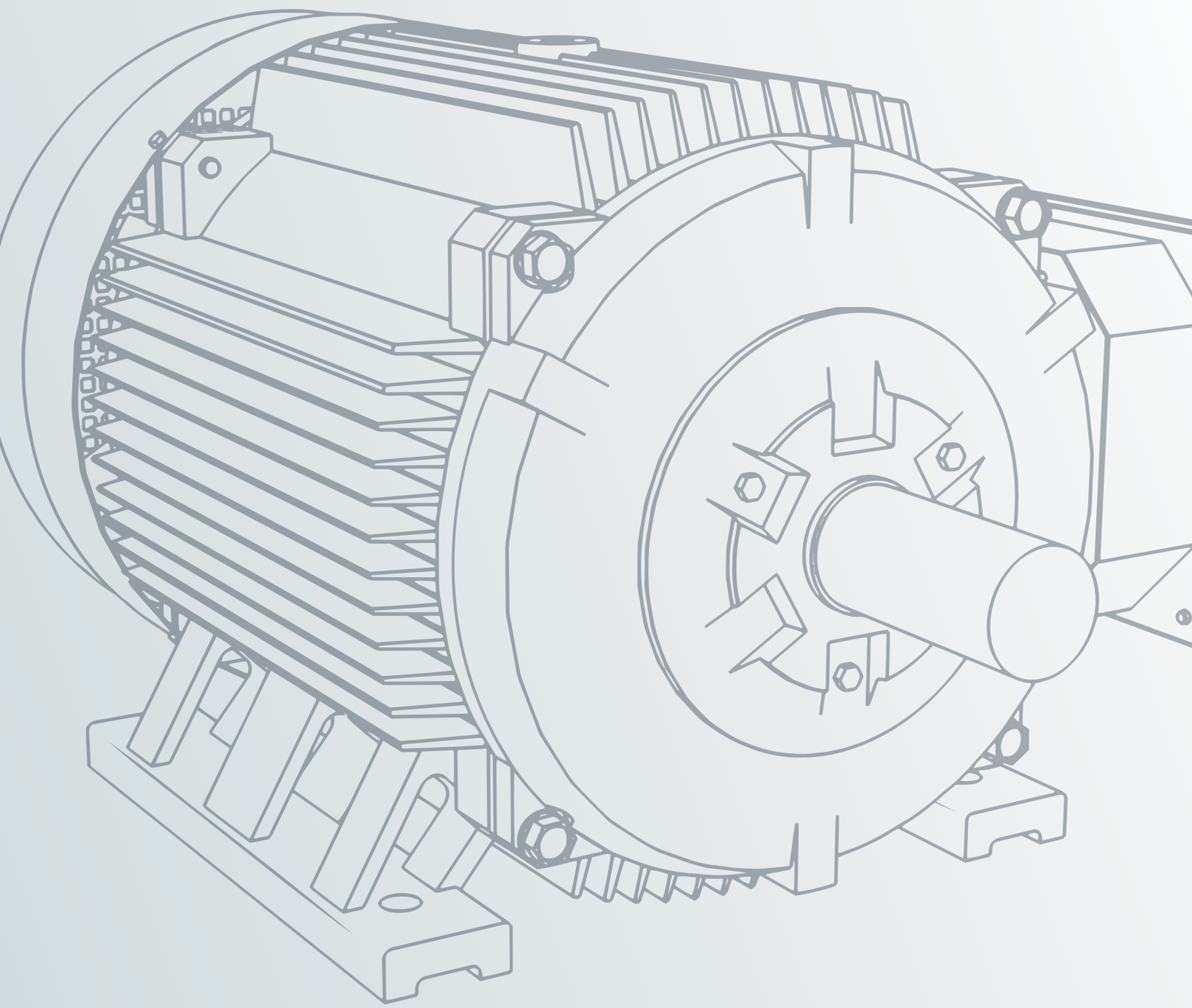
INDUSTRIAL ELECTRICAL SOLUTIONS

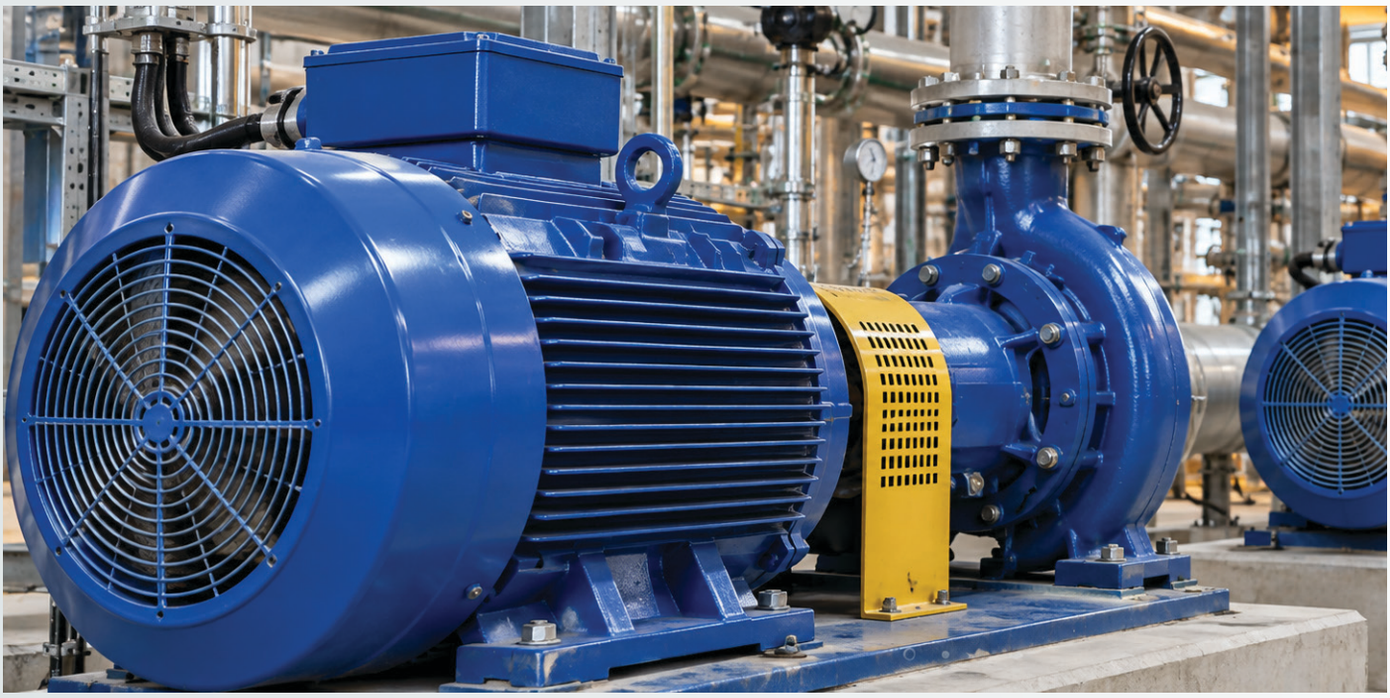
SELi



THREE-PHASE INDUCTION MOTORS

General Catalog

Company



SELI ITALIA – the soul of asynchronous squirrel-cage electric motors

SELI ITALIA has grown over time driven by a genuine passion for electric motors, specializing in **squirrel-cage asynchronous models** and **direct current (DC) motors**.
Our journey is rooted in the expertise of a historic electromechanical workshop. Drawing from this heritage, we have built a solid proficiency in testing, analyzing, and optimizing both direct current and alternating current (AC) electrical machines.
Today, we select global manufacturing partners who meet strict international standards, while controlling, testing, and customizing every single component in our facility in Italy. This approach allows us to combine the cost-effectiveness of industrial manufacturing with the flexibility of custom-tailored projects.
Listening to our clients and finding the ideal technical solution for every application are the values that drive our team. We successfully operate across European markets, as well as in the Middle East, North Africa, and the Far East, ensuring on-time shipments through an efficient and proven logistics network.
The result is a range of reliable, practical, and competitive electric motors. Because inside every single one of our motors lies the work, commitment, and history of SELI ITALIA.

Competence and Experience



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Validity Of The Catalogue

The information contained in this catalog relating to the SA and SG electrical motors series and their derivatives are indicative and does not contractually bind SELI ITALIA. It may be updated, revised, and/or modified by SELI ITALIA without notice. During the finalization phase, the final product specifications will be provided following a specific request from the end customer. SELI ITALIA is not responsible if the products described here are used outside of their designed specifications.

Introduction, standards and authorisations

This catalogue contains technical data of our SA and SG series of motors. These motors are surface-cooled (TEFC), three phase squirrel-cage induction motors, built according to the current international IEC and EN standards. The production sites are certified to comply with the international quality standard ISO 9001.

SELI motors comply with the following standards and regulations:

Technical terms	IEC
Rotating electrical machines	IEC 60034-1
Efficiency classes (IE code)	IEC 60034-2-1
Direction of rotation	IEC 60034-8
Methods of cooling (IC Code)	IEC 60034-6
Dimensions	IEC 60072-1
Protection degree (IP code)	IEC 60034-5
Noise limits	IEC 60034-9
Types of construction (IM Code)	IEC 60034-7
IEC standard voltages	IEC 60038
Mechanical vibration	IEC 60034-14
Thermal protection	IEC 60034-11

Efficiency levels IE (International Efficiency)

The IEC standards regarding the energy efficiency of motors are:
IEC 60034-2-1, which establishes the test methods for calculating efficiency, namely, the following methods:
1. Method 2-1-1A: Direct measurement of absorbed power and output power (absorbed-output) via torque measurement. It applies to all single-phase machines. The required test device is a full-load dynamometer.
2. Method 2-1-1B: Sum of the separate losses. Additional load loss determined using the residual loss method. It applies to all three-phase machines with a rated output power up to 2 MW. The required test device is a dynamometer for 1.25 × full load or a load machine for 1.25 × full load with a torque meter.

These tests must be conducted at a reference ambient temperature of 25°C. For 60 Hz motors, the equivalent values of rated power (PN) and rated voltage (UN) for 50 Hz operation are calculated based on the values applicable to 60 Hz.

IEC 60034-30-1, (TS) 2 regarding the new efficiency classes for mains-powered or frequency converter-powered motors, namely:

1. IE1 = Standard Efficiency (efficiency levels roughly equivalent to the previous EFF2 in Europe: no longer applicable, with some exceptions);
2. IE2 = High Efficiency (efficiency levels roughly equivalent to EFF1 in Europe today and identical to EPAct in the USA for 60 Hz, no longer applicable, with some exceptions);
3. IE3 = Premium Efficiency (efficiency class in Europe today and identical to "NEMA Premium" in the United States for 60 Hz);
4. IE4 = Super Premium Efficiency (a new efficiency class in Europe today, identical to "NEMA Super Premium" in the United States for 60 Hz).
5. IE5 = Ultra Premium Efficiency (the IE5 class has been introduced, although not yet fully defined. The goal is to reduce IE5 losses by approximately 20% compared to IE4).

The technical specification IEC TS 60034-30-2, published in December 2016, specifies the efficiency classes for variable-speed rotating electrical machines not covered by the IEC 60034-30-1 standard.

Commission Regulation (EC) No. 2019/1781 of 1 October 2019

This regulation replaces the previous Regulation (EC) No. 640/2009, extending the efficiency rules to powers up to 1 MW and including 8-pole machines. Specifically, the scope of application is:
Induction motors without brushes, commutators, slip rings or electrical connections to the rotor, designed to operate on a sinusoidal voltage at 50 Hz, 60 Hz or 50/60 Hz, which:

i. have two, four, six, or eight poles;
ii. have a rated voltage UN greater than 50 V up to and including 1,000 V;
iii. have a rated power PN between 0.12 kW and 1,000 kW;
iv. have characteristics based on continuous operation;
v. are designed to operate with direct starting.

The specifications do not apply to the following motors:

a. Motors that are fully integrated into a product; the motor must share common components with the driven unit and is not designed to be entirely separated from the driven unit and operate independently. The separation process renders the motor inoperative;
b. Motors with an integrated variable speed drive (compact variable speed drives) for which energy performance cannot be tested independently of the variable speed drive;
c. Motors with an integrated brake that is an integral part of the motor interior and cannot be removed or powered by a separate power source during motor efficiency testing;
d. Motors specifically designed and designated to operate exclusively:
i) at altitudes above 4,000 meters above sea level;
ii) at ambient air temperatures above 60°C;
iii) at a maximum operating temperature above 400°C;
iv) at ambient air temperatures below -30°C;
(v) at product inlet coolant temperatures below 0°C or above 32°C;
e. motors specifically designed and designated to operate entirely immersed in a liquid;
f. motors with specific features to ensure the safety of nuclear installations;
g. explosion-protected motors specifically designed and certified for mining;
h. motors in cordless or battery-operated equipment;
i. motors in portable equipment whose weight is supported by hand during operation;
j. motors in hand-guided mobile equipment transported during operation;
k. motors equipped with mechanical commutators;
l. totally enclosed non-ventilated (TENV) motors;
m. motors placed on the market before 1 July 2029 as replacements for identical motors integrated into products placed on the market before 1 July 2022 and specifically marketed as such;
n. multi-speed motors, i.e., motors with multiple windings or a switchable winding, which have a different number of poles and speeds;
o. motors specifically designed for electric traction vehicles.

July 1, 2023

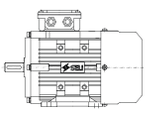
2-, 4- and 6-pole motors rated from 75 to 200 kW (excluding brake motors and safety motors) must meet efficiency class IE4.

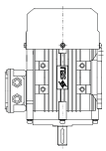
Efficiency limit values acc. to IEC 60034-30-1; March 2014 standard; based on IEC 60034-2-1; 2015 standard - 50 Hz mains supply frequency.

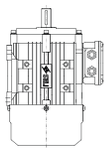
Power nominal	Standard Efficiency (IE1) No. of poles				High Efficiency (IE2) No. of poles				Premium Efficiency (IE3) No. of poles				Super Premium Efficiency (IE4) No. of poles			
Kw	2	4	6	8	2	4	6	8	2	4	6	8	2	4	6	8
0,12	45,0	50,0	38,3	31,0	53,6	59,1	50,6	39,8	60,8	64,8	57,7	50,7	66,5	69,8	64,9	62,3
0,18	52,8	57,0	45,5	38,0	60,4	64,7	56,6	45,9	65,9	69,9	63,9	58,7	70,8	74,7	70,1	67,2
0,20	54,6	58,5	47,6	39,7	61,9	65,9	58,2	47,4	67,2	71,1	65,4	60,6	71,9	75,8	71,4	68,4
0,25	58,2	61,5	52,1	43,4	64,8	68,5	61,6	50,6	69,7	73,5	68,6	64,1	74,3	77,9	74,1	70,8
0,37	63,9	66,0	59,7	49,7	69,5	72,7	67,6	56,1	73,8	77,3	73,5	69,3	78,1	81,1	78,0	74,3
0,40	64,9	66,8	61,1	50,9	70,4	73,5	68,8	57,2	74,6	78,0	74,4	70,1	78,9	81,7	78,7	74,9
0,55	69,0	70,0	65,8	56,1	74,1	77,1	73,1	61,7	77,8	80,8	77,2	73,0	81,5	83,9	80,9	77,0
0,75	72,1	72,1	70,0	61,2	77,4	79,6	75,9	66,2	80,7	82,5	78,9	75,0	83,5	85,7	82,7	78,4
1,1	75,0	75,0	72,9	66,5	79,6	81,4	78,1	70,8	82,7	84,1	81,0	77,7	85,2	87,2	84,5	80,8
1,5	77,2	77,2	75,2	70,2	81,3	82,8	79,8	74,1	84,2	85,3	82,5	79,7	86,5	88,2	85,9	82,6
2,2	79,7	79,7	77,7	74,2	83,2	84,3	81,8	77,6	85,9	86,7	84,3	81,9	88,0	89,5	87,4	84,5
3	81,5	81,5	79,7	77,0	84,6	85,5	83,3	80,0	87,1	87,7	85,6	83,5	89,1	90,4	88,6	85,9
4	83,1	83,1	81,4	79,2	85,8	86,6	84,6	81,9	88,1	88,6	86,8	84,8	90,0	91,1	89,5	87,1
5,5	84,7	84,7	83,1	81,4	87,0	87,7	86,0	83,8	89,2	89,6	88,0	86,2	90,9	91,9	90,5	88,3
7,5	86,0	86,0	84,7	83,1	88,1	88,7	87,2	85,3	90,1	90,4	89,1	87,3	91,7	92,6	91,3	89,3
11	87,6	87,6	86,4	85,0	89,4	89,8	88,7	86,9	91,2	91,4	90,3	88,6	92,6	93,3	92,3	90,4
15	88,7	88,7	87,7	86,2	90,3	90,6	89,7	88,0	91,9	92,1	91,2	89,6	93,3	93,9	92,9	91,2
18,5	89,3	89,3	88,6	86,9	90,9	91,2	90,4	88,6	92,4	92,6	91,7	90,1	93,7	94,2	93,4	91,7
22	89,9	89,9	89,2	87,4	91,3	91,6	90,9	89,1	92,7	93,0	92,2	90,6	94,0	94,5	93,7	92,1
30	90,7	90,7	90,2	88,3	92,0	92,3	91,7	89,8	93,3	93,6	92,9	91,3	94,5	94,9	94,2	92,7
37	91,2	91,2	90,8	88,8	92,5	92,7	92,2	90,3	93,7	93,9	93,3	91,8	94,8	95,2	94,5	93,1
45	91,7	91,7	91,4	89,2	92,9	93,1	92,7	90,7	94,0	94,2	93,7	92,2	95,0	95,4	94,8	93,4
55	92,1	92,1	91,9	89,7	93,2	93,5	93,1	91,0	94,3	94,6	94,1	92,5	95,3	95,7	95,1	93,7
75	92,7	92,7	92,6	90,3	93,8	94,0	93,7	91,6	94,7	95,0	94,6	93,1	95,6	96,0	95,4	94,2
90	93,0	93,0	92,9	90,7	94,1	94,2	94,0	91,9	95,0	95,2	94,9	93,4	95,8	96,1	95,6	94,4
110	93,3	93,3	93,3	91,1	94,3	94,5	94,3	92,3	95,2	95,4	95,1	93,7	96,0	96,3	95,8	94,7
132	93,5	93,5	93,5	91,5	94,6	94,7	94,6	92,6	95,4	95,6	95,4	94,0	96,2	96,4	96,0	94,9
160	93,8	93,8	93,8	91,9	94,8	94,9	94,8	93,0	95,6	95,8	95,6	94,3	96,3	96,6	96,2	95,1
200	94,0	94,0	94,0	92,5	95,0	95,1	95,0	93,5	95,8	96,0	95,8	94,6	96,5	96,7	96,3	95,4
250	94,0	94,0	94,0	92,5	95,0	95,1	95,0	93,5	95,8	96,0	95,8	94,6	96,5	96,7	96,3	95,4
315	94,0	94,0	94,0	92,5	95,0	95,1	95,0	93,5	95,8	96,0	95,8	94,6	96,5	96,7	96,3	95,4
355	94,0	94,0	94,0	92,5	95,0	95,1	95,0	93,5	95,8	96,0	95,8	94,6	96,5	96,7	96,3	95,4
400	94,0	94,0	94,0	92,5	95,0	95,1	95,0	93,5	95,8	96,0	95,8	94,6	96,5	96,7	96,3	95,4
450	94,0	94,0	94,0	92,5	95,0	95,1	95,0	93,5	95,8	96,0	95,8	94,6	96,5	96,7	96,3	95,4
500-1000	94,0	94,0	94,0	92,5	95,0	95,1	95,0	93,5	95,8	96,0	95,8	94,6	96,5	96,7	96,3	95,4

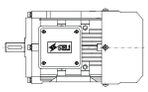
Construction types

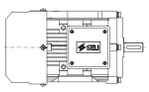
The SA and SG electric motor series, along with their derivatives, are available in IM B3, IM B5, IM B14, and derived mounting configurations. They are manufactured in accordance with DIN EN 60034, as specified in the table below.

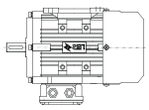

IM B3
IM 1001

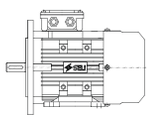

IM V5
IM 1011

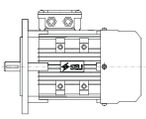

IM V6
IM 1031

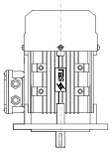

IM B6
IM 1051

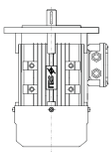

IM B7
IM 1061

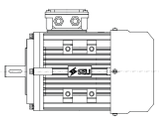

IM B8
IM 1078

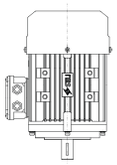

IM B35
IM 2001

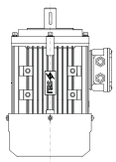

IM B5
IM 3001

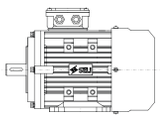

IM V1
IM 3011


IM V3
IM 3031


IM B14
IM 3601


IM V18
IM 3611


IM V19
IM 3631


IM B34
IM 2101

Painting

The SA and SG electric motor series, along with their derivatives, feature a standard matte finish in RAL 5010 Blue, with a C3 corrosivity category in accordance with ISO 12944-2, making them ideal for most urban and industrial environments. Custom colors are available upon request, as well as specialized paint systems for highly aggressive or corrosive environments, complying with C4, C5, and C5M categories according to ISO 12944-2.

Duty Cycle Type

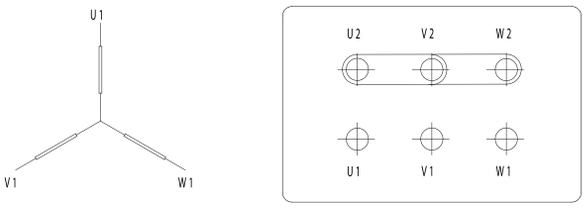
The SA and SG electric motor series, along with their derivatives, are designed for continuous operation under standard conditions in S1 duty cycle – defined as operation at a constant load lasting long enough to reach thermal equilibrium. The reference standard EN 60034-1 also defines other duty cycle types, including:
S2 – Short-time duty
S3 – Intermittent periodic duty
S4 – Intermittent periodic duty with starting
S5 – Intermittent periodic duty with electric braking
S6 – Continuous operation periodic duty
S7 – Continuous operation periodic duty with electric braking
S8 – Continuous operation periodic duty with related load and speed variations
S9 – Duty with non-periodic load and speed variations
Any application involving a duty cycle other than S1 must be validated by our technical department based on the specific shaft load applied.

Construction Features

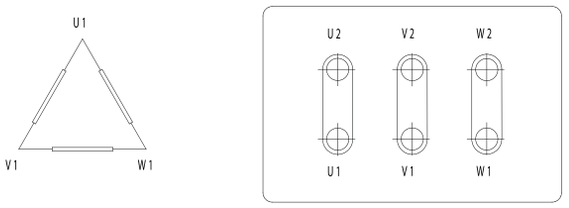
The SA electric motor series and its derivatives, from frame size 63 up to frame size 132, feature a die-cast aluminum alloy housing that ensures excellent thermal conductivity and high corrosion resistance. The end shields, flanges, and feet are also made of die-cast aluminum alloy. The feet can be mounted on three sides of the motor, ensuring maximum product flexibility and allowing the terminal box to be oriented in different positions.
The SG motor series and its derivatives, from frame size 160 up to frame size 450, are constructed with a cast iron housing, end shields, and flanges. The feet are integrated into the main motor housing, and the terminal box is positioned on top as standard. A configuration with a side-mounted terminal box is available upon request.

Terminal Box

The SA motor series and its derivatives are supplied with a top-mounted aluminum terminal box as standard. The cable entry can be rotated in 4x90° positions, and the connection diagrams are conveniently provided inside.
The SG motor series and its derivatives are supplied with a top-mounted cast iron terminal box as standard. The cable entry can be rotated in 4x 90° positions, and the connection diagrams are conveniently provided inside.



Star connection



Delta connection

Supply Voltage and Frequency

SA and SG series motors, along with their derivatives, are supplied with a standard voltage of 230/400V - 50 Hz for rated power outputs up to 4 kW. For rated powers from 5.5 kW and above, the standard supply voltage is 400/690V - 50 Hz. When operated under these rated voltage and frequency conditions, the motor efficiency complies with the requirements of the IEC 60034-30 standard.
These motors are designed to operate safely within the voltage and frequency fluctuations defined by international reference standards. Specifically, they can withstand a voltage variation of ±10% and a frequency variation of ±5%, with a maximum combined tolerance of ±10%, while maintaining a temperature rise within standard limits.
Operation at 60 Hz is also possible at a supply voltage of 460 V. In this configuration, the motors deliver an approximate 20% increase in nominal speed (1.2 times) and a 15% increase in rated power output (1.15 times).
Custom voltage and frequency configurations differing from the standard specifications are available upon request.

Insulation Class

SA and SG series motors, along with their derivatives, are manufactured with Class F insulation (including the enamelled wire, insulation materials, and impregnating resin). When operating under continuous S1 duty at rated load, the temperature rise does not exceed 80 K, complying with Class B limits. The meticulous selection of high-quality insulation components makes these motors fully suitable for frequency converter (VFD) operation at both 400 V and 690 V. Class H insulation can be provided upon request for specific application requirements.

Degree of Protection

SA and SG series motors, along with their derivatives, are manufactured with a standard IP55 protection rating in accordance with IEC 60034-5. The external cooling fan is protected by a fan cowl with an IP20 protection rating (preventing accidental finger contact).
Higher protection ratings, such as IP56 or IP65 configurations, are available upon request.
For vertical installations with the shaft facing downwards (mounting arrangements V1, V5, V18), an optional canopy (drip cover) can be supplied. For vertical installations with the shaft facing upwards (mounting arrangements V3, V6, V19), an additional shaft seal is available as an option to prevent liquid ingress.

Direction of Rotation

SA and SG series motors, along with their derivatives, can operate in both directions of rotation. When terminals U1, V1, and W1 are connected to phases L1, L2, and L3 respectively, the motor rotates clockwise (as viewed from the drive end shaft extension). Counterclockwise rotation is achieved by simply swapping any two phases.

Thermal Winding Protection

SA and SG series motors, along with their derivatives, are equipped with thermal winding protection as standard from frame size 80 and above, consisting of three PTC (Positive Temperature Coefficient) thermistors calibrated to a tripping temperature of 155 °C. Upon request, alternative thermal protection options can be integrated into the windings—such as bimetallic switches (PTO) or PT100 sensors—as well as inside the end shields for bearing temperature monitoring via PT100 sensors.

Ambient temperature

All rated power outputs specified in this catalog for SA and SG series motors, along with their derivatives, refer to continuous S1 duty with a power supply at nominal voltage and frequency. These ratings apply to an ambient temperature range of -20 °C to +40 °C and a maximum installation altitude of 1,000 meters above sea level, in full compliance with the EN 60034-1 standard.

If the motors are intended for use in ambient temperatures outside these limits, please contact the SELI ITALIA technical department to verify feasibility.

Unless otherwise specified, the standard installation environment is assumed to be:

- Dry: with a relative humidity ≤75%;
- Free from chemical agents: with no concentrations of gases, vapors, or dust that could chemically corrode the motor materials.

For environments with different characteristics, the conditions must be specified at the enquiry stage for evaluation by the SELI ITALIA technical department, applying the following derating factors.

Altitude m.a.s.l.	Ambient temperature (°C)					
	30	40	45	50	55	60
<= 1.000	1,05	1	0,95	0,90	0,85	0,80
1500	1	0,95	0,90	0,85	0,80	0,75
2000	0,95	0,90	0,85	0,80	0,75	0,70
2500	0,90	0,85	0,80	0,75	0,70	0,65
3000	0,85	0,80	0,75	0,70	0,65	0,60

WARNING: The SA and SG series motors, along with their derivatives described in this catalog, MUST NOT be installed in potentially explosive atmospheres (ATEX zones).

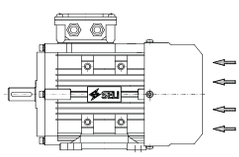
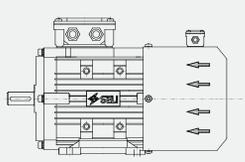
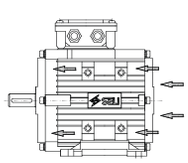
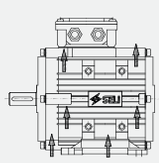
Overload

When operated at an ambient temperature of ≤40 °C, SA and SG series motors, along with their derivatives, can withstand overloads in compliance with EN 60034-1 standards, subject to the following functional limits:

Overload	Duration	Interval
10	10	12
20	5	10
30	3	10
40	2	10
50	1	10

Cooling System

The cooling method is defined by the IC (International Cooling) code in accordance with IEC 60034-6. SA and SG series motors, along with their derivatives, are TEFC (Totally Enclosed Fan Cooled) units equipped with a standard IC411 self-ventilation system, utilizing a bidirectional synthetic axial fan. To ensure unrestricted airflow, motors must be installed maintaining a minimum clearance between the fan cowl and the nearest obstruction. As a rule of thumb, this minimum distance should exceed half the frame height. For easier maintenance access, it is highly recommended to maintain a clearance equal to the full depth of the fan cowl.
Upon request, motors from frame size 80 can be supplied with an external forced-ventilation fan, with cooling designated IC416. This configuration should be used when the motor is operated by a frequency converter at frequencies below 35 Hz, allowing constant torque operation at low rotational speeds, or when a wide rotational speed range is required. This option is not available for motors with shaft extensions at both ends.
For applications requiring other cooling methods defined by the standard—such as IC410 (natural convection / unventilated) or IC418 (motor cooled by an external independent airflow)—the requirement must be specified at the time of inquiry for validation by the SELI ITALIA technical department.

IC		Description
411		Self-ventilated motor. Closed body with external fan mounted on the motor shaft.
416		Forced-ventilated motor. Enclosed housing with an independent external fan mounted in the rear fan cowl.
418		Self-ventilated motor. Closed body without fan, external cooling provided by a device external to the motor.
410		Fanless motor. Enclosed casing without fan. Natural air cooling.

Bearings and Lubrication

SA and SG series motors, along with their derivatives, feature different bearing configurations depending on the frame size: Frame sizes 63 to 132: Equipped as standard with sealed, lubricated-for-life bearings (2RS and/or ZZ types). Frame sizes 160 to 200: Equipped as standard with sealed, lubricated-for-life bearings (2RS and/or ZZ types), featuring provision for retrofitting open bearings with regreasing nipples. Frame sizes 225 and above: Equipped as standard with open bearings and regreasing nipples. The recommended lubricant is a mineral oil-based grease with a lithium thickener in compliance with the DIN 51825 K2K-30 standard, such as SKF LGMT 2, ExxonMobil Unirex N2/N3, Shell Gadus S2, or equivalent. Alternative configurations, including cylindrical roller bearings (NU type) or insulated bearings, are available upon request.

Frame size	Number of poles	Type of bearing DE	Type of bearing NDE
63	2,4, 6, 8	6201-2RS C3	6201-2RS C3
71	2,4, 6, 8	6202-2RS C3	6202-2RS C3
80	2,4, 6, 8	6204-2RS C3	6204-2RS C3
90	2,4, 6, 8	6205-2RS C3	6205-2RS C3
100	2,4, 6, 8	6206-2RS C3	6206-2RS C3
112	2,4, 6, 8	6306-2RS C3	6306-2RS C3
132	2,4, 6, 8	6308-2RS C3	6308-2RS C3
160	2,4, 6, 8	6309-2RS C3	6309-2RS C3
180	2,4, 6, 8	6311-2RS C3	6311-2RS C3
200	2,4, 6, 8	6312-2RS C3	6312-2RS C3
225	2,4, 6, 8	6313 C3	6313 C3
250	2,4, 6, 8	6314 C3	6314 C3
280	2	6314 C3	6314 C3
	4, 6, 8	6317 C3	6317 C3
315	2	6317 C3	6317 C3
	4, 6, 8	6319 C3 / (NU 319 C3)	6319 C3
355	2	6319 C3	6319 C3
	4, 6, 8	6322 C3 / (NU 322 C3)	6322 C3

Rotor Balancing and Vibration Levels

SA and SG series motors and their derivatives are dynamically balanced with a half parallel key fitted and classified as vibration Grade A in accordance with DIN EN 60034-14. A version with reduced Grade B vibration is available upon request. The table summarises the maximum vibration displacement S, vibration velocity V and vibration acceleration A by shaft height for vibration Grades A and B. The data refer to no-load operation with the motor freely suspended. Tolerance range: ±10%.

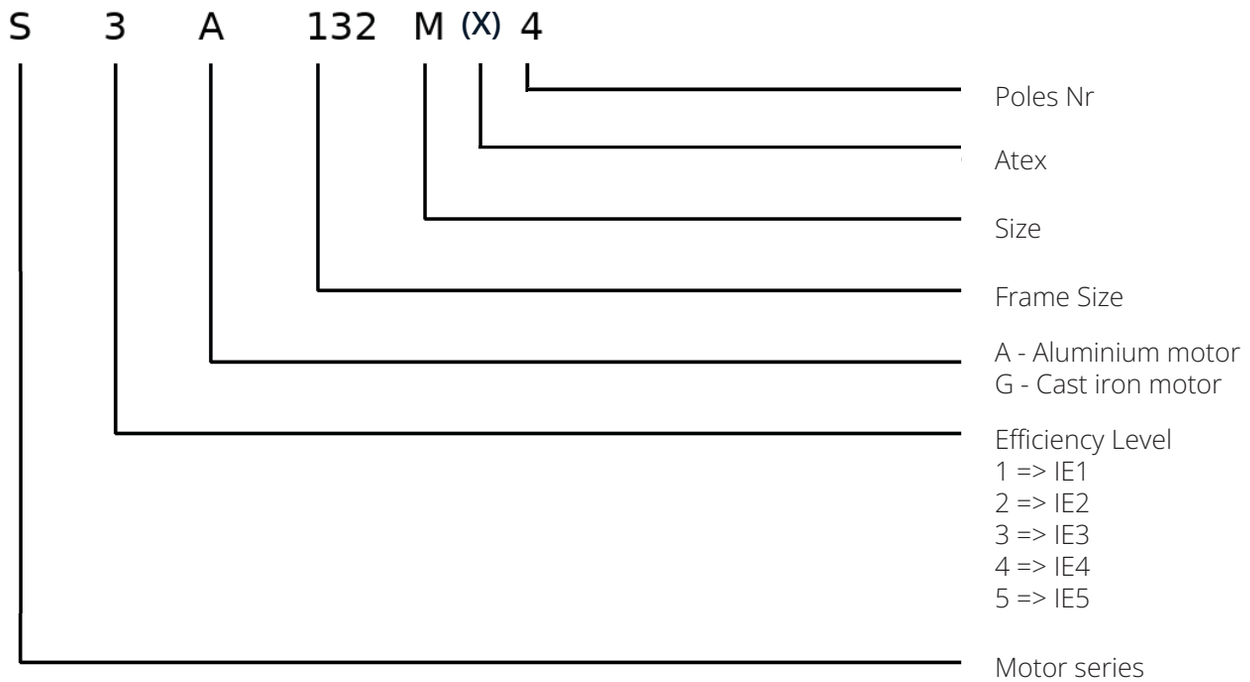
Vibration grade	Limits per vibration grade								
	56<H≤132			132<H≤280			H> 280		
	s[µm]	v[mm/s]	a[mm/s²]	s[µm]	v[mm/s]	a[mm/s²]	s[µm]	v[mm/s]	a[mm/s²]
A	25	1,6	2,5	35	2,2	3,5	45	2,8	4,4
B	11	0,7	1,1	18	1,1	1,7	29	1,8	2,8

Geometric Tolerances

SA and SG series motors, along with their derivatives, comply with the dimensional and tolerance requirements for shaft extensions, keys, and flanges as specified by the EN 50347 and IEC 60072 standards. The shaft extension features a tapped center hole in accordance with UNI 3221 and DIN 332 standards, and is supplied with a fitted parallel key. The following table outlines the specific tolerances applied to the various mechanical components.

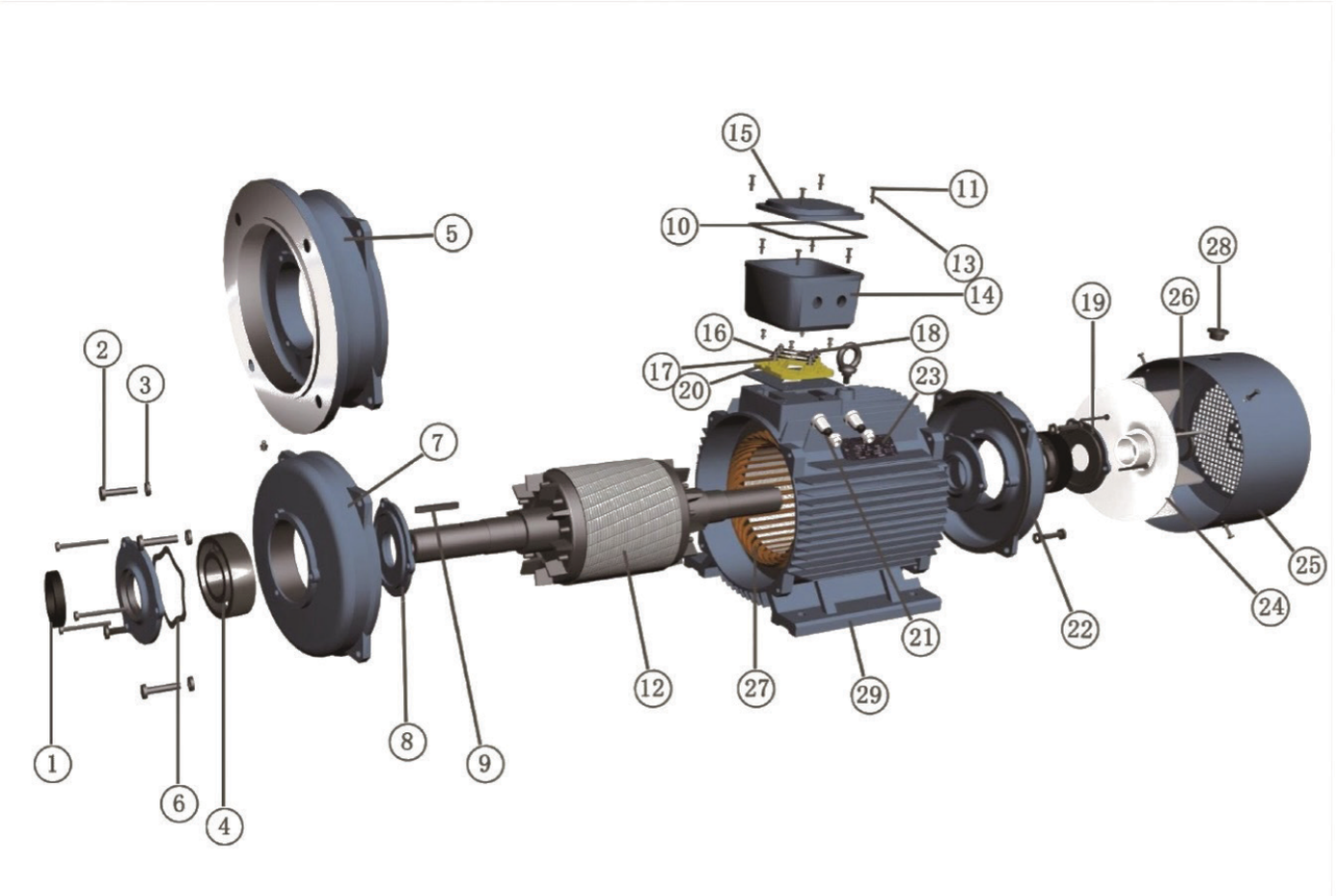
Component	Dimension	Tolerance	
Frame Size	H	Up to frame size BG 250 above frame size 250	0,5 mm 1 mm
Shaft end	D	Ø19-28 Ø38-48 ≥Ø55	J6k6m6
key	F		h9
flange	N	Ø < 250Ø ≥ 250	j6h6

Model Specification



S1A	Three-Phase Aluminum Motor - Efficiency IE1
S2A	Three-Phase Aluminum Motor - Efficiency IE2
S3A	Three-Phase Aluminum Motor - Efficiency IE3
S4A	Three-Phase Aluminum Motor - Efficiency IE4
S5A	Three-Phase Aluminum Motor - Efficiency IE5
S1G	Three-Phase Cast Iron Motor - Efficiency IE1
S2G	Three-Phase Cast Iron Motor - Efficiency IE2
S3G	Three-Phase Cast Iron Motor - Efficiency IE3
S4G	Three-Phase Cast Iron Motor - Efficiency IE4
S5G	Three-Phase Cast Iron Motor - Efficiency IE5
SAFC	Three-Phase Aluminum Motor – DC brake
SGFC	Three-Phase Cast Iron Motor – DC brake CC
SAFA	Three-Phase Aluminum Motor – AC brake
SGFA	Three-phase cast iron motor – C brake
SAM	single phase Aluminum Motor
SAT	single phase Aluminum Motor – double capacitor
SAR	Three-Phase slip ring Motor Aluminum
SGR	Three-phase wound-rotor motor with cast iron housing
SSR	Three-Phase slip ring Motor welded steel Motor
SA	Three-Phase Aluminum Motor – special execution like double speed, etc
SG	Three-Phase Cast Iron Motor – special execution like double speed, etc
SMT	Medium-voltage motor, any voltage
SMR	Medium-voltage wound-rotor motor, any voltage

Components



MOTOR PARTS LIST

1. Oil seal
2. Bolt
3. Washer
4. Bearing
5. B5 Flange
6. Spring washer
7. Front Endshield
8. Inner Bearing cap
9. Key
10. Gasket
11. Screw
12. Rotor
13. Washer
14. Terminal box base
15. Terminal box lid
16. Brass net
17. Brass lug
18. Brass washer
19. Outer bearing cap
20. Terminal board
21. Cable gland
22. Rear endshield
23. Nameplate
24. Fan
25. Fan cowl
26. Fan clamp
27. Stator
28. Stopper
29. Feet

Electrical data IE3

2 poles - 50 Hz

Power	Type	Speed	Current			Efficiency	Cosphi	Starting current	Nominal Torque	Starting Torque	Torque max	Mass
kW		Rpm	230 V	400 V	690 V	%			Nm			Kg
0,18	S3A 62 A2	2720	0,85	0,5	--	65,9	0,8	4,2	0,6	2,9	3,1	4,5
0,25	S3A 63 B2	2720	1,05	0,6	--	69,7	0,81	4,5	0,9	2,8	2,9	4,9
0,37	S3A 71 A2	2740	1,55	0,9	--	73,8	0,81	5,4	1,3	2,9	3,1	6
0,55	S3A 71 B2	2740	2,25	1,3	--	77,8	0,82	5,2	1,9	2,9	3	6,5
0,75	S3A 80 A2	2910	2,8	1,6	--	80,7	0,82	7	2,5	2,3	2,3	8,8
1,1	S3A 80 B2	2910	4	2,3	--	82,7	0,83	7,3	3,6	2,2	2,3	9,3
1,5	S3A 90 S2	2910	5,4	3,1	--	84,2	0,84	7,6	4,9	2,2	2,3	13
2,2	S3A 90 L2	2910	7,4	4,3	--	85,9	0,85	7,6	7,2	2,2	2,3	17
3	S3A 100 L2	2910	9,9	5,7	--	87,1	0,87	7,8	9,8	2,2	2,3	23
4	S3A 112 M2	2915	12,8	7,4	--	88,1	0,88	8,3	13,1	2,2	2,3	33
5,5	S3A 132 SA2	2920	--	10,1	5,8	89,2	0,88	8,3	18,0	2	2,3	42
7,5	S3A 132 SB2	2920	--	13,7	7,9	90,1	0,88	7,9	24,5	2	2,3	48
11	S3G 160 MA2	2950	--	19,6	11,3	91,2	0,89	8,1	35,6	2	2,3	122
15	S3G 160 MB2	2950	--	26,5	15,3	91,9	0,89	8,1	48,6	2	2,3	131
18,5	S3G 160 L2	2950	--	32,5	18,8	92,4	0,89	8,2	59,9	2	2,3	150
22	S3G 180 M2	2960	--	38,5	22,2	92,7	0,89	8,2	71,0	2	23	193
30	S3G 200 LA2	2970	--	52,1	30,1	93,3	0,89	7,6	96,5	2	23	255
37	S3G 200 LB2	2970	--	64	37	93,7	0,89	7,6	119,0	2	23	275
45	S3G 225 M2	2970	--	76,8	44,3	94	0,9	7,7	144,7	2	2,3	326
55	S3G 250 M2	2970	--	93,5	54	94,3	0,9	7,7	176,9	2	2,3	417
75	S3G 280 S2	2980	--	127	73,3	94,7	0,9	7,1	240,4	1,8	2,3	540
90	S3G 280 M2	2980	--	152	87,8	95	0,9	7,1	288,4	1,8	23	596
110	S3G 315 S2	2980	--	185	106,8	95,2	0,9	7,1	352,5	1,8	23	965
132	S3G 315 M2	2980	--	222	128,2	95,4	0,9	7,1	423,0	1,8	2,3	1.070
160	S3G 315 LA2	2980	--	265	153	95,6	0,91	7,2	512,8	1,8	2,3	1.150
200	S3G 315 LB2	2980	--	331	191,1	95,8	0,91	7,2	640,9	1,8	2,2	1.210
250	S3G 355 M2	2980	--	414	239	95,8	0,91	7,2	801,2	1,6	2,2	1.670
315	S3G 355 L2	2980	--	522	301,4	95,8	0,91	7,2	1009,5	1,6	2,2	1.865

Electrical data IE3

4 poles - 50 Hz

Power	Type	Speed	Current			Efficiency	Cosphi	Starting current	Nominal Torque	Starting Torque	Torque max	Mass
kW		Rpm	230 V	400 V	690 V	%			Nm			Kg
0,12	S3A 63 A4	1350	0,86	0,5	--	64,8	0,63	4,4	0,8	2,1	2,2	4,6
0,18	S3A 63 B4	1350	1,14	0,66	--	69,9	0,66	4,4	1,3	2,1	2,2	5
0,25	S3A 71 A4	1370	1,53	0,88	--	73,5	0,68	5,2	1,7	2,1	2,2	6,3
0,37	S3A 71 B4	1390	2,8	1,62	--	77,3	0,73	5,2	2,5	2,4	2,3	9
0,55	S3A 80 A4	1430	2,81	1,62	--	80,8	0,73	5,2	3,7	2,4	2,4	9,5
0,75	S3A 80 B4	1430	2,94	1,7	--	82,5	0,75	6,6	5,0	2,3	2,3	11
1,1	S3A 90 S4	1435	4,33	2,5	--	84,1	0,76	6,8	7,3	2,3	2,3	15
1,5	S3A 90 L4	1435	5,75	3,3	--	85,3	0,77	7	10,0	2,3	2,3	19
2,2	S3A 100 LA4	1450	7,79	4,5	--	86,7	0,81	7,6	14,5	2,3	2,3	25,2
3	S3A 100 LB4	1450	10,4	6	--	87,7	0,82	7,6	19,8	2,3	2,3	30
4	S3A 112 M4	1455	13,7	7,9	--	88,6	0,82	7,8	26,3	2,2	2,3	36
5,5	S3A 132 S4	1460	--	10,7	6,2	89,6	0,83	7,9	36,0	2	2,3	48,5
7,5	S3A 132 M4	1460	--	14,3	8,3	90,4	0,84	7,5	49,1	2	2,3	60
11	S3G 160 M4	1470	--	20,4	11,8	91,4	0,85	7,7	71,5	2,2	2,3	130
15	S3G 160 L4	1470	--	27,3	15,8	92,1	0,86	7,8	97,4	2,2	2,3	148
18,5	S3G 180 M4	1475	--	33,5	19,3	92,6	0,86	7,8	119,8	2	2,3	192
22	S3G 180 L4	1475	--	39,7	22,9	93	0,86	7,8	142,4	2	2,3	206
30	S3G 200 L4	1475	--	53,8	31,1	93,6	0,86	7,3	194,2	2	2,3	275
37	S3G 225 S4	1480	--	66,1	38,2	93,9	0,86	7,4	238,8	2	2,3	325
45	S3G 225 M4	1480	--	80,2	46,3	94,2	0,86	7,4	290,4	2	23	350
55	S3G 250 M4	1485	--	97,6	56,4	94,6	0,86	7,4	353,7	2,2	23	435
75	S3G 280 S4	1485	--	129	74,5	95	0,88	6,9	482,3	2	2,3	585
90	S3G 280 M4	1485	--	155	89,5	95,2	0,88	6,9	578,8	2	23	653
110	S3G 315 S4	1490	--	187	108	95,4	0,89	7	705,0	2	2,2	1010
132	S3G 315 M4	1490	--	224	129,3	95,6	0,89	7	846,0	2	2,2	1140
160	S3G 315 LA4	1490	--	271	156,5	95,8	0,89	7,1	1025,5	2	2,2	1.210
200	S3G 315 LB4	1490	--	334	192,8	96	0,9	7,1	1281,9	2	2,2	1.285
250	S3G 355 M4	1490	--	418	241,3	96	0,9	7,1	1602,3	2	2,2	1.680
315	S3G 355 L4	1490	--	526	303,3	96	0,9	7,1	2019,0	2	2,2	1.870

Electrical data IE3

6 poles - 50 Hz

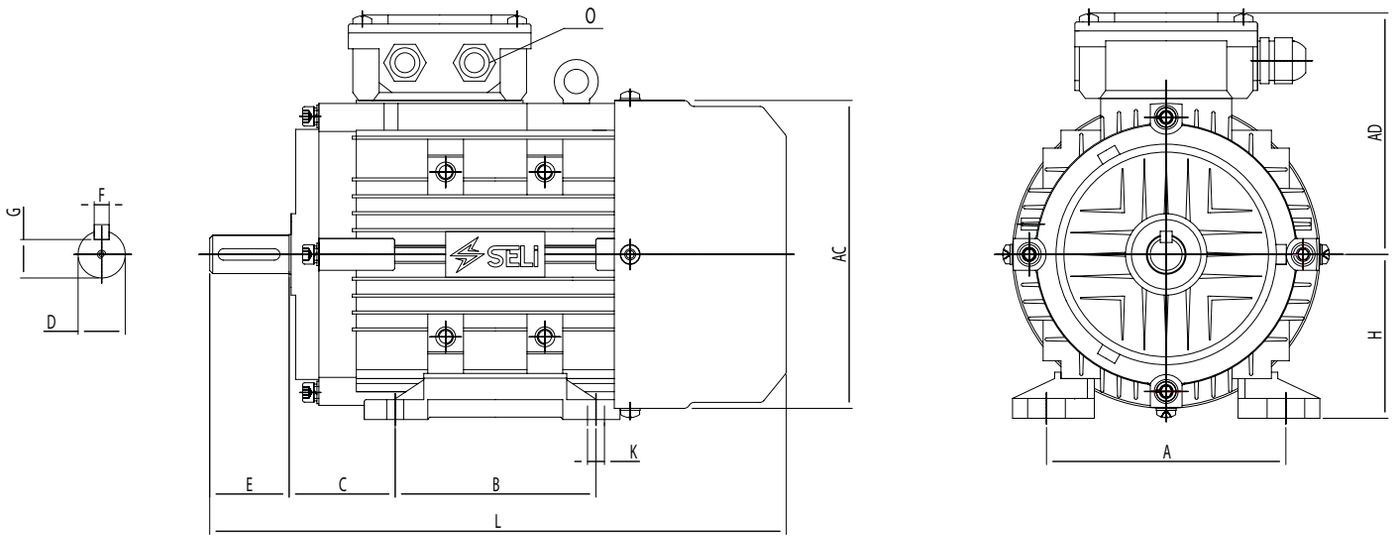
Power	Type	Speed	Current			Efficiency	Cosphi	Starting current	Nominal Torque	Starting Torque	Torque max	Mass
kW		Rpm	230 V	400 V	690 V	%			Nm			Kg
0,18	S3A 71 A6	880	1,22	0,7	--	63,9	0,66	4	2,0	1,9	2	6
0,25	S3A 71 B6	880	1,51	0,87	--	68,6	0,68	4	2,7	1,9	2	6,5
0,37	S3A 80 A6	900	2,13	1,23	--	73,5	0,7	4,7	3,9	1,9	2	9
0,55	S3A 80 B6	900	2,85	1,65	--	77,2	0,72	4,7	5,8	1,9	2,1	10,5
0,75	S3A 90 S6	930	3,29	1,9	--	78,9	0,71	6	7,7	2	2,1	14
1,1	S3A 90 L6	930	4,67	2,7	--	81	0,73	6	11,3	2	2,1	18
1,5	S3A 100 L6	950	6,32	3,6	--	82,5	0,73	6,5	15,1	2	2,1	30
2,2	S3A 112 M6	960	8,83	5,1	--	84,3	0,74	6,6	21,9	2	2,1	34
3	S3A 132 S6	970	11,77	6,8	--	85,6	0,74	6,8	29,5	2	2,1	42
4	S3A 132 MA6	970	15,58	9	--	86,8	0,74	6,8	39,4	2	2,1	48
5,5	S3A 132 MB6	970	--	12	6,92	88	0,75	7	54,1	2	2,1	55
7,5	S3G 160 M6	975	--	15,4	8,9	89,1	0,79	7	73,5	2	2,1	120
11	S3G 160 L6	975	--	22	12,7	90,3	0,8	7,2	107,7	2	2,1	145
15	S3G 180 L6	985	--	29,3	16,9	91,2	0,81	7,3	145,4	2	2,1	188
18,5	S3G 200 LA6	980	--	36	20,8	91,7	0,81	73	180,3	2	2,1	242
22	S3G 200 LB6	980	--	42,5	24,5	92,2	0,81	7,4	214,4	2	2,1	262
30	S3G 225 M6	980	--	56,1	32,4	92,9	0,83	6,9	292,3	2	2,1	320
37	S3G 250 M6	980	--	68,1	39,3	93,3	0,84	7,1	360,6	2	2,1	398
45	S3G 280 S6	980	--	81,6	47,1	93,7	0,85	73	438,5	2	2	532
55	S3G 280 M6	980	--	98,1	56,6	94,1	0,86	7,3	536,0	2	2	583
75	S3G 315 S6	990	--	136	78,5	94,6	0,84	6,6	723,5	2	2	965
90	S3G 315 M6	990	--	161	93	94,9	0,85	6,7	868,2	2	2	1085
110	S3G 315 LA6	990	--	196	113,2	95,1	0,85	6,7	1061,1	2	2	1175
132	S3G 315 LB6	990	--	232	133,9	95,4	0,86	6,8	1273,3	2	2	1.230
160	S3G 355 MA6	990	--	281	162,2	95,6	0,86	6,8	1543,4	1,8	2	1.575
200	S3G 355 MB6	990	--	346	199,8	95,8	0,87	6,8	1929,3	1,8	2	1.760
250	S3G 355 L6	990	--	433	250	95,8	0,87	6,8	2411,6	1,8	2	1.920

Electrical data IE3

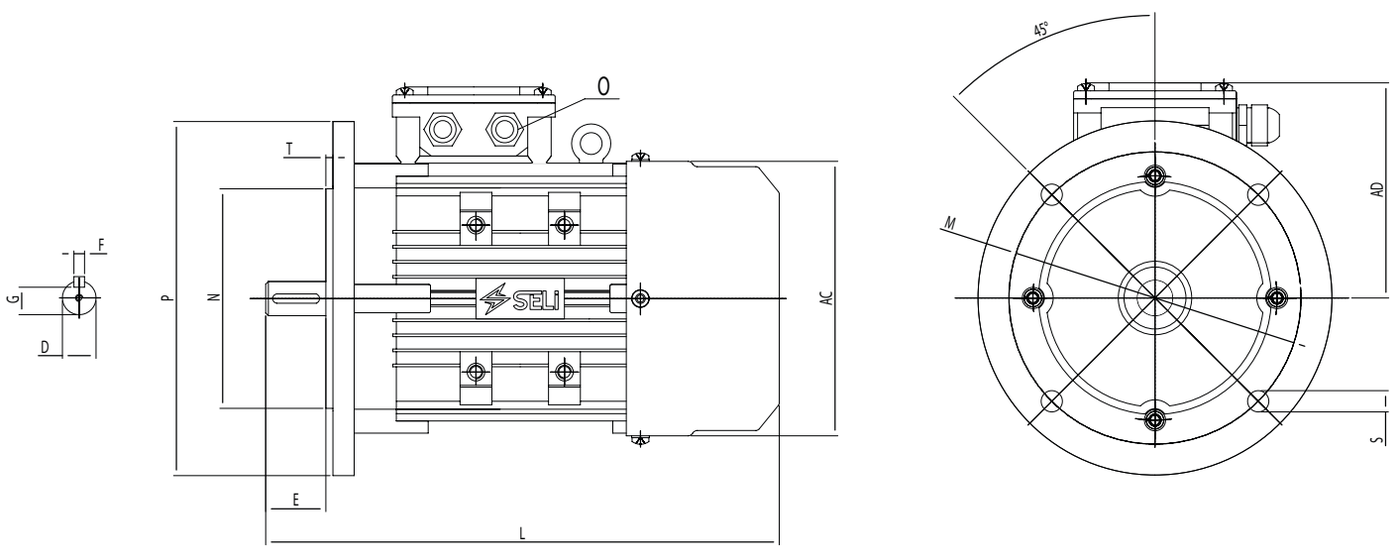
8 poles - 50 Hz

Power	Type	Speed	Current			Efficiency	Cosphi	Starting current	Nominal Torque	Starting Torque	Torque max	Mass
kW		Rpm	230 V	400 V	690 V	%			Nm			Kg
0,37	S3A 90 S8	660	2,58	1,49	--	69,3	0,61	4	5,4	1,8	1,9	23
0,55	S3A 90 L8	660	3,75	2,17	--	73	0,61	4	8,0	1,8	1,9	26
0,75	S3A 100A L8	690	4,16	2,4	--	75	0,67	4	10,4	1,8	2	36
1,1	S3A 100 LB8	690	5,75	3,32	--	77,7	0,69	5	15,2	1,8	2	46
1,5	S3A 112 M8	700	7,6	4,4	--	79,7	0,69	5	20,5	1,8	2	63
2,2	S3A 132 S8	710	10,46	6,04	--	81,9	0,71	6	29,6	1,8	2	76
3	S3A 132 M8	710	13,68	7,9	--	83,5	0,73	6	40,4	1,8	2	83
4	S3G 160 MA8	720	9,8	5,6	--	84,8	0,73	6	53,1	1,9	2	102
5,5	S3G 160 MB8	720	--	12,9	7,5	86,2	0,74	6	73,0	2	2	113
7,5	S3G 160 L8	720	--	16,9	9,8	87,3	0,75	6	99,5	2	2	132
11	S3G 180 L8	730	--	23,8	13,8	88,6	0,76	6	143,9	2	2	171
15	S3G 200 L8	730	--	32,4	18,7	89,6	0,76	6	196,2	2	2	217
18,5	S3G 225 S8	740	--	39	22,5	90,1	0,76	6,6	238,8	1,9	2	259
22	S3G 225 M8	740	--	45	26	90,6	0,78	6,6	283,9	1,9	2	278
30	S3G 250 M8	740	--	60,2	34,8	91,3	0,79	6,6	387,2	1,9	2	373
37	S3G 280 S8	740	--	73,9	42,7	91,8	0,79	6,6	477,5	1,9	2	484
45	S3G 280 M8	740	--	86,8	50,1	92,2	0,79	6,6	580,7	1,9	2	536
55	S3G 315 S8	740	--	105,5	60,9	92,5	0,81	6,6	709,8	1,8	2	721
75	S3G 315 M8	740	--	143,5	82,8	93,1	0,81	6,6	967,9	1,8	2	865
90	S3G 315 LA8	740	--	169,1	97,6	93,4	0,82	6,6	1161,5	1,8	2	972
110	S3G 315 LB8	740	--	206,2	119	93,7	0,82	6,6	1419,6	1,8	2	1.077
132	S3G 355 MA8	740	--	248	143,2	94	0,82	6,4	1703,5	1,8	2	1.518
160	S3G 355 MB8	740	--	299,3	172,8	943	0,82	6,4	2064,9	1,8	2	1.630
200	S3G 355 LA8	740	--	367,7	212,3	94,6	0,83	6,4	2581,1	1,8	2	1.819

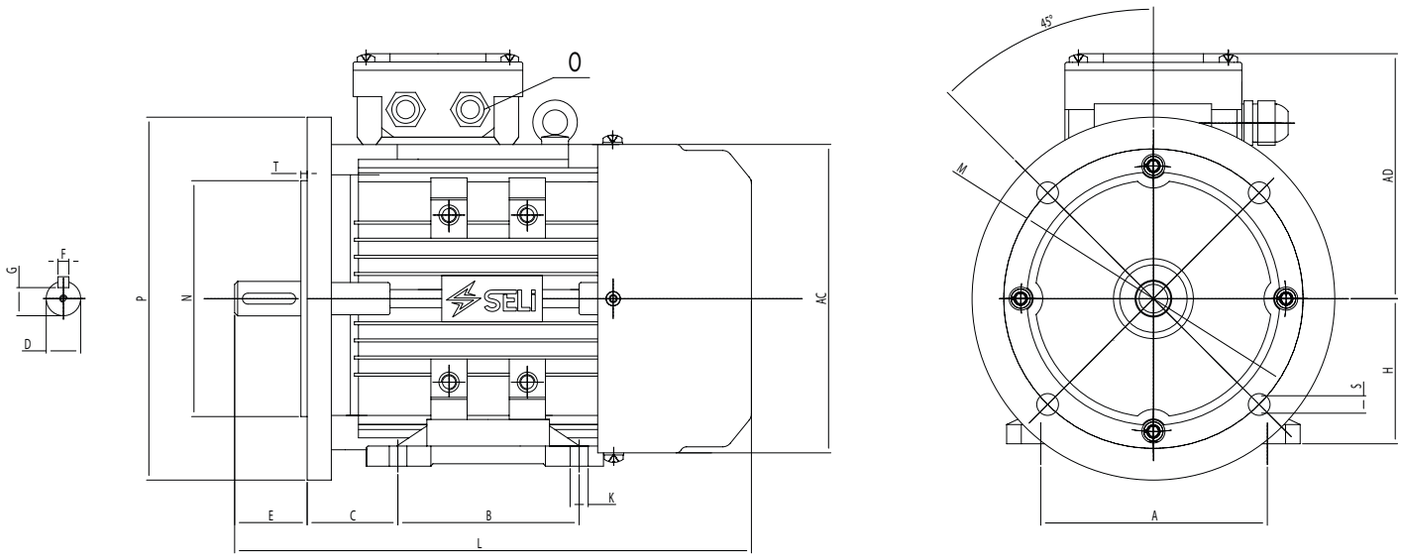
Technical drawings IE3



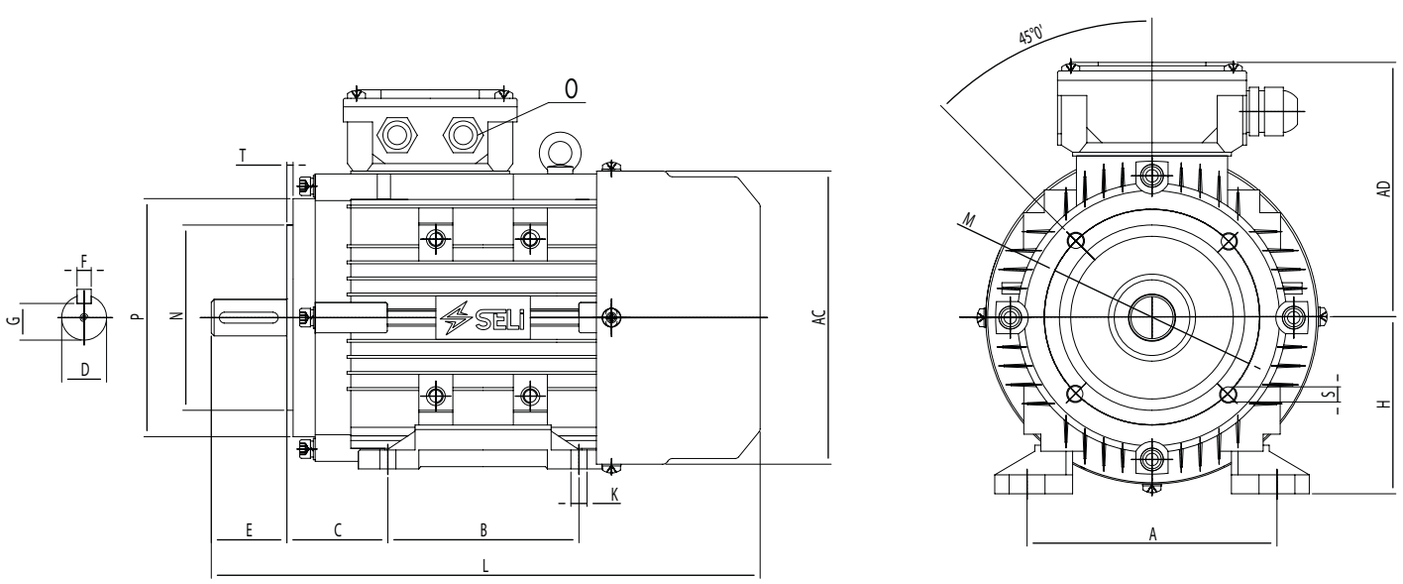
Mounting arrangement B3



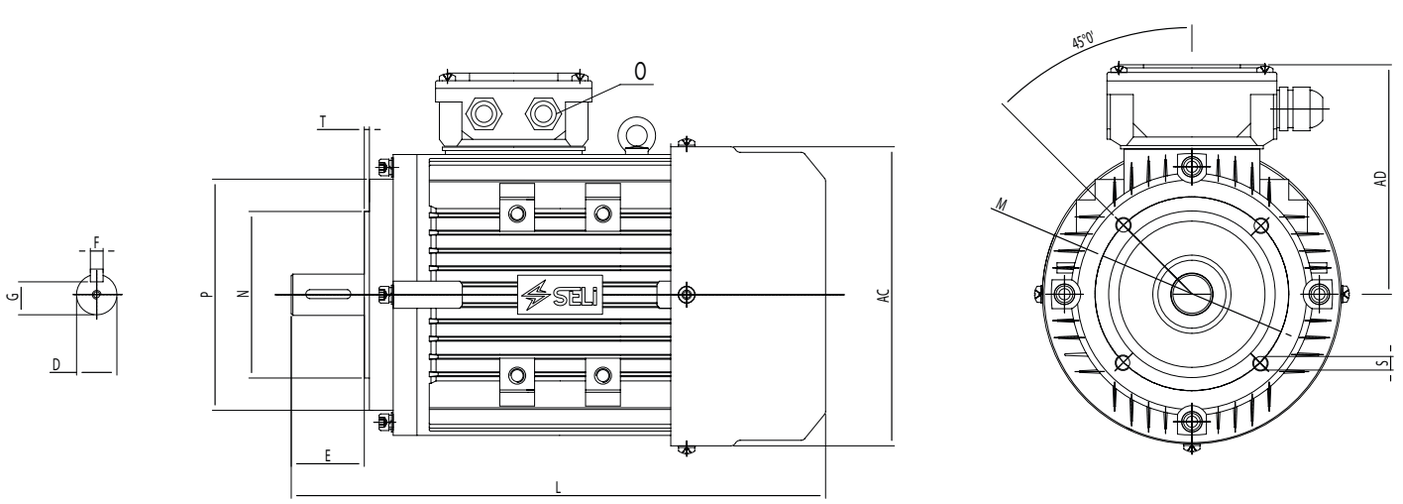
Mounting arrangement B5



Mounting arrangement B35



Mounting arrangement B34



Mounting arrangement B14

Dimensions IE3

2 poles - 50 Hz

Type	Motor shaft				Overall dimensions				B3 dimensions				B5 dimensions					B14 dimensions					Cable entry
	D	G	F	E	L	H	AC	AD	C	B	K	A	P/ B5	N/ B5	M/ B5	T/ B5	SB5	P/ B14	N/ B14	M/ B14	T/ B14	SB14	O
S3A 62 A2	11	8,5	4	23	225	63	115	120	40	80	7	100	140	95	115	3	4 X 10	90	60	75	2,5	4 x M5	1 x M20
S3A 63 B2	11	8,5	4	23	225	63	115	120	40	80	7	100	140	95	115	3	4 X 10	90	60	75	2,5	4 x M5	1 x M20
S3A 71 A2	14	11	5	30	250	71	135	124	45	90	7	112	160	110	130	3	4 x 10	105	70	85	2,5	4 x M6	1 x M20
S3A 71 B2	14	11	5	30	250	71	135	124	45	90	7	112	160	110	130	3	4 x 10	105	70	85	2,5	4 x M6	1 x M20
S3A 80 A2	19	15,5	6	40	304	80	167	147	50	100	10	125	200	130	165	3,5	4 x 12	120	80	100	3	4 x M6	2 x M20
S3A 80 B2	19	15,5	6	40	304	80	167	147	50	100	10	125	200	130	165	3,5	4 x 12	120	80	100	3	4 x M6	2 x M20
S3A 90 S2	24	20	8	50	336	90	182	155	56	100	10	140	200	130	165	3,5	4 x 12	140	95	115	3	4 x M8	2 x M20
S3A 90 L2	24	20	8	50	361	90	182	155	56	125	10	140	200	130	165	3,5	4 x 12	140	95	115	3	4 x M8	2 x M20
S3A 100 L2	28	24	8	60	406	100	205	166	63	140	12	160	250	180	215	4	4 x 14,5	160	110	130	3,5	4 x M8	2 x M20
S3A 112 M2	28	24	8	60	452	112	219	182	70	140	12	190	250	180	215	4	4 x 14,5	160	110	130	3,5	4 x M8	2 x M32
S3A 132 SA2	38	33	10	80	470	132	258	203	89	140	12	216	300	230	265	4	4 x 14,5	200	130	165	4	4 x M10	2 x M25
S3A 132 SB2	38	33	10	80	470	132	258	203	89	140	12	216	300	230	265	4	4 x 14,5	200	130	165	4	4 x M10	2 x M25
S3G 160 MA2	42	37	12	110	608	160	314	251	108	210	14,5	254	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S3G 160 MB2	42	37	12	110	608	160	314	251	108	210	14,5	254	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S3G 160 L2	42	37	12	110	652	160	314	251	108	254	14,5	254	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S3G 180 M2	48	42,5	14	110	688	180	355	267	121	241	14,5	279	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S3G 200 LA2	55	49	16	110	779	200	397	299	133	305	16,5	318	400	300	350	5	4 x 18,5	--	--	--	--	--	2 x M50
S3G 200 LB2	55	49	16	110	779	200	397	299	133	305	16,5	318	400	300	350	5	4 x 18,5	--	--	--	--	--	2 x M50
S3G 225 M2	55	49	16	110	819	225	446	322	149	311	18,5	356	450	350	400	5	8 x 18,5	--	--	--	--	--	2 x M50
S3G 250 M2	60	53	18	140	910	250	485	358	168	349	24	406	550	450	500	5	8x 18,5	--	--	--	--	--	2 x M63
S3G 280 S2	65	58	18	140	982	280	547	387	190	368	24	457	550	450	500	5	8 x 18,5	--	--	--	--	--	2 x M63
S3G 280 M2	65	58	18	140	1033	280	547	387	190	419	24	457	550	450	500	5	8 x 18,5	--	--	--	--	--	2 x M63
S3G 315 S2	65	58	18	140	1194	315	620	527	216	406	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S3G 315 M2	65	58	18	140	1304	315	620	527	216	457	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S3G 315 LA2	65	58	18	140	1304	315	620	527	216	508	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S3G 315 LB2	65	58	18	140	1304	315	620	527	216	508	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S3G 355 M2	75	67,5	20	140	1486	355	698	642	254	560	28	610	800	680	740	6	8 x 24	--	--	--	--	--	2 x M71
S3G 355 L2	75	67,5	20	140	1486	355	698	642	254	630	28	610	800	680	740	6	8 x 24	--	--	--	--	--	2 x M71

Dimensions IE3

4 poles - 50 Hz

Type	Motor shaft				Overall dimensions				B3 dimensions				B5 dimensions					B14 dimensions					Cable entry
	D	G	F	E	L	H	AC	AD	C	B	K	A	P/ B5	N/ B5	M/ B5	T/ B5	SB5	P/ B14	N/ B14	M/ B14	T/ B14	SB14	O
S3A 63 A4	11	8,5	4	23	225	63	115	120	40	80	7	100	140	95	115	3	4 X 10	90	60	75	2,5	4 x M5	1 x M20
S3A 63 B4	11	8,5	4	23	225	63	115	120	40	80	7	100	140	95	115	3	4 X 10	90	60	75	2,5	4 x M5	1 x M20
S3A 71 A4	14	11	5	30	250	71	135	124	45	90	7	112	160	110	130	3	4 x 10	105	70	85	2,5	4 x M6	1 x M20
S3A 71 B4	14	11	5	30	250	71	135	124	45	90	7	112	160	110	130	3	4 x 10	105	70	85	2,5	4 x M6	1 x M20
S3A 80 A4	19	15,5	6	40	304	80	167	147	50	100	10	125	200	130	165	3,5	4 x 12	120	80	100	3	4 x M6	2 x M20
S3A 80 B4	19	15,5	6	40	304	80	167	147	50	100	10	125	200	130	165	3,5	4 x 12	120	80	100	3	4 x M6	2 x M20
S3A 90 S4	24	20	8	50	336	90	182	155	56	100	10	140	200	130	165	3,5	4 x 12	140	95	115	3	4 x M8	2 x M20
S3A 90 L4	24	20	8	50	361	90	182	155	56	125	10	140	200	130	165	3,5	4 x 12	140	95	115	3	4 x M8	2 x M20
S3A 100 LA4	28	24	8	60	406	100	205	166	63	140	12	160	250	180	215	4	4 x 14,5	160	110	130	3,5	4 x M8	2 x M20
S3A 100 LB4	28	24	8	60	406	100	205	166	63	140	12	160	250	180	215	4	4 x 14,5	160	110	130	3,5	4 x M8	2 x M20
S3A 112 M4	28	24	8	60	452	112	219	182	70	140	12	190	250	180	215	4	4 x 14,5	160	110	130	3,5	4 x M8	2 x M25
S3A 132 S4	38	33	10	80	470	132	258	203	89	140	12	216	300	230	265	4	4 x 14,5	200	130	165	4	4 x M10	2 x M25
S3A 132 M4	38	33	10	80	508	132	258	203	89	178	12	216	300	230	265	4	4 x 14,5	200	130	165	4	4 x M10	2 x M25
S3G 160 M4	42	37	12	110	608	160	314	251	108	210	14,5	254	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S3G 160 L4	42	37	12	110	652	160	314	251	108	254	14,5	254	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S3G 180 M4	48	42,5	14	110	688	180	355	267	121	241	14,5	279	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S3G 180 L4	48	42,5	14	110	726	180	355	267	121	279	14,5	279	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S3G 200 L4	55	49	16	110	779	200	397	299	133	305	16,5	318	400	300	350	5	4 x 18,5	--	--	--	--	--	2 x M50
S3G 225 S4	60	53	18	140	824	225	446	322	149	286	18,5	356	450	350	400	5	8 x 18,5	--	--	--	--	--	2 x M50
S3G 225 M4	60	53	18	140	849	225	446	322	149	311	18,5	356	450	350	400	5	8 x 18,5	--	--	--	--	--	2 x M50
S3G 250 M4	65	58	18	140	910	250	485	358	168	349	24	406	550	450	500	5	8x 18,5	--	--	--	--	--	2 x M63
S3G 280 S4	75	67,5	20	140	982	280	547	387	190	368	24	457	550	450	500	5	8 x 18,5	--	--	--	--	--	2 x M63
S3G 280 M4	75	67,5	20	140	1033	280	547	387	190	419	24	457	550	450	500	5	8 x 18,5	--	--	--	--	--	2 x M63
S3G 315 S4	80	71	22	170	1224	315	620	527	216	406	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S3G 315 M4	80	71	22	170	1334	315	620	527	216	457	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S3G 315 LA4	80	71	22	170	1334	315	620	527	216	508	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S3G 315 LB4	80	71	22	170	1334	315	620	527	216	508	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S3G 355 M4	100	90	28	210	1516	355	698	642	254	560	28	610	800	680	740	6	8 x 24	--	--	--	--	--	2 x M71
S3G 355 L4	100	90	28	210	1516	355	698	642	254	630	28	610	800	680	740	6	8 x 24	--	--	--	--	--	2 x M71

Dimensions IE3

6 poles - 50 Hz

Type	Motor shaft				Overall dimensions				B3 dimensions				B5 dimensions					B14 dimensions					Cable entry
	D	G	F	E	L	H	AC	AD	C	B	K	A	P/ B5	N/ B5	M/ B5	T/ B5	SB5	P/ B14	N/ B14	M/ B14	T/ B14	SB14	O
S3A 71 A6	14	11	5	30	250	71	135	124	45	90	7	112	160	110	130	3	4 x 10	105	70	85	2,5	4 x M6	1 x M20
S3A 71 B6	14	11	5	30	250	71	135	124	45	90	7	112	160	110	130	3	4 x 10	105	70	85	2,5	4 x M6	1 x M20
S3A 80 A6	19	15,5	6	40	304	80	167	147	50	100	10	125	200	130	165	3,5	4 x 12	120	80	100	3	4 x M6	2 x M20
S3A 80 B6	19	15,5	6	40	304	80	167	147	50	100	10	125	200	130	165	3,5	4 x 12	120	80	100	3	4 x M6	2 x M20
S3A 90 S6	24	20	8	50	336	90	182	155	56	100	10	140	200	130	165	3,5	4 x 12	140	95	115	3	4 x M8	2 x M20
S3A 90 L6	24	20	8	50	361	90	182	155	56	125	10	140	200	130	165	3,5	4 x 12	140	95	115	3	4 x M8	2 x M20
S3A 100 L6	28	24	8	60	406	100	205	166	63	140	12	160	250	180	215	4	4 x 14,5	160	110	130	3,5	4 x M8	2 x M20
S3A 112 M6	28	24	8	60	452	112	219	182	70	140	12	190	250	180	215	4	4 x 14,5	160	110	130	3,5	4 x M8	2 x M25
S3A 132 S6	38	33	10	80	470	132	258	203	89	140	12	216	300	230	265	4	4 x 14,5	200	130	165	4	4 x M10	2 x M25
S3A 132 MA6	38	33	10	80	508	132	258	203	89	178	12	216	300	230	265	4	4 x 14,5	200	130	165	4	4 x M10	2 x M25
S3A 132 MB6	38	33	10	80	508	132	258	203	89	178	12	216	300	230	265	4	4 x 14,5	200	130	165	4	4 x M10	2 x M25
S3G 160 M6	42	37	12	110	608	160	314	251	108	210	14,5	254	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S3G 160 L6	42	37	12	110	652	160	314	251	108	254	14,5	254	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S3G 180 L6	48	42,5	14	110	726	180	355	267	121	279	14,5	279	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S3G 200 LA6	55	49	16	110	779	200	397	299	133	305	16,5	318	400	300	350	5	4 x 18,5	--	--	--	--	--	2 x M50
S3G 200 LB6	55	49	16	110	779	200	397	299	133	305	16,5	318	400	300	350	5	4 x 18,5	--	--	--	--	--	2 x M50
S3G 225 M6	60	53	18	140	849	225	446	322	149	311	18,5	356	450	350	400	5	8 x 18,5	--	--	--	--	--	2 x M50
S3G 250 M6	65	58	18	140	910	250	485	358	168	349	24	406	550	450	500	5	8x 18,5	--	--	--	--	--	2 x M63
S3G 280 S6	75	67,5	20	140	982	280	547	387	190	368	24	457	550	450	500	5	8 x 18,5	--	--	--	--	--	2 x M63
S3G 280 M6	75	67,5	20	140	1033	280	547	387	190	419	24	457	550	450	500	5	8 x 18,5	--	--	--	--	--	2 x M63
S3G 315 S6	80	71	22	170	1224	315	620	527	216	406	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S3G 315 M6	80	71	22	170	1334	315	620	527	216	457	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S3G 315 LA6	80	71	22	170	1334	315	620	527	216	508	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S3G 315 LB6	80	71	22	170	1334	315	620	527	216	508	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S3G 355 MA6	100	90	28	210	1516	355	698	642	254	560	28	610	800	680	740	6	8 x 24	--	--	--	--	--	2 x M71
S3G 355 MB6	100	90	28	210	1516	355	698	642	254	560	28	610	800	680	740	6	8 x 24	--	--	--	--	--	2 x M71
S3G 355 L6	100	90	28	210	1516	355	698	642	254	630	28	610	800	680	740	6	8 x 24	--	--	--	--	--	2 x M71

Dimensions IE3

8 poles - 50 Hz

Type	Motor shaft				Overall dimensions				B3 dimensions				B5 dimensions					B14 dimensions					Cable entry
	D	G	F	E	L	H	AC	AD	C	B	K	A	P/ B5	N/ B5	M/ B5	T/ B5	SB5	P/ B14	N/ B14	M/ B14	T/ B14	SB14	O
S3A 90 S8	24	20	8	50	336	90	182	155	56	100	10	140	200	130	165	3,5	4 x 12	140	95	115	3	4 x M8	2 x M20
S3A 90 L8	24	20	8	50	361	90	182	155	56	125	10	140	200	130	165	3,5	4 x 12	140	95	115	3	4 x M8	2 x M20
S3A 100A L8	28	24	8	60	406	100	205	166	63	140	12	160	250	180	215	4	4 x 14,5	160	110	130	3,5	4 x M8	2 x M20
S3A 100 LB8	28	24	8	60	406	100	205	166	63	140	12	160	250	180	215	4	4 x 14,5	160	110	130	3,5	4 x M8	2 x M20
S3A 112 M8	28	24	8	60	452	112	219	182	70	140	12	190	250	180	215	4	4 x 14,5	160	110	130	3,5	4 x M8	2 x M25
S3A 132 S8	38	33	10	80	470	132	258	203	89	140	12	216	300	230	265	4	4 x 14,5	200	130	165	4	4 x M10	2 x M25
S3A 132 M8	38	33	10	80	508	132	258	203	89	178	12	216	300	230	265	4	4 x 14,5	200	130	165	4	4 x M10	2 x M25
S3G 160 MA8	42	37	12	110	608	160	314	251	108	210	14,5	254	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S3G 160 MB8	42	37	12	110	608	160	314	251	108	210	14,5	254	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S3G 160 L8	42	37	12	110	652	160	314	251	108	254	14,5	254	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S3G 180 L8	48	42,5	14	110	726	180	355	267	121	279	14,5	279	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S3G 200 L8	55	49	16	110	779	200	397	299	133	305	16,5	318	400	300	350	5	4 x 18,5	--	--	--	--	--	2 x M50
S3G 225 S8	60	53	18	140	824	225	446	322	149	286	18,5	356	450	350	400	5	8 x 18,5	--	--	--	--	--	2 x M50
S3G 225 M8	60	53	18	140	849	225	446	322	149	311	18,5	356	450	350	400	5	8 x 18,5	--	--	--	--	--	2 x M50
S3G 250 M8	65	58	18	140	910	250	485	358	168	349	24	406	550	450	500	5	8x 18,5	--	--	--	--	--	2 x M63
S3G 280 S8	75	67,5	20	140	982	280	547	387	190	368	24	457	550	450	500	5	8 x 18,5	--	--	--	--	--	2 x M63
S3G 280 M8	75	67,5	20	140	1033	280	547	387	190	419	24	457	550	450	500	5	8 x 18,5	--	--	--	--	--	2 x M63
S3G 315 S8	80	71	22	170	1224	315	620	527	216	406	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S3G 315 M8	80	71	22	170	1334	315	620	527	216	457	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S3G 315 LA8	80	71	22	170	1334	315	620	527	216	508	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S3G 315 LB8	80	71	22	170	1334	315	620	527	216	508	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S3G 355 MA8	100	90	28	210	1516	355	698	642	254	560	28	610	800	680	740	6	8 x 24	--	--	--	--	--	2 x M71
S3G 355 MB8	100	90	28	210	1516	355	698	642	254	560	28	610	800	680	740	6	8 x 24	--	--	--	--	--	2 x M71
S3G 355 LA8	100	90	28	210	1516	355	698	642	254	630	28	610	800	680	740	6	8 x 24						2 x M71

Electrical data IE4

2 poles - 50 Hz

Power	Type	Speed	Current			Efficiency	Cosphi	Starting current	Nominal Torque	Starting Torque	Torque max	Mass
kW		Rpm	230 V	400 V	690 V	%			Nm			Kg
11	S4G 160 MA2	2950	--	19,3	11,1	92,6	0,89	8,1	35,6	2	2,3	132
15	S4G 160 MB2	2950	--	26,1	15,1	93,3	0,89	8,1	48,6	2	2,3	140
18,5	S4G 160 L2	2950	--	32	18,5	93,7	0,89	8,2	59,9	2	2,3	155
22	S4G 180 M2	2960	--	38	22	94	0,89	8,2	71,0	2	23	195
30	S4G 200 LA2	2970	--	51,5	29,8	94,5	0,89	7,6	96,5	2	23	260
37	S4G 200 LB2	2970	--	63,3	36,6	94,8	0,89	7,6	119,0	2	23	285
45	S4G 225 M2	2970	--	76	43,8	95	0,9	7,7	144,7	2	2,3	345
55	S4G 250 M2	2970	--	92,6	54,5	95,3	0,9	7,7	176,9	2	2,3	450
75	S4G 280 S2	2980	--	126	72,5	95,6	0,9	7,1	240,4	1,8	2,3	590
90	S4G 280 M2	2980	--	151	87,2	95,8	0,9	7,1	288,4	1,8	23	660
110	S4G 315 S2	2980	--	184	106,2	96	0,9	7,1	352,5	1,8	23	960
132	S4G 315 M2	2980	--	220	127	96,2	0,9	7,1	423,0	1,8	2,3	1.100
160	S4G 315 LA2	2980	--	264	152,5	96,3	0,91	7,2	512,8	1,8	2,3	1.185
200	S4G 315 LB2	2980	--	329	190	96,5	0,91	7,2	640,9	1,8	2,2	1.320
250	S4G 355 M2	2980	--	411	237	96,5	0,91	7,2	801,2	1,6	2,2	1.950
315	S4G 355 L2	2980	--	518	299	96,5	0,91	7,2	1009,5	1,6	2,2	2.080

4 poles - 50 Hz

Power	Type	Speed	Current			Efficiency	Cosphi	Starting current	Nominal Torque	Starting Torque	Torque max	Mass
kW		Rpm	230 V	400 V	690 V	%			Nm			Kg
11	S4G 160 M4	1470	--	20	11,5	93,3	0,85	7,7	71,5	2,2	2,3	136
15	S4G 160 L4	1470	--	26,8	15,5	93,9	0,86	7,8	97,4	2,2	2,3	155
18,5	S4G 180 M4	1475	--	33	19,1	94,2	0,86	7,8	119,8	2	2,3	195
22	S4G 180 L4	1475	--	39,1	22,6	94,5	0,86	7,8	142,4	2	2,3	210
30	S4G 200 L4	1475	--	53,1	30,7	94,9	0,86	7,3	194,2	2	2,3	285
37	S4G 225 S4	1480	--	65,2	37,6	95,2	0,86	7,4	238,8	2	2,3	350
45	S4G 225 M4	1480	--	79,2	45,7	95,4	0,86	7,4	290,4	2	23	385
55	S4G 250 M4	1485	--	96,5	55,7	95,7	0,86	7,4	353,7	2,2	23	510
75	S4G 280 S4	1485	--	128	73,9	96	0,88	6,9	482,3	2	2,3	631
90	S4G 280 M4	1485	--	154	88,9	96,1	0,88	6,9	578,8	2	23	715
110	S4G 315 S4	1490	--	185	106,8	96,3	0,89	7	705,0	2	2,2	1.010
132	S4G 315 M4	1490	--	222	128,2	96,4	0,89	7	846,0	2	2,2	1.080
160	S4G 315 LA4	1490	--	271	155,3	96,6	0,89	7,1	1025,5	2	2,2	1.160
200	S4G 315 LB4	1490	--	339	195,7	96,7	0,9	7,1	1281,9	2	2,2	1.275
250	S4G 355 M4	1490	--	424	244,8	96,7	0,9	7,1	1602,3	2	2,2	1.850
315	S4G 355 L4	1490	--	534	308,3	96,7	0,9	7,1	2019,0	2	2,2	2.050

Electrical data IE4

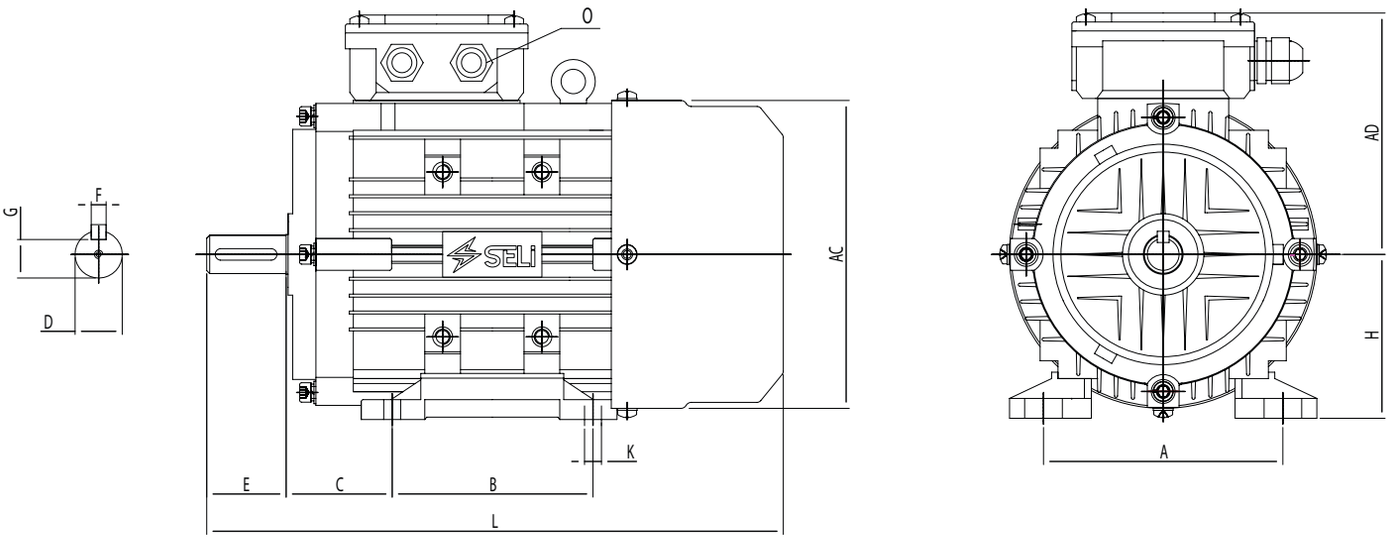
6 poles - 50 Hz

Power	Type	Speed	Current			Efficiency	Cosphi	Starting current	Nominal Torque	Starting Torque	Torque max	Mass
kW		Rpm	230 V	400 V	690 V	%			Nm			Kg
7,5	S4G 160 M6	975	--	15	8,7	92,3	0,79	7	73,5	2	2,1	140
11	S4G 160 L6	975	--	21,5	12,4	92,9	0,8	7,2	107,7	2	2,1	155
15	S4G 180 L6	985	--	28,8	16,6	93,4	0,81	7,3	145,4	2	2,1	210
18,5	S4G 200 LA6	980	--	35,3	20,4	93,7	0,81	73	180,3	2	2,1	230
22	S4G 200 LB6	980	--	41,8	24,1	94,2	0,81	7,4	214,4	2	2,1	260
30	S4G 225 M6	980	--	55,4	32	94,5	0,83	6,9	292,3	2	2,1	340
37	S4G 250 M6	980	--	67,3	38,9	94,8	0,84	7,1	360,6	2	2,1	450
45	S4G 280 S6	980	--	80,6	46,5	95,1	0,85	73	438,5	2	2	595
55	S4G 280 M6	980	--	97	56	95,4	0,86	7,3	536,0	2	2	655
75	S4G 315 S6	990	--	132	76,2	95,6	0,84	6,6	723,5	2	2	985
90	S4G 315 M6	990	--	158	91,2	95,8	0,85	6,7	868,2	2	2	1.100
110	S4G 315 LA6	990	--	193	111,4	96	0,85	6,7	1061,1	2	2	1.180
132	S4G 315 LB6	990	--	231	133,4	96,2	0,86	6,8	1273,3	2	2	1.310
160	S4G 355 MA6	990	--	279	161,1	96,3	0,86	6,8	1543,4	1,8	2	1.840
200	S4G 355 MB6	990	--	345	199,2	96,5	0,87	6,8	1929,3	1,8	2	2.030
250	S4G 355 L6	990	--	430	248,3	96,6	0,87	6,8	2411,6	1,8	2	2.250

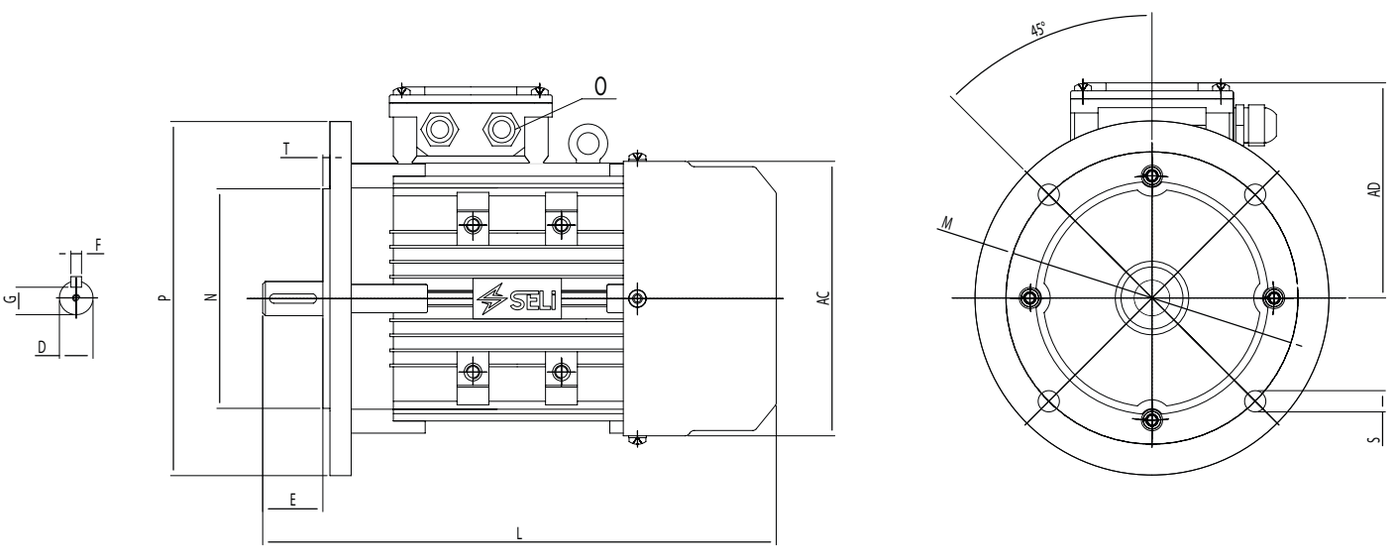
8 poles - 50 Hz

Power	Type	Speed	Current			Efficiency	Cosphi	Starting current	Nominal Torque	Starting Torque	Torque max	Mass
kW		Rpm	230 V	400 V	690 V	%			Nm			Kg
4	S4G 160 L8	720	9	5,2	--	87,1	0,73	6	53,1	1,9	2	115
5,5	S4G 180 L8	720	--	12	6,9	88,3	0,74	6	73,0	2	2	126
7,5	S4G 200 L8	720	--	16	9,2	89,3	0,75	6	99,5	2	2	148
11	S4G 225 S8	730	--	22,9	13,2	90,4	0,76	6	143,9	2	2	195
15	S4G 225 M8	730	--	30,9	17,8	91,2	0,76	6	196,2	2	2	245
18,5	S4G 250 M8	740	--	37,4	21,6	91,7	0,76	6,6	238,8	1,9	2	285
22	S4G 280 S8	740	--	43,8	25,3	92,1	0,78	6,6	283,9	1,9	2	325
30	S4G 280 M8	740	--	58,5	33,8	92,7	0,79	6,6	387,2	1,9	2	420
37	S4G 315 S8	740	--	71,8	41,5	93,1	0,79	6,6	477,5	1,9	2	550
45	S4G 315 M8	740	--	87,1	50,3	93,4	0,79	6,6	580,7	1,9	2	605
55	S4G 315 LA8	740	--	103	59,5	93,7	0,81	6,6	709,8	1,8	2	960
75	S4G 315 LB8	740	--	140	80,8	94,2	0,81	6,6	967,9	1,8	2	1.040
90	S4G 355 MA8	740	--	166	95,8	94,4	0,82	6,6	1161,5	1,8	2	1.160
110	S4G 355 MB8	740	--	202	116,6	94,7	0,82	6,6	1419,6	1,8	2	1.280
132	S4G 355 LA8	740	--	242	139,7	94,9	0,82	6,4	1703,5	1,8	2	1.820
160	S3G 355 MB8	740	--	293	169,2	95,1	0,82	6,4	2064,9	1,8	2	1.960
200	S3G 355 LA8	740	--	373	215,4	95,4	0,83	6,4	2581,1	1,8	2	2.105

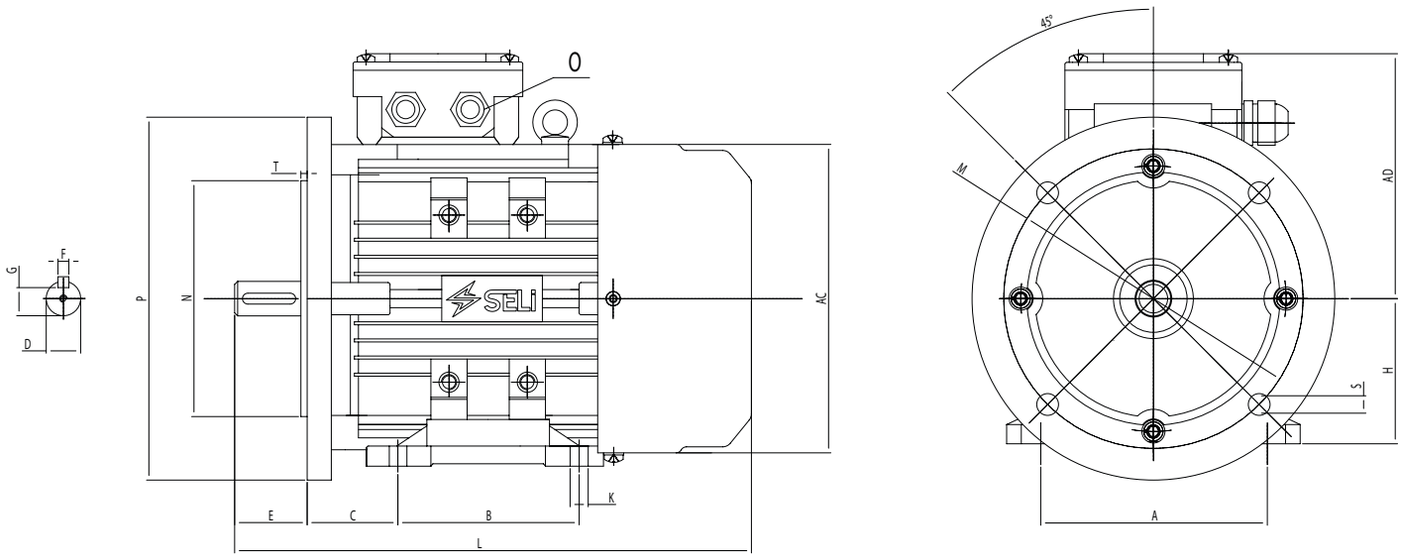
Technical drawings IE4



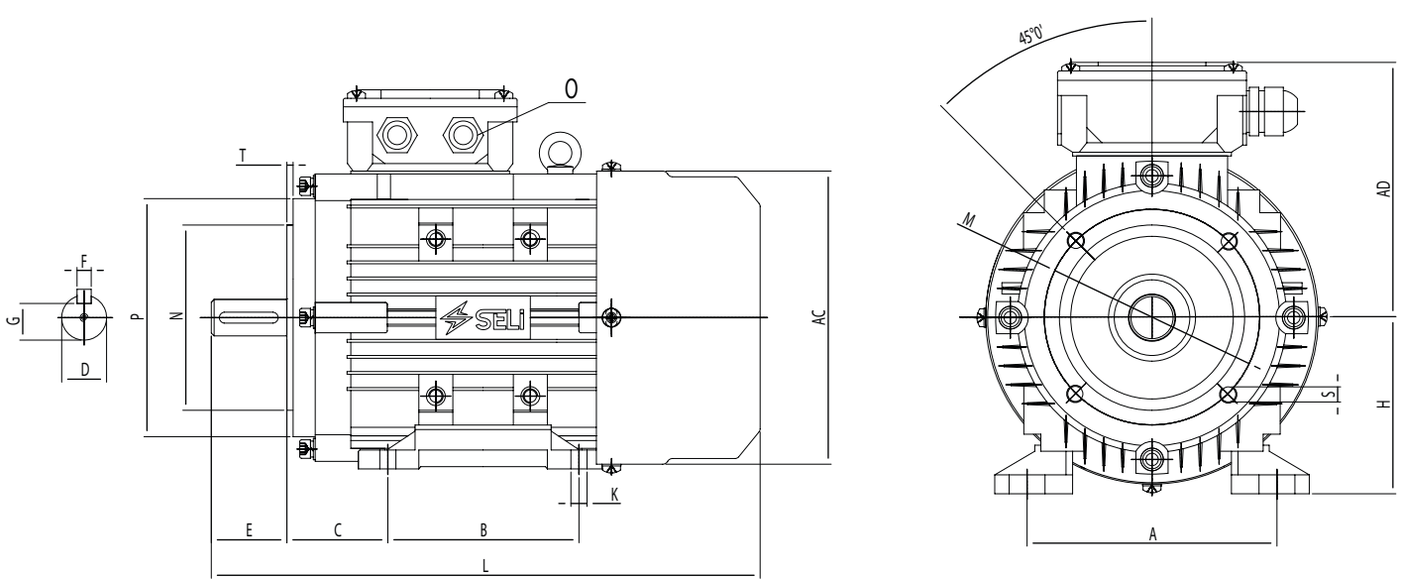
Mounting arrangement B3



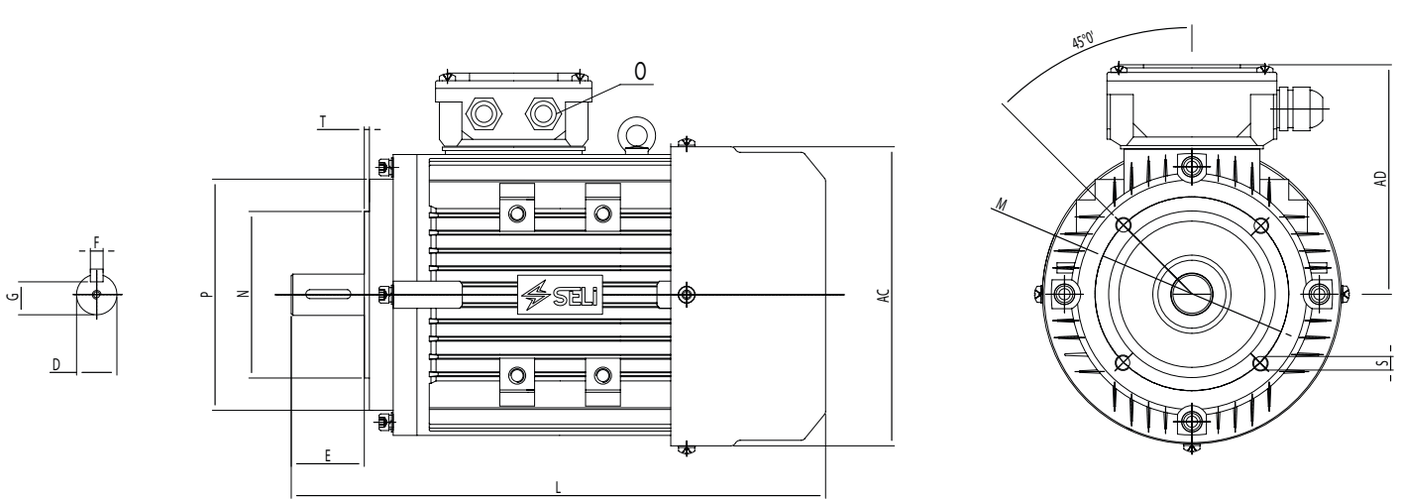
Mounting arrangement B5



Mounting arrangement B35



Mounting arrangement B34



Mounting arrangement B14

Dimensions IE4

2 poles - 50 Hz

Type	Motor shaft				Overall dimensions				B3 dimensions				B5 dimensions					B14 dimensions					Cable entry
	D	G	F	E	L	H	AC	AD	C	B	K	A	P/ B5	N/ B5	M/ B5	T/ B5	SB5	P/ B14	N/ B14	M/ B14	T/ B14	SB14	O
S4G 160 MA2	42	37	12	110	608	160	314	251	108	210	14,5	254	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S4G 160 MB2	42	37	12	110	608	160	314	251	108	210	14,5	254	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S4G 160 L2	42	37	12	110	652	160	314	251	108	254	14,5	254	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S4G 180 M2	48	42,5	14	110	688	180	355	267	121	241	14,5	279	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S4G 200 LA2	55	49	16	110	779	200	397	299	133	305	16,5	318	400	300	350	5	4 x 18,5	--	--	--	--	--	2 x M50
S4G 200 LB2	55	49	16	110	779	200	397	299	133	305	16,5	318	400	300	350	5	4 x 18,5	--	--	--	--	--	2 x M50
S4G 225 M2	55	49	16	110	819	225	446	322	149	311	18,5	356	450	350	400	5	8 x 18,5	--	--	--	--	--	2 x M50
S4G 250 M2	60	53	18	140	910	250	485	358	168	349	24	406	550	450	500	5	8x 18,5	--	--	--	--	--	2 x M63
S4G 280 S2	65	58	18	140	982	280	547	387	190	368	24	457	550	450	500	5	8 x 18,5	--	--	--	--	--	2 x M63
S4G 280 M2	65	58	18	140	1033	280	547	387	190	419	24	457	550	450	500	5	8 x 18,5	--	--	--	--	--	2 x M63
S4G 315 S2	65	58	18	140	1194	315	620	527	216	406	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S4G 315 M2	65	58	18	140	1304	315	620	527	216	457	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S4G 315 LA2	65	58	18	140	1304	315	620	527	216	508	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S4G 315 LB2	65	58	18	140	1304	315	620	527	216	508	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S4G 355 M2	75	67,5	20	140	1486	355	698	642	254	560	28	610	800	680	740	6	8 x 24	--	--	--	--	--	2 x M71
S4G 355 L2	75	67,5	20	140	1486	355	698	642	254	630	28	610	800	680	740	6	8 x 24	--	--	--	--	--	2 x M71

4 poles - 50 Hz

Type	Motor shaft				Overall dimensions				B3 dimensions				B5 dimensions					B14 dimensions					Cable entry
	D	G	F	E	L	H	AC	AD	C	B	K	A	P/ B5	N/ B5	M/ B5	T/ B5	SB5	P/ B14	N/ B14	M/ B14	T/ B14	SB14	O
S4G 160 M4	42	37	12	110	608	160	314	251	108	210	14,5	254	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S4G 160 L4	42	37	12	110	652	160	314	251	108	254	14,5	254	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S4G 180 M4	48	42,5	14	110	688	180	355	267	121	241	14,5	279	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S4G 180 L4	48	42,5	14	110	726	180	355	267	121	279	14,5	279	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S4G 200 L4	55	49	16	110	779	200	397	299	133	305	16,5	318	400	300	350	5	4 x 18,5	--	--	--	--	--	2 x M50
S4G 225 S4	60	53	18	140	824	225	446	322	149	286	18,5	356	450	350	400	5	8 x 18,5	--	--	--	--	--	2 x M50
S4G 225 M4	60	53	18	140	849	225	446	322	149	311	18,5	356	450	350	400	5	8 x 18,5	--	--	--	--	--	2 x M50
S4G 250 M4	65	58	18	140	910	250	485	358	168	349	24	406	550	450	500	5	8x 18,5	--	--	--	--	--	2 x M63
S4G 280 S4	75	67,5	20	140	982	280	547	387	190	368	24	457	550	450	500	5	8 x 18,5	--	--	--	--	--	2 x M63
S4G 280 M4	75	67,5	20	140	1033	280	547	387	190	419	24	457	550	450	500	5	8 x 18,5	--	--	--	--	--	2 x M63
S4G 315 S4	80	71	22	170	1224	315	620	527	216	406	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S4G 315 M4	80	71	22	170	1334	315	620	527	216	457	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S4G 315 LA4	80	71	22	170	1334	315	620	527	216	508	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S4G 315 LB4	80	71	22	170	1334	315	620	527	216	508	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S4G 355 M4	100	90	28	210	1516	355	698	642	254	560	28	610	800	680	740	6	8 x 24	--	--	--	--	--	2 x M71
S4G 355 L4	100	90	28	210	1516	355	698	642	254	630	28	610	800	680	740	6	8 x 24	--	--	--	--	--	2 x M71

Dimensions IE4

6 poles - 50 Hz

Type	Motor shaft				Overall dimensions				B3 dimensions				B5 dimensions					B14 dimensions					Cable entry
	D	G	F	E	L	H	AC	AD	C	B	K	A	P/ B5	N/ B5	M/ B5	T/ B5	SB5	P/ B14	N/ B14	M/ B14	T/ B14	SB14	O
S4G 160 M6	42	37	12	110	608	160	314	251	108	210	14,5	254	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S4G 160 L6	42	37	12	110	652	160	314	251	108	254	14,5	254	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S4G 180 L6	48	42,5	14	110	726	180	355	267	121	279	14,5	279	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S4G 200 LA6	55	49	16	110	779	200	397	299	133	305	16,5	318	400	300	350	5	4 x 18,5	--	--	--	--	--	2 x M50
S4G 200 LB6	55	49	16	110	779	200	397	299	133	305	16,5	318	400	300	350	5	4 x 18,5	--	--	--	--	--	2 x M50
S4G 225 M6	60	53	18	140	849	225	446	322	149	311	18,5	356	450	350	400	5	8 x 18,5	--	--	--	--	--	2 x M50
S4G 250 M6	65	58	18	140	910	250	485	358	168	349	24	406	550	450	500	5	8x 18,5	--	--	--	--	--	2 x M63
S4G 280 S6	75	67,5	20	140	982	280	547	387	190	368	24	457	550	450	500	5	8 x 18,5	--	--	--	--	--	2 x M63
S4G 280 M6	75	67,5	20	140	1033	280	547	387	190	419	24	457	550	450	500	5	8 x 18,5	--	--	--	--	--	2 x M63
S4G 315 S6	80	71	22	170	1224	315	620	527	216	406	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S4G 315 M6	80	71	22	170	1334	315	620	527	216	457	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S4G 315 LA6	80	71	22	170	1334	315	620	527	216	508	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S4G 315 LB6	80	71	22	170	1334	315	620	527	216	508	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S4G 355 MA6	100	90	28	210	1516	355	698	642	254	560	28	610	800	680	740	6	8 x 24	--	--	--	--	--	2 x M71
S4G 355 MB6	100	90	28	210	1516	355	698	642	254	560	28	610	800	680	740	6	8 x 24	--	--	--	--	--	2 x M71
S4G 355 L6	100	90	28	210	1516	355	698	642	254	630	28	610	800	680	740	6	8 x 24	--	--	--	--	--	2 x M71

8 poles - 50 Hz

Type	Motor shaft				Overall dimensions				B3 dimensions				B5 dimensions					B14 dimensions					Cable entry
	D	G	F	E	L	H	AC	AD	C	B	K	A	P/ B5	N/ B5	M/ B5	T/ B5	SB5	P/ B14	N/ B14	M/ B14	T/ B14	SB14	O
S4G 160 L8	42	37	12	110	652	160	314	251	108	254	14,5	254	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S4G 180 L8	48	42,5	14	110	726	180	355	267	121	279	14,5	279	350	250	300	5	4 x 18,5	--	--	--	--	--	2 x M40
S4G 200 L8	55	49	16	110	779	200	397	299	133	305	16,5	318	400	300	350	5	4 x 18,5	--	--	--	--	--	2 x M50
S4G 225 S8	60	53	18	140	824	225	446	322	149	286	18,5	356	450	350	400	5	8 x 18,5	--	--	--	--	--	2 x M50
S4G 225 M8	60	53	18	140	849	225	446	322	149	311	18,5	356	450	350	400	5	8 x 18,5	--	--	--	--	--	2 x M50
S4G 250 M8	65	58	18	140	910	250	485	358	168	349	24	406	550	450	500	5	8x 18,5	--	--	--	--	--	2 x M63
S4G 280 S8	75	67,5	20	140	982	280	547	387	190	368	24	457	550	450	500	5	8 x 18,5	--	--	--	--	--	2 x M63
S4G 280 M8	75	67,5	20	140	1033	280	547	387	190	419	24	457	550	450	500	5	8 x 18,5	--	--	--	--	--	2 x M63
S4G 315 S8	80	71	22	170	1224	315	620	527	216	406	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S4G 315 M8	80	71	22	170	1334	315	620	527	216	457	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S4G 315 LA8	80	71	22	170	1334	315	620	527	216	508	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S4G 315 LB8	80	71	22	170	1334	315	620	527	216	508	28	508	660	550	600	6	8 X 24	--	--	--	--	--	2 x M63
S4G 355 MA8	100	90	28	210	1516	355	698	642	254	560	28	610	800	680	740	6	8 x 24	--	--	--	--	--	2 x M71
S4G 355 MB8	100	90	28	210	1550	355	698	642	254	560	28	610	800	680	740	6	8 x 24	--	--	--	--	--	2 x M71
S4G 355 LA8	100	90	28	210	1575	355	698	642	254	630	28	610	800	680	740	6	8 x 24	--	--	--	--	--	2 x M71
S3G 355 MB8	100	90	28	210	1615	355	698	642	254	630	28	610	800	680	740	6	8 x 24	--	--	--	--	--	--
S3G 355 LA8	100	90	28	210	1675	355	698	642	254	630	28	610	800	680	740	6	8 x 24	--	--	--	--	--	--

Special Executions

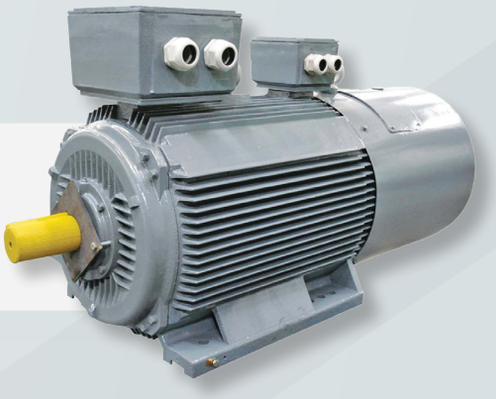
Beyond our standard motor range, SELI Srl can offer you customized solutions for any type of rotating electrical machine, with both electrical and mechanical specialties. We provide products that comply with the customer's technical specifications and are optimized for both the specific application and the final site of use.

- Large-scale motors (frame sizes 400 / 450 / 500)
- Low-speed motors (10 – 12 – 16 poles)
- Two-speed winding motors (2/4 – 4/6 - 4/8 poles)
- DC brake motors (Direct Current)
- AC brake motors (Alternating Current)
- ATEX-certified motors for use in Zone 21
- ATEX-certified motors for use in Zone 22
- Explosion-proof ATEX-certified motors
- Single-phase motors with single and dual capacitors
- Motors with IP23 – IP56 – IP66 – IP67 – IP68 protection ratings
- Wound rotor motors
- Water-cooled motors
- Motors with customized shaft, feet, and flange dimensions
- DC motors (Direct Current)

Upon request, a complete range of gearboxes and gearmotors is also available: worm gear, coaxial helical, parallel shaft, helical-bevel, and planetary.



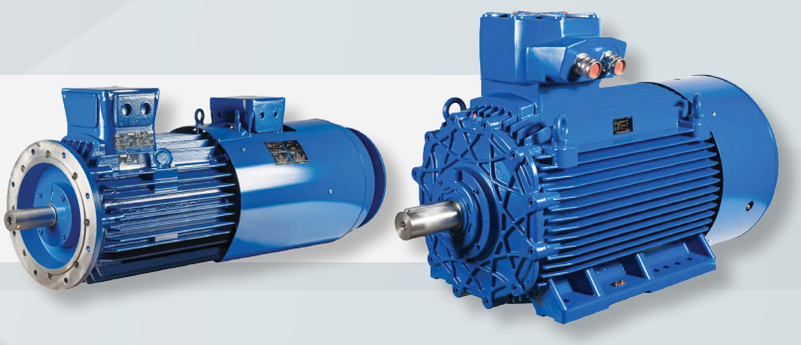
Slip-ring motors

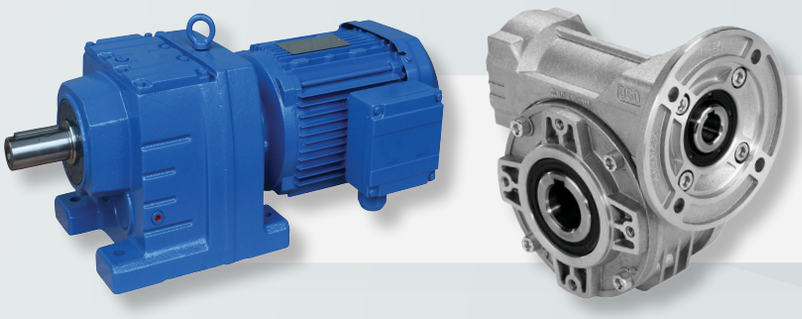




Medium-voltage motors

ATEX motors





Gearmotors



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