

AC-Motoren

Wir treiben Sie an!

PRODUCT CATALOG

LOW-VOLTAGE MOTORS



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Abbreviations & acronyms

TECHNICALLY ADEPT. PERSONALLY COMMITTED. DRIVEN BY YOUR CHALLENGES.

We have been trading in electric motors since 1998. In all these years, one thing never changed: The drive to offer our customers the optimum solution at the best price/performance ratio.

Our location in Eppertshausen near Frankfurt covers an area of over 16,000 sqm with approx. 30,000 pallet spaces. A well-organized logistics system helps us to even faster and more flexibly respond to the wishes of our customers.



Maximum availability



Certified partners



Certified acc. to ISO 9001



Shortest possible delivery times



Efficient logistics



UL approval

Energy efficiency

The individual efficiency classes are specified according to the IEC 60034-30 standard and divided into four classes.

IE4	Super Premium Efficiency (SPE)
IE3	Premium Efficiency (PHE)
IE2	High Efficiency (HE)
IE1	Standard Efficiency

The efficiency classification according to IEC 60034-30 covers low-voltage three-phase AC motors with the following characteristics:

- Rated voltage: up to 1000 V
- Rated power: 0.75 - 375 kW
- Operating mode: S1 or S3, S6 >80%
- Mains-operated
- Ambient conditions according to IEC 60034-1

The following motors are excluded from this efficiency classification:

- Motors for short-time operation or intermittent operation with a duty cycle of <80%.
- Motors specially designed for frequency converter operation
- Motors with 8 or more poles
- Motors specially designed for integration into a certain application that cannot be assessed independently.

The determination of the efficiency classes is carried out according to the methods defined in the IEC 60034-2-1 standard.

The European Minimum Energy Performance Standard (EU MEPS) regulates the essential efficiency values for motors that must be achieved to use them on the European market.

As of 1 January 2017 the following provision applies to motors from 0.75 to 375 kW:

Mains-operated motors must comply with the requirements of efficiency class IE3.

Motors with efficiency class IE2 may only be operated in conjunction with a frequency converter.

The following motors are excluded from the regulations of the EU MEPS:

- Motors with explosion protection
- Motors with braking device
- Motors specially designed for frequency converter operation
- Double-speed motors
- Motors with 8 or more poles
- Motors specially designed for integration into a certain application that cannot be assessed independently.

Explanation of the type code

Mounting		Aluminum		Cast iron		
B3		ACA		ACM		
B5 / B14		FCA		FCM		FCA
B35 / B34		FCPA		FCMP		
Terminal box right						
B3		ARA		ACR		
B35 / B34		FRPA		FCPR		
Terminal box left						
B3		ALA		ACL		
B35 / B34		FLPA		FCPL		
Shaft height (foot to center of shaft)						
63	90	132	200	280	132	
71	100	160	225	315		
80	112	180	250	355		
Frame type						
S - short	M - medium	L - long		M		
short	medium	long				
Number of poles / speed						
2	3000 rpm					
4	1500 rpm		4			
6	1000 rpm					
8	750 rpm					
Efficiency class						
IE4	SPE					
IE3	PHE		PHE			
IE2	HE					
IE1	-					

Explanation of the type code

The diagram shows a motor nameplate with the following information:

- 04** points to the company name: **AC-Motoren GmbH**
- 05** points to the address: **D-64859 Eppertshausen**
- 06** points to the website: **www.ac-motoren.de**
- 07** points to the efficiency class: **IE2**
- 08** points to the IEC standard: **IEC 60034-1**
- 03** points to the type code: **FCA 100 LB-4/HE**
- 02** points to the insulation class: **THCL**
- 01** points to the technical data table.

TYPE	FCA 100 LB-4/HE	SN	1508427437	24	kg
THCL	F / B	IP 55	S 1		
V	Hz	kW	COSφ	rpm	A
Δ400V / Y690V	50	3	0,82	1420	10,75 / 6,18
Δ460V / Y795V	60	3,6	0,82	1704	11,2 / 6,45

01

Technical data

02

Additional information

03

Insulation class

04

Type code

05

Protection class

06

Serial number

07

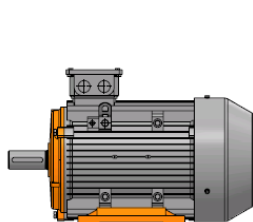
Efficiency class

08

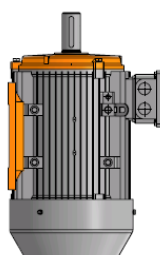
Operating mode

Mounting types

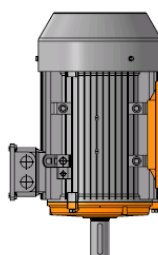
The following diagrams show the most common mounting types according to DIN EN 60034-7, Code I. The variable components of the different mounting types are shown in orange.



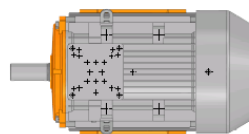
IMB3



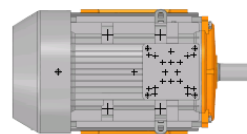
IMV6



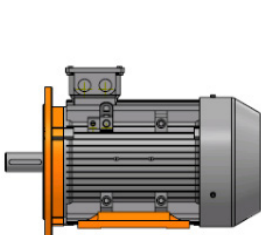
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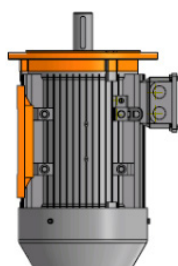
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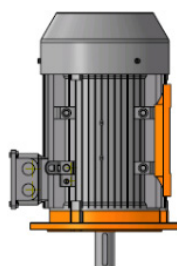
IMB7



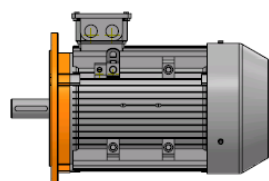
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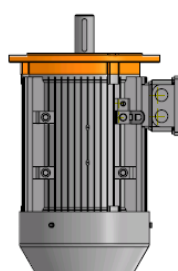
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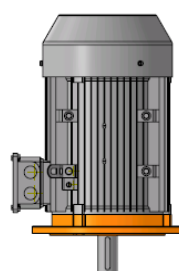
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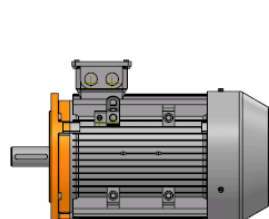
IMB5



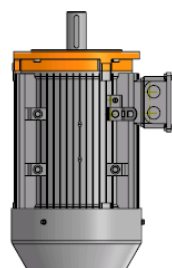
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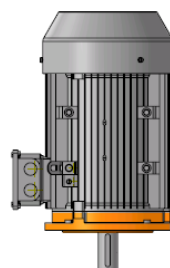
IMV1



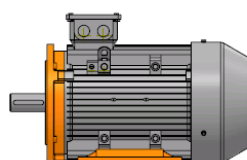
IMB14



IMV19



IMV18



IMB34

Voltages and frequencies

The tolerances of the voltages and frequencies of the mains network are regulated by the EN 60034-1 standard. In range A, a combination of a voltage deviation of +/-5% and a frequency deviation of +/-2% is permissible. In the extended voltage range B, a combination of voltage deviation of +/-10% and a frequency deviation of +3% / -5% is permissible.

Tolerances

Electrical tolerances according to DIN EN 60034-1	Efficiency	0.15 (1- η) for PN $\leq$ 150 kW -0.1 (1- η) for PN > 150 kW
	Power factor $\frac{1 - \cos\phi}{6}$	at least 0.02 not more than 0.07
	Slip at rated load	$\pm 20\%$
	Starting current in starting circuit	+20% with no downward limit
	Starting torque	-15 to +25%
	Pull-up torque	-15%
	Breakdown torque	-10% (minimum breakdown torque = factor 1.6)
	Moment of inertia	$\pm 10\%$
	Noise level	+3 dB (A)
Mechanical tolerances	Distance of foot holes (axial and transverse)	± 1 mm
	Flange diameter	-1 mm
	Diameter of centering edge of the flange	up to $\varnothing$ 230 mm corresponding to j6 from $\varnothing$ 250 mm corresponding to h6
	Shaft end diameter	from $\varnothing$ 9 mm to $\varnothing$ 28 mm corresponding to j6 from $\varnothing$ 38 mm to $\varnothing$ 48 mm corresponding to k6 from $\varnothing$ 55 mm to $\varnothing$ 100 mm corresponding to m6
	Feather key width	h9
	Total length and height of the motor	according to DIN ISO 2768-1 (roughly)
	Lower edge of shaft end to upper edge of feather key	± 0.2 mm
	Motor weight	$\pm 5\%$

Mechanical balancing

All rotors are dynamically balanced according to DIN EN 60034-14 with half feather key according to vibration severity level A (normal). In accordance with DIN ISO 8821, the balancing type "half-key balancing" is prescribed.

Color and coating

The motors are painted in RAL 7030 as standard. The coating of the motors corresponds to C2 "medium" according to DIN EN ISO 12944. The coating and color can be adapted on request.

Operating modes

The rated power is always stated for "S1, Continuous Duty" according to DIN EN 60034-1. If short-time duty (S2) or intermittent duty (S3, S6) is required, an increase in power is to be expected. In this context, it must be made sure that the relative breakdown torque results in a value of ≥ 1.6 .

$$\frac{M_K / M_N}{\text{Power factor } x} \leq 1.6$$

Overview of the most common operating modes:

S1	Continuous duty with constant load until thermal equilibrium is reached.
S2	Short-time duty with constant load for a time not sufficient to reach thermal equilibrium. Example: S2-10min, S2-30min, S2-60min, S2-90min
S3	Intermittent periodic duty composed of a sequence of identical load cycles and a standstill time. Example: S3-25%, S3-40%, S3-60%
S6	Continuous-operation periodic duty composed of a sequence of identical load cycles and an idle time. There is no standstill, so the motor does not have the possibility to cool down completely (as with S3). Example: S6-25%, S6-40%, S6-60%

Necessary data for the calculation of power are the following:

- Relative duty cycle (this is specified in minutes ("min") for S2 and in percent ("%") for S3, S6 – see above)
- Switching frequency

Protection class

All motors are designed as standard with IP55 level of protection according to DIN EN 60529. If required, the level of protection can be increased to IP66. (IP = International Protection)
The abbreviation IP is followed by two digits: The first digit indicates the level of protection that the enclosure provides against the ingress of solid foreign objects. The second digit indicates the level of protection that the enclosure provides against the ingress of water.

Brief description of the level of protection:

First digit

5 = Dust-protected
6 = Dust-tight

Second digit

5 = Water jets
6 = Powerful water jets

Insulation class

All motors have insulation class "F" as standard. The utilization of the motors corresponds to class "B" for rated power and mains operation. At an ambient temperature of 40 °C and an altitude of up to 1000 m, the motor can be operated at rated power. If one of the two values changes, a power reduction must be taken into account, which can be seen in the following table. The increased insulation class H for temperatures up to 80 °C is available on request.

Installation altitude	Ambient temperature						
(in m)	≤ 30 °C	35 °C	40 °C	45 °C	50 °C	55 °C	60 °C
1000	-	-	100 %	96 %	92 %	87 %	82 %
1500	-	100 %	97 %	93 %	89 %	84 %	79 %
2000	100 %	97 %	94 %	90 %	86 %	82 %	77 %
2500	96 %	93 %	90 %	86 %	83 %	78 %	74 %
3000	92 %	89 %	86 %	82 %	79 %	75 %	70 %
3500	88 %	85 %	82 %	79 %	75 %	71 %	67 %
4000	82 %	79 %	77 %	74 %	71 %	67 %	63 %

Cooling and ventilation

The motors are equipped with radial fans made of plastic or aluminum which provide cooling independently of the motor's direction of rotation (IC 411 according to DIN EN 60034-6). To ensure adequate ventilation, a minimum distance from surrounding walls must be maintained.

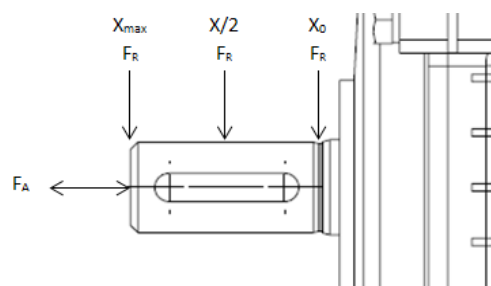
Frame size	56	63	71	80	90	100	112	160	180	200	225	250	280	315	355
Distance (in mm)	22	25	28	32	34	36	42	50	60	65	65	70	70	75	75

Bearings

The nominal bearing life (Lh10) is at least 20,000 hours if the loads given in the following table apply.

Up to frame size 280 the motors are equipped with closed bearings as standard. From frame size 315 open bearings with relubrication devices are fitted. The values given in the following table apply to operation at 50 Hz. If the motor is operated at 60 Hz, the values must be reduced by 10%.

Starting from frame size 280 we recommend the use of an insulated bearing on the non-drive side of three-phase motors.



Frame size	No. of poles	Bearing types		Xmax	X/2	Xo		V1
		Drive end	Non-drive end	FR (N)	FR (N)	FR (N)	FA (N)	FA (N)
56	2	6201.ZZ.C3	6201.ZZ.C3	250	275	300	250	235
	4	6201.ZZ.C3	6201.ZZ.C3	325	362.5	400	350	335
63	2	6201.ZZ.C3	6201.ZZ.C3	275	300	325	250	235
	4	6201.ZZ.C3	6201.ZZ.C3	350	375	400	350	335
71	2	6202.ZZ.C3	6202.ZZ.C3	300	337.5	375	300	280
	4	6202.ZZ.C3	6202.ZZ.C3	375	412.5	450	400	380
	6	6202.ZZ.C3	6202.ZZ.C3	450	487.5	525	475	450
80	2	6204.ZZ.C3	6204.ZZ.C3	500	562.5	625	475	445
	4	6204.ZZ.C3	6204.ZZ.C3	625	700	775	625	595
	6	6204.ZZ.C3	6204.ZZ.C3	725	812.5	900	775	745
	8	6204.ZZ.C3	6204.ZZ.C3	800	900	1000	850	820
90S	2	6205.ZZ.C3	6205.ZZ.C3	525	600	675	500	460
	4	6205.ZZ.C3	6205.ZZ.C3	675	775	875	675	635
	6	6205.ZZ.C3	6205.ZZ.C3	775	887.5	1000	825	785
	8	6205.ZZ.C3	6205.ZZ.C3	850	975	1100	925	885
90L	2	6205.ZZ.C3	6205.ZZ.C3	550	625	700	500	460
	4	6205.ZZ.C3	6205.ZZ.C3	700	787.5	875	675	635
	6	6205.ZZ.C3	6205.ZZ.C3	825	925	1025	825	785
	8	6205.ZZ.C3	6205.ZZ.C3	900	1012.5	1125	925	885
100	2	6206.ZZ.C3	6206.ZZ.C3	775	887.5	1000	700	655
	4	6206.ZZ.C3	6206.ZZ.C3	1000	1125	1250	950	905
	6	6206.ZZ.C3	6206.ZZ.C3	1150	1287.5	1425	1125	1080
	8	6206.ZZ.C3	6206.ZZ.C3	1250	1412.5	1575	1300	1255
112M	2	6306.ZZ.C3	6306.ZZ.C3	775	875	975	700	655
	4	6306.ZZ.C3	6306.ZZ.C3	975	1100	1225	950	905
	6	6306.ZZ.C3	6306.ZZ.C3	1125	1262.5	1400	1125	1080
	8	6306.ZZ.C3	6306.ZZ.C3	1250	1400	1550	1300	1255
132S	2	6308.ZZ.C3	6308.ZZ.C3	1150	1312.5	1475	1075	1025
	4	6308.ZZ.C3	6308.ZZ.C3	1450	1650	1850	1450	1400
	6	6308.ZZ.C3	6308.ZZ.C3	1650	1887.5	2125	1725	1675
	8	6308.ZZ.C3	6308.ZZ.C3	1825	2087.5	2350	1975	1925
132M	2	6308.ZZ.C3	6308.ZZ.C3	1200	1350	1500	1075	1025
	4	6308.ZZ.C3	6308.ZZ.C3	1500	1700	1900	1450	1400
	6	6308.ZZ.C3	6308.ZZ.C3	1725	1950	2175	1725	1675
	8	6308.ZZ.C3	6308.ZZ.C3	1900	2150	2400	1975	1925

Bearings

Frame size	No. of poles	Bearing types		Xmax	X/2	Xo		V1
		Drive end	Non-drive end	F R (N)	F R (N)	F R (N)	F A (N)	F A (N)
160M	2	6309.ZZ.C3	6309.ZZ.C3	2000	2300	2600	2150	2070
	4	6309.ZZ.C3	6309.ZZ.C3	2525	2900	3275	2850	2770
	6	6309.ZZ.C3	6309.ZZ.C3	2900	3325	3750	3375	3295
	8	6309.ZZ.C3	6309.ZZ.C3	3175	3662	4150	3825	3745
160L	2	6309.ZZ.C3	6309.ZZ.C3	2100	2375	2650	2150	2070
	4	6309.ZZ.C3	6309.ZZ.C3	2650	3000	3350	2850	2770
	6	6309.ZZ.C3	6309.ZZ.C3	3025	3437	3850	3375	3295
	8	6309.ZZ.C3	6309.ZZ.C3	3325	3775	4225	3825	3745
180M	2	6311.ZZ.C3	6311.ZZ.C3	2925	3300	3675	2900	2800
	4	6311.ZZ.C3	6311.ZZ.C3	3700	4175	4650	3800	3700
180L	2	6311.ZZ.C3	6311.ZZ.C3	3800	4250	4700	3800	3700
	4	6311.ZZ.C3	6311.ZZ.C3	4350	4862	5375	4525	4425
	6	6311.ZZ.C3	6311.ZZ.C3	4800	5362	5925	5125	5025
200L	2	6312.ZZ.C3	6312.ZZ.C3	3450	3825	4200	3325	2700
	4	6312.ZZ.C3	6312.ZZ.C3	4350	4825	5300	4350	3550
	6	6312.ZZ.C3	6312.ZZ.C3	4975	5525	6075	5150	4360
	8	6312.ZZ.C3	6312.ZZ.C3	5500	6100	6700	5850	5150
225S	4	6313.ZZ.C3	6313.ZZ.C3	4600	5237	5875	4900	4100
	8	6313.ZZ.C3	6313.ZZ.C3	5800	6600	7400	6550	5730
225M	2	6313.ZZ.C3	6313.ZZ.C3	3875	4287	4700	3725	3100
	4	6313.ZZ.C3	6313.ZZ.C3	4675	5300	5925	4900	4000
	6	6313.ZZ.C3	6313.ZZ.C3	5350	6062	6775	5775	4880
	8	6313.ZZ.C3	6313.ZZ.C3	5900	6687	7475	6550	5620
250M	2	6314.ZZ.C3	6314.ZZ.C3	4325	4837	5350	4175	3350
	4	6314.ZZ.C3	6314.ZZ.C3	5450	6100	6750	5500	4420
	6	6314.ZZ.C3	6314.ZZ.C3	6250	6987	7725	6500	5370
	8	6314.ZZ.C3	6314.ZZ.C3	6875	7687	8500	7350	6150
280S	2	6314.ZZ.C3	6314.ZZ.C3	4350	4825	5300	4175	3160
	4	6317.ZZ.C3	6317.ZZ.C3	7025	7787	8550	6900	5450
	6	6317.ZZ.C3	6317.ZZ.C3	8025	8912	9800	8125	6660
	8	6317.ZZ.C3	6317.ZZ.C3	8850	9812	10775	9150	7630
280M	2	6314.ZZ.C3	6314.ZZ.C3	4475	4925	5375	4175	4050
	4	6317.ZZ.C3	6317.ZZ.C3	7200	7925	8650	6900	5280
	6	6317.ZZ.C3	6317.ZZ.C3	8250	9087	9925	8125	6450
	8	6317.ZZ.C3	6317.ZZ.C3	9075	10000	10925	9150	7370
315S	2	6317 C3	6317 C3	5850	6362	6875	5175	3360
	4	6319 C3	6319 C3	10000	15500	21000	7875	5600
	6	6319 C3	6319 C3	10000	17000	24000	9225	6860
	8	6319 C3	6319 C3	10000	18000	26000	10350	7980
315M,L	2	6317 C3	6317 C3	6050	6525	7000	5175	2660
	4	6319 C3	6319 C3	9000	15500	22000	7875	4430
	6	6319 C3	6319 C3	9000	16500	24000	9225	3510
	8	6319 C3	6319 C3	9000	18000	27000	10350	6560
355	2	6319 C3	6319 C3	7250	7712	8175	5875	2420
	4	6322 C3	6322 C3	11500	19250	27000	10075	4700
	6	6322 C3	6322 C3	11500	19250	27000	11950	5350
	8	6322 C3	6322 C3	11500	19250	27000	13375	6130

Motor protection

Various protective devices are available to prevent damage to the motor due to overloading. The following shows which protective component can be used for which type of protection.

Winding protection	PTC	PTO	PT100	PT1000
Bearing protection	PT100	PT1000		

PTC – definition

A PTC thermistor is a temperature-dependent component that emits a signal. The motor current is interrupted via a tripping unit connected to the PTC thermistor. If the measured temperature reaches a certain limit value, the resistance of the PTC increases rapidly and the tripping unit switches off the motor.

PTO – definition

A PTO bimetal tripping unit is a temperature-dependent component that interrupts the current as soon as the rated load temperature is exceeded. If the temperature of the motor drops, it can be restarted after a short time.

PT100 / PT1000 – definition

A PT100 / PT1000 is a temperature-dependent component that outputs a signal. Temperature and resistance are linearly dependent on each other, so that it is possible to set exactly when the tripping device should switch. The numbers 100 / 1000 indicate the nominal resistance at 0 °C.

Space heaters (anti-condensation heating)

For operating conditions involving high humidity or high temperature fluctuations, a space heater is recommended. This prevents condensation inside the motor when the motor is at a standstill. The space heater must not be switched on when the motor is running.

Protective roof

For vertical mounting (especially outdoors) with the shaft downwards, a protective roof (fan cowl cover / rain hood) is recommended. It prevents the ingress of water and foreign bodies. For explosion-proof motors, a protective roof is required for this type of mounting in accordance with DIN EN 50014.

Frequency converters

All motors are generally suitable for use with frequency converters. For motors with an output of 0.55 to 22 kW, frequency converters can be installed directly on the motor.

Advantages of motors with frequency converters

- Speed settings are infinitely variable
- Smooth starting with acceleration ramp
- Extensive motor control and monitoring options

Low-speed operation

At low speeds, it must be taken into account that the motor's cooling via its own fan is no longer guaranteed within a certain range. In such a case, the use of an external fan ("forced cooling") is necessary.

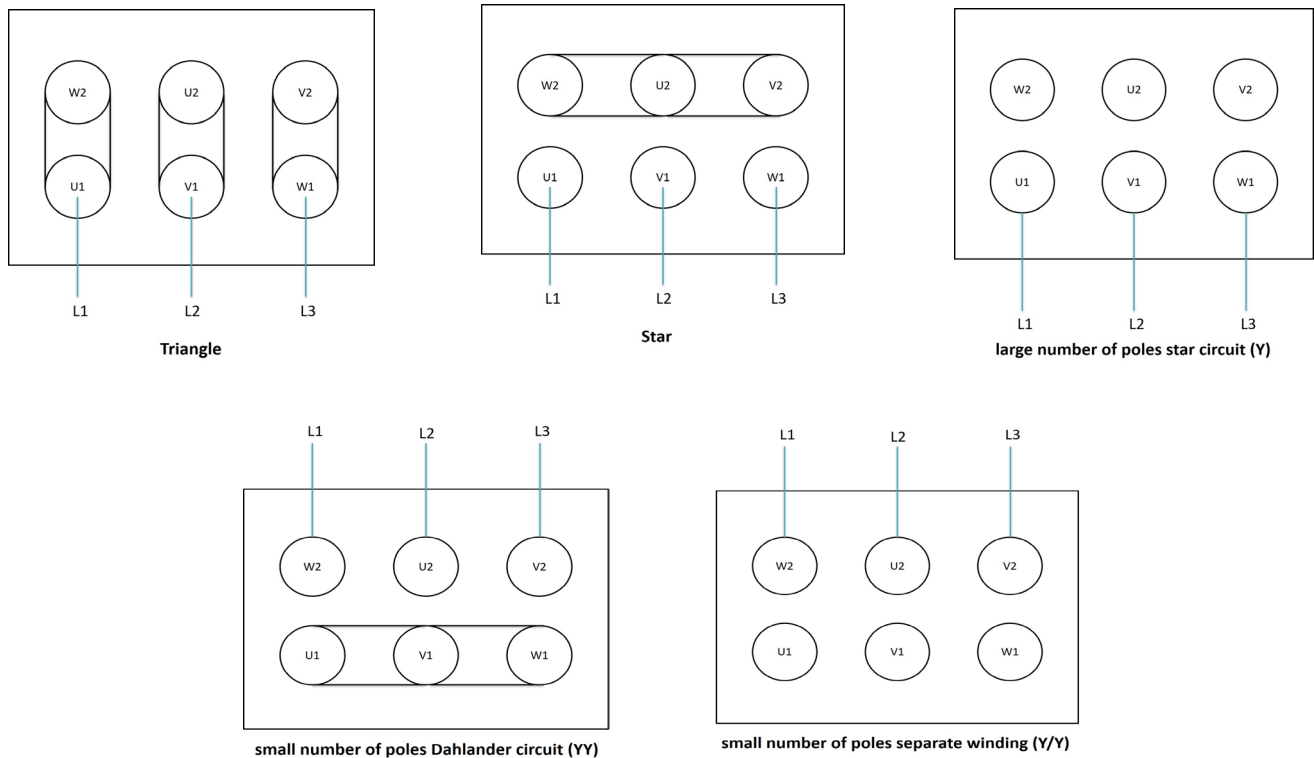
An exception from this applies to motors that are cooled via the fan system they are integrated in. The motors are cooled via their built-in fan ("self-cooled") up to a frequency of 30 Hz. The minimum frequency is 5 Hz.

Note

The motors must be grounded properly. According to the EMC Directive, wiring must be carried out with shielded cables and EMC cable glands. In addition, current-insulated bearings can be offered as an option. The electric motors supplied by AC-Motoren GmbH are used as components in more complex plants and systems. The operator is responsible for selecting the electric motors and integrating them into the overall system.

Wiring diagram for three-phase motors

The following wiring diagrams show the wiring from the winding to the terminal board. This type of wiring is intended for direct mains connection and direct start-up. For star-delta operation, the jumpers must be removed and the motor must then be controlled via an external circuit.



Certificates



UL listed motors

Frame sizes 80-355
Number of poles: 2-6
File-Nr.: E480221
Electric design according to NEMA



Explosion-proof motors

Zone 2
Zone 22
Flameproof enclosure



CE marking

Products comply with EU directives



China Compulsory Certification

Frame sizes 63-90
Number of poles: 2-8



YOUR MOTOR. OUR DRIVE.

In our 16,000 sqm warehouse there are countless variants of electric motors available for you. Immediate availability ensures fast delivery ex works and maximum flexibility. With our global, reliable network of partners we meet virtually any special requirement you might have for your electric motor.

ACA ALUMINUM HOUSING IE4

DIN EN 60034-30 | Super Premium Efficiency (SPE)

2 poles, idle speed 3000 rpm

230/400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to Rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
80 A-2	0.75 / 0.90	2910 / 3492	83.5	83.5	81.8	0.82	2.8 / 1.6	2.5	7.0	2.3	2.3	0.0012	11.0
80 B-2	1.10 / 1.32	2920 / 3504	85.2	85.2	83.5	0.83	4.0 / 2.3	3.6	7.3	2.2	2.3	0.0014	11.6
90 S-2	1.50 / 1.80	2930 / 3516	86.5	86.5	84.8	0.84	5.3 / 3.0	4.9	7.6	2.2	2.3	0.0018	16.0
90 L-2	2.20 / 2.64	2930 / 3516	88.0	88.0	86.2	0.85	7.5 / 4.3	7.2	7.6	2.2	2.3	0.0022	20.6
100 L-2	3.00 / 3.60	2935 / 3522	89.1	89.1	87.3	0.87	9.9 / 5.7	9.8	7.8	2.2	2.3	0.0040	23.7
112 M-2	4.00 / 4.80	2940 / 3528	90.0	90.0	88.2	0.88	12.9 / 7.4	13.0	8.3	2.2	2.3	0.0072	42.0
132 SA-2	5.50 / 6.60	2945 / 3534	90.9	90.9	89.1	0.88	17.5 / 10.1	17.8	8.3	2.0	2.3	0.0144	46.0
132 SB-2	7.50 / 9.00	2950 / 3540	91.7	91.7	89.9	0.88	23.7 / 13.6	24.3	7.9	2.0	2.3	0.0180	52.0

4 poles, idle speed 1500 rpm

230/400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to Rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
80 B-4	0.75 / 0.90	1430 / 1716	85.7	85.7	84.0	0.82	3.0 / 1.7	5.0	6.6	2.3	2.3	0.0031	12.9
90 S-4	1.10 / 1.32	1445 / 1734	87.2	87.2	85.5	0.83	4.2 / 2.4	7.3	6.8	2.3	2.3	0.0037	16.8
90 L-4	1.50 / 1.80	1450 / 1740	88.2	88.2	86.4	0.84	5.6 / 3.2	9.9	7.0	2.3	2.3	0.0044	19.7
100 LA-4	2.20 / 2.64	1455 / 1746	89.5	89.5	87.7	0.85	7.7 / 4.4	14.4	7.6	2.3	2.3	0.0076	25.5
100 LB-4	3.00 / 3.60	1455 / 1746	90.4	90.4	88.6	0.87	10.3 / 5.9	19.7	7.6	2.3	2.3	0.0095	31.3
112 M-4	4.00 / 4.80	1460 / 1752	91.1	91.1	89.3	0.88	13.6 / 7.8	26.2	7.8	2.2	2.3	0.0134	39.2
132 S-4	5.50 / 6.60	1470 / 1764	91.9	91.9	90.1	0.88	18.4 / 10.6	35.7	7.9	2.0	2.3	0.0305	51.2
132 M-4	7.50 / 9.00	1470 / 1764	92.6	92.6	90.7	0.88	24.6 / 14.1	48.7	7.5	2.0	2.3	0.0415	65.0

ACA ALUMINUM HOUSING IE4

DIN EN 60034-30 | Super Premium Efficiency (SPE)

6 poles, idle speed 1000 rpm

230/400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to Rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
90 S-6	0.75 / 0.90	950 / 1140	82.7	82.7	81.0	0.71	3.3 / 1.9	7.5	6.0	2.0	2.1	0.0042	17.2
90 L-6	1.10 / 1.32	955 / 1146	84.5	84.5	82.8	0.73	4.5 / 2.6	11.0	6.0	2.0	2.1	0.0047	22.4
100 L-6	1.50 / 1.80	960 / 1152	85.9	85.9	84.2	0.73	6.1 / 3.5	14.9	6.5	2.0	2.1	0.0090	33.5
112 M-6	2.20 / 2.64	965 / 1158	87.4	87.4	85.7	0.74	8.7 / 5.0	21.8	6.6	2.0	2.1	0.0150	38.6
132 S-6	3.00 / 3.60	970 / 1164	88.6	88.6	86.8	0.74	11.7 / 6.7	29.5	6.8	2.0	2.1	0.0300	46.0
132 MA-6	4.00 / 4.80	975 / 1170	89.5	89.5	87.7	0.74	15.4 / 8.8	39.2	6.8	2.0	2.1	0.0380	54.0
132 MB-6	5.50 / 6.60	975 / 1170	90.5	90.5	88.7	0.75	20.6 / 11.9	53.9	7.0	2.0	2.1	0.0430	61.8

8 poles, idle speed 750 rpm

230/400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to Rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
100 LA-8	0.75 / 0.90	700 / 840	78.4	78.4	76.8	0.67	3.6 / 2.1	10.2	4.0	1.8	2.0	0.0102	31.0
100 LB-8	1.10 / 1.32	700 / 840	80.8	80.8	79.2	0.69	5.0 / 2.9	15.0	5.0	1.8	2.0	0.0114	33.5
112 M-8	1.50 / 1.80	710 / 852	82.6	82.6	80.9	0.70	6.6 / 3.8	20.2	5.0	1.8	2.0	0.0168	39.8
132 S-8	2.20 / 2.64	720 / 864	84.5	84.5	82.8	0.71	9.3 / 5.4	29.2	6.0	1.8	2.0	0.0420	53.0
132 M-8	3.00 / 3.60	720 / 864	85.9	85.9	84.2	0.73	12.2 / 7.0	39.8	6.0	1.8	2.0	0.0516	61.0

ACM CAST IRON HOUSING IE4

DIN EN 60034-30 | Super Premium Efficiency (SPE)

2 poles, idle speed 3000 rpm

400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
160 MA-2	11.0 / 13.2	2960 / 3552	92.6	92.6	90.7	0.89	19.5	35.5	8.1	2.0	2.3	0.0480	133
160 MB-2	15.0 / 18.0	2960 / 3552	93.3	93.3	91.4	0.89	26.4	48.4	8.1	2.0	2.3	0.0600	146
160 L-2	18.5 / 22.2	2960 / 3552	93.7	93.7	91.8	0.89	32.5	59.7	8.2	2.0	2.3	0.0708	160
180 M-2	22.0 / 26.4	2965 / 3558	94.0	94.0	92.1	0.89	38.5	70.9	8.2	2.0	2.3	0.1116	221
200 LA-2	30.0 / 36.0	2970 / 3564	94.5	94.5	92.6	0.89	52.2	96.5	7.6	2.0	2.3	0.1680	260
200 LB-2	37.0 / 44.4	2970 / 3564	94.8	94.8	92.9	0.89	64.2	119.0	7.6	2.0	2.3	0.1956	309
225 M-2	45.0 / 54.0	2975 / 3570	95.0	95.0	93.1	0.90	77.1	144.5	7.7	2.0	2.3	0.2940	370
250 M-2	55.0 / 66.0	2975 / 3570	95.3	95.3	93.4	0.90	93.9	176.6	7.7	2.0	2.3	0.3960	520
280 S-2	75.0 / 90.0	2980 / 3576	95.6	95.6	93.7	0.90	127.6	240.4	7.1	1.8	2.3	0.7800	570
280 M-2	90.0 / 108	2982 / 3578	95.8	95.8	93.9	0.90	152.8	288.2	7.1	1.8	2.3	0.8520	630
315 S-2	110 / 132	2980 / 3576	96.0	96.0	94.1	0.90	186.4	352.5	7.1	1.8	2.3	1.5600	985
315 M-2	132 / 158	2980 / 3576	96.2	96.2	94.3	0.90	223.2	423.0	7.1	1.8	2.3	2.4000	1050
315 LA-2	160 / 192	2980 / 3576	96.3	96.3	94.4	0.91	267.3	512.8	7.2	1.8	2.3	2.8200	1160
315 LB-2	200 / 240	2980 / 3576	96.5	96.5	94.6	0.91	333.4	640.9	7.2	1.8	2.2	3.2400	1200
355 M-2	250 / 300	2985 / 3582	96.5	96.5	94.6	0.91	416.8	800.0	7.2	1.6	2.2	4.0800	2050
355 L-2	315 / 378	2982 / 3578	96.5	96.5	94.6	0.91	525.2	1009	7.2	1.6	2.2	4.6800	2380

4 poles, idle speed 1500 rpm

400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
160 M-4	11.0 / 13.2	1475 / 1770	93.3	93.3	91.4	0.85	20.3	71.2	7.7	2.2	2.3	0.0988	146
160 L-4	15.0 / 18.0	1475 / 1770	93.9	93.9	92.0	0.86	27.2	97.1	7.8	2.2	2.3	0.1159	156
180 M-4	18.5 / 22.2	1480 / 1776	94.2	94.2	92.3	0.86	33.4	119.4	7.8	2.0	2.3	0.1720	181
180 L-4	22.0 / 26.4	1480 / 1776	94.5	94.5	92.6	0.86	39.6	142.0	7.8	2.0	2.3	0.2050	209
200 L-4	30.0 / 36.0	1480 / 1776	94.9	94.9	93.0	0.86	53.8	193.6	7.3	2.0	2.3	0.3355	280
225 S-4	37.0 / 44.4	1485 / 1782	95.2	95.2	93.3	0.86	66.2	237.9	7.4	2.0	2.3	0.5246	373
225 M-4	45.0 / 54.0	1485 / 1782	95.4	95.4	93.5	0.86	80.3	289.4	7.4	2.0	2.3	0.5978	390
250 M-4	55.0 / 66.0	1485 / 1782	95.7	95.7	93.8	0.86	97.8	353.7	7.4	2.2	2.3	0.8418	553
280 S-4	75.0 / 90.0	1490 / 1788	96.0	96.0	94.1	0.88	130.0	480.7	6.9	2.0	2.3	1.4762	655
280 M-4	90.0 / 108	1490 / 1788	96.1	96.1	94.2	0.88	155.8	576.8	6.9	2.0	2.3	1.8056	730
315 S-4	110 / 132	1490 / 1788	96.3	96.3	94.4	0.89	187.9	705.0	7.0	2.0	2.2	4.2456	980
315 M-4	132 / 158	1490 / 1788	96.4	96.4	94.5	0.89	225.2	846.0	7.0	2.0	2.2	4.4530	1031
315 LA-4	160 / 192	1490 / 1788	96.6	96.6	94.7	0.89	272.5	1026	7.1	2.0	2.2	5.1240	1093
315 LB-4	200 / 240	1490 / 1788	96.7	96.7	94.8	0.9	336.4	1282	7.1	2.0	2.2	6.1000	1190
355 M-4	250 / 300	1490 / 1788	96.7	96.7	94.8	0.9	420.6	1602	7.1	2.0	2.2	8.4180	1754
355 L-4	315 / 378	1490 / 1788	96.7	96.7	94.8	0.9	529.9	2019	7.1	2.0	2.2	10.614	1960

ACM CAST IRON HOUSING IE4

DIN EN 60034-30 | Super Premium Efficiency (SPE)

6 poles, idle speed 1000 rpm

400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
160 M-6	7.50 / 9.00	980 / 1176	91.3	91.3	89.5	0.79	15.2	73.1	7.0	2.0	2.1	0.0950	140
160 L-6	11.0 / 13.2	980 / 1176	92.3	92.3	90.5	0.80	21.8	107.2	7.2	2.0	2.1	0.1200	160
180 L-6	15.0 / 18.0	985 / 1182	92.9	92.9	91.0	0.81	29.2	145.5	7.3	2.0	2.1	0.2200	245
200 LA-6	18.5 / 22.2	985 / 1182	93.4	93.4	91.5	0.81	35.8	179.4	7.3	2.0	2.1	0.3700	265
200 LB-6	22.0 / 26.4	985 / 1182	93.7	93.7	91.8	0.81	42.4	213.3	7.4	2.0	2.1	0.4200	285
225 M-6	30.0 / 36.0	990 / 1188	94.2	94.2	92.3	0.83	56.2	289.4	6.9	2.0	2.1	0.5500	335
250 M-6	37.0 / 44.4	990 / 1188	94.5	94.5	92.6	0.84	68.2	356.9	7.1	2.0	2.1	0.8400	471
280 S-6	45.0 / 54.0	990 / 1188	94.8	94.8	92.9	0.85	81.8	434.1	7.3	2.0	2.0	1.4200	530
280 M-6	55.0 / 66.0	990 / 1188	95.1	95.1	93.2	0.86	98.5	530.6	7.3	2.0	2.0	1.7000	670
315 S-6	75.0 / 90.0	990 / 1188	95.4	95.4	93.5	0.84	137.0	723.5	6.6	2.0	2.0	4.2000	960
315 M-6	90.0 / 108	990 / 1188	95.6	95.6	93.7	0.85	162.1	868.2	6.7	2.0	2.0	4.9000	1070
315 LA-6	110 / 132	990 / 1188	95.8	95.8	93.9	0.85	197.8	1061	6.7	2.0	2.0	5.5000	1160
315 LB-6	132 / 158	990 / 1188	96.0	96.0	94.1	0.86	234.1	1273	6.8	2.0	2.0	6.5000	1250
355 MA-6	160 / 192	990 / 1188	96.2	96.2	94.3	0.86	283.1	1543	6.8	1.8	2.0	10.100	1780
355 MB-6	200 / 240	990 / 1188	96.3	96.3	94.4	0.87	349.5	1929	6.8	1.8	2.0	11.200	1900
355 L-6	250 / 300	990 / 1188	96.5	96.5	94.6	0.87	436.0	2412	6.8	1.8	2.0	13.000	2100

8 poles, idle speed 750 rpm

400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
160 MA-8	4.00 / 4.80	730 / 876	87.1	87.1	85.4	0.73	9.2	52.3	6.0	1.9	2.0	1.1160	138
160 MB-8	5.50 / 6.60	730 / 876	88.3	88.3	86.5	0.74	12.3	72.0	6.0	1.9	2.0	0.1260	150
160 L-8	7.50 / 9.00	730 / 876	89.3	89.3	87.5	0.75	16.4	98.1	6.0	1.9	2.0	0.1440	170
180 L-8	11.0 / 13.2	735 / 882	90.4	90.4	88.6	0.75	23.8	142.9	6.5	2.0	2.0	0.2640	230
200 L-8	15.0 / 18.0	735 / 882	91.2	91.2	89.4	0.76	31.7	194.9	6.6	2.0	2.0	0.4680	280
225 S-8	18.5 / 22.2	735 / 882	91.7	91.7	89.9	0.76	38.9	240.4	6.6	1.9	2.0	0.6120	302
225 M-8	22.0 / 26.4	735 / 882	92.1	92.1	90.3	0.78	44.8	285.9	6.6	1.9	2.0	0.7080	335
250 M-8	30.0 / 36.0	735 / 882	92.7	92.7	90.8	0.79	60.0	389.8	6.5	1.9	2.0	0.9840	400
280 S-8	37.0 / 44.4	740 / 888	93.1	93.1	91.2	0.79	73.7	477.5	6.6	1.9	2.0	1.7040	520
280 M-8	45.0 / 54.0	740 / 888	93.4	93.4	91.5	0.79	89.3	580.7	6.6	1.9	2.0	2.0400	600
315 S-8	55.0 / 66.0	740 / 888	93.7	93.7	91.8	0.81	106.1	709.8	6.6	1.8	2.0	5.5200	1010
315 M-8	75.0 / 90.0	740 / 888	94.2	94.2	92.3	0.81	143.9	967.9	6.2	1.8	2.0	6.6000	1140
315 LA-8	90.0 / 108	740 / 888	94.4	94.4	92.5	0.82	170.2	1161	6.4	1.8	2.0	7.5600	1175
315 LB-8	110 / 132	740 / 888	94.7	94.7	92.8	0.82	207.4	1420	6.4	1.8	2.0	8.4400	1210
355 MA-8	132 / 158	740 / 888	94.9	94.9	93.0	0.82	248.3	1704	6.4	1.8	2.0	12.720	2050
355 MB-8	160 / 192	740 / 888	95.1	95.1	93.2	0.82	300.4	2065	6.4	1.8	2.0	14.160	2200
355 L-8	200 / 240	740 / 888	95.4	95.4	93.5	0.83	369.8	2581	6.4	1.8	2.0	16.560	2300

ACA ALUMINUM HOUSING IE3

DIN EN 60034-30 | Premium High Efficiency (PHE)

2 poles, idle speed 3000 rpm230/400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
80 A-2	0.75 / 0.90	2880 / 3456	80.7	80.7	79.1	0.82	2.9 / 1.7	2.5	7.0	2.3	2.3	0.0010	8.8
80 B-2	1.10 / 1.32	2880 / 3456	82.7	82.7	81.0	0.83	4.1 / 2.3	3.7	7.3	2.3	2.3	0.0012	9.0
90 S-2	1.50 / 1.80	2895 / 3474	84.2	84.2	82.5	0.84	5.4 / 3.1	4.9	7.6	2.3	2.3	0.0015	13.5
90 L-2	2.20 / 2.64	2895 / 3474	85.9	85.9	84.2	0.85	7.7 / 4.4	7.3	7.6	2.3	2.3	0.0018	17.0
100 L-2	3.00 / 3.60	2895 / 3474	87.1	87.1	85.4	0.87	10.1 / 5.8	9.9	7.8	2.3	2.3	0.0033	23.2
112 M-2	4.00 / 4.80	2905 / 3486	88.1	88.1	86.3	0.88	13.1 / 7.6	13.1	8.3	2.3	2.3	0.0060	40.0
132 SA-2	5.50 / 6.60	2930 / 3516	89.2	89.2	87.4	0.88	17.8 / 10.3	17.9	8.3	2.2	2.3	0.0120	42.0
132 SB-2	7.50 / 9.00	2930 / 3516	90.1	90.1	88.3	0.88	24.1 / 13.8	24.4	7.9	2.2	2.3	0.0150	48.0

4 poles, idle speed 1500 rpm230/400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
80 B-4	0.75 / 0.90	1420 / 1704	82.5	82.5	80.9	0.75	3.1 / 1.8	5.0	6.6	2.3	2.3	0.0025	11.1
90 S-4	1.10 / 1.32	1445 / 1734	84.1	84.1	82.4	0.76	4.4 / 2.5	7.3	6.8	2.3	2.3	0.0030	15.0
90 L-4	1.50 / 1.80	1445 / 1734	85.3	85.3	83.6	0.77	5.8 / 3.3	9.9	7.0	2.3	2.3	0.0036	19.0
100 LA-4	2.20 / 2.64	1435 / 1722	86.7	86.7	85.0	0.81	8.0 / 4.6	14.6	7.6	2.3	2.3	0.0062	25.4
100 LB-4	3.00 / 3.60	1435 / 1722	87.7	87.7	85.9	0.82	10.6 / 6.1	20.0	7.6	2.3	2.3	0.0078	30.5
112 M-4	4.00 / 4.80	1440 / 1728	88.6	88.6	86.8	0.82	14.0 / 8.1	26.5	7.8	2.3	2.3	0.0110	37.0
132 S-4	5.50 / 6.60	1460 / 1752	89.6	89.6	87.8	0.83	18.8 / 10.8	36.0	7.9	2.0	2.3	0.0250	48.5
132 M-4	7.50 / 9.00	1460 / 1752	90.4	90.4	88.6	0.84	25.1 / 14.5	49.1	7.5	2.0	2.3	0.0340	60.0

ACA ALUMINUM HOUSING IE3

DIN EN 60034-30 | Premium High Efficiency (PHE)

6 poles, idle speed 1000 rpm

230/400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm ²]	kg
90 S-6	0.75 / 0.90	935 / 1122	78.9	78.9	77.3	0.71	3.4 / 2.0	7.7	6.0	2.0	2.1	0.0035	14.0
90 L-6	1.10 / 1.32	945 / 1134	81.0	81.0	79.4	0.73	4.7 / 2.7	11.1	6.0	2.0	2.1	0.0047	18.0
100 L-6	1.50 / 1.80	949 / 1138	82.5	82.5	80.9	0.73	6.3 / 3.6	15.1	6.5	2.0	2.1	0.0090	29.5
112 M-6	2.20 / 2.64	955 / 1146	84.3	84.3	82.6	0.74	9.0 / 5.2	22.0	6.6	2.0	2.1	0.0150	32.0
132 S-6	3.00 / 3.60	968 / 1161	85.6	85.6	83.9	0.74	12.1 / 6.9	29.6	6.8	2.0	2.1	0.0300	43.0
132 MA-6	4.00 / 4.80	968 / 1161	86.8	86.8	85.1	0.74	15.9 / 9.1	39.5	6.3	2.0	2.1	0.0380	49.0
132 MB-6	5.50 / 6.60	968 / 1161	88.0	88.0	86.2	0.75	21.2 / 12.2	54.3	7.0	2.0	2.1	0.0430	59.0

8 poles, idle speed 750 rpm

230/400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm ²]	kg
100 LA-8	0.75 / 0.90	685 / 822	75.0	75.0	73.5	0.67	3.8 / 2.2	10.5	4.0	1.8	2.0	0.0085	29.0
100 LB-8	1.10 / 1.32	685 / 822	77.7	77.7	76.1	0.69	5.2 / 3.0	15.3	5.0	1.8	2.0	0.0095	30.5
112 M-8	1.50 / 1.80	695 / 834	79.7	79.7	78.1	0.70	6.8 / 3.9	20.6	5.0	1.8	2.0	0.0140	38.5
132 S-8	2.20 / 2.64	710 / 852	81.9	81.9	80.3	0.71	9.6 / 5.5	29.6	6.0	1.8	2.0	0.0350	49.5
132 M-8	3.00 / 3.60	710 / 852	83.5	83.5	81.8	0.73	12.5 / 7.2	40.4	6.0	1.8	2.0	0.0430	59.0

ACM CAST IRON HOUSING IE3

DIN EN 60034-30 | Premium High Efficiency (PHE)

2 poles, idle speed 3000 rpm400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
160 MA-2	11.0 / 13.2	2945 / 3534	91.2	91.2	89.4	0.89	19.8	35.7	8.1	2.0	2.3	0.0400	113
160 MB-2	15.0 / 18.0	2945 / 3534	91.9	91.9	90.1	0.89	26.8	48.6	8.1	2.0	2.3	0.0500	123
160 L-2	18.5 / 22.2	2940 / 3528	92.4	92.4	90.6	0.89	32.9	60.1	8.2	2.0	2.3	0.0590	142
180 M-2	22.0 / 26.4	2955 / 3546	92.7	92.7	90.8	0.89	39.0	71.1	8.2	2.0	2.3	0.0930	182
200 LA-2	30.0 / 36.0	2960 / 3552	93.3	93.3	91.4	0.89	52.9	96.8	7.6	2.0	2.3	0.1400	246
200 LB-2	37.0 / 44.4	2960 / 3552	93.7	93.7	91.8	0.89	65.0	119.4	7.6	2.0	2.3	0.1630	265
225 M-2	45.0 / 54.0	2965 / 3558	94.0	94.0	92.1	0.90	77.9	144.9	7.7	2.0	2.3	0.2450	323
250 M-2	55.0 / 66.0	2970 / 3564	94.3	94.3	92.4	0.90	94.9	176.9	7.7	2.0	2.3	0.3300	413
280 S-2	75.0 / 90.0	2975 / 3570	94.7	94.7	92.8	0.90	128.8	240.8	7.1	1.8	2.3	0.6500	546
280 M-2	90.0 / 108	2975 / 3570	95.0	95.0	93.1	0.90	154.1	288.9	7.1	1.8	2.3	0.7100	569
315 S-2	110 / 132	2978 / 3573	95.2	95.2	93.3	0.90	188.0	352.8	7.1	1.8	2.3	1.3000	897
315 M-2	132 / 158	2978 / 3573	95.4	95.4	93.5	0.90	225.1	423.3	7.1	1.8	2.3	2.0000	1029
315 LA-2	160 / 192	2980 / 3576	95.6	95.6	93.7	0.91	269.3	512.8	7.2	1.8	2.3	2.3500	1067
315 LB-2	200 / 240	2980 / 3576	95.8	95.8	93.9	0.91	335.9	640.9	7.2	1.8	2.2	2.7000	1194
355 M-2	250 / 300	2982 / 3578	95.8	95.8	93.9	0.91	419.8	800.6	7.2	1.6	2.2	3.4000	1685
355 L-2	315 / 378	2982 / 3578	95.8	95.8	93.9	0.91	529.0	1009	7.2	1.6	2.2	3.9000	1734

4 poles, idle speed 1500 rpm400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
160 M-4	11.0 / 13.2	1465 / 1758	91.4	91.4	89.6	0.85	20.7	71.7	7.7	2.2	2.3	0.0810	121
160 L-4	15.0 / 18.0	1465 / 1758	92.1	92.1	90.3	0.86	27.7	97.8	7.8	2.2	2.3	0.0950	142
180 M-4	18.5 / 22.2	1470 / 1764	92.6	92.6	90.7	0.86	34.0	120.2	7.8	2.0	2.3	0.1410	181
180 L-4	22.0 / 26.4	1470 / 1764	93.0	93.0	91.1	0.86	40.3	142.9	7.8	2.0	2.3	0.1680	209
200 L-4	30.0 / 36.0	1475 / 1770	93.6	93.6	91.7	0.86	54.6	194.2	7.3	2.0	2.3	0.2750	284
225 S-4	37.0 / 44.4	1485 / 1782	93.9	93.9	92.0	0.86	67.1	237.9	7.4	2.0	2.3	0.4300	328
225 M-4	45.0 / 54.0	1485 / 1782	94.2	94.2	92.3	0.86	81.3	289.4	7.4	2.0	2.3	0.4900	363
250 M-4	55.0 / 66.0	1485 / 1782	94.6	94.6	92.7	0.86	99.0	353.7	7.4	2.2	2.3	0.6900	442
280 S-4	75.0 / 90.0	1486 / 1783	95.0	95.0	93.1	0.88	131.3	482.0	6.9	2.0	2.3	1.2100	569
280 M-4	90.0 / 108	1486 / 1783	95.2	95.2	93.3	0.88	157.3	578.4	6.9	2.0	2.3	1.4800	639
315 S-4	110 / 132	1488 / 1785	95.4	95.4	93.5	0.89	189.7	706.0	7.0	2.0	2.2	3.4800	939
315 M-4	132 / 158	1488 / 1785	95.6	95.6	93.7	0.89	227.1	847.2	7.0	2.0	2.2	3.6500	1033
315 LA-4	160 / 192	1488 / 1785	95.8	95.8	93.9	0.89	274.7	1027	7.1	2.0	2.2	4.2000	1126
315 LB-4	200 / 240	1490 / 1788	96.0	96.0	94.1	0.90	338.9	1282	7.1	2.0	2.2	5.0000	1238
355 M-4	250 / 300	1490 / 1788	96.0	96.0	94.1	0.90	423.6	1602	7.1	2.0	2.2	6.9000	1830
355 L-4	315 / 378	1490 / 1788	96.0	96.0	94.1	0.90	533.8	2019	7.1	2.0	2.2	8.7000	1950

ACM CAST IRON HOUSING IE3

DIN EN 60034-30 | Premium High Efficiency (PHE)

6 poles, idle speed 1000 rpm

400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
160 M-6	7.50 / 9.00	970 / 1164	89.1	89.1	87.3	0.79	15.6	73.8	6.7	2.0	2.1	0.0950	112
160 L-6	11.0 / 13.2	970 / 1164	90.3	90.3	88.5	0.80	22.3	108.3	7.2	2.0	2.1	0.1200	134
180 L-6	15.0 / 18.0	978 / 1173	91.2	91.2	89.4	0.81	29.7	146.5	7.3	2.0	2.1	0.2200	197
200 LA-6	18.5 / 22.2	980 / 1176	91.7	91.7	89.9	0.81	43.1	180.3	7.3	2.0	2.1	0.3700	234
200 LB-6	22.0 / 26.4	980 / 1176	92.2	92.2	90.4	0.81	57.0	214.4	7.4	2.0	2.1	0.4200	251
225 M-6	30.0 / 36.0	980 / 1176	92.9	92.9	91.0	0.83	69.1	292.3	6.9	2.0	2.1	0.5500	308
250 M-6	37.0 / 44.4	985 / 1182	93.3	93.3	91.4	0.84	82.7	358.7	7.1	2.0	2.1	0.8400	383
280 S-6	45.0 / 54.0	985 / 1182	93.7	93.7	91.8	0.85	99.5	436.3	7.3	2.0	2.0	1.4200	501
280 M-6	55.0 / 66.0	985 / 1182	94.1	94.1	92.2	0.86	138.2	533.2	7.3	2.0	2.0	1.7000	573
315 S-6	75.0 / 90.0	985 / 1182	94.6	94.6	92.7	0.84	163.3	727.2	6.6	2.0	2.0	4.2000	843
315 M-6	90.0 / 108	988 / 1185	94.9	94.9	93.0	0.85	186.4	869.9	6.7	2.0	2.0	4.9000	941
315 LA-6	110 / 132	988 / 1185	95.1	95.1	93.2	0.85	199.2	1063	6.7	2.0	2.0	5.5000	1017
315 LB-6	132 / 158	988 / 1185	95.4	95.4	93.5	0.86	235.5	1276	6.8	2.0	2.0	6.5000	1121
355 MA-6	160 / 192	990 / 1188	95.6	95.6	93.7	0.86	284.9	1543	6.8	1.8	2.0	10.100	1715
355 MB-6	200 / 240	990 / 1188	95.8	95.8	93.9	0.87	351.3	1929	6.8	1.8	2.0	11.200	1846
355 L-6	250 / 300	990 / 1188	95.8	95.8	93.9	0.87	439.1	2412	6.8	1.8	2.0	13.000	2085

8 poles, idle speed 750 rpm

400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
160 MA-8	4.00 / 4.80	725 / 870	84.8	84.8	83.1	0.73	9.3	52.7	6.0	1.9	2.0	0.0930	101
160 MB-8	5.50 / 6.60	725 / 870	86.2	86.2	84.5	0.74	12.4	72.4	6.0	1.9	2.0	0.1050	126.5
160 L-8	7.50 / 9.00	725 / 870	87.3	87.3	85.6	0.75	16.5	98.8	6.0	1.9	2.0	0.1200	136
180 L-8	11.0 / 13.2	735 / 882	88.6	88.6	86.8	0.75	23.9	142.9	6.5	2.0	2.0	0.2200	198
200 L-8	15.0 / 18.0	730 / 876	89.6	89.6	87.8	0.76	31.8	196.2	6.6	2.0	2.0	0.3900	234
225 S-8	18.5 / 22.2	730 / 876	90.1	90.1	85.3	0.76	39.0	242.0	6.6	1.9	2.0	0.5100	284
225 M-8	22.0 / 26.4	730 / 876	90.6	90.6	88.8	0.78	44.9	287.8	6.6	1.9	2.0	0.5900	325
250 M-8	30.0 / 36.0	735 / 882	91.3	91.3	89.5	0.79	60.0	389.8	6.5	1.9	2.0	0.8200	425
280 S-8	37.0 / 44.4	735 / 882	91.8	91.8	90.0	0.79	73.6	480.7	6.6	1.9	2.0	1.4200	518
280 M-8	45.0 / 54.0	735 / 882	92.2	92.2	90.4	0.79	89.2	584.7	6.6	1.9	2.0	1.7000	582
315 S-8	55.0 / 66.0	735 / 882	92.5	92.5	90.7	0.81	106.0	714.6	6.6	1.8	2.0	4.6000	852
315 M-8	75.0 / 90.0	735 / 882	93.1	93.1	91.2	0.81	144.0	974.5	6.2	1.8	2.0	5.5000	952
315 LA-8	90.0 / 108	735 / 882	93.4	93.4	91.5	0.82	170.0	1169	6.4	1.8	2.0	6.3000	1040
315 LB-8	110 / 132	735 / 882	93.7	93.7	91.8	0.82	207.0	1429	6.4	1.8	2.0	7.2000	1056
355 MA-8	132 / 158	740 / 888	94.0	94.0	92.1	0.82	247.0	1704	6.4	1.8	2.0	10.600	1784
355 MB-8	160 / 192	740 / 888	94.3	94.3	92.4	0.82	299.0	2065	6.4	1.8	2.0	11.800	1941
355 L-8	200 / 240	740 / 888	94.6	94.6	92.7	0.83	368.0	2581	6.4	1.8	2.0	13.800	2026

ACA ALUMINUM HOUSING IE2

DIN EN 60034-30 | High Efficiency (HE)

2 poles, idle speed 3000 rpm

230/400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
80 A-2	0.75 / 0.90	2875 / 3450	77.4	77.4	75.9	0.83	3.0 / 1.7	2.5	6.8	2.3	2.3	0.0008	8.9
80 B-2	1.10 / 1.32	2875 / 3450	79.6	79.6	78.0	0.84	4.2 / 2.4	3.7	7.1	2.3	2.3	0.0009	10.0
90 S-2	1.50 / 1.80	2890 / 3468	81.3	81.3	79.7	0.84	5.6 / 3.2	5.0	7.3	2.3	2.3	0.0012	12.5
90 L-2	2.20 / 2.64	2890 / 3468	83.2	83.2	81.5	0.85	7.9 / 4.6	7.3	7.6	2.3	2.3	0.0015	15.2
100 L-2	3.00 / 3.60	2891 / 3469	84.6	84.6	82.9	0.87	10.4 / 6.0	9.9	7.8	2.2	2.3	0.0028	21.5
112 M-2	4.00 / 4.80	2914 / 3496	85.8	85.8	84.1	0.88	13.5 / 7.8	13.1	8.1	2.2	2.3	0.0050	26.0
132 SA-2	5.50 / 6.60	2937 / 3524	87.0	87.0	85.3	0.86	18.7 / 10.8	17.9	8.2	2.2	2.3	0.0100	38.2
132 SB-2	7.50 / 9.00	2940 / 3528	88.1	88.1	86.3	0.88	24.6 / 14.2	24.4	7.8	2.2	2.3	0.0120	44.0

4 poles, idle speed 1500 rpm

230/400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
80 B-4	0.75 / 0.90	1400 / 1680	79.6	79.6	78.0	0.76	3.2 / 1.8	5.1	6.4	2.3	2.3	0.0022	10.8
90 S-4	1.10 / 1.32	1440 / 1728	81.4	81.4	79.8	0.76	4.5 / 2.6	7.3	6.6	2.3	2.3	0.0024	13.8
90 L-4	1.50 / 1.80	1445 / 1734	82.8	82.8	81.1	0.77	6.0 / 3.4	9.9	6.7	2.3	2.3	0.0030	15.8
100 LA-4	2.20 / 2.64	1440 / 1728	84.3	84.3	82.6	0.81	8.2 / 4.7	14.6	7.3	2.3	2.3	0.0056	22.4
100 LB-4	3.00 / 3.60	1440 / 1728	85.5	85.5	83.8	0.82	10.9 / 6.3	19.9	7.5	2.3	2.3	0.0068	24.0
112 M-4	4.00 / 4.80	1445 / 1734	86.6	86.6	84.9	0.82	14.3 / 8.2	26.4	7.5	2.3	2.3	0.0095	35.0
132 S-4	5.50 / 6.60	1455 / 1746	87.7	87.7	85.9	0.83	19.2 / 11.1	36.1	7.5	2.0	2.3	0.0220	43.0
132 M-4	7.50 / 9.00	1455 / 1746	88.7	88.7	86.9	0.84	25.6 / 14.7	49.2	7.3	2.0	2.3	0.0300	54.0

ACA ALUMINUM HOUSING IE2

DIN EN 60034-30 | High Efficiency (HE)

6 poles, idle speed 1000 rpm

230/400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm ²]	kg
90 S-6	0.75 / 0.90	934 / 1120	75.9	75.9	74.4	0.72	3.5 / 2.0	7.7	5.3	2.0	2.1	0.0030	12.5
90 L-6	1.10 / 1.32	945 / 1134	78.1	78.1	76.5	0.72	5.0 / 2.9	11.1	5.0	2.0	2.1	0.0040	16.6
100 L-6	1.50 / 1.80	945 / 1134	79.8	79.8	78.2	0.72	6.6 / 3.8	15.2	5.5	2.0	2.1	0.0082	22.5
112 M-6	2.20 / 2.64	960 / 1152	81.8	81.8	80.2	0.76	9.0 / 5.2	21.9	5.5	2.0	2.1	0.0140	27.5
132 S-6	3.00 / 3.60	964 / 1156	83.3	83.3	81.6	0.76	12.1 / 6.9	29.7	6.5	2.0	2.1	0.0290	41.5
132 MA-6	4.00 / 4.80	965 / 1158	84.6	84.6	82.9	0.76	15.8 / 9.1	39.6	6.5	2.0	2.1	0.0360	49.0
132 MB-6	5.50 / 6.60	965 / 1158	86.0	86.3	84.3	0.77	21.1 / 12.2	54.4	6.5	2.0	2.1	0.0400	52.5

8 poles, idle speed 750 rpm

230/400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm ²]	kg
100 LA-8	0.75 / 0.90	685 / 822	66.2	66.2	64.9	0.67	4.3 / 2.5	10.5	4.0	1.8	2.0	0.0092	25.2
100 LB-8	1.10 / 1.32	685 / 822	70.8	70.8	69.4	0.69	5.7 / 3.3	15.3	5.0	1.8	2.0	0.0120	26.5
112 M-8	1.50 / 1.80	695 / 834	74.1	74.1	72.6	0.70	7.4 / 4.2	20.6	5.0	1.8	2.0	0.0246	33.5
132 S-8	2.20 / 2.64	710 / 852	77.6	77.6	76.0	0.71	10.2 / 5.8	29.6	6.0	1.8	2.0	0.0315	43.2
132 M-8	3.00 / 3.60	710 / 852	80.0	80.0	78.4	0.73	13.1 / 7.5	40.4	6.0	1.8	2.0	0.0396	51.5

ACM CAST IRON HOUSING IE2

DIN EN 60034-30 | High Efficiency (HE)

2 poles, idle speed 3000 rpm

400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
160 MA-2	11.0 / 13.2	2930 / 3516	89.4	89.4	87.6	0.89	20.0	35.9	7.9	2.2	2.3	0.0385	108
160 MB-2	15.0 / 18.0	2930 / 3516	90.3	90.3	88.5	0.89	26.9	48.9	7.9	2.2	2.3	0.0466	122
160 L-2	18.5 / 22.2	2937 / 3524	90.9	90.9	89.1	0.89	33.0	60.2	8.0	2.2	2.3	0.0550	140
180 M-2	22.0 / 26.4	2940 / 3528	91.3	91.3	89.5	0.88	39.5	71.5	8.1	2.2	2.3	0.0810	178
200 LA-2	30.0 / 36.0	2950 / 3540	92.0	92.0	90.2	0.88	53.5	97.1	7.5	2.0	2.3	0.1250	229
200 LB-2	37.0 / 44.4	2950 / 3540	92.5	92.5	90.7	0.89	64.9	119.8	7.5	2.0	2.3	0.1450	249
225 M-2	45.0 / 54.0	2960 / 3552	92.9	92.9	91.0	0.89	78.6	145.2	7.5	2.2	2.3	0.2280	322
250 M-2	55.0 / 66.0	2965 / 3558	93.2	93.2	91.3	0.90	94.6	177.2	7.6	2.2	2.3	0.3050	401
280 S-2	75.0 / 90.0	2970 / 3564	93.8	93.8	91.9	0.90	126.8	241.2	6.9	1.8	2.3	0.6000	533
280 M-2	90.0 / 108	2970 / 3564	94.1	94.1	92.2	0.91	151.7	289.4	6.9	1.8	2.3	0.6860	568
315 S-2	110 / 132	2975 / 3570	94.3	94.3	92.4	0.91	185.0	353.1	7.0	1.8	2.2	1.1700	914
315 M-2	132 / 158	2975 / 3570	94.6	94.6	92.7	0.91	221.3	423.7	7.0	1.8	2.2	1.8000	1029
315 LA-2	160 / 192	2975 / 3570	94.8	94.8	92.9	0.92	264.8	513.6	7.1	1.8	2.2	2.1200	1067
315 LB-2	200 / 240	2975 / 3570	95.0	95.0	93.1	0.92	330.3	642.0	7.1	1.8	2.2	2.5000	1194
355 M-2	250 / 300	2980 / 3576	95.0	95.0	93.1	0.92	412.9	801.2	7.1	1.6	2.2	3.1000	1597
355 L-2	315 / 378	2980 / 3576	95.0	95.0	93.1	0.92	520.2	1009.5	7.2	1.6	2.2	3.6000	1702

4 poles, idle speed 1500 rpm

400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
160 M-4	11.0 / 13.2	1460 / 1752	89.8	89.8	88.0	0.84	21.0	72.0	6.9	2.1	2.8	0.0740	114
160 L-4	15.0 / 18.0	1460 / 1752	90.6	90.6	88.8	0.85	28.1	98.1	7.5	2.1	2.8	0.0918	136
180 M-4	18.5 / 22.2	1470 / 1764	91.2	91.2	89.4	0.86	34.0	120.2	7.8	2.1	2.8	0.1350	176
180 L-4	22.0 / 26.4	1470 / 1764	91.6	91.6	89.8	0.86	40.3	142.9	7.5	2.1	2.8	0.1600	196
200 L-4	30.0 / 36.0	1470 / 1764	92.3	92.3	90.5	0.86	54.5	194.9	7.1	2.0	2.8	0.2650	259
225 S-4	37.0 / 44.4	1480 / 1776	92.7	92.7	90.8	0.87	66.2	238.8	7.5	2.0	2.5	0.4200	302
225 M-4	45.0 / 54.0	1480 / 1776	93.1	93.1	91.2	0.87	80.2	290.4	7.6	1.8	2.5	0.4700	329
250 M-4	55.0 / 66.0	1480 / 1776	93.5	93.5	91.6	0.87	97.6	354.9	7.3	1.8	2.5	0.6600	418
280 S-4	75.0 / 90.0	1480 / 1776	94.0	94.0	92.1	0.87	132.4	484.0	7.6	1.8	2.2	1.1400	546
280 M-4	90.0 / 108	1480 / 1776	94.2	94.2	92.3	0.87	158.5	580.7	7.5	1.8	2.2	1.4200	638
315 S-4	110 / 132	1485 / 1782	94.5	94.5	92.6	0.88	190.9	707.4	7.1	1.8	2.2	3.4000	939
315 M-4	132 / 158	1485 / 1782	94.7	94.7	92.8	0.88	228.6	848.9	7.3	1.8	2.2	3.5800	1033
315 LA-4	160 / 192	1485 / 1782	94.9	94.9	93.0	0.89	273.4	1029	7.4	1.8	2.2	4.1000	1126
315 LB-4	200 / 240	1485 / 1782	95.1	95.1	93.2	0.89	341.1	1286	7.6	1.8	2.2	4.9000	1229
355 M-4	250 / 300	1490 / 1788	95.1	95.1	93.2	0.90	421.6	1602	7.5	1.8	2.2	6.7000	1670
355 L-4	315 / 378	1490 / 1788	95.1	95.1	93.2	0.90	531.2	2019	7.4	1.8	2.2	8.4000	2848

ACM CAST IRON HOUSING IE2

DIN EN 60034-30 | High Efficiency (HE)

6 poles, idle speed 1000 rpm

400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
160 M-6	7.50 / 9.00	970 / 1164	87.2	87.2	85.5	0.78	15.9	73.8	6.8	2.0	2.1	0.0880	112
160 L-6	11.0 / 13.2	970 / 1164	88.7	88.7	86.9	0.78	22.9	108.3	6.9	2.0	2.1	0.1150	133
180 L-6	15.0 / 18.0	975 / 1170	89.7	89.7	87.9	0.81	29.8	146.9	7.3	2.0	2.1	0.2100	183
200 LA-6	18.5 / 22.2	980 / 1176	90.4	90.4	88.6	0.81	36.5	180.3	7.2	2.0	2.1	0.3100	224
200 LB-6	22.0 / 26.4	980 / 1176	90.9	90.9	89.1	0.83	42.1	214.4	7.3	2.0	2.1	0.3500	240
225 M-6	30.0 / 36.0	980 / 1176	91.7	91.7	89.9	0.84	56.2	292.3	6.8	2.1	2.1	0.5340	285
250 M-6	37.0 / 44.4	980 / 1176	92.2	92.2	90.4	0.86	67.4	360.6	7.0	2.0	2.1	0.8250	389
280 S-6	45.0 / 54.0	980 / 1176	92.7	92.7	90.8	0.86	81.5	438.5	7.2	2.0	2.0	1.3500	489
280 M-6	55.0 / 66.0	980 / 1176	93.1	93.1	91.8	0.86	99.1	536.0	7.2	2.0	2.0	1.6000	550
315 S-6	75.0 / 90.0	985 / 1182	93.7	93.7	93.9	0.86	134.3	727.2	6.5	2.0	2.0	4.0000	838
315 M-6	90.0 / 108	985 / 1182	94.0	94.0	92.1	0.86	160.7	872.6	6.6	2.0	2.0	4.6000	941
315 LA-6	110 / 132	985 / 1182	94.3	94.3	92.5	0.86	195.8	1066	6.6	2.0	2.0	5.2500	986
315 LB-6	132 / 158	985 / 1182	94.6	94.6	92.7	0.87	231.5	1280	6.6	2.0	2.0	6.2000	1121
355 MA-6	160 / 192	990 / 1188	94.8	94.8	92.9	0.88	276.8	1543	6.7	2.0	2.0	9.6000	1650
355 MB-6	200 / 240	990 / 1188	95.0	95.0	93.1	0.88	345.3	1929	6.8	2.0	2.0	10.800	1752
355 L-6	250 / 300	990 / 1188	95.0	95.0	93.1	0.88	431.6	2412	6.8	2.0	2.0	12.500	1990

8 poles, idle speed 750 rpm

400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
160 MA-8	4.00 / 4.80	725 / 870	81.9	81.9	80.3	0.73	9.7	52.7	6.0	1.9	2.0	0.0480	92
160 MB-8	5.50 / 6.60	725 / 870	83.8	83.8	82.1	0.74	12.8	72.4	6.0	1.9	2.0	0.0600	115
160 L-8	7.50 / 9.00	725 / 870	85.3	85.3	83.6	0.75	16.9	98.8	6.0	1.9	2.0	0.0708	124
180 L-8	11.0 / 13.2	735 / 882	86.9	86.9	85.2	0.75	24.4	142.9	6.5	2.0	2.0	0.1116	180
200 L-8	15.0 / 18.0	730 / 876	88.0	88.0	86.2	0.76	32.4	196.2	6.6	2.0	2.0	0.1680	213
225 S-8	18.5 / 22.2	730 / 876	88.6	88.6	86.8	0.76	39.7	242.0	6.6	1.9	2.0	0.1956	263
225 M-8	22.0 / 26.4	730 / 876	89.1	89.1	87.3	0.78	45.7	287.8	6.6	1.9	2.0	0.2940	301
250 M-8	30.0 / 36.0	735 / 882	89.8	89.8	88.0	0.79	61.0	389.8	6.5	1.9	2.0	0.3960	394
280 S-8	37.0 / 44.4	735 / 882	90.3	90.3	88.5	0.79	74.9	480.7	6.6	1.9	2.0	0.7800	480
280 M-8	45.0 / 54.0	735 / 882	90.7	90.7	88.9	0.79	90.6	584.7	6.6	1.9	2.0	0.8520	539
315 S-8	55.0 / 66.0	735 / 882	91.0	91.0	89.2	0.81	108.0	714.6	6.6	1.8	2.0	1.5600	820
315 M-8	75.0 / 90.0	735 / 882	91.6	91.6	89.8	0.81	146.0	974.5	6.2	1.8	2.0	2.4000	916
315 LA-8	90.0 / 108	735 / 882	91.9	91.9	90.1	0.82	172.0	1169	6.4	1.8	2.0	2.8200	1000
315 LB-8	110 / 132	735 / 882	92.3	92.3	90.5	0.82	210.0	1429	6.4	1.8	2.0	3.2400	1015
355 MA-8	132 / 158	740 / 888	92.6	92.6	90.7	0.82	251.0	1703	6.4	1.8	2.0	4.0800	1715
355 MB-8	160 / 192	740 / 888	93.0	93.0	91.1	0.82	303.0	2065	6.4	1.8	2.0	4.6800	1866
355 L-8	200 / 240	740 / 888	93.5	93.5	91.6	0.83	372.0	2518	6.4	1.8	2.0	4.0800	1948

IE1 ALUMINUM SERIES

“SMALL MOTORS”

Due to their power output these motors are not covered by the IE2 standard.
This standard only covers power outputs of 0.75 kW – 375 kW.

2 poles, idle speed 3000 rpm

230 V / 50 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm ²]	kg
56 A-2	0.09 / 0.12	2750 / 3300	62.0	-	-	0.70	0.53	0.31	5.2	2.1	2.2	0.00	3.4
56 B-2	0.12 / 0.14	2800 / 3360	64.0	-	-	0.78	0.61	0.41	5.2	2.1	2.2	0.00	3.7
63 A-2	0.18 / 0.21	2800 / 3360	66.0	-	-	0.80	0.87	0.61	5.5	2.2	2.3	0.00	4.3
63 B-2	0.25 / 0.30	2800 / 3360	69.0	-	-	0.81	1.14	0.85	5.5	2.2	2.3	0.00	4.4
71 A-2	0.37 / 0.44	2800 / 3360	70.0	-	-	0.81	1.66	1.26	6.1	2.3	2.4	0.00	5.3
71 B-2	0.55 / 0.66	2740 / 3288	73.0	-	-	0.82	2.34	1.92	6.1	2.2	2.3	0.00	6.2

4 poles, idle speed 1500 rpm

230 V / 50 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm ²]	kg
56 A-4	0.06 / 0.07	1340 / 1608	56.0	-	-	0.69	0.40	0.43	4.0	2.0	2.1	0.00	3.6
56 B-4	0.09 / 0.11	1340 / 1608	58.0	-	-	0.70	0.56	0.64	4.0	2.0	2.1	0.00	3.9
63 A-4	0.12 / 0.14	1360 / 1632	59.0	-	-	0.72	0.72	0.84	4.4	2.1	2.2	0.00	4.2
63 B-4	0.18 / 0.22	1360 / 1632	59.0	-	-	0.73	1.06	1.26	4.4	2.1	2.2	0.00	4.5
71 A-4	0.25 / 0.30	1380 / 1656	67.3	-	-	0.74	1.28	1.73	5.2	2.1	2.2	0.00	5.3
71 B-4	0.37 / 0.44	1380 / 1656	70.0	-	-	0.75	1.79	2.56	5.2	2.1	2.2	0.00	6.1
80 A-4	0.55 / 0.66	1390 / 1668	71.1	-	-	0.75	2.63	3.78	5.2	2.3	2.3	0.00	8.1

6 poles, idle speed 1000 rpm

230 V / 50 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to Rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm ²]	kg
63 A-6	0.09 / 0.12	840 / 1008	44.0	-	-	0.60	0.87	1.02	3.5	1.8	1.9	0.00	4.5
63 B-6	0.12 / 0.18	850 / 1020	48.0	-	-	0.60	1.06	1.35	3.5	1.8	1.9	0.00	4.6
71 A-6	0.18 / 0.22	900 / 1080	57.0	-	-	0.66	1.22	1.91	4.0	1.9	2.0	0.00	6.5
71 B-6	0.25 / 0.30	900 / 1080	60.0	-	-	0.68	1.56	2.65	4.0	1.9	2.0	0.00	6.7
80 A-6	0.37 / 0.44	900 / 1080	63.0	-	-	0.70	2.14	3.93	4.7	1.9	2.0	0.00	8.5
80 B-6	0.55 / 0.66	885 / 1062	65.0	-	-	0.72	2.99	5.94	4.7	1.9	2.1	0.00	9.4

IE1 ACA ALUMINUM SERIES AND ACM CAST IRON MOTORS

8 poles, idle speed 750 rpm

400 V / 50 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos ϕ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm ²]	kg
80 A-8	0.18 / 0.21	690 / 828	38.0	-	-	0.61	1.1	2.5	3.3	1.8	1.9	0.00	8.5
80 B-8	0.25 / 0.30	690 / 828	43.3	-	-	0.61	1.4	3.5	3.3	1.8	1.9	0.00	9.0
90 S-8	0.37 / 0.44	690 / 828	49.7	-	-	0.61	1.8	5.1	4.0	1.8	1.9	0.01	12.6
90 L-8	0.55 / 0.66	690 / 828	56.1	-	-	0.61	2.3	7.6	4.0	1.8	2.0	0.01	15.3
100 LA-8	0.75 / 0.90	700 / 840	61.2	-	-	0.67	2.6	10.2	4.0	1.8	2.0	0.01	21.0
100 LB-8	1.10 / 1.32	700 / 840	66.5	-	-	0.69	3.5	15.0	5.0	1.8	2.0	0.01	22.0
112 M-8	1.50 / 1.80	700 / 840	70.2	-	-	0.69	4.4	20.5	5.0	1.8	2.0	0.02	28.0
132 S-8	2.20 / 2.64	710 / 852	74.2	-	-	0.72	6	29.6	6.0	1.8	2.0	0.03	36.0
132 M-8	3.00 / 3.60	710 / 852	77.0	-	-	0.74	7.7	40.4	6.0	1.8	2.0	0.04	43.0

8 poles, idle speed 750 rpm

400 V / 50 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to Rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos ϕ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm ²]	kg
160 MA-8	4.0 / 4.8	720 / 864	79.2	-	-	0.73	10.0	53.1	6.0	1.9	2.0	0.08	91.0
160 MB-8	5.5 / 6.6	720 / 864	81.4	-	-	0.74	13.2	73.0	6.0	2.0	2.0	0.09	103
160 L-8	7.5 / 9.0	720 / 864	83.1	-	-	0.75	17.4	99.5	6.0	2.0	2.0	0.13	124
180 L-8	11.0 / 13.2	730 / 876	85.0	-	-	0.76	24.6	143.9	6.0	2.0	2.0	0.20	165
200 L-8	15.0 / 18.0	730 / 876	86.2	-	-	0.76	33.0	196.2	6.6	2.0	2.0	0.40	225
225 S-8	18.5 / 22.2	730 / 876	86.9	-	-	0.76	40.4	242.0	6.6	1.9	2.0	0.49	256
225 M-8	22.0 / 26.4	730 / 876	87.4	-	-	0.78	46.6	287.8	6.6	1.9	2.0	0.55	275
250 M-8	30.0 / 36.0	735 / 882	88.3	-	-	0.79	62.1	389.8	6.6	1.9	2.0	0.83	350
280 S-8	37.0 / 44.4	735 / 882	88.8	-	-	0.79	76.1	480.7	6.6	1.9	2.0	1.93	472
280 M-8	45.0 / 54.0	735 / 882	89.2	-	-	0.79	92.2	584.7	6.6	1.8	2.0	3.65	520
315 S-8	55.0 / 66.0	735 / 882	89.7	-	-	0.81	109.0	714.6	6.6	1.8	2.0	6.37	815
315 M-8	75.0 / 90.0	735 / 882	90.3	-	-	0.81	148.0	974.5	6.6	1.8	2.0	7.23	906
315 LA-8	90.0 / 108	735 / 882	90.7	-	-	0.82	175.0	1169	6.6	1.8	2.0	4.79	987
315 LB-8	110 / 132	735 / 882	91.1	-	-	0.82	213.0	1429	6.4	1.8	2.0	5.58	995
355 MA-8	132 / 158	740 / 888	91.5	-	-	0.82	254.0	1704	6.4	1.8	2.0	7.90	1700
355 MB-8	160 / 192	740 / 888	91.9	-	-	0.82	306.0	2065	6.4	1.8	2.0	10.30	1850
355 L-8	200 / 240	740 / 888	92.5	-	-	0.83	376.0	2581	6.4	1.8	2.0	12.30	1930

PROGRESSIVE

IE3 motors with increased power in a smaller housing

2 poles, idle speed 3000 rpm

400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to Rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm ²]	kg
80 C-2	1.50	2890	84.2	84.2	82.5	0.84	3.1	5.0	7.6	2.3	2.3	0.00110	11.6
90 LC-2	3.00	2890	87.1	87.1	85.4	0.87	5.7	9.9	8.1	2.3	2.3	0.00260	20.4
100 LC-2	4.00	2895	88.1	88.1	86.3	0.88	7.4	13.2	8.3	2.3	2.3	0.00450	23.7
112 MC-2	5.50	2920	89.2	89.4	87.4	0.88	10.1	18.0	8.0	2.2	2.3	0.00690	30.2
132 MC-2	11.0	2940	91.2	91.2	89.4	0.90	19.3	35.7	7.9	2.2	2.3	0.01700	71.2
160 LC-2	22.0	2950	92.7	92.7	90.8	0.90	38.1	71.2	8.2	2.2	2.3	0.06000	187
180 MC-2	30.0	2950	93.3	93.3	91.4	0.89	52.1	97.1	7.5	2.2	2.3	0.09300	235

4 poles, idle speed 1500 rpm

400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to Rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm ²]	kg
80 C-4	1.10	1430	84.1	84.1	82.4	0.74	2.6	7.3	6.5	2.3	2.3	0.00240	12.9
90 LC-4	2.20	1430	86.7	86.7	85.0	0.78	4.7	14.7	6.9	2.3	2.3	0.00530	19.7
100 LC-4	4.00	1435	88.6	88.6	86.8	0.80	8.1	26.6	7.6	2.3	2.3	0.00950	31.3
112 MC-4	5.50	1450	89.6	89.6	87.8	0.80	11.1	36.2	7.7	2.0	2.3	0.01100	39.2
132 MC-4	11.0	1460	91.4	91.4	89.6	0.84	21.2	72.0	7.4	2.2	2.3	0.03950	58.2
160 LC-4	18.5	1465	92.6	92.6	90.7	0.84	33.4	120.6	7.5	2.2	2.3	0.09800	182
180 MC-4	22.0	1465	93.0	93.0	91.1	0.85	40.2	143.4	7.7	2.2	2.3	0.16000	231
200 LC-4	30.0	1470	93.6	93.6	91.7	0.86	53.8	194.9	7.8	2.2	2.3	0.18200	225
225 MC-4	55.0	1480	94.6	94.6	92.7	0.86	97.6	354.9	7.5	2.2	2.3	0.60000	443
250 MC-4	75.0	1480	95.0	95.0	93.1	0.87	131.0	484.0	7.5	2.2	2.3	0.81000	553
280 MC-4	110.0	1485	95.4	95.4	93.5	0.88	189.1	707.5	7.5	2.0	2.3	1.70000	835
315 MC-4	200.0	1485	96.0	96.0	94.1	0.90	334.1	1286	7.5	2.0	2.3	5.00000	1336

PROGRESSIVE

IE3 motors with increased power in a smaller housing

6 poles, idle speed 1000 rpm

400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to Rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm ²]	kg
90 LC-6	1.50	945	82.5	82.5	80.9	0.69	3.8	15.2	6.0	2.1	2.1	0.00720	26.6
100 LC-6	2.20	952	84.3	84.3	82.6	0.71	5.3	22.1	6.0	2.1	2.2	0.01300	33.5
112 MC-6	3.00	965	85.6	85.6	83.9	0.71	7.1	29.7	6.2	2.0	2.1	0.02000	38.3
112 MD-6	4.00	965	86.8	86.8	85.1	0.71	9.4	39.6	6.8	2.0	2.1	0.02500	54.1
132 MC-6	5.50	965	88.0	88.0	86.2	0.75	12.0	54.4	7.1	2.0	2.1	0.05100	68.9
132 MC-6	7.50	968	89.1	89.1	87.3	0.77	15.8	74.0	6.7	2.1	2.1	0.05100	72.4
160 LC-6	15.0	968	91.2	91.2	89.4	0.81	29.3	148.0	7.2	2.0	2.1	0.12100	143
180 LC-6	18.5	977	91.7	91.7	89.9	0.81	35.0	180.8	7.2	2.1	2.1	0.25300	250
280 MC-6	75.0	990	94.6	94.6	92.7	0.86	133.1	723.6	7.3	2.0	2.1	1.95000	713

PROGRESSIVE

IE2 motors with increased power in a smaller housing

2 poles, idle speed 3000 rpm

400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to Rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
80 C-2	1.50	2850	81.3	81.6	79.7	0.84	3.2	5.0	6.5	2.2	2.3	0.0011	13.0
90 LC-2	3.00	2850	84.6	84.9	82.9	0.87	5.9	10.1	7.0	2.2	2.3	0.0026	17.0
100 LC-2	4.00	2870	85.8	86.1	84.1	0.88	7.6	13.3	7.5	2.2	2.3	0.0048	22.5
112 MC-2	5.50	2900	87.0	87.3	85.3	0.88	10.4	18.1	7.5	2.2	2.3	0.0069	30.5
132 MC-2	11.0	2910	89.4	89.8	87.6	0.89	20.0	36.1	7.8	2.2	2.3	0.0170	49.0
160 LC-2	22.0	2940	91.3	91.7	89.5	0.89	39.1	71.5	7.8	2.2	2.3	0.0600	145
180 MC-2	30.0	2940	92.0	92.4	90.2	0.89	52.9	97.5	7.5	2.0	2.3	0.0930	190
200 LC-2	45.0	2960	92.9	93.3	91.0	0.90	77.7	145.2	7.8	2.2	2.3	0.1680	290
225 MC-2	55.0	2960	93.2	93.6	91.3	0.90	94.6	177.5	7.5	2.1	2.3	0.2570	320
250 MC-2	75.0	2970	93.8	94.2	91.9	0.90	128.2	241.2	7.2	2.1	2.3	0.3500	432
280 MC-2	110.0	2975	94.3	94.7	92.4	0.90	187.1	353.2	7.5	2.0	2.3	0.7270	800

4 poles, idle speed 1500 rpm

400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to Rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
80 C-4	1.10	1400	81.4	81.7	79.8	0.77	2.5	7.5	6.5	2.2	2.3	0.0024	10.3
90 LC-4	2.20	1420	84.3	84.6	82.6	0.81	4.7	14.8	7.0	2.2	2.3	0.0053	20.3
100 LC-4	4.00	1435	86.6	86.9	84.9	0.82	8.1	26.6	7.0	2.2	2.3	0.0095	30.5
112 MC-4	5.50	1440	87.7	88.0	85.9	0.82	11.0	36.5	7.5	2.2	2.3	0.0110	36.5
132 MC-4	11.0	1460	89.8	90.1	88.0	0.84	21.0	72.0	7.5	2.2	2.3	0.0395	56.0
160 LC-4	18.5	1460	91.2	91.5	89.4	0.86	33.1	121.0	7.5	2.1	2.3	0.0980	150
180 MC-4	22.0	1460	91.6	91.9	89.8	0.86	40.3	143.9	7.5	2.2	2.3	0.1600	134
180 LC-4	30.0	1470	92.3	92.6	90.5	0.86	54.5	194.9	7.5	2.2	2.3	0.1820	205
200 LC-4	37.0	1470	92.7	93.0	90.8	0.86	67.0	240.4	7.5	2.2	2.3	0.2950	280
225 MC-4	55.0	1470	93.5	93.8	91.6	0.86	98.7	357.4	7.2	2.2	2.3	0.5300	346
250 MC-4	75.0	1480	94.0	94.3	92.1	0.87	132.4	484.0	7.2	2.2	2.3	0.7200	440
280 MC-4	110.0	1485	94.5	94.8	92.6	0.88	190.9	707.5	7.2	2.2	2.3	1.5900	830
315 MC-4	200.0	1485	95.1	95.4	93.2	0.89	341.1	1286.4	7.5	2.2	2.3	4.9000	1150

PROGRESSIVE

IE2 motors with increased power in a smaller housing

6 poles, idle speed 1000 rpm

400 V / 50 Hz, 460 V / 60 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to Rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm ²]	kg
90 LC-6	1.50	920	79.8	80.0	78.2	0.74	3.7	15.6	6.0	2.0	2.1	0.0072	20.5
100 LC-6	2.20	940	81.8	82.0	80.2	0.74	5.2	22.4	6.5	2.1	2.2	0.0130	25.0
112 MC-6	3.00	940	83.3	83.5	81.6	0.76	6.8	30.5	6.5	2.0	2.1	0.0200	39.0
112 MD-6	4.00	950	84.6	84.9	82.9	0.76	9.0	40.2	6.5	2.0	2.1	0.0250	46.0
132 MC-6	7.50	960	87.2	87.5	85.5	0.77	16.1	74.6	6.5	2.1	2.1	0.0510	65.0
160 LC-6	15.0	965	89.7	90.0	87.9	0.79	30.6	148.5	7.0	2.1	2.1	0.1210	160
180 LC-6	18.5	975	90.4	90.7	88.6	0.81	35.5	151.2	7.0	2.2	2.1	0.2530	203
200 LC-6	30.0	975	91.7	92.1	89.9	0.82	57.6	293.9	7.0	2.1	2.1	0.4200	450
250 MC-6	45.0	980	92.7	93.0	90.8	0.85	82.4	438.6	7.0	2.1	2.1	1.0500	580
280 MC-6	75.0	985	93.7	94.0	91.8	0.86	134.3	727.2	7.0	2.1	2.1	1.9800	270

DOUBLE-SPEED MOTORS

Double-speed pole-changing motors for quadratically increasing counter torque
(aluminum housing)

2-4 poles, idle torque 3000/1500 rpm

400 V / 50 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
80 A-2-4	0.75 / 0.17	2825 / 1360	72.0 / 61.0	-	-	0.81 / 0.50	1.9 / 0.8	2.5 / 1.1	6.5 / 5.0	1.6 / 1.6	2.0	0.0009	16.0
80 B-2-4	0.95 / 0.25	2825 / 1380	74.0 / 66.0	-	-	0.80 / 0.61	2.3 / 0.9	3.2 / 1.7	7.5 / 5.5	2.0 / 1.4	1.8	0.0010	18.0
90 S-2-4	1.4 / 0.3	2840 / 1380	80.0 / 69.0	-	-	0.82 / 0.57	3.1 / 1.1	4.7 / 2.0	7.5 / 5.5	2.0 / 1.4	1.8	0.0013	23.0
90 L-2-4	1.9 / 0.4	2840 / 1380	80.0 / 69.0	-	-	0.82 / 0.57	4.2 / 1.5	6.3 / 2.7	7.5 / 5.5	2.0 / 1.4	1.8	0.0015	26.0
100 LA-2-4	2.5 / 0.65	2840 / 1400	81.0 / 69.0	-	-	0.89 / 0.70	5.0 / 1.9	8.4 / 4.4	7.5 / 5.5	1.8 / 1.2	1.8	0.0030	36.0
100 LB-2-4	3.1 / 0.8	2880 / 1400	83.0 / 73.0	-	-	0.89 / 0.70	6.1 / 2.3	10.2 / 5.4	7.5 / 5.5	1.8 / 1.3	1.8	0.0038	36.0
112 M-2-4	4.4 / 1.1	2915 / 1445	84.0 / 76.0	-	-	0.87 / 0.69	8.7 / 3.0	14.4 / 7.3	7.5 / 5.5	1.4 / 1.4	1.8	0.0072	42.0
132 S-2-4	5.9 / 1.4	2895 / 1395	83.0 / 77.0	-	-	0.90 / 0.74	11.4 / 3.6	19.5 / 9.6	7.5 / 5.5	1.9 / 1.3	1.8	0.0120	68.0
132 M-2-4	8.0 / 2.0	2900 / 1420	85.0 / 79.0	-	-	0.91 / 0.78	14.9 / 4.7	26.3 / 13.5	7.5 / 5.5	1.9 / 1.3	1.8	0.0160	79.0

4-6 poles, idle torque 1500/1000 rpm

400 V / 50 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
80 A-4-6	0.4 / 0.12	1415 / 925	67.0 / 50.0	-	-	0.66 / 0.50	1.3 / 0.7	2.7 / 1.2	6.0 / 4.7	1.9 / 1.9	2.3	0.0021	15.0
80 B-4-6	0.55 / 0.18	1390 / 885	71.0 / 50.0	-	-	0.76 / 0.60	1.5 / 0.9	3.8 / 1.9	6.0 / 6.0	2.0 / 1.6	2.2	0.0023	16.0
90 S-4-6	1.1 / 0.32	1430 / 960	76.0 / 59.0	-	-	0.78 / 0.46	2.7 / 1.7	7.3 / 3.2	6.0 / 6.0	1.5 / 1.5	2.0	0.0029	24.0
90 L-4-6	1.4 / 0.45	1395 / 935	72.0 / 62.0	-	-	0.84 / 0.66	3.3 / 1.6	9.6 / 4.6	6.5 / 6.0	1.3 / 1.3	1.8	0.0035	26.0
100 LA-4-6	2.2 / 0.7	1420 / 910	77.0 / 65.0	-	-	0.76 / 0.66	5.4 / 2.4	14.8 / 7.4	6.5 / 6.0	1.5 / 1.5	1.8	0.0067	36.0
100 LB-4-6	2.5 / 0.9	1420 / 910	81.0 / 74.0	-	-	0.78 / 0.67	5.7 / 2.6	16.8 / 9.4	7.0 / 6.0	1.8 / 1.6	1.8	0.0071	36.0
112 M-4-6	3.2 / 1.1	1440 / 960	82.0 / 78.0	-	-	0.82 / 0.68	6.9 / 3.0	21.2 / 10.9	7.0 / 6.0	1.8 / 1.6	1.8	0.0095	42.0
132 S-4-6	4.7 / 1.5	1440 / 940	81.0 / 73.0	-	-	0.83 / 0.64	10.1 / 4.7	31.2 / 15.2	7.0 / 6.0	1.8 / 1.6	1.8	0.0214	68.0
132 M-4-6	6.7 / 2.2	1440 / 940	84.0 / 75.0	-	-	0.87 / 0.70	13.2 / 6.0	44.4 / 22.3	6.5 / 6.0	1.3 / 1.3	1.8	0.0320	79.0

DOUBLE-SPEED MOTORS

Double-speed pole-changing motors for quadratically increasing counter torque
(aluminum housing)

4-8 poles, idle torque 1500/750 rpm

400 V / 50 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm ²]	kg
80 A-4-8	0.5 / 0.1	1420 / 660	74.0 / 36.0	-	-	0.70 / 0.43	1.4 / 0.9	3.3 / 1.4	5.5 / 4.5	1.4 / 1.8	2.0	0.0021	15.0
80 B-4-8	0.7 / 0.15	1390 / 655	74.0 / 43.0	-	-	0.77 / 0.50	1.8 / 1.0	4.8 / 2.1	5.5 / 4.5	1.5 / 1.3	1.8	0.0026	16.0
90 S-4-8	1.0 / 0.22	1395 / 670	75.0 / 60.0	-	-	0.82 / 0.60	2.3 / 0.9	6.8 / 3.1	6.0 / 4.5	1.5 / 1.5	1.8	0.0029	23.0
90 L-4-8	1.5 / 0.3	1395 / 695	78.0 / 57.0	-	-	0.84 / 0.49	3.3 / 1.5	10.3 / 4.1	7.0 / 5.0	1.8 / 1.5	1.8	0.0037	26.0
100 LA-4-8	2.0 / 0.55	1445 / 700	80.0 / 65.0	-	-	0.80 / 0.61	4.5 / 2.0	13.2 / 7.6	7.5 / 5.0	1.9 / 1.5	1.8	0.0061	36.0
100 LB-4-8	2.4 / 0.65	1435 / 695	80.0 / 65.0	-	-	0.79 / 0.59	5.5 / 2.45	15.9 / 8.9	6.0 / 6.0	1.8 / 1.6	1.8	0.0067	36.0
112 M-4-8	3.2 / 0.9	1450 / 710	84.0 / 73.0	-	-	0.77 / 0.56	7.1 / 3.2	21.0 / 12.1	7.5 / 5.0	2.0 / 1.6	2.2	0.0095	42.0
132 S-4-8	4.5 / 1.1	1460 / 730	86.0 / 78.0	-	-	0.81 / 0.57	9.3 / 3.6	29.4 / 14.4	7.5 / 5.0	1.8 / 1.3	2.0	0.0214	68.0
132 M-4-8	6.3 / 1.5	1450 / 720	87.0 / 80.0	-	-	0.85 / 0.60	12.3 / 4.5	41.5 / 19.9	7.0 / 6.0	1.8 / 1.6	1.8	0.0296	79.0

DOUBLE-SPEED MOTORS

Double-speed pole-changing motors for quadratically increasing counter torque
(cast iron housing)

2-4 poles, idle torque 3000/1500 rpm

400 V / 50 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
160 M-2-4	12.5 / 2.8	2930 / 1420	85.0 / 80.0	-	-	0.90 / 0.75	23.6 / 6.7	40.7 / 13.5	7.5 / 5.5	1.8 / 1.3	1.8	0.0410	148
160 L-2-4	16.5 / 3.8	2930 / 1440	87.0 / 82.0	-	-	0.91 / 0.76	30.1 / 8.8	38 / 25.2	7.5 / 5.5	1.8 / 1.3	1.8	0.0550	160
180 M-2-4	20.0 / 5.5	2930 / 1440	87.0 / 82.0	-	-	0.89 / 0.74	37.3 / 13.1	65.2 / 36.5	7.0 / 5.5	1.6 / 1.5	1.8	0.0750	185
180 L-2-4	24.0 / 6.4	2940 / 1440	88.0 / 82.0	-	-	0.89 / 0.72	44.2 / 15.6	78.0 / 42.4	7.5 / 6.5	1.8 / 1.6	1.8	0.0850	200
200 L-2-4	30.0 / 7.8	2955 / 1475	87.0 / 82.0	-	-	0.89 / 0.72	55.9 / 19.1	96.9 / 50.5	7.5 / 6.5	1.8 / 1.6	1.8	0.1390	265
225 S-2-4	37.0 / 9.5	2950 / 1460	87.0 / 82.0	-	-	0.89 / 0.72	69.0 / 23.2	120 / 62.1	7.0 / 6.5	1.8 / 1.6	1.8	0.2050	290
225 M-2-4	45.0 / 12.0	2970 / 1485	89.0 / 84.0	-	-	0.89 / 0.72	82.0 / 28.6	145 / 77.2	7.0 / 6.5	1.8 / 1.6	1.8	0.2260	320
250 M-2-4	55.0 / 15.0	2970 / 1480	90.0 / 85.0	-	-	0.89 / 0.75	99.1 / 34	177 / 97	7.0 / 6.5	1.4 / 1.4	1.8	0.2950	425
280 S-2-4	75.0 / 20.0	2975 / 1485	89.0 / 84.0	-	-	0.89 / 0.74	136.7 / 46.4	241 / 129	7.0 / 6.5	1.4 / 1.4	1.8	0.5850	550
280 M-2-4	90.0 / 24.0	2980 / 1485	89.0 / 84.0	-	-	0.88 / 0.71	166 / 58.1	288 / 154	7.0 / 6.5	1.4 / 1.4	1.8	0.6750	660

4-6 poles, idle torque 1500/1000 rpm

400 V / 50 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm²]	kg
160 M-4-6	9.5 / 3.1	1450 / 970	85.0 / 80.0	-	-	0.82 / 0.75	19.7 / 7.5	62.6 / 30.5	7.5 / 6.0	2.2 / 1.8	2.0	0.8810	148
160 L-4-6	12.0 / 4.0	1460 / 960	87.0 / 83.0	-	-	0.85 / 0.68	23.4 / 10.4	78.5 / 39.8	6.5 / 6.0	1.3 / 1.3	1.8	0.0116	166
180 M-4-6	15.5 / 5.1	1460 / 970	88.0 / 81.0	-	-	0.89 / 0.68	28.6 / 13.4	101 / 50.2	7.5 / 7.5	1.5 / 1.5	1.8	0.2150	185
180 L-4-6	18.5 / 6.2	1470 / 970	87.0 / 81.0	-	-	0.85 / 0.74	36.1 / 14.9	120 / 61	7.5 / 7.0	1.5 / 1.5	1.8	0.2350	200
200 L-4-6	26.0 / 8.70	1480 / 970	89.0 / 82.0	-	-	0.90 / 0.79	46.9 / 19.4	168 / 85.6	7.5 / 7.5	1.5 / 1.5	1.8	0.3850	265
225 S-4-6	33.0 / 11.0	1460 / 980	89.0 / 84.0	-	-	0.89 / 0.82	60.1 / 23.1	216 / 107	7.0 / 6.5	1.5 / 1.5	1.8	0.5650	290
225 M-4-6	39.0 / 13.0	1480 / 970	90.0 / 85.0	-	-	0.86 / 0.85	72.7 / 26	252 / 128	7.5 / 7.0	1.5 / 1.5	1.8	0.6750	320
250 M-4-6	47.0 / 16.0	1480 / 970	90.0 / 85.0	-	-	0.89 / 0.87	84.7 / 31.2	303 / 158	7.5 / 7.0	1.5 / 1.5	1.8	0.8950	425
280 S-4-6	55.0 / 18.5	1480 / 990	90.0 / 85.0	-	-	0.88 / 0.86	100.2 / 36.5	355 / 178	7.5 / 7.0	1.5 / 1.5	1.8	1.5950	550
280 M-4-6	70.0 / 25.0	1480 / 990	91.0 / 89.0	-	-	0.88 / 0.87	126.2 / 46.6	452 / 241	7.0 / 6.0	1.5 / 1.5	1.8	1.9800	660

DOUBLE-SPEED MOTORS

Double-speed pole-changing motors for quadratically increasing counter torque
(cast iron housing)

4-8 poles, idle torque 1500/750 rpm

400 V / 50 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm ²]	kg
160 M-4-8	8.9 / 2.0	1445 / 720	85.0 / 82.0	-	-	0.85 / 0.67	17.8 / 5.2	58.8 / 26.5	7.5 / 5.0	2.0 / 1.2	1.8	0.0930	148
160 L-4-8	12.0 / 2.7	1445 / 720	85.0 / 82.0	-	-	0.85 / 0.67	24.0 / 7.0	79.3 / 35.8	7.5 / 5.0	2.0 / 1.2	1.8	0.1260	160
180 M-4-8	16.0 / 4.0	1470 / 730	88.0 / 84.0	-	-	0.85 / 0.65	30.9 / 10.6	104 / 52.3	7.5 / 5.0	2.0 / 1.2	1.8	0.1530	185
180 L-4-8	19.5 / 5.0	1470 / 720	89.0 / 85.0	-	-	0.85 / 0.66	37.2 / 12.9	127 / 66.3	7.5 / 5.0	2.0 / 1.2	1.8	0.1710	200
200 L-4-8	29.0 / 7.5	1480 / 730	90.0 / 87.0	-	-	0.85 / 0.66	54.7 / 18.9	187 / 98.1	7.5 / 5.0	2.0 / 1.2	1.8	0.2980	265
225 M-4-8	40.0 / 9.5	1480 / 720	91.0 / 88.0	-	-	0.88 / 0.64	72.1 / 24.3	258 / 126	7.5 / 5.0	2.0 / 1.3	1.8	0.4880	320
250 M-4-8	52.0 / 14.5	1480 / 740	92.0 / 88.0	-	-	0.86 / 0.64	97.1 / 37.8	336 / 187	7.5 / 5.0	1.8 / 1.5	1.8	0.6950	425
280 S-4-8	65.0 / 17.0	1490 / 740	91.0 / 89.0	-	-	0.87 / 0.68	119 / 40.5	417 / 219	7.5 / 5.0	2.0 / 1.3	1.8	1.2000	550
280 M-4-8	75.0 / 18.5	1490 / 740	91.0 / 89.0	-	-	0.87 / 0.68	137 / 44.1	481 / 239	7.5 / 5.0	2.0 / 1.3	1.8	1.3200	660

SINGLE-PHASE MOTORS

Single-phase motors with operating capacitor

2 poles, idle speed 3000 rpm

230 V / 50 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm ²]	kg
ABS 63 A-2	0.18	2800	60.0	-	-	0.92	1.48	0.61	3.4	0.40	1.7	0.00074	3.9
ABS 63 B-2	0.25	2800	63.0	-	-	0.92	1.96	0.85	3.6	0.40	1.7	0.00089	4.4
ABS 71 A-2	0.37	2800	67.0	-	-	0.92	2.73	1.26	3.7	0.35	1.7	0.00139	6.2
ABS 71 B-2	0.55	2800	70.0	-	-	0.92	3.88	1.88	3.9	0.35	1.7	0.00172	6.5
ABS 80 A-2	0.75	2800	72.0	-	-	0.92	5.15	2.56	3.9	0.33	1.7	0.00366	8.3
ABS 80 B-2	1.10	2800	75.0	-	-	0.95	7.02	3.75	4.3	0.33	1.7	0.00457	9.0
ABS 90 S-2	1.50	2800	76.0	-	-	0.95	9.44	5.12	4.8	0.33	1.7	0.00723	13.0
ABS 90 L-2	2.20	2800	78.0	-	-	0.95	13.67	7.50	4.8	0.33	1.7	0.00964	15.0

4 poles, idle speed 1500 rpm

230 V / 50 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm ²]	kg
ABS 63 A-4	0.12	1400	55.0	-	-	0.90	1.10	0.82	3.2	0.40	1.7	0.00129	4.0
ABS 63 B-4	0.18	1400	56.0	-	-	0.90	1.62	1.23	3.1	0.40	1.7	0.00181	4.5
ABS 71 A-4	0.25	1400	61.0	-	-	0.92	2.02	1.71	3.5	0.35	1.7	0.00281	6.1
ABS 71 B-4	0.37	1400	62.0	-	-	0.92	3.88	2.52	3.4	0.35	1.7	0.00358	7.0
ABS 80 A-4	0.55	1400	64.0	-	-	0.92	4.25	3.75	3.5	0.35	1.7	0.00596	9.5
ABS 80 B-4	0.75	1400	68.0	-	-	0.92	5.45	5.12	3.7	0.33	1.7	0.00769	10.0
ABS 90 S-4	1.10	1400	71.0	-	-	0.95	7.45	7.50	4.0	0.32	1.7	0.01728	13.0
ABS 90 L-4	1.50	1400	73.0	-	-	0.95	9.83	10.2	4.6	0.33	1.7	0.01481	16.0
ABS 100 L-4	2.20	1400	76.0	-	-	0.95	13.80	15.0	4.7	0.35	1.7	0.03901	23.0

SINGLE-PHASE MOTORS

Single-phase motors with starting and operating capacitors

2 poles, idle speed 3000 rpm

230 V / 50 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm ²]	kg
ABS 71 A-2	0.37	2800	67.0	-	-	0.92	2.73	1.26	5.9	2.3	1.8	0.00139	7.0
ABS 71 B-2	0.55	2800	70.0	-	-	0.92	3.88	1.88	5.4	2.5	1.8	0.00172	8.0
ABS 80 A-2	0.75	2800	72.0	-	-	0.92	5.15	2.56	5.8	2.5	1.8	0.00366	8.5
ABS 80 B-2	1.10	2800	75.0	-	-	0.95	7.02	3.75	5.7	2.5	1.8	0.00457	9.5
ABS 90 S-2	1.50	2800	76.0	-	-	0.95	9.44	5.12	5.8	2.5	1.8	0.00723	12.5

4 poles, idle speed 1500 rpm

230 V / 50 Hz

Frame size	Power at 50/60 Hz	Rated speed at 50/60 Hz	Efficiency at 100% load	75%	50%	Power factor at 50/60 Hz	Rated current at 400 V / 50 Hz	Rated torque	Starting current to Rated current	Starting torque to rated torque	Breakdown torque to Rated torque	Moment of inertia	Weight
Type	kW	rpm	%	%	%	cos φ	A	Nm	Ia/In	Ta/Tn	Tk/Tn	J [kgm ²]	kg
ABS 71 A-4	0.25	1400	62.0	-	-	0.92	1.99	1.71	6.0	2.5	1.8	0.00281	6.9
ABS 71 B-4	0.37	1400	65.0	-	-	0.92	2.81	2.52	5.7	2.5	1.8	0.00358	8.1
ABS 80 A-4	0.55	1400	68.0	-	-	0.92	4.00	3.75	5.3	2.5	1.8	0.00596	8.9
ABS 80 B-4	0.75	1400	71.0	-	-	0.92	5.22	5.12	5.7	2.5	1.8	0.00769	9.6
ABS 90 S-4	1.10	1400	73.0	-	-	0.95	9.44	7.50	5.6	2.5	1.8	0.01173	13.0
ABS 90 L-4	1.50	1400	75.0	-	-	0.95	9.57	10.23	5.7	2.5	1.8	0.01481	16.0
ABS 100 L-4	2.20	1400	76.0	-	-	0.95	13.90	15.01	5.8	2.5	1.8	0.03901	23.0



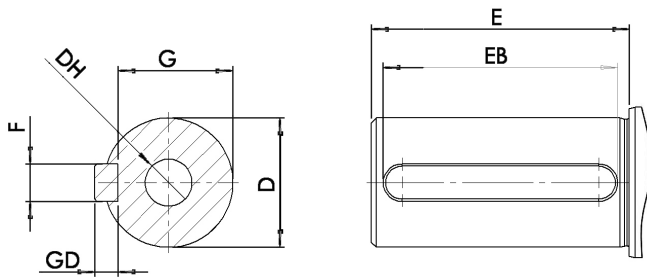
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SHAFT END DIMENSIONS

independent of mounting type and efficiency class



Independent of number of poles

Frame size	D	E	F	G	DH	EB	ED	GD
56	9	20	3	7.2	M4x12	16	2	3
63	11	23	4	8.5	M4x12	16	3.5	4
71	14	30	5	11	M5x12	25	2.5	5
80	19	40	6	15.5	M6x16	30	5	6
90	24	50	8	20	M8x19	40	5	7
100	28	60	8	24	M10x22	50	5	7
112	28	60	8	24	M12x28	50	5	7
132	38	80	10	33.0	M12x28	65	7.5	8

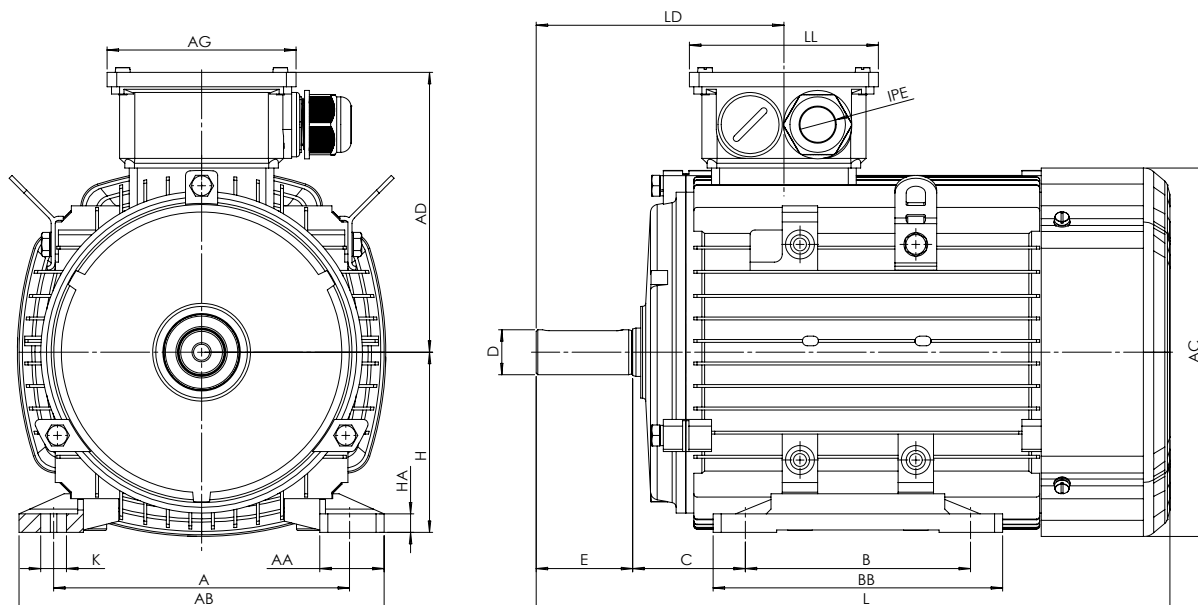
2 poles

Frame size	D	E	F	G	DH	EB	ED	GD
160	42	110	12	37	M16x36	90	10	8
180	48	110	14	42.5	M16x36	90	10	9
200	55	110	16	49	M20x42	100	5	10
225	55	110	16	49	M20x42	100	5.0	10
250	60	140	18	53	M20x42	125	7.5	11
280	65	140	18	58	M20x42	125	7.5	11
315	65	140	18	58	M20x42	125	7.5	11
355	80	170	22	67.5	M20x50	130	5	14

4, 6, 8 poles

Frame size	D	E	F	G	DH	EB	ED	GD
160	42	110	12	37	M16x36	90	10	8
180	48	110	14	42.5	M16x36	90	10	9
200	55	110	16	49	M20x42	100	5	10
225	60	110	18	53	M20x42	125	7.5	11
250	65	140	18	58	M20x42	125	7.5	11
280	75	140	20	67.5	M20x42	125	7.5	12
315	80	140	22	71	M20x42	160	5	14
355	100	210	28	86	M24x50	160	5	16

ALUMINUM MOTOR, MOUNTING B3



Without IE classification

Frame size	A	AA	AB	AC	AD	AG	B	BB	C	D	E	H	HA	K	L	LD	LL	IPE
56	90	23	111	113	90	86	71	88	36	9	20	56	7		199	83	86	1-M20x1.5
63	100	24	123	120	100	101	80	100	40	11	23	63	7	7x9.5	217	95,5	101	1-M20x1.5
71	112	26	138	136	112	101	90	110	45	14	30	71	8	7x11	245	110,5	101	1-M20x1.5

IE2

Frame size		A	AA	AB	AC	AD	AG	B	BB	C	D	E	H	HA	K	L	LD	LL	IPE
80		125	35	157	155	124	101	100	125	50	19	40	80	9	10x14	281	118	101	1-M25x1.5
90	S	140	37	173	175	137	109	100	125	56	24	50	90	10	10x14	315	136	109	1-M25x1.5
90	L	140	37	173	175	137	109	125	150	56	24	50	90	10	10x14	340	136	109	1-M25x1.5
100	L	160	40	196	195	151	109	140	172	63	28	60	100	11	12x16	373	144	109	1-M25x1.5
112	M	190	41	227	219	169	117.5	140	180	70	28	60	112	12	12x16	394	152	117.5	2-M32x1.5
132	S	216	51	262	258	188	117.5	140	186	89	38	80	132	15	12x16	465	180	117.5	2-M32x1.5
132	M	216	51	262	258	188	117.5	178	224	89	38	80	132	15	12x16	503	180	117.5	2-M32x1.5
160	M	254	55	304	315	242	167	210	260	108	42	110	160	18	15x18	607	268.5	157	2-M40x1.5
160	L	254	55	304	315	242	167	254	304	108	42	110	160	18	15x18	651	268.5	157	2-M40x1.5

ALUMINUM MOTOR, MOUNTING B3

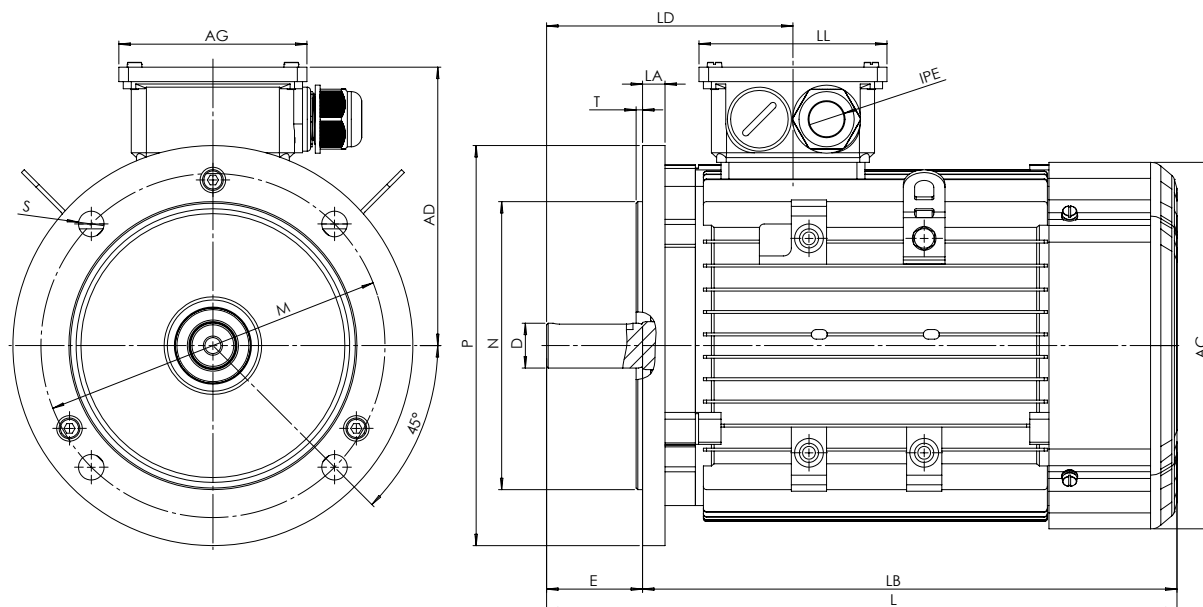
IE3

Frame size		A	AA	AB	AC	AD	AG	B	BB	C	D	E	H	HA	K	L	LD	LL	IPE
80		125	35	157	158	129	101	100	125	50	19	40	80	8	10x14	294	115	101	1-M25x1.5
90	S	140	37	173	175	140	109	100	125	56	24	50	90	10	10x14	319	145	109	1-M25x1.5
90	L	140	37	173	175	140	109	125	150	56	24	50	90	10	10x14	344	145	109	1-M25x1.5
100	L	160	40	196	198	156	109	140	172	63	28	60	100	11	12x16	393	148.5	109	1-M25x1.5
112	M	190	41	227	219	166	117.5	140	180	70	28	60	112	12	12x16	394	152	117.5	2-M32x1.5
132	S	216	51	262	258	188	117.5	140	186	89	38	80	132	15	12x16	445	180	117.5	2-M32x1.5
132	M	216	51	262	258	188	117.5	178	224	89	38	80	132	15	12x16	483	180	117.5	2-M32x1.5
160	M	254	55	304	315	242	167	210	260	108	42	110	160	18	15x18	589	268.5	157	2-M40x1.5
160	L	254	55	304	315	242	167	254	304	108	42	110	160	18	15x18	633	268.5	157	2-M40x1.5

IE4

Frame size		A	AA	AB	AC	AD	AG	B	BB	C	D	E	H	HA	K	L	LD	LL	IPE
80		125	35	157	158	129	101	100	125	50	19	40	80	8	10x14	294	115	101	1-M25x1.5
90	S	140	37	173	175	140	109	100	125	56	24	50	90	10	10x14	319	145	109	1-M25x1.5
90	L	140	37	173	175	140	109	125	150	56	24	50	90	10	10x14	344	145	109	1-M25x1.5
100	L	160	40	196	198	156	109	140	172	63	28	60	100	11	12x16	393	148.5	109	1-M32x1.5
112	M	190	40	227	224	175	117.5	140	180	70	28	60	112	12	12x16	400	154	117.5	2-M32x1.5
132	S	216	51	262	258	188	117.5	140	186	89	38	80	132	15	12x16	445	180	117.5	2-M32x1.5
132	M	216	51	262	258	188	117.5	178	224	89	38	80	132	15	12x16	483	180	117.5	2-M32x1.5
132	M-4	216	51	262	258	188	117.5	178	224	89	38	80	132	15	12x16	539	180	117.5	2-M32x1.5
160	M	254	55	304	315	242	167	210	260	108	42	110	160	18	15x18	589	268.5	157	2-M40x1.5
160	L	254	55	304	315	242	167	254	304	108	42	110	160	18	15x18	633	268.5	157	2-M40x1.5

ALUMINUM MOTOR, MOUNTING B5



Without IE classification

Frame size	AC	AD	AG	D	E	L	LA	LB	LD	LL	M	N	P	S	T	IPE
56	113	90	86	9	20	199	8	179	83	86	100	80	120	4x7	3	1-M20x1.5
63	120	100	101	11	23	217	10	194	95.5	101	115	95	140	4x10	3	1-M20x1.5
71	136	112	101	14	30	245	10	215	110.5	101	130	110	160	4x10	3.5	1-M20x1.5

IE2

Frame size	AC	AD	AG	D	E	L	LA	LB	LD	LL	M	N	P	S	T	IPE
80	155	124	101	19	40	281	12	241	118	101	165	130	200	4x12	3.5	1-M25x1.5
90	S	175	137	109	24	315	11	265	136	109	165	130	200	4x12	3.5	1-M25x1.5
90	L	175	137	109	24	340	11	290	136	109	165	130	200	4x12	3.5	1-M25x1.5
100	L	195	151	109	28	373	13	313	144	109	215	180	250	4x14.5	4	1-M25x1.5
112	M	219	169	117.5	28	394	14	334	152	117.5	215	180	250	4x14.5	4	2-M32x1.5
132	S	258	188	117.5	38	465	14	385	180	117.5	265	230	300	4x14.5	4	2-M32x1.5
132	M	258	188	117.5	38	503	14	423	180	117.5	265	230	300	4x14.5	4	2-M32x1.5
160	M	315	242	167	42	607	15	497	268.5	157	300	250	350	4x18.5	5	2-M40x1.5
160	L	315	242	167	42	651	15	541	268.5	157	300	250	350	4x18.5	5	2-M40x1.5

ALUMINUM MOTOR, MOUNTING B5

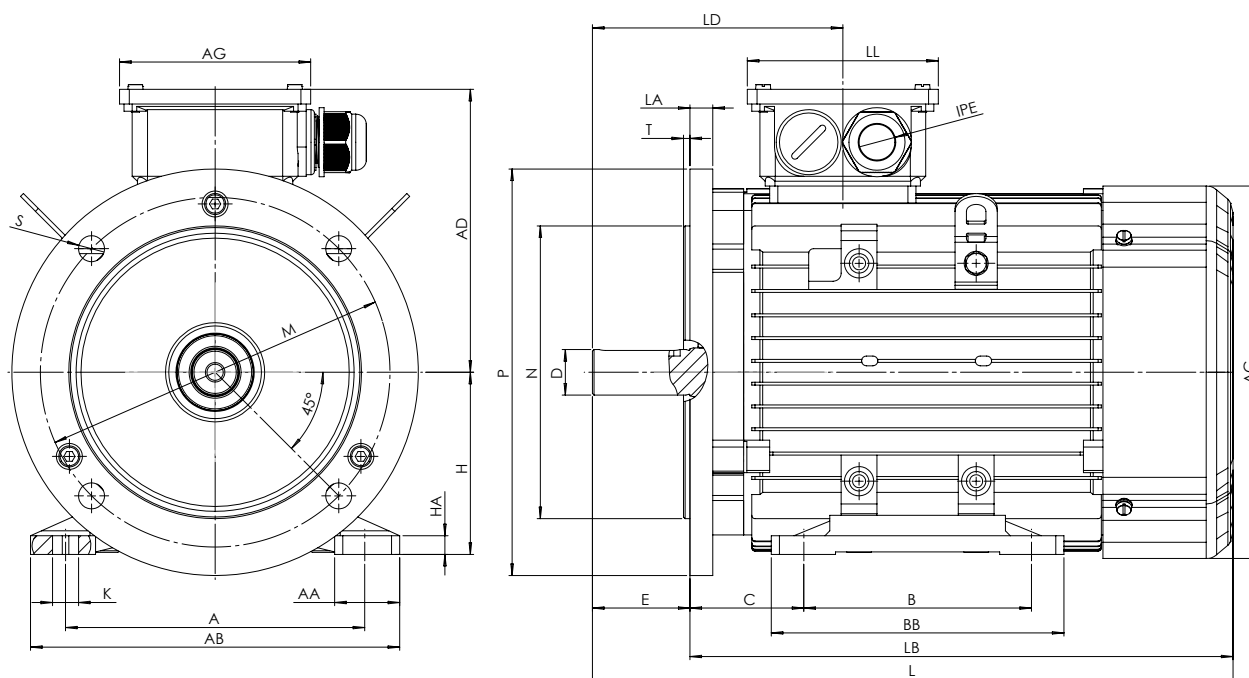
IE3

Frame size		AC	AD	AG	D	E	L	LA	LB	LD	LL	M	N	P	S	T	IPE
80		158	129	101	19	40	294	12	254	115	101	165	130	200	4x12	3.5	1-M25x1.5
90	S	175	140	109	24	50	319	12	269	145	109	165	130	200	4x12	3.5	1-M25x1.5
90	L	175	140	109	24	50	344	12	294	145	109	165	130	200	4x12	3.5	1-M25x1.5
100	L	198	156	109	28	60	393	13	333	148.5	109	215	180	250	4x14.5	4	1-M25x1.5
112	M	219	166	117.5	28	60	394	14	334	152	117.5	215	180	250	4x14.5	4	2-M32x1.5
132	S	258	188	117.5	38	80	445	14	365	180	117.5	265	230	300	4x14.5	4	2-M32x1.5
132	M	258	188	117.5	38	80	483	14	403	180	117.5	265	230	300	4x14.5	4	2-M32x1.5
160	M	315	242	167	42	110	589	15	479	268.5	157	300	250	350	4x18.5	5	2-M40x1.5
160	L	315	242	167	42	110	633	15	523	268.5	157	300	250	350	4x18.5	5	2-M40x1.5

IE4

Frame size		AC	AD	AG	D	E	L	LA	LB	LD	LL	M	N	P	S	T	IPE
80		158	129	101	19	40	294	12	254	115	101	165	130	200	4x12	3.5	1-M25x1.5
90	S	175	140	109	24	50	319	12	269	145	109	165	130	200	4x12	3.5	1-M25x1.5
90	L	175	140	109	24	50	344	12	294	145	109	165	130	200	4x12	3.5	1-M25x1.5
100	L	198	156	109	28	60	393	13	333	148.5	109	215	180	250	4x14.5	4	2-M32x1.5
112	M	224	175	117.5	28	60	400	14	340	154	117.5	215	180	250	4x14.5	4	2-M32x1.5
132	S	258	188	117.5	38	80	445	14	365	180	117.5	265	230	300	4x14.5	4	2-M32x1.5
132	M	258	188	117.5	38	80	483	14	403	180	117.5	265	230	300	4x14.5	4	2-M32x1.5
132	M-4	258	188	117.5	38	80	539	14	459	180	117.5	265	230	300	4x14.5	4	2-M32x1.5
160	M	315	242	167	42	110	589	15	479	268.5	157	300	250	350	4x18.5	5	2-M40x1.5
160	L	315	242	167	42	110	633	15	523	268.5	157	300	250	350	4x18.5	5	2-M40x1.5

ALUMINUM MOTOR, MOUNTING B35



Without IE classification

Frame size	A	AA	AB	AC	AD	AG	B	BB	C	D	E	H	HA	K	L	LA	LB	LD	LL	M	N	P	S	T	IPE
56	90	23	111	113	90	86	71	88	36	9	20	56	7		199	8	179	83	86	100	80	120	4x7	3	1-M20x1.5
63	100	24	123	120	100	101	80	100	40	11	23	63	7	7x9.5	217	10	194	95,5	101	115	95	140	4x10	3	1-M20x1.5
71	112	26	138	136	112	101	90	110	45	14	30	71	8	7x11	245	10	215	110,5	101	130	110	160	4x10	3,5	1-M20x1.5

IE2

Frame size	A	AA	AB	AC	AD	AG	B	BB	C	D	E	H	HA	K	L	LA	LB	LD	LL	M	N	P	S	T	IPE
80	125	35	157	155	124	101	100	125	50	19	40	80	9	10x14	281	12	241	118	101	165	130	200	4x12	3.5	1-M25x1.5
90 S	140	37	173	175	137	109	100	125	56	24	50	90	10	10x14	315	11	265	136	109	165	130	200	4x12	3.5	1-M25x1.5
90 L	140	37	173	175	137	109	125	150	56	24	50	90	10	10x14	340	11	290	136	109	165	130	200	4x12	3.5	1-M25x1.5
100 L	160	40	196	195	151	109	140	172	63	28	60	100	11	12x16	373	13	313	144	109	215	180	250	4x14.5	4	1-M25x1.5
112 M	190	41	227	219	169		140	180	70	28	60	112	12	12x16	394	14	334	152	117.5	215	180	250	4x14.5	4	2-M32x1.5
132 S	216	51	262	258	188		140	186	89	38	80	132	15	12x16	465	14	385	180	117.5	265	230	300	4x14.5	4	2-M32x1.5
132 M	216	51	262	258	188		178	224	89	38	80	132	15	12x16	503	14	423	180	117.5	265	230	300	4x14.5	4	2-M32x1.5
160 M	254	55	304	315	242	167	210	260	108	42	110	160	18	15x18	607	15	497	268.5	157	300	250	350	4x18.5	5	2-M40x1.5
160 L	254	55	304	315	242	167	254	304	108	42	110	160	18	15x18	651	15	541	268.5	157	300	250	350	4x18.5	5	2-M40x1.5

ALUMINUM MOTOR, MOUNTING B35

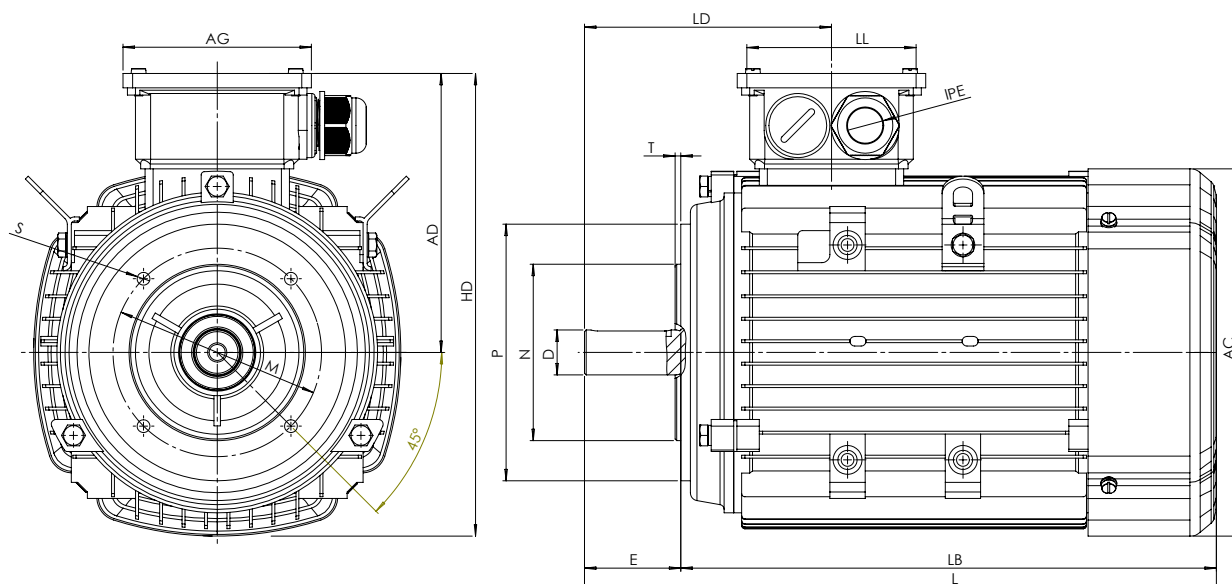
IE3

Frame size		A	AA	AB	AC	AD	AG	B	BB	C	D	E	H	HA	K	L	LA	LB	LD	LL	M	N	P	S	T	IPE
80		125	35	157	158	129	101	100	125	50	19	40	80	8	10x14	294	12	254	115	101	165	130	200	4x12	3,5	1-M25x1.5
90	S	140	37	173	175	140	109	100	125	56	24	50	90	10	10x14	319	12	269	145	109	165	130	200	4x12	3,5	1-M25x1.5
90	L	140	37	173	175	140	109	125	150	56	24	50	90	10	10x14	344	12	294	145	109	165	130	200	4x12	3,5	1-M25x1.5
100	L	160	40	196	198	156	109	140	172	63	28	60	100	11	12x16	393	13	333	148,5	109	215	180	250	4x14.5	4	1-M25x1.5
112	M	190	41	227	219	166	117,5	140	180	70	28	60	112	12	12x16	394	14	334	152	117,5	215	180	250	4x14.5	4	2-M32x1.5
132	S	216	51	262	258	188	117,5	140	186	89	38	80	132	15	12x16	445	14	365	180	117,5	265	230	300	4x14.5	4	2-M32x1.5
132	M	216	51	262	258	188	117,5	178	224	89	38	80	132	15	12x16	483	14	403	180	117,5	265	230	300	4x14.5	4	2-M32x1.5
160	M	254	55	304	315	242	167	210	260	108	42	110	160	18	15x18	589	15	479	268,5	157	300	250	350	4x18.5	5	2-M40x1.5
160	L	254	55	304	315	242	167	254	304	108	42	110	160	18	15x18	633	15	523	268,5	157	300	250	350	4x18.5	5	2-M40x1.5

IE4

Frame size	A	AA	AB	AC	AD	AG	B	BB	C	D	E	H	HA	K	L	LA	LB	LD	LL	M	N	P	S	T	IPE	
80		125	35	157	158	129	101	100	125	50	19	40	80	8	10x14	294	12	254	115	101	165	130	200	4x12	3,5	1-M25x1.5
90	S	140	37	173	175	140	109	100	125	56	24	50	90	10	10x14	319	12	269	145	109	165	130	200	4x12	3,5	1-M25x1.5
90	L	140	37	173	175	140	109	125	150	56	24	50	90	10	10x14	344	12	294	145	109	165	130	200	4x12	3,5	1-M25x1.5
100	L	160	40	196	198	156	109	140	172	63	28	60	100	11	12x16	393	13	333	148,5	109	215	180	250	4x14.5	4	1-M32x1.5
112	M	190	40	227	224	175	117,5	140	180	70	28	60	112	12	12x16	400	14	340	154	117,5	215	180	250	4x14.5	4	2-M32x1.5
132	S	216	51	262	258	188	117,5	140	186	89	38	80	132	15	12x16	445	14	365	180	117,5	265	230	300	4x14.5	4	2-M32x1.5
132	M	216	51	262	258	188	117,5	178	224	89	38	80	132	15	12x16	483	14	403	180	117,5	265	230	300	4x14.5	4	2-M32x1.5
132	M-4	216	51	262	258	188	117,5	178	224	89	38	80	132	15	12x16	539	14	459	180	117,5	265	230	300	4x14.5	4	2-M32x1.5
160	M	254	55	304	315	242	167	210	260	108	42	110	160	18	15x18	589	15	479	268,5	157	300	250	350	4x18.5	5	2-M40x1.5
160	L	254	55	304	315	242	167	254	304	108	42	110	160	18	15x18	633	15	523	268,5	157	300	250	350	4x18.5	5	2-M40x1.5

ALUMINUM MOTOR, MOUNTING B14A



Without IE classification

Frame size	AC	AD	AG	D	E	HD	L	LB	LD	LL	M	N	P	S	T	IPE
56	113	90	86	9	20	152.5	199	179	83	86	65	50	80	4xM5	2.5	1-M20x1.5
63	120	100	101	11	23	162	217	194	95.5	101	75	60	90	4xM5	2.5	1-M20x1.5
71	136	112	101	14	30	177	245	215	110.5	101	85	70	105	4xM6	2.5	1-M20x1.5

IE2

Frame size	AC	AD	AG	D	E	HD	L	LB	LD	LL	M	N	P	S	T	IPE
80	155	124	101	19	40	201.5	281	241	118	101	100	80	120	4xM6	3	1-M25x1.5
90 S	175	137	109	24	50	224.5	315	265	136	109	115	95	140	4xM8	3	1-M25x1.5
90 L	175	137	109	24	50	224.5	340	290	136	109	115	95	140	4xM8	3	1-M25x1.5
100 L	195	151	109	28	60	248.5	373	313	144	109	130	110	160	4xM8	3.5	1-M25x1.5
112 M	219	169	117.5	28	60	278.5	394	334	152	117.5	130	110	160	4xM8	3.5	2-M32x1.5
132 S	258	188	117.5	38	80	317	465	385	180	117.5	165	130	200	4xM10	3.5	2-M32x1.5
132 M	258	188	117.5	38	80	317	503	423	180	117.5	165	130	200	4xM10	3.5	2-M32x1.5

ALUMINUM MOTOR, MOUNTING B14A

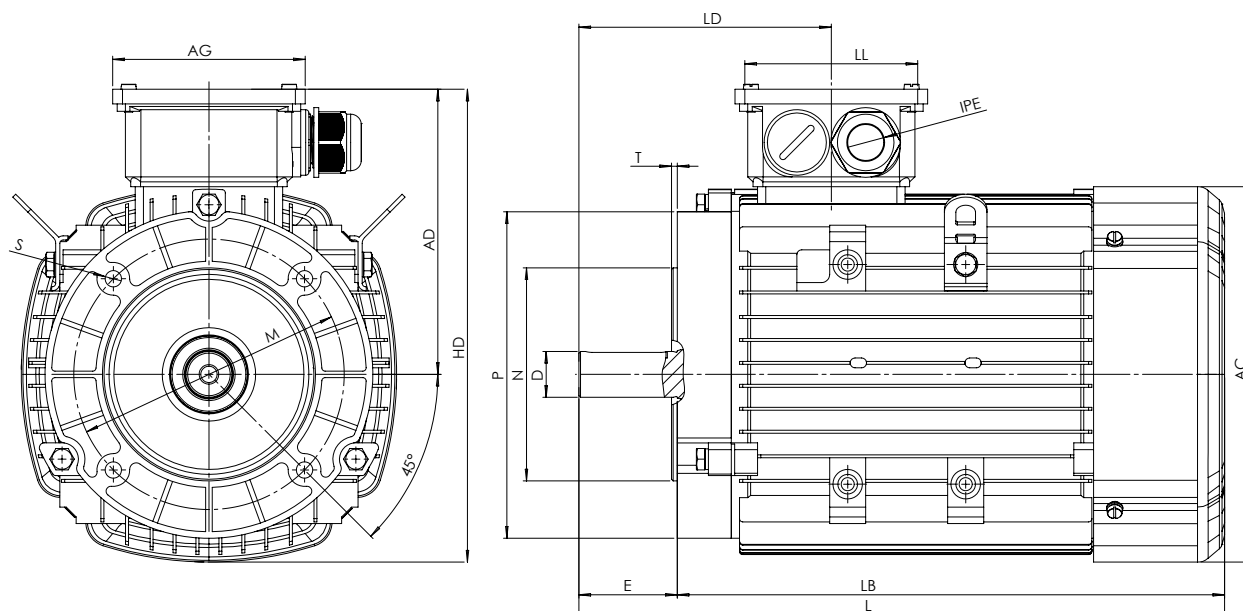
IE3

Frame size		AC	AD	AG	D	E	HD	L	LB	LD	LL	M	N	P	S	T	IPE
80		158	129	101	19	40	208	294	254	115	101	100	80	120	4xM6	3	1-M25x1.5
90	S	175	140	109	24	50	227.5	319	269	145	109	115	95	140	4xM8	3	1-M25x1.5
90	L	175	140	109	24	50	227.5	344	294	145	109	115	95	140	4xM8	3	1-M25x1.5
100	L	198	156	109	28	60	255	393	333	148.5	109	130	110	160	4xM8	3.5	1-M25x1.5
112	M	219	166	117.5	28	60	275.5	394	334	152	117.5	130	110	160	4xM8	3.5	2-M32x1.5
132	S	258	188	117.5	38	80	317	445	365	180	117.5	165	130	200	4xM10	3.5	2-M32x1.5
132	M	258	188	117.5	38	80	317	483	403	180	117.5	165	130	200	4xM10	3.5	2-M32x1.5

IE4

Frame size		AC	AD	AG	D	E	HD	L	LB	LD	LL	M	N	P	S	T	IPE
80		158	129	101	19	40	208	294	254	115	101	100	80	120	4xM6	3	1-M25x1.5
90	S	175	140	109	24	50	227.5	319	269	145	109	115	95	140	4xM8	3	1-M25x1.5
90	L	175	140	109	24	50	227.5	344	294	145	109	115	95	140	4xM8	3	1-M25x1.5
100	L	198	156	109	28	60	255	393	333	148.5	109	130	110	160	4xM8	3.5	1-M32x1.5
112	M	224	175	117.5	28	60	287	400	340	154	117.5	130	110	160	4xM8	3.5	2-M32x1.5
132	S	258	188	117.5	38	80	317	445	365	180	117.5	165	130	200	4xM10	3.5	2-M32x1.5
132	M	258	188	117.5	38	80	317	483	403	180	117.5	165	130	200	4xM10	3.5	2-M32x1.5
132	M-4	258	188	117.5	38	80	317	539	459	180	117.5	165	130	200	4xM10	3.5	2-M32x1.5

ALUMINUM MOTOR, MOUNTING B14B



Without IE classification

Frame size	AC	AD	AG	D	E	HD	L	LB	LD	LL	M	N	P	S	T	IPE
56	113	90	86	9	20	152.5	199	179	83	86	85	70	105	4xM6	2.5	1-M20x1.5
63	120	100	101	11	23	162	217	194	95.5	101	110	80	120	4xM6	3	1-M20x1.5
71	136	112	101	14	30	179	245	215	110.5	101	115	95	140	4xM8	3	1-M20x1.5

IE2

Frame size	AC	AD	AG	D	E	HD	L	LB	LD	LL	M	N	P	S	T	IPE
80	155	124	101	19	40	204	281	241	118	101	130	110	160	4xM8	3.5	1-M25x1.5
90 S	175	137	109	24	50	224.5	315	265	136	109	130	110	160	4xM8	3.5	1-M25x1.5
90 L	175	137	109	24	50	224.5	340	290	136	109	130	110	160	4xM8	3.5	1-M25x1.5
100 L	195	151	109	28	60	251	373	313	144	109	165	130	200	4xM10	3.5	1-M25x1.5
112 M	219	169	117.5	28	60	278.5	394	334	152	117.5	165	130	200	4xM10	3.5	2-M32x1.5
132 S	258	188	117.5	38	80	317	465	385	180	117.5	215	180	250	4xM12	4	2-M32x1.5
132 M	258	188	117.5	38	80	317	503	423	180	117.5	215	180	250	4xM12	4	2-M32x1.5

ALUMINUM MOTOR, MOUNTING B14B

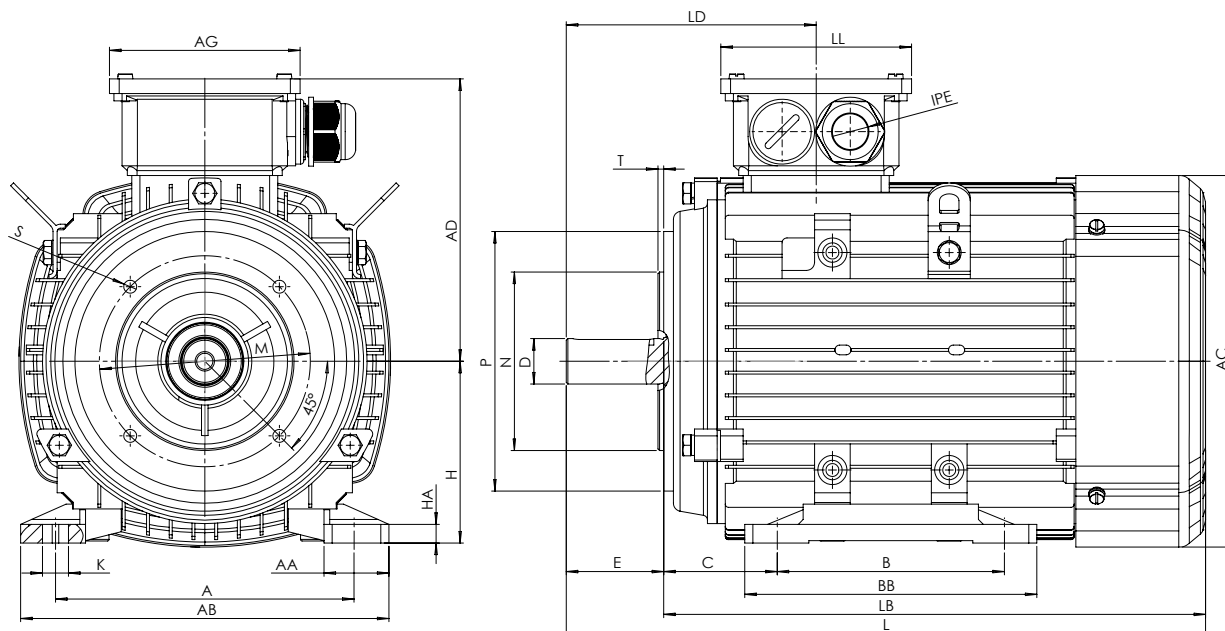
IE3

Frame size		AC	AD	AG	D	E	HD	L	LB	LD	LL	M	N	P	S	T	IPE
80		158	129	101	19	40	209	294	254	115	101	130	110	160	4xM8	3.5	1-M25x1.5
90	S	175	140	109	24	50	227.5	319	269	145	109	130	110	160	4xM8	3.5	1-M25x1.5
90	L	175	140	109	24	50	227.5	344	294	145	109	130	110	160	4xM8	3.5	1-M25x1.5
100	L	198	156	109	28	60	256	393	333	148.5	109	165	130	200	4xM10	3.5	1-M25x1.5
112	M	219	166	117.5	28	60	275.5	394	334	152	117.5	165	130	200	4xM10	3.5	2-M32x1.5
132	S	258	188	117.5	38	80	317	445	365	180	117.5	215	180	250	4xM12	4	2-M32x1.5
132	M	258	188	117.5	38	80	317	483	403	180	117.5	215	180	250	4xM12	4	2-M32x1.5

IE4

Frame size		AC	AD	AG	D	E	HD	L	LB	LD	LL	M	N	P	S	T	IPE
80		158	129	101	19	40	209	294	254	115	101	130	110	160	4xM8	3.5	1-M25x1.5
90	S	175	140	109	24	50	227.5	319	269	145	109	130	110	160	4xM8	3.5	1-M25x1.5
90	L	175	140	109	24	50	227.5	344	294	145	109	130	110	160	4xM8	3.5	1-M25x1.5
100	L	198	156	109	28	60	256	393	333	148.5	109	165	130	200	4xM10	3.5	1-M32x1.5
112	M	224	175	117.5	28	60	285	400	340	154	117.5	165	130	200	4xM10	3.5	2-M32x1.5
132	S	258	188	117.5	38	80	317	445	365	180	117.5	215	180	250	4xM12	4	2-M32x1.5
132	M	258	188	117.5	38	80	317	483	403	180	117.5	215	180	250	4xM12	4	2-M32x1.5
132	M-4	258	188	117.5	38	80	317	539	459	180	117.5	215	180	250	4xM12	4	2-M32x1.5

ALUMINUM MOTOR, MOUNTING B34A



Without IE classification

Frame size	A	AA	AB	AC	AD	AG	B	BB	C	D	E	H	HA	K	L	LB	LD	LL	M	N	P	S	T	IPE
56	90	23	111	113	90	86	71	88	36	9	20	56	7		199	179	83	86	65	50	80	4xM5	2,5	
63	100	24	123	120	100	101	80	100	40	11	23	63	7	7x9.5	217	194	95,5	101	75	60	90	4xM5	2,5	
71	112	26	138	136	112	101	90	110	45	14	30	71	8	7x11	245	215	110,5	101	85	70	105	4xM6	2,5	

IE2

Frame size		A	AA	AB	AC	AD	AG	B	BB	C	D	E	H	HA	K	L	LB	LD	LL	M	N	P	S	T	IPE
80		125	35	157	155	124	101	100	125	50	19	40	80	9	10x14	281	241	118	101	100	80	120	4xM6	3	
90	S	140	37	173	175	137	109	100	125	56	24	50	90	10	10x14	315	265	136	109	115	95	140	4xM8	3	
90	L	140	37	173	175	137	109	125	150	56	24	50	90	10	10x14	340	290	136	109	115	95	140	4xM8	3	
100	L	160	40	196	195	151	109	140	172	63	28	60	100	11	12x16	373	313	144	109	130	110	160	4xM8	3,5	
112	M	190	41	227	219	169	117.5	140	180	70	28	60	112	12	12x16	394	334	152	117,5	130	110	160	4xM8	3,5	
132	S	216	51	262	258	188	117.5	140	186	89	38	80	132	15	12x16	465	385	180	117,5	165	130	200	4xM10	3,5	
132	M	216	51	262	258	188	117.5	178	224	89	38	80	132	15	12x16	503	423	180	117,5	165	130	200	4xM10	3,5	

ALUMINUM MOTOR, MOUNTING B34A

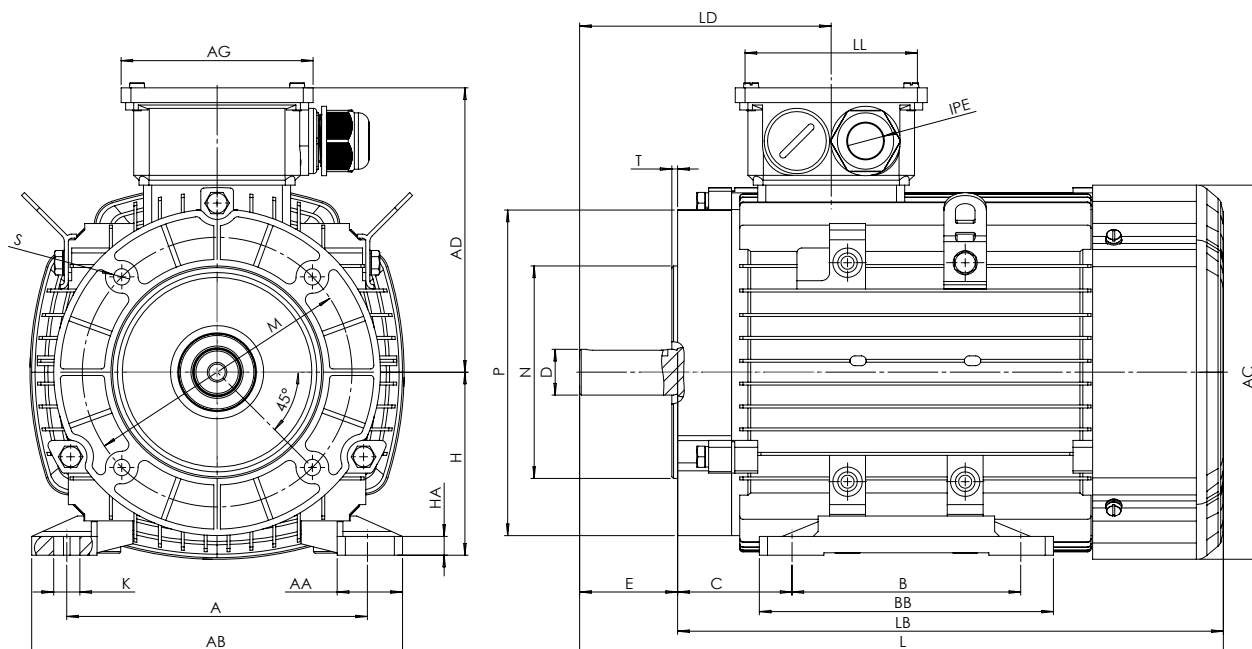
IE3

Frame size		A	AA	AB	AC	AD	AG	B	BB	C	D	E	H	HA	K	L	LB	LD	LL	M	N	P	S	T	IPE
80		125	35	157	158	129	101	100	125	50	19	40	80	8	10x14	294	254	115	101	100	80	120	4xM6	3	1-M25x1.5
90	S	140	37	173	175	140	109	100	125	56	24	50	90	10	10x14	319	269	145	109	115	95	140	4xM8	3	1-M25x1.5
90	L	140	37	173	175	140	109	125	150	56	24	50	90	10	10x14	344	294	145	109	115	95	140	4xM8	3	1-M25x1.5
100	L	160	40	196	198	156	109	140	172	63	28	60	100	11	12x16	393	333	148,5	109	130	110	160	4xM8	3,5	1-M25x1.5
112	M	190	41	227	219	166	117,5	140	180	70	28	60	112	12	12x16	394	334	152	117,5	130	110	160	4xM8	3,5	2-M32x1.5
132	S	216	51	262	258	188	117,5	140	186	89	38	80	132	15	12x16	445	365	180	117,5	165	130	200	4xM10	3,5	2-M32x1.5
132	M	216	51	262	258	188	117,5	178	224	89	38	80	132	15	12x16	483	403	180	117,5	165	130	200	4xM10	3,5	2-M32x1.5

IE4

Frame size	A	AA	AB	AC	AD	AG	B	BB	C	D	E	H	HA	K	L	LB	LD	LL	M	N	P	S	T	IPE
80		125	35	157	158	129	101	100	125	50	19	40	80	8	10x14	294	254	115	101	100	80	120	4xM6	3
90	S	140	37	173	175	140	109	100	125	56	24	50	90	10	10x14	319	269	145	109	115	95	140	4xM8	3
90	L	140	37	173	175	140	109	125	150	56	24	50	90	10	10x14	344	294	145	109	115	95	140	4xM8	3
100	L	160	40	196	198	156	109	140	172	63	28	60	100	11	12x16	393	333	148,5	109	130	110	160	4xM8	3,5
112	M	190	40	227	224	175	117,5	140	180	70	28	60	112	12	12x16	400	340	154	117,5	130	110	160	4xM8	3,5
132	S	216	51	262	258	188	117,5	140	186	89	38	80	132	15	12x16	445	365	180	117,5	165	130	200	4xM10	3,5
132	M	216	51	262	258	188	117,5	178	224	89	38	80	132	15	12x16	483	403	180	117,5	165	130	200	4xM10	3,5
132	M-4	216	51	262	258	188	117,5	178	224	89	38	80	132	15	12x16	539	459	180	117,5	165	130	200	4xM10	3,5

ALUMINUM MOTOR, MOUNTING B34B



Without IE classification

Frame size	A	AA	AB	AC	AD	AG	B	BB	C	D	E	H	HA	K	L	LB	LD	LL	M	N	P	S	T	IPE
56	90	23	111	113	90	86	71	88	36	9	20	56	7	5,8x8,3	199	179	83	86	85	70	105	4xM6	2,5	1-M20x1,5
63	100	24	123	120	100	101	80	100	40	11	23	63	7	7x9,5	217	194	95,5	101	110	80	120	4xM6	3	1-M20x1,5
71	112	26	138	136	112	101	90	110	45	14	30	71	8	7x11	245	215	110,5	101	115	95	140	4xM8	3	1-M20x1,5

IE2

Frame size		A	AA	AB	AC	AD	AG	B	BB	C	D	E	H	HA	K	L	LB	LD	LL	M	N	P	S	T	IPE
80		125	35	157	155	124	101	100	125	50	19	40	80	9	10x14	281	241	118	101	130	110	160	4xM8	3,5	1-M25x1,5
90	S	140	37	173	175	137	109	100	125	56	24	50	90	10	10x14	315	265	136	109	130	110	160	4xM8	3,5	1-M25x1,5
90	L	140	37	173	175	137	109	125	150	56	24	50	90	10	10x14	340	290	136	109	130	110	160	4xM8	3,5	1-M25x1,5
100	L	160	40	196	195	151	109	140	172	63	28	60	100	11	12x16	373	313	144	109	165	130	200	4xM10	3,5	1-M25x1,5
112	M	190	41	227	219	169	117,5	140	180	70	28	60	112	12	12x16	394	334	152	117,5	165	130	200	4xM10	3,5	2-M32x1,5
132	S	216	51	262	258	188	117,5	140	186	89	38	80	132	15	12x16	465	385	180	117,5	215	180	250	4xM12	4	2-M32x1,5
132	M	216	51	262	258	188	117,5	178	224	89	38	80	132	15	12x16	503	423	180	117,5	215	180	250	4xM12	4	2-M32x1,5

ALUMINUM MOTOR, MOUNTING B34B

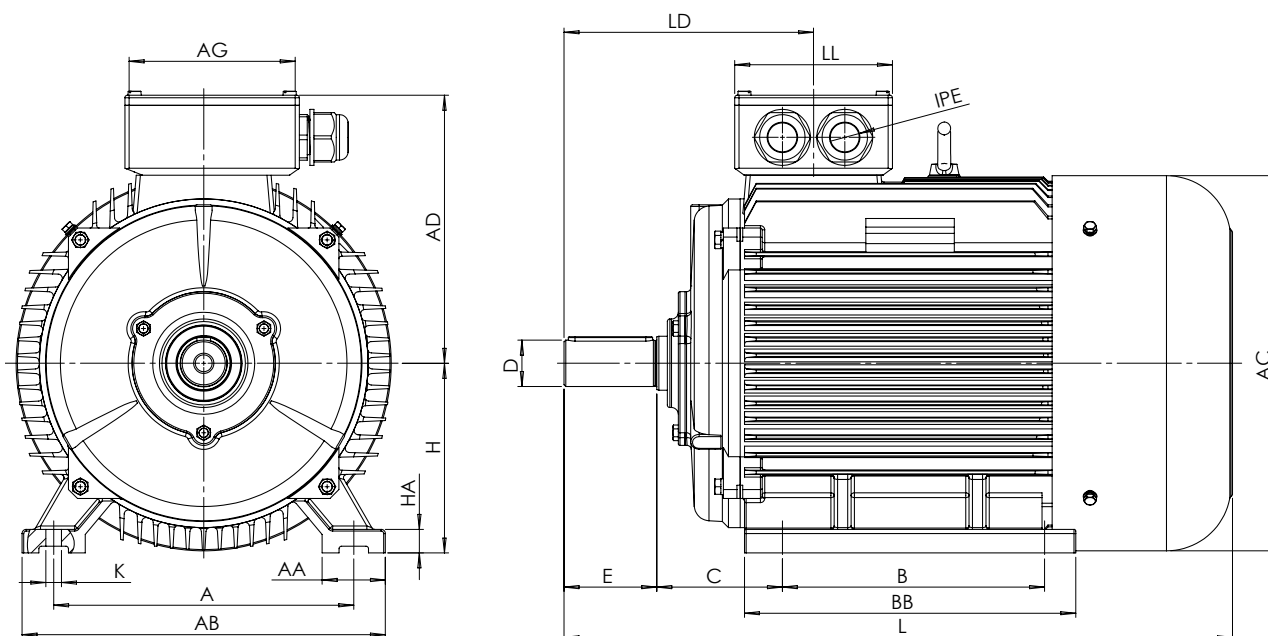
IE3

Frame size		A	AA	AB	AC	AD	AG	B	BB	C	D	E	H	HA	K	L	LB	LD	LL	M	N	P	S	T	IPE
80		125	35	157	158	129	101	100	125	50	19	40	80	8	10x14	294	254	115	101	130	110	160	4xM8	3,5	1-M25x1.5
90	S	140	37	173	175	140	109	100	125	56	24	50	90	10	10x14	319	269	145	109	130	110	160	4xM8	3,5	1-M25x1.5
90	L	140	37	173	175	140	109	125	150	56	24	50	90	10	10x14	344	294	145	109	130	110	160	4xM8	3,5	1-M25x1.5
100	L	160	40	196	198	156	109	140	172	63	28	60	100	11	12x16	393	333	148,5	109	165	130	200	4xM10	3,5	1-M25x1.5
112	M	190	41	227	219	166	117,5	140	180	70	28	60	112	12	12x16	394	334	152	117,5	165	130	200	4xM10	3,5	2-M32x1.5
132	S	216	51	262	258	188	117,5	140	186	89	38	80	132	15	12x16	445	365	180	117,5	215	180	250	4xM12	4	2-M32x1.5
132	M	216	51	262	258	188	117,5	178	224	89	38	80	132	15	12x16	483	403	180	117,5	215	180	250	4xM12	4	2-M32x1.5

IE4

Frame size		A	AA	AB	AC	AD	AG	B	BB	C	D	E	H	HA	K	L	LB	LD	LL	M	N	P	S	T	IPE
80		125	35	157	158	129	101	100	125	50	19	40	80	8	10x14	294	254	115	101	130	110	160	4xM8	3,5	1-M25x1.5
90	S	140	37	173	175	140	109	100	125	56	24	50	90	10	10x14	319	269	145	109	130	110	160	4xM8	3,5	1-M25x1.5
90	L	140	37	173	175	140	109	125	150	56	24	50	90	10	10x14	344	294	145	109	130	110	160	4xM8	3,5	1-M25x1.5
100	L	160	40	196	198	156	109	140	172	63	28	60	100	11	12x16	393	333	148,5	109	165	130	200	4xM10	3,5	1-M32x1.5
112	M	190	40	227	224	175	117,5	140	180	70	28	60	112	12	12x16	400	340	154	117,5	165	130	200	4xM10	3,5	2-M32x1.5
132	S	216	51	262	258	188	117,5	140	186	89	38	80	132	15	12x16	445	365	180	117,5	215	180	250	4xM12	4	2-M32x1.5
132	M	216	51	262	258	188	117,5	178	224	89	38	80	132	15	12x16	483	403	180	117,5	215	180	250	4xM12	4	2-M32x1.5
132	M-4	216	51	262	258	188	117,5	178	224	89	38	80	132	15	12x16	539	459	180	117,5	215	180	250	4xM12	4	2-M32x1.5

CAST IRON MOTOR, MOUNTING B3



IE2

Frame size	x poles	A	AA	AB	AC	AD	AG	B	BB	C	D	E	H	HA	K	L	LD	LL	IPE
160 M	2,4,6,8	254	65	314	314	251	162	210	260	108	42	110	160	20	4x14.5	608	256	152	2xM40x1.5
160 L	2,4,6,8	254	65	314	314	251	162	254	304	108	42	110	160	20	4x14.5	652	256	152	2xM40x1.5
180 M	2,4,8	279	70	349	355	267	162	241	311	121	48	110	180	22	4x14.5	688	271	152	2xM40x1.5
180 L	4,6,8	279	70	349	355	267	162	279	349	121	48	110	180	22	4x14.5	726	271	152	2xM40x1.5
200 L	2,4,6,8	318	70	388	397	299	210	305	369	133	55	110	200	25	4x18.5	772	296	190	2xM50x1.5
225 S	4,8	356	75	431	446	322	210	286	368	149	60	140	225	28	4x18.5	808	329	190	2xM50x1.5
225 M	2	356	75	431	446	322	210	311	393	149	55	110	225	28	4x18.5	803	299	190	2xM50x1.5
225 M	4,6,8	356	75	431	446	322	210	311	393	149	60	140	225	28	4x18.5	833	329	190	2xM50x1.5
250 M	2	406	80	484	485	358	248	349	445	168	60	140	250	30	4x24	915	347	218	2xM63x1.5
250 M	4,6,8	406	80	484	485	358	248	349	445	168	65	140	250	30	4x24	915	347	218	2xM63x1.5
280 S	2	457	85	542	547	387	248	368	485	190	65	140	280	35	4x24	982	355.5	218	2xM63x1.5
280 S	4,6,8	457	85	542	547	387	248	368	485	190	75	140	280	35	4x24	982	355.5	218	2xM63x1.5
280 M	2	457	85	542	547	387	248	419	536	190	65	140	280	35	4x24	1033	355.5	218	2xM63x1.5
280 M	4,6,8	457	85	542	547	387	248	419	536	190	75	140	280	35	4x24	1033	355.5	218	2xM63x1.5
315 S	2	508	120	628	620	527	320	406	570	216	65	140	315	45	4x28	1185	397	280	2xM63x1.5
315 S	4,6,8	508	120	628	620	527	320	406	570	216	80	170	315	45	4x28	1215	427	280	2xM63x1.5
315 M	2	508	120	628	620	527	320	457	680	216	65	140	315	45	4x28	1295	397	280	2xM63x1.5
315 M	4,6,8	508	120	628	620	527	320	457	680	216	80	170	315	45	4x28	1325	427	280	2xM63x1.5
315 L	2	508	120	628	620	527	320	508	680	216	65	140	315	45	4x28	1295	397	280	2xM63x1.5
315 L	4,6,8	508	120	628	620	527	320	508	680	216	80	170	315	45	4x28	1325	427	280	2xM63x1.5
355 M	2	610	116	726	698	642	380	560	750	254	75	140	355	52	6x28	1495	414	330	2xM63x1.5
355 M	4,6,8	610	116	726	698	642	380	560	750	254	95	170	355	52	6x28	1565	444	330	2xM63x1.5
355 L	2	610	116	726	698	642	380	630	750	254	75	140	355	52	6x28	1495	414	330	2xM63x1.5
355 L	4,6,8	610	116	726	698	642	380	630	750	254	95	170	355	52	6x28	1565	444	330	2xM63x1.5

CAST IRON MOTOR, MOUNTING B3

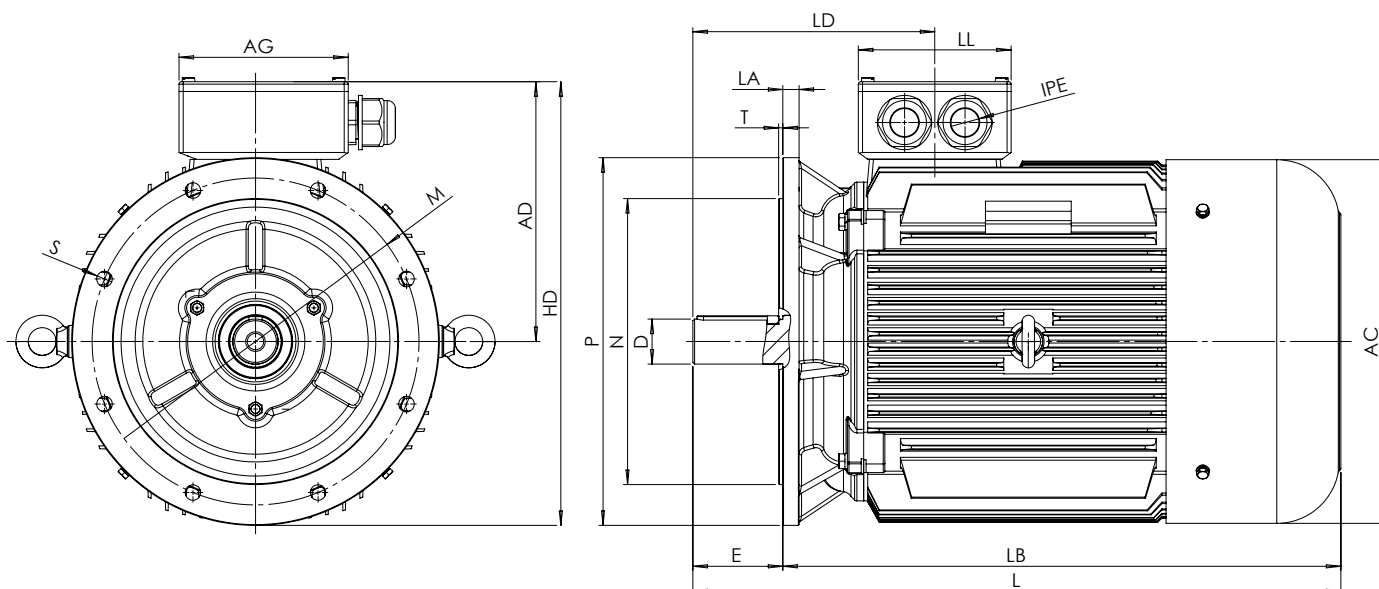
IE3

Frame size		No. of poles	A	AA	AB	AC	AD	AG	B	BB	C	D	E	H	HA	K	L	LD	LL	IPE
160	M	2,4,6,8	254	65	314	314	251	162	210	260	108	42	110	160	20	4x14.5	589	256	152	2xM40x1.5
160	L	2,4,6,8	254	65	314	314	251	162	254	304	108	42	110	160	20	4x14.5	633	256	152	2xM40x1.5
180	M	2,4,8	279	70	349	355	267	162	241	311	121	48	110	180	22	4x14.5	661	271	152	2xM40x1.5
180	L	4,6,8	279	70	349	355	267	162	279	349	121	48	110	180	22	4x14.5	699	271	152	2xM40x1.5
200	L	2,4,6,8	318	70	388	397	299	210	305	369	133	55	110	200	25	4x18.5	757	296	190	2xM50x1.5
225	S	4,8	356	75	431	446	322	210	286	368	149	60	140	225	28	4x18.5	798	329	190	2xM50x1.5
225	M	2	356	75	431	446	322	210	311	393	149	55	110	225	28	4x18.5	793	299	190	2xM50x1.5
225	M	4,6,8	356	75	431	446	322	210	311	393	149	60	140	225	28	4x18.5	823	329	190	2xM50x1.5
250	M	2	406	80	484	485	358	248	349	445	168	60	140	250	30	4x24	900	347	218	2xM63x1.5
250	M	4,6,8	406	80	484	485	358	248	349	445	168	65	140	250	30	4x24	900	347	218	2xM63x1.5
280	S	2	457	85	542	547	387	248	368	485	190	65	140	280	35	4x24	931	355.5	218	2xM63x1.5
280	S	4,6,8	457	85	542	547	387	248	368	485	190	75	140	280	35	4x24	961	355.5	218	2xM63x1.5
280	M	2	457	85	542	547	387	248	419	536	190	65	140	280	35	4x24	982	355.5	218	2xM63x1.5
280	M	4,6,8	457	85	542	547	387	248	419	536	190	75	140	280	35	4x24	1012	355.5	218	2xM63x1.5
315	S	2	508	120	628	620	527	320	406	570	216	65	140	315	45	4x28	1156	397	280	2xM63x1.5
315	S	4,6,8	508	120	628	620	527	320	406	570	216	80	170	315	45	4x28	1228	427	280	2xM63x1.5
315	M	2	508	120	628	620	527	320	457	680	216	65	140	315	45	4x28	1266	397	280	2xM63x1.5
315	M	4,6,8	508	120	628	620	527	320	457	680	216	80	170	315	45	4x28	1338	427	280	2xM63x1.5
315	L	2	508	120	628	620	527	320	508	680	216	65	140	315	45	4x28	1266	397	280	2xM63x1.5
315	L	4,6,8	508	120	628	620	527	320	508	680	216	80	170	315	45	4x28	1338	427	280	2xM63x1.5
355	M	2	610	116	726	698	642	380	560	750	254	75	140	355	52	6x28	1491	414	330	2xM63x1.5
355	M	4,6,8	610	116	726	698	642	380	560	750	254	95	170	355	52	6x28	1561	444	330	2xM63x1.5
355	L	2	610	116	726	698	642	380	630	750	254	75	140	355	52	6x28	1491	414	330	2xM63x1.5
355	L	4,6,8	610	116	726	698	642	380	630	750	254	95	170	355	52	6x28	1561	444	330	2xM63x1.5

IE4

Frame size		No. of poles	A	AA	AB	AC	AD	AG	B	BB	C	D	E	H	HA	K	L	LD	LL	IPE
160	M	2,4,6,8	254	65	314	335	256	162	210	315	108	42	110	160	20	4x14.5	648	248	152	2xM40x1.5
160	L	2,4,6,8	254	65	314	335	256	162	254	355	108	42	110	160	20	4x14.5	688	248	152	2xM40x1.5
180	M	2,4,8	279	70	349	363	271	162	241	359	121	48	110	180	22	4x14.5	711	271	152	2xM40x1.5
180	L	4,6,8	279	70	349	363	271	162	279	360	121	48	110	180	22	4x14.5	746	271	152	2xM40x1.5
200	L	2,4,6,8	318	70	395	418	312	210	305	372	133	55	110	200	25	4x18.5	846	296	190	2xM50x1.5
225	S	4,8	356	75	431	465	334	210	286	431	149	60	140	225	28	4x18.5	880	330	190	2xM50x1.5
225	M	2	356	75	431	465	334	210	311	466	149	55	110	225	28	4x18.5	885	299	190	2xM50x1.5
225	M	4,6,8	356	75	431	465	334	210	311	466	149	60	140	225	28	4x18.5	915	330	190	2xM50x1.5
250	M	2	406	80	484	525	379	248	349	515	168	60	140	250	30	4x24	980	347	220	2xM63x1.5
250	M	4,6,8	406	80	484	525	379	248	349	515	168	65	140	250	30	4x24	980	347	220	2xM63x1.5
280	S	2	457	85	542	588	412	248	368	510	190	65	140	280	35	4x24	980	355	220	2xM63x1.5
280	S	4,6,8	457	85	542	588	412	248	368	510	190	75	140	280	35	4x24	980	355	220	2xM63x1.5
280	M	2	457	85	542	588	412	248	419	550	190	65	140	280	35	4x24	1020	355	220	2xM63x1.5
280	M	4,6,8	457	85	542	588	412	248	419	550	190	75	140	280	35	4x24	1020	355	220	2xM63x1.5
315	S	2	508	120	628	620	524	320	406	570	216	65	140	315	45	4x28	1194	397	280	2xM63x1.5
315	S	4,6,8	508	120	628	620	524	320	406	570	216	80	170	315	45	4x28	1224	427	280	2xM63x1.5
315	M	2	508	120	628	620	524	320	457	680	216	65	140	315	45	4x28	1304	397	280	2xM63x1.5
315	M	4,6,8	508	120	628	620	524	320	457	680	216	80	170	315	45	4x28	1334	427	280	2xM63x1.5
315	L	2	508	120	628	620	524	320	508	680	216	65	140	315	45	4x28	1304	397	280	2xM63x1.5
315	L	4,6,8	508	120	628	620	524	320	508	680	216	80	170	315	45	4x28	1334	427	280	2xM63x1.5
355	M	2	610	116	726	698	639	380	560	750	254	75	140	355	52	6x28	1496	422	330	2xM63x1.5
355	M	4,6,8	610	116	726	698	639	380	560	750	254	95	170	355	52	6x28	1536	452	330	2xM63x1.5
355	L	2	610	116	726	698	639	380	630	750	254	75	140	355	52	6x28	1496	422	330	2xM63x1.5
355	L	4,6,8	610	116	726	698	639	380	630	750	254	95	170	355	52	6x28	1536	452	330	2xM63x1.5

CAST IRON MOTOR, MOUNTING B5



IE2

Frame size	No. of poles	AC	AD	AG	D	E	HD	L	LA	LB	LD	LL	M	N	P	S	T	IPE
160 M	2,4,6,8	314	251	162	42	110	426	608	15	498	256	152	300	250	350	4x18.5	5	2xM40x1.5
160 L	2,4,6,8	314	251	162	42	110	426	652	15	542	256	152	300	250	350	4x18.5	5	2xM40x1.5
180 M	2,4,8	355	267	162	48	110	444.5	688	15	578	271	152	300	250	350	4x18.5	5	2xM40x1.5
180 L	4,6,8	355	267	162	48	110	444.5	726	15	616	271	152	300	250	350	4x18.5	5	2xM40x1.5
200 L	2,4,6,8	397	299	210	55	110	499	772	17	662	296	190	350	300	400	4x18.5	5	2xM50x1.5
225 S	4,8	446	322	210	60	140	547	808	20	668	329	190	400	350	450	8x18.5	5	2xM50x1.5
225 M	2	446	322	210	55	110	547	803	20	693	299	190	400	350	450	8x18.5	5	2xM50x1.5
225 M	4,6,8	446	322	210	60	140	547	833	20	693	329	190	400	350	450	8x18.5	5	2xM50x1.5
250 M	2	485	358	248	60	140	633	915	22	775	347	218	500	450	550	8x18.5	5	2xM63x1.5
250 M	4,6,8	485	358	248	65	140	633	915	22	775	347	218	500	450	550	8x18.5	5	2xM63x1.5
280 S	2	547	387	248	65	140	662	982	22	842	355.5	218	500	450	550	8x18.5	5	2xM63x1.5
280 S	4,6,8	547	387	248	75	140	662	982	22	842	355.5	218	500	450	550	8x18.5	5	2xM63x1.5
280 M	2	547	387	248	65	140	662	1033	22	893	355.5	218	500	450	550	8x18.5	5	2xM63x1.5
280 M	4,6,8	547	387	248	75	140	662	1033	22	893	355.5	218	500	450	550	8x18.5	5	2xM63x1.5
315 S	2	620	527	320	65	140	857	1185	22	1045	397	280	600	550	660	8x24	6	2xM63x1.5
315 S	4,6,8	620	527	320	80	170	857	1215	22	1045	427	280	600	550	660	8x24	6	2xM63x1.5
315 M	2	620	527	320	65	140	857	1295	22	1155	397	280	600	550	660	8x24	6	2xM63x1.5
315 M	4,6,8	620	527	320	80	170	857	1325	22	1155	427	280	600	550	660	8x24	6	2xM63x1.5
315 L	2	620	527	320	65	140	857	1295	22	1155	397	280	600	550	660	8x24	6	2xM63x1.5
315 L	4,6,8	620	527	320	80	170	857	1325	22	1155	427	280	600	550	660	8x24	6	2xM63x1.5
355 M	2	698	642	380	75	140	1042	1495	25	1355	414	330	740	680	800	8x24	6	2xM63x1.5
355 M	4,6,8	698	642	380	95	170	1042	1565	25	1395	444	330	740	680	800	8x24	6	2xM63x1.5
355 L	2	698	642	380	75	140	1042	1495	25	1355	414	330	740	680	800	8x24	6	2xM63x1.5
355 L	4,6,8	698	642	380	95	170	1042	1565	25	1395	444	330	740	680	800	8x24	6	2xM63x1.5

CAST IRON MOTOR, MOUNTING B5

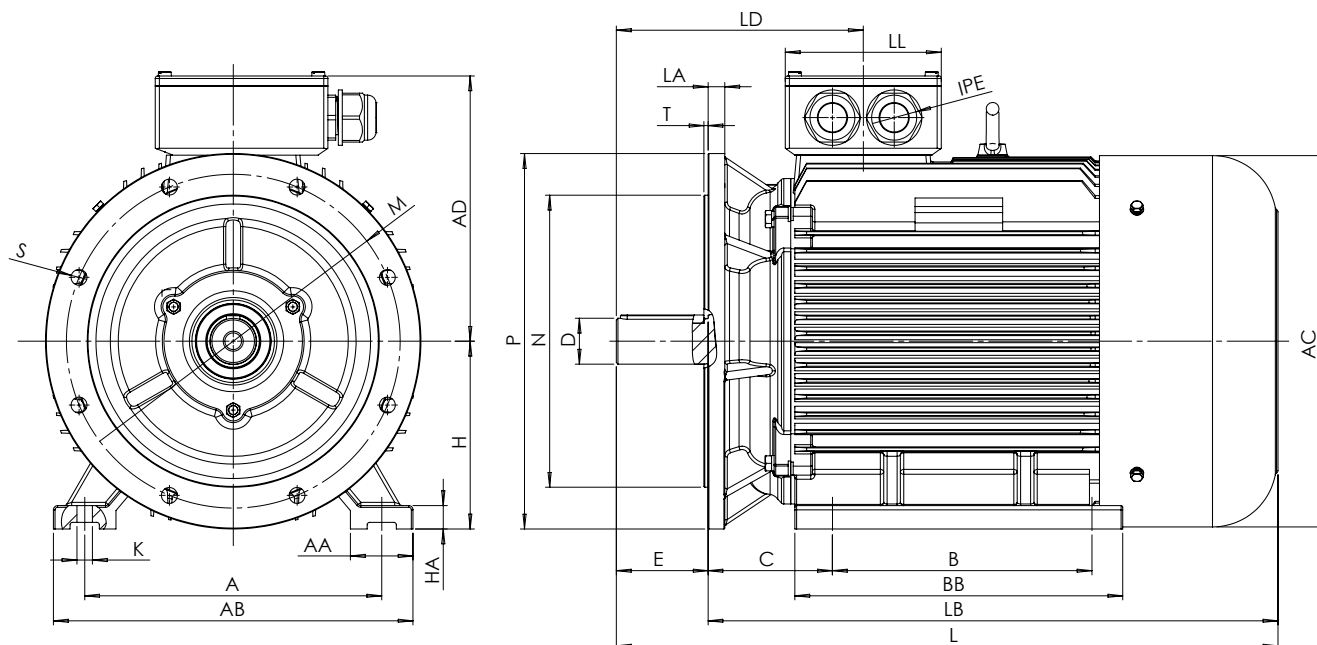
IE3

Frame size		No. of poles	AC	AD	AG	D	E	HD	L	LA	LB	LD	LL	M	N	P	S	T	IPE
160	M	2,4,6,8	314	251	162	42	110	426	589	15	479	256	152	300	250	350	4x18.5	5	2xM40x1.5
160	L	2,4,6,8	314	251	162	42	110	426	633	15	523	256	152	300	250	350	4x18.5	5	2xM40x1.5
180	M	2,4,8	355	267	162	48	110	444.5	661	15	551	271	152	300	250	350	4x18.5	5	2xM40x1.5
180	L	4,6,8	355	267	162	48	110	444.5	699	15	589	271	152	300	250	350	4x18.5	5	2xM40x1.5
200	L	2,4,6,8	397	299	210	55	110	499	757	17	647	296	190	350	300	400	4x18.5	5	2xM50x1.5
225	S	4,8	446	322	210	60	140	547	798	20	658	329	190	400	350	450	8x18.5	5	2xM50x1.5
225	M	2	446	322	210	55	110	547	793	20	683	299	190	400	350	450	8x18.5	5	2xM50x1.5
225	M	4,6,8	446	322	210	60	140	547	823	20	683	329	190	400	350	450	8x18.5	5	2xM50x1.5
250	M	2	485	358	248	60	140	633	900	22	760	347	218	500	450	550	8x18.5	5	2xM63x1.5
250	M	4,6,8	485	358	248	65	140	633	900	22	760	347	218	500	450	550	8x18.5	5	2xM63x1.5
280	S	2	547	387	248	65	140	662	931	22	791	355.5	218	500	450	550	8x18.5	5	2xM63x1.5
280	S	4,6,8	547	387	248	75	140	662	961	22	821	355.5	218	500	450	550	8x18.5	5	2xM63x1.5
280	M	2	547	387	248	65	140	662	982	22	842	355.5	218	500	450	550	8x18.5	5	2xM63x1.5
280	M	4,6,8	547	387	248	75	140	662	1012	22	872	355.5	218	500	450	550	8x18.5	5	2xM63x1.5
315	S	2	620	527	320	65	140	857	1156	22	1016	397	280	600	550	660	8x24	6	2xM63x1.5
315	S	4,6,8	620	527	320	80	170	857	1228	22	1058	427	280	600	550	660	8x24	6	2xM63x1.5
315	M	2	620	527	320	65	140	857	1266	22	1126	397	280	600	550	660	8x24	6	2xM63x1.5
315	M	4,6,8	620	527	320	80	170	857	1338	22	1168	427	280	600	550	660	8x24	6	2xM63x1.5
315	L	2	620	527	320	65	140	857	1266	22	1126	397	280	600	550	660	8x24	6	2xM63x1.5
315	L	4,6,8	620	527	320	80	170	857	1338	22	1168	427	280	600	550	660	8x24	6	2xM63x1.5
355	M	2	698	642	380	75	140	1042	1491	25	1351	414	330	740	680	800	8x24	6	2xM63x1.5
355	M	4,6,8	698	642	380	95	170	1042	1561	25	1391	444	330	740	680	800	8x24	6	2xM63x1.5
355	L	2	698	642	380	75	140	1042	1491	25	1351	414	330	740	680	800	8x24	6	2xM63x1.5
355	L	4,6,8	698	642	380	95	170	1042	1561	25	1391	444	330	740	680	800	8x24	6	2xM63x1.5

IE4

Frame size		No. of poles	AC	AD	AG	D	E	HD	L	LA	LB	LD	LL	M	N	P	S	T	IPE
160	M	2,4,6,8	335	256	162	42	110	431	648	15	538	248	152	300	250	350	4x18.5	5	2xM40x1.5
160	L	2,4,6,8	335	256	162	42	110	431	688	15	578	248	152	300	250	350	4x18.5	5	2xM40x1.5
180	M	2,4,8	363	271	162	48	110	446	711	15	601	271	152	300	250	350	4x18.5	5	2xM40x1.5
180	L	4,6,8	363	271	162	48	110	446	746	15	636	271	152	300	250	350	4x18.5	5	2xM40x1.5
200	L	2,4,6,8	418	312	210	55	110	512	846	17	736	296	190	350	300	400	4x18.5	5	2xM50x1.5
225	S	4,8	465	334	210	60	140	559	880	20	740	330	190	400	350	450	8x18.5	5	2xM50x1.5
225	M	2	465	334	210	55	110	559	885	20	775	299	190	400	350	450	8x18.5	5	2xM50x1.5
225	M	4,6,8	465	334	210	60	140	559	915	20	775	330	190	400	350	450	8x18.5	5	2xM50x1.5
250	M	2	525	379	248	60	140	654	980	22	840	347	220	400	450	550	8x18.5	5	2xM63x1.5
250	M	4,6,8	525	379	248	65	140	654	980	22	840	347	220	500	450	550	8x18.5	5	2xM63x1.5
280	S	2	588	412	248	65	140	687	980	222	840	355	220	500	450	550	8x18.5	5	2xM63x1.5
280	S	4,6,8	588	412	248	75	140	687	980	22	840	355	220	500	450	550	8x18.5	5	2xM63x1.5
280	M	2	588	412	248	65	140	687	1020	22	880	355	220	500	450	550	8x18.5	5	2xM63x1.5
280	M	4,6,8	588	412	248	75	140	687	1020	22	880	355	220	500	450	550	8x18.5	5	2xM63x1.5
315	S	2	620	524	320	65	140	854	1194	22	1054	397	280	600	550	660	8x24	6	2xM63x1.5
315	S	4,6,8	620	524	320	80	170	824	1224	22	1054	427	280	600	550	600	8x24	6	2xM63x1.5
315	M	2	620	524	320	65	140	854	1304	22	1164	397	280	600	550	660	8x24	6	2xM63x1.5
315	M	4,6,8	320	524	320	80	170	854	1334	22	1164	427	280	600	550	660	8x24	6	2xM63x1.5
315	L	2	620	524	320	65	140	854	1304	22	1164	397	280	600	550	660	8x24	6	2xM63x1.5
315	L	4,6,8	620	524	320	80	170	854	1334	22	1164	427	280	600	550	660	8x24	6	2xM63x1.5
355	M	2	698	639	380	75	140	1039	1496	25	1356	422	330	740	680	800	8x24	6	2xM63x1.5
355	M	4,6,8	698	639	380	95	170	1039	1536	25	1366	452	330	740	680	800	8x24	6	2xM63x1.5
355	L	2	698	639	380	75	140	1039	1496	25	1356	422	330	740	680	800	8x24	6	2xM63x1.5
355	L	4,6,8	698	639	380	95	170	1039	1536	25	1366	452	330	740	680	800	8x24	6	2xM63x1.5

CAST IRON MOTOR, MOUNTING B35



IE2

Frame size		No. of poles	A	AA	AB	AC	AD	AG	B	BB	C	D	E	H	HA	K	L	LA	LB	LD	LL	M	N	P	S	T	IPE
160	M	2,4,6,8	254	65	314	314	251	162	210	260	108	42	110	160	20	4x14.5	608	15	498	256	152	300	250	350	4x18.5	5	2xM40x1.5
160	L	2,4,6,8	254	65	314	314	251	162	254	304	108	42	110	160	20	4x14.5	652	15	542	256	152	300	250	350	4x18.5	5	2xM40x1.5
180	M	2,4,8	279	70	349	355	267	162	241	311	121	48	110	180	22	4x14.5	688	15	578	271	152	300	250	350	4x18.5	5	2xM40x1.5
180	L	4,6,8	279	70	349	355	267	162	279	349	121	48	110	180	22	4x14.5	726	15	616	271	152	300	250	350	4x18.5	5	2xM40x1.5
200	L	2,4,6,8	318	70	388	397	299	210	305	369	133	55	110	200	25	4x18.5	772	17	662	296	190	350	300	400	4x18.5	5	2xM50x1.5
225	S	4,8	356	75	431	446	322	210	286	368	149	60	140	225	28	4x18.5	808	20	668	329	190	400	350	450	8x18.5	5	2xM50x1.5
225	M	2	356	75	431	446	322	210	311	393	149	55	110	225	28	4x18.5	803	20	693	299	190	400	350	450	8x18.5	5	2xM50x1.5
225	M	4,6,8	356	75	431	446	322	210	311	393	149	60	140	225	28	4x18.5	833	20	693	329	190	400	350	450	8x18.5	5	2xM50x1.5
250	M	2	406	80	484	485	358	248	349	445	168	60	140	250	30	4x24	915	22	775	347	218	500	450	550	8x18.5	5	2xM63x1.5
250	M	4,6,8	406	80	484	485	358	248	349	445	168	65	140	250	30	4x24	915	22	775	347	218	500	450	550	8x18.5	5	2xM63x1.5
280	S	2	457	85	542	547	387	248	368	485	190	65	140	280	35	4x24	982	22	842	355.5	218	500	450	550	8x18.5	5	2xM63x1.5
280	S	4,6,8	457	85	542	547	387	248	368	485	190	75	140	280	35	4x24	982	22	842	355.5	218	500	450	550	8x18.5	5	2xM63x1.5
280	M	2	457	85	542	547	387	248	419	536	190	65	140	280	35	4x24	1033	22	893	355.5	218	500	450	550	8x18.5	5	2xM63x1.5
280	M	4,6,8	457	85	542	547	387	248	419	536	190	75	140	280	35	4x24	1033	22	893	355.5	218	500	450	550	8x18.5	5	2xM63x1.5
315	S	2	508	120	628	620	527	320	406	570	216	65	140	315	45	4x28	1185	22	1045	397	280	600	550	660	8x24	6	2xM63x1.5
315	S	4,6,8	508	120	628	620	527	320	406	570	216	80	170	315	45	4x28	1215	22	1045	427	280	600	550	660	8x24	6	2xM63x1.5
315	M	2	508	120	628	620	527	320	457	680	216	65	140	315	45	4x28	1295	22	1155	397	280	600	550	660	8x24	6	2xM63x1.5
315	M	4,6,8	508	120	628	620	527	320	457	680	216	80	170	315	45	4x28	1325	22	1155	427	280	600	550	660	8x24	6	2xM63x1.5
315	L	2	508	120	628	620	527	320	508	680	216	65	140	315	45	4x28	1295	22	1155	397	280	600	550	660	8x24	6	2xM63x1.5
315	L	4,6,8	508	120	628	620	527	320	508	680	216	80	170	315	45	4x28	1325	22	1155	427	280	600	550	660	8x24	6	2xM63x1.5
355	M	2	610	116	726	698	642	380	560	750	254	75	140	355	52	6x28	1495	25	1355	414	330	740	680	800	8x24	6	2xM63x1.5
355	M	4,6,8	610	116	726	698	642	380	560	750	254	95	170	355	52	6x28	1565	25	1395	444	330	740	680	800	8x24	6	2xM63x1.5
355	L	2	610	116	726	698	642	380	630	750	254	75	140	355	52	6x28	1495	25	1355	414	330	740	680	800	8x24	6	2xM63x1.5
355	L	4,6,8	610	116	726	698	642	380	630	750	254	95	170	355	52	6x28	1565	25	1395	444	330	740	680	800	8x24	6	2xM63x1.5

CAST IRON MOTOR, MOUNTING B35

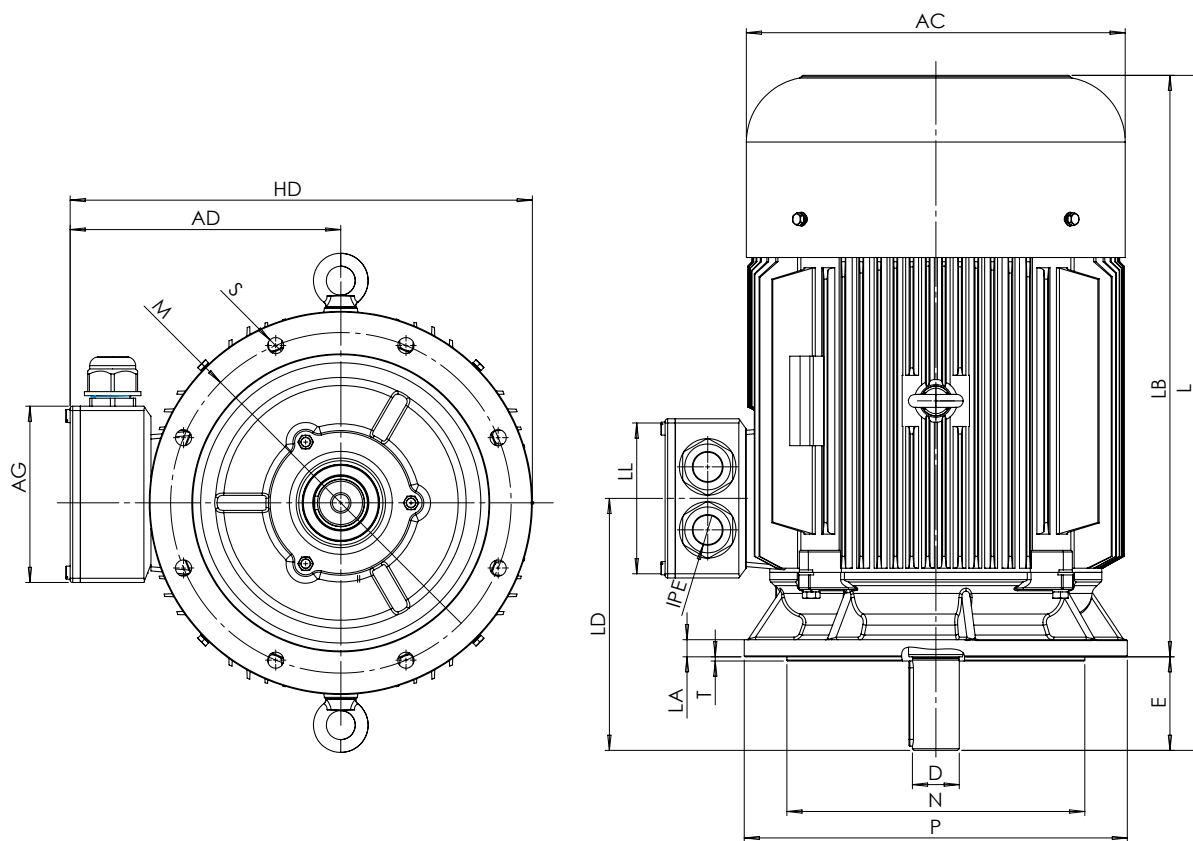
IE3

Frame size		No. of poles	A	AA	AB	AC	AD	AG	B	BB	C	D	E	H	HA	K	L	LA	LB	LD	LL	M	N	P	S	T	IPE
160	M	2,4,6,8	254	65	314	314	251	162	210	260	108	42	110	160	20	4x14.5	589	15	479	256	152	300	250	350	4x18.5	5	2xM40x1.5
160	L	2,4,6,8	254	65	314	314	251	162	254	304	108	42	110	160	20	4x14.5	633	15	523	256	152	300	250	350	4x18.5	5	2xM40x1.5
180	M	2,4,8	279	70	349	355	267	162	241	311	121	48	110	180	22	4x14.5	661	15	551	271	152	300	250	350	4x18.5	5	2xM40x1.5
180	L	4,6,8	279	70	349	355	267	162	279	349	121	48	110	180	22	4x14.5	699	15	589	271	152	300	250	350	4x18.5	5	2xM40x1.5
200	L	2,4,6,8	318	70	388	397	299	210	305	369	133	55	110	200	25	4x18.5	757	17	647	296	190	350	300	400	4x18.5	5	2xM50x1.5
225	S	4.8	356	75	431	446	322	210	286	368	149	60	140	225	28	4x18.5	798	20	658	329	190	400	350	450	8x18.5	5	2xM50x1.5
225	M	2	356	75	431	446	322	210	311	393	149	55	110	225	28	4x18.5	793	20	683	299	190	400	350	450	8x18.5	5	2xM50x1.5
225	M	4,6,8	356	75	431	446	322	210	311	393	149	60	140	225	28	4x18.5	823	20	683	329	190	400	350	450	8x18.5	5	2xM50x1.5
250	M	2	406	80	484	485	358	248	349	445	168	60	140	250	30	4x24	900	22	760	347	218	500	450	550	8x18.5	5	2xM63x1.5
250	M	4,6,8	406	80	484	485	358	248	349	445	168	65	140	250	30	4x24	900	22	760	347	218	500	450	550	8x18.5	5	2xM63x1.5
280	S	2	457	85	542	547	387	248	368	485	190	65	140	280	35	4x24	931	22	791	355.5	218	500	450	550	8x18.5	5	2xM63x1.5
280	S	4,6,8	457	85	542	547	387	248	368	485	190	75	140	280	35	4x24	961	22	821	355.5	218	500	450	550	8x18.5	5	2xM63x1.5
280	M	2	457	85	542	547	387	248	419	536	190	65	140	280	35	4x24	982	22	842	355.5	218	500	450	550	8x18.5	5	2xM63x1.5
280	M	4,6,8	457	85	542	547	387	248	419	536	190	75	140	280	35	4x24	1012	22	872	355.5	218	500	450	550	8x18.5	5	2xM63x1.5
315	S	2	508	120	628	620	527	320	406	570	216	65	140	315	45	4x28	1156	22	1016	397	280	600	550	660	8x24	6	2xM63x1.5
315	S	4,6,8	508	120	628	620	527	320	406	570	216	80	170	315	45	4x28	1228	22	1058	427	280	600	550	660	8x24	6	2xM63x1.5
315	M	2	508	120	628	620	527	320	457	680	216	65	140	315	45	4x28	1266	22	1126	397	280	600	550	660	8x24	6	2xM63x1.5
315	M	4,6,8	508	120	628	620	527	320	457	680	216	80	170	315	45	4x28	1338	22	1168	427	280	600	550	660	8x24	6	2xM63x1.5
315	L	2	508	120	628	620	527	320	508	680	216	65	140	315	45	4x28	1266	22	1126	397	280	600	550	660	8x24	6	2xM63x1.5
315	L	4,6,8	508	120	628	620	527	320	508	680	216	80	170	315	45	4x28	1338	22	1168	427	280	600	550	660	8x24	6	2xM63x1.5
355	M	2	610	116	726	698	642	380	560	750	254	75	140	355	52	6x28	1491	25	1351	414	330	740	680	800	8x24	6	2xM63x1.5
355	M	4,6,8	610	116	726	698	642	380	560	750	254	95	170	355	52	6x28	1561	25	1391	444	330	740	680	800	8x24	6	2xM63x1.5
355	L	2	610	116	726	698	642	380	630	750	254	75	140	355	52	6x28	1491	25	1351	414	330	740	680	800	8x24	6	2xM63x1.5
355	L	4,6,8	610	116	726	698	642	380	630	750	254	95	170	355	52	6x28	1561	25	1391	444	330	740	680	800	8x24	6	2xM63x1.5

IE4

Frame size		No. of poles	A	AA	AB	AC	AD	AG	B	BB	C	D	E	H	HA	K	L	LA	LB	LD	LL	M	N	P	S	T	IPE
160	M	2,4,6,8	254	65	314	335	256	162	210	315	108	42	110	160	20	4x14.5	648	15	538	248	152	300	250	350	4x18.5	5	2xM40x1.5
160	L	2,4,6,8	254	65	314	335	256	162	254	355	108	42	110	160	20	4x14.5	688	15	578	248	152	300	250	350	4x18.5	5	2xM40x1.5
180	M	2,4,8	279	70	349	363	271	162	241	359	121	48	110	180	22	4x14.5	711	15	601	271	152	300	250	350	4x18.5	5	2xM40x1.5
180	L	4,6,8	279	70	349	363	271	162	279	360	121	48	110	180	22	4x14.5	746	15	636	271	152	300	250	350	4x18.5	5	2xM40x1.5
200	L	2,4,6,8	318	70	395	418	312	210	305	372	133	55	110	200	25	4x18.5	846	17	736	296	190	350	300	400	4x18.5	5	2xM50x1.5
225	S	4,8	356	75	431	465	334	210	286	431	149	60	140	225	28	4x18.5	880	20	740	330	190	400	350	450	8x18.5	5	2xM50x1.5
225	M	2	356	75	431	465	334	210	311	466	149	55	110	225	28	4x18.5	885	20	775	299	190	400	350	450	8x18.5	5	2xM50x1.5
225	M	4,6,8	356	75	431	465	334	210	311	466	149	60	140	225	28	4x18.5	915	20	775	330	190	400	350	450	8x18.5	5	2xM50x1.5
250	M	2	406	80	484	525	379	248	349	515	168	60	140	250	30	4x24	980	22	840	347	220	400	450	550	8x18.5	5	2xM63x1.5
250	M	4,6,8	406	80	484	525	379	248	349	515	168	65	140	250	30	4x24	980	22	840	347	220	500	450	550	8x18.5	5	2xM63x1.5
280	S	2	457	85	542	588	412	248	368	510	190	65	140	280	35	4x24	980	22	840	355	220	500	450	550	8x18.5	5	2xM63x1.5
280	S	4,6,8	457	85	542	588	412	248	368	510	190	75	140	280	35	4x24	980	22	840	355	220	500	450	550	8x18.5	5	2xM63x1.5
280	M	2	457	85	542	588	412	248	419	550	190	65	140	280	35	4x24	1020	22	880	355	220	500	450	550	8x18.5	5	2xM63x1.5
280	M	4,6,8	457	85	542	588	412	248	419	550	190	75	140	280	35	4x24	1020	22	880	355	220	500	450	550	8x18.5	5	2xM63x1.5
315	S	2	508	120	628	620	524	320	406	570	216	65	140	315	45	4x28	1194	22	1054	397	280	600	550	660	8x24	6	2xM63x1.5
315	S	4,6,8	508	120	628	620	524	320	406	570	216	80	170	315	45	4x28	1224	22	1054	427	280	600	550	600	8x24	6	2xM63x1.5
315	M	2	508	120	628	620	524	320	457	680	216	65	140	315	45	4x28	1304	22	1164	397	280	600	550	660	8x24	6	2xM63x1.5
315	M	4,6,8	508	120	628	620	524	320	457	680	216	80	170	315	45	4x28	1334	22	1164	427	280	600	550	660	8x24	6	2xM63x1.5
315	L	2	508	120	628	620	524	320	508	680	216	65	140	315	45	4x28	1304	22	1164	397	280	600	550	660	8x24	6	2xM63x1.5
315	L	4,6,8	508	120	628	620	524	320	508	680	216	80	170	315	45	4x28	1334	22	1164	427	280	600	550	660	8x24	6	2xM63x1.5
355	M	2	610	116	726	698	639	380	560	750	254	75	140	355	52	4x28	1496	25	1356	422	330	740	680	800	8x24	6	2xM63x1.5
355	M	4,6,8	610	116	726	698	639	380	560	750	254	95	170	355	52	4x28	1536	25	1366	452	330	740	680	800	8x24	6	2xM63x1.5
355	L	2	610	116	726	698	639	380	630	750	254	75	140	355	52	4x28	1496	25	1356	422	330	740	680	800	8x24	6	2xM63x1.5
355	L	4,6,8	610	116	726	698	639	380	630	750	254	95	170	355	52	4x28	1536	25	1366	452	330	740	680	800	8x24	6	2xM63x1.5

CAST IRON MOTOR, MOUNTING V1



IE2

Frame size	No. of poles	AC	AD	AG	D	E	HD	L	LA	LB	LD	LL	M	N	P	S	T	IPE
160 M	2,4,6,8	314	251	162	42	110	426	608	15	498	256	152	300	250	350	4x18.5	5	2xM40x1.5
160 L	2,4,6,8	314	251	162	42	110	426	652	15	542	256	152	300	250	350	4x18.5	5	2xM40x1.5
180 M	2,4,8	355	267	162	48	110	444.5	688	15	578	271	152	300	250	350	4x18.5	5	2xM40x1.5
180 L	4,6,8	355	267	162	48	110	444.5	726	15	616	271	152	300	250	350	4x18.5	5	2xM40x1.5
200 L	2,4,6,8	397	299	210	55	110	499	772	17	662	296	190	350	300	400	4x18.5	5	2xM50x1.5
225 S	4,8	446	322	210	60	140	547	808	20	668	329	190	400	350	450	8x18.5	5	2xM50x1.5
225 M	2	446	322	210	55	110	547	803	20	693	299	190	400	350	450	8x18.5	5	2xM50x1.5
225 M	4,6,8	446	322	210	60	140	547	833	20	693	329	190	400	350	450	8x18.5	5	2xM50x1.5
250 M	2	485	358	248	60	140	633	915	22	775	347	218	500	450	550	8x18.5	5	2xM63x1.5
250 M	4,6,8	485	358	248	65	140	633	915	22	775	347	218	500	450	550	8x18.5	5	2xM63x1.5
280 S	2	547	387	248	65	140	662	982	22	842	355.5	218	500	450	550	8x18.5	5	2xM63x1.5
280 S	4,6,8	547	387	248	75	140	662	982	22	842	355.5	218	500	450	550	8x18.5	5	2xM63x1.5
280 M	2	547	387	248	65	140	662	1033	22	893	355.5	218	500	450	550	8x18.5	5	2xM63x1.5
280 M	4,6,8	547	387	248	75	140	662	1033	22	893	355.5	218	500	450	550	8x18.5	5	2xM63x1.5
315 S	2	620	527	320	65	140	857	1185	22	1045	397	280	600	550	660	8x24	6	2xM63x1.5
315 S	4,6,8	620	527	320	80	170	857	1215	22	1045	427	280	600	550	660	8x24	6	2xM63x1.5
315 M	2	620	527	320	65	140	857	1295	22	1155	397	280	600	550	660	8x24	6	2xM63x1.5
315 M	4,6,8	620	527	320	80	170	857	1325	22	1155	427	280	600	550	660	8x24	6	2xM63x1.5
315 L	2	620	527	320	65	140	857	1295	22	1155	397	280	600	550	660	8x24	6	2xM63x1.5
315 L	4,6,8	620	527	320	80	170	857	1325	22	1155	427	280	600	550	660	8x24	6	2xM63x1.5
355 M	2	698	642	380	75	140	1042	1495	25	1355	414	330	740	680	800	8x24	6	2xM63x1.5
355 M	4,6,8	698	642	380	95	170	1042	1565	25	1395	444	330	740	680	800	8x24	6	2xM63x1.5
355 L	2	698	642	380	75	140	1042	1495	25	1355	414	330	740	680	800	8x24	6	2xM63x1.5
355 L	4,6,8	698	642	380	95	170	1042	1565	25	1395	444	330	740	680	800	8x24	6	2xM63x1.5

CAST IRON MOTOR, MOUNTING V1

IE3

Frame size		No. of poles	AC	AD	AG	D	E	HD	L	LA	LB	LD	LL	M	N	P	S	T	IPE
160	M	2,4,6,8	314	251	162	42	110	426	589	15	479	256	152	300	250	350	4x18.5	5	2xM40x1.5
160	L	2,4,6,8	314	251	162	42	110	426	633	15	523	256	152	300	250	350	4x18.5	5	2xM40x1.5
180	M	2,4,8	355	267	162	48	110	444.5	661	15	551	271	152	300	250	350	4x18.5	5	2xM40x1.5
180	L	4,6,8	355	267	162	48	110	444.5	699	15	589	271	152	300	250	350	4x18.5	5	2xM40x1.5
200	L	2,4,6,8	397	299	210	55	110	499	757	17	647	296	190	350	300	400	4x18.5	5	2xM50x1.5
225	S	4.8	446	322	210	60	140	547	798	20	658	329	190	400	350	450	8x18.5	5	2xM50x1.5
225	M	2	446	322	210	55	110	547	793	20	683	299	190	400	350	450	8x18.5	5	2xM50x1.5
225	M	4,6,8	446	322	210	60	140	547	823	20	683	329	190	400	350	450	8x18.5	5	2xM50x1.5
250	M	2	485	358	248	60	140	633	900	22	760	347	218	500	450	550	8x18.5	5	2xM63x1.5
250	M	4,6,8	485	358	248	65	140	633	900	22	760	347	218	500	450	550	8x18.5	5	2xM63x1.5
280	S	2	547	387	248	65	140	662	931	22	791	355.5	218	500	450	550	8x18.5	5	2xM63x1.5
280	S	4,6,8	547	387	248	75	140	662	961	22	821	355.5	218	500	450	550	8x18.5	5	2xM63x1.5
280	M	2	547	387	248	65	140	662	982	22	842	355.5	218	500	450	550	8x18.5	5	2xM63x1.5
280	M	4,6,8	547	387	248	75	140	662	1012	22	872	355.5	218	500	450	550	8x18.5	5	2xM63x1.5
315	S	2	620	527	320	65	140	857	1156	22	1016	397	280	600	550	660	8x24	6	2xM63x1.5
315	S	4,6,8	620	527	320	80	170	857	1228	22	1058	427	280	600	550	660	8x24	6	2xM63x1.5
315	M	2	620	527	320	65	140	857	1266	22	1126	397	280	600	550	660	8x24	6	2xM63x1.5
315	M	4,6,8	620	527	320	80	170	857	1338	22	1168	427	280	600	550	660	8x24	6	2xM63x1.5
315	L	2	620	527	320	65	140	857	1266	22	1126	397	280	600	550	660	8x24	6	2xM63x1.5
315	L	4,6,8	620	527	320	80	170	857	1338	22	1168	427	280	600	550	660	8x24	6	2xM63x1.5
355	M	2	698	642	380	75	140	1042	1491	25	1351	414	330	740	680	800	8x24	6	2xM63x1.5
355	M	4,6,8	698	642	380	95	170	1042	1561	25	1391	444	330	740	680	800	8x24	6	2xM63x1.5
355	L	2	698	642	380	75	140	1042	1491	25	1351	414	330	740	680	800	8x24	6	2xM63x1.5
355	L	4,6,8	698	642	380	95	170	1042	1561	25	1391	444	330	740	680	800	8x24	6	2xM63x1.5

IE4

Frame size		No. of poles	AC	AD	AG	D	E	HD	L	LA	LB	LD	LL	M	N	P	S	T	IPE
160	M	2,4,6,8	335	256	162	42	110	431	648	15	538	248	152	300	250	350	4x18.5	5	2xM40x1.5
160	L	2,4,6,8	335	256	162	42	110	431	688	15	578	248	152	300	250	350	4x18.5	5	2xM40x1.5
180	M	2,4,8	363	271	162	48	110	446	711	15	601	271	152	300	250	350	4x18.5	5	2xM40x1.5
180	L	4,6,8	363	271	162	48	110	446	746	15	636	271	152	300	250	350	4x18.5	5	2xM40x1.5
200	L	2,4,6,8	418	312	210	55	110	512	846	17	736	296	190	350	300	400	4x18.5	5	2xM50x1.5
225	S	4.8	465	334	210	60	140	559	880	20	740	330	190	400	350	450	8x18.5	5	2xM50x1.5
225	M	2	465	334	210	55	110	559	885	20	775	299	190	400	350	450	8x18.5	5	2xM50x1.5
225	M	4,6,8	465	334	210	60	140	559	915	20	775	330	190	400	350	450	8x18.5	5	2xM50x1.5
250	M	2	525	379	248	60	140	654	980	22	840	347	220	400	450	550	8x18.5	5	2xM63x1.5
250	M	4,6,8	525	379	248	65	140	654	980	22	840	347	220	500	450	550	8x18.5	5	2xM63x1.5
280	S	2	588	412	248	65	140	687	980	222	840	355	220	500	450	550	8x18.5	5	2xM63x1.5
280	S	4,6,8	588	412	248	75	140	687	980	22	840	355	220	500	450	550	8x18.5	5	2xM63x1.5
280	M	2	588	412	248	65	140	687	1020	22	880	355	220	500	450	550	8x18.5	5	2xM63x1.5
280	M	4,6,8	588	412	248	75	140	687	1020	22	880	355	220	500	450	550	8x18.5	5	2xM63x1.5
315	S	2	620	524	320	65	140	854	1194	22	1054	397	280	600	550	660	8x24	6	2xM63x1.5
315	S	4,6,8	620	524	320	80	170	824	1224	22	1054	427	280	600	550	660	8x24	6	2xM63x1.5
315	M	2	620	524	320	65	140	854	1304	22	1164	397	280	600	550	660	8x24	6	2xM63x1.5
315	M	4,6,8	320	524	320	80	170	854	1334	22	1164	427	280	600	550	660	8x24	6	2xM63x1.5
315	L	2	620	524	320	65	140	854	1304	22	1164	397	280	600	550	660	8x24	6	2xM63x1.5
315	L	4,6,8	620	524	320	80	170	854	1334	22	1164	427	280	600	550	660	8x24	6	2xM63x1.5
355	M	2	698	639	380	75	140	1039	1496	25	1356	422	330	740	680	800	8x24	6	2xM63x1.5
355	M	4,6,8	698	639	380	95	170	1039	1536	25	1366	452	330	740	680	800	8x24	6	2xM63x1.5
355	L	2	698	639	380	75	140	1039	1496	25	1356	422	330	740	680	800	8x24	6	2xM63x1.5
355	L	4,6,8	698	639	380	95	170	1039	1536	25	1366	452	330	740	680	800	8x24	6	2xM63x1.5

Abbreviations & acronyms

Short sign	Translation
V	Voltage
A	Current
rpm or min-1	Speed
η	Efficiency
$\cos \varphi$	Power factor
I_a/I_n	Starting current factor
T_a/T_n or M_a/M_n	Starting torque factor
T_k/T_n or M_k/M_n	Breakdown torque factor
$F_R X_{max}$	Maximum permissible radial force at shaft end
$F_R X/2$	Maximum permissible radial force at shaft center
$F_R X_o$	Maximum permissible radial force at flange surface (shaft recess)
F_A	Maximum permissible axial force, horizontal mounting
$F_A V_1$	Maximum permissible axial force, vertical mounting



Version 4/2018

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