

CANTONI
MOTOR



**General
purpose
3-phase
induction
motors**

EFF 1

EFF 2



Formerly **Elektrim**
Motor

Product Catalogue

DESCRIPTION OF THE CATALOGUE VERSION

Duty:	S1
Rated voltage:	380V, 400V, 690V (Δ/Y)
Frequency:	50 Hz
Ambient temperature:	from -20°C to + 40°C
Mounting height:	up to 1000 m above sea level
Number of free shaft ends:	1
Insulation class:	F
Bearings:	according to page 12

Other specifications dependent on the frame size:

Frame size	Degree of protection	Position of the terminal box	Number of terminals	Number of cable outlets	Optional rotation of the terminal box	Glands	Temperature sensors in winding	Bearing lubrication system	Thermal protection of bearings
Sg 56	IP 55	top	6	1	180°	M 20	on request	no	no
Sg 63	IP 55	top	6	1	180°	M 20	on request	no	no
Sh 71	IP 55	top	6	1	180°	M 20	on request	no	no
Sh 80	IP 55	top	6	1	180°	M 20	on request	no	no
Sh 90	IP 55	top	6	2	4 × 90°	M 20	on request	no	no
Sg 100	IP 55	top	6	2	4 × 90°	M 20	on request	no	no
Sg 112	IP 55	top	6	2	4 × 90°	M 25	on request	no	no
Sg 132	IP 55	top	6	2	4 × 90°	M 25	on request	no	no
Sg 160	IP 55	top	6	2	4 × 90°	M 40	on request	on request	on request
Sg 180	IP 55	top	6	2	4 × 90°	M 40	on request	on request	on request
Sg 200	IP 55	right	6	2	4 × 90°	M 50	PTC	no	on request
Sg 225	IP 55	right	6	2	4 × 90°	M 50	PTC	no	on request
Sg 250	IP 55	right	6	2	4 × 90°	M 63	PTC	no	on request
Sg 280	IP 55	right	6	2	4 × 90°	M 63	PTC	no	on request
Sg 315	IP 55	right	6	2	4 × 90°	M 76	PTC	yes	on request
SEE 315	IP 55	top	6	2	4 × 90°	M76	PTC	yes	on request
Sg 355	IP 55	right	6	2	4 × 90°	M 76	PTC Mark A	yes	on request
SEE 355	IP 55	top	6	2	4 × 90°	M 76	PTC Mark A	yes	on request
Sh 355	IP 55	top	6	2	4 × 90°	M 76	Pt 100	yes	Pt 100
Sh 400	IP 55	top	3 (bars)	3	180°	M 3× ϕ 55	Pt 100	yes	Pt 100
Sh 450	IP 55	top	3 (bars)	3	180°	M 3× ϕ 55	Pt 100	yes	Pt 100
Sh 500	IP 55	top	3 (bars)	3	180°	M 3× ϕ 55	Pt 100	yes	Pt 100

We are able to supply almost any motor made according to customer's specifications

DESCRIPTION OF THE CUSTOMISED VERSION

Different supply voltage	
Frequency:	60 Hz
Degree of protection:	IP 56
Insulation class:	H
Number of free shaft ends:	2
Tropicalization	
Different bearings	
Different duty type	
Adaptation for supply from a frequency inverter	
Different versions per customer's specifications	

As part of our development program, we reserve the right to alter or amend any of the specifications without giving prior notice

RATINGS - TOLERANCES

Permissible deviations of real values from catalogue values according to IEC 60034-1:

Power factor $\cos \varphi$	$\Delta \cos \varphi = -1/6 (1 - \cos \varphi_N)$
Efficiency η	$\Delta \eta = -15\% (100 - \eta_N)$ for $P_N \leq 50\text{kW}$ $\Delta \eta = -10\% (100 - \eta_N)$ for $P_N > 50\text{kW}$
Speed n	$\Delta n = \pm 20\% (n_s - n_N)$ for $P_N > 1\text{kW}$ $\Delta n = \pm 30\% (n_s - n_N)$ for $P_N \leq 1\text{kW}$
Locked rotor current I_L/I_N	$\Delta (I_L/I_N) = +20\% (I_L/I_N)$
Locked rotor torque T_L/T_N	$\min (T_L/T_N) = -15\% (T_L/T_N)$ $\max (T_L/T_N) = +25\% (T_L/T_N)$
Breakdown torque T_b/T_N	$\Delta (T_b/T_N) = -10\% (T_b/T_N)$
Moment of inertia J [kgm ²]	$\Delta J = \pm 10\% J$
Sound pressure level L_{pA} [dB]	$\Delta L_{pA} = +3 \text{ dB } /A/$

The efficiency of motors of frame size 56 - 180 is determined by method of total loss measurement, and the efficiency of motors of frame size 200 - 500 is determined by method of summary of losses.

The rated current of a motor is the value consumed by a given motor at the rated load, rated supply voltage, rated efficiency and power factor.

Real current consumed by the motor at the rated supply voltage and rated load results from the real efficiency and real power factor (permissible deviations).

No-load current in small motors and low speeds, e.g. frame size 90, 2p=6 or 2p=8, may be approximately slightly lower or equal to the rated current. In case of supply voltage higher than the rated one it may even exceed the rated current.

STANDARDS AND EQUIVALENTS

The electric motors are manufactured according to international standards:

		Country	Standard
Rating and performance	IEC 60034-1	Germany	DIN VDE 0530; DIN EN 60034/VDE; DIN IEC 34; DIN 42673; DIN 42677
Methods for determining losses and efficiency	IEC 60034-2		
Classification of degrees of protection	IEC 60034-5		
Methods of cooling	IEC 60034-6	Great Britain	BS 5000; BS 4999
Symbols of construction and mounting arrangements	IEC 60034-7		
Terminal markings and direction of rotation	IEC 60034-8	France	NFC 51 111 51 120; NFC 51 200; NFC 51 115 NFC 51 117; NFC 51 119
Noise limits	IEC 60034-9		
Dimensions and output for electric machines	IEC 60072-1	Italy	CEI 2-3 1988; CEI 2-6; CEI 2-7 CEI 2-8; CEI 2-15 CEI/UNEL 13113-71; CEI/UNEL 13117-71; CEI/UNEL 13118-71;
Vibration limits	IEC 60034-14		
The products comply with the specifications regarding the electromagnetic compatibility specified in: EN 50081-1, EN 50081-2, EN 50082-1, EN 50082-2.			

All the motors are manufactured in
Quality Assurance System
consistent with ISO 9001.

ISO9001

The motors covered by the present catalogue comply
with the regulations and standards effective in other
countries, consistent with IEC standards.

IEC

All the motors described in the present catalogue are
provided with CE mark.
It means that our products are consistent with the
European Union directives regarding the safety measures.

CE



EFFICIENCY OF MOTORS

Since 2001 Cantoni Motor has started offering high efficiency series SEE motors.

The SEE motors belong to the EFF1 efficiency class (high efficiency) in accordance with the recommendations of the European Association of Electric Motor Manufacturers CEMEP acting under the auspices of the European Power Committee.

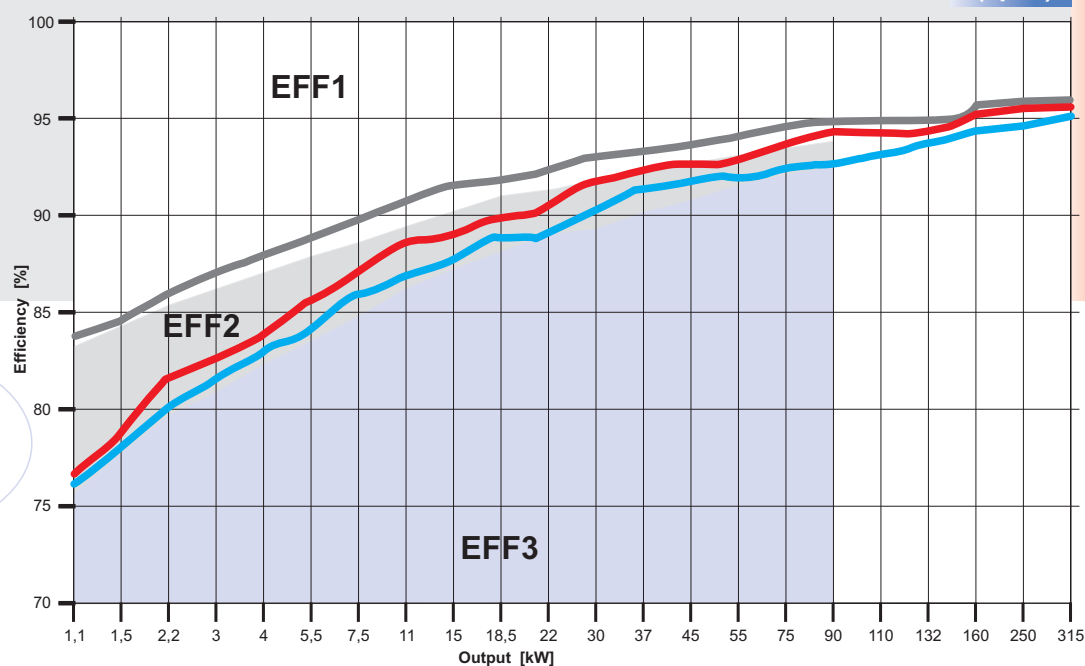
The present catalogue mostly describes the electric motors belonging to the second efficiency class EFF2 (improved efficiency).

These motors show high efficiency, exceeding average efficiency of motors manufactured by other European manufacturers.

Output [kW]	Average efficiency of SEE high efficiency motors from Cantoni Motor [%]	Average efficiency of Sg and Sh motors from Cantoni Motor [%]	Average efficiency of motors from other manufacturers [%]
0,75	83,9	75,0	73,7
1,1	83,8	76,7	75,9
1,5	85,0	79,0	78,0
2,2	86,4	82,0	80,1
3,0	87,4	82,7	81,5
4,0	88,3	85,1	83,7
5,5	89,2	85,9	85,0
7,5	90,1	87,0	86,4
11	91,0	89,0	87,0
15	91,8	89,5	88,9
18,5	92,2	90,5	90,1
22	92,6	91,0	89,2
30	93,5	92,5	91,0
37	94,3	92,6	92,1
45	94,5	94,0	92,4
55	95,0	93,5	92,7
75	95,2	94,2	92,1
90	95,2	94,8	93,2
110	95,5	94,2	93,0
132	95,6	94,9	94,0
160	95,9	95,6	94,7
250	96,3	96,3	95,0
315	96,6	96,6	95,6

(2p=4)

Average efficiency of SEE high efficiency motors from Cantoni Motor
Average efficiency of Sg and Sh motors from Cantoni Motor
Average efficiency of motors from other manufacturers



EFF 1

EFF 2

INSULATION CLASSIFICATION

The insulation system of an electric motor is determined by a given insulation class on the basis of its thermal resistance. This thermal resistance should be guaranteed by the entire set of electric insulating materials used in the motor insulating system.

Thermal resistance classification is related to the temperature of the hotspot in the insulation occurring during rated operating conditions of the electric motor, allowing for the highest permissible rise in average temperature.

This rise should be selected so that at the highest permissible ambient temperature, the temperature of the hotspot in insulation will not exceed the value assigned to a given thermal resistance class.

Symbols of thermal resistance classes (permissible insulation temperatures for ambient temperature of 40°C)

Symbol	Temperature [°C]
A	105
E	120
B	130
F	155
H	180

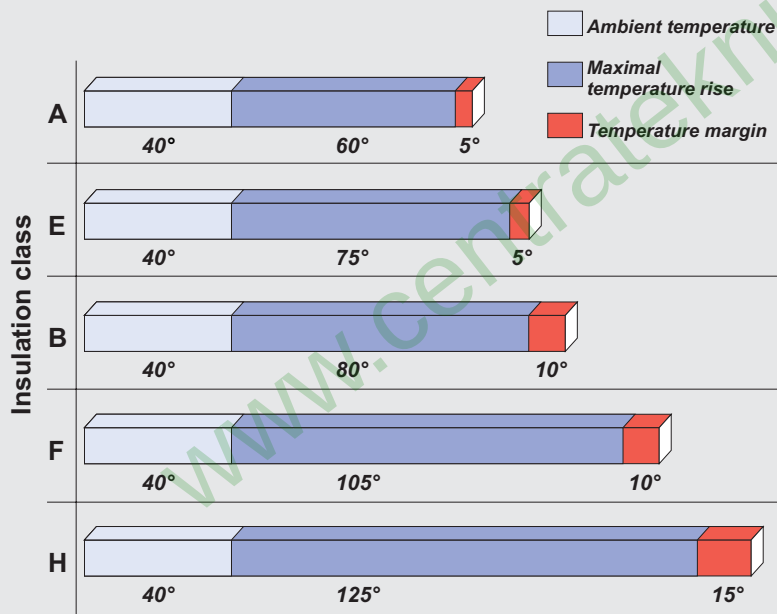
Insulation class F for an electric motor means that at ambient temperature of 40°C the temperature rise of its windings may be max. 105°C with the additional temperature margin of 10°C (under specified measuring conditions in accordance with the IEC 60034-1 standard).

Class F

The motors made by Cantoni Motor in their basic version have the insulation class F while the temperature rise is for class B. It means longer life of motors.

On customer's demand, we make motors with insulation class H.

Strengthened insulation system makes it possible to supply our motors from frequency inverters.



DEGREE OF PROTECTION IP

According to the IEC 60034-5 standard the electric motors are provided with IP code which determines the degree of protection ensured by the housing against access to dangerous parts, introducing foreign matter and/or water.

The IP code consists of IP code letters and two obligatory digits, meaning:

The first digit (protection from introduction Of solid foreign matter)		The second digit (protection against penetration of water and its harmful effects)	
IP	Definition	IP	Definition
0	no protection	0	no protection
1	diameter ≥ 50 mm	1	dropping vertically
2	diameter $\geq 12,5$ mm	2	dropping (up to 15°)
3	diameter $\geq 2,5$ mm	3	sprayed
4	diameter $\geq 1,0$ mm	4	splashed
5	limited protection against dust	5	in stream
		6	in strong stream
		7	under short-time immersion
		8	under permanent immersion

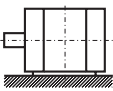
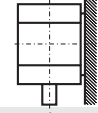
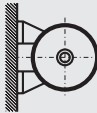
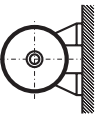
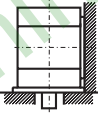
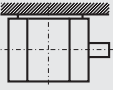
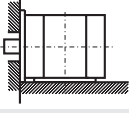
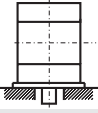
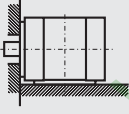
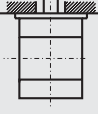
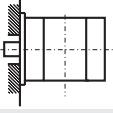
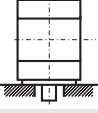
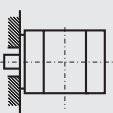
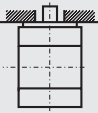
The motors described in the present catalogue in their basic version have the IP 55 degree of protection.

On demand we make motors with the IP 56 degree of protection.

IP55

MOUNTING ARRANGEMENTS

According to the IEC 60034-7 standard

Horizontal shaft				Vertical shaft			
Designation				Designation			
	System II	System I	Frame size		System II	System I	Frame size
	IM 1001	IM B3	56 ÷ 500		IM 1011	IM V5	56 ÷ 315 except Sg 315 M6C except Sg 315 M8C
	IM 1051	IM B6	56 ÷ 280		IM 1031	IM V6	56 ÷ 315 except Sg 315 M6C except Sg 315 M8C
	IM 1061	IM B7	56 ÷ 280		IM 2011 IM 2111	IM V15	56 ÷ 315 except SLg 315 M6C except SLg 315 M8C
	IM 1071	IM B8	56 ÷ 280		IM 2031 IM 2131	IM V36	56 ÷ 315 except SLg 315 M6C except SLg 315 M8C
	IM 2001	IM B35	56 ÷ 500		IM 3011	IM V1	56 ÷ 500 except SVEE 355 (2-pole) except SVh 355 (2-pole) except SVh 400 (2-pole)
	IM 2101	IM B34	56 ÷ 132		IM 3031	IM V3	56 ÷ 280
	IM 3001	IM B5	56 ÷ 315 except SKg 315 M6C except SKg 315 M8C		IM 3611	IM V18	56 ÷ 180
	IM 3601	IM B14	56 ÷ 132		IM 3631	IM V19	56 ÷ 180

MOTOR FEET

Motors of frame size ≤ 112 have screwed feet.

Motors of frame size 132 have screwed feet or integrated with the motor housing.

Motors of frame size ≥ 160 have feet integrated with the motor housing.

TERMINAL BOX

Terminal boxes of low voltage motors have threaded inlet holes designed for mounting cable glands. The box contains terminal board with marked terminals making possible connection of supply cables.

In addition, terminal boxes may be provided with additional terminals connected to the ends of thermal protection or anticondensation heater circuits and extra glands to connect these circuits.

Low voltage high-power motors contain terminal boxes with cable gland seals and cable clamps to prevent their removal. Inside the boxes there are special clamps used to ground the supply cable armouring.

In low voltage motors of very high power three supply busbar are used.

Box covers of low voltage high-power motors are made in form of antiimplosion membranes.

The circuits of thermal protection and anticondensation heaters are connected to separate terminal boxes.

VIBRATION LEVEL AND ACOUSTIC POWER

The rotor balancing method guarantees maintaining a normal vibration level VN in accordance with the IEC 60034-14 standard and basic acoustic power level in accordance with the IEC 60034-9 standard. On customer's demand the motors may be made with reduced vibration or noise level.

HOUSING, END SHIELDS, FEET

Frame size [mm]	Motor housing	End shields	Feet
56	Aluminium	Aluminium	Aluminium - screwed
63	Aluminium	Aluminium	Aluminium - screwed
71	Aluminium	Aluminium	Aluminium - screwed
80	Aluminium	Aluminium	Aluminium - screwed
90	Aluminium	Cast iron	Aluminium - screwed
100	Aluminium	Cast iron	Aluminium - screwed
112	Aluminium	Cast iron	Aluminium - screwed
132	Cast iron	Cast iron	Cast iron - screwed
160	Cast iron	Cast iron	Cast iron - integrated
180	Cast iron	Cast iron	Cast iron - integrated
200	Cast iron	Cast iron	Cast iron - integrated
225	Cast iron	Cast iron	Cast iron - integrated
250	Cast iron	Cast iron	Cast iron - integrated
280	Cast iron	Cast iron	Cast iron - integrated
315	Cast iron	Cast iron	Cast iron - integrated
355	Cast iron	Cast iron	Cast iron - integrated
400	Cast iron	Cast iron	Cast iron - integrated
450	Cast iron	Cast iron	Cast iron - integrated
500	Cast iron	Cast iron	Cast iron - integrated

In motors of frame size 80: end shields may be made of cast iron.

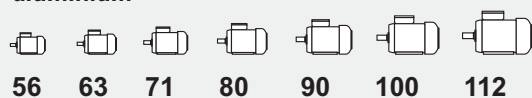
In motors of frame size 90 and 100: end shields may be made of aluminium.

In motors of frame size 132: feet may be integrated with housing.

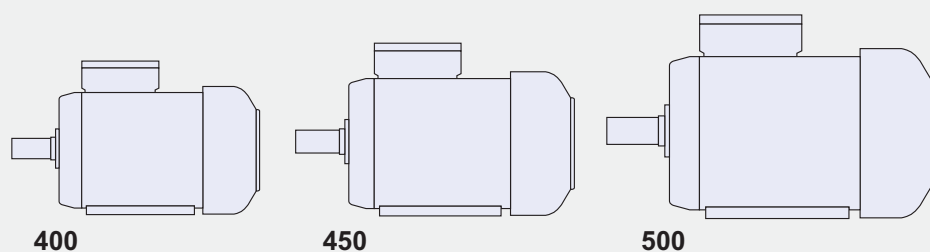
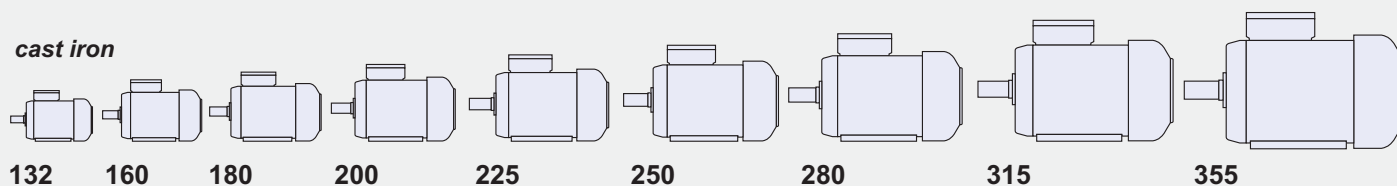
Motor housing

 aluminium  cast iron

aluminium



cast iron



PERMISSIBLE LOADING ON THE SHAFT END

Frame size	Number of poles	Horizontal operation	Vertical operation	Frame size	Number of poles	Horizontal operation	Vertical operation
		$F_R(x=0)$ $F_R(x=\max)$ [kN]	F_P F_{a1} F_{a2} [kN]			$F_R(x=0)$ $F_R(x=\max)$ [kN]	F_P F_{a1} F_{a2} [kN]
Sg 56	2	0,20 0,16	0,04 0,03 0,05	Sg 200 LA	6	2,80 2,30	2,40 1,80 3,30
Sg 56	4	0,25 0,20	0,05 0,04 0,06	Sg 200 LB	6	2,70 2,20	2,40 1,60 3,40
Sg 63	2	0,20 0,16	0,04 0,04 0,06	Sg 200 L	8	3,10 2,60	2,7 2,00 3,60
Sg 63	4	0,25 0,20	0,06 0,05 0,07	Sg 225 S	4	2,90 2,30	2,50 1,80 3,40
Sg 63	6	0,27 0,22	0,06 0,05 0,07	Sg 225 S	8	3,90 3,10	3,20 2,50 4,20
Sh 71	2	0,29 0,24	0,07 0,05 0,09	Sg 225 M	2	2,20 1,80	1,70 1,10 2,50
Sh 71	4	0,36 0,30	0,09 0,07 0,11	Sg 225 M	4	2,70 2,10	2,40 1,60 3,50
Sh 71	6	0,40 0,35	0,10 0,08 0,12	Sg 225 M	6	3,10 2,50	2,80 1,90 4,00
Sh 71	8	0,40 0,35	0,11 0,09 0,13	Sg 225 M	8	3,70 2,90	3,10 2,30 4,30
Sh 80	2	0,33 0,27	0,09 0,06 0,12	Sg 250 M	2	2,60 2,10	2,00 1,30 3,00
Sh 80	4	0,44 0,37	0,12 0,09 0,15	Sg 250 M	4	3,20 2,60	2,80 1,80 4,20
Sh 80	6	0,51 0,42	0,14 0,11 0,17	Sg 250 M	6	3,60 2,90	3,20 2,00 4,90
Sh 80	8	0,51 0,42	0,17 0,15 0,20	Sg 250 M	8	4,10 3,40	3,60 2,30 5,30
Sh 90	2	0,58 0,44	0,53 0,30 0,40	Sg 280 S	2	3,20 2,70	2,60 1,40 4,00
Sh 90	4	0,64 0,52	0,60 0,30 0,40	Sg 280 S	4	3,90 3,30	3,50 2,10 5,40
Sh 90	6	0,74 0,68	0,73 0,30 0,40	Sg 280 S	6	5,00 4,20	4,20 2,90 5,90
Sh 90	8	0,82 0,74	0,80 0,30 0,40	Sg 280 S	8	5,50 4,60	4,60 3,30 6,50
Sg 100	2	0,78 0,56	0,70 0,25 0,40	Sg 280 M	2	3,10 2,50	2,50 1,30 4,10
Sg 100	4	0,81 0,79	0,83 0,25 0,40	Sg 280 M	4	3,70 3,10	3,50 1,90 5,50
Sg 100	6	0,98 0,92	0,98 0,25 0,40	Sg 280 M	6	4,80 4,00	4,10 2,70 6,10
Sg 100	8	1,12 1,04	1,11 0,25 0,40	Sg 280 M	8	5,20 4,30	4,50 2,90 6,70
Sg 112	2	0,70 0,56	0,67 0,25 0,40	Sg 315 S	2	3,70 3,20	3,00 1,60 4,80
Sg 112	4	0,81 0,71	0,79 0,25 0,40	Sg 315 S	4	6,40 5,30	4,90 3,10 7,30
Sg 112	6	0,92 0,84	0,92 0,25 0,40	Sg 315 S	6	7,40 6,20	6,30 4,30 8,90
Sg 112	8	1,05 0,97	1,05 0,25 0,40	Sg 315 S	8	8,40 7,00	7,00 5,00 9,60
Sg 132	2	1,02 0,94	1,04 0,17 0,57	Sg 315 MA	2	3,60 3,00	2,90 1,50 4,80
Sg 132	4	1,16 1,04	1,16 0,17 0,57	Sg 315 MB	2	3,30 2,80	2,90 1,30 4,90
Sg 132	6	1,40 1,22	1,37 0,17 0,57	Sg 315 MA	4	6,20 5,10	4,80 2,90 7,40
Sg 132	8	1,63 1,39	1,57 0,17 0,57	Sg 315 MB	4	5,90 4,90	4,80 2,70 7,50
Sg 160	2	1,23 1,09	1,22 0,82 1,07	Sg 315 MA	6	7,20 6,00	6,20 4,10 9,00
Sg 160	4	1,35 1,13	1,32 1,00 1,39	Sg 315 MB	6	6,80 5,60	6,10 3,60 9,30
Sg 160	6	1,61 1,37	1,58 1,26 1,62	Sg 315 MA	8	8,20 6,80	6,90 4,80 9,70
Sg 160	8	1,92 1,50	1,80 1,47 1,80	Sg 315 MB	8	7,70 6,40	6,80 4,30 10,00
Sg 180	2	1,90 1,66	1,65 1,00 1,20	SEE 315 MC	2	2,90 2,50	2,80 1,00 5,10
Sg 180	4	2,42 1,82	1,98 1,00 1,35	SEE 315 MC	4	7,50 6,30	4,70 2,60 7,40
Sg 180	6	2,75 2,07	2,15 1,60 1,95	SEE 315 MD	6	8,30 6,90	5,30 2,50 9,00
Sg 180	8	3,30 2,04	2,49 1,90 2,44	SEE 315 MD	8	9,40 7,80	5,90 3,10 9,60
Sg 200 LA	2	2,00 1,60	1,50 1,10 2,10	SEE 355	adaptation to belt drive on customer's request		
Sg 200 LB	2	1,80 1,50	1,50 1,00 2,10	Sg 355	adaptation to belt drive on customer's request		
Sg 200 L	4	2,40 1,90	2,10 1,50 2,90	Sh 400-450	adaptation to belt drive on customer's request		
				Sh 500	adaptation to belt drive on customer's request		

Value of radial force F_R acting on the shaft end for a given belt pulley diameter is calculated according to the following formula:

$$F_R = \frac{19600 \times P \times k}{D_K \times n} \text{ [N]}$$

where: P - motor output [kW]
 D_K - belt pulley diameter [m]
 n - speed [rpm]
 k - belt tension factor:
 for V-belts $k=2,2$
 for flat belts $k=3$

Value of force F_R acting on any point of the shaft end (between points $X=\max$ and $X=0$) may be calculated according to the following formula:

$$F_R = F_{X0} - \frac{X}{E} \times (F_{X0} - F_{XMAX}) \text{ [N]}$$

where: F_{X0} - value of F_R force acting on the beginning of the shaft end
 F_{XMAX} - value of F_R force acting on the end of the shaft end
 E - length of the shaft end

BEARINGS

Frame size	Number of poles	Bearings
Sg 56	for all	6201 2Z
Sg 63	for all	6202 2Z
Sh 71	for all	6203 2Z
Sh 80	for all	6204 2Z
Sh 90	for all	6205 2Z
Sg 100	for all	6206 2Z
Sg 112	for all	6306 2Z
Sg 132	for all	6308 2Z
Sg 160	for all	6309 2Z
Sg 180	for all	6311 2Z
2Sg 200	for all	6212 2ZC3
2Sg 225	for all	6213 2ZC3
2Sg 250	for all	6215 2ZC3
2Sg 280	2	6215 C3
2Sg 280	4 ÷ 12	6217 C3
2Sg 315	2	6315 C3
2Sg 315	4 ÷ 12	6318 C3

Bearings in standard version for horizontal duty.

Frame size		Number of poles	Bearings
Sg 315 MC	DE NDE	6 ÷ 8	NU320 EM1 6320 C3
SEE 315		2	6315 ZC3
SEE 315	DE NDE	4 ÷ 8	6320 C3 6318 C3
Sg 355		2	6317 C3
Sg 355	DE NDE	4 ÷ 12	NU322 C3 6322 C3
SEE 355		2	6217 C3
SEE 355		4 ÷ 8	6222 C3
Sh 355		2	6217 C3
Sh 355		4 ÷ 8	6322 C3
Sh 400		2	6218 C3
Sh 400	DE NDE	4 ÷ 8	6324 MC3 6322 MC3
Sh 450	DE NDE	4 ÷ 10	6324 MC3 NU222 EM1
Sh 500	DE NDE	4 ÷ 10	NU226 EM1+ 6226 C3 Nu226 EM1

COOLING SYSTEM

Standard motors of frame size 56 ÷ 500 are being cooled down by means of a fan installed on the shaft from the non-drive end, covered with steel cover, cooling system IC 411 according to the IEC 60034-6 standard.

The design of fans and fan covers as well as materials used ensure optimum utilization of their aerodynamic and aeroacoustic properties.

Standard motors can operate in both directions of rotation, with the exception of Sh 355, 400, 450, 500 (2 and 4 poles) motors where unidirectional fans are applied.

ORDERING INFORMATION

Orders for motors should specify:

- motor type designation,
- rated output,
- rated speed,
- operating duty,
- supply voltage and connection,
- frequency,
- mounting arrangements,
- degree of protection,
- machine to be driven,
- other details of out-of-catalogue or special version,

and information concerning additional accessories e.g.

- thermal protection,
- anticondensation heaters,
- vibration sensors,
- etc.

When ordering high-power or special purpose motors one should also indicate:

- required direction of rotation,
- required degree of interior protection,
- method of start-up,
- method of coupling with the driven unit (gears, dimensions of belt pulleys, etc.),
- type of driven machine (nature of load), including the moment of inertia J or flywheel effect GD^2 brought to the motor shaft,
- other customer's specifications.

When ordering spare parts one should specify:

- full designation of the motor type including its serial number (provided on the nameplate) or catalogue number,
- degree of protection,
- mounting form,
- name of part,
- number of pieces.

TECHNICAL DATA

¹ - insulation class H

Totally enclosed motors IP55

Item	Type	Rated output		Rated speed N _N [rpm]	Rated torque T _N [Nm]	Efficiency			Power factor cos φ _N [-]	Full load current			Locked rotor torque T _L /T _N [-]	Locked rotor current I _L /I _N [-]	Breakdown torque T _b /T _N [-]	Moment of inertia J [kgm²]	Sound power level L _{WA} [dB]	Sound pressure level L _{pA} [dB]	Weight (IMB3) m [kg]
		P _N				η _N [%] at % of full load				I _N at rated voltage									
		[kW]	[HP]			50%	75%	100%		[A] _{230V}	[A] _{380V}	[A] _{400V}							
2p=4																			

¹ - insulation class H² - at rated voltage 690 V

Totally enclosed motors IP55

Item	Type	Rated output		Rated speed	Rated torque	Efficiency			Power factor	Full load current				Locked rotor torque	Locked rotor current	Breakdown torque	Moment of inertia	Sound power level	Sound pressure level	Weight (IMB3)			
		P _N				η _N	at % of full load			I _N at rated voltage													
		[kW]	[HP]			n _N	T _N	η _N [%]		50%	75%	100%	cos φ _N								I _N at rated voltage		
		[rpm]	[Nm]			50%	75%	100%		[-]	[A] _{230V}	[A] _{380V}	[A] _{400V}										
2p=6 n _s =1000 rpm																							
82.	Sg 56-6B	0,06	0,08	900	0,637	34	36	40	0,65	0,6	0,35	0,35	1,5	1,8	1,6	0,00019	62	55	3,4				
83.	Sg 63-6A	0,09	0,12	820	1,05	26	32	40	0,75	0,8	0,45	0,45	1,1	1,9	1,3	0,00024	57	50	3,6				
84.	Sg 63-6B	0,12	0,17	880	1,3	40	46	53	0,7	0,85	0,5	0,5	1,1	2,6	1,6	0,00031	62	55	4,2				
85.	Sh 71-6A	0,18	0,25	890	1,93	47	54	57	0,68	1,3	0,75	0,75	1,9	2,6	1,9	0,00074	57	50	4,9				
86.	Sh 71-6B	0,25	0,33	860	2,78	45	52	55	0,79	1,75	1	1	1,6	2,3	1,6	0,00095	57	50	5,8				
87.	Sh 80-6A	0,37	0,50	910	3,88	61	63	64	0,65	2,4	1,4	1,4	2	3	2,1	0,00169	59	52	7,3				
88.	Sh 80-6B	0,55	0,75	900	5,84	62	65	67	0,7	3,1	1,8	1,8	1,9	2,7	2	0,00207	65	58	8,6				
89.	Sh 90S-6	0,75	1,00	915	7,83	70,2	73,3	72,4	0,72	3,6	2,2	2,1	1,9	3,7	2,2	0,002	63	53	13,5				
90.	Sh 90L-6	1,1	1,50	920	11,42	73,5	76,2	75,4	0,71	4,6	3,1	2,9	2,2	4	2,2	0,0028	71	61	16,5				
91.	Sg 100L-6	1,5	2,00	945	15,16	74	76,9	76,7	0,73	6,8	4,1	3,9	1,9	4,6	2,3	0,009	71	61	24				
92.	Sg 112M-6	2,2	3,00	960	21,89	81,6	83,8	83,8	0,78	8,3	5,1	4,8	2,2	5,9	2,8	0,0177	71	61	33				
93.	Sg 132S-6	3	4,00	950	30,16	79,2	81,5	81	0,78	11,8	7,2	6,8	2,1	5,4	2,8	0,025	76	65	54				
94.	Sg 132M-6A	4	5,50	950	40,21	83,5	84,8	84	0,79	14,9	9,1	8,6	2,4	6	3,1	0,032	76	65	66				
95.	Sg 132M-6B	5,5	7,50	950	55,29	84,8	85,9	85	0,79	20,4	12,4	11,8	2,7	6,3	3,1	0,04	76	65	72				
96.	Sg 160M-6	7,5	10,0	960	74,61	86,6	87,9	87,5	0,81	26,3	16	15,2	2,3	6,5	3,1	0,072	80	69	100				
97.	Sg 160L-6	11	15,0	960	109,4	88,3	89,2	88,5	0,82	37,9	23	21,9	2,4	7	3,1	0,096	80	69	125				
98.	Sg 180L-6	15	20,0	975	146,9	88	89,2	89	0,84	50,3	30,5	29,	2,8	6	2,4	0,22	84	73	170				
99.	Sg 200L6A	18,5	25,0	980	180	90	90,8	90,5	0,86	60	36	34,5	2,5	6,8	2,4	0,41	75	63	250				
100.	Sg 200L6B	22	30,0	981	214	90	90,8	90,5	0,88	69	42	40	2,4	6,9	2,2	0,47	73	63	265				
101.	Sg 225M6	30	40,0	982	292	92,3	92,5	91,9	0,88	93	56	54	2,1	6,3	2,2	0,76	83	73	325				
102.	Sg 250M6	37	50,0	985	359	92	92,8	92,5	0,89	113	68	65	2,6	6,8	2,3	1,23	78	68	430				
103.	Sg 280S6	45	60,0	985	436	91,8	93	93	0,87	140	85	80	2	6,5	2,3	1,35	78	68	525				
104.	Sg 280M6	55	75,0	985	533	93,2	93,5	93,5	0,89	166	100	95	2,2	6,2	2,2	1,61	78	68	565				
105.	Sg 315S6	75	100	985	727	93,2	93,6	93,5	0,89	226	137	130	2,3	6,6	2,2	2,16	78	68	730				
106.	Sg 315M6A	90	125	984	873	92,8	93,8	93,7	0,88	274	166	158	2,5	6,8	2	2,29	78	68	740				
107.	Sg 315M6B	110	150	985	1066	93	94	94,2	0,89	329	199	189	2,3	7,2	2,1	2,86	78	68	840				
108.	Sg 315M6C	132	175	987	1278	94	94,5	94,5	0,86	-	-	235	2	6,5	2,7	5,1	84	75	1065				
109.	SEE 315M6D ¹	160	220	984	1553	95	94,9	94,4	0,87	-	-	284	2,4	6	2,3	3,69	92	82	1120				
110.	Sg 355S6	160	220	989	1544	94	94,6	94,5	0,86	-	-	284	1,6	5,5	2,2	7,5	87	78	1330				
111.	SEE 355ML6A	200	270	990	1928	95,5	96	95,8	0,86	-	-	351	2,2	7,1	2,3	6,2	84	75	1650				
112.	SEE 355ML6B	250	340	990	2412	95,7	96,1	95,9	0,86	-	-	437	2,2	7,1	2,4	7,7	87	75	1790				
113.	Sh 355H6Cs	315	430	991	3034	96	96,2	96,1	0,86	-	-	550	1,9	7	2,2	11	90	78	2370				
114.	Sh 355H6Ds	355	480	991	3421	96	96,2	96,2	0,86	-	-	621	1,8	6,9	2,3	12,2	90	78	2480				
115.	Sh 400H6Bs	400	540	992	3851	95,6	96,3	96,3	0,84	-	-	714	1,4	6,8	2,2	16,5	92	80	3050				
116.	Sh 400H6Cs	450	610	993	4328	95,8	96,3	96,3	0,85	-	-	795	1,5	7,2	2,2	18,4	93	80	3200				
117.	Sh 450H6As	500	680	994	4803	96,6	96,9	96,8	0,88	-	-	491 ²	1,2	6,7	2,6	36,5	93	80	3800				
118.	Sh 450H6Bs	560	760	994	5379	96,7	97	96,9	0,88	-	-	549 ²	1,2	6,8	2,6	40,6	93	80	4300				
119.	Sh 450H6Cs	630	850	994	6050	96,7	97,1	97	0,89	-	-	611 ²	1,3	7	2,6	45	93	80	4500				
120.	Sh 450H6Ds	710	960	994	6821	96,7	97	97	0,89	-	-	689 ²	1,4	7,4	2,6	49	93	80	4800				
121.	Sh 500H6As	800	1080	995	7678	96,7	97,1	97	0,86	-	-	802 ²	0,9	5,8	2,2	61	93	80	6200				
122.	Sh 500H6Bs	900	1210	995	8638	96,8	97,1	97	0,87	-	-	893 ²	1	6	2,2	71	93	80	6550				
123.	Sh 500H6Cs	1000	1350	995	9598	96,7	97,1	97,1	0,86	-	-	1003 ²	1,1	6,8	2,5	80	93	80	6930				
124.	Sh 500H6Ds	1120	1510	995	10750	96,7	97,1	97,1	0,87	-	-	1110 ²	1,1	6,9	2,5	86,7	93	80	7220				
125.	Sh 500H6Es	1250	1680	995	11997	96,8	97,2		0,86	-	-	1252 ²	1,1	7,1	2,5	92,5	93	80	7490				

¹ - insulation class H² - at rated voltage 690V

TECHNICAL DATA

Totally enclosed motors IP55

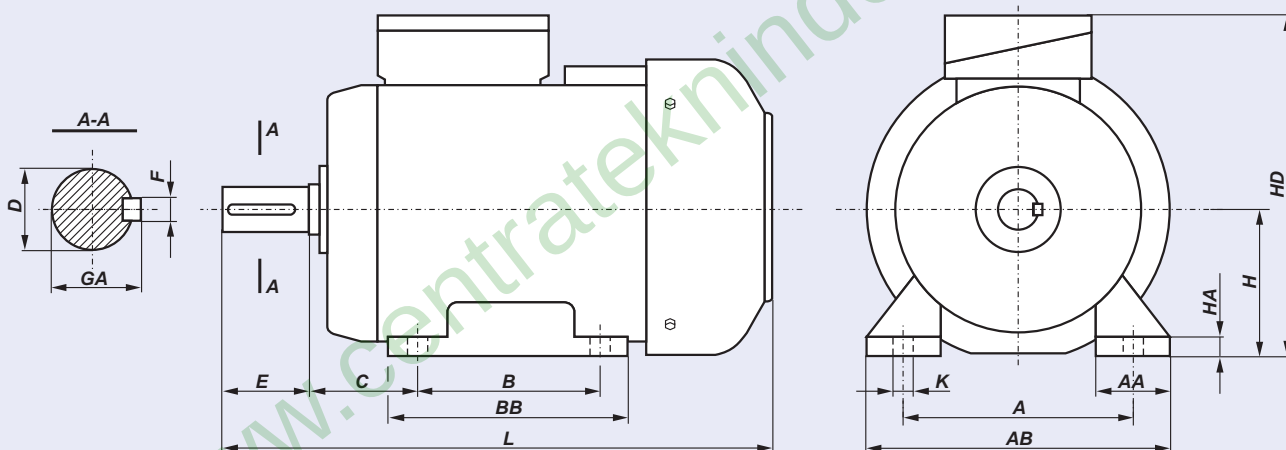
Item	Type	Rated output		Rated speed	Rated torque	Efficiency			Power factor	Full load current			Locked rotor torque	Locked rotor current	Breakdown torque	Moment of inertia	Sound power level	Sound pressure level	Weight (IMB3)										
		P _N				η _N	T _N	η _N [%] at % of full load			cos φ _N	I _N at rated voltage								T _L /T _N	I _L /I _N	T _B /T _N	J	L _{WA}	L _{PA}	m			
		[kW]	[HP]			[rpm]	[Nm]	50%		75%	100%	[-]								[A] _{230V}	[A] _{380V}	[A] _{400V}	[-]	[-]	[-]	[kgm²]	[dB]	[dB]	[kg]
2p=8 n _s =750 rpm																													
126.	Sg 63-8A	0,04	0,05	670	0,57	20	31	35	0,6	0,6	0,35	0,35	1,6	1,7	1,7	0,00024	57	50	3,6										
127.	Sg 63-8B	0,06	0,08	670	0,85	25	34	38	0,6	0,8	0,45	0,45	1,6	1,7	1,7	0,000307	57	50	4,2										
128.	Sh 71-8A	0,09	0,12	680	1,26	25	31	35	0,5	1,3	0,75	0,75	1,9	1,9	1,9	0,000736	57	50	4,9										
129.	Sh 71-8B	0,12	0,17	670	1,71	40	45	47	0,63	1,25	0,7	0,7	1,7	1,9	1,8	0,000946	57	50	5,8										
130.	Sh 80-8A	0,18	0,25	680	2,53	43	51	53	0,6	1,55	0,9	0,9	1,8	2,3	2	0,001693	60	53	7,5										
131.	Sh 80-8B	0,25	0,33	680	3,51	52	55	57	0,6	2,1	1,2	1,2	1,7	2,5	1,9	0,00207	60	53	8,9										
132.	Sh 90S-8	0,37	0,50	695	5,08	54,2	60,8	63,4	0,59	2,4	1,5	1,4	1,7	2,9	2,3	0,0021	59	49	13,4										
133.	Sh 90L-8	0,55	0,75	675	7,78	60,4	65,3	65	0,64	3,3	2	1,9	1,7	2,8	1,9	0,0024	60	50	15,3										
134.	Sg 100L-8A	0,75	1,00	710	10,1	65,9	70,5	71,1	0,66	4	2,4	2,3	1,4	3,5	1,9	0,009	69	59	23,6										
135.	Sg 100L-8B	1,1	1,50	705	14,9	67,6	71,8	72,2	0,65	5,9	3,6	3,4	1,6	3,6	1,9	0,01	71	61	26,3										
136.	Sg 112M-8	1,5	2,00	720	19,9	72,5	76,2	76,8	0,71	6,9	4,2	4	1,9	4,6	2,3	0,0192	71	61	31										
137.	Sg 132S-8	2,2	3,00	710	29,6	75,4	78,2	78	0,74	9,5	5,8	5,5	2	4,7	2,4	0,033	71	60	53										
138.	Sg 132M-8	3	4,00	710	40,4	78,5	80,7	80	0,74	12,6	7,7	7,3	2,3	5	3	0,044	76	65	65										
139.	Sg 160M-8A	4	5,50	705	54,2	81,5	82,7	81,5	0,76	16,1	9,8	9,3	2,2	5	2,7	0,06	76	65	85										
140.	Sg 160M-8B	5,5	7,50	710	74	82,1	83,7	83	0,75	22	13,4	12,7	2,7	5,5	3	0,077	76	65	95										
141.	Sg 160L-8	7,5	10,0	705	102	84,5	85,5	84,5	0,78	28,2	17,2	16,3	2,7	5,8	3	0,102	80	69	115										
142.	Sg 180L-8	11	15,0	730	144	87,7	89,2	89	0,76	40,7	24,7	23,5	2	5,5	2,4	0,213	80	69	165										
143.	Sg 200L8	15	20,0	733	196	88,8	90	89,5	0,83	50	30,5	29,1	2,2	5,5	2,1	0,45	70	60	255										
144.	Sg 225S8	18,5	25,0	735	240	88,8	90	89,5	0,81	64	39	37	2	5,6	2	0,58	70	60	280										
145.	Sg 225M8	22	30,0	735	286	90	90,8	90,4	0,8	76	46	44	2	5,2	1,8	0,68	70	60	315										
146.	Sg 250M8	30	40,0	738	388	91	92	91,5	0,84	98	59	56	2,5	6,3	2,1	1,27	75	65	430										
147.	Sg 280S8	37	50,0	737	479	92	93,1	92,8	0,83	121	73	69	2	5,3	1,8	1,47	75	65	535										
148.	Sg 280M8	45	60,0	737	583	92	92,8	92,5	0,84	145	88	84	2,1	5,4	2	1,8	75	65	590										
149.	Sg 315S8	55	75,0	735	715	92	93	92,7	0,81	184	111	106	2	5,3	1,9	2,16	75	65	720										
150.	Sg 315M8A	75	100	737	972	92,5	93,5	93,2	0,82	246	149	142	2,5	6,2	1,9	2,29	75	65	750										
151.	Sg 315M8B	90	125	737	1166	92,5	93,5	93,2	0,82	296	179	170	2,4	6,5	1,9	2,86	75	65	840										
152.	Sg 315M8C	110	150	740	1419	92,3	93,1	93	0,84	-	-	203	1,6	6,7	2,9	5,1	86	75	1060										
153.	SEE 315M8D ¹	132	175	737	1711	92,7	93,3	93,2	0,78	-	-	267	2,3	5,4	2,2	3,69	88	86	1120										
154.	Sg 355S8	132	175	741	1701	93,7	94,7	94,8	0,8	-	-	351	1,3	5,5	2	7,2	87	76	1320										
155.	SEE 355ML8A	160	220	739	2067	95,1	95,5	95	0,8	-	-	306	1,6	5,8	2	6,1	85	74	1600										
156.	SEE 355ML8B	200	270	740	2582	95,1	95,6	95,2	0,79	-	-	384	1,8	6,2	2,1	7,5	85	74	1750										
157.	Sh 355H8Ds	250	340	744	3209	95,5	96	95,8	0,77	-	-	489	1,3	6	2	11,8	88	77	2440										
158.	Sh 355H8Es	315	430	743	4049	95,6	96	95,8	0,78	-	-	609	1,4	6,1	2	13,8	88	77	2590										
159.	Sh 400H8Ds	355	480	743	4563	95,8	96	96	0,79	-	-	676 ²	1,2	6,3	2	18,6	89	78	3250										
160.	Sh 400H8Es	400	540	743	5141	95,8	96	96	0,79	-	-	762 ²	1,2	6,4	2	22,2	89	78	3700										
161.	Sh 450H8Bs	450	610	746	5761	95,5	96,3	96,4	0,78	-	-	501 ²	1	5,8	2,1	41,6	89	78	4400										
162.	Sh 450H8Cs	500	580	746	6401	95,5	96,3	96,4	0,78	-	-	557 ²	1	5,8	2,1	46	89	78	4600										
163.	Sh 450H8Ds	560	760	746	7169	95,6	96,4	96,5	0,78	-	-	623 ²	1	5,7	2,1	49	89	78	4770										
164.	Sh 450H8Es	630	850	746	8065	95,8	96,4	96,5	0,79	-	-	692 ²	1	5,6	2	53,8	89	78	4980										
165.	Sh 500H8Bs	710	960	746	9089	96,3	96,8	96,8	0,81	-	-	758 ²	1	6	2	75	89	78	6200										
166.	Sh 500H8Cs	800	1080	746	10241	96,3	96,9	96,9	0,81	-	-	853 ²	1	6,4	2,1	82,4	89	78	6500										
167.	Sh 500H8Ds	900	1210	745	11537	96,4	96,9	96,9	0,81	-	-	962 ²	1	6,2	2	88,6	89	78	6990										
168.	Sh 500H8Es	1000	1350	745	12819	96,4	96,9	96,9	0,81	-	-	1081 ²	1	6,4	2,1	95,5	89	78	7400										

¹ insulation class H² at rated voltage 690 V

Item	Type	Rated output		Rated speed	Rated torque	Efficiency			Power factor	Full load current			Locked rotor torque	Locked rotor current	Breakdown torque	Moment of Inertia	Sound power Level	Sound pressure level	Weight (IMB3)										
		P _N				η _N	T _N	η _N [%] at % of full load			cos φ _N	I _N at rated voltage								T _L /T _N	I _L /I _N	T _b /T _N	J	L _{WA}	L _{PA}	m			
		[kW]	[HP]			[rpm]	[Nm]	50%		75%	100%	[-]								[A] _{230V}	[A] _{380V}	[A] _{400V}	[-]	[-]	[-]	[kgm ²]	[dB]	[dB]	[kg]
2p=10 n _s =600 rpm																													
169.	Sg 200L10A	7,5	10,0	580	123	82,5	84	85	0,68	32,5	19,7	18,7	1,7	3,5	2,1	0,4	73	63	240										
170.	Sg 200L10B	11	15,0	590	178	84,7	86,7	87,5	0,68	46,5	28,1	26,7	3,2	5,9	2,4	0,47	73	63	255										
171.	Sg 225S10	13	18,0	580	214	83,5	85	86	0,68	55,5	33,8	32,1	1,8	3,8	2	0,6	73	63	305										
172.	Sg 225M10	15	20,0	590	243	86	88	89	0,67	63	38,2	36,3	2,8	5,4	2	0,76	73	63	325										
173.	Sg 225M10z	18,5	25,0	590	300	84,3	87,1	87,7	0,64	83	50	47,5	2,1	5,5	2,8	0,76	73	63	325										
174.	Sg 250M10	22	30,0	585	359	84	86,2	87	0,67	93,5	57	54	2	4,3	2	1,27	78	68	450										
175.	Sg 180S10A	30	50,0	585	490	85,5	87,5	89	0,71	119	72	68,4	2	4,5	1,7	1,47	80	70	490										
176.	Sg 280S10B	37	60,0	588	601	87	90	91	0,74	137	83	79	1,9	4,5	1,5	1,61	80	70	520										
177.	Sg 280M10	45	60,0	587	732	88	90,5	91,6	0,76	161	98	93	2	4,5	1,6	2,03	80	70	570										
178.	Sg 315S10	45	60,0	588	731	90	91,5	92,1	0,71	171	105	99	2	4,1	2	2,16	80	70	720										
179.	Sg 315S10z	55	75,0	583	901	88	90,5	91,5	0,75	201	122	116	1,7	4,7	1,9	2,86	80	70	840										
180.	Sg 315M10	75	100	583	1229	88	90,5	91,5	0,75	274	166	158	1,8	4,9	1,5	3,01	80	70	895										
181.	Sg 355S10	75	100	592	1211	92,3	93,5	93,3	0,78	-	-	148,9	1,3	5,6	2,2	6,8	86	75	1150										
182.	Sg 355S10A	90	125	592	1453	92,9	93,9	93,8	0,78	-	-	177,8	1,4	5,9	2,3	8,2	97	77	1250										
183.	Sg 355S10B	110	150	592	1775	93,4	94,2	94	0,79	-	-	214,1	1,4	5,9	2,3	10,3	87	77	1390										
184.	Sg 355M10A	132	175	592	2131	93,9	94,6	94,4	0,8	-	-	252,6	1,5	6	2,3	12,7	87	77	1620										
185.	Sg 355M10B	160	220	592	2582	93,8	94,8	94,8	0,79	-	-	308,7	1,6	6,3	2,5	14,1	87	77	1730										
186.	Sh 450H10As	315	430	594	5064	94,9	95,5	95,5	0,81	-	-	341 ¹	1	5,9	2,2	49,4	89	78	4050										
187.	Sh 450H10Bs	355	480	594	5707	95	95,7	95,7	0,81	-	-	384 ¹	1	6	2,3	53,9	89	78	4130										
188.	Sh 450H10Cs	400	540	594	6431	95	95,7	95,7	0,81	-	-	432 ¹	1,1	6,4	2,3	58,3	89	78	4300										
189.	Sh 500H10As	450	610	594	7235	95,1	95,8	95,7	0,81	-	-	486 ¹	1,4	6,3	2,1	74,1	90	79	5420										
190.	Sh 500H10Bs	500	680	594	8039	95,2	95,9	95,8	0,82	-	-	533 ¹	1,5	6,6	2,2	85,5	90	79	5700										
191.	Sh 500H10Cs	560	760	593	9018	95,4	95,9	95,8	0,82	-	-	597 ¹	1,3	6,2	2	94,2	90	79	5950										
192.	Sh 500H10Ds	630	850	594	10129	95,5	96	96	0,82	-	-	670 ¹	1,7	6,9	2,2	108	90	79	6300										
2p=12 n _s =500 rpm																													
193.	Sg 200L12	9	12,0	490	175	75,3	80,1	81,8	0,55	50	30,5	28,9	2,7	4,3	2,5	0,47	75	64	255										
194.	Sg 200L12z	11	15,0	487	216	81	82	82,5	0,58	57,7	34,9	33,2	2,5	4,2	1,9	0,53	77	66	320										
195.	Sg 225S12	11	15,0	475	221	80,7	82,2	82	0,59	57	34,5	32,8	1,7	3,5	1,7	0,58	80	70	320										
196.	Sg 225M12	13	18,0	475	261	81,5	82,2	82,5	0,59	67	40,5	38,6	1,7	3,5	1,7	0,68	80	70	350										
197.	Sg 250M12	18,5	25,0	480	368	83	85	84,5	0,59	94	56	54	1,7	3,5	1,8	1,27	80	70	450										
198.	Sg 280S12	22	30,0	485	433	85	87	87	0,61	104	63	60	1,8	3,5	1,8	1,35	81	71	520										
199.	Sg 280M12	30	40,0	485	591	85	87	87,5	0,62	139	84	80	1,8	3,5	1,8	1,61	81	71	570										
200.	Sg 315S12	37	50,0	490	721	87,1	89,3	89	0,58	180	109	104	2	3,5	1,9	2,16	82	72	720										
201.	Sg 315M12A	45	60,0	490	877	87,1	89,3	89	0,58	218	132	126	2	3,5	1,8	2,86	82	72	890										
202.	Sg 315M12B	55	75,0	490	1072	87,5	90	89,5	0,58	265	161	153	2	3,8	1,8	3,01	82	72	930										
203.	Sg 355S12	75	100	491	1460	91,7	93,1	93	0,75	-	-	155,4	1,2	4,5	1,9	8,3	86	75	1250										
204.	Sg 355S12A	90	125	491	1751	92,6	93,7	93,5	0,75	-	-	185,5	1,3	5	2	10,4	86	75	1390										
205.	Sg 355S12B	110	150	491	2141	92,6	93,7	93,5	0,75	-	-	226,7	1,3	5	2	12,1	87	76	1570										
206.	Sg 355M12	132	175	492	2564	92	93,4	93,8	0,75	-	-	271,1	1,4	5,4	2,1	13,1	89	78	1730										

1 - at rated voltage 690 V

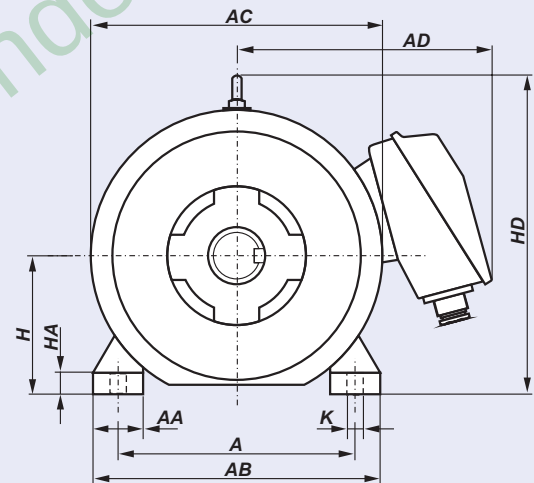
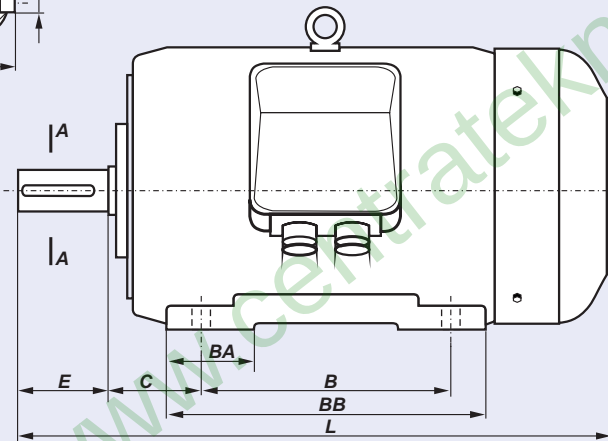
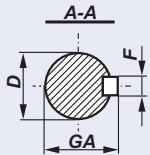
FOOT MOUNTED MOTORS - IM B3



Motor type	A	B	C	D	E	F	GA	H	HA	K	AA	AB	BB	HD	L
Sg 56-2A	90	71	36	9j6	20	3h9	10,2	56	7	5,8	30	110	92	154	188
Sg 56-4A	90	71	36	9j6	20	3h9	10,2	56	7	5,8	30	110	92	154	149 *
Sg 56-2B	90	71	36	9j6	20	3h9	10,2	56	7	5,8	30	110	92	154	196
Sg 56-4B	90	71	36	9j6	20	3h9	10,2	56	7	5,8	30	110	92	154	157 *
Sg 56-6B	90	71	36	9j6	20	3h9	10,2	56	7	5,8	30	110	92	154	196
Sg 63-A	100	80	40	11j6	23	4h9	12,5	63	8,5	7	36	124	106	165	202
Sg 63-B	100	80	40	11j6	23	4h9	12,5	63	8,5	7	36	124	106	165	214
Sh 71-A	112	90	45	14j6	30	5h9	16,0	71	8	7	45	142	116	182	223
Sh 71-B	112	90	45	14j6	30	5h9	16,0	71	8	7	45	142	116	182	245
Sh 80-A	125	100	50	19j6	40	6h9	21,5	80	9	10	55	160	130	200	266
Sh 80-B	125	100	50	19j6	40	6h9	21,5	80	9	10	55	160	130	200	278
Sh 90S ...	140	100	56	24j6	50	8h9	27,0	90	10	10	50	170	153	220	305
Sh 90L ...	140	125	56	24j6	50	8h9	27,0	90	10	10	50	170	153	220	330
Sg 100L ...	160	140	63	28j6	60	8h9	31,0	100	14	12	45	200	172	240	376
Sg 112M ...	190	140	70	28j6	60	8h9	31,0	112	14	12	54	230	174	276	384
Sg 132S ...	216	140	89	38k6	80	10h9	41,0	132	16	12	56	278	182	310	463
Sg 132S-2B	216	140	89	38k6	80	10h9	41,0	132	16	12	56	278	220	310	501
Sg 132M ...	216	178	89	38k6	80	10h9	41,0	132	16	12	56	278	220	310	501
Sg 160M ...	254	210	108	42k6	110	12h9	45,0	160	20	15	60	305	256	370	612
Sg 160L ...	254	254	108	42k6	110	12h9	45,0	160	20	15	60	305	300	370	656
Sg 180M ...	279	241	121	48k6	110	14h9	51,5	180	26	15	70	350	320	408	705
Sg 180L ...	279	279	121	48k6	110	14h9	51,5	180	26	15	70	350	320	408	705

* - the Sg 56-4A and 4B motors in their standard version have neither fan nor fan cover

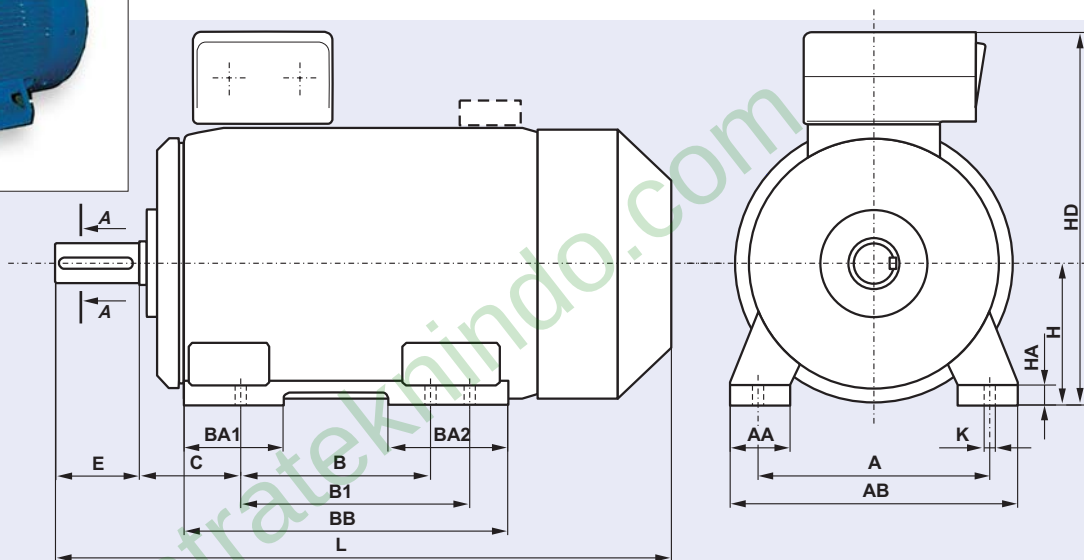
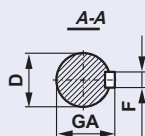
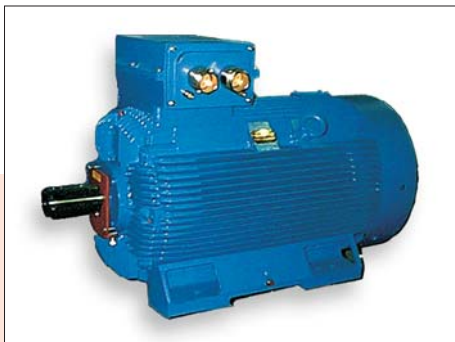
FOOT MOUNTED MOTORS - IM B3



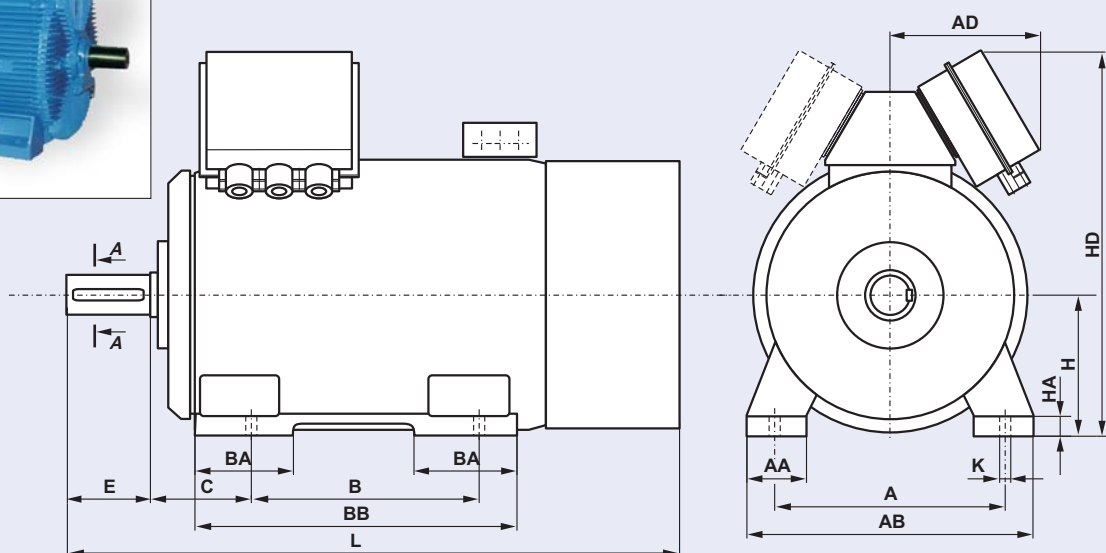
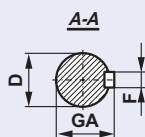
Motor type	A	B	C	D	E	F	GA	H	HA	K	AA	AB	AC	AD	BA	BB	HD	L
Sg 200 L2+12	318	305	133	55m6	110	16h9	59,0	200	32	19	80	400	450	355	100	380	485	810
Sg 225 S4+12	356	286	149	60m6	140	18h9	64,0	225	34	19	85	445	505	375	110	355	535	860
Sg 225 M2	356	311	149	55m6	110	16h9	59,0	225	34	19	85	445	505	375	110	380	535	855
Sg 225 M4+12	356	311	149	60m6	140	18h9	64,0	225	34	19	85	445	505	375	110	380	535	885
Sg 250 M2	406	349	168	60m6	140	18h9	64,0	250	36	24	90	495	540	415	120	420	590	980
Sg 250 M4+12	406	349	168	65m6	140	18h9	69,0	250	36	24	90	495	540	415	120	420	590	980
Sg 280 S2	457	368	190	65m6	140	18h9	69,0	280	40	24	100	560	620	450	165	520	660	1040
Sg 280 S4+12	457	368	190	75m6	140	20h9	79,5	280	40	24	100	560	620	450	165	520	660	1040
Sg 280 M2	457	419	190	65m6	140	18h9	69,0	280	40	24	100	560	620	450	165	520	660	1040
Sg 280 M4+12	457	419	190	75m6	140	20h9	79,5	280	40	24	100	560	620	450	165	520	660	1040
Sg 315 S2	508	406	216	65m6	140	18h9	69,0	315	46	28	105	610	620	450	190	560	695	1180
Sg 315 S4+12	508	406	216	80m6	170	22h9	85,0	315	46	28	105	610	620	450	190	560	695	1210
Sg 315 M2	508	457	216	65m6	140	18h9	69,0	315	46	28	105	610	620	450	190	560	695	1180
Sg 315 M4+12	508	457	216	80m6	170	22h9	85,0	315	46	28	105	610	620	450	190	560	695	1210
Sg 315 M6+8C	508	457	216	80m6	170	22h9	85,5	315	45	28	130	640	694	585	150	550	750	1240
Sg 355 S2	610	500	254	80m6	170	22h9	85,0	355	50	28	158	720	764	620	170	600	848	1354
Sg 355 S4+12	610	500	254	100m6	210	28h9	106,0	355	50	28	158	720	764	620	170	600	848	1394
Sg 355 M10+12	610	560	254	100m6	210	28h9	106,0	355	50	28	158	720	764	620	205	730	848	1454

DIMENSION DRAWINGS

FOOT MOUNTED MOTORS - IM B3

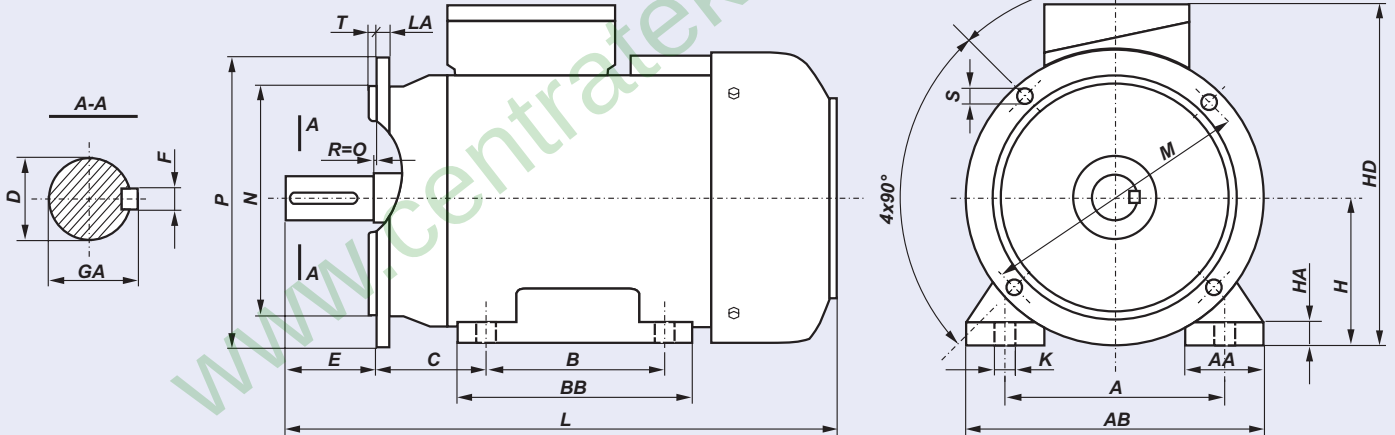


Type	Poles	A	B	B1	C	D	E	F	GA	H	HA	K	AA	AB	BA1	BA2	BB	HD	L
SEE 315M..	2	508	457	-	216	65	140	18	69	315	46	28	120	610	117	168	550	805	1225
SEE 315M..	4÷8	508	457	-	216	80	170	22	85	315	46	28	120	610	117	168	550	805	1255
SEE 355....	2	610	560	630	254	80	170	22	85	355	50	28	150	720	250	300	890	935	1580
SEE 355....	4÷8	610	560	630	254	100	210	28	106	355	50	28	150	720	250	300	890	935	1620
Sh 355...s	2	610	900	-	200	70	140	20	75	355	45	28	160	730	265	265	1045	995	1800
Sh 355...s	4÷8	610	900	-	200	100	210	28	106	355	45	28	160	730	265	265	1045	995	1870



Type	Poles	A	B	C	D	E	F	GA	H	HA	K	AA	AB	AD	BA	BB	HD	L
Sh 400...s	2	686	1000	224	80	170	22	85	400	50	35	175	840	520	265	1160	1255	1975
Sh 400...s	4÷8	686	1000	224	110	210	28	116	400	50	35	175	840	520	265	1160	1255	1960
Sh 450...s	4÷10	750	1120	254	110	210	28	116	450	60	35	205	940	560	340	1320	1356	2105
Sh 500...s	4÷10	850	1250	280	120	210	32	127	500	70	42	223	1050	560	300	1450	1470	2430

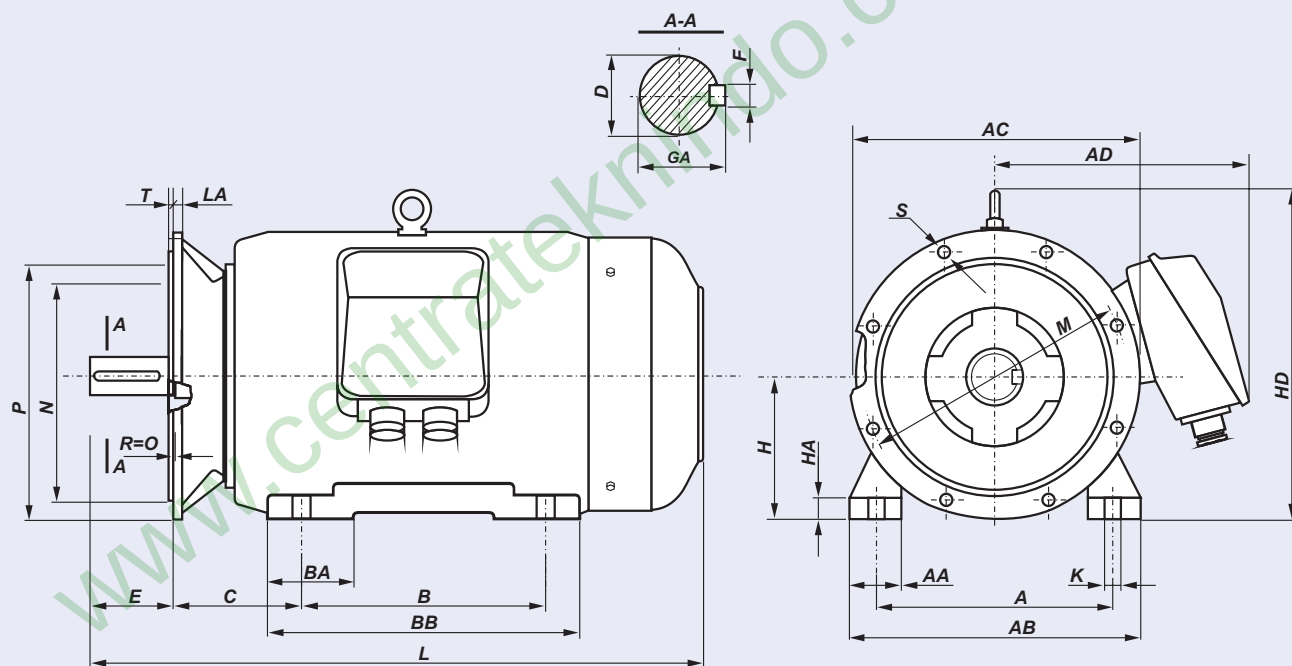
FOOT/FLANGE MOUNTED MOTORS - IM B35



DIMENSION DRAWINGS

Motor type	A	B	C	D	E	F	GA	H	HA	K	AA	AB	BB	HD	L	LA	M	N	P	T	S
SLg 56-2A	90	71	36	9j6	20	3h9	10,2	56	7,0	8,0	30	110	92	154	188	8	100	80j6	120	3,0	7
SLg 56-4A	90	71	36	9j6	20	3h9	10,2	56	7,0	8,0	30	110	92	154	149	8	100	80j6	120	3,0	7
SLg 56-2B	90	71	36	9j6	20	3h9	10,2	56	7,0	8,0	30	110	92	154	196	8	100	80j6	120	3,0	7
SLg 56-4B	90	71	36	9j6	20	3h9	10,2	56	7,0	8,0	30	110	92	154	157	8	100	80j6	120	3,0	7
SLg 56-6B	90	71	36	9j6	20	3h9	10,2	56	7,0	8,0	30	110	92	154	196	8	100	80j6	120	3,0	7
SLg 63- .A	100	80	40	11j6	23	4h9	12,5	63	8,5	10,0	36	124	106	165	202	9	115	95j6	140	3,0	10
SLg 63- .B	100	80	40	11j6	23	4h9	12,5	63	8,5	10,0	36	124	106	165	214	9	115	95j6	140	3,0	10
SLh 71- .A	112	90	45	14j6	30	5h9	16,0	71	8,0	10,0	45	142	116	182	223	9	130	110j6	160	3,5	10
SLh 71- .B	112	90	45	14j6	30	5h9	16,0	71	8,0	10,0	45	142	116	182	245	9	130	110j6	160	3,5	10
SLh 80- .A	125	100	50	19j6	40	6h9	21,5	80	9,0	10,0	55	160	130	200	266	10	165	130j6	200	3,5	12
SLh 80- .B	125	100	50	19j6	40	6h9	21,5	80	9,0	10,0	55	160	130	200	278	10	165	130j6	200	3,5	12
SLh 90S ...	140	100	56	24j6	50	8h9	27,0	90	10,0	10,0	50	170	153	220	305	8	165	130j6	200	3,5	12
SLh 90L ...	140	125	56	24j6	50	8h9	27,0	90	10,0	10,0	50	170	153	220	330	8	165	130j6	200	3,5	12
SLg 100L ...	160	140	63	28j6	60	8h9	31,0	100	14,0	12,0	45	200	172	240	376	11	215	180j6	250	4,0	15
SLg 112M ...	190	140	70	28j6	60	8h9	31,0	112	14,0	12,0	54	230	174	276	384	12	215	180j6	250	4,0	15
SLg 132S ...	216	140	89	38k6	80	10h9	41,0	132	16,0	12,0	56	278	182	310	463	12	265	230j6	300	4,0	15
SLg 132S-2B	216	140	89	38k6	80	10h9	41,0	132	16,0	12,0	56	278	220	310	501	12	265	230j6	300	4,0	15
SLg 132M ...	216	178	89	38k6	80	10h9	41,0	132	16,0	12,0	56	278	220	310	501	12	265	230j6	300	4,0	15
SLg 160M ...	254	210	108	42k6	110	12h9	45,0	160	20,0	15,0	60	305	256	370	612	13	300	250j6	350	5,0	19
SLg 160L ...	254	254	108	42k6	110	12h9	45,0	160	20,0	15,0	60	305	300	370	656	13	300	250j6	350	5,0	19
SLg 180M ...	279	241	121	48k6	110	14h9	51,5	180	26,0	15,0	70	350	320	408	705	13	300	250j6	350	5,0	19
SLg 180L ...	279	279	121	48k6	110	14h9	51,5	180	26,0	15,0	70	350	320	408	705	13	300	250j6	350	5,0	19

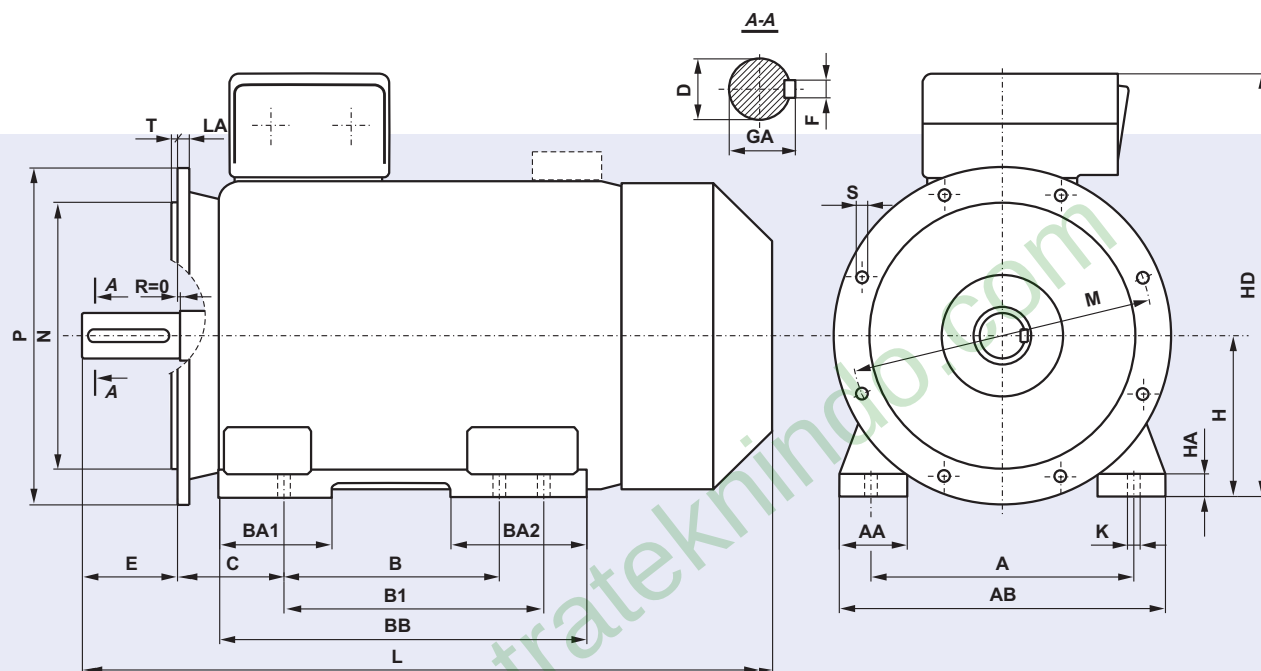
FOOT/FLANGE MOUNTED MOTORS - IM B35



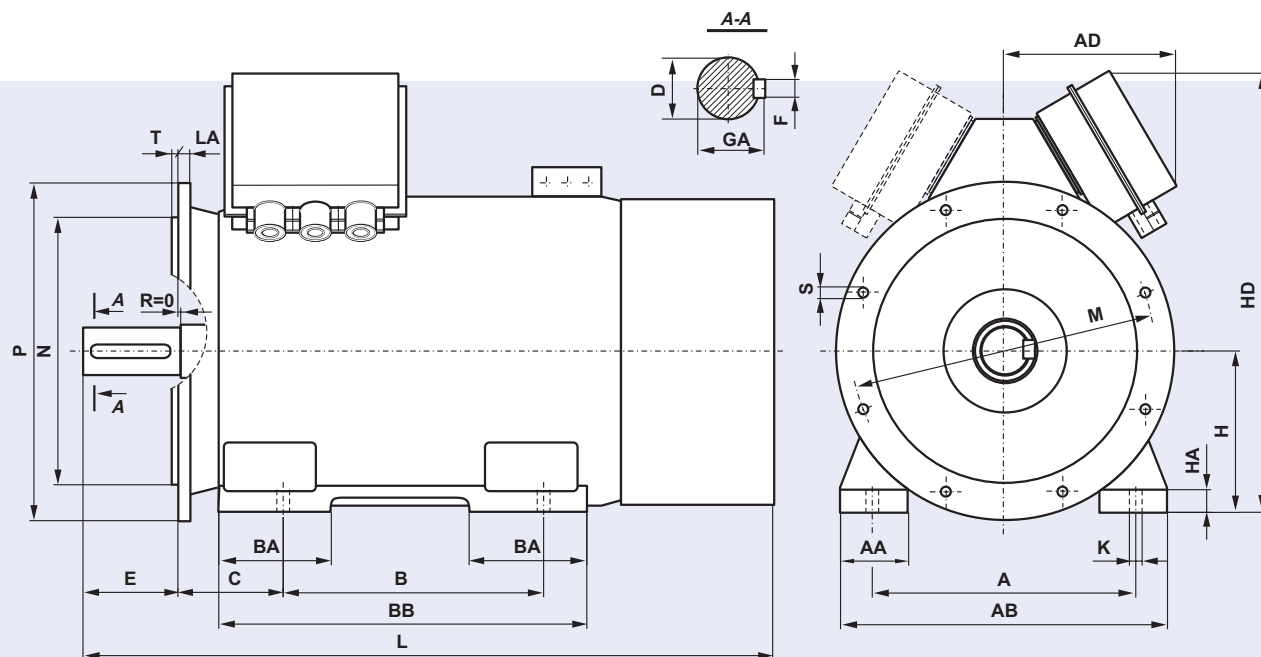
Motor type	A	B	C	D	E	F	GA	H	HA	K	AA	AB	AC	AD	BA	BB	HD	L	LA	M	N	P	T	S	φ holes
SLg 200 L2÷12	318	305	133	55m6	110	16h9	59	200	32	19	80	400	450	355	100	380	485	810	16,5	350	300	400	5	18	4
SLg 225 S4÷12	356	286	149	60m6	140	18h9	64	225	34	19	85	445	505	375	110	355	535	860	18	400	350	450	5	18	8
SLg 225 M2	356	311	149	55m6	110	16h9	59	225	34	19	85	445	505	375	110	380	535	855	18	400	350	450	5	18	8
SLg 225 M4÷12	356	311	149	60m6	140	18h9	64	225	34	19	85	445	505	375	110	380	535	885	18	400	350	450	5	18	8
SLg 250 M2	406	349	168	60m6	140	18h9	64	250	36	24	90	495	540	415	120	420	590	980	19	500	450	550	5	18	8
SLg 250 M4÷12	406	349	168	65m6	140	18h9	69	250	36	24	90	495	540	415	120	420	590	980	19	500	450	550	5	18	8
SLg 280 S2	457	368	190	65m6	140	18h9	69	280	40	24	100	560	620	450	165	520	660	1040	20	500	450	550	5	18	8
SLg 280 S4÷12	457	368	190	75m6	140	20h9	79,5	280	40	24	100	560	620	450	165	520	660	1040	20	500	450	550	5	18	8
SLg 280 M2	457	419	190	65m6	140	18h9	69	280	40	24	100	560	620	450	165	520	660	1040	20	500	450	550	5	18	8
SLg 280 M4÷12	457	419	190	75m6	140	20h9	79,5	280	40	24	100	560	620	450	165	520	660	1040	20	500	450	550	5	18	8
SLg 315 S2	508	406	216	65m6	140	18h9	69	315	46	28	105	610	620	450	190	560	695	1180	22	600	550	660	6	22	8
SLg 315 S4÷12	508	406	216	80m6	170	22h9	85	315	46	28	105	610	620	450	190	560	695	1210	22	600	550	660	6	22	8
SLg 315 M2	508	457	216	65m6	140	18h9	69	315	46	28	105	610	620	450	190	560	695	1180	22	600	550	660	6	22	8
SLg 315 M4÷12	508	457	216	80m6	170	22h9	85	315	46	28	105	610	620	450	190	560	695	1210	22	600	550	660	6	22	8
SLg 355 S2	610	500	254	80m6	170	22h9	85,0	355	50	28	158	720	764	620	170	600	848	1354	24	740	680	800	6	24	8
SLg 355 S4÷12	610	500	254	100m6	210	28h9	106	355	50	28	158	720	764	620	170	600	848	1394	24	740	680	800	6	24	8
SLg 355 M10÷12	610	560	254	100m6	210	28h9	106	355	50	28	158	720	764	620	205	730	848	1454	24	740	680	800	6	24	8

the motors from SLg200L to SLg 315 are also available in mounting arrangements: IM B65, IM B75 i IM B85

FOOT/FLANGE MOUNTED MOTORS - IM B35

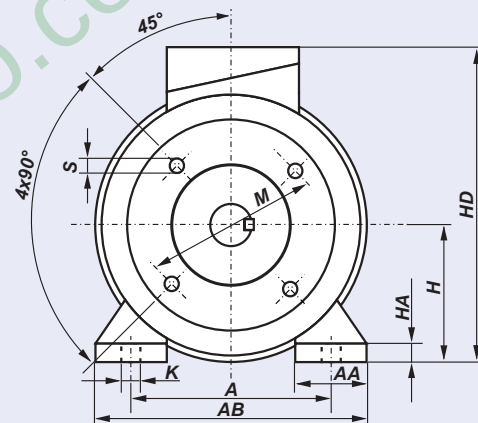
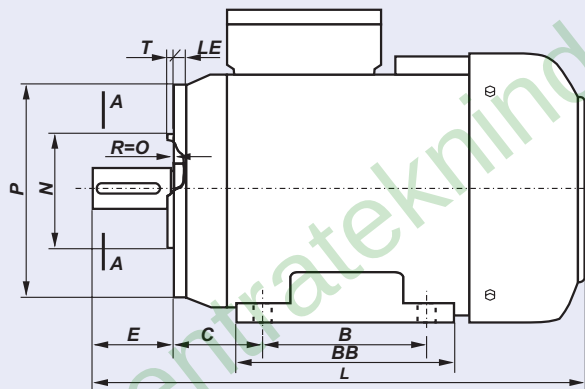
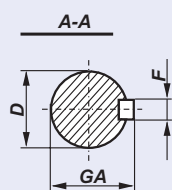


Type	Poles	A	B	B1	C	D	E	F	GA	H	HA	K	AA	AB	BA1	BA2	BB	HD	L	LA	M	N	P	S	T
SLEE 315M...	2	508	457	-	216	65	140	18	69	315	46	28	120	610	117	168	550	805	1225	22	600	550	660	24	6
SLEE 315M...	4+8	508	457	-	216	80	170	22	85	315	46	28	120	610	117	168	550	805	1255	22	600	550	660	24	6
SLEE 355....	2	610	560	630	254	80	170	22	85	355	50	28	150	720	250	300	890	935	1580	24	740	680	800	22	6
SLEE 355....	4+8	610	560	630	254	100	210	28	106	355	50	28	150	720	250	300	890	935	1620	24	740	680	800	22	6
SLh 355...s	2	610	900	-	254	70	140	20	74,5	355	45	28	160	730	265	265	1045	995	1854	24	740	680	800	22	6
SLh 355...s	4+8	610	900	-	254	100	210	28	106	355	45	28	160	730	265	265	1045	995	1924	24	740	680	800	22	6



Type	Poles	A	B	C	D	E	F	GA	H	HA	K	AA	AB	AD	BA	BB	HD	L	LA	M	N	P	S	T
SLh 400...s	2	686	1000	280	80	170	22	85	400	50	35	175	840	520	265	1160	1255	2031	30	940	880	1000	25	6
SLh 400...s	4+8	686	1000	280	110	210	28	116	400	50	35	175	840	520	265	1160	1255	2016	30	940	880	1000	25	6
SLh 450...s	4+10	750	1120	315	110	210	28	116	450	60	35	205	940	560	340	1320	1356	2175	30	1080	1000	1150	28	6
SLh 500...s	4+10	850	1250	355	120	210	32	127	500	70	42	223	1050	560	300	1450	1470	2505	30	1080	1000	1150	28	6

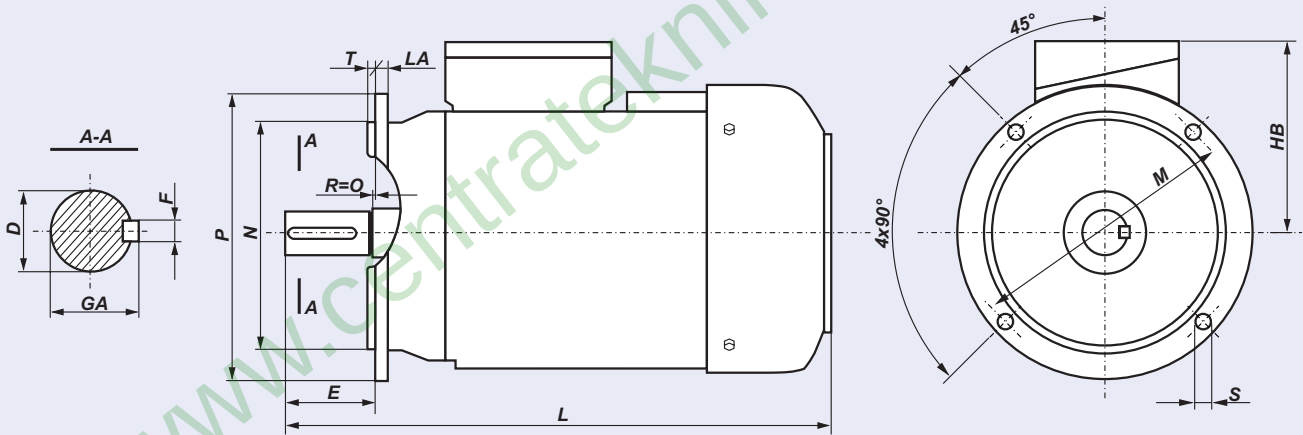
FOOT/FLANGE MOUNTED MOTORS - IM B34



Motor type	Flange	A	AA	B	C	D	E	F	GA	H	HA	K	M	N	P	S	LE	T	HD	L
SLg 56-2A1	B14/C1	90	30	71	36	9j6	20	3h9	10,2	56	7	8,0	85	70j6	105	M6	15,0	2,5	154	188
SLg 56-2A2	B14/C2	90	30	71	36	9j6	20	3h9	10,2	56	7	8,0	65	50j6	80	M5	12,5	2,5	154	188
SLg 56-4A1	B14/C1	90	30	71	36	9j6	20	3h9	10,2	56	7	8,0	85	70j6	105	M6	15,0	2,5	154	149*
SLg 56-4A2	B14/C2	90	30	71	36	9j6	20	3h9	10,2	56	7	8,0	65	50j6	80	M5	12,5	2,5	154	149*
SLg 56-2B1	B14/C1	90	30	71	36	9j6	20	3h9	10,2	56	7	8,0	85	70j6	105	M6	15,0	2,5	154	196
SLg 56-2B2	B14/C2	90	30	71	36	9j6	20	3h9	10,2	56	7	8,0	65	50j6	80	M5	12,5	2,5	154	196
SLg 56-4B1	B14/C1	90	30	71	36	9j6	20	3h9	10,2	56	7	8,0	85	70j6	105	M6	15,0	2,5	154	157*
SLg 56-4B2	B14/C2	90	30	71	36	9j6	20	3h9	10,2	56	7	8,0	65	50j6	80	M5	12,5	2,5	154	157*
SLg 56-6B1	B14/C1	90	30	71	36	9j6	20	3h9	10,2	56	7	8,0	85	70j6	105	M6	15,0	2,5	154	196
SLg 56-6B2	B14/C2	90	30	71	36	9j6	20	3h9	10,2	56	7	8,0	65	50j6	80	M5	12,5	2,5	154	196
SLg 63- .A1	B14/C1	100	36	80	40	11j6	23	4h9	12,5	63	8,5	10,0	100	80j6	120	M6	14,0	3,0	165	202
SLg 63- .A2	B14/C2	100	36	80	40	11j6	23	4h9	12,5	63	8,5	10,0	75	60j6	90	M5	9,5	2,5	165	202
SLg 63- .B1	B14/C1	100	36	80	40	11j6	23	4h9	12,5	63	8,5	10,0	100	80j6	120	M6	14,0	3,0	165	214
SLg 63- .B2	B14/C2	100	36	80	40	11j6	23	4h9	12,5	63	8,5	10,0	75	60j6	90	M5	9,5	2,5	165	214
SLh 71- .A1	B14/C1	112	45	90	45	14j6	30	5h9	16,0	71	8	10,0	115	95j6	140	M8	14,0	3,0	182	223
SLh 71- .A2	B14/C2	112	45	90	45	14j6	30	5h9	16,0	71	8	10,0	85	70j6	105	M6	12,0	2,5	182	223
SLh 71- .B1	B14/C1	112	45	90	45	14j6	30	5h9	16,0	71	8	10,0	115	95j6	140	M8	14,0	3,0	182	245
SLh 71- .B2	B14/C2	112	45	90	45	14j6	30	5h9	16,0	71	8	10,0	85	70j6	105	M6	12,0	2,5	182	245
SLh 80- .A1	B14/C1	125	55	100	50	19j6	40	6h9	21,5	80	9	10,0	130	110j6	160	M8	14,0	3,5	200	266
SLh 80- .A2	B14/C2	125	55	100	50	19j6	40	6h9	21,5	80	9	10,0	100	80j6	120	M6	12,0	3,0	200	266
SLh 80- .B1	B14/C1	125	55	100	50	19j6	40	6h9	21,5	80	9	10,0	130	110j6	160	M8	14,0	3,5	200	278
SLh 80- .B2	B14/C2	125	55	100	50	19j6	40	6h9	21,5	80	9	10,0	100	80j6	120	M6	12,0	3,0	200	278
SLh 90S ...	B14/C1	140	50	100	56	24j6	50	8h9	27,0	90	10	10,0	130	110j6	160	M8	10,0	3,5	220	305
SLh 90L ...	B14/C2	140	50	100	56	24j6	50	8h9	27,0	90	10	10,0	115	95j6	140	M8	10,0	3,0	220	305
SLh 90L ...	B14/C1	140	50	125	56	24j6	50	8h9	27,0	90	10	10,0	130	110j6	160	M8	10,0	3,5	220	330
SLh 90L ...	B14/C2	140	50	125	56	24j6	50	8h9	27,0	90	10	10,0	115	95j6	140	M8	10,0	3,0	220	330
SLg 100L ...	B14/C1	160	45	140	63	28j6	60	8h9	31,0	100	14	12,0	165	130j6	200	M10	12,0	3,5	240	376
SLg 100L ...	B14/C2	160	45	140	63	28j6	60	8h9	31,0	100	14	12,0	130	110j6	160	M8	12,0	3,5	240	376
SLg 112M ...	B14/C1	190	54	140	70	28j6	60	8h9	31,0	112	14	12,0	165	130j6	200	M10	12,0	3,5	276	384
SLg 112M ...	B14/C2	190	54	140	70	28j6	60	8h9	31,0	112	14	12,0	130	110j6	160	M8	12,0	3,5	276	384
SLg 132S ...	B14/C1	216	56	140	89	38k6	80	10h9	41,0	132	16	12,0	215	180j6	250	M12	12,0	4,0	310	463
SLg 132S ...	B14/C2	216	56	140	89	38k6	80	10h9	41,0	132	16	12,0	165	130j6	200	M12	12,0	3,5	310	463
SLg 132S-2B	B14/C1	216	56	140	89	38k6	80	10h9	41,0	132	16	12,0	215	180j6	250	M12	12,0	4,0	310	501
SLg 132S-2B	B14/C2	216	56	140	89	38k6	80	10h9	41,0	132	16	12,0	165	130j6	200	M12	12,0	3,5	310	501
SLg 132M...	B14/C1	216	56	140	89	38k6	80	10h9	41,0	132	16	12,0	215	180j6	250	M12	12,0	4,0	310	501
SLg 132M...	B14/C2	216	56	140	89	38k6	80	10h9	41,0	132	16	12,0	165	130j6	200	M12	12,0	3,5	310	501

* - the SKg 56-4A and 4B motors in their standard version have neither fan nor fan cover

FLANGE MOUNTED MOTORS - IM B5, IM V1, IM V3

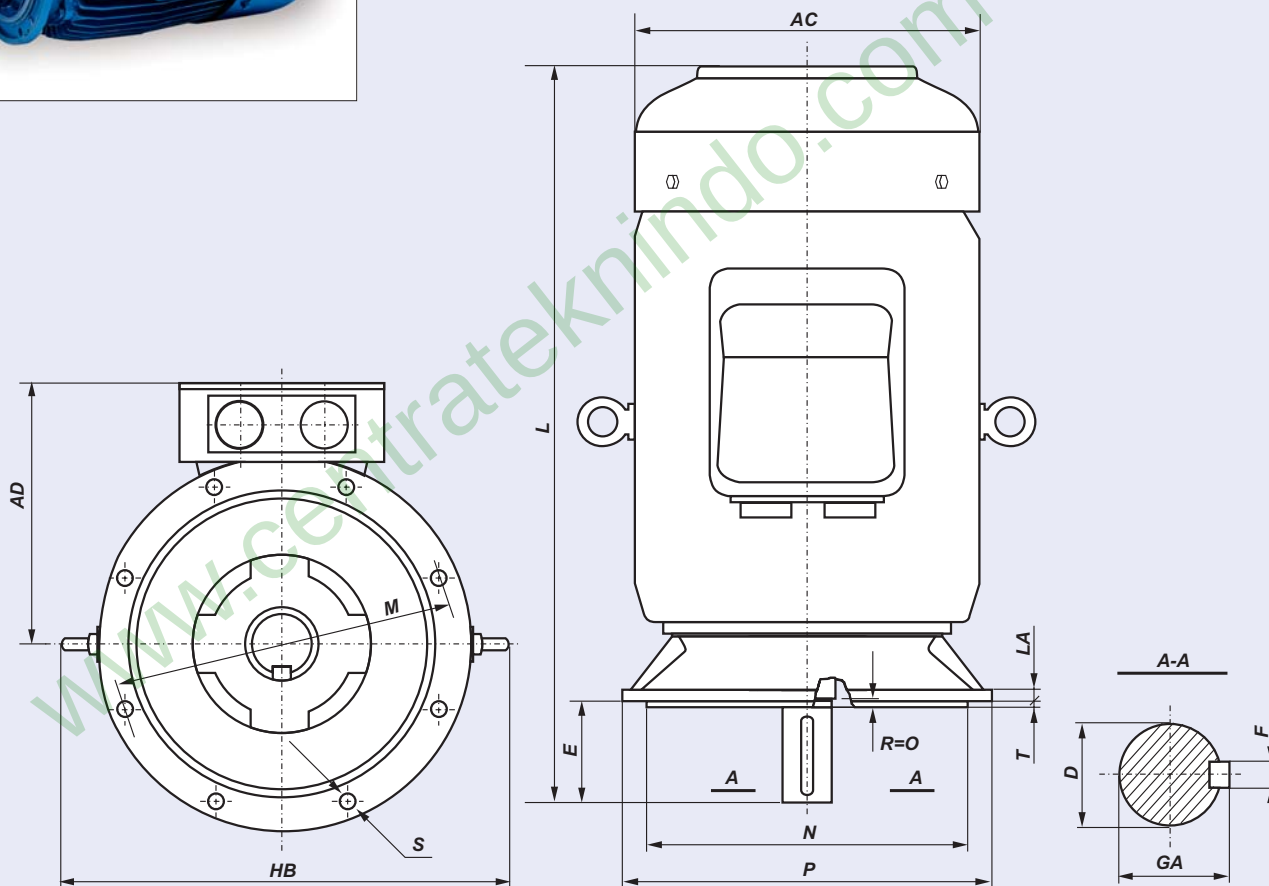


DIMENSION DRAWINGS

Type	D	E	F	GA	M	N	P	LA	T	S	HB	L
SKg 56-2A	9j6	20	3h9	10,2	100	80j6	120	8	3	7	98	188
SKg 56-4A	9j6	20	3h9	10,2	100	80j6	120	8	3	7	98	149*
SKg 56-2B	9j6	20	3h9	10,2	100	80j6	120	8	3	7	98	196
SKg 56-4B	9j6	20	3h9	10,2	100	80j6	120	8	3	7	98	157*
SKg 56-6B	9j6	20	3h9	10,2	100	80j6	120	8	3	7	98	196
SKg 63- .A	11j6	23	4h9	12,5	115	95j6	140	9	3	10	102	202
SKg 63- .B	11j6	23	4h9	12,5	115	95j6	140	9	3	10	102	214
SKh 71- .A	14j6	30	5h9	16	130	110j6	160	9	3,5	10	111	223
SKh 71- .B	14j6	30	5h9	16	130	110j6	160	9	3,5	10	111	245
SKh 80- .A	19j6	40	6h9	21,5	165	130j6	200	10	3,5	12	115	266
SKh 80- .B	19j6	40	6h9	21,5	165	130j6	200	10	3,5	12	115	278
SKh 90S ...	24j6	50	8h9	27	165	130j6	200	8	3,5	12	130	305
SKh 90L ...	24j6	50	8h9	27	165	130j6	200	8	3,5	12	130	330
SKg 100L ...	28j6	60	8h9	31	215	180j6	250	11	4	15	140	376
SKg 112M ...	28j6	60	8h9	31	215	180j6	250	12	4	15	164	384
SKg 132S ...	38k6	80	10h9	41	265	230j6	300	12	4	15	178	463
SKg 132S-2B	38k6	80	10h9	41	265	230j6	300	12	4	15	178	501
SKg 132M ...	38k6	80	10h9	41	265	230j6	300	12	4	15	178	501
SKg 160M ...	42k6	110	12h9	45	300	250j6	350	13	5	19	210	612
SKg 160L ...	42k6	110	12h9	45	300	250j6	350	13	5	19	210	656
SKg 180M ...	48k6	110	14h9	51,5	300	250j6	350	13	5	19	228	705
SKg 180L ...	48k6	110	14h9	51,5	300	250j6	350	13	5	19	228	705

* - the SKg 56-4A and 4B in their standard version have neither fan nor fan cover.

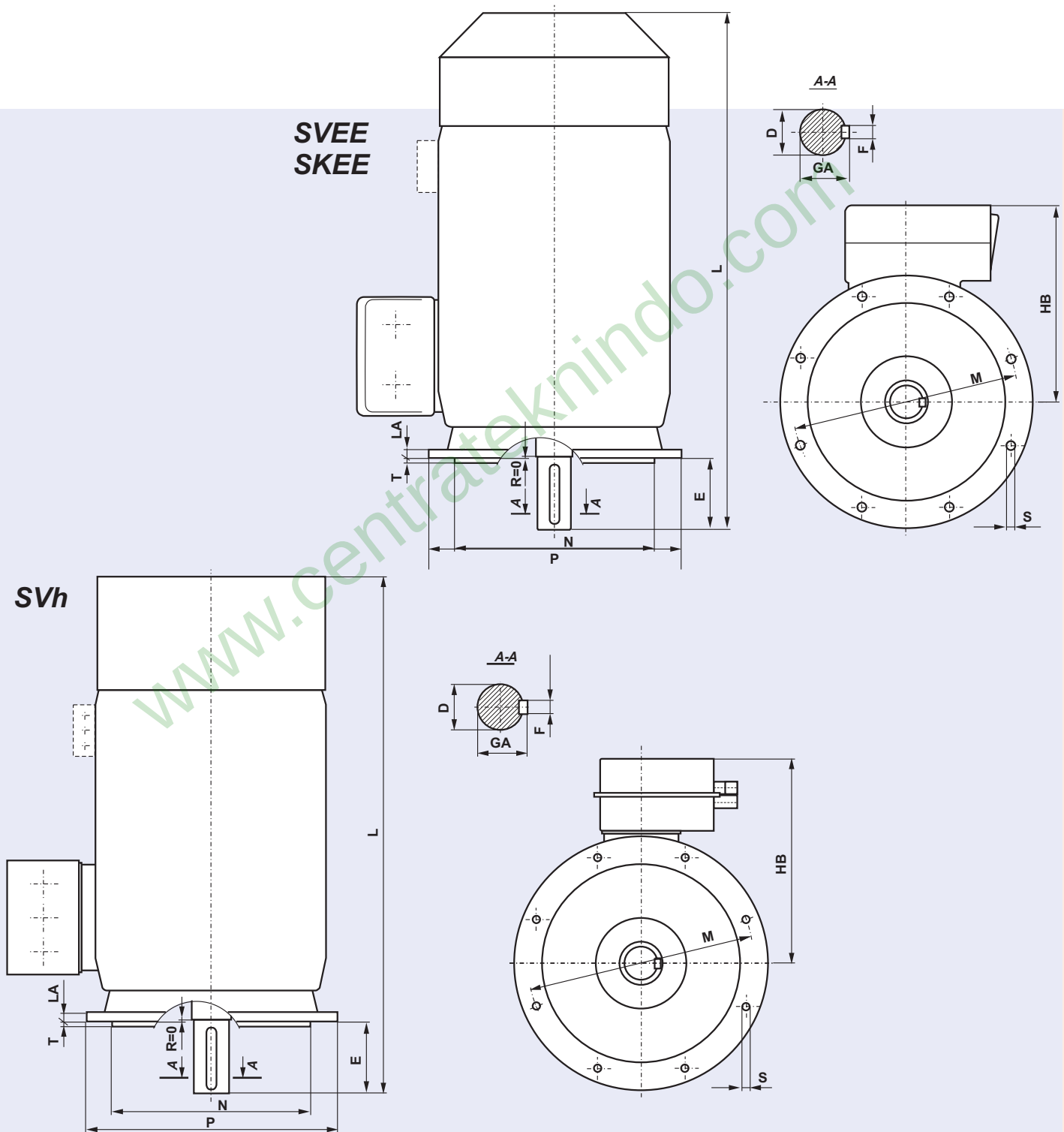
FLANGE MOUNTED MOTORS - IM B5, IM V1, IM V3



Motor type	D	E	F	GA	AC	AD	HB	L	LA	M	N	P	T	S	
SKg 200 L2+12	55m6	110	16h9	59,0	450	355	570	810	16,5	350	300j6	400	5	18	holes
SKg 225 S4+12	60m6	140	18h9	64,0	505	375	620	860	18,0	400	350j6	450	5	18	8
SKg 225 M2	55m6	110	16h9	59,0	505	375	620	855	18,0	400	350j6	450	5	18	8
SKg 225 M4+12	60m6	140	18h9	64,0	505	375	620	885	18,0	400	350j6	450	5	18	8
SKg 250 M2	60m6	140	18h9	64,0	540	415	675	980	19,0	500	450j6	550	5	18	8
SKg 250 M4+12	65m6	140	18h9	69,0	540	415	675	980	19,0	500	450j6	550	5	18	8
SKg 280 S2	65m6	140	18h9	69,0	620	450	755	1040	20,0	500	450j6	550	5	18	8
SKg 280 S4+12	75m6	140	20h9	79,5	620	450	755	1040	20,0	500	450j6	550	5	18	8
SKg 280 M2	65m6	140	18h9	69,0	620	450	755	1040	20,0	500	450j6	550	5	18	8
SKg 280 M4+12	75m6	140	20h9	79,5	620	450	755	1040	20,0	500	450j6	550	5	18	8
SKg 315 S2	65m6	140	18h9	69,0	620	450	790	1180	22,0	600	550j6	660	6	22	8
SKg 315 S4+12	80m6	170	22h9	85,0	620	450	790	1210	22,0	600	550j6	660	6	22	8
SKg 315 M2	65m6	140	18h9	69,0	620	450	790	1180	22,0	600	550j6	660	6	22	8
SKg 315 M4+12	80m6	170	22h9	85,0	620	450	790	1210	22,0	600	550j6	660	6	22	8
SVg 315 M6+8C *	80m6	170	22h9	85,0	693	551	877	1355	22,0	600	550js6	660	6	22	8
SVg 355 S4+12 *	100m6	210	28h9	106,0	767	588	970	1580	24,0	740	680js6	800	6	24	8
SVg 355 M10+12 *	100m6	210	28h9	106,0	767	588	970	1580	24,0	740	680js6	800	6	24	8

* - the SVg motors may operate only in vertical position IM V1

FLANGE MOUNTED MOTORS - IM V1

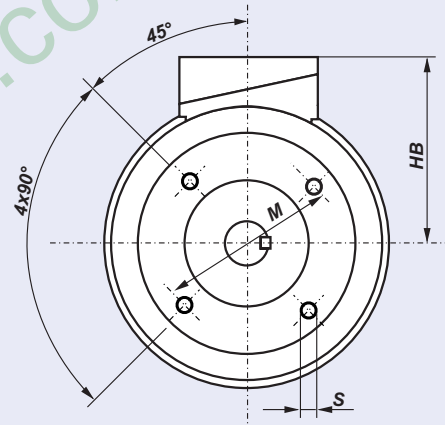
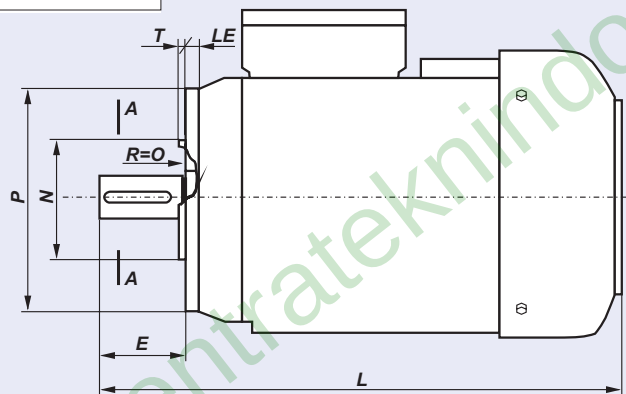
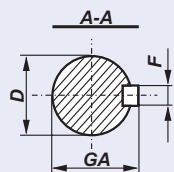


DIMENSION DRAWINGS

Type	Poles	D	E	F	GA	HB	L	LA	M	N	P	S	T
SKEE 315M..	2	65	140	18	69	490	1225	22	600	550	660	24	6
SKEE 315M..	4÷8	80	170	22	85	490	1255	22	600	550	660	24	6
SVEE 355....*	4÷8	100	210	28	106	580	1620	24	740	680	800	22	6
SVh 355...s*	4÷8	100	210	28	106	640	1955	24	740	680	800	22	6
SVh 400...s*	4÷8	110	210	28	116	695	2016	30	940	880	1000	25	6
SVh 450...s*	4÷10	110	210	28	116	745	2160	30	1080	1000	1150	28	6
SVh 500...s*	4÷10	120	210	32	127	795	2505	30	1080	1000	1150	28	6

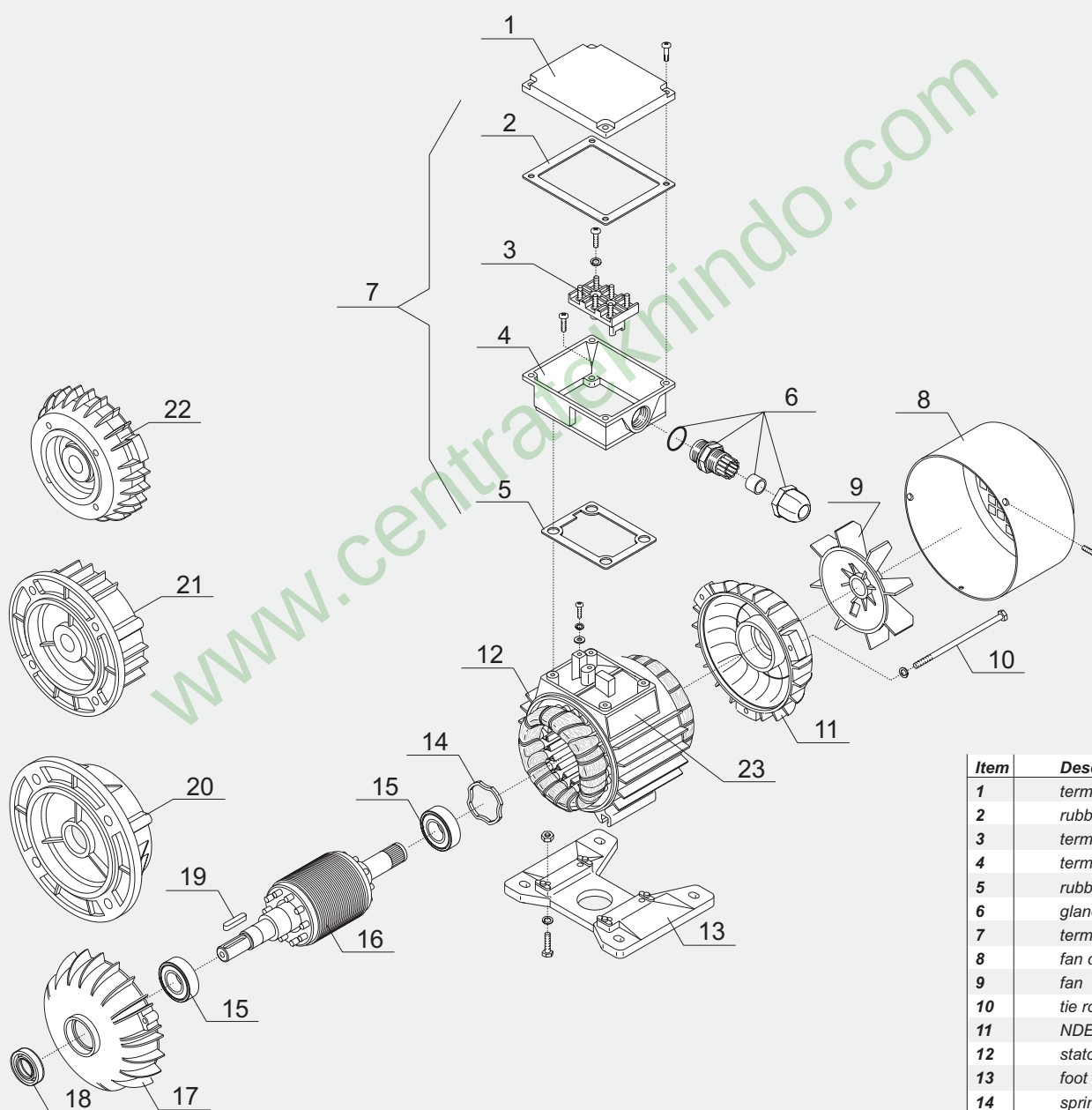
* - the SVEE and SVh motors can work in IM V1 only.

FLANGE MOUNTED MOTORS - IM B14

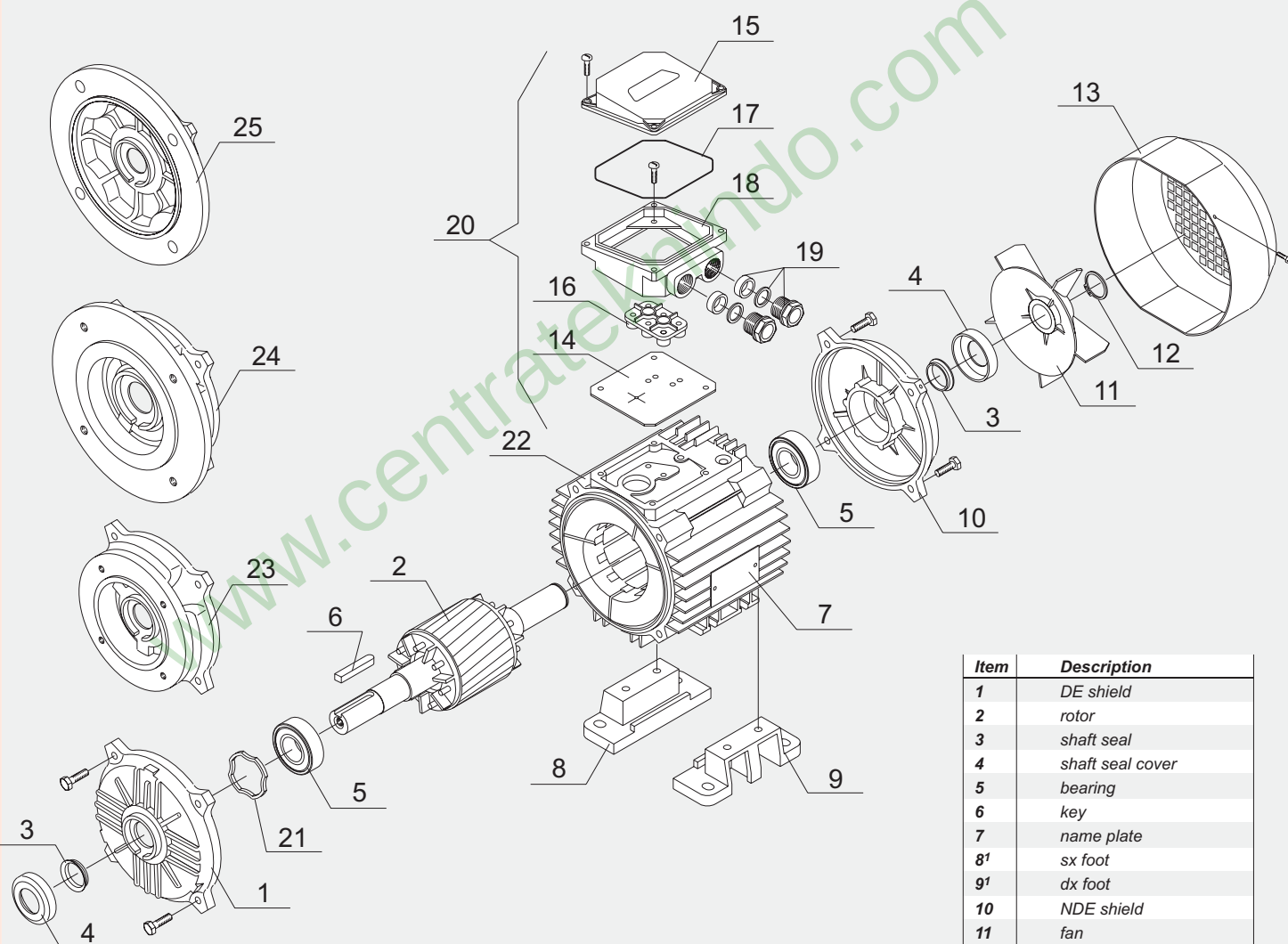


Motor type	Flange	D	E	F	GA	M	N	P	S	T	LE	HB	L
SKg 56-2A1	B14/C1	9j6	20	3h9	10,2	85	70j6	105	M6	2,5	15	98	188
SKg 56-2A2	B14/C2	9j6	20	3h9	10,2	65	50j6	80	M5	2,5	12,5	98	188
SKg 56-4A1	B14/C1	9j6	20	3h9	10,2	85	70j6	105	M6	2,5	15	98	149 *
SKg 56-4A2	B14/C2	9j6	20	3h9	10,2	65	50j6	80	M5	2,5	12,5	98	149 *
SKg 56-2B1	B14/C1	9j6	20	3h9	10,2	85	70j6	105	M6	2,5	15	98	196
SKg 56-2B2	B14/C2	9j6	20	3h9	10,2	65	50j6	80	M5	2,5	12,5	98	196
SKg 56-4B1	B14/C1	9j6	20	3h9	10,2	85	70j6	105	M6	2,5	15	98	157 *
SKg 56-4B2	B14/C2	9j6	20	3h9	10,2	65	50j6	80	M5	2,5	12,5	98	157 *
SKg 56-6B1	B14/C1	9j6	20	3h9	10,2	85	70j6	105	M6	2,5	15	98	196
SKg 56-6B2	B14/C2	9j6	20	3h9	10,2	65	50j6	80	M5	2,5	12,5	98	196
SKg 63- .A1	B14/C1	11j6	23	4h9	12,5	100	80j6	120	M6	3	14	102	202
SKg 63- .A2	B14/C2	11j6	23	4h9	12,5	75	60j6	90	M5	2,5	9,5	102	202
SKg 63- .B1	B14/C1	11j6	23	4h9	12,5	100	80j6	120	M6	3	14	102	214
SKg 63- .B2	B14/C2	11j6	23	4h9	12,5	75	60j6	90	M5	2,5	9,5	102	214
SKh 71- .A1	B14/C1	14j6	30	5h9	16	115	95j6	140	M8	3	14	111	223
SKh 71- .A2	B14/C2	14j6	30	5h9	16	85	70j6	105	M6	2,5	12	111	223
SKh 71- .B1	B14/C1	14j6	30	5h9	16	115	95j6	140	M8	3	14	111	245
SKh 71- .B2	B14/C2	14j6	30	5h9	16	85	70j6	105	M6	2,5	12	111	245
SKh 80- .A1	B14/C1	19j6	40	6h9	21,5	130	110j6	160	M8	3,5	14	115	266
SKh 80- .A2	B14/C2	19j6	40	6h9	21,5	100	80j6	120	M6	3	12	115	266
SKh 80- .B1	B14/C1	19j6	40	6h9	21,5	130	110j6	160	M8	3,5	14	115	278
SKh 80- .B2	B14/C2	19j6	40	6h9	21,5	100	80j6	120	M6	3	12	115	278
SKh 90S ...	B14/C1	24j6	50	8h9	27,0	130	110j6	160	M8	3,5	10	130	305
SKh 90S ...	B14/C2	24j6	50	8h9	27,0	115	95j6	140	M8	3	10	130	305
SKh 90L ...	B14/C1	24j6	50	8h9	27,0	130	110j6	160	M8	3,5	10	130	330
SKh 90L ...	B14/C2	24j6	50	8h9	27,0	115	95j6	140	M8	3	10	130	330
SKg 100L ...	B14/C1	28j6	60	8h9	31,0	165	130j6	200	M10	3,5	12	140	376
SKg 100L ...	B14/C2	28j6	60	8h9	31,0	130	110j6	160	M8	3,5	12	140	376
SKg 112M ...	B14/C1	28j6	60	8h9	31,0	165	130j6	200	M10	3,5	12	164	384
SKg 112M ...	B14/C2	28j6	60	8h9	31,0	130	110j6	160	M8	3,5	12	164	384
SKg 132S ...	B14/C1	38k6	80	10h9	41,0	215	180j6	250	M12	4,0	12	178	463
SKg 132S ...	B14/C2	38k6	80	10h9	41,0	165	130j6	200	M12	3,5	12	178	463
SKg 132S-2B	B14/C1	38k6	80	10h9	41,0	215	180j6	250	M12	4,0	12	178	501
SKg 132S-2B	B14/C2	38k6	80	10h9	41,0	165	130j6	200	M12	3,5	12	178	501
SKg 132M ...	B14/C1	38k6	80	10h9	41,0	215	180j6	250	M12	4,0	12	178	501
SKg 132M ...	B14/C2	38k6	80	10h9	41,0	165	130j6	200	M12	3,5	12	178	501

*- the SKg 56-4A and 4B motors in their standard version have neither fan nor fan cover



Item	Description
1	terminal box cover
2	rubber gasket
3	terminal board
4	terminal box
5	rubber gasket
6	gland
7	terminal box complete
8	fan cover
9	fan
10	tie rod
11	NDE shield
12	stator
13	foot
14	spring washer
15	bearing
16	rotor
17	DE shield
18	shaft seal
19	key
20	flange B5
21	flange B14/C1
22	flange B14/C2
23	name plate

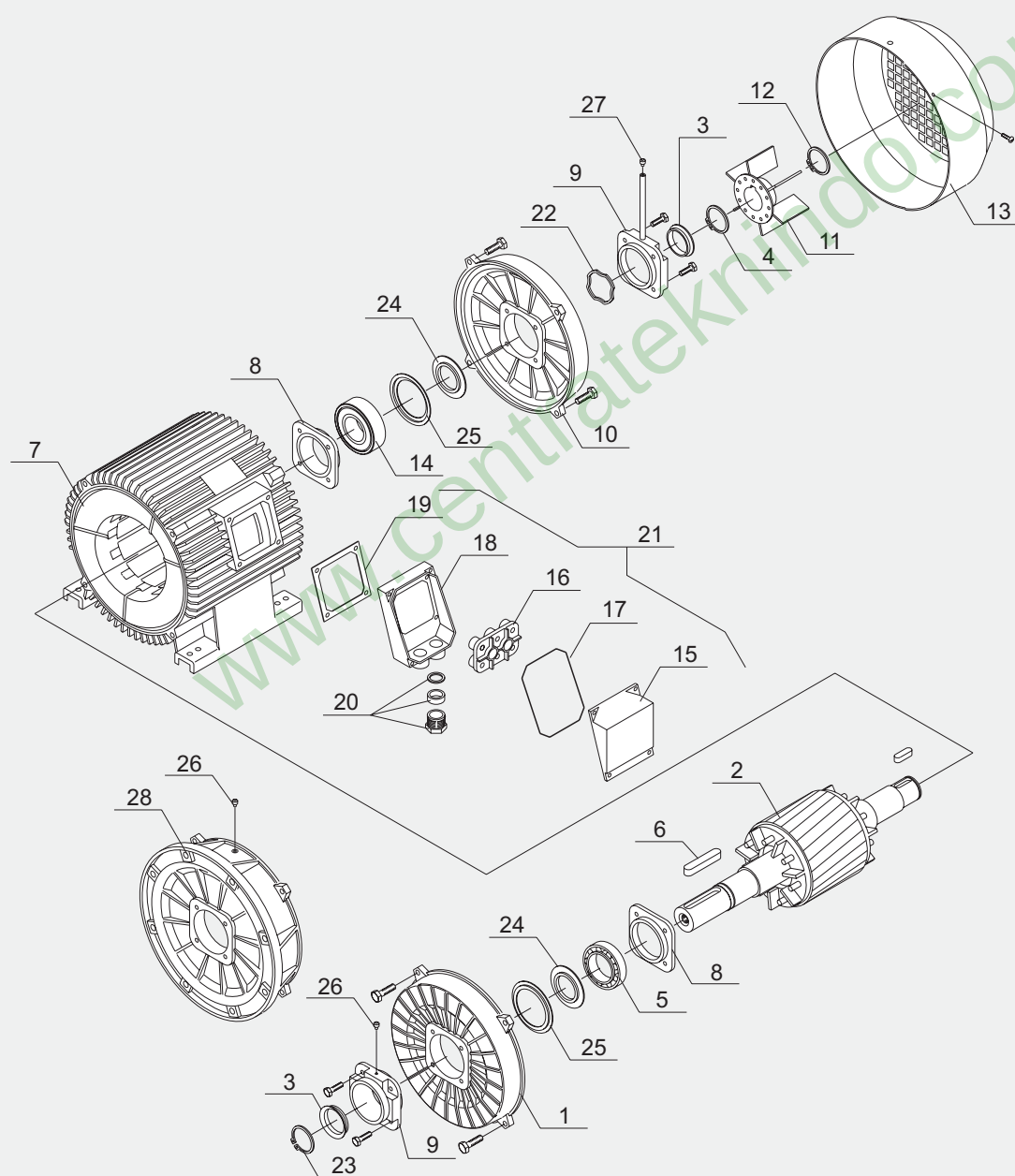


Item	Description
1	DE shield
2	rotor
3	shaft seal
4	shaft seal cover
5	bearing
6	key
7	name plate
8 ¹	sx foot
9 ¹	dx foot
10	NDE shield
11	fan
12	seeger ring
13	fan cover
14	rubber gasket
15	terminal box cover
16	terminal board
17	rubber gasket
18	terminal box
19	glands
20	terminal box complete
21	spring washer
22	stator
23 ²	flange B14/C2
24 ²	flange B14/C1
25	flange B5

1 - for frame size 132 feet can be screwed or integrated with the motor housing, for frame size 160 - 180 feet are integrated with the motor housing.

2 - only for frame size 90 - 132.

**Frame size: 200÷355
except Sh and SEE motors**



Item	Description
1	DE shield
2	rotor
3	shaft seal
4 ¹	seeger ring
5	DE bearing
6	key
7	stator with foot
8	internal bearing cap
9	external bearing cap
10	NDE shield
11	fan
12	seeger ring
13	fan cover
14	NDE bearing
15	terminal box cover
16	terminal board
17	rubber gasket
18	terminal box
19	rubber gasket
20	glands
21	terminal box complete
22	spring washer
23	seeger ring
24 ²	grease shield
25 ²	bearing internal ring
26	DE lubricator
27	NDE lubricator
28	flange B5

¹ - only for frame size 200,225,355

² - only for frame size 280-315

PRODUCTION PROGRAM

OUTPUT RANGE [kW]

GENERAL PURPOSE 3-PHASE INDUCTION MOTORS	0,04 - 1400
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GENERAL PURPOSE 1-PHASE INDUCTION MOTORS	0,04 - 2,2
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HIGH VOLTAGE INDUCTION MOTORS

Totally enclosed motors IP55	160 - 3150
Totally enclosed motors for power engineering IP55	200 - 2000
Open drip proof motors IP23	200 - 1250

MOTORS WITH ENLARGED RATED OUTPUT	0,12 - 200
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MOTORS WITH FOREIGN COOLING

Motors with foreign cooling IP54 (IP55)	0,09 - 1400
Motors with foreign cooling IP20	0,09 - 2,2

3-PHASE INDUCTION MOTORS FOR PUMPS

Standard motors for pumps	0,37 - 90
Explosion-proof motors for pumps	11 - 45
Explosion-proof marine motors for pumps	10 - 50

MOTORS TO BE BUILT-IN

1-phase motors to be built-in	0,06 - 1,5
3-phase motors to be built-in	0,09 - 160

BRAKE MOTORS

Brake motors (with DC brake)	0,09 - 160
Brake motors (with AC brake)	3 - 11

EXPLOSION-PROOF MOTORS

Increased safety motors	0,09 - 22
Flame-proof motors	11 - 250
Flame-proof marine motors	10 - 99
Special purpose flame-proof motors for mining	4,5 - 170
Special purpose flame-proof motors for chemical industry	5,5 - 45
Special purpose flame-proof marine motors	10 - 50
High voltage flame-proof motors	200 - 1400

MOTORS FOR AXIAL-FLOW FANS

1-phase motors for axial-flow fans	0,18 - 0,75
3-phase motors for axial-flow fans	0,2 - 1,1
3-phase motors for axial-flow mining fans	11 - 55
3-phase explosion-proof motors for air duct axial-flow fans	7,5 - 90
3-phase marine motors for axial-flow fans	0,75 - 25,3
3-phase explosion-proof marine motors for axial-flow fans	10 - 18,5
3-phase multi-speed motors for axial-flow fans	0,18 - 0,75
3-phase multi-speed motors for air duct axial-flow fans	10 - 40

PRODUCTION PROGRAM

OUTPUT RANGE [kW]

MULTI-SPEED MOTORS

General purpose 2-speed motors	0,07 - 250
General purpose multi-speed motors	0,12 - 60

MARINE MOTORS

General purpose marine motors	0,06 - 350
Marine motors for pumps	22 - 99
Marine motors for axial-flow fans	5,5 - 25
Marine motors for boat davits	9 - 30
Marine motors for tubular rudders	200 - 2000
General purpose explosion-proof marine motors	3,5 - 99
Explosion-proof marine motors for pumps	10 - 50
Explosion-proof marine motors for axial-flow fans	10 - 18,5

WOUND ROTOR INDUCTION MOTORS

Totally enclosed (IP 54, 55) wound rotor induction motors	18,5 - 315
Open drip proof (IP 23) wound rotor induction motors	55 - 315

CRANE MOTORS

Squirrel cage crane motors	2,2 - 15
Wound rotor crane motors	0,8 - 185
Two-speed crane motors with brake	0,28 - 13

SPECIAL PURPOSE INDUCTION MOTORS

Motors with 0/Y/ Δ switch	5,5 - 7,5
Motors with increased slip	3,0 - 22
Roller table motors for iron and steel industry	1,1 - 7,5
1-phase motors with shaft height 65 mm	0,75 - 2,0
3-phase motors with shaft height 65 mm	0,75 - 2,0

HIGH EFFICIENCY SEE MOTORS

0,55 - 315

MOTORS ACCORDING TO NEMA AND CSA STANDARDS

0,8 - 500 [HP]

ACCESORIES

DC electromagnetic disc brakes	braking torque	4 - 800 [Nm]
AC electromagnetic disc brakes	braking torque	4 - 300 [Nm]
Powder brakes and clutches	torque	6 - 170 [Nm]
Thrustors	force of piston rod	500 - 3200 [N]