficiency level corresponding to **IE3**, or to **IE2** if controlled by an inverter.
- **01/01/2017:** Electric motors with a rated power output between 0.75 kW and 375 kW must have a minimum efficiency level corresponding to **IE3**, or to **IE2** if controlled by an inverter.

Scope and exclusions

EC Regulation 640/2009 applies to 2, 4, and 6 pole, single-speed, three-phase, 50 Hz or 60 Hz, cage-induction motors with rated outputs of 0.75 kW to 375 kW, and rated voltage up to 1000 V, designed for continuous duty (S1).

The regulation does not apply to:

- brakemotors
- motors designed to function immersed in liquid
- motors that are fully integrated in a product (like a gearbox, pump, fan), so that it is not possible to test the performance of the motor independently of that of the product.
- motors expressly designed to function:
 - at altitudes above 4000 metres a.s.l.;
 - in ambient temperatures above 60 °C;
 - at maximum operating temperatures above 400 °C;
 - in ambient temperatures below -30 °C (all motors) or below 0 °C (water-cooled motors);
 - with incoming liquid coolants at temperatures below 0 °C or above 32 °C;
 - in potentially explosive atmospheres as defined by Directive 2014/34/EU.



M3 GENERAL CHARACTERISTICS

M3.1 Production range

The asynchronous three-phase electric motors BXN, BX, BE, BN, MXN, MX, ME and M of BONFI-GLIOLI RIDOTTORI's production, are available in basic design IMB5 and derived versions. Motors are the enclosed type with outer fan and cage-type rotor for use in industrial environments. Standard versions of BX-BE/MX-ME motors are 230/400V Δ/Y (400/690V Δ/Y in sizes BX-BE 160 and BX- BE 180), 50 Hz motors, with a tolerance of $\pm 10\%$. Standard BN/M motors are designed to operate from a rated voltage 230/400V Δ/Y (400/690V Δ/Y for frame sizes BN 160 through BN 200) 50 Hz, with $\pm 10\%$ tolerance.

On the BXN/MXN motors, it is present a terminal box with 9 PIN connection + 12 wires winding that makes it easy to obtain the right voltage for most countries as standard. The Standard versions is identified as WD1 and makes it possible to obtain the following voltages/frequency (115/200/230/400V-50Hz and 132/230/265/460V-60Hz). For the BXN/MXN motors the voltage tolerance is reduced to $\pm 5\%$.

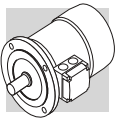
M3.2 Standards

The motors described in this catalogue are manufactured to the applicable standards shown in the following table.

(F01)	Title	CEI	IEC
	General requirements for rotating electrical machines	CEI EN 60034-1	IEC 60034-1
	Terminal markings and direction of rotation of rotating machines	CEI 2-8	IEC 60034-8
	Methods of cooling for electrical machines	CEI EN 60034-6	IEC 60034-6
	Dimensions and output ratings for rotating electrical machines	EN 50347	IEC 60072
	Classification of degree of protection provided by enclosures for rotating machines	CEI EN 60034-5	IEC 60034-5
	Noise limits	CEI EN 60034-9	IEC 60034-9
	Classification of type of construction and mounting arrangements	CEI EN 60034-7	IEC 60034-7
	Rated voltage for low voltage mains power	CEI 8-6	IEC 60038
	Vibration level of electric machines	CEI EN 60034-14	IEC 60034-14
	Efficiency classes of single-speed, three-phase, cage-induction motors (IE code)	CEI EN 60034-30-1	IEC 60034-30-1
	Standard method for determining losses and efficiency from tests	CEI EN 60034-2-1	IEC 60034-2-1

The motors also comply with foreign standards adapted to IEC 60034-1 as shown here below.

(F02)	Standard	Country
	DIN VDE 0530	Germany
	BS5000 / BS4999	Great Britain
	AS 1359	Australia
	NBNC 51 - 101	Belgium
	NEK - IEC 34	Norway
	NF C 51	France
	OEVE M 10	Austria
	SEV 3009	Switzerland
	NEN 3173	Netherlands
	SS 426 01 01	Sweden



M3.3 Directives 2006/95/EC (LVD) and 2004/108/EC (EMC)

BXN, BX, BE, BN, MXN, MX, ME and M motors meet the requirements of Directives 2014/35/UE (LVD - Low Voltage Directive), the 2014/30/UE (EMC - Electromagnetic Compatibility Directive), the 2009/125/CE (ERP - Energy Related Products Directive) and 2011/65/UE (RoHS – Restriction of Hazardous Substances) and their nameplates bear the CE mark.

As for the EMC Directive, construction is in accordance with standards CEI EN 60034-1 (Rotating electrical machines Part 1: Rating and performance), CEI EN 61000-6-2 (Generic standards - Immunity for industrial environments), CEI EN 61000-6-4 (Generic standards - Emission standard for industrial environments).

Motors with FD brakes, when fitted with the suitable capacitive filter at rectifier input (option **CF**), meet the emission limits required by Standards CEI EN 61000-6-3 and CEI EN 60204-1.

The responsibility for final product safety and compliance with applicable directives rests with the manufacturer or the assembler who incorporate the motors as component parts.

UKCA mark as standard

In UK, the CE mark will be replaced by the UKCA (United Kingdom Conformity Assessed mark) mark, due to Brexit, starting from 1st January 2022. All Bonfiglioli motors are already compliant with UKCA requirements.

M3.4 EU Directive 2012/19/EU - Information on disposal



This product should not be mixed with general household waste. Disposal has to be carried out in conformity with EU Directive 2012/19/EU where established, and in accordance to national regulations.

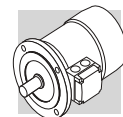
Fulfill disposal in accordance with any other legislation in force throughout the country.

M3.5 Tolerances

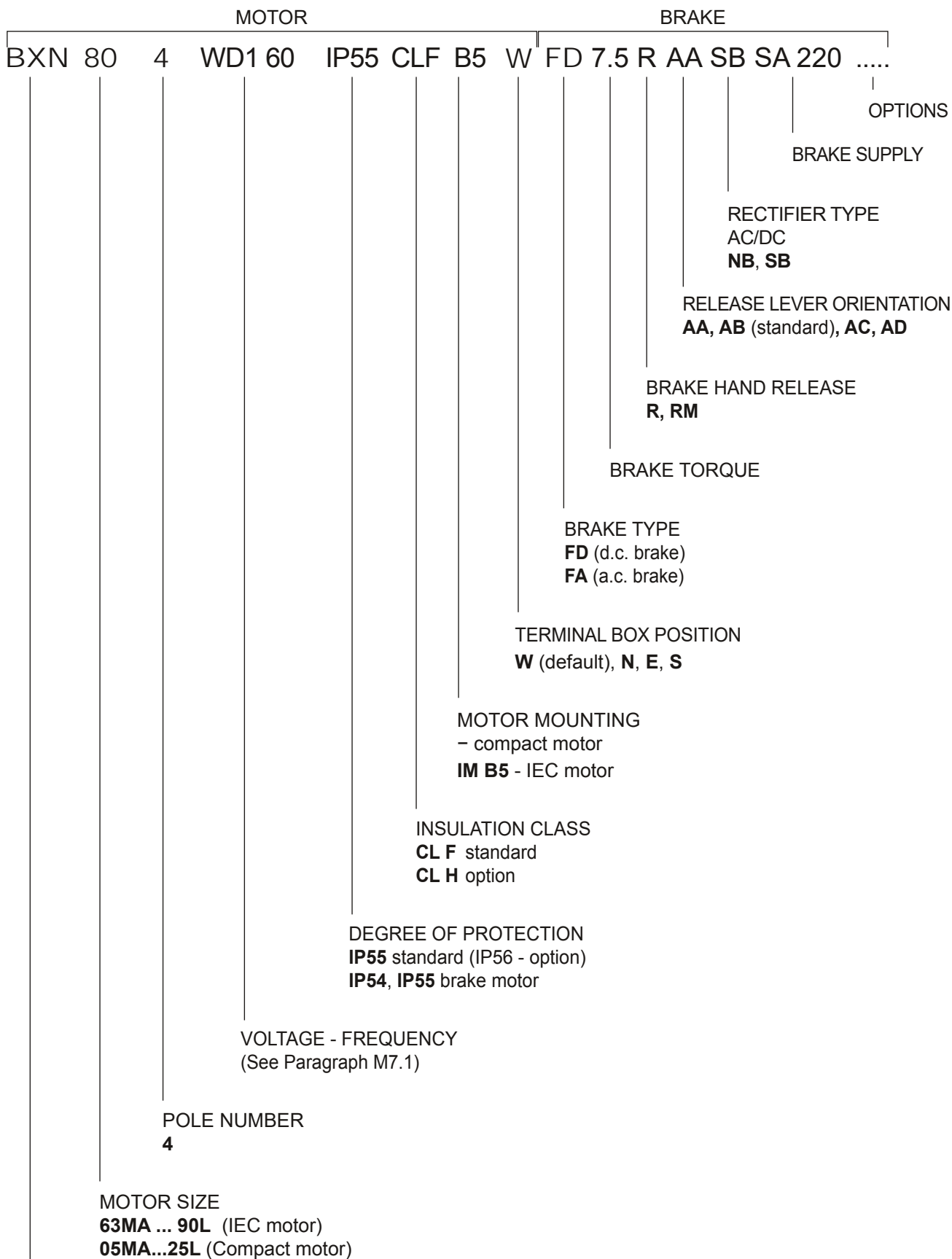
As per the Norms CEI EN 60034-1, applicable the tolerances here below apply to the following quantities.

(F03)	-0.15 (1 - η) P \leq 50kW	Efficiency
	-(1 - $\cos\phi$)/6 min 0.02 max 0.07	Power factor
	$\pm 20\%$ *	Slip
	+20%	Locked rotor current
	-15% +25%	Locked rotor torque
	-10%	Max. torque

(*) $\pm 30\%$ for motors with Pn < 1 kW

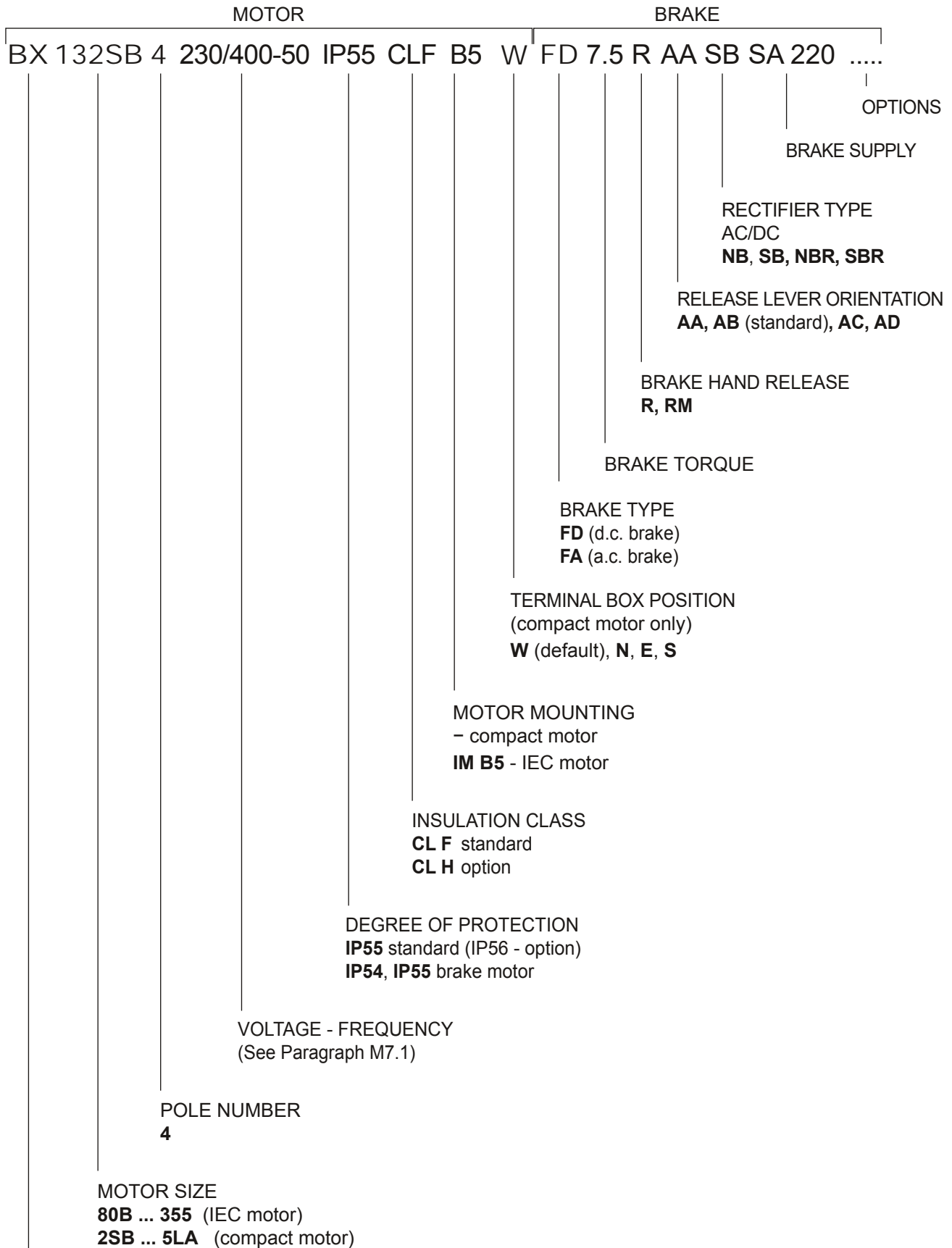
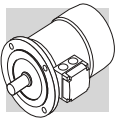


M4 MOTOR DESIGNATION



MOTOR TYPE

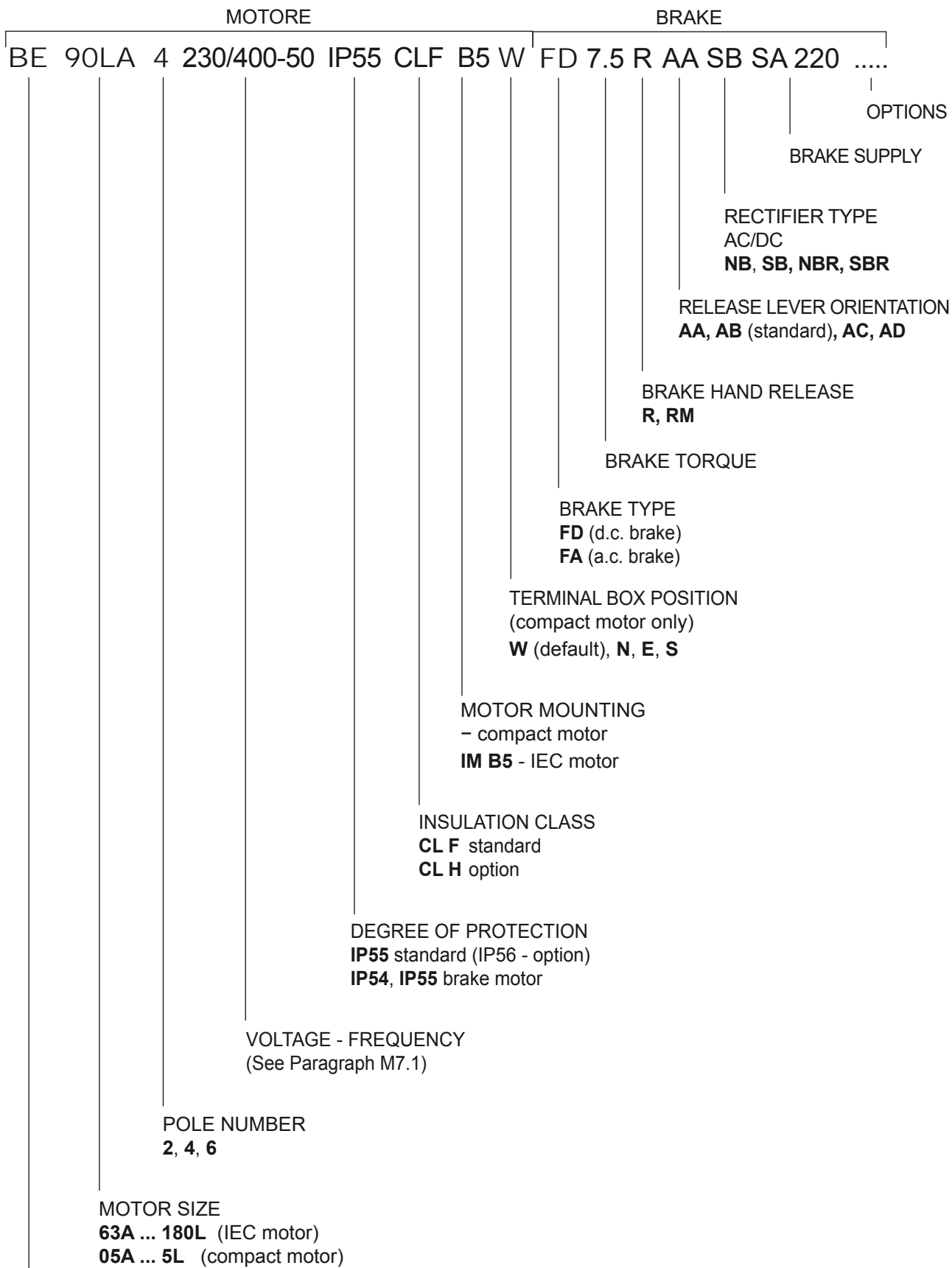
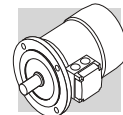
BXN = IEC 3-phase, class IE3 **MXN** = compact 3-phase, class IE3



MOTOR TYPE

BX = IEC 3-phase, class IE3

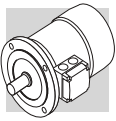
MX = compact 3-phase, class IE3



MOTOR TYPE

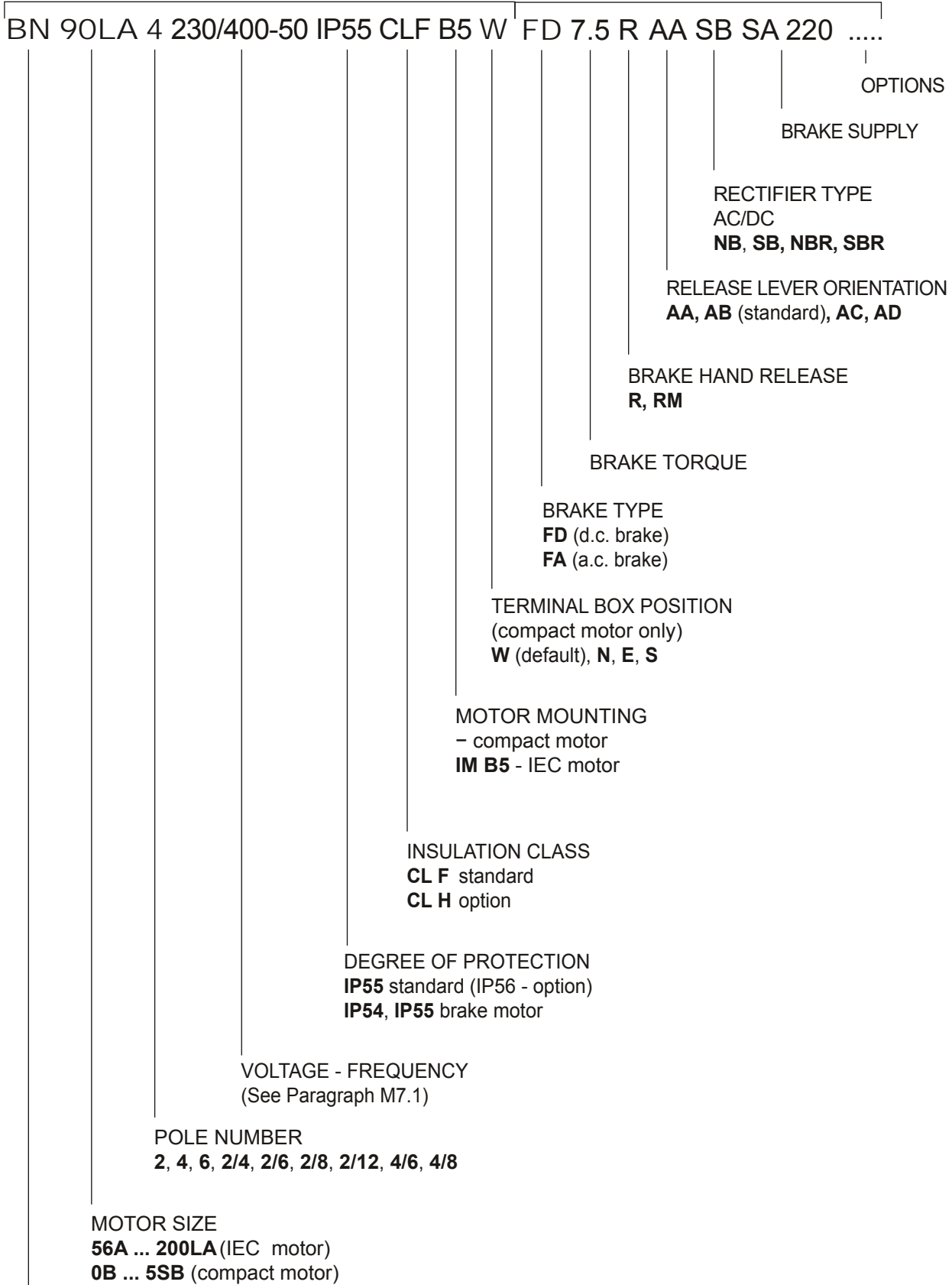
BE = IEC 3-phase, class IE2

ME = compact 3-phase, class IE2



MOTOR

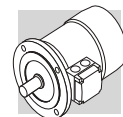
BRAKE



MOTOR TYPE

BN = IEC 3-phase

M = IEC compact 3-phase



M5 VARIANTS AND OPTIONS

M5.1 Variants

(F04)

Description		Default	Option	Page
Voltage (BN - BE - BX) ≤ 132		230/400/50		576
Voltage (BN - BE - BX) ≥ 160		400/690/50		
Voltage (BXN)		WD1		EVOX*
Protection class	BXN - BX - BE - BN - MXN - MX - ME - M	IP 55	IP 56	572
	BXN - BX - BE - BN/FA-FD MXN - MX - ME - M/FA-FD	IP 54	IP 55	
	BX_FD ≥ 200	IP 55		
	BX...K - BX... K_FDK	IP 55	IP 56	
Insulation class		CLF	CLH	583
Design version	BX - BE - BN	B5 B5 R		571
	BXN	B5		EVOX*

Default values.

* See EVOX specific catalogue

M5.2 Options

(F05)

Description	Catalogue numbers								Availability	Page
	D3	K1	E3	PT1000°						
Thermal protective devices	D3	K1	E3	PT1000°					BXN - BX - BE - BN - MXN - MX - ME - M	602
50 Hz normalized power	PN								BN - M	579
Feedback devices	EN1	EN2	EN3	EN4	EN5	EN6	EN7*	EN8*	BXN - BX - BE - BN - MX - ME - M	610-612
Anti-condensate heaters	H1	NH1							BXN - BX - BE - BN - MXN - MX - ME - M	605
Tropicalized windings	TP								BXN - BX - BE - BN - MXN - MX - ME - M	606
Double-extended shaft	PS								BXN - BX - BE - BN - MXN - MX - ME - M	606
Rotor balancing grade B	RV								BX - BE - BN MX - ME - M	607
External mechanical protections	RC	TC***	EC°						BXN - BX - BE - BN - MXN - MX - ME - M	610
Forced ventilation	U1	U2**							BX - BE - BN MX - ME - M	608
Insulated Bearings	IB*								BX - MX	612
Certification CSA/UL	CUS°								BXN - BX - BE - BN - MXN - MX - ME - M	580
Bureau of Indian Standard Certification	BIS								BE - ME	581
China Compulsory Certification	CCC								BX - BE - BN MX - ME - M	581
China Energy Label	CEL								BX - MX	582
NBR Certification	NBR								BX - MX	582
EECA Ceertification	EECA								BX - MX	583
Plug connector	CON								BX - BE - BN MX - ME - M	602
Surface protection	C_								BXN - BX - BE - BN - MXN - MX - ME - M	613
Painting	RAL								BXN - BX - BE - BN - MXN - MX - ME - M	614
Certificates	ACM								BXN - BX - BE - BN - MXN - MX - ME - M	614
Inspection certificate	CC								BXN - BX - BE - BN - MXN - MX - ME - M	614
Vertical Mounting	VM*								BX - MX	613
Backstop device	AL	AR							MX - ME - M	607
Type of duty	S2	S3	S9						BN - M	584
	S2-10	S2-30	S2-60	S3=25%	S3=40%	S3=70%			BXN - MXN	

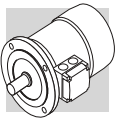
*Only for BX ≥ 280 and BX ≥ 280K

** Only for motors BN

*** Not for motors BX - MX

° Standard on BXN/MXN not an option

°° Only for motors BXN/MXN



M5.3 Brake-related options

(F06)	Description	Catalogue numbers				Availability	Page
	Brake torque	Refer to the specific brake type					593-596
	Manual release lever	R	RM			BXN - BX - BE - BN MXN - MX - ME - M	599
	Release lever orientation	AB	AA	AC	AD	BXN - BX - BE - BN MXN - MX - ME - M	600
	DC brake rectifier	NB	NBR°	SB	SBR°	BXN - BX - BE - BN MXN - MX - ME - M	591
	Soft-start flywheel	F1				BE - BN ME - M	601
	Capacitive filter	CF				BXN - BX - BE - BN MXN - MX - ME - M	601
	Brake separate power supply (*)	...SA	...SD	DIR°°		BXN - BX - BE - BN MXN - MX - ME - M	600
	Brake functionality check	MSW				BX - BE - BN MX - ME - M	605
	Additional cable entry for brake motors	IC				BN M	605

(*) Specify voltage. (°) Not for BXN/MXN (°°) Only for BXN/MXN - means "without separate power supply"

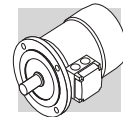
■ Default values.

M5.4 Example of identification nameplate for legacy motors (BX - BE - BN)

①	IEC EN 60034	Bonfiglioli Riduttori		CE	④
	3~Mot BE 90LA 4		Cod. 8U09030001		
②	No 1003001 - 6954785	S1	IM B5	15,1 kg	⑤
	kW 1,5	CL F	IP 55	Amb 40 °C	
	Hz	V ± 10%	A	min ⁻¹	cos φ
	50	230/400 Δ/Y	6.1/3.5	1430	0.74
③	60	265/460 Δ/Y	5.4/3.1	1730	0.73
	50Hz-IE2	83.5(100%) - 83.0(75%) - 80.0(50%)			⑥
	60Hz-IE2	84.5(100%) - 83.9(75%) - 80.7(50%)			

- ① BONFIGLIOLI Motor type
- ② Serial number
- ③ Rated voltage

- ④ Motor code
- ⑤ Type of duty: S1 Continuous duty
- ⑥ IE Class, Efficiency at: 4/4 - 3/4 - 2/4 load



M5.4.1 Example of identification nameplate for EVOX motors (BXN)

1	Bonfiglioli		TEFC IMB14 IP55 22,6 kg		
	Cod. xxxxxxxxxxxx		No xxxxxxxx - xxxxxxxx		
2	kW 1,5 HP 2		Amb 40 °C	CLF	S1
	Hz	V	A	min ⁻¹	cos φ
3	50	115/200 ΔΔ/YY	11.9/6.88	1441	0.75
	50	230/400 Δ/Y	5.96/3.44	1441	0.75
4	60	132/230 ΔΔ/YY	10.1/5.84	1750	0.74
	60	265/460 Δ/Y	5.6/2.92	1750	0.74
5	50Hz IE3 - 85.3 (100%) 84.3 (75%) 81.7 (50%) - KWA code J				
	60Hz IE3 - 86.5 (100%) 86.5 (75%) 83.4 (50%) - KWA code L				
6	H1 1~ 230V ± 10% 10W				
7	VB = 230V MB = 26Nm NB SA				
8		IEC EN 60034			
					CC320B
	Bonfiglioli Riduttori S.p.A.		Made in Italy		

- ① Motor designation and general information
- ② Serial codes
- ③ Environment & application compliancy
- ④ Rated performances function of voltages/frequencies
- ⑤ Motor performances @ 50 Hz
- ⑥ Motor performances @ 60 Hz
- ⑦ Thermal protection and Servo ventilation information
- ⑧ Brake information
- ⑨ Certifications
- ⑩ Manufactory information

M6 MECHANICAL FEATURES

M6.1 Versions

EC-normalised BXN, BX, BE and BN motors are available in the design versions as indicated in the table below here after as per Standards EN 60034-7 (BX/BE), CEI EN 60034-14 (BN).

Mounting versions are:

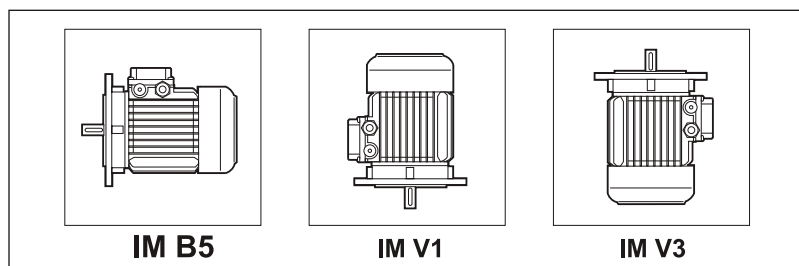
IM B5 (basic)

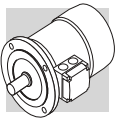
IM V1, IM V3 (derived)

IM B5 design motors can be installed in positions IM V1 and IM V3; in such cases, the basic design IM B5 is indicated on the motor name plate.

In design versions with a vertically located motor and shaft downwards, it is recommended to request the drip cover (always necessary for brake motors). This facility, included in the option list should be specified when ordering as it does not come as a standard device

(F07)





For Motor **BX≥200** and **BX≥200K** it is necessary to select VM options when vertically mounted.

If the motor will be mounted with DE facing downwards, selection of RC option is recommended. This has to be specified during the ordering phase because not present in standard motor version.

Flange output motors are also available with reduced coupling dimensions, as indicated in the table below - executions **B5R**. Their use in combination with gearboxes must be however coherent with the maximum installable power on gearboxes themselves (see chapters “Motors availability”). In case this condition is not met need to contact the Technical Service for the checking of the combination.

(F08)

	BN/BE 71	BX/BE/BN 80	BX/BE/BN 90	BX/BE/BN 100	BX/BE/BN 112	BX/BE/BN 132
	DxE - Ø					
B5R⁽¹⁾	11x23 - 140	14x30 - 160	19x40 - 200	24x50 - 200	24x50 - 200	28x60 - 250

(1) flange with through holes

M6.2 Degree of protection

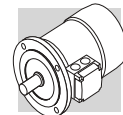
IP..

The following chart provides an overview of the degrees of protection available. In addition to the degree of protection specified when ordering, motors to be installed outdoors require protection against direct sunlight and also – when they are to be installed vertically down – a drip cover to prevent the ingress of water and solid particles (option **RC**).

(F09)

		IP 54	IP 55	IP 56
BXN- BX-BE-BN	MXN-MX-ME-M	⊘	standard	☼ on request
BXN-BX-BE-BN/ FD*-FA	MXN-MX-ME-M/ FD-FA	standard	☼ on request	⊘
BX ≥ 200_FD BX ≥ 200K_FD		⊘	standard	⊘
BX ≥ 280K_FD		⊘	standard	☼ on request

(*) BX ≤ 180_FD



IP			5			5		
0		Not protected	0		Not protected			
1	 ∅ 50 mm	Protected against extraneous solid bodies having $\varnothing \geq 50$ mm	1		Protected against vertical water drips			
2	 ∅ 12 mm	Protected against extraneous solid bodies having $\varnothing \geq 12.5$ mm	2		Protected against vertical water drips inclined up to 15°			
3	 ∅ 2,5 mm	Protected against extraneous solid bodies having $\varnothing \geq 2.5$ mm	3		Protected against rain			
4	 ∅ 1 mm	Protected against extraneous solid bodies having $\varnothing \geq 1.0$ mm	4		Protected against water splashes			
5		Protected against dust	5		Protected against jets of water			
6		No dust ingress	6		Protected against powerful jets of water			
			7		Protected against the effects of temporary immersion			
			8		Protected against the effects of continuous immersion			

M6.3 Cooling

The motors are externally ventilated (IC 411 to CEI EN 60034-6) and are equipped with a plastic fan working in both directions.

The motors must be installed allowing sufficient space between fan cowl and the nearest wall to ensure free air intake and allow access for maintenance purposes on motor and brake, if supplied. Independent, forced air ventilation (IC 416) can be supplied on request (option **U1**).

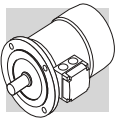
This solution enables to increase the motor duty factor when driven by an inverter and operating at reduced speed.

M6.4 Direction of rotation

Rotation is possible in both directions. If terminals U1, V1 and W1 are connected to line phases L1, L2 and L3, clockwise rotation (looking from drive end) is obtained. For counterclockwise rotation, switch two phases.

M6.5 Noise

Noise levels, measured using the method prescribed by ISO 1680 Standards, are within the maximum levels specified by Standards CEI EN 60034-9.



M6.6 Vibrations and balancing

Rotor shafts are balanced with half key fitted and fall within the vibration class N, as per Standard CEI EN 60034-14.

M6.7 Terminal box

Legacy motors (BN/M - BE/ME - BX/MX) terminal board features 6 studs for eyelet terminal connection while EVOX BXN and MXN motors have always 9 studs as standard. When a legacy motor have UL option active the terminal board features 9 studs execution (for US voltage “Dual Voltage”). A ground terminal is also supplied for earthing of the equipment. Terminals number and type are shown in the following table. For brake power supply, please read par. M9 (brake FD), M10 (brake FA). Brakemotors house the a.c./d.c. rectifier (factory pre-wired) inside the terminal box. Wiring instructions are provided either in the box or in the user manual.

(F10)

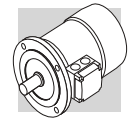
		No. of terminals	Terminal threads
BXN 63 ... BXN 90	MXN05 ... MXN25	9	M4
BX 80, BX 90 BE 63 ... BE 90 BN 56 ... BN 90	MX2, MX3 ME05 ... ME3 M05 ... M2	6	M4
BX 100 ... BX 132 BE 100 ... BE 132 BN 100 ... BN 160MR	MX3, MX4 ME3, ME4 M3 ... M4	6	M5
BX 160 - BE 160 ... BE 180M BN 160M ... BN 180M	ME5 MX5 - M5	6	M6
BX 180 - BE 180L BN 180L ... BN 200L	—	6	M8
BX 200 ... BX 250 BX 200K ... BX 250K	—	6	M10
BX 280 ... BX 355 BX 280K ... BX 355K	—	6	M12
BX 80 ... BX 132 BE 71 ... BE 132 BN 63 ... BN 160MR	MX2 ... MX4 ME2 ... ME4 M05 ... M4	9	M4
BX 160 ... BX 180 BE 160 ... BE 180 BN 160M ... BN 200L	MX5 ME5 M5	9	M6

M6.8 Cable entry

The holes used to bring cables to terminal boxes use metric threads in accordance with standard EN 50262 as indicated in the table here after.

(F11)

		Cable gland and dimensions		Maximum cable diameter allowed [mm]
BXN 63	MXN 05	2 x M20 x 1.5	1+1 Hole on each side	13
		2 x M16 x 1.5		11
BXN 71 ... BXN 90	MXN 10 ... MXN 25	2 x M25 x 1.5	1 Hole on each side	17
		2 x M16 x 1.5		11
BN 63 - BE 63	M05 - ME05	2 x M20 x 1.5	1 Hole on each side	13
BN71 ... BN90, BE71 ... BE90, BX80 ... BX90	M1 - M2, ME1 - ME2, MX2	2 x M25 x 1.5	1 Hole on each side	17
BN100 - BN112, BE100 - BE112, BX100 - BX112	MX3, MX4 - ME3 M3	2 x M32 x 1.5	2 Holes on each side	21
		2 x M25 x 1.5		17
BN132 ... BN160MR, BE132, BX132	M4, ME4, MX4	4 x M32 x 1.5	2 Holes on each side	21
BN160M ... BN200L, BE160 - BE180, BX160 - BX180	M5, ME5, MX5	2 x M40 x 1.5	Pivoting, 4 x 90°	28
BX 200 ... BX 355 BX 200K ... BX 355K	—	2 x M63 x 1.5	Pivoting, 4 x 90°	45



M6.9 Bearings

Life lubricated preloaded radial ball bearings are used, types are shown in the chart here under. Calculated endurance lifetime L_{10h} , as per ISO 281, in unloaded condition, exceeds 40000 hrs.

DE = drive end

NDE = non drive end

(F12)

	DE	NDE	
		Without Brake	With Brake
MXN 05 - ME05 - M05	6004 2Z C3	6201 2Z C3	6201 2RS C3
MXN 10 - ME1 - M1	6004 2Z C3	6202 2Z C3	6202 2RS C3
MXN 20 - MX2 - ME2 - M2	6007 2Z C3	6204 2Z C3	6204 2RS C3
MXN 25 - MX3 - ME3 - M3	6207 2Z C3	6206 2Z C3	6206 2RS C3
MX4 - ME4 - M4	6309 2Z C3	6308 2Z C3	6308 2RS C3
MX5 - ME5 - M5	6309 2Z C3	6309 2Z C3	6309 2RS C3

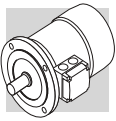
	DE	NDE	
		Without Brake	With Brake
BN 56	6201 2Z C3	6201 2Z C3	-
BXN 63 - BE 63 BN 63	6201 2Z C3	6201 2Z C3	6201 2RS C3
BXN 71 - BE 71 BN 71	6202 2Z C3	6202 2Z C3	6202 2RS C3
BXN 80 - BX 80 BE 80 - BN 80	6204 2Z C3	6204 2Z C3	6204 2RS C3
BXN 90 - BX 90 BE 90 - BN 90	6205 2Z C3	6205 2Z C3	6305 2RS C3
BX 100 - BE 100 - BN 100	6206 2Z C3	6206 2Z C3	6206 2RS C3
BX 112 - BE 112 - BN 112	6306 2Z C3	6306 2Z C3	6306 2RS C3
BX 132 - BE 132 - BN 132	6308 2Z C3	6308 2Z C3	6308 2RS C3
BN 160MR	6309 2Z C3	6308 2Z C3	6308 2RS C3
BX 160M/L - BE 160M/L - BN 160M/L	6309 2Z C3	6309 2Z C3	6309 2RS C3
BN 180M	6310 2Z C3	6309 2Z C3	6309 2RS C3
BX 180M/L - BE 180M/L - BN 180L	6310 2Z C3	6310 2Z C3	6310 2RS C3

	DE	NDE	
		Without Brake	With Brake
BN 200L - BX 200 - BX 200K	6312 2Z C3 6312/C3	6310 2Z C3 6210/C3*	6310 2RS C3
BX 225 - BX 225K	6313/C3*	6212/C3*	-
BX 250 - BX 250K	6315/C3*	6213/C3*	-
BX 280 - BX 280K	6316/C3*	6316/C3*	-
BX 315 - BX 315K	6319/C3**	6316/C3**	-
BX 355 - BX 355K	6322/C3**	6316/C3**	-

*Regreasable bearings with M6x1 Greasing Device

**Regreasable bearings with M10x1 Greasing Device

Note: BX and BXN motors have high efficiency bearings



M7 ELECTRICAL CHARACTERISTICS

M7.1 Voltage

Single speed motors are provided in standard execution either for nominal voltage 230 / 400 V Δ/Y, 50 Hz, or 400 / 690 V Δ/Y, 50 Hz, with a voltage tolerance of ± 10%.

Note: Motor nominal voltage/frequency also depends on the selection of options related to energy certifications for specific markets. Table below, then, has to be intended only as a guideline, for more details on the available Voltages/Frequencies as a function of the selected certification, please refer to paragraph M7.5 - M7.10.

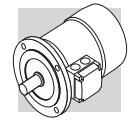
On all the motors, whose voltage / frequency configuration is not as indicated above, the voltage tolerance is reduced down to ± 5%.

For the operation out of the tolerance boundaries, the temperature may exceed by 10 K the limit provided by the adopted insulation class. The motors are suitable for operation on distribution European grid with voltage complying with the publication IEC 60038.

The table below shows the wiring options available.

(F13)

BN - M motor power supply voltages (IE1)				
Single speed motors at 50Hz				
Motor power supply voltage	— (CE)		CCC	CUS
	STD	FD / FA		
220/380 - 50	X	✓	X	✓
230/400 - 50	✓	✓	✓	✓
240/415 - 50	X	✓	X	✓
290/500 - 50	✓	✓	X	✓
380/660 - 50	X	✓	X	✓
400/690 - 50	✓	✓	X	✓
415/720 - 50	X	✓	X	✓
500/865 - 50	✓	✓	X	✓
Double speed motors at 50Hz				
Motor power supply voltage	— (CE)		CCC	CUS
	STD	FD / FA		
380 - 50	✓		X	✓
400 - 50	✓		✓	✓
415 - 50	✓		X	✓
500 - 50	✓		X	✓
Single speed motors at 60Hz				
Motor power supply voltage	— (CE)		CCC	CUS
	STD	FD / FA		
208/360 - 60	✓	✓	X	✓
220/380 - 60	✓	✓	X	✓
230/400 - 60	✓	✓	X	✓
255/440 - 60	X	✓	X	✓
265/460 - 60	X	✓	✓	✓
280/480 - 60	X	✓	X	✓
330/575 - 60	✓	✓	X	✓
380/660 - 60	✓	✓	X	✓
400/690 - 60	✓	✓	X	✓
440/760 - 60	X	✓	X	✓
460/800 - 60	X	✓	X	✓
480/830 - 60	X	✓	X	✓
575/995 - 60	✓	✓	X	✓
220/440 - 60	✓	✓	X	✓
230/460 - 60	✓	✓	X	✓
240/480 - 60	✓	✓	X	✓
Double speed motors at 60Hz				
Motor power supply voltage	— (CE)		CCC	CUS
	STD	FD / FA		
208 - 60	✓		X	✓
220 - 60	✓		X	✓
230 - 60	✓		X	✓
240 - 60	✓		X	✓
380 - 60	✓		X	✓
400 - 60	✓		X	✓
440 - 60	✓		X	✓
460 - 60	✓		X	✓
480 - 60	✓		X	✓
575 - 60	✓		X	✓



(F14)

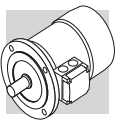
BE - ME motor power supply voltages (IE2)					
Single speed motors at 50Hz					
Motor power supply voltage	— (CE)	CCC	BIS	CUS	
220/380 - 50	✓	✗	✓	✓	
230/400 - 50	✓	✓	✓	✓	
240/415 - 50	✓	✗	✓	✓	
290/500 - 50	✓	✗	✓	✓	
380/660 - 50	✓	✗	✓	✓	
400/690 - 50	✓	✗	✓	✓	
415/720 - 50	✓	✗	✓	✓	
500/865 - 50	✓	✗	✓	✓	

Single speed motors at 60Hz					
Motor power supply voltage	— (CE)		CCC	BIS	CUS
	STD	FD / FA			
208/360 - 60	✓	✓	✗	✗	✓
220/380 - 60	✓	✓	✗	✗	✓
230/400 - 60	✓	✓	✗	✗	✓
255/440 - 60	✓	✓	✗	✗	✓
265/460 - 60	✗	✓	✗	✗	✓
280/480 - 60	✓	✓	✗	✗	✓
330/575 - 60	✗	✓	✗	✗	✓
380/660 - 60	✓	✓	✗	✗	✓
400/690 - 60	✓	✓	✗	✗	✓
440/760 - 60	✓	✓	✗	✗	✓
460/800 - 60	✗	✓	✗	✗	✓
480/830 - 60	✓	✓	✗	✗	✓
575/995 - 60	✓	✓	✗	✗	✓
220/440 - 60	✓	✓	✗	✗	✓
230/460 - 60	✓	✓	✗	✗	✓
240/480 - 60	✓	✓	✗	✗	✓

BX - MX motor power supply voltages (IE3)							
Single speed motors at 50Hz							
Motor power supply voltage	— (CE)		CCC	CEL	NBR	BIS	CUS
230/400-50	✓ ⁽¹⁾		✗	✓ ⁽⁶⁾	✗	✗	✗
290/500-50	✓		✗	✗	✗	✗	✗
380/660-50	✗		✗	✓ ⁽⁴⁾	✗	✗	✗
400/690-50	✓ ⁽²⁾		✗	✓ ^{(2) (3)}	✗	✗	✗



Single speed motors at 60Hz							
Motor power supply voltage	— (CE)		CCC	CEL	NBR ^(*)	BIS	CUS
	STD	FD / FA					
220/380-60	✗	✗	✗	✗	✓ ⁽³⁾	✗	✓
265/460-60	✗	✓ ⁽¹⁾	✗	✗	✗	✗	✓
330/575-60	✗	✓ ⁽³⁾	✗	✗	✗	✗	✓
380/660-60	✗	✗	✗	✗	✓ ⁽⁵⁾	✗	✓
440/760-60	✗	✗	✗	✗	✓ ⁽⁴⁾	✗	✓
460/800-60	✗	✓ ^{(2) (3)}	✗	✗	✗	✗	✓
220/440-60	✗	✗	✗	✗	✓ ⁽³⁾	✗	✓
230/460-60	✗	✗	✗	✗	✗	✗	✓

(1) only for motor size ≤132 (3) only for motor size ≤180 (5) only for motor size 180
 (2) only for motor size ≥160 (4) only for motor size ≥200 (6) only for motor size ≥100



M7.2 Frequency

(F15)





Number of poles			Winding connection
2	BE 80 ... BE 160, BN 63 ... BN 200	ME2 ... ME5, M05 ... M5	Δ / Y ⁽²⁾
4	BXN 63 ... BXN 90, BX 80 ... BX 355 BX 200LAK ... BX 355MCK BE 63 ... BE 180, BN 56 ... BN 200	MXN05 ... MXN25, MX2 ... MX5 — ME05 ... ME5, M05 ... M5	
6	BE 90 ... BE 160, BN 63 ... BN 200	ME3 ... ME5, M05 ... M5	
8	BN 71 ... BN 132	M1 ... M4	Y / Y (Two windings)
2/4	BN 63 ... BN 132	M05 ... M4	
2/6	BN 71 ... BN 132	M1 ... M4	
2/8	BN 71 ... BN 132	M1 ... M4	
2/12	BN 80 ... BN 132	M2 ... M4	
4/6	BN 71 ... BN 132	M1 ... M4	
4/8	BN 80 ... BN 132	M2 ... M4	

(²) Motors with voltage in ratio 2 (ex. 230/460 - 60) will be equipped with a 9 pin terminal box with winding connection either ΔΔ / Δ or YY / Y (except 6 pole BN 63 Δ / Y)

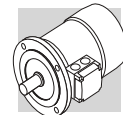
NOTE: For BXN and MXN motors refer to EVOX specific catalogue

Rated output power BN / M for 60 Hz operation is shown in the following diagram.

(F16)

		P _n [kW]						P _n [kW]			
		2P	4P	6P	8P (*)			2P	4P	6P	8P (*)
BN 56A	—	—	0.07	—	—	BN 100L	M3LA	3.5	—	—	—
BN 56B	M0B	—	0.1	—	—	BN 100LA	—	—	2.5	1.8	0.9
BN 63A	M05A	0.21	0.14	0.1	—	BN 100LB	M3LB	4.7	3.5	2.2	1.3
BN 63B	M05B	0.3	0.21	0.14	—	BN 112M	—	4.7	4.7	2.5	1.8
BN 63C	M05C	0.45	0.3	—	—	—	M3LC	—	4.7	2.5	—
BN 71A	—	0.45	0.3	0.21	0.1	BN 132S	M4SA	—	6.5	3.5	2.5
—	M1SC	—	—	0.21	—	BN 132SA	—	6.5	—	—	—
BN 71B	M05SD	0.65	0.45	0.3	0.14	BN 132SB	M4SB	8.7	—	—	—
BN 71C	M1LA	0.9	0.65	0.45	—	BN 132M	—	11	—	—	3.5
BN 80A	—	0.9	0.65	0.45	0.21	BN 132MA	M4LA	—	8.7	4.7	—
BN 80B	M2SA	1.3	0.9	0.65	0.30	BN 132MA	—	—	8.7	4.7	—
BN 80C	M2SB	1.8	1.3	0.9	—	BN 132MB	M4LB	—	11	6.5	—
BN 90S	—	—	1.3	0.9	0.45	BN 160MR	M4LC	12.5	12.5	—	—
BN 90SA	—	1.8	—	—	—	BN 160M	M5SA	—	—	8.7	—
BN 90SB	—	2.2	—	—	—	BN 160MB	—	17.5	—	—	—
BN 90L	M3SA	2.5	—	1.3	0.65	—	M5SB	17.5	17.5	—	—
BN 90LA		—	1.8	—	—	BN 160L	—	21.5	17.5	12.5	—
BN 90LB	—	—	2.2	—	—	—	M5SC	21.5	—	—	—
						BN 180M	M5LA	24.5	21.5	—	—
						BN 180L	—	—	25.3	17.5	—
						BN 200L	—	—	34	—	—
						BN 200LA	—	34	—	22	—

(*) Excluded M_— motors



BXN / BX / BE / MXN / MX / ME motors are available at 60 Hz on a 4 pole configuration only, and their power rating is the same as their 50 Hz counterpart. Double speed BN / M motors supplied at 60 Hz will have an increase of nominal power, referred to 50 Hz, equal to 15%, whereas double speed BXN / BX / BE / MXN / MX / ME motors are not available. If a nominal power rating, equal to the normalised nominal power rating at 50 Hz, was requested to be on a nameplate of a motor meant to be voltage supplied at 60 Hz, the PN option shall be specified on the motor designation. Motors normally designed for a 50 Hz frequency may be used on a 60 Hz operating grid, but the related data shall be updated according to the following table. Motors designated for 50 Hz operation show on the nameplate also the values for 60 Hz operation (excluding motors in CUS execution and brake motors). See the following table.

(F17)

	50 Hz		60 Hz		
	V - 50 Hz	V - 60 Hz	P _n - 60 Hz	M _n , M _a /M _n - 60 Hz	n [min ⁻¹] - 60 Hz
BXN / MXN BX / MX BE / ME	230/400 Δ/Y	265 - 460 Δ Y	1	0.83	1.2
	400/690 Δ/Y	460 Δ			
BN / M	230/400 Δ/Y	220 - 240 Δ			
		380 - 415 Y			
	400/690 Δ/Y	380 - 415 Δ			
BN / M	230/400 Δ/Y	265 - 280 Δ	1.15	1	1.2
		440 - 480 Y			
	400/690 Δ/Y	440 - 480 Δ			

NOTE: For BXN and MXN motors refer to EVOX specific catalogue

M7.3 Ambient temperature

Catalogue rating values are calculated for 50 Hz operation and for standard ambient conditions (temperature 40 °C; elevation ≤ 1000 m a.s.l.) as per the CEI EN 60034-1 Standards. The motors can be used within the 40 - 60 °C temperature range with rated power output adjusted by factors given in the table below.

(F18)

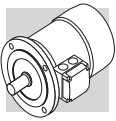
Ambient temperature (°C)	40°	45°	50°	55°	60°
Permitted power as a % of rated power	100%	95%	90%	85%	80%

Should a derating factor higher than 15% apply please consult factory.

M7.4 50 HZ normalized power

PN

With this option, motor name plate includes 50 Hz normalized power information even when motor is designated for operation with 60 Hz power mains. For 60 Hz supplies along with voltages 230/460V and 575V the PN option is applied by default.



M7.5 Motors for USA and Canada

CUS

CUS option is available in NEMA Design C execution for BN, BE, M, ME motors, and NEMA Design B for BX motors, with regards to the electrical features. The BXN and MXN motors are CUS certified as standard. Motors are certified in compliance with CSA (Canadian Standard) C22.2 N° 100 and UL (Underwriters Laboratory) UL 1004-1 standards, as stated on UL file E308649.

All powers BN-BE-M-ME and BXN-MXN with powers between 0,12 and 0,55kW included motors nameplates show the below marks:



BXN/MXN \geq 0,75kW and BX/MX \geq 0,75kW motors nameplates show the below marks and are certified in compliance with the energy efficiency standards in effect in the USA and Canada, respectively provided by DOE (10 CFR Part 431) and NRCAN (Energy Efficiency Regulations), tested according to CSA C390 standard.



BX 100 motors are available for the USA only and not for Canada, and the related marks reported on the nameplates are the following:



BX \geq 200K motors shows on nameplate the logo reported below and are compliant to energy efficiency regulations of USA and Canada, respectively established from DOE (10 CFR Part 431) and from NRCAN (Energy Efficiency Regulations), and tested in accordance to CSA C390.



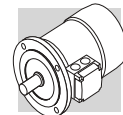
NOTES:

Starting from **June, 1st 2016**, CUS motors whose efficiency is below IE3 (i.e. “Premium Efficiency”) cannot be any longer sold in the USA and Canada, unless one or more of the following conditions apply:

- Double speed motors;
- Motors plated for a non - continuous duty (<80%);
- Motors intended to be operated through variable frequency drive only (properly equipped with “Inverter Duty Only” label, or similar).

CUS option is selectable in combination to U1 or U2 only for BX \geq 200K.

US power mains voltages and the corresponding rated voltages to be specified for the motor are indicated in the following table:




(F19)

Frequency	Mains voltage	V_{mot}
60 Hz	208 V	200 V
	240 V	230 V
	480 V	460 V
	600 V	575 V

BX motor with CUS option are available with the following nominal Voltage/Frequency combinations:

(F20)

	V_{mot}
BX ≤ 132	265/460 - 60 Hz
BX ≤ 180	230/460 - 60 Hz 330/575 - 60 Hz
BX ≥ 160 BX ≥ 200K	460/800 - 60 Hz

CUS option is applicable onto 50 Hz operating motors as well (motors BX, MX excluded).

M7.6 Motors certified for India

BIS

Low voltage motors $\geq 0.12\text{kW}$ manufactured or imported in India must be certified from Bureau of Indian Standard and provided with a mark certifying motor compliance to IS 12615 standard. BE - ME motors with power up to 3.7kW included, are available with the above mentioned certification and, when BIS option is selected, are provided with the nameplate reporting the following logo:



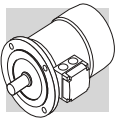
M7.7 China Compulsory Certification

CCC

Electric motors destined for sale in the People's Republic of China have to be certified under the CCC (China Compulsory Certification) system. BN/M and BE/ME motors of up to 7 Nm in rated torque are available with CCC certification and a special nameplate bearing the mark shown below:



CCC option is not currently available for IE3 motors and will be available starting from end 2021. CCC option is not currently available for servo - ventilated motors.



M7.8 Motor certified for China (China Energy Label)

CEL

Low voltage motors ≥ 0.75 kW manufactured or imported in China must be certified and registered by the label office and provided with an energy label certifying they meet the energy efficiency levels as defined in GB18613-2012.

BX motors with power from 30 to 355 kW included are available with the above mentioned certification and, when CEL option is selected, are provided with the following sticker applied to the motor:



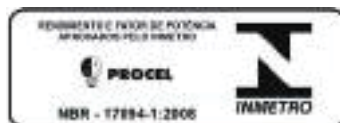
BX motors with CEL option are available with the following nominal Voltage/Frequency combinations:

(F21)		V_{mot}
	BX ≥ 200	380/660 - 50 Hz

M7.9 Motors certified for Brazil

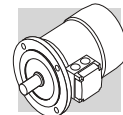
NBR

Brazilian laws regulate the manufacturing and importation of electric motor in the country. These have to be approved by NBR through a declaration of the motor efficiency level at INMETRO. Motor compliant to NBR must report the declared efficiency value and have to be provided with a specific NBR nameplate and the additional mark shown in picture below.




The NBR option is available for motors:

- BX with powers from 0.75 to 22 kW included
- BX... K with powers from 30 to 355 kW included



BX motors with NBR option are available with the following nominal Voltage/Frequency combinations:

(F22)

	V_{mot}
BX90SR ... BX160	220/380 - 60 Hz 220/440 - 60 Hz
BX 180	220/380 - 60 Hz 220/440 - 60 Hz 380/660 - 60 Hz
BX \geq 200K	440/760 - 60 HZ

M7.10 Motors certified for Australia


EECA

Electric motor covered by Australian/New Zealand's energy regulation must be listed in the national database Energyratig. Motor with EECA option are registered in the previously mentioned database and can be sold in Australia and New Zealand.

EECA option is available for BX ... K motor with power from 30 to 355kW included.

BX motors with EECA option are available with the following nominal Voltage/Frequency combinations:

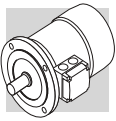
(F23)

	V_{mot}
BX \geq 200K	400/690 - 50 Hz

M7.11 Insulation class

CL F

Bonfiglioli motors use class **F** insulating materials (enamelled wire, insulators, impregnation resins) as compare to the standard motor. In standard motors, stator windings over temperature normally stays below the 80 K limit corresponding to class B over temperature. A careful selection of insulating components makes the motors compatible with tropical climates and normal vibration. For applications involving the presence of aggressive chemicals or high humidity, contact Bonfiglioli Engineering for assistance with product selection.



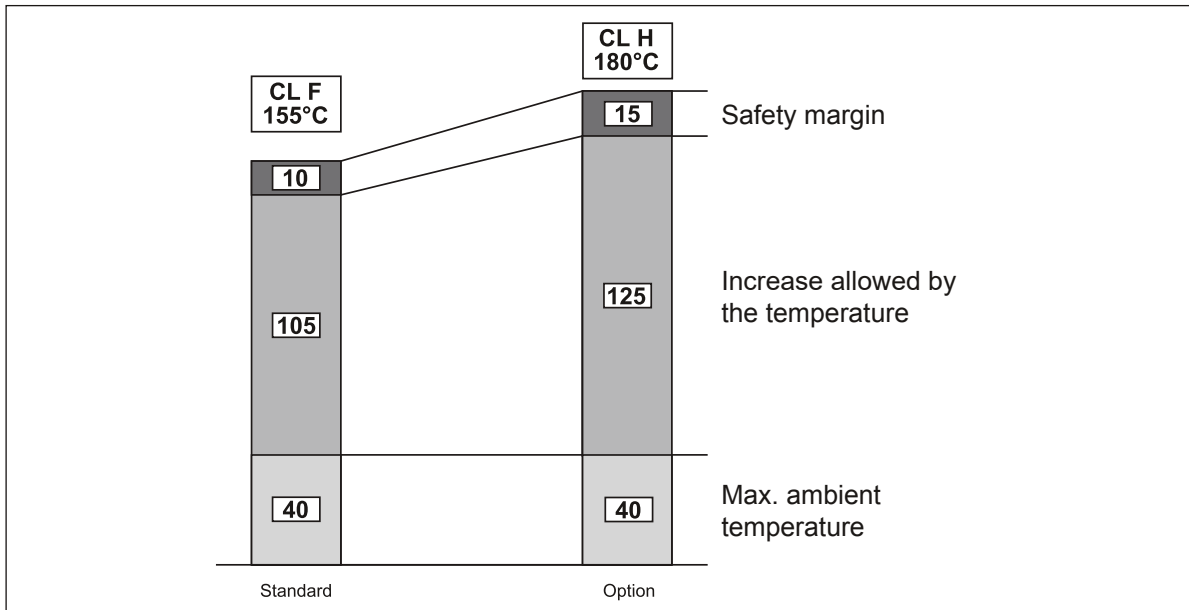
CL H

Motors manufactured in insulation class **H** are available at request.

This option can be selected for motors compliant with CSA and UL standards (CUS option), only for BX \geq 200 and BX \geq 200K.

CLH can't be selected on BXN motors because are CUS standard. If necessary contact technical office.

(F25)



M7.12 Type of duty

Unless otherwise specified, catalogue motor power refers to continuous duty S1. Any operating conditions other than S1 duty must be identified in accordance with duty cycle definitions laid down in standards CEI EN 60034-1. For duty cycles S2 and S3, the power increase co-efficient reported in the following table may be used. Please note that the table provided below applies to single-speed motors. As an alternative to S1 continuous duty, one of the following values can be specified at the product configuration stage (single speed motors only): S2, S3 or S9. The motor nameplate will be marked with an increased power rating to suit the type of duty, and with specific electrical data and a duty type of S2-30 min, S3-70% or S9 respectively. For further details, contact Bonfiglioli's Technical Service. Please contact Bonfiglioli Engineering for the power increase coefficients applicable to switch-pole motors.

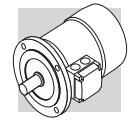
BN and M motors can be configured for operation at duty cycle S2(30min) and S3(70%) as standard option, Other requests which are different in terms of % or min are considered a speciality. BXN and MXN motors can be configured as standard at S2=10min, S2=30min, S2=60min or S3=25%, S3=40%, S3=70%.

(F24)

	Type of duty						S4 - S9
	S2			S3 *			
	Duration (min)			Intermittence (I)			
	10	30 (*)	60	25%	40%	70% (*)	Contact us
f_m	1.35	1.15	1.05	1.25	1.15	1.1	

* Cycle duration must, in any event, be equal to or less than 10 minutes; if this time is exceeded, please contact our Technical Service.

(*) Default values from options (tab. F05).



Cyclic duration factor:

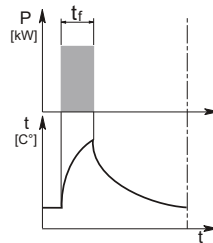
$$I = \frac{t_f}{t_f + t_r} \cdot 100 \quad (01)$$

t_f = work time under constant load

t_r = rest time

Limited duration duty S2

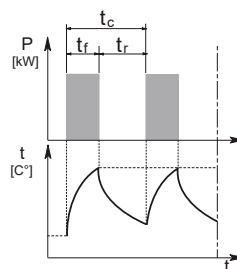
This type of duty is characterized by operation at constant load for a limited time, which is shorter than the time required to reach thermal equilibrium, followed by a rest period of sufficient duration to restore ambient temperature in the motor.



Periodical intermittent duty S3:

This type of duty is characterized by a sequence of identical operation cycles, each including a constant load operation period and a rest period.

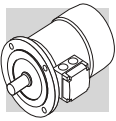
For this type of duty, the starting current does not significantly influence overtemperature.



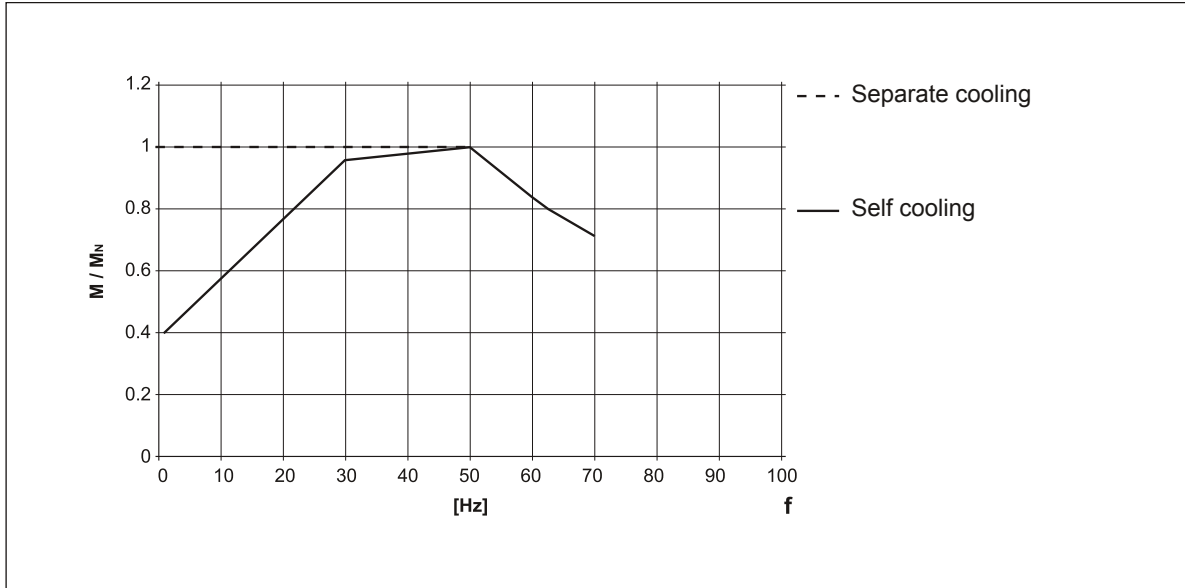
M7.13 Inverter-controlled motors

The electric motors Bonfiglioli may be used in combination with PWM inverters with rated voltage at transformer input up to 500 V. Standard motors use a phase insulating system with separators, class 2 enamelled wire and class H impregnation resins (1600V peak-to-peak voltage pulse capacity and rise edge $t_s > 0.1 \mu s$ at motor terminals). Typical torque/speed curves referred to S1 duty for motors with base frequency $f_b = 50$ Hz is reported in the table below. Because ventilation is somewhat impaired in operation at lower frequencies (about 30 Hz), standard motors with incorporated fan (IC411) require adequate torque derating or - alternately - the addition of a separate supply fan cooling.

Above base frequency, upon reaching the maximum output voltage of the inverter, the motor enters a steady-power field of operation, and shaft torque drops with ratio (f/f_b) . As motor maximum torque decreases with $(f/f_b)^2$, the allowed overloading must be reduced progressively.



(F26)



The following table reports the mechanical speed limit for motors operating above rated frequency:

(F27)

		n [min ⁻¹]		
		2p	4p	6p
≤ BE 112 - BN 112	ME2, ME3 M05 ... M3	5200	4000	3000
≥ BE 132 - BN 132	ME4, ME5 M4, M5	4500	4000	3000
BXN 63 ... BXN 90	MXN 05 ... MXN 25		4000	
BX 80 ... BX 180	MX2 ... MX5		4000	

Above rated speed, motors generate increased mechanical vibration and fan noise. Class B rotor balancing is highly recommended in these applications. Installing a separate supply fan cooling may also be advisable. Remote-controlled fan and brake (if fitted) must always be connected direct to mains power supply.

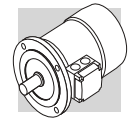
M7.14 Permissible starts per hour, Z

The rating charts of brakemotors lend the permitted number of starts Z_0 , based on 50% intermittence and for unloaded operation.

The catalogue value represents the maximum number of starts per hour for the motor without exceeding the rated temperature for the insulation class F.

To give a practical example for an application characterized by inertia J_c , drawing power P_r and requiring mean torque at start-up M_L the actual number of starts per hour for the motor can be calculated approximately through the following equation:

$$Z = \frac{Z_0 \cdot K_c \cdot K_d}{K_J} \quad (02)$$



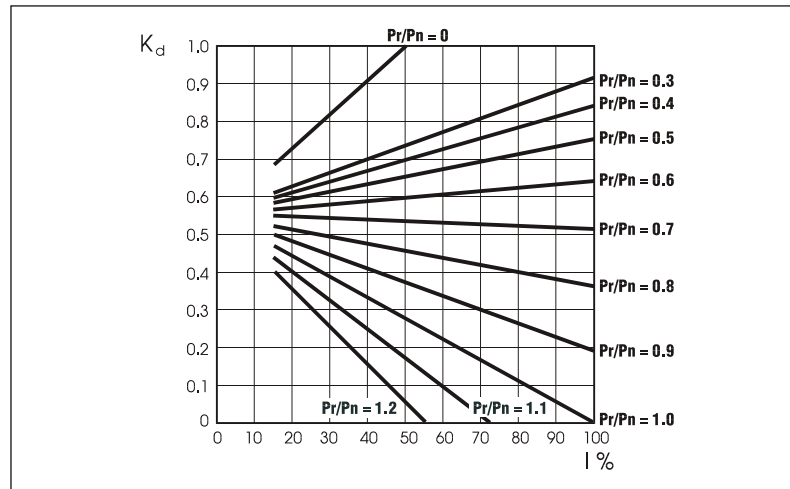
where:

$$K_J = \frac{J_m + J_c}{J_m} \quad \text{inertia factor}$$

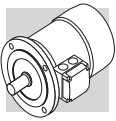
$$K_c = \frac{M_a - M_L}{M_a} \quad \text{torque factor}$$

$$K_d = \quad \text{load factor, see the following table}$$

(F28)



If actual starts per hour is within permitted value (Z) it may be worth checking that braking work is compatible with brake (thermal) capacity W_{max} also given in tables (F38), (F41) and dependent on the number of switches (c/h).

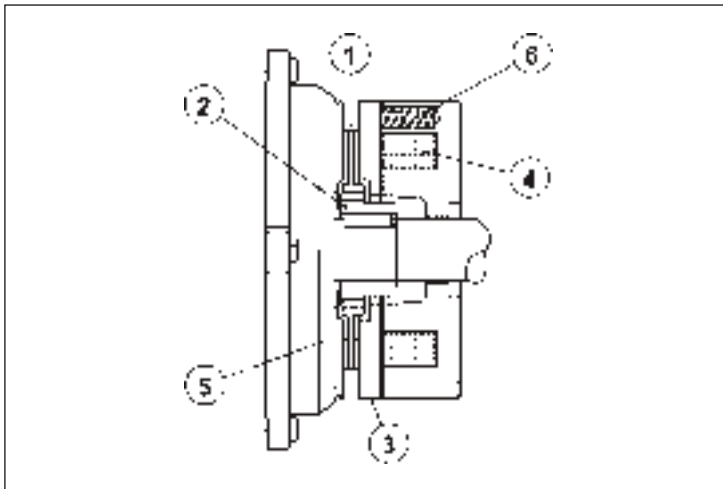


M8 ASYNCHRONOUS BRAKE MOTORS

M8.1 Operation

Versions with incorporated brake use spring-applied DC (FD option) or AC (FA options) brakes. All brakes are designed to provide fail-safe operation, meaning that they are applied by spring-action in the event of power failure.

(F29)



Key:

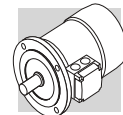
- ① brake disc
- ② disc carrier
- ③ pressure plate
- ④ brake coil
- ⑤ motor rear shield
- ⑥ brake springs

When voltage is interrupted, pressure springs push the armature plate against the brake disc. The disc becomes trapped between the armature plate and motor shield and stops the shaft from rotation.

When the coil is energized, a magnetic field strong enough to overcome spring action attracts the armature plate, so that the brake disc – which is integral with the motor shaft – is released.

M8.2 Most significant features

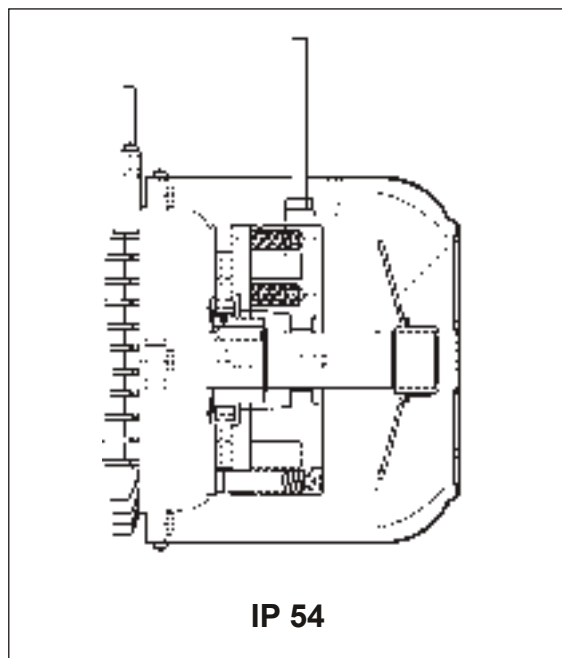
- High braking torques (normally $M_b \approx 2 M_n$), braking torque adjustment.
- Steel brake disc with double friction lining (low-wear, asbestos-free lining).
- Hexagonal seat on motor shaft fan end (N.D.E.) for manual rotation (not compatible with options PS, RC, TC, U1, U2, EN1, EN2, EN3, EN4, EN5, EN6).
- Manual release lever (options **R** and **RM** for FD; option **R** for FA).
- Corrosion-proof treatment on all brake surfaces.
- Insulation class F.



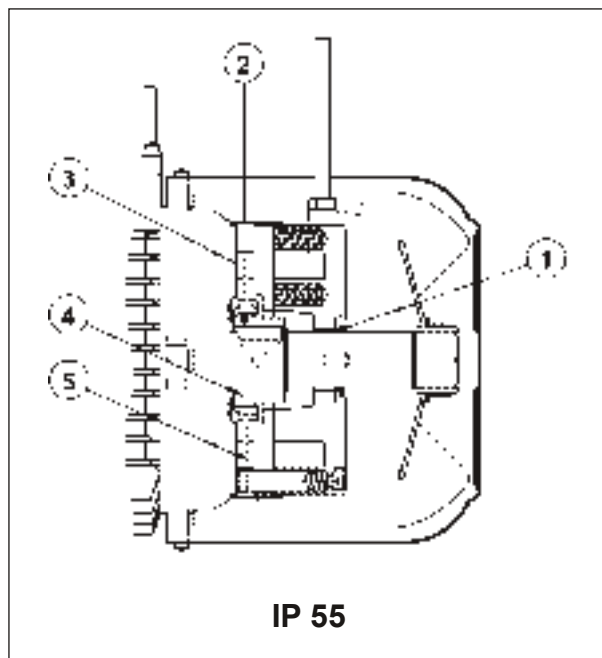
M9 DC BRAKE MOTORS TYPE BXN-BX-BE-BN_FD and MXN-MX-ME-M_FD

Frame sizes: BXN 63 ... BXN 90, BX 80 ... BX 355M, BX200LAK ... BX 355MCK - BE 63 ... BE 180L - BN 63 ... BN 200L / MXN 05 ... MXN 25 - MX2SB ... MX5LA - ME05 ... ME5 - M05 ... M5

(F30)



(F31)



Direct current toroidal-coil electromagnetic brake bolted onto motor shield. Preloading springs provide axial positioning of magnet body.

Brake disc slides axially on steel hub shrunk onto motor shaft with anti-vibration device.

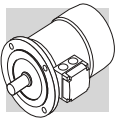
Brake torque factory setting is indicated in the corresponding motor rating charts. Braking torque may be modified by changing the type and/or number of springs.

At request, motors may be equipped with manual release lever with automatic return (**R**) or system for holding brake in the released position (**RM**).

See variant at paragraph "BRAKE RELEASE SYSTEMS" for available release lever locations.

FD brakes ensure excellent dynamic performance with low noise. DC brake operating characteristics may be optimized to meet application requirements by choosing from the various rectifier/power supply and wiring connection options available.

For applications involving lifting and/or high hourly energy dissipation, contact Bonfiglioli's Technical Service.



M9.1 Degree of protection

The standard protection degree for BN - M, BE - ME, BX≤180 - MX≤5 and BXN - MXN, while for BX≥200 and BX≥200K standard protection degree is IP55.

BN - M, BE - ME, BX≤180 - MX≤5 and BXN - MXN brakemotor with a standard protection degree IP54 can be requested with a protection degree IP55. If **IP55** is selected the following construction variants will be applied:

- ① V-ring at N.D.E. of motor shaft
- ② dust and water-proof rubber boot
- ③ stainless steel ring placed between motor shield and brake disc
- ④ stainless steel hub
- ⑤ stainless steel brake disc

M9.2 FD brake power supply

A rectifier accommodated inside the terminal box feeds the DC brake coil. Wiring connection across rectifier and brake coil is performed at the factory.

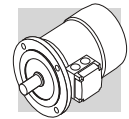
Brake power supply voltage V_B is as indicated in the following table, regardless of mains frequency:

(F32)

Brake power supply voltage V	FD brake supply voltages		
	Power supply from the motor with rectifier	Separate power supply with rectifier	Power supply without rectifier
24	X	X	✓
100	X	X	✓
110	X	✓	X
115	X	✓	X
120	X	✓	X
127	X	✓	X
180	X	X	✓
208	✓	✓	X
220	✓	✓	X
230	✓	✓	✓
240	✓	✓	X
255	✓	X	X
265	✓	X	X
280	✓	X	X
290	✓	X	X
330	✓	X	X
380	✓	✓	X
400	✓	✓	X
415	✓	✓	X
440	✓	✓	X
460	✓	✓	X
480	✓	✓	X
500	✓	✓	X


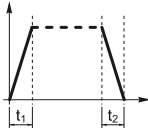
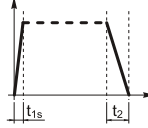
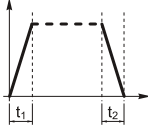
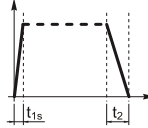
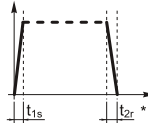
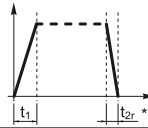
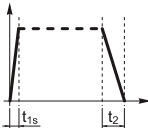
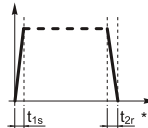
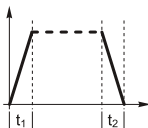
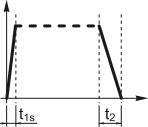


NOTE: For BXN and MXN motors refer to EVOX specific catalogue

For switch-pole motors the brake power supply is compulsorily from a separate line:



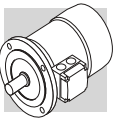
The diode half-wave rectifier ($V_{DC} \approx 0,45 \times V_{AC}$) is available in versions **NB**, **SB**, **NBR** e **SBR**, as detailed in the table below:

(F33)

		brake			
			standard on request		
BXN 63	MXN05	FD 02			
BXN 71	MXN10	FD 53			
BXN 80	MXN20	FD 04			
BXN 90	—	FD 05			
BE 63 - BN 63	ME05 - M05	FD 02			
BE 71 - BN 71	ME1 - M1	FD 03 FD 53			
BX 80 - BE 80 - BN 80	MX2 - ME2 - M2	FD 04			
BX 90S - BE 90S - BN 90S	—	FD 14			
BX 90L - BE 90L - BN 90L	—	FD 05			
BX 100 - BE 100 - BN 100	MX3 - ME3 - M3	FD 15			
—	—	FD 55			
BX 112 - BE 112 - BN 112	—	FD 06S			
BX 132 - BE 132 - BN 132 - BN 160MR	MX4 - ME4 - M4	FD 56 FD 06 FD 07			
BX 160 - BE 160L - BN 160L - BN 180M	MX5 - ME5 - M5	FD 08			
BX 180 - BE 180L - BN 180L - BN 200M	—	FD 09			
BX 200LA	—	FD 20			
BX 225SA	—	FD 25			
BX 250M - BX 315SA	—	FD 30			
BX 315SB - BX 315SC	—	FD 160			
BX 315MA - BX 355MA	—	FD 250			
BX 355MB - BX 355MC	—	FD 400			
BX 200LAK	—	FD 8			
BX 225SAK - BX 225SBK	—	FD 9			
BX 250MAK	—	FD 10			
BX 280SAK - BX 315SAK	—	FD 1000			
BX 315SBK - BX 315SCK	—	FD 1600			
BX 355SAK - BX 355MCK	—	FD 2500			
					

(*) $t_{2c} < t_{2r} < t_2$

For BXN motors see the “Brake section” on the EVOX catalogue.



Rectifier **SB** with electronic energizing control over-energizes the electromagnet upon power-up to cut brake release response time and then switches to normal half-wave operation once the brake has been released.

Use of the **SB** rectifier is mandatory in the event of:

- high number of operations per hour
- reduced brake release response time
- brake is exposed to extreme thermal stress

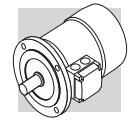
Rectifiers **NBR** or **SBR** are available for applications requiring quick brake intervention (braking condition reinstatement) response.

These rectifiers complement the **NB** and **SB** types as their electronic circuit incorporates a static switch that de-energizes the brake quickly in the event voltage is missing.

This arrangement ensures short brake release response time with no need for additional external wiring and contacts.

Optimum performance of rectifiers **NBR** and **SBR** is achieved with separate brake power supply.

Versions available: 230Vac $\pm 10\%$, 400Vac $\pm 10\%$, 50/60 Hz (with power supply); 100Vdc $\pm 10\%$, 180Vdc $\pm 10\%$ (with SD option).



M9.3 FD brake technical specifications

The table below reports the technical specifications of DC brakes FD.

(F34)

Brake	Brake torque M_b [Nm] springs			Release		Braking		W_{max} per brake operation [J]			W	P
	6	4	2	t_1	t_{1s}	t_2	t_{2c}				[MJ]	[W]
				[ms]	[ms]	[ms]	[ms]	10 s/h	100 s/h	1000 s/h		
FD02	–	3.5	1.75	30	15	80	9	4500	1400	180	15	17
FD03	5	3.5	1.75	50	20	100	12	7000	1900	230	25	24
FD53	7.5	5	2.5	60	30	100	12					
FD04	15	10	5	80	35	140	15	10000	3100	350	30	33
FD14												
FD05	40	26	13	130	65	170	20	18000	4500	500	50	45
FD15	40	26	13	130	65	170	20					
FD06S	60	40	20	–	80	220	25	20000	4800	550	70	55
FD56	–	75	37	–	90	250	20	29000	7400	800	80	65
FD06		100	50		100	250	20					
FD07	150	100	50	–	120	200	25	40000	9300	1000	130	65
FD08*	250	200	170	–	140	350	30	60000	14000	1500	230	100
FD09**	400	300	200	–	200	450	40	70000	15000	1700	230	120
FD20	260			100	170	340	-	80000	1700	1800	-	100
FD25	400			120	195	390	-	120000	19000	2000	-	110
FD30	1000			180	210	420	-	200000	28000	2900	-	200
FD160	1600			360	245	490	-	240000	36000	2600	-	336
FD250	2500			420	343	685	-	280000	47000	3700	-	400
FD400	4000			530	455	910	-	325000	51000	4500	-	420
FD8	400			176	78	236	-	65000	7000	650	-	85
FD9	600			324	138	176	-	120000	12000	1200	-	100
FD10	800			480	194	172	-	100000	16000	2000	-	150
FD1000	1000			252	-	375	-	220000	27000	2700	-	300
FD1600	1600			366	-	498	-	230000	35000	3500	-	340
FD2500	2500			660	-	880	-	590000	61000	6100	-	530

* brake torque values obtained with 9, 7 and 6 springs, respectively

** brake torque values obtained with 12, 9 and 6 springs, respectively

- t_1 = brake release time with half-wave rectifier
- t_{1s} = brake release time with over-energizing rectifier
- t_2 = brake engagement time with AC line interruption and separate power supply
- t_{2c} = brake engagement time with AC and DC line interruption – Values for t_1 , t_{1s} , t_2 , t_{2c} indicated in the tab. (F34) are referred to brake set at maximum torque, medium air gap and rated voltage
- W_{max} = max energy per brake operation
- W = braking energy between two successive air gap adjustments
- P_b = brake power absorption at 20 °C
- M_b = static braking torque ($\pm 15\%$)
- s/h = starts per hour

The brake pad wear depends on the operating/ambient conditions (temperature, humidity, angular speed, specific pressure); Therefore the declared wear rate must be considered as indicative.

M9.4 FD brake connections

On standard single-pole motors, the rectifier is connected to the motor terminal board at the factory. For switch-pole motors and where a separate brake power supply is required, connection to rectifier must comply with brake voltage VB stated in motor name plate.

Because the load is of the inductive type, brake control and DC line interruption must use contacts from the usage class AC-3 to IEC 60947-4-1.

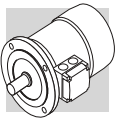


Table (F35+F39) – Brake coil with power supply from motor terminals (DIR) and AC line interruption. Delayed stop time t_2 and function of motor time constants.

Mandatory when soft-start/stops are required.

Table (F36+F40) – Brake coil with separate power supply (SA) and AC line interruption.

Normal stop time independent of motor.

Achieved stop times t_2 are indicated in the table (F34).

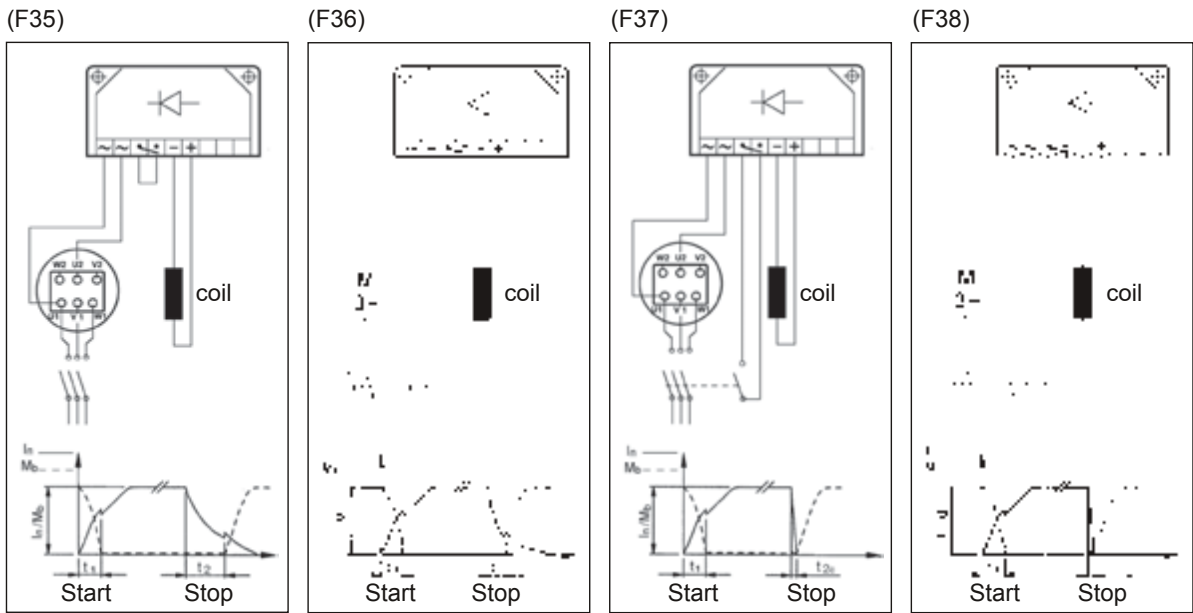
Table (F37+F41) – Brake coil with power supply from motor terminals (DIR) and AC/DC line interruption.

Quick stop with operation times t_{2c} as per table (F34).

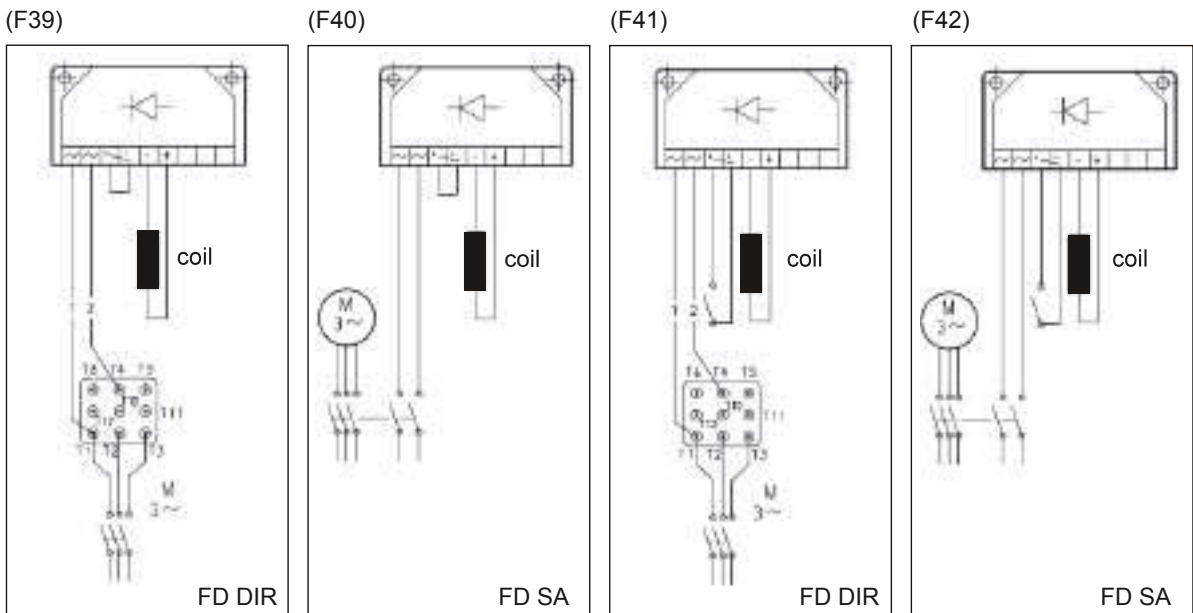
Table (F38+F42) – Brake coil with separate power supply (SA) and AC/DC line interruption.

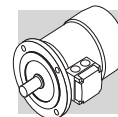
Stop time decreases by values t_{2c} indicated in the table (F34).

The brake may be voltage supplied directly from the motor terminal box (tab. F35-F39 and tab. F37-F41) only if the nominal voltage of the brake is the same as the smaller voltage of the motor.



For BXN and MXN motors the FD brake connection scheme is as follows:

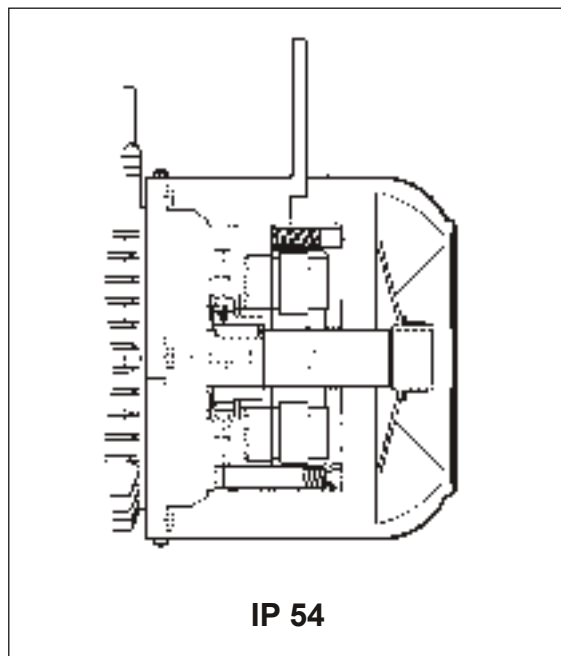




M10 AC BRAKE MOTORS TYPE BXN-BX-BE-BN_FA and MXN-MX-ME-M_FA

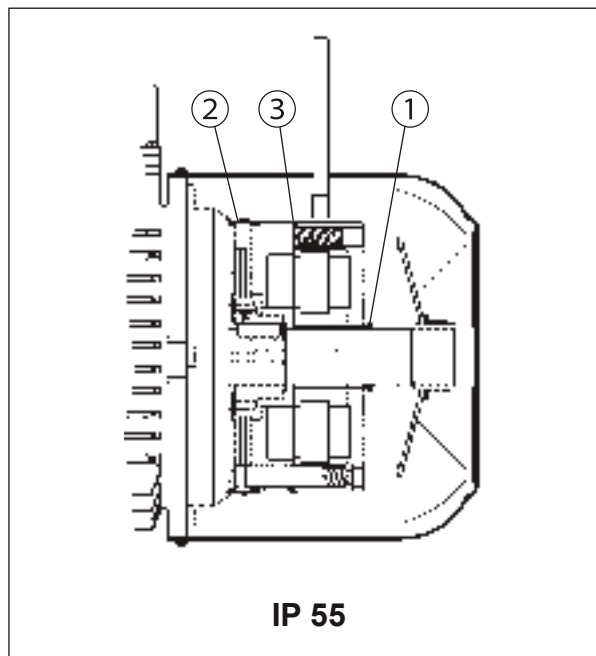
Frame sizes: BXN 63 ... BXN 90, BX 80 ... BX 160L - BE 63 ... BE 160L - BN 63 ... BN 180M /
MXN 05 ... MXN 25 - MX2SB ... MX5LA - ME05 ... ME5 - M05 ... M5

(F43)



IP 54

(F44)



IP 55

Electromagnetic brake operates from three-phase alternated current power supply and is bolted onto conveyor shield. Preloading springs provide axial positioning of magnet body.

Steel brake disc slides axially on steel hub shrunk onto motor shaft with anti-vibration device.

Brake torque factory setting is indicated in the corresponding motor rating charts.

Spring preloading screws provide stepless braking torque adjustment.

Torque adjustment range is $30\% M_{bMAX} < M_b < M_{bMAX}$ (where M_{bMAX} is maximum braking torque as shown in tab. (F45).

Thanks to their high dynamic characteristics, FA brakes are ideal for heavy-duty applications as well as applications requiring frequent stop/starts and very fast response time.

Motors may be equipped with manual release lever with automatic return (R) at request. See variant at paragraph "BRAKE RELEASE SYSTEMS" for available release lever locations.

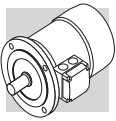
For applications involving lifting and/or high hourly energy dissipation, contact Bonfiglioli's Technical Service.

M10.1 Degree of protection

Standard protection class is IP54.

Brake motor FA is also available in protection class **IP55**, which mandates the following variants:

- ① V-ring at N.D.E. of motor shaft
- ② dust and water-proof rubber boot
- ③ O-ring



M10.2 FA brake power supply

In single speed motors, power supply may be brought to the brake coil direct from the motor terminal box. As a result, brake voltage and motor voltage are the same.

Switch-pole motors and motors with separate brake power supply feature an auxiliary terminal board with 6 terminals for connection to brake line. In all cases, brake voltage indication in the designation is mandatory. The following table reports standard AC brake power supply ratings for single- and switch-pole motors:

(F45)

Brake power supply voltage V	FA brake	
	Motor power supply at 50Hz	Motor power supply at 60Hz
208	✗	✓
220	✗	✓
230	✓	✓
240	✗	✓
380	✓	✓
400	✓	✓
415	✓	✗
440	✗	✓
460	✗	✓
480	✗	✓
500	✓	✗
575	✗	✓

NOTE: For BXN and MXN motors refer to EVOX specific catalogue

Special voltages are available at request.

M10.3 Technical specifications of FA brakes

(F46)

Brake	Brake torque M_b [Nm]	Release t_1 [ms]	Braking t_2 [ms]	W_{max} [J]			W [MJ]	P [VA]
				10 s/h	100 s/h	1000 s/h		
FA 02	3.5	4	20	4500	1400	180	15	60
FA 03	7.5	4	40	7000	1900	230	25	80
FA 04	15	6	60	10000	3100	350	30	110
FA 14								
FA 05	40	8	90	18000	4500	500	50	250
FA 15								
FA 06S	60	16	120	20000	4800	550	70	470
FA 06	75	16	140	29000	7400	800	80	550
FA 07	150	16	180	40000	9300	1000	130	600
FA 08	250	20	200	60000	14000	1500	230	1200

M_b = max static braking torque ($\pm 15\%$)

t_1 = brake release time

t_2 = brake engagement time

W_{max} = max energy per brake operation (brake thermal capacity)

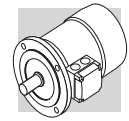
W = braking energy between two successive air gap adjustments

P_b = power drawn by brake at 20° (50 Hz)

s/h = starts per hour

NOTE

Values t_1 and t_2 in the table refer to a brake set at rated torque, medium air gap and rated voltage.

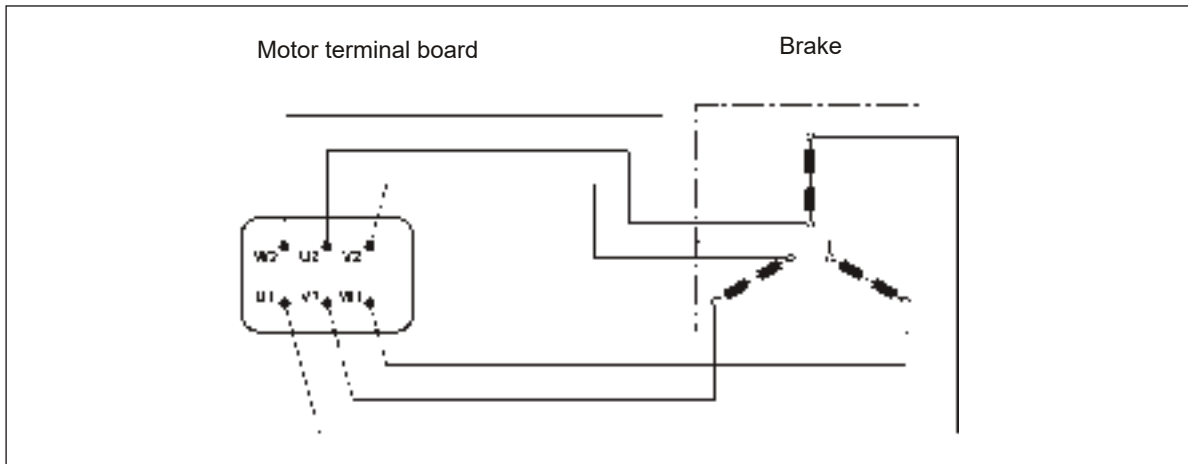


The brake pad wear depends on the operating/ambient conditions (temperature, humidity, angular speed, specific pressure); Therefore the declared wear rate must be considered as indicative.

M10.4 FA brake connections

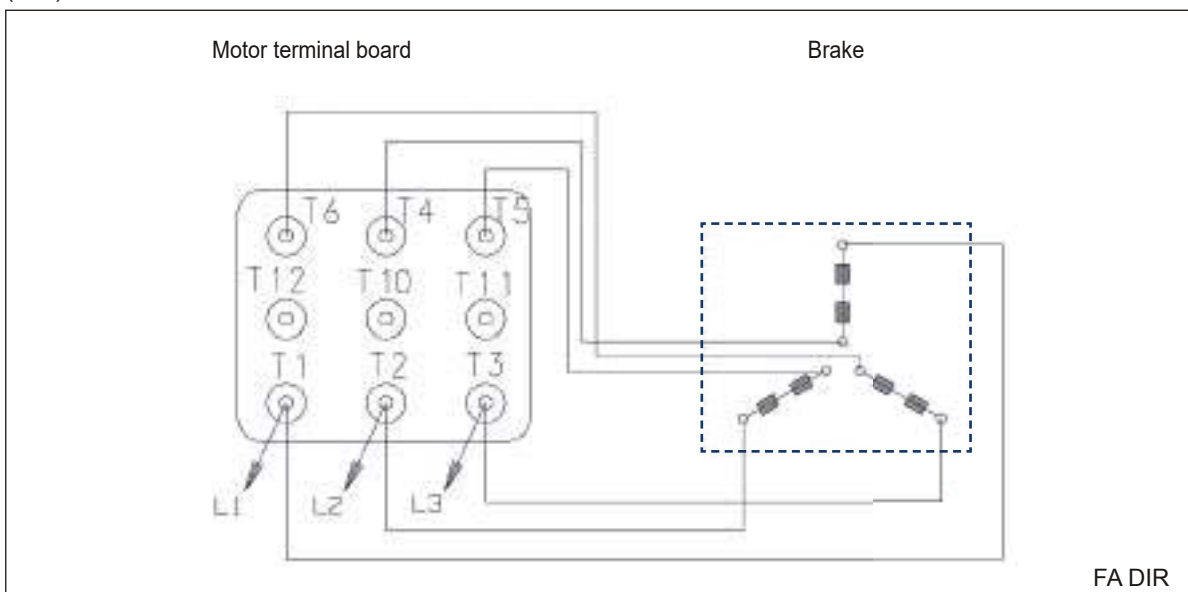
The diagram below shows the wiring when brake is connected directly to same power supply of the motor:

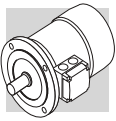
(F47)



For BXN and MXN motors the FA brake connection scheme is as follows:

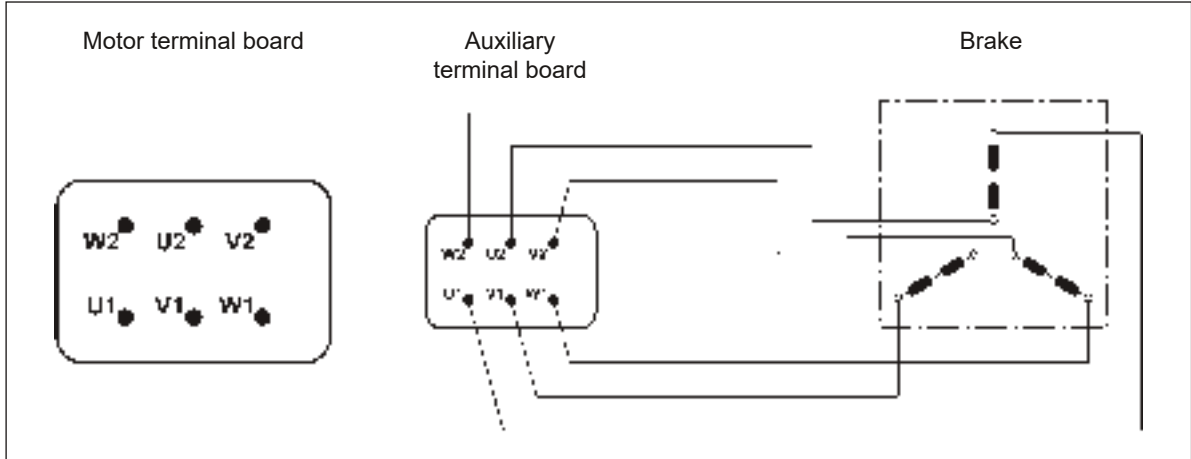
(F48)





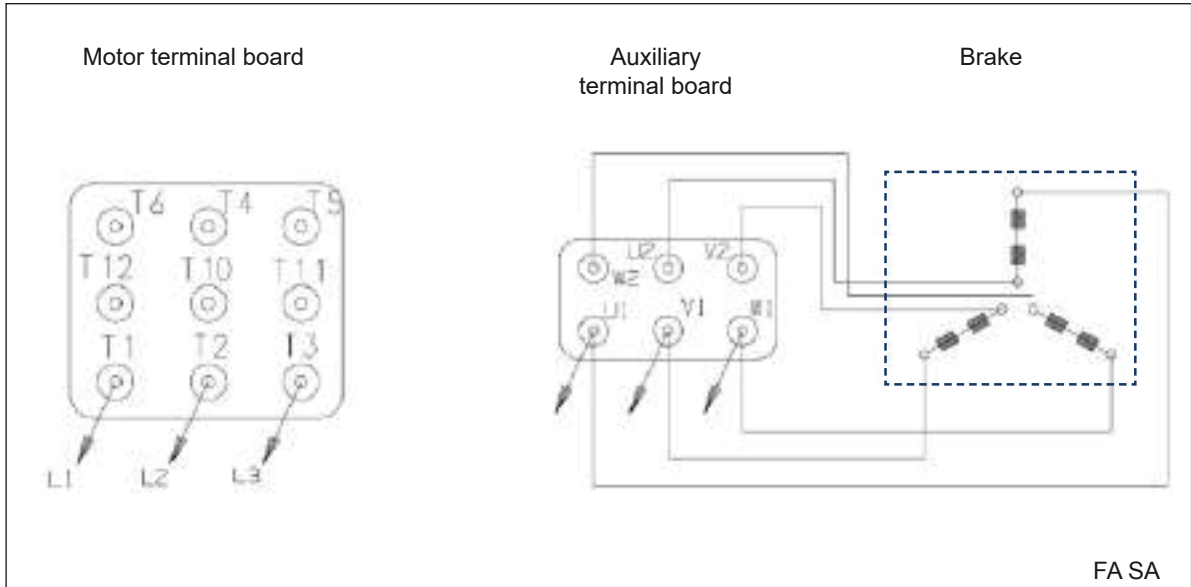
Switch-pole motors and, at request, single-pole motors with separate power supply are equipped with an auxiliary terminal board with 6 terminals for brake connection. In this version, motors feature a larger terminal box. See diagram below:

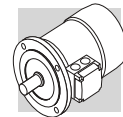
(F49)



For BXN and MXN motors the FA brake connection scheme is as follows:

(F50)



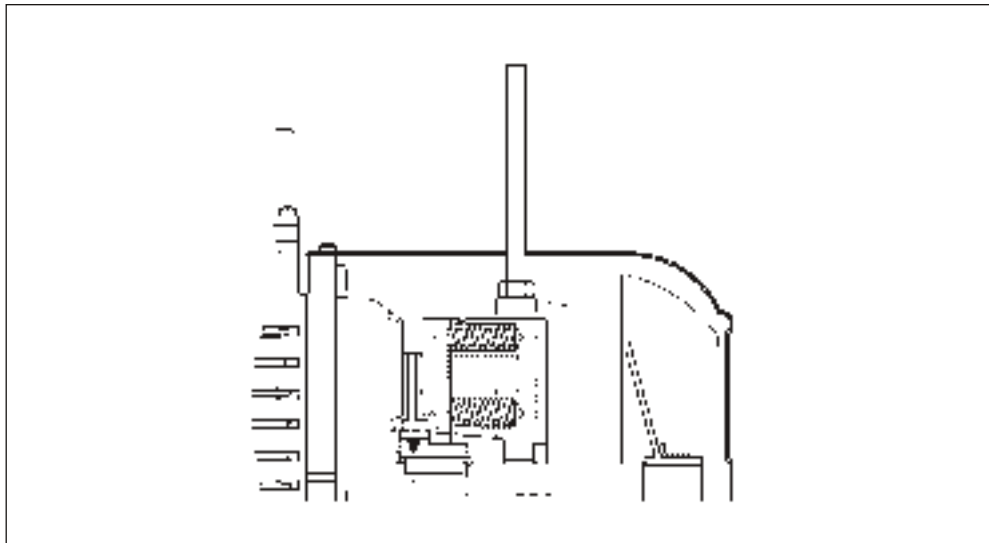


M11 BRAKE RELEASE SYSTEMS

Spring-applied brakes type FD and FA may be equipped with optional manual release devices. These are typically used for manually releasing the brake before servicing any machine or plant parts operated by the motor.

R

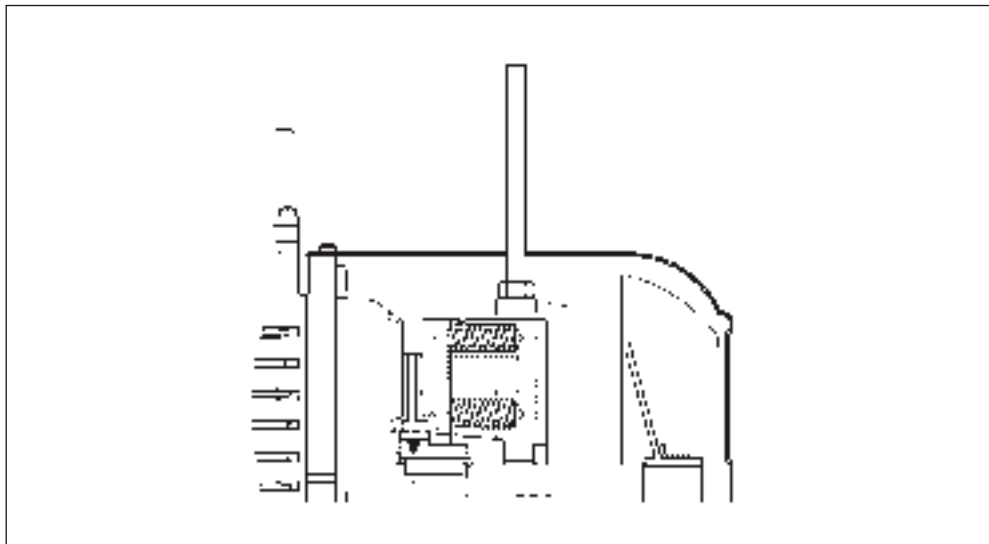
(F51)



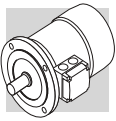
A return spring brings the release lever back in the original position.

RM

(F52)



On brake motors type FD, if the option RM is specified, the release device may be locked in the "release" position by tightening the lever until its end becomes engaged with a brake housing projection. The availability for the various disengagement devices is charted here below:



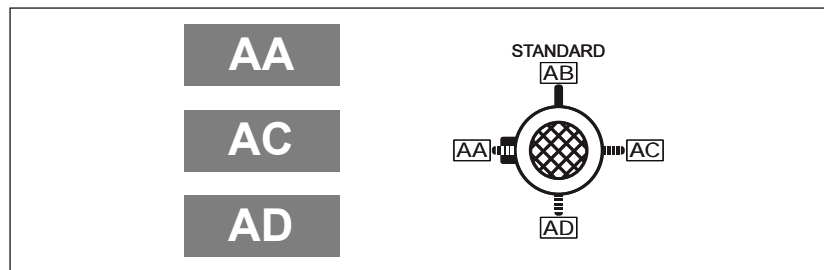
(F53)

	R	RM
BXN_FD BX_FD BE_FD BN_FD	BXN 63 ... BXN 90 BX 80 ... BX 180 BX 200K ... BX 315K BE 63 ... BE 180 BN 63 ... BN 200	BXN 63 ... BXN 90 BX 80 ... BX 132 BE 63 ... BE 132 BN 63 ... BN 132 FD07
MXN_FD MX_FD ME_FD M_FD	MXN05 ... MXN20 MX2 ... MX5 ME05 ... ME5 M05 ... M5	MXN05 ... MXN20 MX2 ... MX4 ME05 ... ME4 M05 ... M4LA
BXN_FA BX_FA BE_FA BN_FA	BXN 63 ... BXN 90 BX 80 ... BX 160 BE 63 ... BE 160L BN 63 ... BN 180M	
MXN_FA MX_FA ME_FA M_FA	MXN05 ... MXN20 MX2 ... MX5 ME05 ... ME5 M05 ... M5	

M11.1 Release lever orientation

Unless otherwise specified, the release lever is located 90° away from the terminal box – identified by letters [AB] in the diagram below – in a clockwise direction on both options **R** and **RM**. Alternative lever positions [AA], [AC] and [AD] are also possible when the corresponding option is specified:

(F54)



M11.2 Separate brake supply

DIR

Direct brake supply

The brake system is directly powered through the electric motor terminal board power supply. When a legacy motor is configured with a direct brake supply no option need to be selected, while for EVOX motors DIR option must be selected.

...SA

Separate AC brake supply

The brake coil is directly powered through an independent line, separated from the motor one.

FA-SA: the rated AC voltage must be specified. SA 230 (V AC). **FD-NB/SB-SA**: the rated AC voltage which power the rectifier must be specified. E.G. SA 400 (V AC).

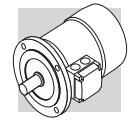
...SD

Separate DC brake supply

The brake coil is directly powered with a DC current and the rectifier is not present.

The rated coil voltage must be specified, E.G. SD 24 (V DC).

Note: for BX≥200 and BX≥200K it is not possible to directly feed the brake from the motor terminal box, it is then necessary to select option SA or SD.



M12 OPTIONS

M12.1 Soft-start / stop

F1

An optional flywheel - option F1 - is available for applications requiring soft starting or stopping. The flywheel's added inertia uses up kinetic energy during starting and returns it back during braking, thus catering for more progressive and gradual shock loads. The optional flywheel is available for brake motors type BN-BE_FD and M-ME_FD with specific characteristics as detailed in the table below:

(F55)

Main data for flywheel of motore type: BN-BE_FD, M-ME_FD			
		Fly-wheel weight [Kg]	Fly-wheel inertia [Kgm ²]
BN 63 - BE 63	M05 - ME05	0.69	0.00063
BN 71 - BE 71	M1 - ME1	1.13	0.00135
BN 80 - BE 80	M2 - ME2	1.67	0.00270
BN 90 S - BN 90 L BE 90 S - BE 90 LA	-	2.51	0.00530
BN 100 - BE 100	M3 - ME3	3.48	0.00840
BN 112 - BE 112	-	4.82	0.01483
BN 132 S - BN 132 M BE 132 S - BE 132 M	M4 - ME4	6.19	0.02580

M12.2 Capacitive filter

CF

An optional capacitive filter is available for brake motors type FD only. When the suitable capacitive filter is installed upstream of the rectifier (option CF), motors comply with the emission limits required by standard EN61000-6-3:2007 "Electromagnetic Compatibility – Generic Emission Standard – Part 6-3: Residential, commercial and light industrial environment".

BX≥200LA and BX≥200LAK motors comply with the emission limits required by standard EN 61000-6-3:2007 "Electromagnetic Compatibility - Generic Emission Standard - Part 6-3: residential, commercial and light industrial environment."

M12.3 Thermal protective devices

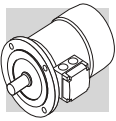
In addition to the standard protection provided by the magneto-thermal device, motors can be supplied with built-in thermal probes to protect the winding against overheating caused, by insufficient ventilation or by an intermittent duty.

This additional protection should always be specified for servoventilated motors (IC416).

M12.4 Thermistors

E3

These are semi-conductors having rapid resistance variation when they are close to the rated switch off temperature (150 °C). Variations of the $R = f(T)$ characteristic are specified under DIN 44081, IEC 34-11 Standards. Positive temperature coefficient thermistors are normally used (also known as PTC "cold conductor resistors"). Thermistors cannot control relays directly and must be connected to a suitable disconnect device. Thus protected, three PTCs connected in series are installed in the winding, the terminals of which are located on the auxiliary terminal-board.



K1

The design characteristics of this sub-group of PTC thermistors allow them to be used as positive temperature coefficient sensors with variable resistance.

Functioning temperature range: 0°C ... +260°C.

Thermistors cannot control relays directly and must be connected to a suitable disconnect device. Terminals (polarised) for 1 x KTY 84-130 are provided on an auxiliary terminal strip.

M12.5 Bimetallic thermostates

D3

These types of protective devices house a bimetal disk. When the rated switch off temperature (150 °C) is reached, the disk switches the contacts from their initial rest position.

As temperature falls, the disk and the contacts automatically return to rest position.

Three bimetallic thermostates connected in series are usually employed, with normally closed contacts. The terminals are located on an auxiliary terminal-board.

M12.6 Resistance thermometer

Pt1000

The resistance thermometer has a chip for a temperature sensor, the resistance of which changes in relation to temperature according to a series of reproducible basic values. The changes in resistance are transferred as changes in current.

At 0°C, the measurement resistances are adjusted to 1000 ohm for the Pt1000 and correspond to the accuracy class B (i.e. the relationship between resistance and temperature). The limit deviation is +0,3°C, and the admissible deviations are defined in EN 60751. The Pt1000 resistance thermometer will, in the future, gradually replace the KTY84-130 temperature available today. The relationship between the temperature and the electrical resistance of conductors is utilized in the Pt1000 to measure the temperature, just like with the additional resistance thermometers described above. Pure metals undergo larger changes in resistance than alloys and have a relatively constant temperature coefficient.

M12.7 Plug connector

CON

Three types of connectors (CON 1, CON 2, CON 3) are provided; they can be mounted in two different positions: right side of terminal box cover (C1D, C2D, C3D); left side of terminal box cover (C1S, C2S, C3S).

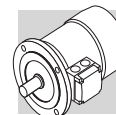
The option CON is applicable to single speed BN and M motors (2, 4, 6, 8 poles), and BX / BE and MX / ME motors on the sizes specified on the following table. All double speed motors are excluded. The connectors CON 1 / CON 2 are available for BX-BE/MX-ME and BN/M motors without brake and for brakemotors equipped with DC brake type FD, for the motor sizes listed below.

The male connector (with pins) is mounted on the motor, the female connector is not provided. With CON option, the winding connection is always Y.

With option U1 "forced ventilation", the fan unit supply is available inside the separate terminal box fixed to fan cover. With options EN1...EN6, the encoder connection is made by a cable not connected to the motor plug connector.

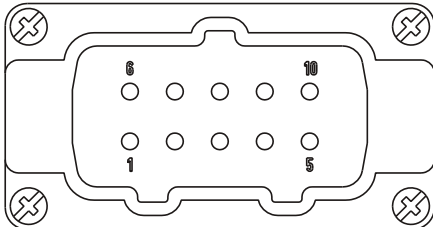
The CON option is not applicable to brakemotors equipped with AC brake type FA.

The CON option is not available when at least one of the next options are selected: the U2, CUS, IC.

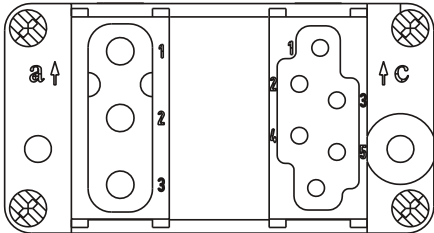


Specifications

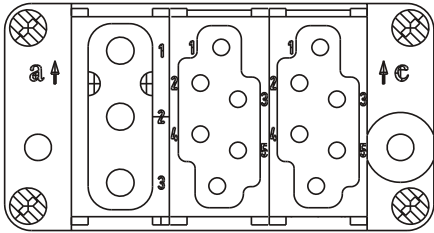
(F56)

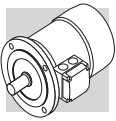
Option	CON 1
Motor size	BX 80 ... BX 112 / MX2, MX3 / BE 63 ... BE 112 / ME05 ... ME4 BN 63 ... BN 112 / M05 ... M3
Connector view	
Type of connector	Harting Han 10ES
Housing	Han EMC 10B with 2 levers
Numbers of pins - nominal current	10 x 16A
Voltage	500 Vac
Contact connection	Screw terminals

(F57)

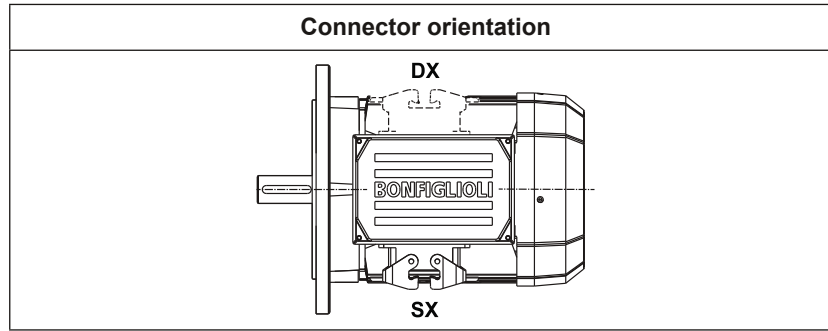
Option	CON 2
Motor size	BX 80 ... BX 132 / MX2, MX3 / BE 63 ... BE 132 / ME05 ... ME4 BN 63 ... BN 160MR / M05 ... M4
Connector view	
Type of connector	Harting Han Modular
Housing	Han EMC 10B with 2 levers
Module type	Module C + Module E + Module E
Numbers of pins - nominal current	3 x 36A / 6 x 16A
Voltage	500 Vac
Contact connection	Crimping contacts

(F58)

Option	CON 3
Motor size	BX 80 ... BX 132M / MX2, MX3 / BE 63 ... BE 132 / ME05 ... ME4 / BN 63 ... BN 160MR / M05 ... M4
Connector view	
Type of connector	Harting Han Modular
Housing	Han EMC 10B with 2 levers
Module type	Module C + Module E + Module E
Numbers of pins - nominal current	3 x 36A / 6 + 6 x 16A
Voltage	500 Vac
Contact connection	Crimping contacts



(F59)



(F60)

Motors without brake dimensions

		AD (mm)	AF (mm)	AH (mm)	LL (mm)	V ^(*) (mm)
BE 63 - BN 63	ME05 - M05	136	110	45	165	4.5
BE 71 - BN 71	ME1 - M1	149	110	45	165	15.5
BX 80 - BE 80 - BN 80	MX2 - ME2 - M2	160	110	45	165	16.5
BX 90 - BE 90 - BN 90	MX3	162	110	45	165	31.5
BX 100 - BE 100 - BN 100	MX3 - ME3 - M3	171	110	45	165	37.5
BX 112 - BE 112 - BN 112	MX4	186	110	45	165	39
BX 132 - BE 132 - BN 132	MX4 - ME4 - M4	210	140	45	188	45.5
BN 160MR	—	210	140	45	188	161

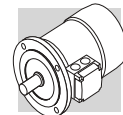
(*) Dimension valid only for motors BX, BE and BN.

(F61)

Motors with FD brake dimensions

		AD (mm)	AF (mm)	AH (mm)	LL (mm)	V ^(*) (mm)
BE 63 - BN 63	ME05 - M05	136	110	45	165	4.5
BE 71 - BN 71	ME1 - M1	149	110	45	165	1.5
BX 80 - BE 80 - BN 80	MX2 - ME2 - M2	160	110	45	165	18.5
BX 90 - BE 90 - BN 90	—	162	110	45	165	39.5
BX 100 - BE 100 - BN 100	MX3 - ME3 - M3	171	110	45	165	63.5
BX 112 - BE 112 - BN 112	—	186	110	45	165	75
BX 132 - BE 132 - BN 132	MX4 - ME4 - M4	210	140	45	188	122
BN 160MR	—	210	140	45	188	161

(*) Dimension valid only for motors BN and BX



M12.8 Control of brake operation

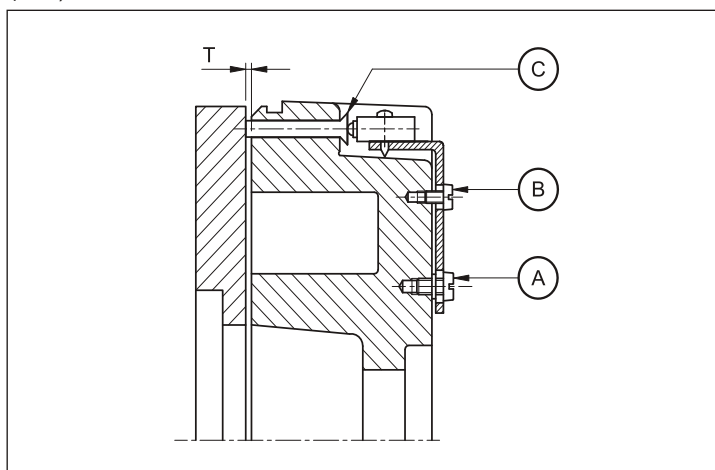
MSW

The microswitch can be set in order to obtain from it a signal related to the attraction/release of anchor plate, or it can be set in order to give feedback when the air gap reaches the maximum value.

MSW option is available for brakes FD03...FD09.

The microswitch is provided with three lead wires (NC, NO, COM). The next figure shown the main components of the brake equipped with microswitch.

(F62)



- A: Plate fixing screws
- B: Setting screws
- C: Actuator control pin

M12.9 Additional cable entry for brakemotors

IC

The terminal box cover of brakemotors BN 63 ... BN 160MR - M05 ... M4L is provided with two additional cable entry M16 x 1.5 (one cable entry per side).

The terminal box cover of brakemotors BN 160 ... BN 200 - M5 is provided with an additional cable entry M16 x 1.5 next to the cable entry used for the brake.

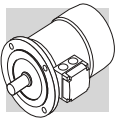
M12.10 Anti-condensation heaters

H1

NH1

Where an application involves high humidity or extreme temperature fluctuation, motors may be equipped with an anti-condensate heater.

A single-phase power supply is available in the auxiliary terminal board inside the main terminal box. Values for the absorbed power are listed here below:



(F63)

	H1	NH1
	1~ 230V ± 10% P [W]	1~ 115V ± 10% P [W]
BXN 63 ... BXN 80 BX 80 BE 63 ... BE 80 BN 56 ... BN 80	10	10
BXN 90 BX 90 ... BX 132 BE 90 ... BE 132MB BN 90 ... BN 160MR	25	25
BX 160...BX 250 BX 160 ... BX 250K BX 160, BX 180 BE 160, BE 180 BN 160, BN 200	50	50
BX 280 BX 280K	60	60
BX 315 ... BX 355 BX 315K ... BX 355K	120	120

Warning!

Always remove power supply to the anti-condensante heater before operating the motor.

M12.11 Tropicalization

TP

When option **TP** is specified, motor windings receive additional protection for operation in high humidity and temperature conditions.

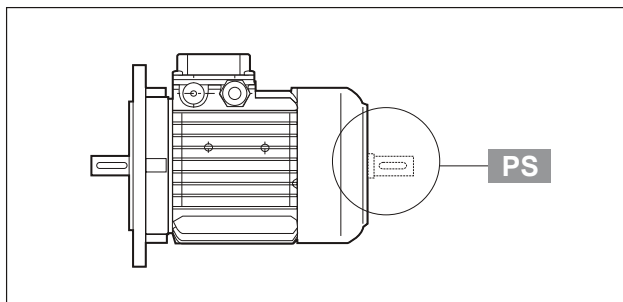
M12.12 Second shaft extension

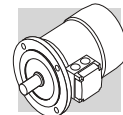
PS

This option is not compatible with variants RC, TC, U1, U2, EN1, EN2, EN3, EN4, EN5, EN6, EN7, EN8.

For shaft dimensions please see motor dimensions tables.

(F64)





M12.13 Backstop device

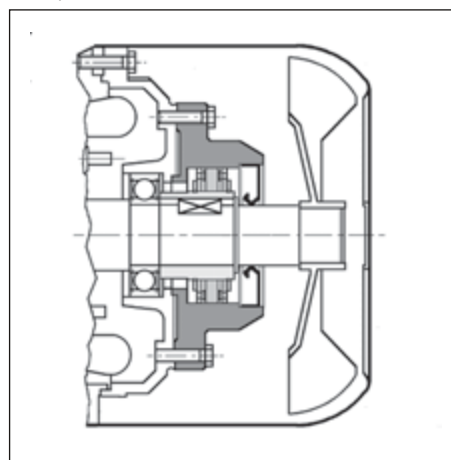
AL **AR**

For applications where backdriving must be avoided, motors equipped with an anti run-back device can be used (available for the MX/ME and M series only). While allowing rotation in the direction required, this device operates instantaneously in case of a power failure, preventing the shaft from running back. The anti run-back device is life lubricated with special grease for this specific application. When ordering, customers should indicate the required rotation direction, AL or AR. Never use the anti run-back device to prevent reverse rotation caused by faulty electrical connection. Table (F62) shows rated and maximum locking torques for the anti run-back devices. A diagram of the device can be seen in Table (F63). Overall dimensions are same as the corresponding brake motor. The direction of free rotation is described in the “MOTOR OPTIONS” section of specifically dedicated sections to gear units.

(F65)

	Rated locking torque [Nm]	Max. locking torque [Nm]	Release speed [min ⁻¹]
ME1 - M1	6	10	750
MX2 - ME2 M2	16	27	650
MX3 - ME3 M3	54	92	520
MX4 - ME4 M4	110	205	430

(F66)



M12.14 Rotor balancing

RV

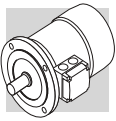
Where low noise is a priority requirement, the option RV ensures reduced vibration in accordance with vibration class B.

The table below reports effective velocity of vibration for normal (A) and B grade balancing.

(F67)

Vibration level	Angular velocity n [min ⁻¹]	Limits of the vibration velocity (mm/s) BX 80 ≤ H ≤ BX 335M ≤ BX 355MK BE 63 ≤ H ≤ BE 180L BN 56 ≤ H ≤ BN 200
A	600 < n < 3600	1.6
B	600 < n < 3600	0.70

Values are obtained from measurements on freely suspended motor during no-load operation; tolerance ±10%.



M12.15 Ventilation

Motors are cooled through outer air blow (IC 411 according to CEI EN 60034-6) and are equipped with a plastic radial fan, which operates in both directions.

Ensure that fan cover is installed at a suitable distance from the closest wall so to allow air circulation and servicing of motor and brake, if fitted.

Motor is cooled by an axial fan with independent power supply and fitted on the fan cover (IC 416 cooling system).

This version is used in case of motor driven by inverter so that steady torque operation is possible even at low speed or when high starting frequencies are needed.

Brake motors of motors with rear shaft projection (PS option) are excluded.

This variant has two different models, called **U1** and **U2**, having the same longitudinal size. Longer side of fan cover (**DL**) is specified for both models in the table below. Overall dimension can be reckoned from motor size table.

(F68)

Extra length for servoventilated motors			
		ΔL_1	ΔL_2
BE 71 - BN 71	ME1 - M1	93	32
BX 80	MX2	80	67
BE 80 - BN 80	ME2 - M2	125	55
BX 90	—	133	85
BE 90 - BN 90	—	133	49
BX 100	MX3	135	88
BE 100 - BN 100	ME3 - M3	119	30
BX 112	—	136	90
BE 112 - BN 112	—	130	33
BX 132	MX4	123	24
BE 132 - BN 132	ME4 - M4	160	51
BX 160 - BX 180	MX5	184	184
BE 160 - BE 180	ME5		
BN 160 - BN 180 - BN 200	M5		
BX 200	—	260	260
BX 225 - BX 250	—	320	320
BX 280 - BX 315	—	430	430
BX 355	—	640	640

ΔL_1 = extra length to LB value of corresponding standard motor.

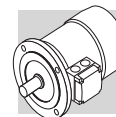
ΔL_2 = extra length to LB value of corresponding brake motor.

U1

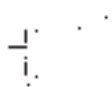
Fan wiring terminals are housed in a separate terminal box.

In brake motors of size BX 132 ... BX 160 - BE 71 ... BE 160 - BN 71 ... BN 160MR, MX4, MX5 - ME05 ... ME5 - M05 ... M5 with **U1** model, the release lever cannot be positioned to AA.

This option can be selected for motors compliant with CSA and UL standards (CUS option), only for BX \geq 200 and BX \geq 200K.



(F69)



		V a.c. ±10%	Hz	P [W]	I [A]
BN 71 - BE 71	ME1 - M1	1 ~ 230	50 / 60	22	0.12
BX 80 - BE 80 BN 80	MX2 - ME2 M2			22	0.12
BX 90 - BE 90 BN 90	—			40	0.30
BX 100 - BE 100 BN 100	MX3 - ME3 M3			50	0.25
BX 112 - BE 112 BN 112	—	3 ~ 230Δ / 400Y	50 / 60	50	0.26 / 0.15
BX 132 - BE 132 BN 132 ... BN 160MR	MX4 - ME4 M4L			110	0.38 / 0.22
BX 160 - BE 160 BN 160M ... BN 180M	MX5 - ME5 M5			180	1.25 / 0.72
BX 180 - BE 180 BN 180L ... BN 200L	—	3 ~ 400Δ / 690Y	50	250	1.51 / 0.87
BX 200 ... BX 250 BX 200K ... BX 250K	—			250	0.64
BX 280 ... BX 315M BX 280K ... BX 315MK	—			750	1.7
BX 315 ... BX 355S BX 315LK ... BX 355SK	—			1500	3.3
BX 355M BX 355MK	—			3000	6.1

U2

Fan terminals are wired in the motor terminal box.

The **U2** option does not apply to motors BX, BE, MX, ME and to motors with option CUS (compliant to norms CSA and UL).

(F70)



		V a.c. ±10%	Hz	P [W]	I [A]
BN 71	M1	1 ~ 230	50 / 60	22	0.12
BN 80	M2			22	0.12
BN 90	—			40	0.30
BN 100	M3	3 ~ 230Δ / 400Y	50 / 60	40	0.26 / 0.09
BN 112	—			50	0.26 / 0.15
BN 132 ... BN 160MR	M4L			110	0.38 / 0.22

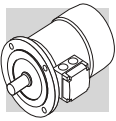
M12.16 Rain canopy

RC

The rain canopy protects the motor from dripping and avoids the ingress of solid bodies. It is recommended when motor is installed in a vertical position with the shaft downwards.

Relevant dimensions are indicated in the table below.

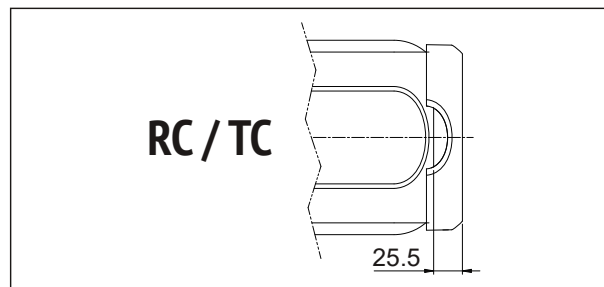
The drip cover is not compatible with variants PS, EN1, EN2, EN3, EN4, EN5, EN6.



(F71)

		AQ	ΔV	
BE 63 - BN 63	ME05 - M05	118	24	
BN 71 - BE 71	ME1 - M1	134	27	
BX 80 - BE 80 BN 80	MX2 - ME2 M2	152	25	
BX 90 - BE 90 BN 90	—	168	30	
BX 100 - BE 100 BN 100	MX3 - ME3 M3	190	28	
BX 112 - BE 112 BN 112	—	211	32	
BX 132 - BE 132 BN 132 ... BN 160MR	MX4 - ME4 M4	254	32	
BX 160 - BE 160 BN 160M ... BN 180M	MX5 - ME5 M5	302	36	
BX 180 - BE 180 BN 180L ... BN 200L	—	340	36	
BX 200	—	423	55	
BX 225	—	465	55	
BX 250	—	514	55	
BX 280	—	567	100	
BX 315	—	645	100	
BX 355	—	740	120	

For RC/TC on BXN/MXN motors see the scheme below.



M12.17 Textile canopy

TC

Option TC is a cover variant for textile industry environments, where lint may obstruct the fan grid and prevent a regular flow of cooling air.

This option is not compatible with variants EN1, EN2, EN3, EN4, EN5, EN6, PS, U1, U2.

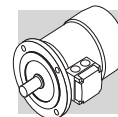
Overall dimensions are the same as drip cover type RC.

TC option is not available for BX motors.

M12.18 Feedback units

Motors may be combined with six different types of encoders to achieve feedback circuits.

Configurations with double-extended shaft (PS) and rain canopy (RC, TC) are not compatible with encoder installation.



EN1

Incremental encoder, $V_{IN} = 5$ V, line-driver output RS 422.

EN2

Incremental encoder, $V_{IN} = 10-30$ V, line-driver output RS 422.

EN3

Incremental encoder, $V_{IN} = 12-30$ V, push-pull output 12-30 V

EN4

Encoder sin/cos, $V_{IN} = 4.5-5.5$ V, output Sinus $0.5V_{PP}$.

EN5

Absolute encoder singleturn, HIPERFACE® interface, $V_{IN} = 7-12$ V.

EN6

Absolute encoder multiturn, HIPERFACE® interface, $V_{IN} = 7-12$ V.

EN7

Incremental encoder Heavy Duty, $V_{IN} = 12-30$ V, push-pull output 12-30 V.

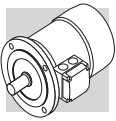
EN8

Incremental encoder Heavy Duty, $V_{IN} = 12-30$ V, push-pull output 9-30 V.

Note: EN7 and EN8 available only for $BX \geq 200$

(F72)

	EN1	EN2	EN3	EN4	EN5	EN6	EN7	EN8	
Interface	TTL/RS 422	TTL/RS 422	HTL push-pull	Sinus 0.5 VPP	HIPERFACE®	HIPERFACE®	HTL push-pull	HTL push-pull	
Power supply voltage [V]	4...6	10...30	12...30	4.4...5.5	7...12	7...12	9...30		
Output voltage [V]	5	5	12...30	—	—	—	9...30		
No-load operating current [mA]	120	100	100	40	80	80	80		
No. of pulses per revolution	1024							2048	
Steps per revolution	—	—	—	—	15 bit	15 bit	-	-	
Revolutions	—	—	—	—	—	12 bit	-	-	
No. of signals	6 (A, B, Z + inverted signals)			6 (cos-, cos+, sin-, sin+, Z, Z̄)	—	—	6	6	
Max. output frequency [kHz]	600			200			200		
Max. speed [min ⁻¹]	6000 (9000 min ⁻¹ for 10 s)							6000	
Temperature range [°C]	-30 ... +100							-20 ... +85	
Protection class	IP 65							IP67	



(F73)

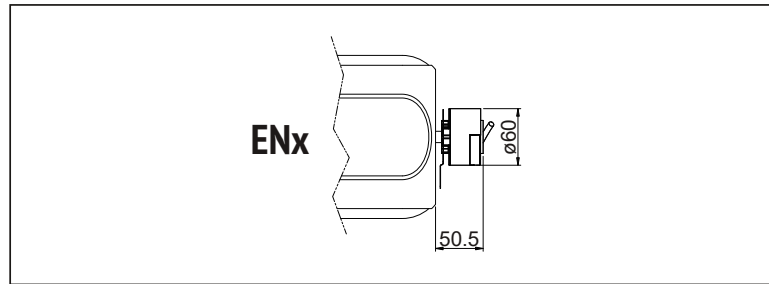
EN1, EN2, EN3, EN4, EN5, EN6, EN7, EN8		
		L4
BN 63 ... BN 200	M05 ... M5	65
BE 63... BE180	ME05 ... ME5L	65
BX 80 ... BX 180	MX2 ... MX5L	65
BX 200 ... BX 280	—	100
BX 315 ... BX 355	—	100

(F74)

EN_ + U1		
		L3
BX 160 - BE 160 BN 160M...BN 180M	MX5 - ME5 M5	72
BX 160 - BE 180 BN 180L...BN 200L	—	82
BX 160_FD BN 160M_FD...BN 180M_FD	MX5_FD M5_FD	35
BX 180_FD BN 180L_FD...BN 200L_FD	—	41
BX 200 - BX 225 - BX 250	—	100
BX 280 - BX 315 - BX 355	—	150

If the encoder device (option EN_) is specified on motors BX 80 ... BX 132 - MX2 ... MX4 - BE 63 ... BE 132 - ME05 ... ME4 - BN 71 ... BN 160MR - M1 ... M4, along with the independent fan cooling (options U1, U2), the extra length of motor is coincident with that of the correspondent U1 and U2 execution.

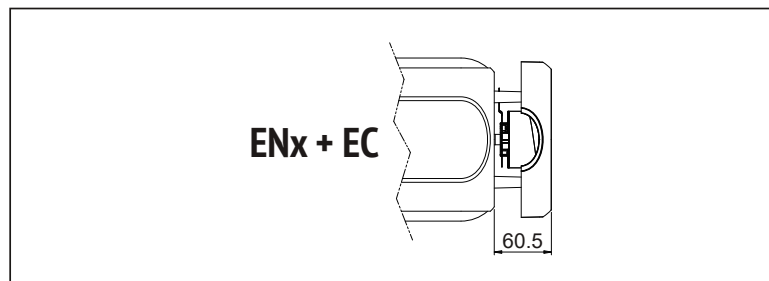
For EN on BXN/MXN motors see the scheme below.

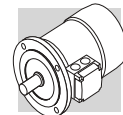


M12.19 EC - Encoder canopy

EC

Option EC is a cover variant specifically made for our encoders. It protects them from impacts and may help in prolonging their productive life.





M12.20 Insulated Bearings

IB

When IB option is selected the motor is equipped with insulated bearings at drive end. This prevent early bearings failures due to high frequency circulation currents.

NOTE: This option is available only for BX ≥ 280 and BX ≥ 280K, and it is mandatory when the motor is operated through a variable speed drive.

M12.21 Vertical Mounting

VM

NOTE: This option is mandatory for BX ≥ 200 and BX ≥ 200K, when vertically mounted.

When VM is selected the motor is delivered with specific arrangements.

Furthermore, the vertical mounting position will also be reported on motor nameplate.

M12.22 Surface protection

C_

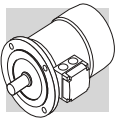
When no specific protection class is requested, the painted (ferrous) surfaces of motors are protected to at least corrosivity class C2 (UNI EN ISO 12944-2). For improved resistance to atmospheric corrosion, motors can be delivered with C3 and C4 surface protection.

(F75)

SURFACE PROTECTION	Typical environments	Maximum surface temperature	Corrosivity class according to UNI EN ISO 12944-2
C3	Urban and industrial environments with up to 100% relative humidity (medium air pollution)	120°C	C3
C4	Industrial areas, coastal areas, chemical plant, with up to 100% relative humidity (high air pollution)	120°C	C4
C5M	Coast and offshore areas with high salt content.	120°C	C5M

Motors with optional protection to class C3 or C4 are available in a choice of colours. If no specific colour is requested (see the “PAINTING” option) motors are finished in RAL 7042 for BN/M, BE/ME and BX≤180/MX and in Munsell blue 8B 4.5/3.25 for BX≥200.

Motors can also be supplied with surface protection for corrosivity class C5 according to UNI EN ISO 12944-2. Contact our Technical Service for further details.



M12.23 Painting

RAL

Gearboxes with optional protection to class C3 or C4 are available in the colours listed in the following table.

(F76)

PAINTING	Colour	RAL number
RAL7042	Traffic Grey A	7042
RAL5010	Gentian Blue	5010
RAL9005	Jet Black	9005
RAL9006	White Aluminium	9006
RAL9010	Pure White	9010
Munsell blue 8B* 4.5/3.25	Blue	MUNSELL 8B 4.5/3.25
RAL7035	Light Grey	7035
RAL7001	Silver Grey	7001
RAL5015	Sky Blue	5015
RAL7037	Dusty Grey	7037
RAL5024	Pastel Blue	5024

* BX \geq 200 and BX \geq 200K Motors are standardly supplied in this colour with C3 protection unless specified differently.

NOTE – “PAINTING” options can only be specified in conjunction with “SURFACE PROTECTION” options.

M12.24 Certificates

ACM

Certificate of compliance of motors

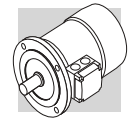
The document certifies the compliance of the product with the purchase order and the construction in conformity with the applicable procedures of the Bonfiglioli Quality System.

Note: Not available for BX \geq 200 and BX \geq 200K

CC

Inspection certificate

The document entails checking on order compliance, the visual inspection of external conditions and instrumental testing of the electrical characteristics in unloaded conditions. Units inspected are sampled within the shipping batch and marked individually.



M13 TABLES OF MOTORS CORRELATION

M13.1 50 Hz Motors

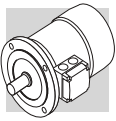
(F77)

2 pole							
Efficiency class	IE1	IE2	IE3	IE1	IE2	IE3	
Pn [kW]	0.06						
	0.09						
	0.12						
	0.18	BN 63A 2			M 05A 2		
	0.25	BN 63B 2			M 05B 2		
	0.37	BN 71A 2			M 05C 2		
	0.55	BN 71B 2			M 1SD 2		
	0.75	BN 71C 2	BE 80A 2		M 1LA 2	ME 2SA 2	
		BN 80A 2					
	1.1	BN 80B 2	BE 80B 2		M 2SA 2	ME 2SB 2	
	1.5	BN 90SA 2	BE 90SA 2		M 2SB 2		
	1.85	BN 90SB 2					
	2.2	BN 90L 2	BE 90L 2		M 3SA 2		
	3	BN 100L 2	BE 100L 2		M 3LA 2	ME 3LB 2	
	4	BN 112M 2	BE 112M 2		M 3LB 2		
	5.5	BN 132SA 2	BE 132SA 2		M 4SA 2	ME 4SA 2	
	7.5	BN 132SB 2	BE 132SB 2		M 4SB 2	ME 4LA 2	
	9.2	BN 132M 2	BE 132MB 2		M 4LA 2	ME 4LB 2	
	11	BN 160MR 2	BE 160MA 2		M 4LC 2	ME 5SA 2	
BN 160M 2							
15	BN 160MB 2	BE 160MB 2		M 5SB 2	ME 5SB 2		
18.5	BN 160L 2	BE 160L 2		M 5SC 2	ME 5LA 2		
22	BN 180M 2			M 5LA 2			
30	BN 200LA 2						

(F78)

4 pole								
Efficiency class	IE1	IE2	IE3	IE1	IE2	IE3		
Pn [kW]	0.06	BN 56A 4						
	0.09	BN 56B 4			M 0B 4			
	0.12	BN 63A 4	BE 63A 4		BXN 63MA 4	M 05A 4	ME 05A 4	MXN 05MA 4
		BN 63B 4	BE 63B 4		BXN 63MB 4	M 05B 4	ME 05B 4	MXN 05MB 4
	0.25	BN 63C 4				M 05C 4		
		BN 71A 4	BE 71A 4		BXN 71MA 4		ME 1SA 4	
	0.37	BN 71B 4	BE 71B 4		BXN 71MB 4	M 1SD 4	ME 1SB 4	MXN 10MB 4
		BN 71C 4						
	0.55	BN 80A 4	BE 80A 4		BXN 80MA 4	M 1LA 4		MXN 20MA 4
		BN 80B 4	BE 80B 4	BX 80B 4	BXN 80MB 4	M 2SA 4	ME 2SB 4	MX 2SB 4
	1.1	BN 80C 4	BE 90S 4	BX 90S 4		M 2SB 4	ME 3SA 4	MX 3SA 4
		BN 90S 4			BXN 90S 4			
	1.5	BN 90LA 4	BE 90LA 4	BX 90LA 4	BXN 90L 4	M 3SA 4	ME 3SB 4	MX 3SB 4
	1.85	BN 90LB 4						
	2.2	BN 100LA 4	BE 100LA 4	BX 100LA 4		M 3LA 4	ME 3LA 4	MX 3LA 4
	3	BN 100LB 4	BE 100LB 4	BX 100LB 4		M 3LB 4	ME 3LB 4	MX 3LB 4
	4	BN 112M 4	BE 112M 4	BX 112M 4		M 3LC 4	ME 4SA 4	MX 4SA 4
	5.5	BN 132S 4	BE 132S 4	BX 132SB 4		M 4SA 4	ME 4SB 4	MX 4SB 4
	7.5	BN 132MA 4	BE 132MA 4	BX 132MA 4		M 4LA 4	ME 4LA 4	MX 4LA 4
	9.2	BN 132MB 4	BE 132MB 4	BX 160MA 4		M 4LB 4	ME 4LB 4	MX 5SA 4
	11	BN 160MR 4	BE 160M 4	BX 160MB 4		M 4LC 4	ME 5SA 4	MX 5SB 4
		BN 160M 4						
	15	BN 160L 4	BE 160L 4	BX 160L 4		M 5SB 4	ME 5LA 4	MX 5LA 4
	18.5	BN 180M 4	BE 180M 4	BX 180M 4		M 5LA 4		
	22	BN 180L 4	BE 180L 4	BX 180L 4				
	30	BN 200L 4		BX 200LA 4*				
	37			BX 225SA 4*				
	45			BX 225SB 4*				
	55			BX 250MA 4*				
	75			BX 280SA 4*				
	90			BX 280SB 4*				
	110			BX 315SA 4*				
	132			BX 315SB 4*				
160			BX 315SC 4*					
200			BX 315MA 4*					
250			BX 355MA 4*					
315			BX 355MB 4*					
355			BX 355MC 4*					

Note: For the Australian market these motor has to be selected in the BX ... K 4 Version



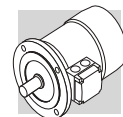
(F79)

6 pole							
Efficiency class	IE1	IE2	IE3	IE1	IE2	IE3	
Pn [kW]	0.06						
	0.09	BN 63A 6			M 05A 6		
	0.12	BN 63B 6			M 05B 6		
	0.18	BN 71A 6			M 1SC 6		
	0.25	BN 71B 6			M 1SD 6		
		BN 71C 6					
	0.37	BN 80A 6			M 1LA 6		
	0.55	BN 80B 6			M 2SA 6		
	0.75	BN 80C 6	BE 90S 6		M 2SB 6		
		BN 90S 6					
	1.1	BN 90L 6	BE 100M 6		M 3SA 6	ME 3LA 6	
	1.5	BN 100LA 6	BE 100LA 6		M 3LA 6	ME 3LB 6	
	1.85	BN 100LB 6			M 3LB 6		
	2.2	BN 112M 6	BE 112M 6		M 3LC 6		
	3	BN 132S 6	BE 132S 6		M 4SA 6	ME 4SB 6	
	4	BN 132MA 6	BE 132MA 6		M 4LA 6	ME 4LA 6	
	5.5	BN 132MB 6	BE 160MA 6		M 4LB 6	ME 5SA 6	
	7.5	BN 160M 6	BE 160MB 6		M 5SA 6	ME 5SB 6	
	9.2						
	11	BN 160L 6			M 5SB 6		
15	BN 180L 6						
18.5	BN 200LA 6						
22							
30							



M13.2 60 Hz Motors

(F80)



2 pole							
Efficiency class	IE1	IE2	IE3	IE1	IE2	IE3	
Pn [kW]	0.06						
	0.09						
	0.12						
	0.18	BN 63A 2			M 05A 2		
	0.25	BN 63B 2			M 05B 2		
	0.37	BN 71A 2			M 05C 2		
	0.55	BN 71B 2			M 1SD 2		
	0.75	BN 71C 2			M 1LA 2		
		BN 80A 2					
	1.1	BN 80B 2			M 2SA 2		
	1.5	BN 90SA 2			M 2SB 2		
	1.85	BN 90SB 2					
	2.2	BN 90L 2			M 3SA 2		
	3	BN 100L 2			M 3LA 2		
	3.7	BN 112M 2			M 3LB 2		
	5.5	BN 132SA 2			M 4SA 2		
	7.5	BN 132SB 2			M 4SB 2		
	9.2	BN 132M 2			M 4LA 2		
	11	BN 160MR 2			M 4LC 2		
		BN 160M 2					
15	BN 160MB 2			M 5SB 2			
18.5	BN 160L 2			M 5SC 2			
22	BN 180M 2			M 5LA 2			
30	BN 200LA 2						

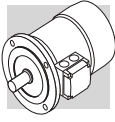


(F81)

4 pole								
Efficiency class	IE1	IE2	IE3	IE1	IE2	IE3		
Pn [kW]	0.06	BN 56A 4						
	0.09	BN 56B 4			M 0B 4			
	0.12	BN 63A 4	BE 63A 4		BXN 63MA 4	M 05A 4	MXN 05MA 4	
	0.18	BN 63B 4	BE 63B 4		BXN 63MB 4	M 05B 4	MXN 05MB 4	
	0.25	BN 63C 4				M 05C 4		
		BN 71A 4	BE 71A 4		BXN 71MA 4			MXN 10MA 4
	0.37	BN 71B 4	BE 71B 4		BXN 71MB 4	M 1SD 4		MXN 10MB 4
		BN 71C 4						
	0.55	BN 80A 4	BE 80A 4		BXN 80MA 4	M 1LA 4		MXN 20MA 4
		BN 80B 4	BE 80B 4	BX 90SR 4	BXN 80MB 4	M 2SA 4	ME 2SB 4	MX 2SB 4
	1.1	BN 80C 4	BE 90S 4	BX 90S 4	BXN 90S 4	M 2SB 4	ME 3SA 4	MX 3SA 4
		BN 90S 4						
	1.5	BN 90LA 4	BE 90LA 4	BX 90LA 4	BXN 90L 4	M 3SA 4	ME 3SB 4	MX 3SB 4
	1.85	BN 90LB 4						
	2.2	BN 100LA 4	BE 100LA 4	BX 100LA 4		M 3LA 4	ME 3LA 4	MX 3LA 4
	3	BN 100LB 4	BE 100LB 4	BX 100LB 4		M 3LB 4	ME 3LB 4	MX 3LB 4
	3.7	BN 112M 4	BE 112M 4	BX 112M 4		M 3LC 4	ME 4SA 4	MX 4SA 4
	5.5	BN 132S 4	BE 132S 4	BX 132SB 4		M 4SA 4	ME 4SB 4	MX 4SB 4
	7.5	BN 132MA 4	BE 132MA 4	BX 132MA 4		M 4LA 4	ME 4LA 4	MX 4LA 4
	9.2	BN 132MB 4	BE 132MB 4	BX 160MA 4		M 4LB 4	ME 4LB 4	MX 5SA 4
		BN 160MR 4	BE 160M 4	BX 160MB 4		M 4LC 4	ME 5SA 4	MX 5SB 4
	BN 160M 4							
	15	BN 160L 4	BE 160L 4	BX 160L 4		M 5SB 4	ME 5LA 4	MX 5LA 4
	18.5	BN 180M 4	BE 180M 4	BX 180M 4		M 5LA 4		
	22	BN 180L 4	BE 180L 4	BX 180L 4				
	30	BN 200L 4		BX 200LAK 4				
	37			BX 225SAK 4				
	45			BX 225SBK 4				
	55			BX 280SAK 4				
	75			BX 280SBK 4				
90			BX 315SAK 4					
110			BX 315SBK 4					
132			BX 315SCK 4					
160			BX 355SAK 4					
200			BX 355SBK 4					
250			BX 355SCK 4					
315			BX 355MBK 4					
355			BX 355MCK 4					

(F82)

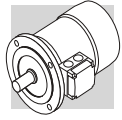
6 pole							
Efficiency class	IE1	IE2	IE3	IE1	IE2	IE3	
Pn [kW]	0.06						
	0.09	BN 63A 6			M 05A 6		
	0.12	BN 63B 6			M 05B 6		
	0.18	BN 71A 6			M 1SC 6		
		BN 71B 6					
	0.25	BN 71C 6			M 1SD 6		
		BN 80A 6			M 1LA 6		
	0.37	BN 80B 6			M 2SA 6		
	0.55	BN 80C 6			M 2SB 6		
		BN 90S 6					
	1.1	BN 90L 6			M 3SA 6		
	1.5	BN 100LA 6			M 3LA 6		
	1.85	BN 100LB 6			M 3LB 6		
	2.2	BN 112M 6			M 3LC 6		
	3	BN 132S 6			M 4SA 6		
	3.7	BN 132MA 6			M 4LA 6		
	5.5	BN 132MB 6			M 4LB 6		
	7.5	BN 160M 6			M 5SA 6		
	9.2						
	11	BN 160L 6			M 5SB 6		
15	BN 180L 6						
18.5	BN 200LA 6						
22							
30							



M14 MOTOR RATING CHARTS BXN-MXN

4 P		1500 min ⁻¹ - S1															50 Hz - IE3				
		d.c. brake															a.c. brake				
		FD															FA				
P _n	n	M _n	In 400V	η%	cos φ	I _s /I _n	M _s /M _n	M _a /M _n	KVA code	J _m x 10 ⁻⁴ kgm ²	IM B5	Mod	M _b Nm	Z ₀ 1/h	J _m x 10 ⁻⁴ kgm ²	IM B5	Mod	M _b Nm	Z ₀ 1/h	J _m x 10 ⁻⁴ kgm ²	IM B5
0.12	1407	0.8	0.47	60.3	0.58	3.4	2.9	1.7	H	1.82	4.6	FD 02	1.8	8900	2.4	6.3	FA 02	1.8	11000	2.4	6.1
0.18	1373	1.3	0.61	68.8	0.61	3.5	3.1	1.8	G	2.92	5.7	FD 02	3.5	7000	3.5	7.4	FA 02	3.5	9000	3.5	7.2
0.25	1388	1.7	0.67	72.8	0.74	4.8	1.6	2.4	H	6.28	6.5	FD 53	5	5700	7.4	9.2	FA 03	5	8100	7.4	8.9
0.37	1429	2.5	1.05	76.0	0.66	6.3	2.6	2.5	L	9.70	8.3	FD 53	5	6400	10.8	11.0	FA 03	5	9900	10.8	10.7
0.55	1447	3.6	1.31	80.8	0.75	6.1	1.9	1.6	J	17.78	10.7	FD 04	10	2500	19.8	14.6	FA 04	10	5200	19.8	14.5
0.75	1451	4.9	1.63	82.5	0.78	7.4	2.4	2.0	K	28.89	14.4	FD 04	15	2000	30.8	18.3	FA 04	15	4100	30.8	18.2
1.1	1448	7.3	2.38	84.1	0.78	7.3	2.4	3.4	J	31.76	15.6	FD 05	26	2800	35.8	21.6	FA 05	26	6600	35.8	22.3
1.5	1441	9.9	3.44	84.3	0.75	6.7	2.6	2.4	J	34.96	16.6	FD 05	26	1400	39.1	22.6	FA 05	26	3100	39.1	23.3

Note: for more details on the available energy certifications look at the catalog's dedicated section.

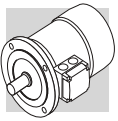


4 P	1500 min⁻¹ - S1	50 Hz - IE3
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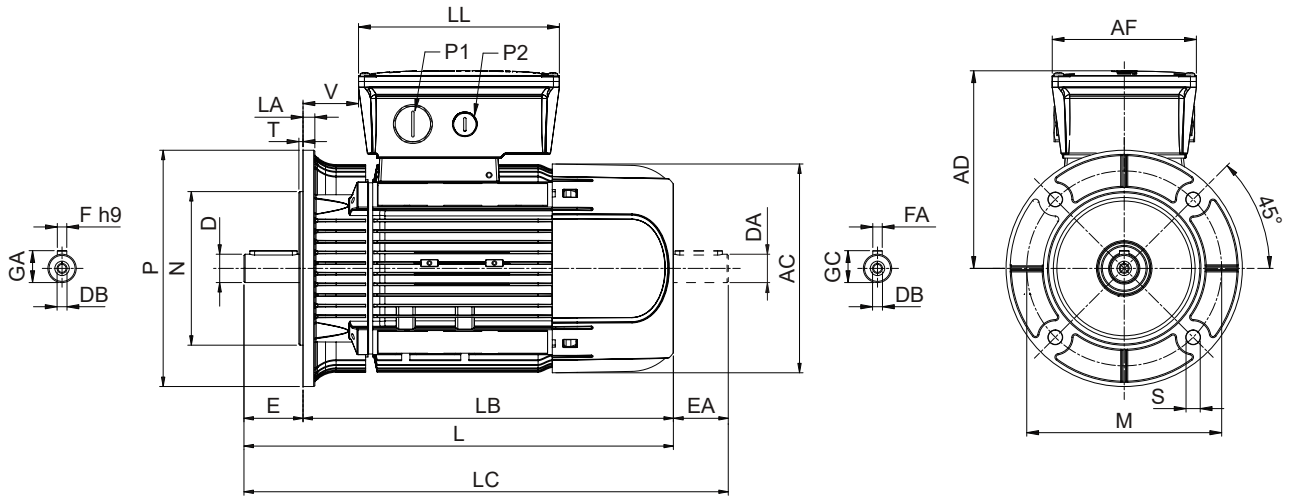
P _n kW	n min ⁻¹	M _n Nm	I _n 400V A	η%		cos φ	$\frac{I_s}{I_n}$	$\frac{M_s}{M_n}$	$\frac{M_a}{M_n}$	KVA code	J _m x 10 ⁻⁴ kgm ²	IM B5 	d.c. brake						a.c. brake										
				100%	75%								FD		FA		FD		FA										
				100%	75%								M _b Nm	Z ₀ 1/h	NB	SB	M _b Nm	Z ₀ 1/h	Mod	IM B5 	J _m x 10 ⁻⁴ kgm ²	M _b Nm	Z ₀ 1/h	Mod	IM B5 	J _m x 10 ⁻⁴ kgm ²	M _b Nm	Z ₀ 1/h	Mod
0.12	MXN 05MA 4	0.8	0.47	64.8	60.3	0.58	3.4	2.9	1.7	H	1.82	4.6	8900	11000	2.4	1.8	11000	2.4	11000	2.4	1.8	11000	2.4	6.3	2.4	1.8	11000	2.4	6.1
0.18	MXN 05MB 4	1.3	0.61	69.9	68.8	0.61	3.5	3.1	1.8	G	2.92	5.7	7000	9000	3.5	3.5	9000	3.5	9000	3.5	3.5	9000	3.5	7.4	3.5	3.5	9000	3.5	7.2
0.25	MXN 10MA 4	1.7	0.67	73.5	72.8	0.74	4.8	1.6	2.4	H	6.28	6.5	5700	8100	7.4	5	8100	7.4	8100	7.4	5	8100	7.4	9.2	7.4	5	8100	7.4	8.9
0.37	MXN 10MB 4	2.5	1.05	77.3	76.0	0.66	6.3	2.6	2.5	L	9.70	8.3	6400	9900	10.8	5	9900	10.8	9900	10.8	5	9900	10.8	11.0	10.8	5	9900	10.8	10.7
0.55	MXN 20MA 4	3.6	1.31	80.8	80.9	0.75	6.1	1.9	1.6	J	17.78	10.7	2500	5200	19.8	10	5200	19.8	5200	19.8	10	5200	19.8	14.6	19.8	10	5200	19.8	14.5
0.75	MXN 20MB 4	4.9	1.63	82.5	82.5	0.78	7.4	2.4	2.0	K	28.89	14.4	2000	4100	30.8	15	4100	30.8	4100	30.8	15	4100	30.8	18.3	30.8	15	4100	30.8	18.2

Note: for more details on the available energy certifications look at the catalog's dedicated section.



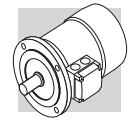
M15 MOTORS DIMENSIONS BXN-MXN

BXN - IM B5 - CE CUS/UKCA



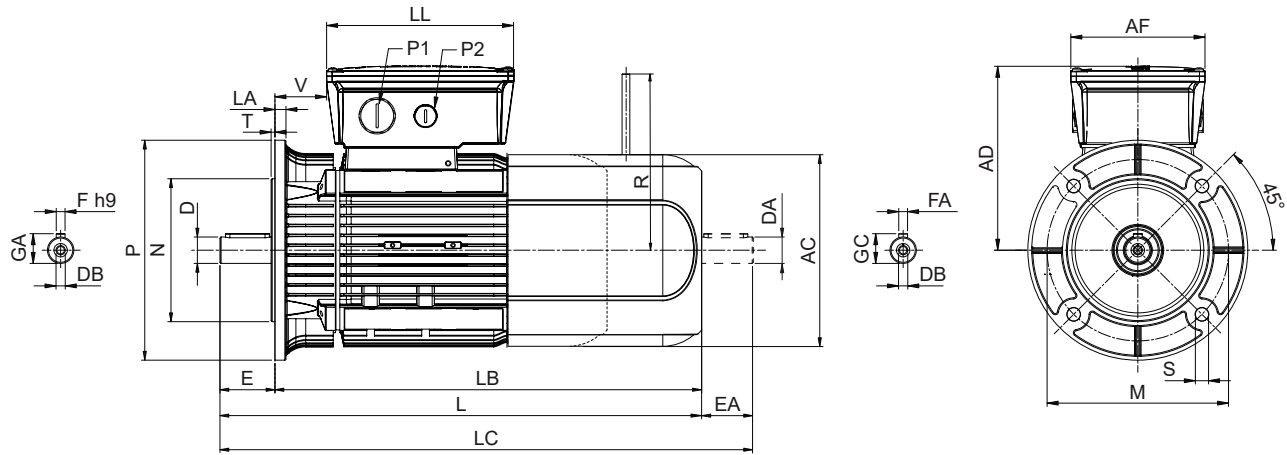
	Shaft					Housing						Motor								
	D DA	E EA	DB	GA GC	F FA	M	N	P	S	T	LA	AC	L	LB	LC	AD	AF	LL	V	
BXN 63	11 9 ⁽¹⁾	23 20 ⁽¹⁾	M4 M3 ⁽¹⁾	12.5 10.2 ⁽¹⁾	4 3 ⁽¹⁾	115	95	140	9.5	3	9	122	281	258	301	136	112	165	37	
BXN 71	14 11 ⁽¹⁾	30 23 ⁽¹⁾	M5 M4 ⁽¹⁾	16 12.5 ⁽¹⁾	5 4 ⁽¹⁾	130	110	160				138	292	262	315	138				34
BXN 80	19 14 ⁽¹⁾	40 30 ⁽¹⁾	M6 M5 ⁽¹⁾	21.5 16 ⁽¹⁾	6 5 ⁽¹⁾	165	130	200	11.5	3.5	10	158	346	306	376	148				40
BXN 90	24 19 ⁽¹⁾	50 40 ⁽¹⁾	M8 M6 ⁽¹⁾	27 21.5 ⁽¹⁾	8 6 ⁽¹⁾							177	365	315	405	170				170

N.B.: 1) These values refer to the rear shaft end (PS).



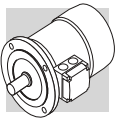
BXN-MXN

BXN - IM B5 - FD/FA - CE - CUS/UKCA

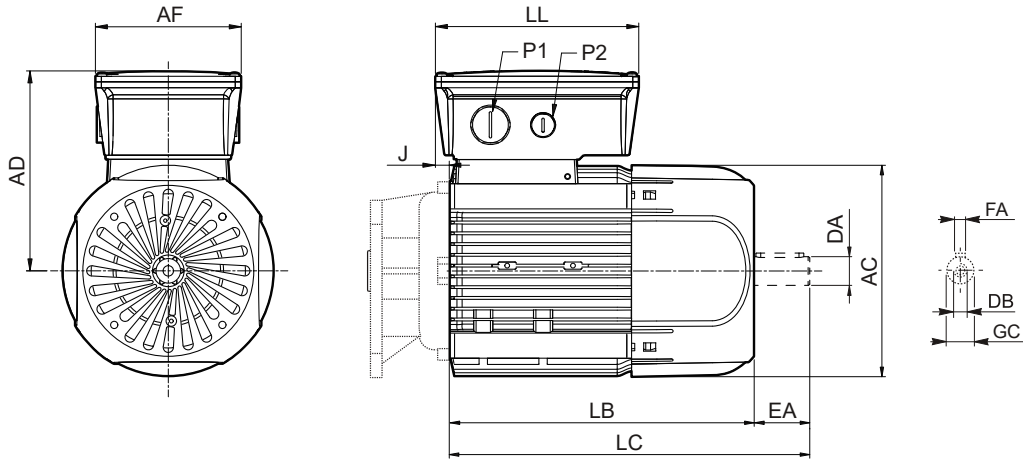


	Shaft					Housing						Motor									
	D	E	DB	GA	F	M	N	P	S	T	LA	AC	L	LB	LC	AD	AF	LL	V	R	
	DA	EA		GC	FA															FD	FA
BXN 63	11 9 ⁽¹⁾	23 20 ⁽¹⁾	M4 M3 ⁽¹⁾	12.5 10.2 ⁽¹⁾	4 3 ⁽¹⁾	115	95	140	9.5	3	9	122	328	305	352	136	112	165	37	96	116
BXN 71	14 11 ⁽¹⁾	30 23 ⁽¹⁾	M5 M4 ⁽¹⁾	16 12.5 ⁽¹⁾	5 4 ⁽¹⁾	130	110	160		9		138	351	321	380	138			34	103	121
BXN 80	19 14 ⁽¹⁾	40 30 ⁽¹⁾	M6 M5 ⁽¹⁾	21.5 16 ⁽¹⁾	6 5 ⁽¹⁾	165	130	200	11.5	3.5	10	158	417	377	448	148			40	129	131
BXN 90	24 19 ⁽¹⁾	50 40 ⁽¹⁾	M8 M6 ⁽¹⁾	27 21.5 ⁽¹⁾	8 6 ⁽¹⁾					3		177	433	383	451	170			170	43	160

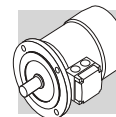
N.B.: 1) These values refer to the rear shaft end (PS).



MXN

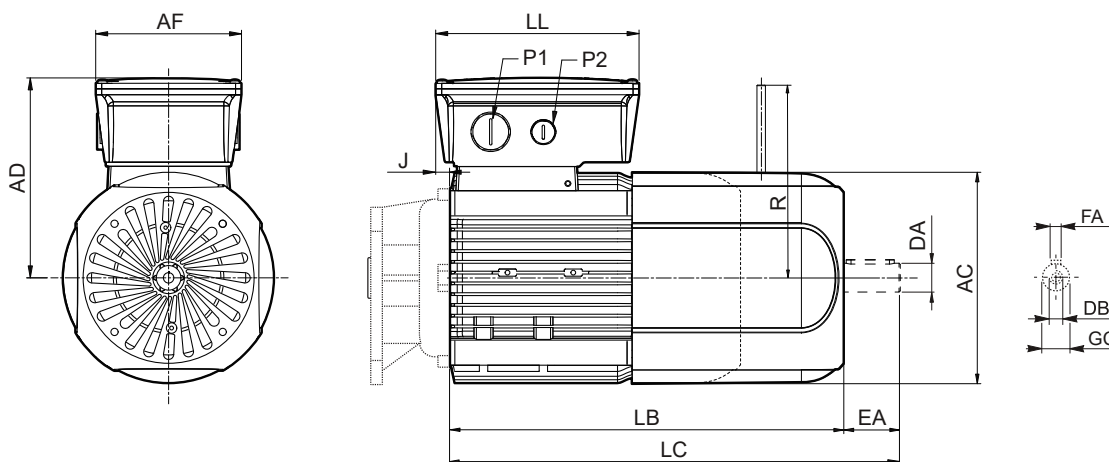


	Rear shaft end					Motor						
	DA	EA	DB	FA	GC	AC	LB	LC	AF	LL	J	AD
MXN 05	9	20	M3	3	10.2	123	211.5	231.5	112	165	9.5	136
MXN 10	11	23	M4	4	12.5	138	216	239	112	165	11.5	137
MXN 20	14	30	M5	5	16	158	255.5	285.5	112	165	10.5	146

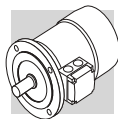


MXN_FD/FA

BXN-MXN



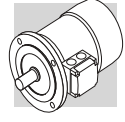
	Rear shaft end					Motor									
	DA	EA	DB	FA	GC	AC	LB	LC	AF	LL	J	AD	R		
													FD	FA	
MXN 05	9	20	M3	3	10.2	122	211.5	258.5	112	165	9.5	136	96	116	
MXN 10	11	23	M4	4	12.5	138	216	275	112	165	11.5	138	103	121	
MXN 20	14	30	M5	5	16	158	255.5	326.5	112	165	10.5	148	129	131	



M16 MOTOR RATING CHARTS BX-MX

4 P		1500 min ⁻¹ - S1															50 Hz - IE3				
		CE															a.c. brake				
P _n kW	n min ⁻¹	M _n Nm	I _n 400V A	η%			cos φ	I _s I _n	M _s M _n	M _a M _n	KVA code	J _m x 10 ⁻⁴ kgm ²	IM B5 	FD			FA				
				100%	75%	50%								M _b Nm	Mod	IM B5 	M _b Nm	Mod	J _m x 10 ⁻⁴ kgm ²	IM B5 	
0.75	BX 80B 4	1425	5.0	1.61	82.5	83.9	0.81	6.5	2.0	1.8	J	35	16	FD 04	FA 04	15	37	19.9	15	37	19.8
1.1	BX 90S 4	1425	7.4	2.44	84.1	84.1	0.77	6.9	3.4	2.2	J	27	16	FD 14	FA 14	15	29	20.2	15	29	20.1
1.5	BX 90LA 4	1420	10.1	3.3	85.3	86.2	0.78	6.3	3.1	1.9	J	31	17	FD 05	FA 05	26	35	23	26	35	23.7
2.2	BX 100LA 4	1445	14.5	5.1	86.7	86.2	0.72	7.2	3.6	2.4	K	58	24	FD 15	FA 15	40	62	31	40	62	31
3	BX 100LB 4	1445	19.8	6.7	87.7	87.7	0.74	7.6	3.9	2.6	K	73	29	FD 15	FA 15	40	77	36	40	77	36
4	BX 112M 4	1445	26	8.1	88.6	88.9	0.8	8.1	3.8	2.5	J	130	38	FD 06S	FA 06S	60	139	48	60	139	50
5.5	BX 132SB 4	1460	36	10.6	89.6	89.2	0.83	8.2	3.6	2.3	J	310	57	FD 56	FA 06	75	320	70	75	320	71
7.5	BX 132MA 4	1460	49	15.0	90.4	90.9	0.80	8.4	3.8	2.5	K	360	67	FD 06	FA 07	100	370	80	100	370	85
9.2	BX 160MA 4	1465	60	17.8	91.0	92.1	0.82	7.9	3.6	2.1	J	650	95	FD 08	FA 08	170	725	125	170	725	124
11	BX 160MB 4	1465	72	20.5	91.4	92.9	0.84	7.8	3.4	1.9	J	780	110	FD 08	FA 08	170	855	140	170	855	139
15	BX 160L 4	1465	98	28.1	92.1	93.2	0.82	9.0	4.1	2.3	K	890	121	FD 08	FA 08	200	965	151	200	965	150
18.5	BX 180M 4	1480	119	32.9	92.6	94.1	0.85	11.3	2.6	2.3	M	1560	155	FD 09		300	1760	195	300	1760	195
22	BX 180L 4	1475	142	38.2	93.0	93.6	0.88	10.2	2.5	2.0	L	1660	163	FD 09		300	1860	203	300	1860	203

Note: for more details on the available energy certifications look at the catalog's dedicated section.

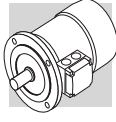


4 P		1500 min ⁻¹ - S1											50 Hz - IE3									
P _n kW	CE	CCC	d.c. brake											a.c. brake								
			FD											FA								
			Mod	M _b Nm	J _m x 10 ⁻⁴ kgm ²	IM B5	KVA code	M _s /M _n	I _s /I _n	cos φ	η%	In 400V A	M _n Nm	n min ⁻¹	Mod	M _b Nm	J _m x 10 ⁻⁴ kgm ²	IM B5				
30			BX 200LA 4	1483	193.2	54.8	93.6	93.9	93.4	0.84	7.5	2.7	3.2	N/A	3850	292	IM B5	FD20	260	3910	317	IM B5
37			BX 225SA 4	1482	238.6	68.9	93.9	94.1	93.8	0.83	7.2	3.1	3.1	N/A	4270	322	IM B5	FD25	400	4450	356	IM B5
45			BX 225SB 4	1482	290	82.3	94.2	94.4	94	0.84	8	3.2	3.5	N/A	5250	357	IM B5	FD25	400	5430	391	IM B5
55			BX 250MA 4	1482	354.2	100	94.6	94.7	94	0.84	7.1	2.9	3.4	N/A	6940	406	IM B5	FD30	1000	7540	452	IM B5
75			BX 280SA 4	1485	483	133	95	95.2	94.8	0.86	6.4	2.3	2.8	N/A	13800	645	IM B5	FD30	1000	14400	691	IM B5
90			BX 280SB 4	1485	578	158	95.2	95.5	95.2	0.86	7.1	2.5	2.9	N/A	17300	700	IM B5	FD30	1000	17900	746	IM B5
110			BX 315SA 4	1489	705	198	95.4	95.5	95	0.84	7	2.1	3	N/A	24300	930	IM B5	FD30	1000	24900	976	IM B5
132			BX 315SB 4	1488	847	231	95.6	95.9	95.5	0.86	6.7	2.2	2.9	N/A	29000	1000	IM B5	FD160	1600	30500	1121	IM B5
160			BX 315SC 4	1488	1026	282	95.8	96	95.8	0.85	6.9	2.2	3	N/A	32000	1065	IM B5	FD160	1600	33500	1186	IM B5
200			BX 315MA 4	1487	1284	351	96	96.4	96.4	0.86	6.8	2.4	3	N/A	39000	1220	IM B5	FD250	2500	41400	1390	IM B5
250			BX 355MA 4	1491	1601	435	96	96	95.6	0.86	6.4	2.1	2.9	N/A	59000	1610	IM B5	FD250	2500	61400	1780	IM B5
315			BX 355MB 4	1491	2018	550	96	96.1	95.7	0.85	7.3	2.4	3.3	N/A	69000	1780	IM B5	FD400	4000	73300	2000	IM B5
355			BX 355MC 4	1490	2273	616	96	96.2	95.8	0.86	6.3	2.3	2.8	N/A	72000	1820	IM B5	FD400	4000	76300	2040	IM B5



Note: for more details on the available energy certifications look at the catalog's dedicated section.

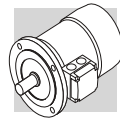
BX-MX



4 P		1500 min ⁻¹ - S1											50 Hz - IE3							
P _n kW	n min ⁻¹	M _n Nm	I _n 400V A	η%		cos φ	I _s I _n	M _s M _n	M _a M _n	KVA code	J _m x 10 ⁻⁴ kgm ²	IM B5 	d.c. brake			a.c. brake				
				100%	75%								Mod	M _b Nm	J _m x 10 ⁻⁴ kgm ²	IM B5 	Mod	M _b Nm	J _m x 10 ⁻⁴ kgm ²	IM B5
				50%	50%															
30	BX 200LAK 4	193	55.7	94.7	95.1	0.82	8.3	3	3.3	N/A	3660	319	FD 8	400	3940	337	FD 8	400	3940	337
37	BX 225SAK 4	238	65.9	95.1	95.5	0.85	7.7	2.8	3.1	N/A	5360	398	FD 9	600	5720	426	FD 9	600	5720	426
45	BX 225SBK 4	290	80.4	95.2	95.6	0.85	7.9	2.8	3.2	N/A	5360	398	FD 9	600	5720	426	FD 9	600	5720	426
55	BX 250MAK 4	354	98.9	95.6	95.8	0.84	7.9	3	3.3	N/A	9330	476	FD 10	800	10080	521	FD 10	800	10080	521
75	BX 280SAK 4	482	134	95.9	96.2	0.84	7.3	2.5	2.8	N/A	15000	665	FD 1000	1000	15360	771	FD 1000	1000	15360	771
90	BX 280SBK 4	578	161	96.2	96.4	0.84	7.9	2.9	3	N/A	18500	725	FD 1000	1000	18860	831	FD 1000	1000	18860	831
110	BX 315SAK 4	704	194	96.8	97	0.84	8.3	2.4	3.1	N/A	29000	1000	FD 1000	1000	29360	1106	FD 1000	1000	29360	1106
132	BX 315SBK 4	846	234	96.9	97.1	0.84	8.1	2.6	3.2	N/A	32000	1065	FD 1600	1600	32500	1233	FD 1600	1600	32500	1233
160	BX 315SCK 4	1025	279	96.7	96.9	0.86	8.2	2.7	3	N/A	39000	1220	FD 1600	1600	39500	1388	FD 1600	1600	39500	1388
200	BX 355SAK 4	1281	345	96.6	96.7	0.87	7.3	2.1	2.7	N/A	59000	1610	FD 2500	2500	59500	1778	FD 2500	2500	59500	1778
250	BX 355MAK 4	1601	435	96	96	0.86	6.4	2.1	2.9	N/A	69000	1780	FD 2500	2500	69500	1948	FD 2500	2500	69500	1948
315	BX 355MBK 4	2017	550	96	96.1	0.85	7.3	2.4	3.3	N/A	72000	1820	FD 2500	2500	72500	1988	FD 2500	2500	72500	1988
355	BX 355MCK 4	2275	616	96	96.2	0.86	6.3	2.3	2.8	N/A	84000	2140	FD 2500	2500	84500	2308	FD 2500	2500	84500	2308



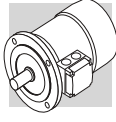
Note: for more details on the available energy certifications look at the catalog's dedicated section.



4 P		1800 min ⁻¹ - S1												60 Hz - Nema Premium						
P _n kW	n min ⁻¹	M _n Nm	I _n 460V A	η%		cos φ	I _s I _n	M _s M _n	M _a M _n	KVA code	J _m x 10 ⁻⁴ kgm ²	IM B5 	d.c. brake			a.c. brake				
				100%	75%								Mod	M _b Nm	J _m x 10 ⁻⁴ kgm ²	IM B5 	Mod	M _b Nm	J _m x 10 ⁻⁴ kgm ²	IM B5
				FD																
0.75	BX 90SR 4	4.1	1.48	85.5	86.4	0.73	8.0	3.7	2.5	L	27	16	FD 14	15	29	20.2	FA 14	15	29	20.1
1.1	BX 90S 4	6.0	2.15	86.5	85.9	0.74	8.2	4.1	2.8	K	27	16	FD 14	15	29	20.2	FA 14	15	29	20.1
1.5	BX 90LA 4	8.3	2.91	86.5	86.5	0.75	7.4	3.6	2.5	K	31	17	FD 05	26	35	23	FA 05	26	35	23.7
2.2	BX 100LA 4	11.9	4.4	89.5	88.6	0.71	9.9	4.8	3.6	N	73	29	FD 15	40	77	36	FA 15	40	77	36
3	BX 100LB 4	16.4	5.9	89.5	88.9	0.71	9.1	4.4	3.3	M	73	29	FD 15	40	77	36	FA 15	40	77	36
3.7	BX 112M 4	20	6.7	89.5	89.5	0.77	10.4	4.7	3.4	M	130	38	FD 06S	60	139	48	FA 06S	60	139	50
5.5	BX 132SB 4	30	9.9	91.7	92.0	0.76	10.7	5.1	4.6	N	410	77	FD 56	75	420	90	FA 06	75	420	91
7.5	BX 132MA 4	41	13.4	91.7	91.3	0.76	11.0	4.9	4.4	N	410	77	FD 06	100	420	90	FA 07	100	420	95
9.2	BX 160MA 4	50	15.6	92.4	92.5	0.8	9.1	4.1	2.6	L	650	95	FD 08	170	725	125	FA 08	170	725	124
11	BX 160MB 4	59	18.2	92.4	92.9	0.82	9.3	4.0	2.4	L	780	110	FD 08	170	855	140	FA 08	170	855	139
15	BX 160L 4	81	24.5	93.0	93.5	0.81	10.9	4.8	2.8	M	890	121	FD 08	200	965	151	FA 08	200	965	150
18.5	BX 180M 4	99	28.6	93.6	94.5	0.85	13.0	2.9	2.7	N	1560	155	FD 09	300	1760	195				
22	BX 180L 4	118	33.1	93.6	94.2	0.87	11.5	2.8	2.4	M	1660	163	FD 09	300	1860	203				

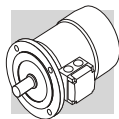
Note: for more details on the available energy certifications look at the catalog's dedicated section.









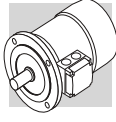
4 P		1800 min ⁻¹ - S1											60 Hz - Nema Premium									
P _n kW	n min ⁻¹	M _n Nm	I _n 460V A	η%		cos φ	I _s I _n	M _s M _n	M _a M _n	KVA code	J _m x 10 ⁻⁴ kgm ²	IM B5 	d.c. brake			a.c. brake						
				100%	75%								Mod	M _b Nm	J _m x 10 ⁻⁴ kgm ²	IM B5 	Mod	M _b Nm	J _m x 10 ⁻⁴ kgm ²	IM B5 		
				50%	50%																	
30	BX 200LAK 4	1786	160	47.9	94.7	94.8	94.1	0.83	9.4	3.3	3.7	N/A	3660	319	FD 8	400	3940	337	FD 8	400	3940	337
37	BX 225SAK 4	1784	198	57.3	95.3	95.5	94.9	0.85	8.8	2.9	3.4	N/A	5360	398	FD 9	600	5720	426	FD 9	600	5720	426
45	BX 225SBK 4	1785	240	70.5	95.3	95.4	94.8	0.84	8.9	3	3.6	N/A	5360	398	FD 9	600	5720	426	FD 9	600	5720	426
55	BX 250MAK 4	1787	293	85.8	95.7	95.8	95.2	0.84	9.1	3.3	3.7	N/A	9330	476	FD 10	800	10080	521	FD 10	800	10080	521
75	BX 280SAK 4	1788	401	117	95.9	95.7	94.7	0.84	8.4	2.7	3.1	N/A	15000	665	FD 1000	1000	15360	771	FD 1000	1000	15360	771
90	BX 280SBK 4	1788	481	140	96.1	95.9	95	0.84	9	3.1	3.3	N/A	18500	725	FD 1000	1000	18860	831	FD 1000	1000	18860	831
110	BX 315SAK 4	1792	586	172	96.1	96	95.3	0.84	8.8	2.6	3.4	N/A	29000	1000	FD 1000	1000	29360	1106	FD 1000	1000	29360	1106
132	BX 315SBK 4	1791	704	206	96.4	96.3	95.6	0.84	9	2.8	3.6	N/A	32000	1065	FD 1600	1600	32500	1233	FD 1600	1600	32500	1233
160	BX 315SCK 4	1791	853	241	96.4	96.4	95.9	0.86	9	2.9	3.3	N/A	39000	1220	FD 1600	1600	39500	1388	FD 1600	1600	39500	1388
200	BX 355SAK 4	1792	1065	301	96.4	96.2	95.4	0.87	8.3	2.2	3	N/A	59000	1610	FD 2500	2500	59500	1778	FD 2500	2500	59500	1778
250	BX 355MAK 4	1792	1332	381	96.7	96.6	96	0.86	8.8	2.7	3.2	N/A	69000	1780	FD 2500	2500	69500	1948	FD 2500	2500	69500	1948
315	BX 355MBK 4	1791	1679	479	96.7	96.6	96.1	0.85	8.5	3.1	3.2	N/A	72000	1820	FD 2500	2500	72500	1988	FD 2500	2500	72500	1988
355	BX 355MCK 4	1792	1893	541	96.7	96.5	96.9	0.86	7.2	2.4	3.1	N/A	84000	2140	FD 2500	2500	84500	2308	FD 2500	2500	84500	2308

Note: for more details on the available energy certifications look at the catalog's dedicated section.

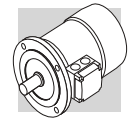


4 P		1500 min ⁻¹ - S1											50 Hz - IE3							
		d.c. brake											a.c. brake							
		FD											FA							
P _n		n	M _n	In 400V	η%	cos φ	$\frac{I_s}{I_n}$	$\frac{M_s}{M_n}$	$\frac{M_a}{M_n}$	KVA code	J _m x 10 ⁻⁴ kgm ²	IM B5 	Mod	M _b	J _m x 10 ⁻⁴ kgm ²	IM B5 	Mod	M _b	J _m x 10 ⁻⁴ kgm ²	IM B5 
0.75	MX 2SB	4	5.0	1.61	82.5	0.81	6.5	2.0	1.8	J	35	16	FD 04	15	37	19.9	FA 04	15	37	19.8
1.1	MX 3SA	4	7.3	2.46	84.1	0.75	6.7	3.0	2.0	J	35	17	FD 15	15	26	24	FA 15	15	26	24
1.5	MX 3SB	4	9.9	3.3	85.3	0.75	6.7	3.1	2.0	J	43	20	FD 15	26	47	27	FA 15	26	47	27
2.2	MX 3LA	4	14.5	5.1	86.7	0.72	7.2	3.6	2.4	K	58	24	FD 15	40	62	31	FA 15	40	62	31
3	MX 3LB	4	19.8	6.7	87.7	0.74	7.6	3.9	2.6	K	73	29	FD 15	40	77	36	FA 15	40	77	36
4	MX 4SA	4	26	7.8	88.6	0.82	8.1	3.7	2.5	J	225	45	FD 56	75	235	58	FA 06	75	235	59
5.5	MX 4SB	4	36	10.6	89.6	0.83	8.2	3.6	2.3	J	310	57	FD 56	75	320	70	FA 06	75	320	71
7.5	MX 4LA	4	49	15.0	90.4	0.80	8.4	3.8	2.5	K	360	67	FD 06	100	370	80	FA 07	100	370	85
9.2	MX 5SA	4	60	17.8	91.0	0.82	7.9	3.6	2.1	J	650	95	FD 08	170	725	125	FA 08	170	725	124
11	MX 5SB	4	72	20.5	91.4	0.84	7.8	3.4	1.9	J	780	110	FD 08	170	855	140	FA 08	170	855	139
15	MX 5LA	4	98	28.1	92.1	0.82	9.0	4.1	2.3	K	890	121	FD 08	200	965	151	FA 08	200	965	150

BX-MX

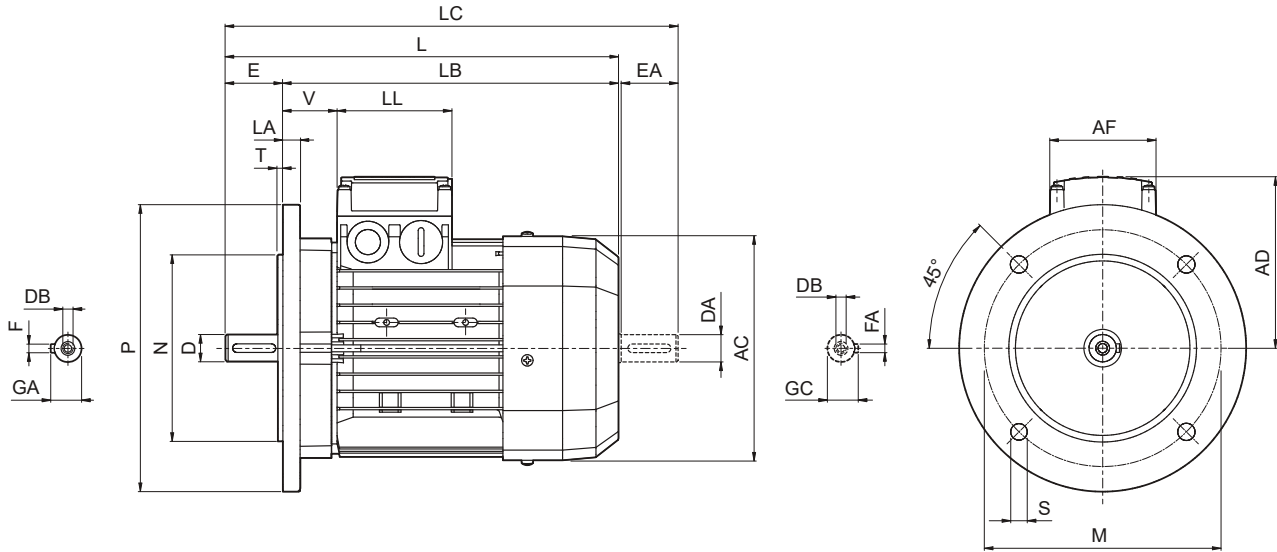


4 P		1800 min ⁻¹ - S1													60 Hz - IE3						
P _n kW	n min ⁻¹	M _n Nm	I _n 460V A	η%			cos φ	I _s I _n	M _s M _n	M _a M _n	KVA code	J _m x 10 ⁻⁴ kgm ²	IM B5 	d.c. brake				a.c. brake			
				100%	75%	50%								Mod	M _b Nm	J _m x 10 ⁻⁴ kgm ²	IM B5 	FA			
																		Mod	M _b	J _m	IM B5
0.75	MX 2SB 4	4.1	1.48	85.5	86.4	83.9	0.73	8.0	3.7	2.5	L	27	16	FD 14	15	29	20.2	FA 14	15	29	20.1
1.1	MX 3SA 4	6.0	2.19	86.5	86.0	83.0	0.73	7.9	3.3	2.5	L	35	17	FD 15	15	26	24	FA 15	15	26	24
1.5	MX 3SB 4	8.2	2.96	86.5	87.2	85.0	0.72	8.5	3.7	2.9	L	43	20	FD 15	26	47	27	FA 15	26	47	27
2.2	MX 3LA 4	11.9	4.4	89.5	88.6	86.2	0.71	9.9	4.8	3.6	N	73	29	FD 15	40	77	36	FA 15	40	77	36
3	MX 3LB 4	16.4	5.9	89.5	88.9	86.7	0.71	9.1	4.4	3.3	M	73	29	FD 15	40	77	36	FA 15	40	77	36
3.7	MX 4SA 4	20.0	6.6	89.5	89.8	87.7	0.78	9.9	4.7	3.4	M	225	45	FD 56	75	235	58	FA 06	75	235	59
5.5	MX 4SB 4	30	9.9	91.7	92.0	90.2	0.76	10.7	5.1	4.6	N	410	77	FD 56	75	420	90	FA 06	75	420	91
7.5	MX 4LA 4	41	13.4	91.7	91.3	89.7	0.76	11.0	4.9	4.4	N	410	77	FD 06	100	420	90	FA 07	100	420	95
9.2	MX 5SA 4	50	15.6	92.4	92.5	91.6	0.8	9.1	4.1	2.6	L	650	95	FD 08	170	725	125	FA 08	170	725	124
11	MX 5SB 4	59	18.2	92.4	92.9	92.0	0.82	9.3	4.0	2.4	L	780	110	FD 08	170	855	140	FA 08	170	855	139
15	MX 5LA 4	81	24.5	93.0	93.5	92.5	0.81	10.9	4.8	2.8	M	890	121	FD 08	200	965	151	FA 08	200	965	150



M17 MOTORS DIMENSIONS BX-MX

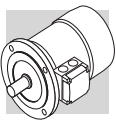
BX - IM B5 - CE/CCC



BX-MX

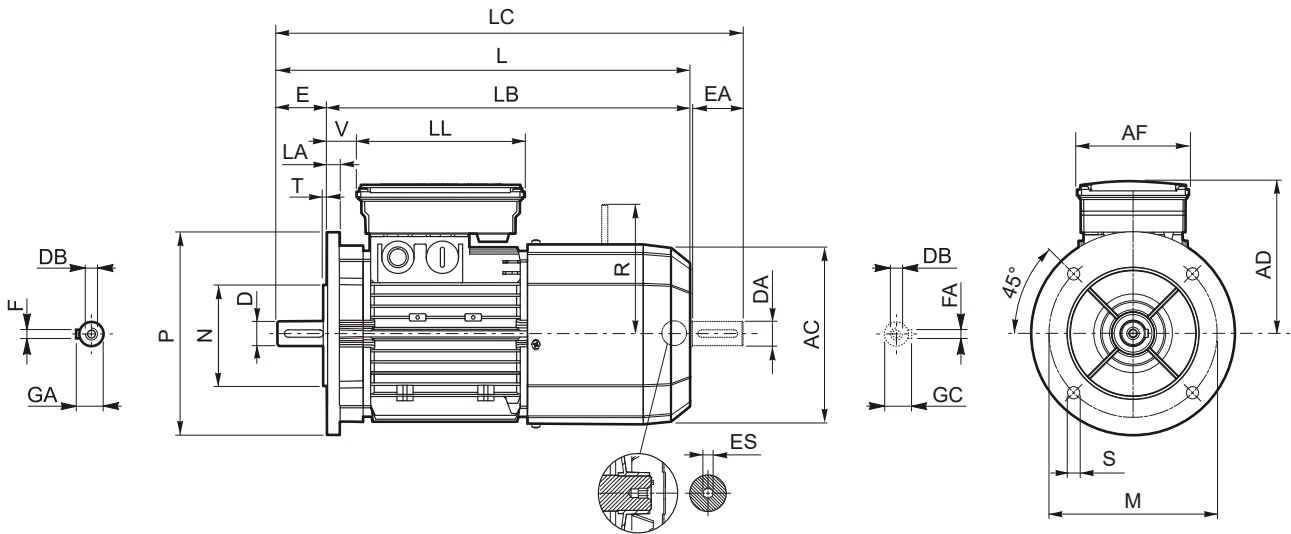
	Shaft					Flange						Motor																
	D DA	E EA	DB	GA GC	F FA	M	N	P	S	T	LA	AC	L	LB	LC	AD	AF	LL	V									
BX 80 B	19 14 ⁽¹⁾	40 30 ⁽¹⁾	M6 M5 ⁽¹⁾	21.5 16 ⁽¹⁾	6 5 ⁽¹⁾	165	130	200	11.5	3.5	11.5	156	320	280	351	119	74	80	38									
BX 90 S	24 19 ⁽¹⁾	50 40 ⁽¹⁾	M8 M6 ⁽¹⁾	27 21.5 ⁽¹⁾	8 6 ⁽¹⁾							176	326	276	368	133	98	98	44									
BX 90 LA																												
BX 100 LA	28 24 ⁽¹⁾	60 50 ⁽¹⁾	M10 M8 ⁽¹⁾	31 27 ⁽¹⁾	8 8 ⁽¹⁾	215	180	250	14	4	14	195	410	350	462	142	98	98	50									
BX 100 LB											15	219	430	370	482	157			52									
BX 112 M											20	258	493	413	556	193	118	118	58									
BX 132 SB	38 28 ⁽¹⁾	80 60 ⁽¹⁾	M12 M10 ⁽¹⁾	41 31 ⁽¹⁾	10 8 ⁽¹⁾	265	230	300	18.5	5	15	258	493	413	556	193	118	118	58									
BX 132 MA												528	448	591	245													
BX 160 MA	42 38 ⁽¹⁾	110 80 ⁽¹⁾	M16 M12 ⁽¹⁾	45 41 ⁽¹⁾	12 10 ⁽¹⁾	300	250	350	18.5	5	15	310	596	486	680	245	187	187	51									
BX 160 MB												640	530	724														
BX 160 L												18	348	708	598	823	261	52										
BX 180 M	48 42 ⁽¹⁾	110 110 ⁽¹⁾	M16 M16 ⁽¹⁾	51.5 45 ⁽¹⁾	14 12 ⁽¹⁾	350	300	400	19	5	20	423	821	711	934	328	300	311	48									
BX 200LA												465	879	739	1001	348												
BX 225SA	60 55 ⁽¹⁾	140 110 ⁽¹⁾	M20 M20 ⁽¹⁾	59 48.5 ⁽¹⁾	16 14 ⁽¹⁾	400	350	450	18	5	24	465	879	739	1001	348	300	311	48									
BX 225SB												514	884	744	1010	376												
BX 250MA												59	49	59	18	16 ⁽¹⁾	500	450	550	18	23	567	1088	948	1238	482	434	306
BX 280SA	75 65 ⁽¹⁾	140 140 ⁽¹⁾	M20 M20 ⁽¹⁾	79.5 69 ⁽¹⁾	20 18 ⁽¹⁾	600	550	660	23	6	25	567	1088	948	1238	482	434	306	43									
BX 280SB																												
BX 315SA	80 75 ⁽¹⁾	170 140 ⁽¹⁾	M20 M20 ⁽¹⁾	85 79.5 ⁽¹⁾	22 20 ⁽¹⁾	600	550	660	23	6	25	645	1204	1034	1352	537	473	347	42									
BX 315SB												1315	1145	1463														
BX 315SC																												
BX 315MA	90 75 ⁽¹⁾	210 170 ⁽¹⁾	M24 M20 ⁽¹⁾	95 79.5 ⁽¹⁾	25 20 ⁽¹⁾	740	680	800	23	6	25	740	1479	1269	1659	603	694	413	50									
BX 355MA																												
BX 355MB																												
BX 355MC																												

N.B.: 1) These values refer to the rear shaft end (PS).



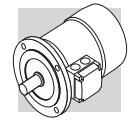
BX - IM B5 - FD/FA - CE/CCC

BX-MX



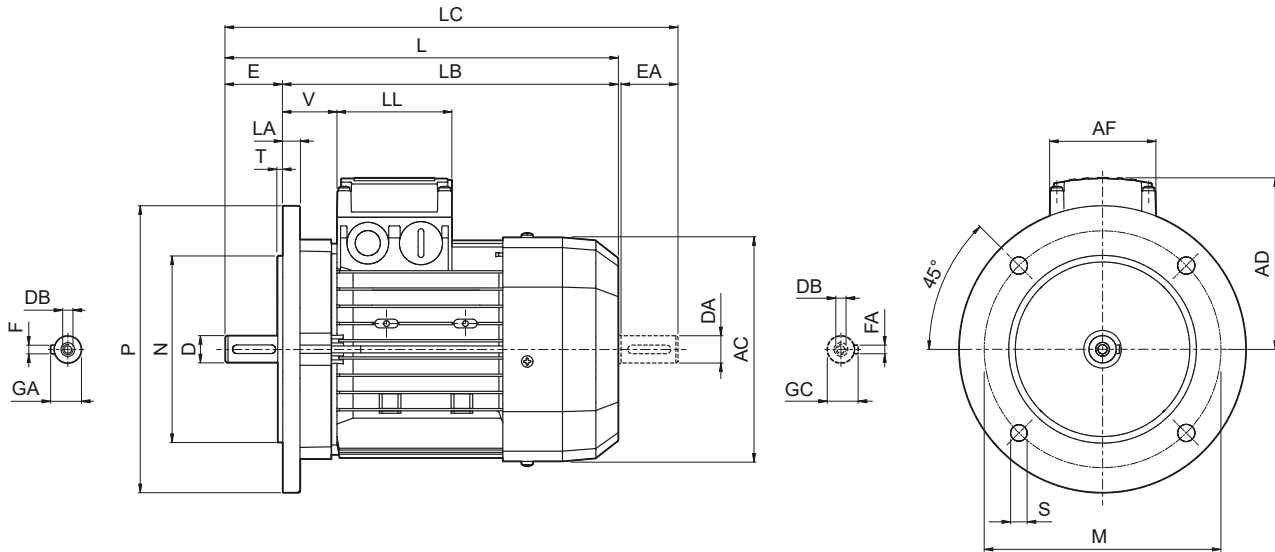
	Shaft					Flange						Motor											
	D	E	DB	GA	F	M	N	P	S	T	LA	AC	L	LB	LC	AD	AF	LL	V	R		ES	
	DA	EA		GC	FA															FD	FA	(2)	
BX 80 B	19 14 ⁽¹⁾	40 30 ⁽¹⁾	M6 M5 ⁽¹⁾	21.5 16 ⁽¹⁾	6 5 ⁽¹⁾							156	392	352	423	143	98	133	25		129	134	5
BX 90 S	24 19 ⁽¹⁾	50 40 ⁽¹⁾	M8 M6 ⁽¹⁾	27 21.5 ⁽¹⁾	8 6 ⁽¹⁾	165	130	200	11.5	3.5	11.5	176	410	360	452	146			32				
BX 90 LA																		110	165		160	160	6
BX 100 LA											14	195	502	442	554	155			37				
BX 100 LB	28 24 ⁽¹⁾	60 50 ⁽¹⁾	M10 M8 ⁽¹⁾	31 27 ⁽¹⁾	8 8 ⁽¹⁾	215	180	250															
BX 112 M									14	4	15	219	527	467	579	170			39	199	198		
BX 132 SB	38 28 ⁽¹⁾	80 60 ⁽¹⁾	M12 M10 ⁽¹⁾	41 31 ⁽¹⁾	10 8 ⁽¹⁾	265	230	300			16	258	603	523	667	210	140	188	46	204	200		
BX 132 MA													627	547	690						226		
BX 160 MA													736	626	820								
BX 160 MB	42 38 ⁽¹⁾	110 80 ⁽¹⁾	M16 M12 ⁽¹⁾	45 41 ⁽¹⁾	12 10 ⁽¹⁾						15	310				245			51	266	247		
BX 160 L						300	250	350	18.5	5			780	670	864			187	187				
BX 180 M	48 42 ⁽¹⁾		M16 M16 ⁽¹⁾	51.5 45 ⁽¹⁾	14 12 ⁽¹⁾						18	348	866	756	981	261			52	305			
BX 180 L		110 110 ⁽¹⁾																					
BX 200LA	55 45 ⁽¹⁾			59 48.5 ⁽¹⁾	16 14 ⁽¹⁾	350	300	400					423	982	872	1095	328			55	275		
BX 225SA	60 55 ⁽¹⁾			64 59 ⁽¹⁾	18 16 ⁽¹⁾	400	350	450	19		20		465	1058	918	1180	348	300	311	48	308		
BX 225SB		140 110 ⁽¹⁾																					
BX 250MA	65 55 ⁽¹⁾			69 59 ⁽¹⁾						5	24	514	1099	959	1225	376					313		
BX 280SA	75 65 ⁽¹⁾	140 140 ⁽¹⁾	M20 M20 ⁽¹⁾	79.5 69 ⁽¹⁾	20 18 ⁽¹⁾	500	450	550	18		23	567	1340	1200	1490	482	434	306	43				
BX 280SB																							
BX 315SA													1452	1282	1600								
BX 315SB	80 75 ⁽¹⁾			85 79.5 ⁽¹⁾	22 20 ⁽¹⁾	600	550	660				645	1497	1327	1645	537	473	347	42			500	
BX 315SC		170 140 ⁽¹⁾																					
BX 315MA	90 75 ⁽¹⁾			95 79.5 ⁽¹⁾	25 20 ⁽¹⁾				23	6	25		1607	1437	1755								
BX 355MA													1790	1580	1970								
BX 355MB	100 75 ⁽¹⁾	210 170 ⁽¹⁾	M24 M20 ⁽¹⁾	106 79.5 ⁽¹⁾	28 20 ⁽¹⁾	740	680	800				740	1825	1615	2005	603	694	413	50				
BX 355MC																							

N.B.: 1) These values refer to the rear shaft end (PS). 2) "ES" hexagon is not present with PS option



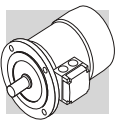
BX-MX

BX - IM B5 - CUS/NBR/EECA



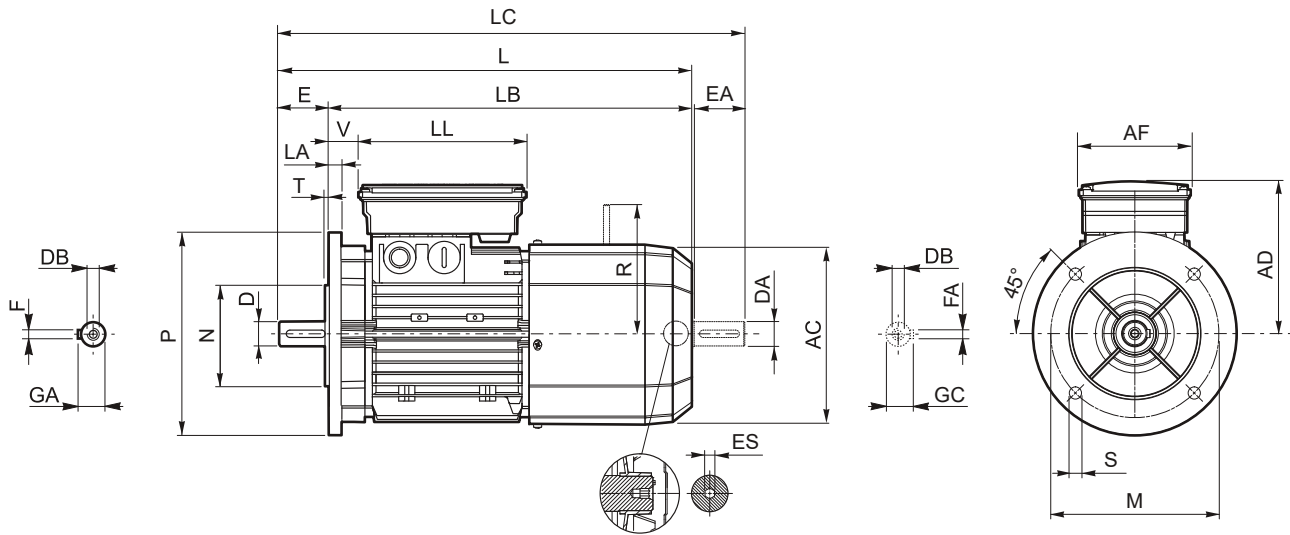
	Shaft					Flange					Motor								
	D DA	E EA	DB	GA GC	F FA	M	N	P	S	T	LA	AC	L	LB	LC	AD	AF	LL	V
BX 90 SR	19 19 ⁽¹⁾	40 40 ⁽¹⁾	M6 M6 ⁽¹⁾	21.5 21.5 ⁽¹⁾	6 6 ⁽¹⁾								316		358				
BX 90 S	24 19 ⁽¹⁾	50 40 ⁽¹⁾	M8 M6 ⁽¹⁾	27 21.5 ⁽¹⁾	8 6 ⁽¹⁾	165	130	200	11.5	3.5	11.5	176	276	276	368	133			44
BX 90 LA													326				98	98	
BX 100 LA	28 24 ⁽¹⁾	60 50 ⁽¹⁾	M10 M8 ⁽¹⁾	31 27 ⁽¹⁾	8 8 ⁽¹⁾	215	180	250			14	195	410	350	462	142			50
BX 100 LB																			
BX 112 M									14	4	15	219	430	370	482	157			52
BX 132 SB	38 28 ⁽¹⁾	80 60 ⁽¹⁾	M12 M10 ⁽¹⁾	41 31 ⁽¹⁾	10 8 ⁽¹⁾	265	230	300			20	258	552	472	615	193	118	118	58
BX 132 MA																			
BX 160 MA	42 38 ⁽¹⁾	110 80 ⁽¹⁾	M16 M12 ⁽¹⁾	45 41 ⁽¹⁾	12 10 ⁽¹⁾						15	310	596	486	680	245			51
BX 160 MB													640	530	724				
BX 160 L						300	250	350	18.5	5							187	187	
BX 180 M	48 42 ⁽¹⁾	110 110 ⁽¹⁾	M16 M16 ⁽¹⁾	51.5 45 ⁽¹⁾	14 12 ⁽¹⁾						18	348	708	598	823	261			52
BX 180 L																			
BX 200LAK	55 45 ⁽¹⁾	110 110 ⁽¹⁾	M20 M20 ⁽¹⁾	59 48.5 ⁽¹⁾	16 14 ⁽¹⁾	350	300	400	19	5	20	423	821	711	934	328	300	311	55
BX 225SAK	60 55 ⁽¹⁾	140 110 ⁽¹⁾	M20 M20 ⁽¹⁾	64 59 ⁽¹⁾	18 16 ⁽¹⁾	400	350	450	19	5	20	465	879	739	1001	348	300	311	48
BX 225SBK																			
BX 250MAK	65 55 ⁽¹⁾	140 110 ⁽¹⁾	M20 M20 ⁽¹⁾	69 59 ⁽¹⁾	18 16 ⁽¹⁾	500	450	550	19	5	24	514	884	744	1010	376	300	311	
BX 280SAK	75 65 ⁽¹⁾	140 140 ⁽¹⁾	M20 M20 ⁽¹⁾	79.5 69 ⁽¹⁾	20 18 ⁽¹⁾	500	450	550	18	5	23	567	1088	948	1238	482	434	306	43
BX 280SBK																			
BX 315SAK	80 75 ⁽¹⁾	170 140 ⁽¹⁾	M20 M20 ⁽¹⁾	85 79.5 ⁽¹⁾	22 20 ⁽¹⁾	600	550	660	23	6	25	645	1204	1034	1352	537	473	347	42
BX 315SBK																			
BX 315SCK													1315	1145	1453				
BX 355SAK	100 75 ⁽¹⁾	210 170 ⁽¹⁾	M24 M20 ⁽¹⁾	106 79.5 ⁽¹⁾	28 20 ⁽¹⁾	740	680	800	23	6	25	740	1479	1269	1659	603	694	413	50
BX 355MAK																			
BX 355MBK																			
BX 355MCK													1584	1374	1764				

N.B.: 1) These values refer to the rear shaft end (PS).



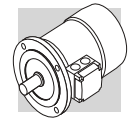
BX - IM B5 - FD/FA - CUS/NBR/EECA

BX-MX

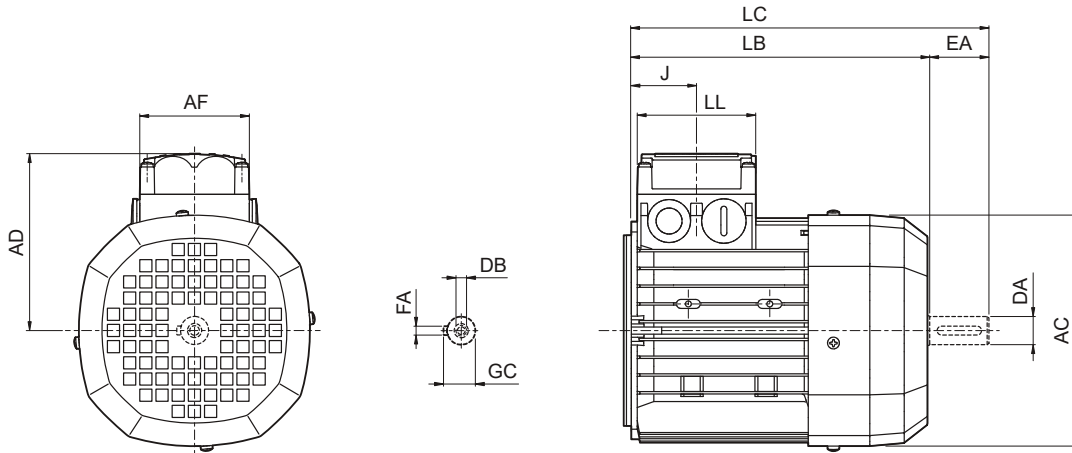


	Shaft					Flange						Motor											
	D DA	E EA	DB	GA GC	F FA	M	N	P	S	T	LA	AC	L	LB	LC	AD	AF	LL	V	R		ES (2)	
																				FD	FA		
BX 90 SR	19 19 ⁽¹⁾	40 40 ⁽¹⁾	M6 M6 ⁽¹⁾	21.5 21.5 ⁽¹⁾	6 6 ⁽¹⁾								400		442								
BX 90 S	24 19 ⁽¹⁾	50 40 ⁽¹⁾	M8 M6 ⁽¹⁾	27 21.5 ⁽¹⁾	8 6 ⁽¹⁾	165	130	200	11.5	3.5	11.5	176	360	452	146				32	129	134		
BX 90 LA																110		165		160	160	6	
BX 100 LA											14	195	502	442	554	155			37				
BX 100 LB	28 24 ⁽¹⁾	60 50 ⁽¹⁾	M10 M8 ⁽¹⁾	31 27 ⁽¹⁾	8 8 ⁽¹⁾	215	180	250											39	199	198		
BX 112 M									14	4	15	219	527	467	579	170				200			
BX 132 SB	38 28 ⁽¹⁾	80 60 ⁽¹⁾	M12 M10 ⁽¹⁾	41 31 ⁽¹⁾	10 8 ⁽¹⁾	265	230	300			16	258	661	581	724	210	140	188	46	204	226		
BX 132 MA																							
BX 160 MA													736	626	820								
BX 160 MB	42 38 ⁽¹⁾	110 80 ⁽¹⁾	M16 M12 ⁽¹⁾	45 41 ⁽¹⁾	12 10 ⁽¹⁾						15	310	780	670	864	245			51	266	247		
BX 160 L						300	250	350	18.5	5							187	187					
BX 180 M	48 42 ⁽¹⁾		M16 M16 ⁽¹⁾	51.5 45 ⁽¹⁾	14 12 ⁽¹⁾						18	348	866	756	981	261			52	305			
BX 180 L		110 110 ⁽¹⁾																					
BX 200LAK	55 45 ⁽¹⁾		M20 M16 ⁽¹⁾	59 48.5 ⁽¹⁾	16 14 ⁽¹⁾	350	300	400				417	967	857	1082	328			55	275			
BX 225SAK	60 55 ⁽¹⁾			64 59 ⁽¹⁾	18 16 ⁽¹⁾	400	350	450	19		20	460	1065	925	1180	348	300	311	48	308			
BX 225SBK		140 110 ⁽¹⁾																					
BX 250MAK	65 55 ⁽¹⁾			69 59 ⁽¹⁾							24	510	1070	930	1240	376				313			
BX 280SAK	75 65 ⁽¹⁾	140 140 ⁽¹⁾	M20 M20 ⁽¹⁾	79.5 69 ⁽¹⁾	20 18 ⁽¹⁾	500	450	550	18		23	564	1284	1144	1379	482	434	306	43				
BX 280SBK																							
BX 315SAK													1493	1323	1643					500			
BX 315SBK	80 75 ⁽¹⁾	170 140 ⁽¹⁾		85 79.5 ⁽¹⁾	22 20 ⁽¹⁾	600	550	660				639	1530	1360	1680	537	473	347	42				
BX 315SCK													1604	1434	1791								
BX 355SAK									23	6	25												
BX 355MAK													1722	1512	1902								
BX 355MBK	100 90 ⁽¹⁾	210 170 ⁽¹⁾	M24 M24 ⁽¹⁾	106 95 ⁽¹⁾	28 25 ⁽¹⁾	740	680	800				725				603	694	413	50				
BX 355MCK													1827	1617	2082								

N.B.: 1) These values refer to the rear shaft end (PS). 2) "ES" hexagon is not present with PS option

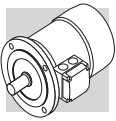


MX



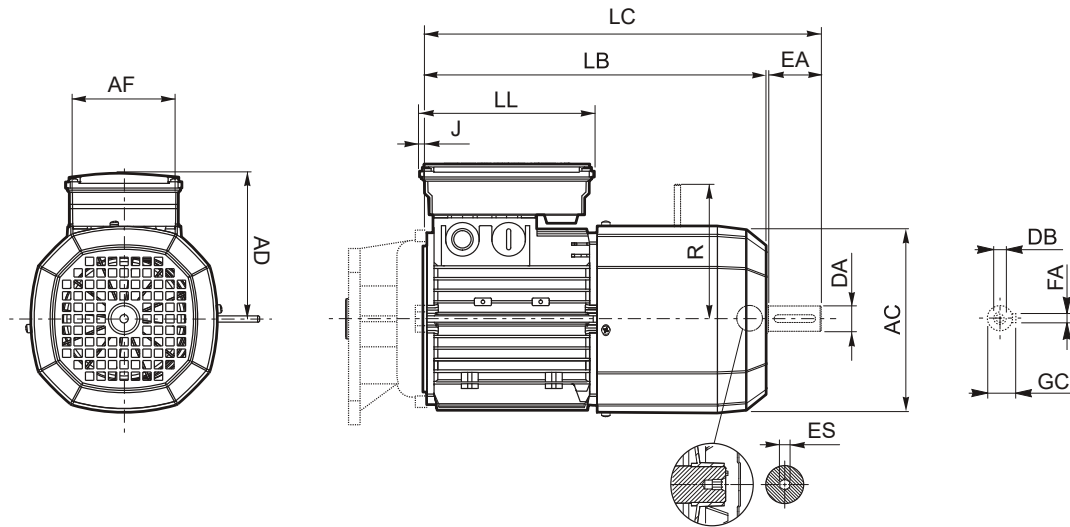
BX-MX

	Rear shaft end					Motor						
	DA	EA	DB	GC	FA	AC	LB	LC	AF	LL	J	AD
MX 2SB	14	30	M5	16	5	156	246	278	74	80	44	119
MX 3SA	24	50	M8	27	8	195	265	317	98	98	53.5	142
MX 3SB							305	357				
MX 3LA												
MX 3LB												
MX 4SA	28	60	M10	31		258	361	424	118	118	64.5	193
MX 4SB							396	459				
MX 4LA												
MX 5SA	38	80	M12	41			310	418	502	187	187	77
MX 5SB					462			546				
MX 5LA												



MX_FD/FA

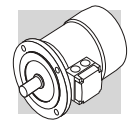
BX-MX



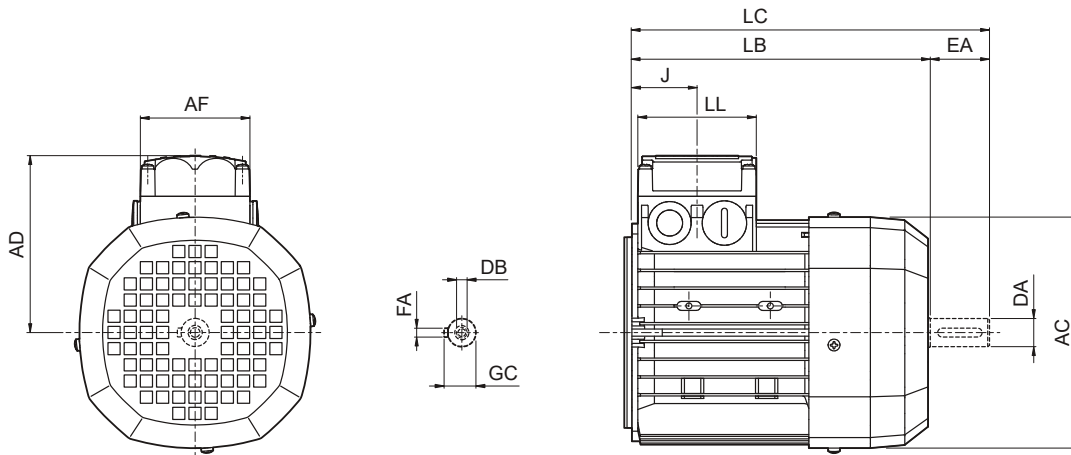
	Rear shaft end					Motor									
	DA	EA	DB	GC	FA	AC	LB	LC	AF	LL	J	AD	R FD FA		ES ⁽¹⁾
MX 2SB	14	30	M5	16	5	156	318	349	98	133	9	143	129	134	5
MX 3SA	24	50	M8	27	8	195	355	407	110	165	7	155	160	160	6
MX 3SB															
MX 3LA															
MX 3LB															
MX 4SA	28	60	M10	31		258	470	534	140	188		210	204	200	
MX 4SB															
MX 4LA							226								
MX 5SA	38	80	M12	41		10	310	558	644	187		187	17	245	
MX 5SB															
MX 5LA															

N.B.:

1) "ES" hexagon is not present with PS option

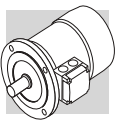


MX CUS



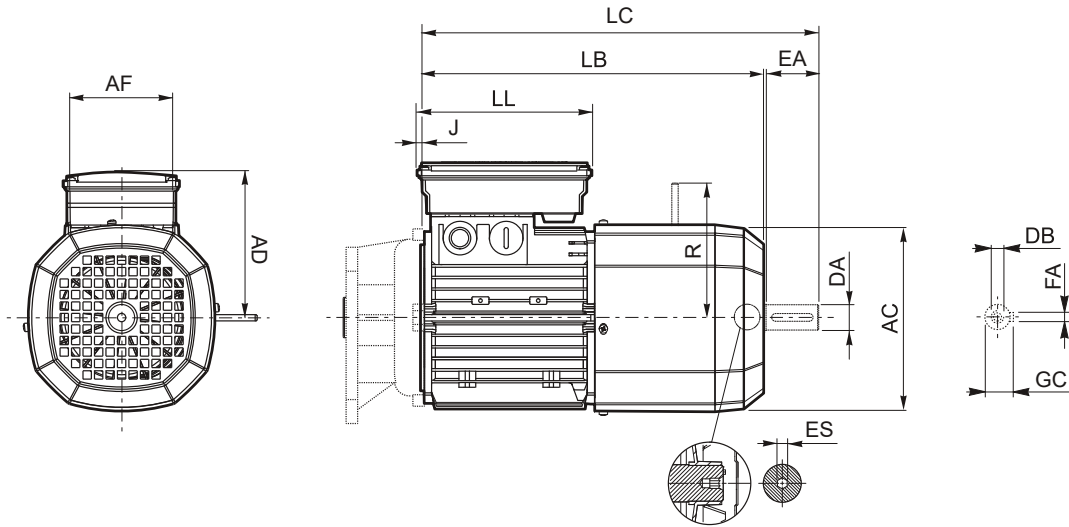
BX-MX

	Rear shaft end					Motor						
	DA	EA	DB	GC	FA	AC	LB	LC	AF	LL	J	AD
MX 2SB	14	30	M5	16	5	176	262	293	98	98	79	133
MX 3SA	24	50	M8	27	8	195	265	317			53.5	142
MX 3SB							305	357				
MX 3LA												
MX 3LB							361	424	118	118	64.5	193
MX 4SA	28	60	M10	31	258	420	483					
MX 4SB												
MX 4LA												
MX 5SA	38	80	M12	41	10	310	418	502	187	187	77	245
MX 5SB							462	546				
MX 5LA												



MX_FD/FA CUS

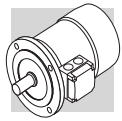
BX-MX



	Rear shaft end					Motor											
	DA	EA	DB	GC	FA	AC	LB	LC	AF	LL	J	AD	R FD FA	ES ⁽¹⁾			
MX 2SB	14	30	M5	16	5	176	347	379			-17	146	129	134	6		
MX 3SA	24	50	M8	27	8	195	355	407	110	165	7	155	160	160			
MX 3SB																	
MX 3LA																	
MX 3LB							397	450									
MX 4SA	28	60	M10	31	8	258	470	534	140	188	7	210	204	200			
MX 4SB																	
MX 4LA																	226
MX 5SA	38	80	M12	41	10	310	558	644	187	187	17	245	266	247	—		
MX 5SB																	
MX 5LA																	

N.B.:

1) "ES" hexagon is not present with PS option

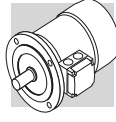


M18 MOTOR RATING CHARTS BE-ME

2 P		3000 min ⁻¹ - S1													50 Hz - IE2											
P _n kW	n min ⁻¹	M _n Nm	I _n 400V A	η%			cos φ	I _s I _n	M _s M _n	M _a M _n	J _m x 10 ⁻⁴ kgm ²	IM B5 	d.c. brake FD				a.c. brake FA									
				100%	75%	50%							M _b Nm	Z ₀ 1/h	NB	SB	J _m x 10 ⁻⁴ kgm ²	IM B5 	Mod	M _b Nm	Z ₀ 1/h	J _m x 10 ⁻⁴ kgm ²	IM B5 			
				In	75%	50%							FD 04	FD 04	FD 14	FD 05	FD 15	FD 06S	FA 04	FA 04	FA 14	FA 05	FA 15	FA 06S	FA 06	FA 06
0.75	2860	2.5	1.65	80	79.6	76.4	0.83	6.8	3.8	3.5	9	9.5	1700	3200	—	—	—	—	5	3200	9.4	13.4	5	3200	9.4	13.3
1.1	2845	3.7	2.35	81.5	82.2	79.9	0.83	6.9	3.8	3.1	11.4	11.3	1500	3000	—	—	—	—	10	3000	10.6	15.2	10	3000	10.6	15.1
1.5	2865	5	3.2	81.3	80.7	78.1	0.82	6.8	3.6	2.8	12.5	12.3	900	2200	—	—	—	—	15	2200	14.1	16.5	15	2200	14.1	16.4
2.2	2870	7.3	4.7	83.2	83.1	80.8	0.82	6.9	3.1	2.9	16.7	14	900	2200	—	—	—	—	26	2200	21	20	26	2200	21	20.7
3	2880	9.9	6.2	84.6	84.6	83.7	0.83	7.3	3.5	3.1	39	23	700	1600	—	—	—	—	26	1600	35	29	26	1600	35	30
4	2920	13.1	8.2	85.8	85.5	84.3	0.82	7.9	3.5	3.1	57	28	—	950	—	—	—	—	40	950	66	39	40	950	66	40
5.5	2925	18	10.6	87	85	81.7	0.86	8.5	3.6	3.3	145	42	—	600	—	—	—	—	50	600	112	55	50	600	112	56
7.5	2935	24	14.3	88.1	87.4	84.7	0.86	8.8	3.9	3.6	178	53	—	550	—	—	—	—	50	550	154	66	50	550	154	67
9.2	2920	30	16.4	88.8	86.5	84.2	0.91	8.4	3.7	3.3	210	65	—	430	—	—	—	—	75	430	189	78	75	430	189	79
11	2940	36	20	89.4	89.5	88	0.89	8.1	3	2.9	340	84	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15	2950	49	27.2	90.5	90.5	89.5	0.88	8.5	3	2.8	420	97	—	—	—	—	—	—	—	—	—	—	—	—	—	—
18.5	2945	60	32	90.9	90.5	89.8	0.91	7.7	2.9	2.7	490	109	—	—	—	—	—	—	—	—	—	—	—	—	—	—

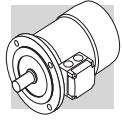


BE-ME



4 P		1500 min ⁻¹ - S1											50 Hz - IE2												
P _n kW	n min ⁻¹	M _n Nm	I _n 400V A	η%	cos φ	I _s I _n	M _s M _n	M _a M _n	J _m x 10 ⁻⁴ kgm ²	d.c. brake					a.c. brake										
										FD					FA										
									IM B5	Mod	M _b Nm	Z ₀ 1/h	NB	SB	J _m x 10 ⁻⁴ kgm ²	IM B5	Mod	M _b Nm	Z ₀ 1/h	J _m x 10 ⁻⁴ kgm ²	IM B5				
0.12	BE 63A	4	1360	0.84	0.45	59.1	59.6	53.5	0.65	3	2	2.2	2.3	3.5	FD 02	1.75	10000	13000	2.6	5.2	FA 02	1.75	13000	2.6	5.2
0.18	BE 63B	4	1370	1.25	0.64	64.7	65.1	59.8	0.62	3.5	2.3	2.5	3.3	5.1	FD 02	3.5	10000	13000	3	5.6	FA 02	3.5	13000	3	5.4
0.25	BE 71A	4	1380	1.73	0.68	68.5	68	62	0.78	4	2.3	2.5	5.8	5.1	FD 03	3.5	7700	11000	6.9	7.8	FA 03	3.5	11000	6.9	7.5
0.37	BE 71B	4	1385	2.55	1.05	72.7	69.3	64.2	0.75	4.0	2.3	2.2	6.9	5.9											
0.55	BE 80A	4	1430	3.7	1.38	77.1	73.4	68	0.77	6	2.2	1.9	15	8.2	FD 04	10	4100	8000	16.6	13.8	FA 04	10	8000	16.6	13.7
0.75	BE 80B	4	1430	5	1.76	79.6	78.5	75.1	0.78	6.1	3.2	3	28	12.2	FD 04	15	4100	7800	22	16.1	FA 04	15	7800	22	16
1.1	BE 90S	4	1430	7.4	2.53	81.4	82	79.5	0.76	6.3	2.9	2.8	28	13.6	FD 14	15	4800	8000	32	17.8	FA 14	15	8000	32	17.7
1.5	BE 90LA	4	1430	10	3.5	82.8	83	80	0.74	5.9	3.1	3	34	15.1	FD 05	26	3400	6000	34	21.1	FA 05	26	6000	34	21.8
2.2	BE 100LA	4	1430	14.7	4.9	84.3	85	84	0.76	5.8	3	2.8	54	22	FD 15	40	2600	4700	44	29	FA 15	40	4700	44	29
3	BE 100LB	4	1420	20	6.6	85.5	86	85.5	0.77	5.9	2.8	2.6	61	24	FD 15	40	2400	4400	58	31	FA 15	40	4400	58	31
4	BE 112M	4	1440	27	8.3	86.6	87	86	0.8	6.5	2.8	2.8	105	32	FD 06S	60	—	1400	107	42	FA 06S	60	2100	107	44
5.5	BE 132S	4	1460	36	11.1	88.5	88.5	87.5	0.81	7.3	2.9	2.9	270	53	FD 56	75	—	1050	223	66	FA 06	75	1200	223	67
7.5	BE 132MA	4	1460	49	14.8	89	89	88.5	0.82	6.9	2.9	2.8	319	59	FD 06	100	—	950	280	72	FA 06	100	1000	280	77
9.2	BE 132MB	4	1460	60	18.1	89.5	89.5	88.5	0.82	6.9	2.9	3	360	70	FD 07	150	—	900	342	86	FA 07	150	900	342	87
11	BE 160M	4	1465	72	21.5	91	91.3	90.5	0.81	6.5	2.8	2.6	650	99	FD 08	170	—	800	655	129	FA 08	170	800	655	128
15	BE 160L	4	1465	98	28.7	90.8	91	90.5	0.83	6.5	2.6	2.3	790	115	FD 08	200	—	750	725	129	FA 08	200	750	725	128
18.5	BE 180M	4	1465	121	35	91.6	92	91.3	0.83	6.5	2.6	2.5	1250	135	FD 09	300	—	400	1450	175	—	—	—	—	—
22	BE 180L	4	1465	143	41	91.6	91.8	91.4	0.84	6.8	2.7	2.6	1650	157	FD 09	300	—	300	1850	197	—	—	—	—	—

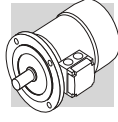




6 P		1000 min ⁻¹ - S1											50 Hz - IE2										
P _n kW	CE A16B744	n min ⁻¹	M _n Nm	I _n 400V A	η%		cos φ	I _s I _n	M _s M _n	M _a M _n	J _m x 10 ⁻⁴ kgm ²	IM B5 	d.c. brake FD				a.c. brake FA						
					100%	75%							50%	M _b Nm	NB	Z ₀ 1/h	J _m x 10 ⁻⁴ kgm ²	IM B5 	Mod	M _b Nm	Z ₀ 1/h	J _m x 10 ⁻⁴ kgm ²	IM B5
0.75		935	7.7	2.06	75.9	75.9	0.69	5.1	3.1	2.9	33	15	FD 14	15	3400	6500	28	19.2	FA 14	15	6500	28	19.1
1.1		945	11.1	2.75	78.1	76.2	0.74	4.9	2.2	1.9	82	22	FD 15	26	2500	4800	58	30	FA 15	26	4800	58	31
1.5		945	15.2	3.9	79.8	77.5	0.72	5.6	2.5	2.3	95	24	FD 15	40	1900	4100	86	30	FA 15	40	4100	86	31
2.2		950	22	5.2	81.8	81.8	0.74	5.2	2.6	2.3	168	32	FD 06S	60	—	2100	177	42	FA 06S	60	2100	177	44
3		955	30	6.6	83.3	83.3	0.79	6.1	2.1	1.9	295	44	FD 56	75	—	1400	226	57	FA 06	75	1400	226	58
4		965	40	8.7	84.6	85	0.79	6.9	2.2	2	383	56	FD 06	100	—	1200	305	69	FA 07	100	1200	318	74
5.5		965	54	11.6	87	87	0.79	6.6	2.5	2.3	740	83	FD 08	170	—	1000	700	112	FA 08	170	1000	700	113
7.5		965	74	15	88	88	0.82	6.6	2.3	2.1	970	103	FD 08	170	—	900	815	132	FA 08	170	900	815	133

(*) Power /size relation not standardized

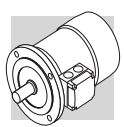
BE-ME



2 P	3000 min⁻¹ - S1	50 Hz - IE2
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P _n kW	n min ⁻¹	M _n Nm	I _n 400V A	η%		cos φ	$\frac{I_s}{I_n}$	$\frac{M_s}{M_n}$	$\frac{M_a}{M_n}$	J _m x 10 ⁻⁴ kgm ²	IM B5 	d.c. brake						a.c. brake									
				100%	75%							FD			FA			FD			FA						
				100%	75%							M _b Nm	Z ₀ 1/h	NB	SB	J _m x 10 ⁻⁴ kgm ²	IM B5 	Mod	M _b Nm	Z ₀ 1/h	J _m x 10 ⁻⁴ kgm ²	IM B5 	Mod	M _b Nm	Z ₀ 1/h	J _m x 10 ⁻⁴ kgm ²	IM B5
0.75	BE 80A 2	2.5	1.65	80	79.6	0.83	6.8	3.8	3.5	9	9.5	FD 04	5	1700	3200	9.4	12.5	FA 04	5	3200	9.4	12.4	FA 04	5	3200	9.4	12.4
1.1	BE 80B 2	3.7	2.35	81.5	82.2	0.83	6.9	3.8	3.1	11.4	11.3	FD 04	10	1500	3000	10.6	13.4	FA 04	10	3000	10.6	13.3	FA 04	10	3000	10.6	13.3
1.5	BE 90SA 2	5	3.2	81.3	80.7	0.82	6.8	3.6	2.8	12.5	12.3	FD 14	15	900	2200	14.1	16.5	FA 14	15	2200	14.1	16.4	FA 14	15	2200	14.1	16.4
2.2	BE 90L 2	7.3	4.7	83.2	83.1	0.82	6.9	3.1	2.9	16.7	14	FD 05	26	900	2200	21	20	FA 05	26	2200	21	20.7	FA 05	26	2200	21	20.7
3.7	BE 112M 2	12.1	7.8	85.5	83	0.79	7.9	3.5	3.1	57	28	FD 06S	40	—	950	66	39	FA 06S	40	950	66	40	FA 06S	40	950	66	40

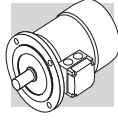


4 P	1500 min⁻¹ - S1	50 Hz - IE2
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P _n kW	n min ⁻¹	M _n Nm	I _n 400V A	η%		cos φ	$\frac{I_s}{I_n}$	$\frac{M_s}{M_n}$	$\frac{M_a}{M_n}$	J _m x 10 ⁻⁴ kgm ²	IM B5 	d.c. brake						a.c. brake									
				100%	75%							50%	M _b Nm	NB	Z ₀ 1/h	J _m x 10 ⁻⁴ kgm ²	IM B5 	Mod	M _b Nm	Z ₀ 1/h	J _m x 10 ⁻⁴ kgm ²	IM B5 	Mod	M _b Nm	Z ₀ 1/h	J _m x 10 ⁻⁴ kgm ²	IM B5
0.37	BE 71B 4	2.55	1.05	72.7	69.3	64.2	4.0	2.3	2.2	6.9	5.9	5	6000	9400	8	8.6	5	9400	8	8.3							
0.55	BE 80A 4	3.7	1.38	77.1	73.4	68	6	2.2	1.9	15	9.9	10	4100	8000	16.6	13.8	10	8000	16.6	13.7							
0.75	BE 80B 4	5	1.76	79.6	78.5	75.1	6.1	3.2	3	28	12.2	15	4100	7800	22	16.1	15	7800	22	16							
1.1	BE 90S 4	7.4	2.53	81.4	82	79.5	6.3	2.9	2.8	28	13.6	15	4800	8000	32	17.8	15	8000	32	17.7							
1.5	BE 90LA 4	10	3.5	82.8	83	80	5.9	3.1	3	34	15.1	26	3400	6000	34	21.1	26	6000	34	21.8							
2.2	BE 100LA 4	14.7	4.9	84.3	85	84	5.8	3	2.8	54	22	40	2600	4700	44	29	40	4700	44	29							
3.7	BE 112M 4	27	8.2	86.3	87	84.3	6.5	2.8	2.8	105	32	60	—	1400	107	42	60	2100	107	44							

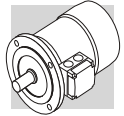
BE-ME



6 P		1000 min ⁻¹ - S1													50 Hz - IE2							
P _n kW	n min ⁻¹	M _n Nm	I _n 400V A	η%		cos φ	I _s I _n	M _s M _n	M _a M _n	J _m x 10 ⁻⁴ kgm ²	IM B5	d.c. brake				a.c. brake						
				100%	75%							50%	FD		FA							
											IM B5	Mod	M _b Nm	NB	Z ₀ 1/h	J _m x 10 ⁻⁴ kgm ²	IM B5	Mod	M _b Nm	Z ₀ 1/h	J _m x 10 ⁻⁴ kgm ²	IM B5
0.75	935	7.7	2.06	75.9	75.9	0.69	5.1	3.1	2.9	33	15	FD 14	15	3400	6500	28	16.8	FA 14	15	6500	28	16.7
1.1	945	11.1	2.75	78.1	76.2	0.74	4.9	2.2	1.9	82	22	FD 15	40	1900	4100	86	28	FA 15	40	4100	86	29
1.5	945	15.2	3.9	79.8	77.5	0.72	5.6	2.5	2.3	95	24	FD 15	40	1700	3600	99	30	FA 15	40	3600	99	31
2.2	950	22	5.2	81.8	81.8	0.74	5.2	2.6	2.3	168	32	FD 06S	60	—	2100	177	42	FA 06S	60	2100	177	44
3.7	970	36.1	8.3	84.3	83.6	0.76	6.9	2.2	2	383	56	FD 06	100	—	1200	305	58	FA 07	100	1200	318	63




(*) Power /size relation not standardized

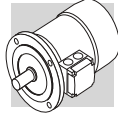


4 P	1800 min⁻¹ - S1	60 Hz - IE2
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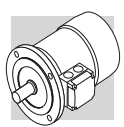
P _n HP	P _n kW	n min ⁻¹	M _n Nm	I _n 400V A	η%		cos φ	I _s I _n	M _s M _n	M _b M _n	KVA Code	J _m x 10 ⁻⁴ kgm ²	IM B5 	d.c. brake						a.c. brake					
					100%	75%								FD			FA								
					100%	75%								M _b	Z ₀	J _m	IM B5	M _b	Z ₀	J _m	IM B5	M _b	Z ₀	J _m	IM B5
0.75	0.55	1740	3	1.23	75.5	73.1	0.74	8.7	3.8	3.0	N	19	9.9	FD 04	10	4100	8000	16.6	13.8	10	8000	16.6	13.7		
1	0.75	1745	4.1	1.46	82.5	81.1	0.78	7.6	3.5	3.2	K	28	12.2	FD 04	15	4100	7800	22	16.1	15	7800	22	16		
1.5	1.1	1740	6	2.25	84	82.7	0.73	7.7	3.5	3.2	L	28	13.6	FD 14	15	4800	8000	32	17.8	15	8000	32	17.7		
2	1.5	1740	8.2	3.1	84.5	83.9	0.73	7.1	3.6	3.4	K	34	15.1	FD 05	26	3400	6000	34	21.1	26	6000	34	21.8		
3	2.2	1745	12	4.2	87.5	85.5	0.76	7	3.3	2.9	J	54	22	FD 15	40	2600	4700	44	29	40	4700	44	29		
4	3	1735	16.5	5.9	87.5	87.7	0.76	7	3.2	2.9	K	61	24	FD 15	40	2400	4400	58	31	40	4400	58	31		
5	3.7	1750	20	6.6	87.5	87.5	0.8	7.8	3.3	3.2	K	105	32	FD 06S	60	—	1400	107	42	60	2100	107	44		
7.5	5.5	1760	30	9.3	89.5	89.5	0.83	8.7	3.5	3.5	K	270	53	FD 56	75	—	1050	223	66	75	1200	223	67		
10	7.5	1760	43	12.7	89.5	89.5	0.83	8	3.4	3.3	K	319	59	FD 06	100	—	950	280	72	100	1000	280	77		
12.5	9.2	1760	50	15.6	90	90	0.82	8.3	3.5	3.6	K	360	70	FD 07	150	—	900	342	86	150	900	342	87		
15	11	1765	60	18.7	91	91	0.81	7.7	2.9	2.8	J	650	99	FD 08	170	—	800	655	129	170	800	655	128		
20	15	1770	81	25.5	91	90.5	0.81	7.1	3.1	2.7	J	790	115	FD 08	200	—	750	725	129	200	750	710	128		
25	18.5	1765	100	30.3	92.4	91.9	0.83	7.3	2.7	2.5	H	1250	135	FD 09	300	—	400	1450	175	—	—	—	—	—	
30	22	1770	119	36	92.4	92.5	0.83	8.1	3.3	3.2	J	1650	157	FD 09	300	—	300	1850	197	—	—	—	—	—	

BE-ME



2 P		3000 min ⁻¹ - S1												50 Hz - IE2									
P _n kW	n min ⁻¹	M _n Nm	I _n 400V A	η%		cos φ	I _s I _n	M _s M _n	M _a M _n	J _m x 10 ⁻⁴ kgm ²	IM B5 	d.c. brake						a.c. brake					
				100%	75%							FD			FA								
				100%	75%							Mod	M _b Nm	NB	Z ₀ 1/h	J _m x 10 ⁻⁴ kgm ²	IM B5 	Mod	M _b Nm	Z ₀ 1/h	J _m x 10 ⁻⁴ kgm ²	IM B5 	
0.75	ME 2SA 2	2.5	1.63	80	79.6	0.83	6.8	3.8	3.5	9	8.8	FD 04	5	1700	3200	9.4	12.7	FA 04	5	3200	9.4	12.6	
1.1	ME 2SB 2	3.7	2.35	81.5	82.2	0.83	6.9	3.8	3.1	11.4	10.6	FD 04	10	1500	3000	13	14.5	FA 04	10	3000	13	14.4	
1.5	ME 3SA 2	5.0	3.2	81.3	79	0.81	6.1	2.9	2.7	24	15.5	FD 15	13	1300	2600	22	22	FA 15	26	2600	22	23	
2.2	ME 3LA 2	7.3	4.7	83.2	83.1	0.82	6.9	2.7	2.5	31	18.7	FD 15	26	1100	2400	28	25.2	FA 15	26	2400	28	26.2	
3	ME 3LB 2	9.9	6.2	84.6	84.6	0.83	7.3	3.5	3.1	39	22	FD 15	26	700	1600	35	28.5	FA 15	26	1600	35	29.5	
4	ME 4SA 2	13.2	7.8	85.8	84.5	0.87	7.0	2.9	2.8	101	33	FD 06	50	—	1400	107	46	FA 06	50	2100	107	47	
5.5	ME 4SB 2	18.0	10.6	87.0	85.0	0.86	8.5	3.6	3.3	145	40	FD 06	50	—	600	112	48	FA 06	50	600	112	49	
7.5	ME 4LA 2	24	14.3	88.1	87.4	0.86	8.8	3.9	3.6	178	51	FD 06	50	—	550	154	55	FA 06	50	550	154	56	
9.2	ME 4LB 2	30	16.4	88.8	86.5	0.91	8.4	3.7	3.3	210	60	FD 56	75	—	430	189	66	FA 06	75	430	189	67	
11	ME 5SA 2	36	20.0	90.5	90.5	0.89	8.1	3.0	2.9	340	70												
15	ME 5SB 2	49	27.2	90.9	90.5	0.88	8.5	3.0	2.8	420	83												
18.5	ME 5LA 2	60	32	90.4	90.1	0.91	7.7	2.9	2.7	490	95												



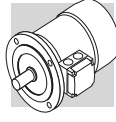


4 P	1500 min⁻¹ - S1	50 Hz - IE2
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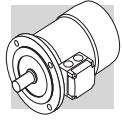


P _n kW	n min ⁻¹	M _n Nm	I _n 400V A	η%		cos φ	I _s I _n	M _s M _n	M _s M _n	J _m x 10 ⁻⁴ kgm ²	IM B5 	d.c. brake				a.c. brake														
				100%	75%							FD		FA																
				100%	75%							M _b Nm	Z ₀ 1/h	NB	SB	Mod	IM B5 	J _m x 10 ⁻⁴ kgm ²	Z ₀ 1/h	M _b Nm	Mod	IM B5 	J _m x 10 ⁻⁴ kgm ²	Z ₀ 1/h	M _b Nm	Mod	IM B5 	J _m x 10 ⁻⁴ kgm ²		
0.12	ME 05A	4	1360	0.84	0.45	59.1	59.6	53.5	0.65	3	2	2.2	2.3	3.5	FD 02	1.75	10000	13000	10000	13000	1.75	FA 02	5.2	2.6	13000	1.75	FA 02	5.2	2.6	13000
0.18	ME 05B	4	1370	1.25	0.64	64.7	65.1	59.8	0.62	3.5	2.3	2.5	3.3	5.1	FD 02	3.5	10000	13000	10000	13000	3.5	FA 02	5.6	3	13000	3.5	FA 02	5.6	3	13000
0.25	ME 1SA	4	1380	1.73	0.68	68.5	68	62	0.78	4	2.3	2.5	5.8	5.1	FD 03	3.5	7700	11000	7700	11000	3.5	FA 03	7.8	6.9	11000	3.5	FA 03	7.8	6.9	11000
0.37	ME 1SB	4	1385	2.55	1.05	72.7	69.3	64.2	0.75	4.0	2.3	2.2	6.9	5.9	FD 03	5	6000	9400	6000	9400	5	FA 03	8.6	8.0	9400	5	FA 03	8.6	8.0	9400
0.55	ME 2SA	4	1430	3.7	1.38	77.1	73.4	68	0.77	6	2.2	1.9	15	9.9	FD 04	10	4100	8000	4100	8000	10	FA 04	13.8	16.6	8000	10	FA 04	13.8	16.6	8000
0.75	ME 2SB	4	1430	5	1.76	79.6	78.5	75.1	0.78	6.1	3.2	3.0	28	12.2	FD 04	15	4100	7800	4100	7800	15	FA 04	16.1	22	7800	15	FA 04	16.1	22	7800
1.1	ME 3SA	4	1430	7.4	2.53	82.5	82.0	79.5	0.76	6.3	2.9	2.8	28	15.5	FD 15	26	4800	8000	4800	8000	26	FA 15	21.5	32	8000	26	FA 15	21.5	32	8000
1.5	ME 3SB	4	1420	10	3.5	83.5	83.0	80.0	0.74	5.9	3.1	3.0	34	17	FD 15	26	3400	6000	3400	6000	26	FA 15	23	34	6000	26	FA 15	23	34	6000
2.2	ME 3LA	4	1430	14.7	4.9	84.3	85	84	0.76	5.8	3	2.8	54	21	FD 15	40	2600	4700	2600	4700	40	FA 15	27	44	4700	40	FA 15	27	44	4700
3	ME 3LB	4	1420	20	6.6	85.5	86.0	85.5	0.77	5.9	2.8	2.6	61	23	FD 15	40	2400	4400	2400	4400	40	FA 15	29	58	4400	40	FA 15	29	58	4400
4	ME 4SA	4	1440	27	8.3	87.0	87.0	86.0	0.80	6.5	2.8	2.8	105	42	FD 56	75	—	1400	—	1400	75	FA 06	55	107	2100	75	FA 06	55	107	2100
5.5	ME 4SB	4	1460	36	11.1	88.5	88.5	87.5	0.81	7.3	2.9	2.9	270	51	FD 56	75	—	1050	—	1050	75	FA 06	64	223	1200	75	FA 06	64	223	1200
7.5	ME 4LA	4	1460	49	14.8	89.0	89.0	88.5	0.82	6.9	2.9	2.8	319	57	FD 06	100	—	950	—	950	100	FA 07	70	280	1000	100	FA 07	70	280	1000
9.2	ME 4LB	4	1460	60	18.1	89.5	89.5	88.5	0.82	6.9	2.9	3.0	360	65	FD 07	150	—	900	—	900	150	FA 07	81	342	900	150	FA 07	81	342	900
11	ME 5SA	4	1465	72	21.5	91.0	91.3	90.5	0.81	6.5	2.8	2.6	650	85	FD 08	170	—	800	—	800	170	FA 08	115	655	800	170	FA 08	115	655	800
15	ME 5LA	4	1465	98	28.7	90.8	91.0	90.5	0.83	6.5	2.6	2.3	790	101	FD 08	200	—	750	—	750	200	FA 08	131	725	750	200	FA 08	131	725	750

BE-ME



6 P		1000 min ⁻¹ - S1												50 Hz - IE2					
P _n kW	 A0168744	d.c. brake												a.c. brake					
		FD						FA						FD		FA			
		Mod	M _b Nm	Z ₀ 1/h	NB	SB	J _m x 10 ⁻⁴ kgm ²	IM B5 	Mod	M _b Nm	Z ₀ 1/h	NB	SB	J _m x 10 ⁻⁴ kgm ²	IM B5 	Mod	M _b Nm	Z ₀ 1/h	J _m x 10 ⁻⁴ kgm ²
0.75	ME 3SA 6	FD 15	26	3400	—	28	17	FD 15	26	6500	—	2100	28	21	FA 15	26	6500	28	22
1.1	ME 3LA 6 (*)	FD 15	26	2700	—	37	21	FD 15	26	5000	—	1400	37	27	FA 15	26	5000	37	28
1.5	ME 3LB 6	FD 15	40	1900	—	86	23	FD 15	40	4100	—	1200	86	29	FA 15	40	4100	86	30
2.2	ME 4SA 6	FD 06	50	—	—	177	34	FD 06	50	2100	—	2100	177	47	FA 06	50	2100	177	48
3	ME 4SB 6	FD 56	75	—	—	226	43	FD 56	75	1400	—	1400	226	56	FA 06	75	1400	226	57
4	ME 4LA 6	FD 06	100	—	—	305	54	FD 06	100	1200	—	1200	305	70	FA 07	100	1200	305	72
5.5	ME 5SA 6 (*)	FD 08	170	—	—	406	69	FD 08	170	1050	—	1050	406	99	FA 08	170	1050	406	98
7.5	ME 5SB 6 (*)	FD 08	170	—	—	815	89	FD 08	170	900	—	900	815	119	FA 08	170	900	815	118

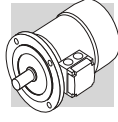


2 P	3000 min⁻¹ - S1	50 Hz - IE2
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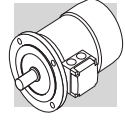
P _n kW	n min ⁻¹	M _n Nm	I _n 400V A	η%		cos φ	$\frac{I_s}{I_n}$	$\frac{M_s}{M_n}$	$\frac{M_b}{M_n}$	J _m x 10 ⁻⁴ kgm ²	IM B5 	d.c. brake				a.c. brake				
				100%	75%							FD		FA						
				M _b Nm	Z ₀ 1/h							NB	SB	M _b Nm	Mod	Z ₀ 1/h	Mod			
0.75	ME 2SA 2 2860	2.5	1.63	80	79.6	0.83	6.8	3.8	3.5	9	8.8	5	1700	3200	5	12.7	5	3200	9.4	12.6
1.1	ME 2SB 2 2845	3.7	2.35	81.5	82.2	0.83	6.9	3.8	3.1	11.4	10.6	10	1500	3000	10	14.5	10	3000	10.6	14.4
1.5	ME 3SA 2 2845	5	3.2	81.3	79	0.81	6.1	2.9	2.7	24	15.5	13	4800	8000	13	22.5	26	8000	32	22.5
2.2	ME 3LA 2 2895	7.3	4.7	83.2	83.1	0.82	6.9	3.1	2.9	16.7	18.7	26	3400	6000	26	25.7	26	6000	34	25.7
3.7	ME 4SA 2 2930	12.1	7.8	84.7	83	0.79	7.9	3.5	3.1	57	33	75	—	1400	75	46	75	2100	107	47

BE-ME



4 P		1500 min ⁻¹ - S1												50 Hz - IE2													
P _n kW	n min ⁻¹	M _n Nm	I _n 400V A	η%		cos φ	$\frac{I_s}{I_n}$	$\frac{M_s}{M_n}$	$\frac{M_a}{M_n}$	J _m x 10 ⁻⁴ kgm ²	IM B5	d.c. brake				a.c. brake											
				100%	75%							FD		FA													
				M _b Nm	NB							Z ₀ 1/h	J _m x 10 ⁻⁴ kgm ²	IM B5	M _b Nm	Z ₀ 1/h	J _m x 10 ⁻⁴ kgm ²	IM B5	Mod	M _b Nm	Z ₀ 1/h	J _m x 10 ⁻⁴ kgm ²	IM B5				
0.37	4	ME 1SB	1385	2.55	1.05	72.7	69.3	64.2	0.75	4.0	2.3	2.2	6.9	5.9	IM B5	FD 03	5	6000	9400	8	8.6	IM B5	FA 03	5	9400	8	8.3
0.55	4	ME 2SA	1430	3.7	1.38	77.1	73.4	68	0.77	6	2.2	1.9	15	9.9	IM B5	FD 04	10	4100	8000	16.6	13.8	IM B5	FA 04	10	8000	16.6	13.7
0.75	4	ME 2SB	1430	5	1.76	79.6	78.5	75.1	0.78	6.1	3.2	3	28	12.2	IM B5	FD 04	15	4100	7800	22	16.1	IM B5	FA 04	15	7800	22	16
1.1	4	ME 3SA	1430	7.4	2.6	82.5	82	79	0.74	5.5	2.5	2.8	34	15.5	IM B5	FD 15	26	4800	8000	32	22.5	IM B5	FA 15	26	8000	32	22.5
1.5	4	ME 3SB	1420	10.1	3.48	84	84	83	0.74	6.2	2.9	2.9	40	17	IM B5	FD 15	26	3400	6000	34	24	IM B5	FA 15	26	6000	34	24
2.2	4	ME 3LA	1430	14.7	4.9	84.3	85	84	0.76	5.8	3	2.8	54	21	IM B5	FD 15	40	2600	4700	44	28	IM B5	FA 15	40	4700	44	28
3.7	4	ME 4SA	1440	27	8.25	87.5	86.8	84	0.80	7.1	3	3.1	213	42	IM B5	FD 56	75	—	1400	107	55	IM B5	FA 06	75	2100	107	56



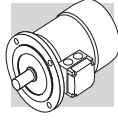


6 P	1000 min⁻¹ - S1	50 Hz - IE2
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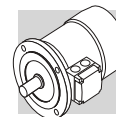


P _n kW	n min ⁻¹	M _n Nm	I _n 400V A	η%		cos φ	$\frac{I_s}{I_n}$	$\frac{M_s}{M_n}$	$\frac{M_a}{M_n}$	J _m x 10 ⁻⁴ kgm ²	IM B5 	d.c. brake						a.c. brake							
				100%	75%							50%	FD			FA			FD			FA			
													M _b Nm	Z ₀ 1/h	NB	SB	Mod	M _b Nm	Z ₀ 1/h	IM B5 	Mod	M _b Nm	Z ₀ 1/h	IM B5 	Mod
0.75	940	7.6	1.98	75.9	75	70.7	4.7	2.2	2	33	17	FD 15	26	3400	3400	6500	6500	28	28	21	26	6500	6500	28	22
1.1	945	11.1	2.75	78.1	76.2	73	4.9	2.2	1.9	82	21	FD 15	26	2700	2700	5000	5000	37	37	27	26	5000	5000	37	28
1.5	945	15.2	3.8	79.8	77.5	74	5.6	2.5	2.3	95	23	FD 15	40	1900	1900	4100	4100	86	86	29	40	4100	4100	86	30
2.2	955	22	4.9	81.8	81.8	80	5.7	1.9	1.7	216	34	FD 56	75	—	—	2100	2100	177	177	47	60	2100	2100	177	48
3.7	970	36.1	8.3	83.5	83.6	81.3	6.9	2.2	2	383	54	FD 06	100	—	—	1200	1200	305	305	70	100	1200	1200	305	72

BE-ME

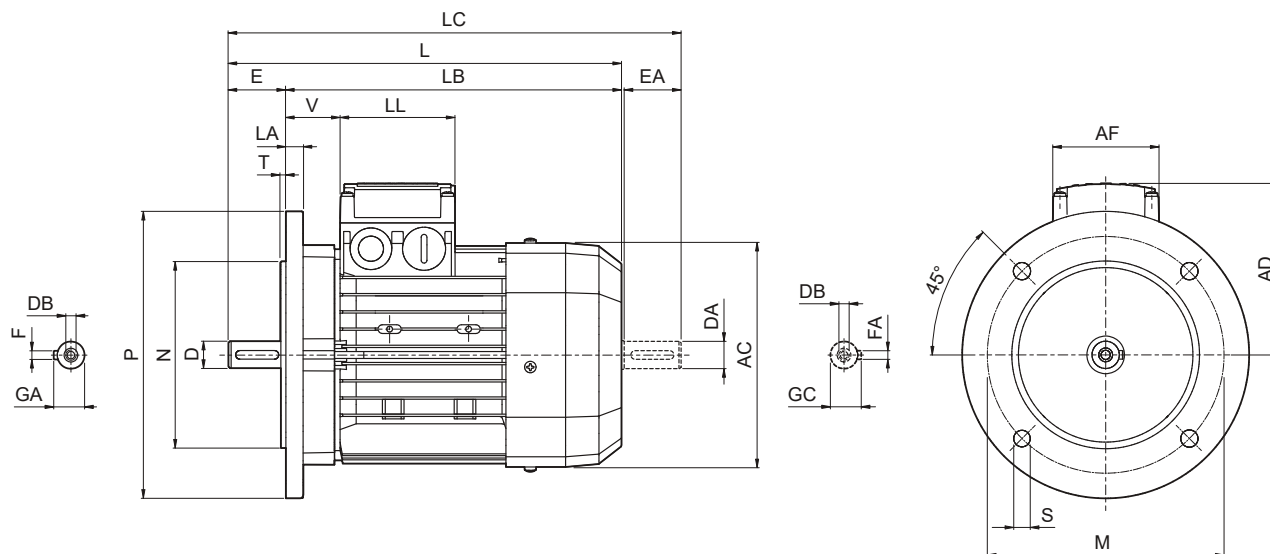


4 P		1800 min ⁻¹ - S1										60 Hz - IE2																
P _n HP kW		d.c. brake															a.c. brake											
		FD															FA											
		Mod	M _b Nm	Z ₀ 1/h	NB	SB	J _m x 10 ⁻⁴ kgm ²	IM B5	IM B5	J _m x 10 ⁻⁴ kgm ²	Z ₀ 1/h	M _b Nm	Mod	M _b Nm	Z ₀ 1/h	J _m x 10 ⁻⁴ kgm ²	IM B5											
0.75	0.55	ME 2SA	4	1740	3	1.23	A	100%	75%	50%	cos φ	I _s I _n	M _s M _n	M _a M _n	KVA Code	J _m x 10 ⁻⁴ kgm ²	IM B5	FD 04	10	4100	8000	16.6	13.8	FA 04	10	8000	16.6	13.7
1	0.75	ME 2SB	4	1745	4.1	1.46	A	82.5	81.1	77.6	0.78	7.6	3.5	3.2	K	28	12.2	FD 04	15	4100	7800	22	16.1	FA 04	15	7800	22	16
1.5	1.1	ME 3SA	4	1740	6	2.25	A	84	82.7	79	0.73	7.7	3.5	3.2	J	28	15.5	FD 15	26	4800	8000	32	21.5	FA 15	26	8000	32	22.5
2	1.5	ME 3SB	4	1740	8.2	3.1	A	84.5	83.9	80.7	0.73	7.1	3.6	3.4	K	34	17	FD 15	26	3400	6000	34	23	FA 15	26	6000	34	24
3	2.2	ME 3LA	4	1745	12	4.2	A	87.5	85.5	83.2	0.76	7	3.3	2.9	J	54	21	FD 15	40	2600	4700	44	27	FA 15	40	4700	44	28
4	3	ME 3LB	4	1735	16.5	5.9	A	87.5	87.7	86.3	0.76	7	3.2	2.9	K	61	23	FD 15	40	2400	4400	58	29	FA 15	40	4400	58	30
5	3.7	ME 4SA	4	1750	20	6.6	A	87.5	87.5	86.1	0.8	7.8	3.3	3.2	J	105	42	FD 56	75	—	1400	107	55	FA 06	75	2100	107	56
7.5	5.5	ME 4SB	4	1760	30	9.3	A	89.5	89.5	87.7	0.83	8.7	3.5	3.5	K	270	51	FD 56	75	—	1050	223	64	FA 06	75	1200	223	65
10	7.5	ME 4LA	4	1760	43	12.7	A	89.5	89.5	87.9	0.83	8	3.4	3.3	K	319	57	FD 06	100	—	950	280	70	FA 07	100	1000	280	75
12.5	9.2	ME 4LB	4	1760	50	15.6	A	90	90	88.6	0.82	8.3	3.5	3.6	K	360	65	FD 07	150	—	900	342	81	FA 07	150	900	342	83
15	11	ME 5SA	4	1765	60	18.7	A	91	91	90	0.81	7.7	2.9	2.8	J	650	85	FD 08	170	—	800	655	115	FA 08	170	800	655	114
20	15	ME 5LA	4	1770	81	25.5	A	91	90.5	89.5	0.81	7.1	3.1	2.7	J	790	101	FD 08	200	—	750	725	131	FA 08	200	750	710	130



M19 MOTORS DIMENSIONS BE-ME

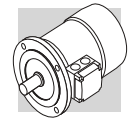
BE - IM B5- CE/CUS/BIS/CCC



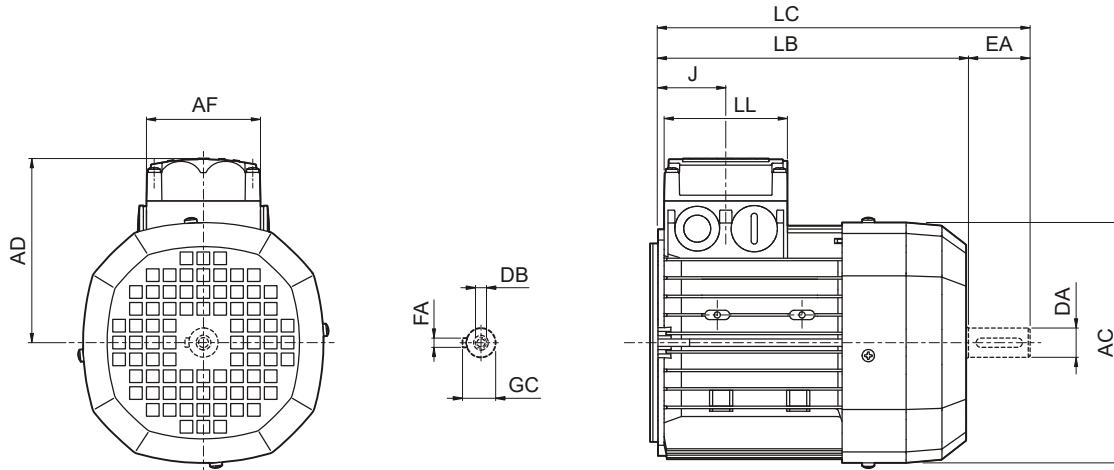
	Shaft					Flange					Motor									
	D DA	E EA	DB	GA GC	F FA	M	N	P	S	T	LA	AC	L	LB	LC	AD	AF	LL	V	
BE 63	11	23	M4	12.5	4	115	95	140	9.5	3	10	121	207	184	232	95	74	80	26	
BE 71	14	30	M5	16	5	130	110	160				138	249	219	281				108	37
BE 80	19	40	M6	21.5	6	165	130	200				11.5	3.5	11.5	156				274	234
BE 90 S	24	50	M8	27	8				215	180	250				14	195	367	307	429	142
BE 90 L						176	326	276				378	133	50						
BE 100	28	60	M10	31	8	215	180	250	14	195	367	307	429	142	98	98	52			
BE 112																	15	219	385	325
BE 132 S	38	80	M12	41	10	265	230	300	14	4	20	258	493	413	576	193	118	118	58	
BE 132 MA													528	448	611				58	
BE 132 MB																				
BE 160 M	42	110	M16	45	12	300	250	350	18.5	5	15	310	596	486	680	245	187	187	51	
BE 160 L													38 ⁽¹⁾	80 ⁽¹⁾	M12 ⁽¹⁾				41 ⁽¹⁾	10 ⁽¹⁾
BE 180 M	48	110	M16	51.5	14	300	250	350	18.5	5	18	348	708	598	823	261	187	187	52	
BE 180 L													42 ⁽¹⁾	110 ⁽¹⁾	M16 ⁽¹⁾				45 ⁽¹⁾	12 ⁽¹⁾

N.B.:

1) These values refer to the rear shaft end.

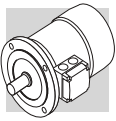


ME - CE/CUS/BIS/CCC



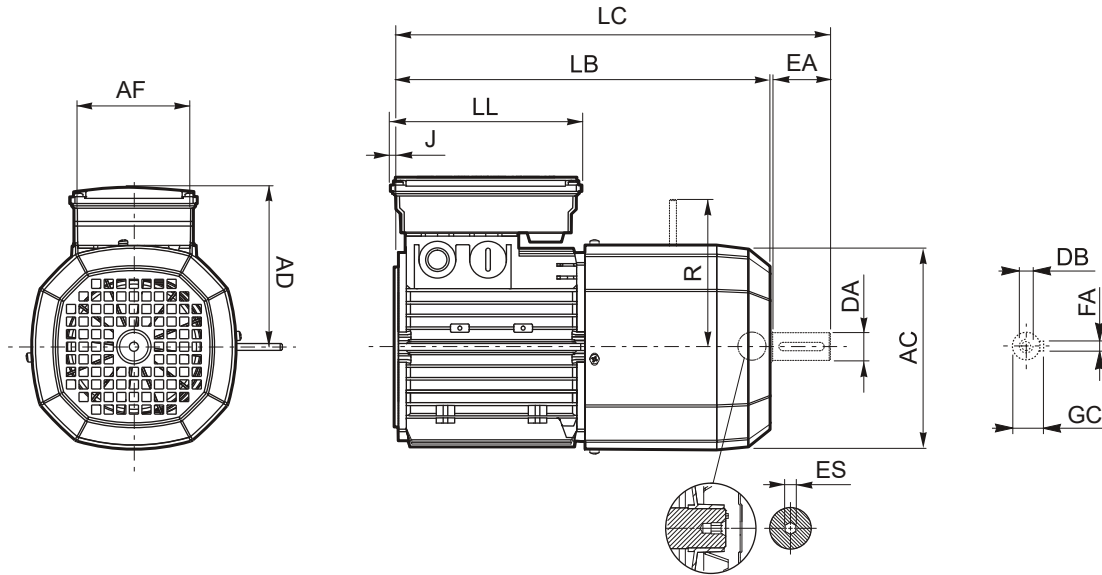
BE-ME

	Rear shaft end					Motor						
	DA	EA	DB	FA	GC	AC	LB	LC	AF	LL	J	AD
ME 05	11	23	M4	12.5	4	121	165	191	74	80	48	95
ME 1S	14	30	M5	16	5	138	187	219			45	108
ME 2S	19	40	M6	21.5	6	156	202	245			44	119
ME 3S	28	60	M10	31	8	195	230	293	98	98	53.5	142
ME 3L							262	325				
ME 4S	38	80	M12	41	10	258	361	444	118	118	64.5	193
ME 4L							396	479				
ME 4LB												
ME 5S	38	80	M12	41	10	310	418	502	187	187	77	245
ME 5L							462	546				



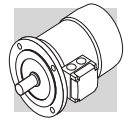
ME_FD/FA - CE/CUS/BIS

BE-ME



	Rear shaft end					Motor										
	DA	EA	DB	GC	FA	AC	LB	LC	AF	LL	J	AD	R FD FA		ES ⁽¹⁾	
ME 05	11	23	M4	12.5	4	121	231	256			-4.5	119	96	116	5	
ME 1S	14	30	M5	16	5	138	248	280	98	133	-8	135	103	124		
ME 2S	19	40	M6	21.5	6	156	272	314			-17	143	129	134		
ME 3S	28	60	M10	31	8	195	326	389	110	165	7	155	160	160	6	
ME 3L							353	416								
ME 4S	38	80	M12	41	10	258	470	553	140	188	7	210	204	200		
ME 4LA							495	578					226	217		
ME 4LB																
ME 5S	38	80	M12	41	10	310	558	642	187	187	17	245	266	247		---
ME 5L							602	686								

N.B.: 1) "ES" hexagon is not present with PS option

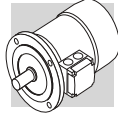


M20 MOTOR RATING CHARTS BN-M

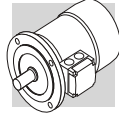
2P		3000 min ⁻¹ - S1																50 Hz																	
		d.c. brake																a.c. brake																	
		FD								IM B5								FA								IM B5									
P _n	kW	P _n	IE1	η (100%)	η (75%)	η (50%)	cosφ	In	Is	Ms	Ma	J _m x 10 ⁻⁴ kgm ²	IM B5	Mod	Mb	Z ₀	1/h	SB	J _m x 10 ⁻⁴ kgm ²	IM B5	Mod	Mb	Z ₀	1/h	J _m x 10 ⁻⁴ kgm ²	IM B5									
n																											M _n	IE1	η (100%)	η (75%)	η (50%)	cosφ	In	Is	Ms
0.18		BN 63A	2	2730	0.63	○	59.9	66.0	69.1	73.8	70.6	0.76	0.95	1.86	5.1	2.8	5.0	2.9	2.8	2.1	2.0	2.0	3.5	FD 02	1.75	3900	4800	2.6	5.2	FA 02	1.75	4800	2.6	5.2	
0.25		BN 63B	2	2740	0.87	○	66.0	64.8	66.8	75.8	74.8	0.76	1.37	1.86	5.1	2.8	5.0	2.9	2.8	2.3	2.3	2.3	3.9	FD 02	1.75	3900	4800	3.0	5.6	FA 02	1.75	4800	3.0	5.4	
0.37		BN 63C	2	2800	1.26	○	69.1	66.8	66.8	76.2	76.2	0.76	1.86	1.86	5.1	2.8	5.0	2.9	2.8	2.6	2.6	2.6	5.1	FD 02	3.5	3600	4500	3.9	6.8	FA 02	3.5	4500	3.9	6.6	
0.37		BN 71A	2	2820	1.25	○	73.8	73.0	73.0	70.6	70.6	0.76	0.95	1.86	5.1	2.8	5.0	2.9	2.8	2.8	2.8	2.6	5.4	FD 03	3.5	3000	4100	4.6	8.1	FA 03	3.5	4200	4.6	7.8	
0.55		BN 71B	2	2820	1.86	○	76.0	75.8	76.2	76.2	76.2	0.76	1.37	1.86	5.1	2.8	5.0	2.9	2.8	2.6	2.6	2.6	6.2	FD 03	5	2900	4200	5.3	8.9	FA 03	5	4200	5.3	8.6	
0.75		BN 71C	2	2810	2.6	○	76.6	76.2	76.2	76.2	76.2	0.76	1.86	1.86	5.1	2.8	5.0	2.9	2.8	2.6	2.6	2.6	7.3	FD 03	5	1900	3300	6.1	10.0	FA 03	5	3600	6.1	9.7	
0.75		BN 80A	2	2810	2.6	●	76.2	75.5	75.5	75.5	75.5	0.81	1.75	1.75	4.8	2.2	7.8	2.6	2.2	2.6	2.6	2.2	8.6	FD 04	5	1700	3200	9.4	12.5	FA 04	5	3200	9.4	12.4	
1.1		BN 80B	2	2800	3.8	●	76.4	76.2	76.2	76.2	76.2	0.81	2.57	2.57	4.8	2.4	9.0	2.8	2.4	2.8	2.8	2.4	9.5	FD 04	10	1500	3000	10.6	13.4	FA 04	10	3000	10.6	13.3	
1.5		BN 80C	2	2800	5.1	●	79.1	79.5	79.5	77.2	77.2	0.81	3.4	3.4	4.9	2.4	11.4	2.7	2.4	2.7	2.7	2.4	11.3	FD 04	15	1300	2600	13.0	15.2	FA 04	15	2600	13.0	15.1	
1.5		BN 90SA	2	2870	5.0	●	82.0	81.5	81.5	81.5	81.5	0.80	3.4	3.4	5.9	2.6	12.5	2.7	2.6	2.7	2.7	2.6	12.3	FD 14	15	900	2200	14.1	16.5	FA 14	15	2200	14.1	16.4	
1.85		BN 90SB	2	2880	6.1	●	82.5	82.0	82.0	82.0	82.0	0.80	4.0	4.0	6.2	2.6	16.7	2.9	2.6	2.9	2.9	2.6	14	FD 14	15	900	2200	18.3	18.2	FA 14	15	2200	18.3	18.1	
2.2		BN 90L	2	2880	7.3	●	82.7	82.1	82.1	80.8	80.8	0.80	4.8	4.8	6.3	2.9	16.7	2.9	2.7	2.9	2.9	2.7	14	FD 05	26	900	2200	21	20	FA 05	26	2200	21	20.7	
3		BN 100L	2	2860	10.0	●	81.5	81.3	81.3	77.4	77.4	0.79	6.7	6.7	5.6	2.2	31	2.6	2.2	2.6	2.6	2.2	20	FD 15	26	700	1600	35	26	FA 15	26	1600	35	27	
4		BN 100LB	2	2870	13.3	●	83.1	83.0	83.0	77.8	77.8	0.80	8.7	8.7	5.8	2.5	39	2.7	2.5	2.7	2.7	2.5	23	FD 15	40	450	900	43	29	FA 15	40	1000	43	30	
4		BN 112M	2	2900	13.2	●	85.5	84.5	84.5	83.0	83.0	0.82	8.2	8.2	6.9	2.9	57	3.0	2.9	3.0	3.0	2.9	28	FD 06S	40	—	950	66	39	FA 06S	40	950	66	40	
5.5		BN 132SA	2	2890	18.2	●	84.7	84.5	84.5	81.2	81.2	0.84	11.2	11.2	5.9	2.2	101	2.6	2.2	2.6	2.6	2.2	35	FD 06	50	—	600	112	48	FA 06	50	600	112	49	
7.5		BN 132SB	2	2900	25	●	86.5	86.3	86.3	84.4	84.4	0.85	14.7	14.7	6.4	2.2	145	2.6	2.2	2.6	2.6	2.2	42	FD 06	50	—	550	154	55	FA 06	50	550	154	56	
9.2		BN 132M	2	2930	30	●	87.0	86.5	86.5	83.6	83.6	0.86	17.7	17.7	6.7	2.3	178	2.8	2.3	2.8	2.8	2.3	53	FD 56	75	—	430	189	66	FA 06	75	430	189	67	
11		BN 160MR	2	2920	36	●	87.6	87.0	87.0	86.0	86.0	0.88	20.6	20.6	6.9	2.5	210	2.9	2.5	2.9	2.9	2.5	65												
15		BN 160MB	2	2930	49	●	89.6	89.4	89.4	88.0	88.0	0.86	28.1	28.1	7.1	2.6	340	2.6	2.3	2.6	2.6	2.3	84												
18.5		BN 160L	2	2930	60	●	90.4	90.1	90.1	89.0	89.0	0.86	34	34	7.6	2.3	420	2.7	2.3	2.7	2.7	2.3	97												
22		BN 180M	2	2930	72	●	89.9	89.7	89.7	89.5	89.5	0.88	40	40	7.8	2.4	490	2.6	2.4	2.6	2.6	2.4	109												
30		BN 200LA	2	2930	98	●	90.7	90.1	90.1	87.6	87.6	0.89	54	54	7.8	2.9	770	2.7	2.9	2.7	2.7	2.9	140												

○ = n.a. ● = IE1

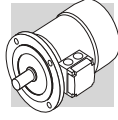
BN-M



8P		750 min ⁻¹ - S1														50 Hz						
		d.c. brake														a.c. brake						
		P _n kW	In 400V A	cosφ	η	M _n Nm	n min ⁻¹	M _n Nm	Is In	Ms Mn	Ma Min	J _m x 10 ⁻⁴ kgm ²	IM B5	Mod	Mb Nm	Z _o 1/h	J _m x 10 ⁻⁴ kgm ²	IM B5	Mod	Mb Nm	Z _o 1/h	J _m x 10 ⁻⁴ kgm ²
FD	FA																					
0.09	0.47	0.59	47	1.26	680	1.26	2.3	2.4	2.3	10.9	6.7	FD 03	3.5	9000	12.0	9.4	FA 03	3.5	16000	12.0	12.0	9.1
0.12	0.58	0.59	51	1.69	680	1.69	2.1	2.3	2.2	12.9	7.7	FD 03	5.0	9000	14.0	10.4	FA 03	5.0	16000	14.0	14.0	10.1
0.18	0.85	0.60	51	2.49	690	2.49	2.4	2.2	2.2	15	8.2	FD 04	5.0	6500	16.6	12.1	FA 04	5.0	11000	16.6	16.6	12.0
0.25	1.06	0.63	54	3.51	680	3.51	2.4	2.0	1.9	20	9.9	FD 04	10.0	6000	22	13.8	FA 04	10.0	10000	22	23	13.7
0.37	1.53	0.60	58	5.2	675	5.2	2.6	2.3	2.1	26	12.6	FD 14	15.0	4800	28	16.8	FA 14	15.0	7500	28	28	16.7
0.55	2.13	0.60	62	7.8	670	7.8	2.6	2.2	2.0	33	15	FD 05	26	4000	37	21	FA 05	26	6400	37	37	22
0.75	2.53	0.63	68	10.2	700	10.2	3.4	1.9	1.7	82	22	FD 15	26	2800	86	28	FA 15	26	4800	86	86	29
1.1	3.65	0.64	68	15.0	700	15.0	3.2	1.7	1.7	95	24	FD 15	40	2500	99	30	FA 15	40	4000	99	99	31
1.5	4.6	0.66	71	20.2	710	20.2	3.7	1.8	1.9	168	32	FD 06S	60	—	177	42	FA 06S	60	3000	177	177	44
2.2	6.4	0.66	75	29.6	710	29.6	3.8	1.8	2.0	295	45	FD 56	75	—	305	58	FA 06	75	2300	305	305	56
3	8.3	0.69	76	40.4	710	40.4	3.9	1.6	1.8	370	53	FD 06	100	—	394	69	FA 07	100	1900	406	406	74

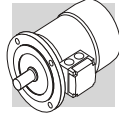


2/6P		3000/1000 min ⁻¹ - S3 60/40%													50 Hz											
															d.c. brake						a.c. brake					
															FD						FA					
P _n		n	M _n	η	cosφ	In	Is	Ms	Ma	J _m	IM B5	Mod	Mb	Z _o	J _m	IM B5	Mod	Mb	Z _o	J _m	IM B5					
kW		min ⁻¹	Nm	%		400V	A	Mn	Mn	x 10 ⁻⁴	kgm ²		Nm	1/h	kgm ²	kgm ²		Nm	1/h	kgm ²	kgm ²					
0.25	BN 71A	2	0.84	60	0.82	0.73	4.3	1.9	1.8	6.9	5.9	FD 03	1.75	1700	8.0	8.6	FA 03	2.5	1700	8.0	8.3					
0.08		6	0.84	43	0.70	0.38	2.1	1.4	1.5					10000					13000							
0.37	BN 71B	2	1.23	62	0.80	1.08	4.4	1.9	1.8	9.1	7.3	FD 03	3.5	1000	10.2	10.0	FA 03	3.5	1300	10.2	9.7					
0.12		6	1.27	44	0.73	0.54	2.4	1.4	1.5					9000					11000							
0.55	BN 80A	2	1.88	63	0.86	1.47	4.5	1.9	1.7	20	9.9	FD 04	5.0	1500	22	13.8	FA 04	5.0	1800	22	13.7					
0.18		6	1.85	52	0.65	0.77	3.3	2.0	1.9					4100					6300							
0.75	BN 80B	2	2.6	66	0.87	1.89	4.3	1.8	1.6	25	11.3	FD 04	5.0	1700	27	15.2	FA 04	5.0	1900	27	15.1					
0.25		6	2.6	54	0.67	1.00	3.2	1.7	1.8					3800					6000							
1.10	BN 90L	2	3.7	67	0.84	2.82	4.7	2.1	1.9	28	14.0	FD 05	13	1400	32	20	FA 05	13	1600	32	21					
0.37		6	3.8	59	0.71	1.27	3.3	1.6	1.6					3400					5200							
1.5	BN 100LA	2	5	73	0.84	3.53	5.1	1.9	2.0	40	18.3	FD 15	13	1000	44	24	FA 15	13	1200	44	25					
0.55		6	5.6	64	0.67	1.85	3.5	1.7	1.8					2900					4000							
2.2	BN 100LB	2	7.2	77	0.85	4.9	5.9	2.0	2.0	61	25	FD 15	26	700	65	31	FA 15	26	900	65	32					
0.75		6	7.5	67	0.64	2.5	3.3	1.9	1.8					2100					3000							
3	BN 112M	2	9.9	78	0.87	6.4	6.3	2.0	2.1	98	30	FD 06S	40	—	107	40	FA 06S	40	1000	107	32					
1.1		6	11.1	72	0.64	3.4	3.9	1.8	1.8					—	2600				2600							
4.5	BN 132S	2	14.8	78	0.84	9.9	5.8	1.9	1.8	213	44	FD 56	37	—	223	57	FA 06	37	500	223	58					
1.5		6	14.9	74	0.67	4.4	4.2	1.9	2.0					—	2100				2100							
5.5	BN 132M	2	18.0	78	0.87	11.7	6.2	2.1	1.9	270	53	FD 56	50	—	280	66	FA 06	50	400	280	67					
2.2		6	22	77	0.71	5.8	4.3	2.1	2.0					—	1900				1900							

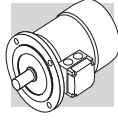


2/12P **3000/500 min-1 - S3 60/40%** **50 Hz**

P _n kW		d.c. brake														a.c. brake																			
		FD														FA																			
		IM B5	J _m x 10 ⁻⁴ kgm ²	Ma Mn	Ms Mn	η	cosφ	In 400V A	Is In	IM B5	J _m x 10 ⁻⁴ kgm ²	Mb	Mod	Z ₀ 1/h	NB	SB	IM B5	J _m x 10 ⁻⁴ kgm ²	Mb	Mod	Z ₀ 1/h	IM B5	J _m x 10 ⁻⁴ kgm ²												
0.55	0.09	BN 80B	2	2820	1.86	64	0.89	1.39	4.2	1.6	1.7	1.7	11.3	25	1000	1300	1300	1300	5.0	FD 04	15.2	FA 04	5.0	1300	27	15.1	27	12000	12000	5.0	1300	27	15.1	27	12000
0.75	0.12	BN 90L	2	2790	2.6	56	0.89	2.17	4.2	1.8	1.7	1.6	12.6	26	1000	1150	1150	1150	13	FD 05	18.6	FA 05	13	1150	30	19.3	30	6300	6300	13	1150	30	19.3	30	6300
1.10	0.18	BN 100LA	2	2850	3.7	65	0.85	2.87	4.5	1.6	1.8	1.5	18.3	40	700	900	900	900	13	FD 15	25	FA 15	13	900	44	25	44	6000	6000	13	900	44	25	44	6000
1.5	0.25	BN 100LB	2	2900	4.9	67	0.86	3.76	5.6	1.9	1.9	1.8	22	54	700	900	900	900	13	FD 15	28	FA 15	13	900	58	28	58	5000	5000	13	900	58	28	58	5000
2	0.3	BN 112M	2	2900	6.6	74	0.88	4.43	6.5	2.1	2.0	2.0	30	98	—	800	800	800	20	FD 06S	40	FA 06S	20	800	107	40	107	3400	3400	20	800	107	40	107	3400
3	0.5	BN 132S	2	2920	9.8	74	0.87	6.7	6.8	2.3	1.9	1.6	44	213	—	450	450	450	37	FD 56	57	FA 06	37	450	223	57	223	3000	3000	37	450	223	57	223	3000
4	0.7	BN 132M	2	2920	13.1	75	0.89	8.6	5.9	2.4	2.3	1.6	53	270	—	400	400	400	37	FD 56	66	FA 06	37	400	280	66	280	2800	2800	37	400	280	66	280	2800

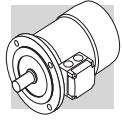


4/8P		1500/750 min ⁻¹ - S1											50 HZ													
d.c. brake														a.c. brake												
P _n kW		n min ⁻¹	M _n Nm	η %	cosφ	I _n 400V A	I _s I _n	M _s M _n	M _a M _n	J _m x 10 ⁻⁴ kgm ²	IM B5			IM B5			IM B5									
											Mod	Mb Nm	Z ₀ 1/h	J _m x 10 ⁻⁴ kgm ²	Mod	Mb Nm	Z ₀ 1/h	J _m x 10 ⁻⁴ kgm ²	Mod	Mb Nm	Z ₀ 1/h	J _m x 10 ⁻⁴ kgm ²				
0.37	BN 80A	4	2.5	63	0.82	1.03	3.3	1.4	1.4	15	8.2	2300	3500	FD 04	10	2300	3500	12.1	FA 04	10	2300	3500	16.6	16.6	12.0	
0.18		8	2.5	44	0.60	0.98	2.2	1.5	1.6			4500	7000			4500	7000					7000				
0.55	BN 80B	4	3.8	65	0.86	1.42	3.8	1.7	1.6	20	9.9	2200	2900	FD 04	10	2200	2900	13.8	FA 04	10	2200	2900	22	22	13.7	
0.30		8	4.3	49	0.65	1.36	2.3	1.7	1.8			4200	6500			4200	6500					6500				
0.65	BN 90S	4	4.5	73	0.85	1.51	4.0	1.9	1.9	28	13.6	2300	2800	FD 14	15	2300	2800	17.8	FA 14	15	2300	2800	30	30	17.7	
0.35		8	4.8	49	0.57	1.81	2.5	2.1	2.2			3500	6000			3500	6000					6000				
0.9	BN 90L	4	6.3	73	0.87	2.05	3.8	1.8	1.8	30	15.1	1700	2100	FD 05	26	1700	2100	21	FA 05	26	1700	2100	34	34	22	
0.5		8	7.1	57	0.62	2.04	2.4	2.1	2.0			2500	4200			2500	4200					4200				
1.30	BN 100LA	4	8.7	72	0.83	3.14	4.3	1.7	1.8	82	22	1300	1700	FD 15	40	1300	1700	28	FA 15	40	1300	1700	86	86	29	
0.70		8	9.6	58	0.64	2.72	2.8	1.8	1.8			2000	3400			2000	3400					3400				
1.8	BN 100LB	4	12.1	69	0.87	4.3	4.2	1.6	1.7	95	25	1200	1700	FD 15	40	1200	1700	31	FA 15	40	1200	1700	99	99	32	
0.9		8	12.3	62	0.63	3.3	3.2	1.7	1.8			1600	2600			1600	2600					2600				
2.2	BN 112M	4	14.6	77	0.85	4.9	5.3	1.8	1.8	168	32	—	1200	FD 06S	60	—	1200	177	42	FA 06S	60	1200	177	177	177	43
1.2		8	16.1	70	0.63	3.9	3.3	1.9	1.8			—	2000			—	2000					2000				
3.6	BN 132S	4	24	80	0.82	7.9	6.5	2.1	1.9	295	45	—	1000	FD 66	75	—	1000	305	58	FA 06	75	1000	305	305	305	59
1.8		8	24	72	0.55	6.6	4.6	1.9	2.0			—	1400			—	1400					1400				
4.6	BN 132M	4	30	81	0.83	9.9	6.5	2.2	1.9	383	56	—	1000	FD 06	100	—	1000	393	69	FA 07	100	1000	393	393	393	74
2.3		8	31	73	0.54	8.4	4.4	2.3	2.0			—	1300			—	1300					1300				






4P		1500 min ⁻¹ - S1																50 Hz			
		d.c. brake																a.c. brake			
		P _n kW	n	M _n Nm	IE1	η (100%) %	η (75%) %	η (50%) %	cosφ	I _n 400V A	I _s I _n	M _s M _n	M _a M _n	J _m x 10 ⁻⁴ kgm ²	IM B5	FD		FA			
Mb Nm	Z _o 1/h															J _m x 10 ⁻⁴ kgm ²	IM B5	Mb Nm	Z _o 1/h	J _m x 10 ⁻⁴ kgm ²	IM B5
0.09	4	0.64	○	51.7	47.6	42.9	0.60	0.42	2.6	2.5	2.4	1.5	2.9								
0.12	4	0.85	○	59.8	56.2	47.0	0.62	0.47	2.6	1.9	1.8	2.0	3.2								
0.18	4	1.30	○	54.8	52.9	52.5	0.67	0.71	2.6	2.2	2.0	2.3	3.6								
0.25	4	1.78	○	65.3	65.0	57.9	0.69	0.80	2.7	2.1	1.9	3.3	4.8								
0.37	4	2.6	○	66.8	66.7	63.0	0.76	1.05	3.7	2.0	1.9	6.9	5.5								
0.55	4	3.8	○	69.0	68.9	68.8	0.74	1.55	4.1	2.3	2.3	9.1	6.9								
0.75	4	5.1	●	75.0	74.5	69.3	0.78	1.85	4.9	2.7	2.5	20	9.2								
1.1	4	7.5	●	76.4	76.2	70.4	0.78	2.66	5.1	2.8	2.5	25	10.6								
1.5	4	10.2	●	79.6	80.5	79.3	0.77	3.5	4.6	2.1	2.1	34	15.5								
2.2	4	14.9	●	81.1	81.4	79.9	0.75	5.2	4.5	2.2	2.0	40	17								
3	4	20	●	82.6	83.8	83.7	0.77	6.8	5.0	2.3	2.2	54	21								
4	4	27	○	82.7	83.1	80.5	0.78	9.0	4.7	2.3	2.2	61	23								
5.5	4	36	●	84.7	84.8	82.5	0.81	11.6	5.5	2.3	2.2	213	42								
7.5	4	50	●	86.0	86.3	85.3	0.81	15.5	5.7	2.5	2.4	270	51								
9.2	4	61	●	88.4	88.6	87.5	0.81	18.8	5.9	2.7	2.5	319	57								
11	4	73	●	87.6	87.8	86.0	0.81	22.4	6.0	2.7	2.5	360	65								
15	4	98	●	88.7	88.5	88.4	0.81	30.1	6.0	2.3	2.1	650	85								
18.5	4	121	●	89.3	89.5	89.2	0.81	37	6.2	2.6	2.5	790	101								

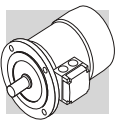
○ = n.a. ● = IE1



2/12P **3000/500 min⁻¹ - S3 60/40%** **50 Hz**

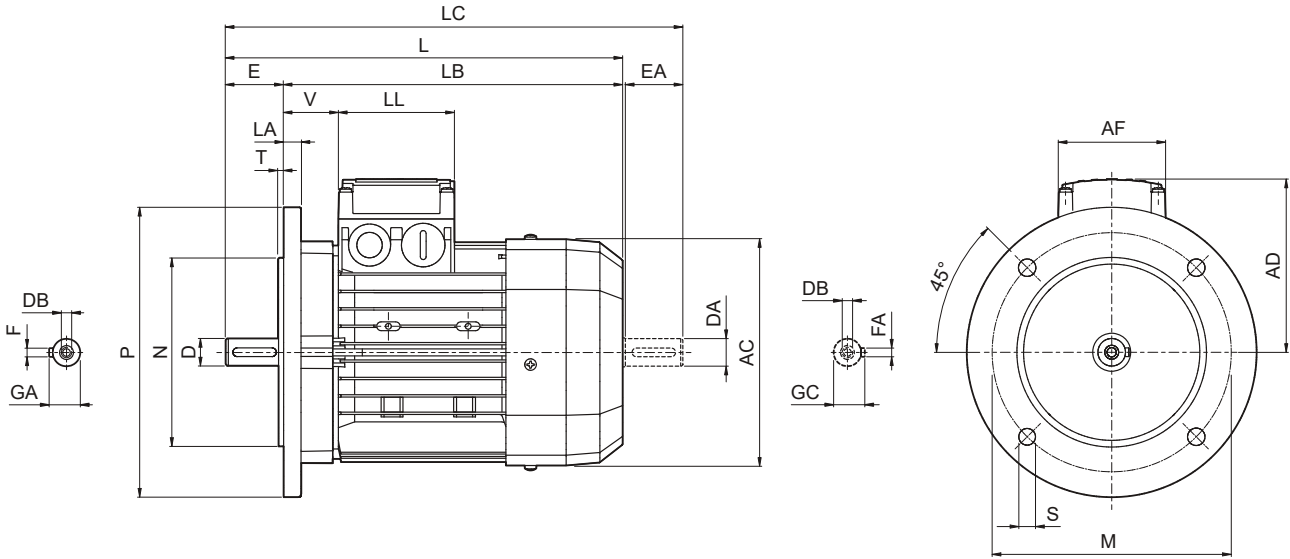
		d.c. brake											a.c. brake							
P _n kW	n min ⁻¹	M _n Nm	η %	cosφ	I _n 400V A	I _s I _n	M _s M _n	M _a M _n	J _m x 10 ⁻⁴ kgm ²	IM B5 	Mod	Mb Nm	FD		IM B5 	Mod	Mb Nm	Z _o 1/h	J _m x 10 ⁻⁴ kgm ²	IM B5 
													NB	SB						
0.55	2820	1.86	64	0.89	1.39	4.2	1.6	1.7	25	10.6	FD 04	5	1000	1300	14.5	FA 04	5	1300	27	14.4
0.09	430	2.0	30	0.63	0.89	1.8	1.9	1.8	8000	12000	8000	12000	12000	12000	12000	12000	12000	12000	12000	12000
0.75	2900	2.5	65	0.81	2.06	5.2	1.9	2.1	34	15.5	FD 15	13	700	900	22	FA 15	13	900	38	23
0.12	460	2.5	33	0.43	1.22	1.9	1.3	1.6	5000	7000	5000	7000	7000	7000	7000	7000	7000	7000	7000	7000
1.1	2850	3.7	65	0.85	2.87	4.5	1.6	1.8	40	17	FD 15	13	700	900	24	FA 15	13	900	44	24
0.18	430	4.0	26	0.54	1.85	1.5	1.3	1.5	4000	6000	4000	6000	6000	6000	6000	6000	6000	6000	6000	6000
1.5	2900	4.9	67	0.86	3.76	5.6	1.9	1.9	54	21	FD 15	13	700	900	27	FA 15	13	900	58	28
0.25	440	5.4	36	0.46	2.18	1.8	1.7	1.8	3800	5000	3800	5000	5000	5000	5000	5000	5000	5000	5000	5000
2	2850	6.7	70	0.84	4.9	4.9	1.8	1.7	61	23	FD 55	18	—	700	29	FA 15	18	700	65	30
0.3	450	6.4	38	0.47	2.4	1.7	1.6	1.7	—	—	—	—	—	3500	—	—	—	3500	—	—
3	2920	9.8	74	0.87	6.7	6.8	2.3	1.9	213	42	FD 56	37	—	450	55	FA 06	37	450	223	56
0.5	470	10.2	51	0.43	3.3	2.0	1.7	1.6	—	—	—	—	—	3000	—	—	—	3000	—	—
4	2920	13.1	75	0.89	8.6	5.9	2.4	2.3	270	51	FD 56	37	—	400	64	FA 06	37	400	280	65
0.7	460	14.5	53	0.44	4.3	1.9	1.7	1.6	—	—	—	—	—	2800	—	—	—	2800	—	—

BN-M



M21 MOTORS DIMENSIONS BN-M

BN - IM B5

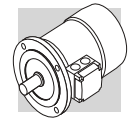


BN-M

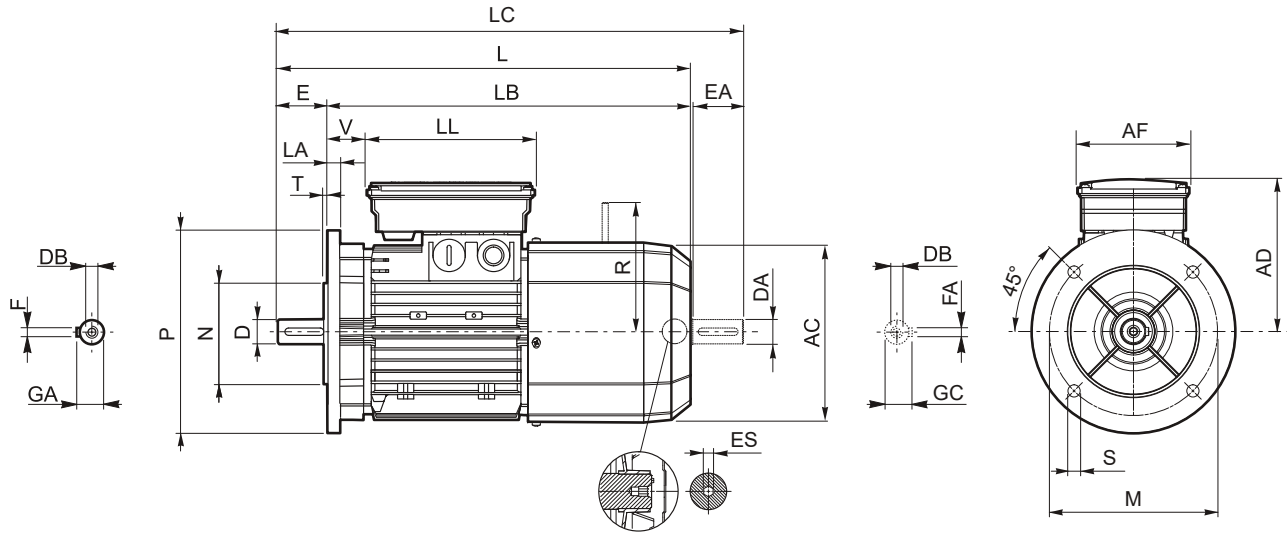
	Shaft					Flange						Motor							
	D DA	E EA	DB	GA GC	F FA	M	N	P	S	T	LA	AC	L	LB	LC	AD	AF	LL	V
BN 56	9	20	M3	10.2	3	100	80	120	7	3	8	110	185	165	207	91	74	80	34
BN 63	11	23	M4	12.5	4	115	95	140	9.5		10	121	207	184	232	95			26
BN 71	14	30	M5	16	5	130	110	160	11.5		10	138	249	219	281	108			37
BN 80	19	40	M6	21.5	6	165	130	200	11.5	3.5	11.5	156	274	234	315	119	98	98	38
BN 90	24	50	M8	27	8						176	326	276	378	133	44			
BN 100	28	60	M10	31	8	215	180	250	14	4	14	195	367	307	429	142	98	98	50
BN 112											15	219	385	325	448	157			52
BN 132	38	80	M12	41	10	265	230	300	18.5	5	20	258	493	413	576	193	118	118	58
BN 160 MR	42 38 ⁽¹⁾	110 80 ⁽¹⁾	M16 M12 ⁽¹⁾	45 41 ⁽¹⁾	12 10 ⁽¹⁾	300	250	350			15		310	596	486				680
BN 160 M									15	310	596	486	680	51					
BN 160 L	48 38 ⁽¹⁾	110 110 ⁽¹⁾	M16 M16 ⁽¹⁾	51.5 41 ⁽¹⁾	14 10 ⁽¹⁾	300	250	350	18.5	5	15	310	640	530	724	187	187	51	
BN 180 M											15	310	640	530	724			52	
BN 180 L	48 42 ⁽¹⁾	110 110 ⁽¹⁾	M16 M16 ⁽¹⁾	51.5 45 ⁽¹⁾	14 12 ⁽¹⁾	350	300	400	18.5	5	18	348	708	598	823	261	261	52	
BN 200 L	55 42 ⁽¹⁾	110 110 ⁽¹⁾	M20 M16 ⁽¹⁾	59 45 ⁽¹⁾	16 12 ⁽¹⁾						350	300	400	18	348			722	612

NOTE:

1) These values refer to the rear shaft end.



BN_FD ; IM B5

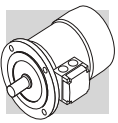


BN-M

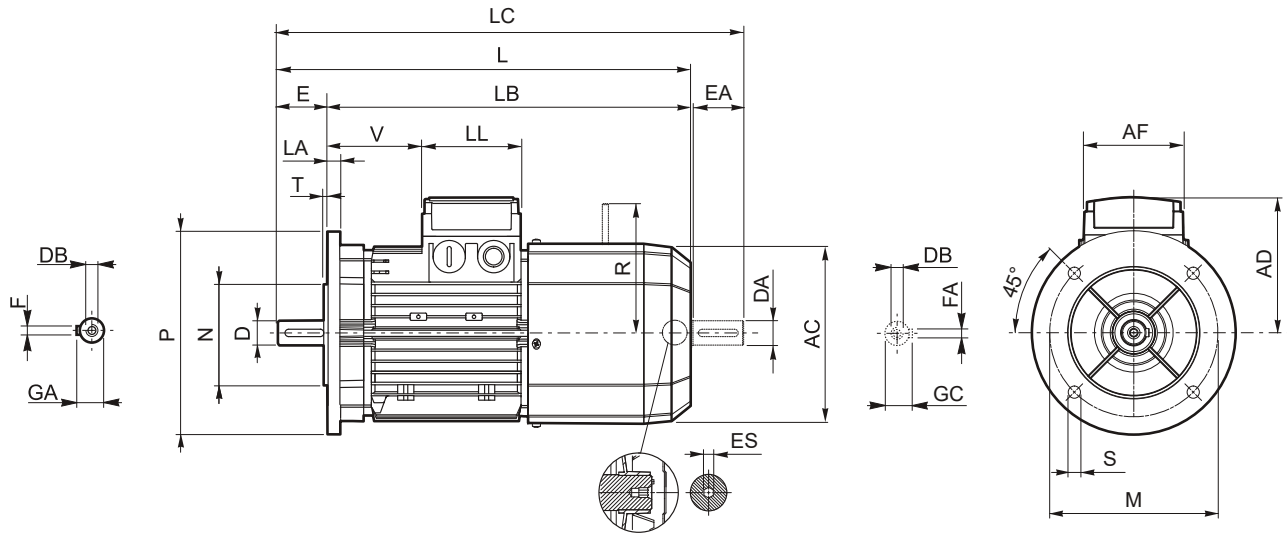
	Shaft					Flange						Motor									
	D DA	E EA	DB	GA GC	F FA	M	N	P	S	T	LA	AC	L	LB	LC	AD	AF	LL	V	R	ES
BN 63	11	23	M4	12.5	4	115	95	140	9.5	3	10	121	272	249	297	122	98	133	14	96	5
BN 71	14	30	M5	16	5	130	110	160	9.5	3.5		138	310	280	342	135			25	103	
BN 80	19	40	M6	21.5	6	165	130	200	11.5			156	346	306	388	146			41	129	
BN 90 S	24	50	M8	27	8					215	180	250	14	4	11.5	176	409	359	461	149	110
BN 90 L						146	165	62													
BN 100	28	60	M10	31	10	265	230	300	14	4	20	195	458	398	521	158	140	188	46	204 ⁽²⁾	6
BN 112												219	484	424	547	173					
BN 132	38	80	M12	41	10	300	250	350	18.5	5	15	258	603	523	686	210	140	188	161	226	
BN 160 MR	42	110	M16	45	12							310	736	626	820	245					187
BN 160 M	38 ⁽¹⁾					41 ⁽¹⁾	10 ⁽¹⁾														
BN 160 L	42	80 ⁽¹⁾	M12 ⁽¹⁾	51.5	14	350	250	350	18.5	5	15	310	780	670	864	245	187	187	51	266	
BN 180 M	48	38 ⁽¹⁾	M16																		41 ⁽¹⁾
BN 180 L	48	110	M16	51.5	14	350	300	400	18.5	5	18	348	866	756	981	261	187	187	52	305	
BN 200 L	55		M20	45 ⁽¹⁾	16																64
	42 ⁽¹⁾	110 ⁽¹⁾	M16 ⁽¹⁾	45 ⁽¹⁾	12 ⁽¹⁾																

NOTE:
 1) These values refer to the rear shaft end.
 2) For FD07 brake value R=226.

ES hexagon is not supplied with PS option.



BN_FA - IM B5



BN-M

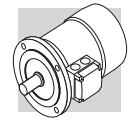
	Shaft					Flange						Motor									
	D DA	E EA	DB	GA GC	F FA	M	N	P	S	T	LA	AC	L	LB	LC	AD	AF	LL	V	R	ES
BN 63	11	23	M4	12.5	4	115	95	140	9.5	3	10	121	272	249	297	95	74	80	26	116	5
BN 71	14	30	M5	16	5	130	110	160		138		310	280	342	108	68			124		
BN 80	19	40	M6	21.5	6	165	130	200	11.5	3.5	11.5	156	346	306	388	119	83	134			
BN 90	24	50	M8	27	8					176		409	359	461	133	95	160				
BN 100	28	60	M10	31	8	215	180	250	14	4	14	195	458	398	521	142	98	98	119	198	6
BN 112										15	219	484	424	547	157	128					
BN 132	38	80	M12	41	10	265	230	300			20	258	603	523	686	210	140	188	46	200 ⁽²⁾	
BN 160 MR	42 38 ⁽¹⁾	110 80 ⁽¹⁾	M16 M12 ⁽¹⁾	45 41 ⁽¹⁾	12 10 ⁽¹⁾	300	250	350	18.5	5	15	310	672	562	755	193	118	118	218	217	
BN 160 M													736	626	820	245	187	187	51	247	—
BN 160 L													780	670	864						
BN 180 M													48 38 ⁽¹⁾			51.5 41 ⁽¹⁾	14 10 ⁽¹⁾				

NOTE:

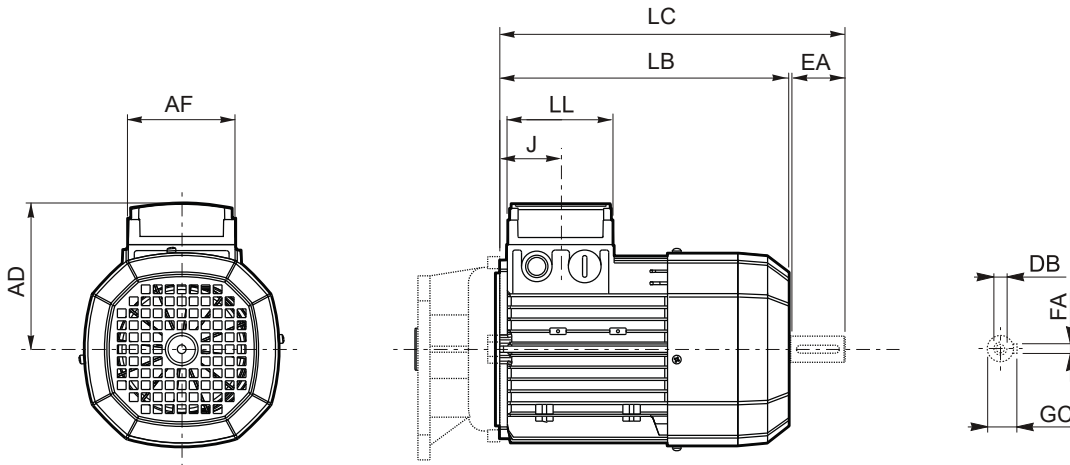
- 1) These values refer to the rear shaft end.
- 2) For FA07 brake value R=217.

Dimensions AD, AF, LL and V, relevant to terminal box of motors BN...FA featuring the separate brake supply (option SA), are coincident with corresponding dimensions of same-size BN...FD motors

ES hexagon is not supplied with PS option.

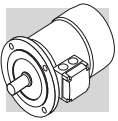


M



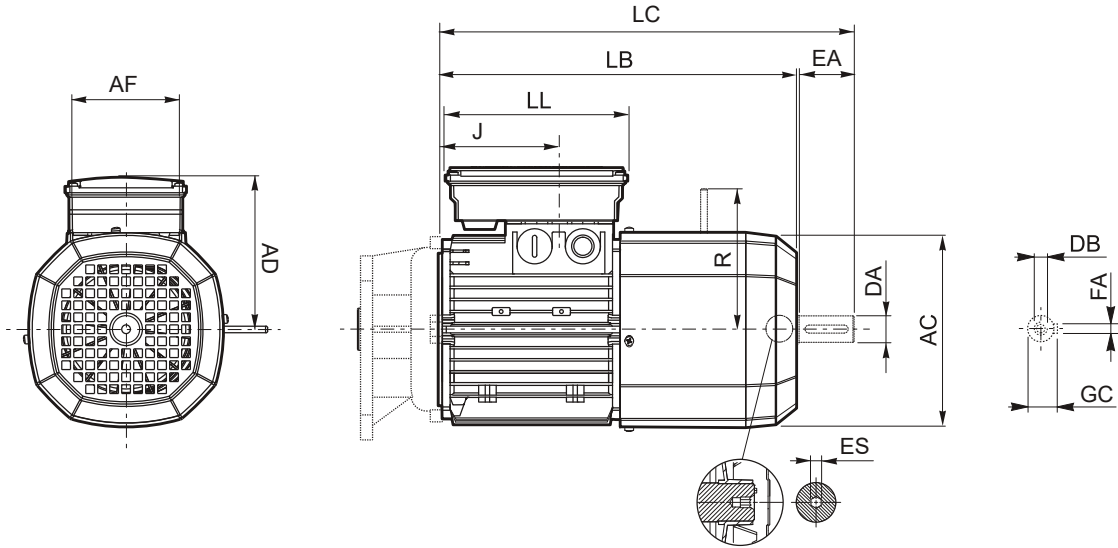
BN-M

	Rear shaft end					Motor						
	DA	EA	DB	FA	GC	AC	LB	LC	AF	LL	J	AD
M 0	9	20	M3	3	10.2	110	133	155	74	80	42	91
M 05	11	23	M4	4	12.5	121	165	191			48	95
M 1	14	30	M5	5	16	138	187	219			45	108
M 2 S	19	40	M6	6	21.5	156	202	245			44	119
M 3 S	28	60	M10	8	31	195	230	293	98	98	53.5	142
M 3 L							262	325				
M 4	38	80	M12	10	41	258	361	444	118	118	64.5	193
M 4 LC							396	479				
M 5 S						310	418	502	187	187	77	245
M 5 L							462	546				



M_FD

BN-M

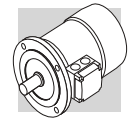


	Rear shaft end					Motor								
	DA	EA	DB	FA	GC	AC	LB	LC	AF	LL	J	AD	R	ES
M 05	11	23	M4	4	12.5	121	231	256	98	133	48	122	96	5
M 1	14	30	M5	5	16	138	248	280			73	135	103	
M 2 S	19	40	M6	6	21.5	156	272	314			88	146	129	
M 3 S	28	60	M10	8	31	195	326	389	110	165	124.5	158	160	6
M 3 L							353	416						
M 4	38	80	M12	10	41	258	470	553	140	188	185.5	210	204 (1)	
M 4 LC							495	578			64.5		226	
M 5 S						310	558	642	187	187	77	245	266	
M 5 L	602	686												

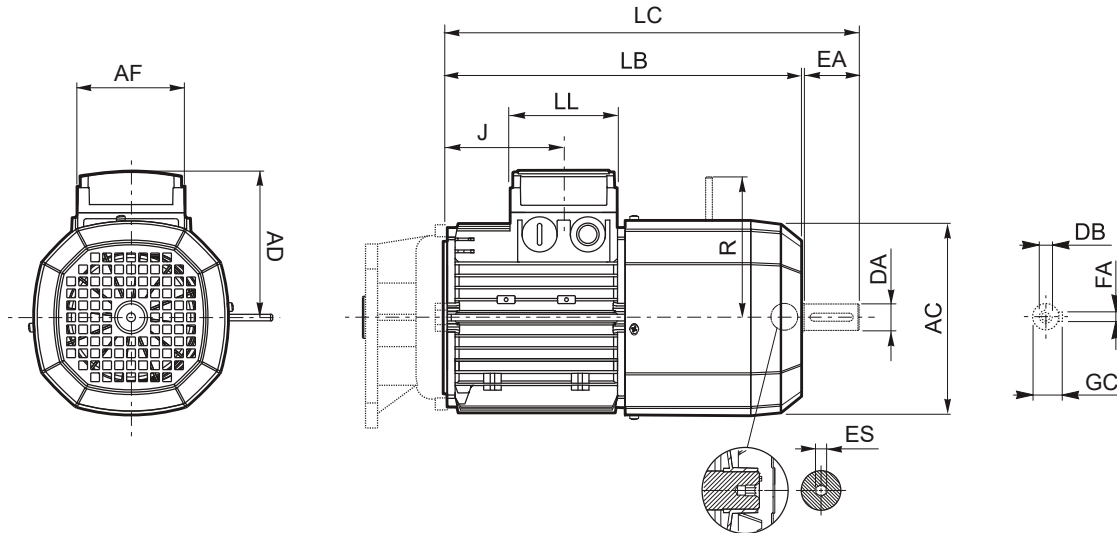
NOTE:

1) For FD07 brake value R=226.

ES hexagon is not supplied with PS option.



M_FA



BN-M

	Rear shaft end					Motor								
	DA	EA	DB	FA	GC	AC	LB	LC	AF	LL	J	AD	R	ES
M 05	11	23	M4	4	12.5	121	231	256	74	80	48	95	116	5
M 1	14	30	M5	5	16	138	248	280			73	108	124	
M 2 S	19	40	M6	6	21.5	156	272	314			88	119	134	
M 3 S	28	60	M10	8	31	195	326	389	98	98	124.5	142	160	6
M 3 L			353				416							
M 4	38	80	M14	10	41	258	470	553	140	188	185.5	210	200 (1)	
M 4 LC							495	578			64.5		217	
M 5 S			M12			310	558	642	187	187	77	245	247	
M 5 L	602	686												

NOTE:


1) For FA07 brake value R=217.

Dimensions AD, AF, LL and V, relevant to terminal box of motors M...FA featuring the separate brake supply (option SA), are coincident with corresponding dimensions of same-size M...FD motors

ES hexagon is not supplied with PS option.



INDEX OF REVISIONS

BR_CAT_CAFS_IE2-IE3_ENG_R13_0	
	Description
...	Added availability of BXN and MXN electric motors.
26, 190, 364, 509	IHB and Long Term Stock Options added.
560...679	"Electric motors" section updated.

2022 09 30



We have a relentless commitment to excellence, innovation & sustainability. Our team creates, distributes and services world-class power transmission & drive solutions to keep the world in motion.

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