



Electric motors

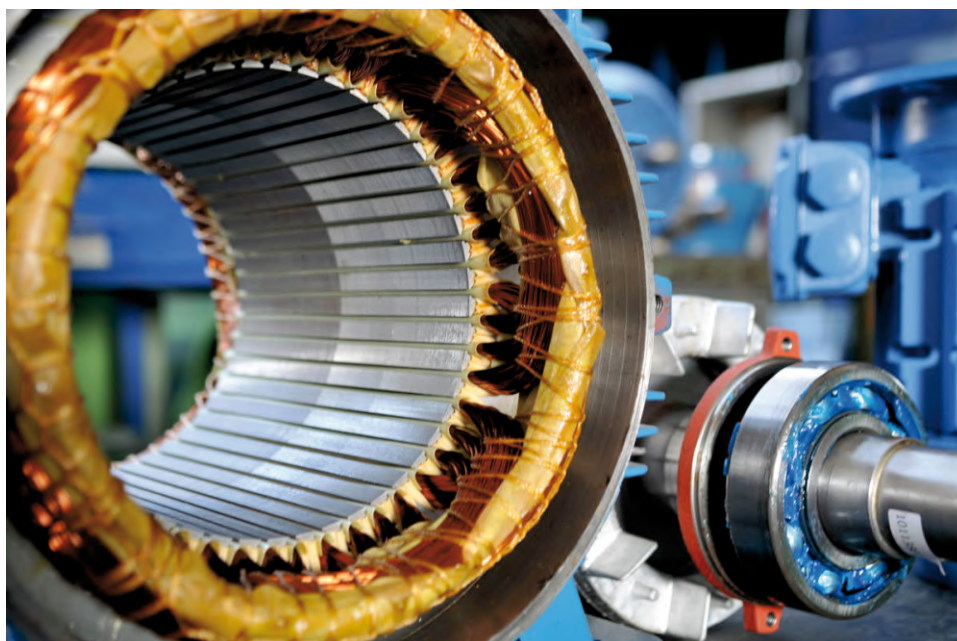
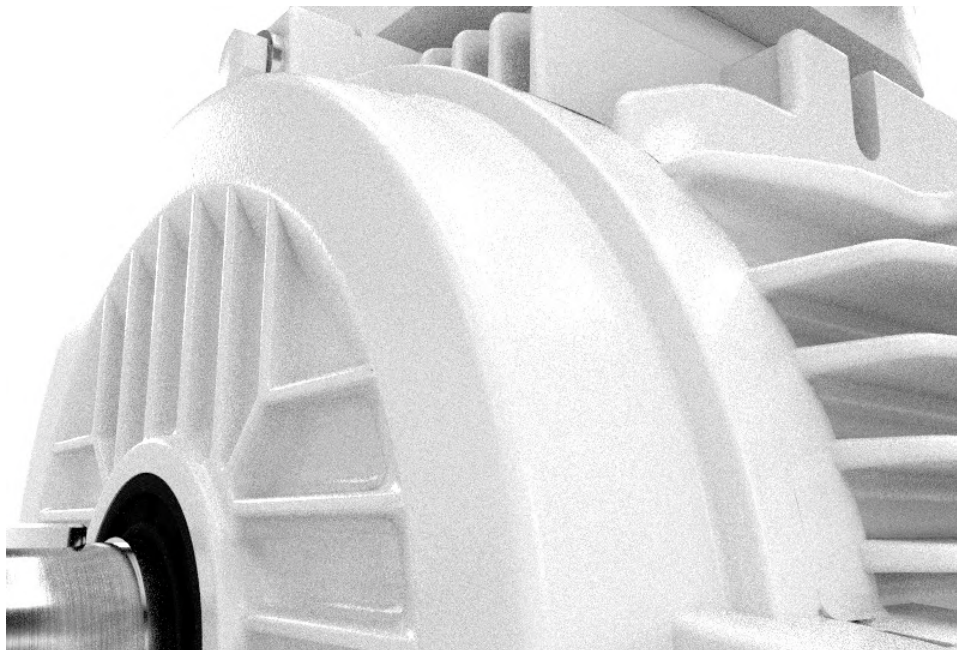
2AL, 2LC Series

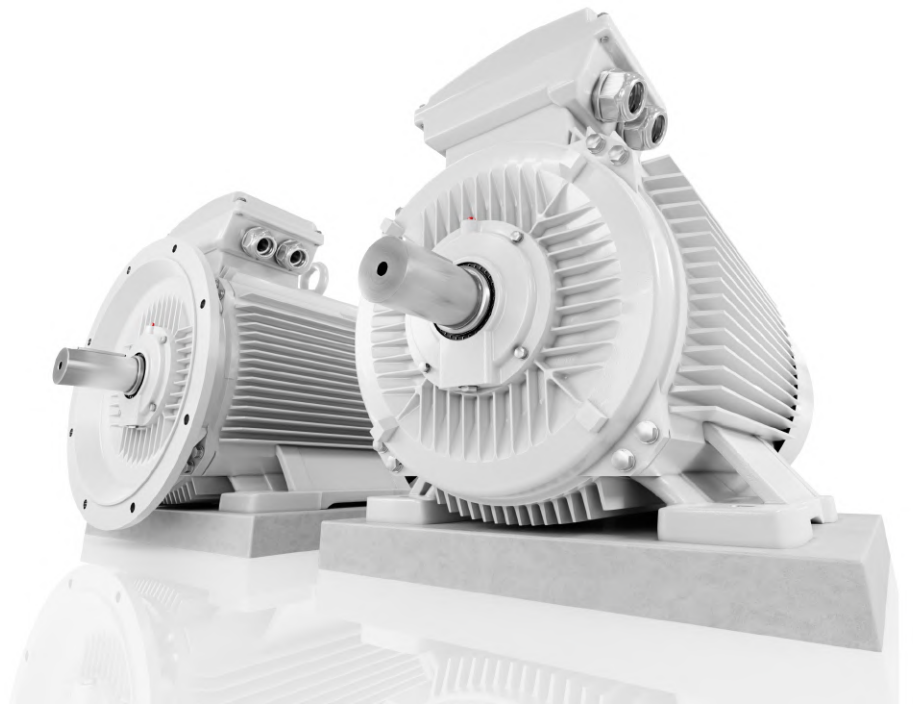
Powerful, efficient and flexible...

Technical catalogue



Low-voltage induction electric motors





AL and **LC** motors
for all types of industry



Quality management and certificates



VYBO Electric is a modern High-tech energy saving company that pays high attention to quality, environment, safety and precision and efficiency of work and energy in production. Therefore, it holds a lot of certificates and quality control systems. **Our priority is quality control.**

Basic certificates include:

ISO9001

The primary task of the ISO 9001 standard is to focus on system management and quality management in the organization. The satisfaction of the customer and the fulfillment of his requirements, which are specified in contracts, orders, or technical drawings, are in the first place. The quality management system is linked to all processes in the company. The standard focuses on the management of human and financial resources, on the stability of infrastructure, including buildings, transport, hardware, software and other communication or information technologies. An important part is also the planning of production and services, the management of the purchasing process, but also the management of non-conforming products.



ISO14001

The main priority of the ISO 14001 standard is to identify and understand the environmental aspects and activities that are related to the entire infrastructure of the company and, based on this, to regulate the environmental impact on the environment.

In its scope, the ISO 14001 standard creates the conditions for determining environmental goals and plans, the fulfillment of which is examined at regular intervals by top management and also by an independent body during internal audits.

This standard is intended for all organizations and companies that consider environmental protection as their primary goal.

The benefit of the standard for society is mainly:

- control over the environmental impact on the environment
- control over produced emissions and waste
- saving material and energy
- prevention of accidents
- compliance of the company's activities with legal requirements
- zero fines for environmental behavior
- creation of a good reputation and prestige of the company



The ISO 45001

Specification (formerly known as OHSAS 18001) is an internationally recognized standard that declares compliance with the principles of a safe enterprise, managing risks at work and protecting the health of workers during work. It does not only concern danger and accidents, but also emphasizes other aspects such as the good condition and mental well-being of the employee.

The certificate is held in Slovakia as STN ISO 45001:2019 and is under the title Management systems of safety and health protection at work. Requirements with guidance for use. It replaces the STN OHSAS 18001 standard.



ISO50001

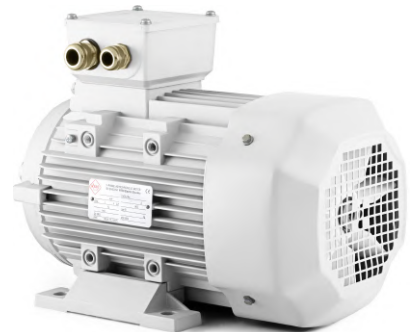
Energy management systems Energy efficiency help organizations save money, save energy resources and also help to prevent climate change. ISO 50001 encourages organizations in all sectors to use energy more efficiently through the development of an energy management system. The international standard ISO 50001: 2011 specifies the requirements for building, maintaining and improving the energy system. It aims to enable organizations to implement a systematic approach that will help achieve lasting improvements in energy efficiency, energy use and consumption.





AL Series

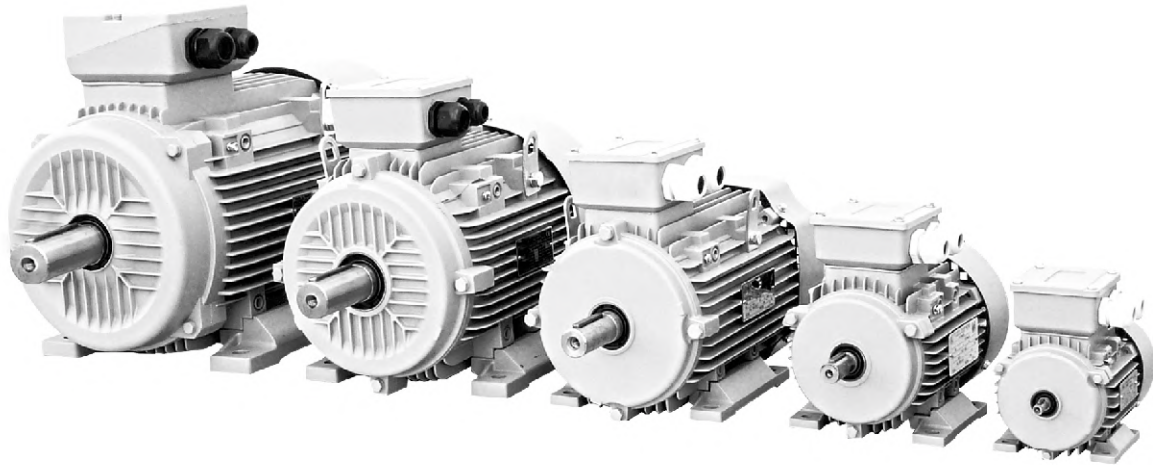
Electric motors for standard and heavy duty in an aluminium frame



SOLUTIONS FOR INDUSTRY

AL SERIES

Motors in AL version - low-voltage electric motors for general and heavy industry

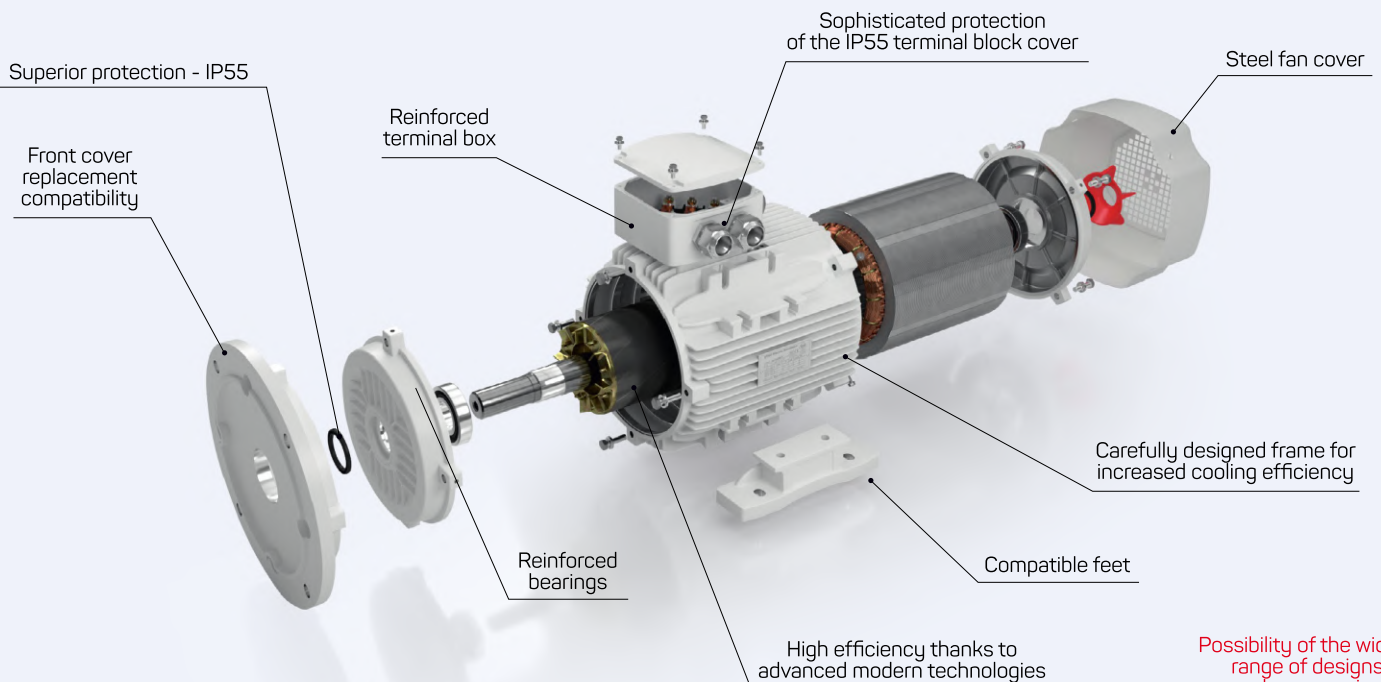


Kinetics AL Class

Types: 1AL, 2AL, 3AL, 4AL
Power from 0,12 to 18,5 kW
Efficiency classes IE1, IE2, IE3, IE4
Reinforced terminal box

Axial heights: 56 and 160 mm
Steel fan cover
Rated frequency 50Hz, 60Hz, 87Hz
Protection IP55, IP56, IP65

Voltage system 230/400/690 V
Cooling IC411
Insulation class F
Compact feet



Possibility of the widest range of designs and accessories

AL SERIES

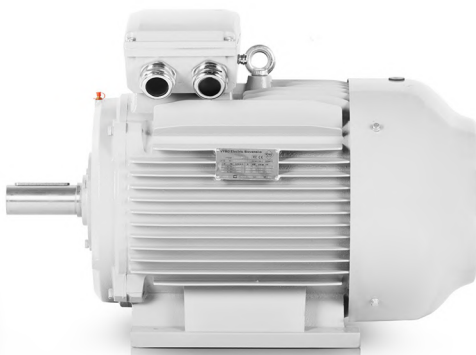
Power:	0.06 - 22 kW
Speed:	3000 / 1500 / 1000 / (750) rpm
Frame size:	56 - 160
Voltage:	230/400 V, 400/690 V, 500 V
Frequency:	50 / 60 Hz
Protection class:	IP55
Efficiency class:	IE1 (Standard efficiency), IE2 (High efficiency), IE3 (Premium efficiency), IE4 (Super premium ef.)
Insulation class:	F/B
Color:	RAL 7030 (stone grey)
Mounting:	IM B3, IM B35, IM B5, IM B14, IM B34
Cooling type:	IC 411 cooling (TENV), IC 416 cooling (TEFV)
Temperature:	-20 °C to +40 °C
Installation height:	1000 m above sea level
Frame material:	aluminium
Direction of rotation:	right/left





LC Series

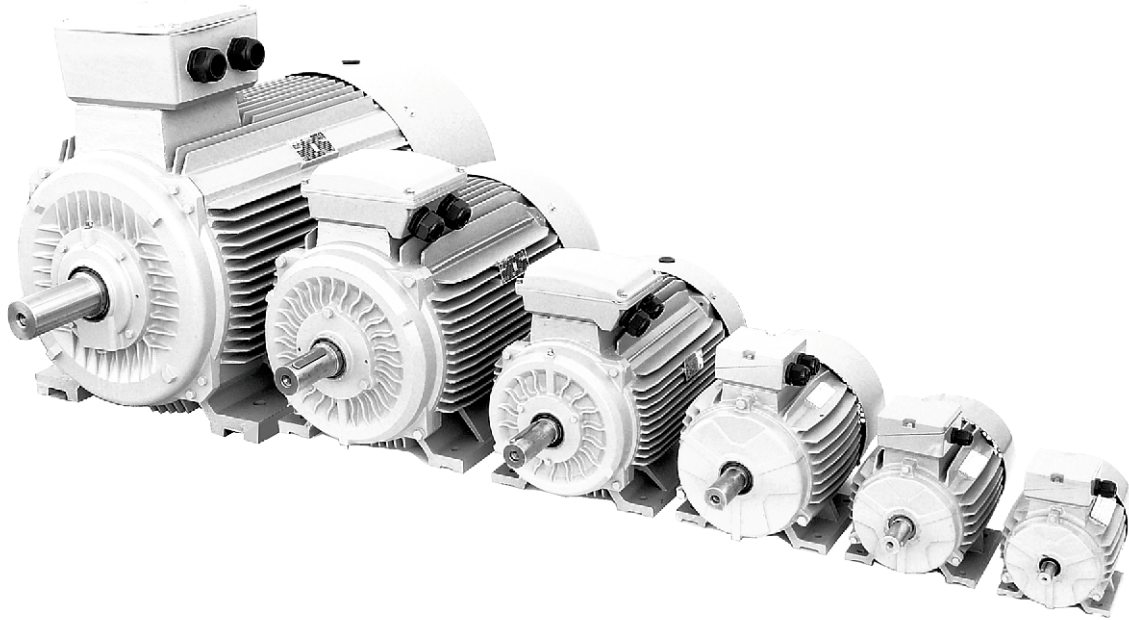
Electric motors for standard and heavy duty in a cast iron frame



SOLUTIONS FOR INDUSTRY

LC SERIES

Electric motors in LC version - performance in robustness



Kinetics LC Class

Cast iron frame
Top motors with high overload capacity
Heavy industrial processes
Full range of optional accessories
Power from 0,12 kW to 1000 kW
Efficiency classes IE1, IE2, IE3, IE4

Axial heights: 1LP, 2LP, 3LP - 71 to 160 mm
1LC, 2LC, 3LC - 180 to 355 mm
4LD - 355 - 450 mm
Nominal frequency 50 Hz, 60 Hz, 87 Hz
Protection IP 54, 55, 56, 65, 66
Voltage system 230/400V, 500V, 400/690V

Cooling IC411, (IC511 special)
Insulation classes F, H
Bearing relubrication system
Thermal protection - PTC thermistors
Steel fan cover
Reinforced terminal block cover

High protection against dust and water up to IP66

Design compatibility

Full range of optional accessories

Reinforced bearings

Maximum security of the terminal box

Reinforced terminal box

Steel fan cover

Reinforced robust alloy construction

Reinforced cast iron feet

Strong cast iron shields

Increased copper content for maximum efficiency IE1 to IE4

LC SERIES

Power:	15 - 400 kW
Speed:	3000 / 1500 / 1000 / (750) rpm
Frame size:	160 - 355
Voltage:	230/400 V, 400/690 V, 500 V
Frequency:	50 / 60 Hz
Protection class:	IP55
Efficiency class:	IE1 (Standard efficiency), IE2 (High efficiency), IE3 (Premium efficiency), IE4 (Super premium ef.)
Insulation class:	F/B
Color:	RAL 7030 (stone gray)
Mounting:	IM B3, IM B35, IM B5, IM B14, IM B34
Cooling type:	IC 411 cooling (TENV), IC 416 cooling (TEFV)
Temperature:	-20 °C to +40 °C
Installation height:	1000 m above sea level
Frame material:	cast iron
Direction of rotation:	right/left



Bearing size

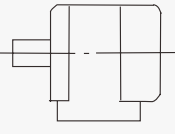
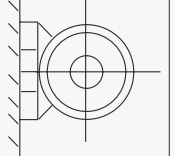
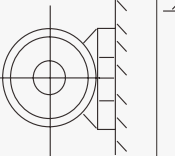
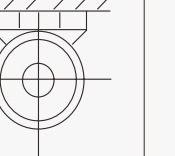
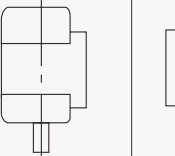
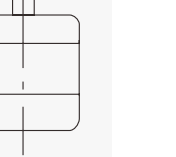
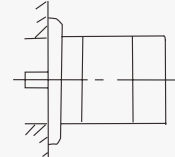
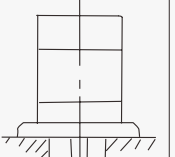
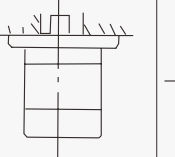
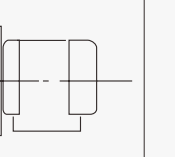
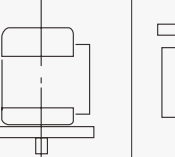
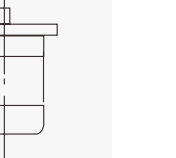
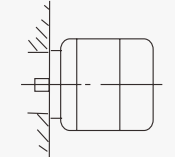
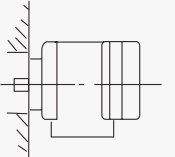
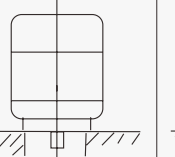
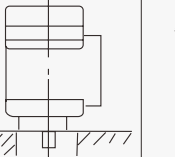
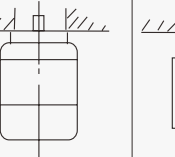
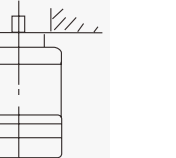
Bearing size	Poles	Drive end	Non drive END
		International type	
80	2-4	62042 RZ	62042RZ
90	2-6	62052 RZ	62052 RZ
100	2-6	62062 RZ	62062 RZ
112	2-6	63062 RZ	63062 RZ
132	2-6	63082 RZ	63082 RZ
160	2-6	63092 ZC3	63092ZC3
180	2-6	6311C3	6311C3
200	2-6	6312C3	6312C3
225	2-6	6313C3	63 3C3
250	2-6	6314C3	6314C3
280	2	6314C3	6314C3
	4-6	6317C3	6317C3
315	2	6317C3	6317C3
	4-6	NU319C3	6319C3
355	2	6319C3	6319C3
	4-6	NU322C3	NU322C3

Main data for terminal box

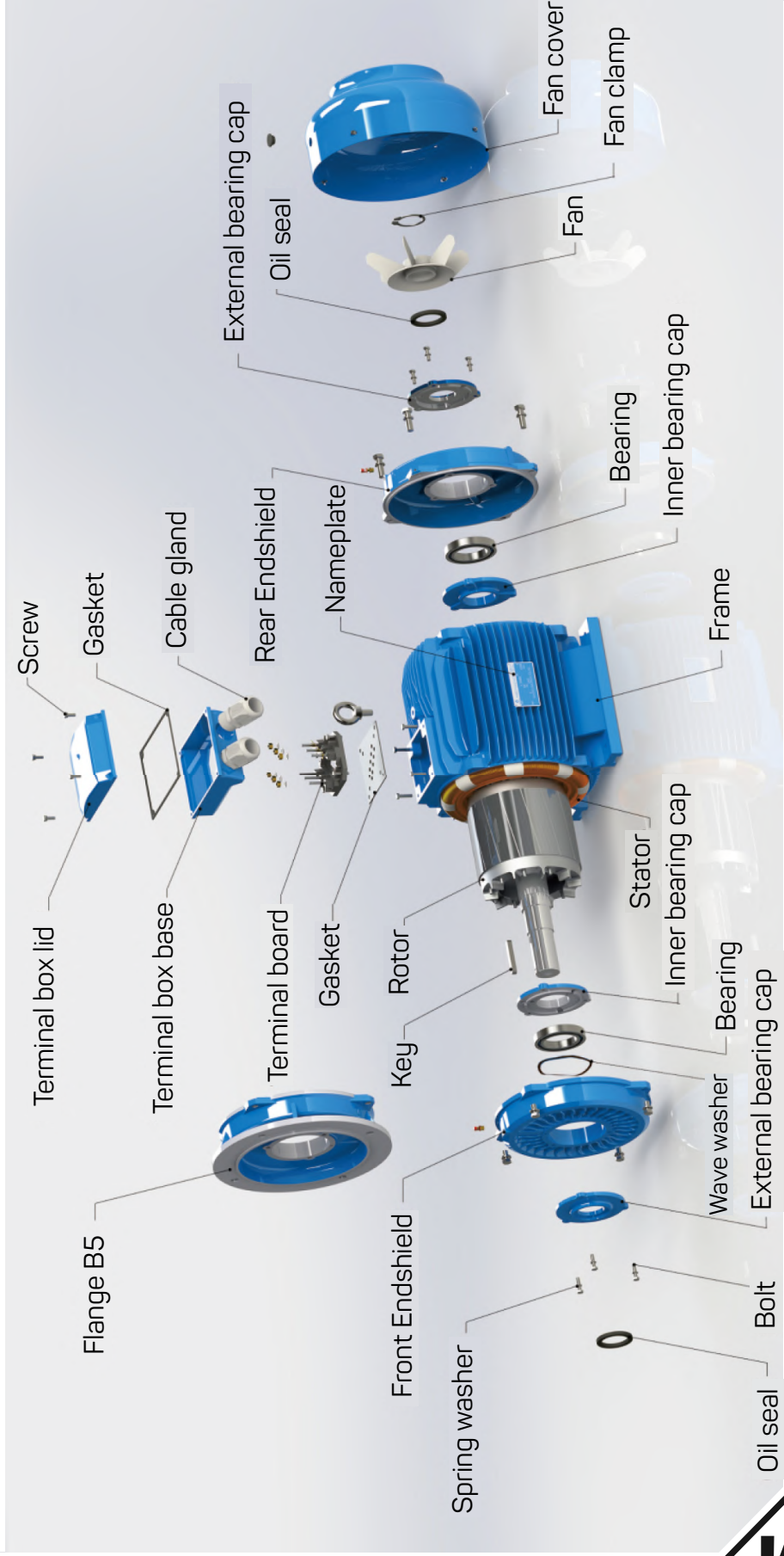
Classified number	Frame size	Rated current	International type
1	H80	2,6	2xM20x1,5
2	H90-100	6,8	2xM25x1,5
3	H112-132	15,4	2xM32x1,5
4	H160-180	42,5	2xM40x1,5
5	H200-225	84,2	2xM50x1,5
6	H250-280	166,6	2xM63x1,5
7	H315	358	2xM63x1,5
8	H355	546	2xM63x1,5

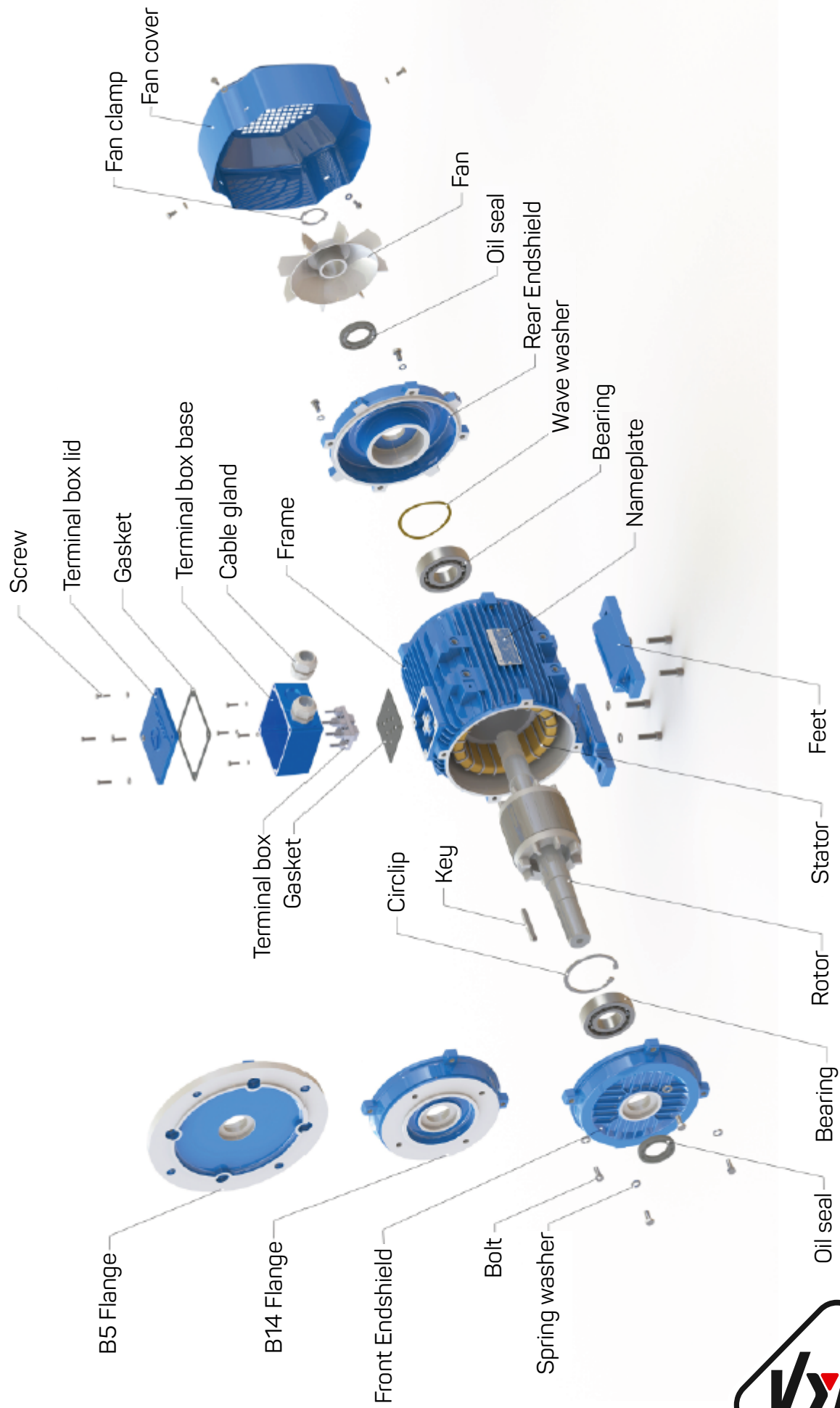


The mounting arrangements of the motors comply with IEC34-7 recommendation. There are four basic arrangements shown as the following tables and figures.

Fundamental arrangement	B3					
Mounting arrangement	B3	B6	B7	B8	V5	V6
Diagram						
Range of Manufacture (frame size)	80-355	80-160				
Fundamental arrangement	B5			B35		
Mounting arrangement	B5	V1	V3	B35	V15	V36
Diagram						
Range of Manufacture (frame size)	80-280	80-355	80-160	80-355	80-160	
Fundamental arrangement	B14					
Mounting arrangement	B14	B34	V18	V58	V19	V69
Diagram						
Range of Manufacture (frame size)	80-132					



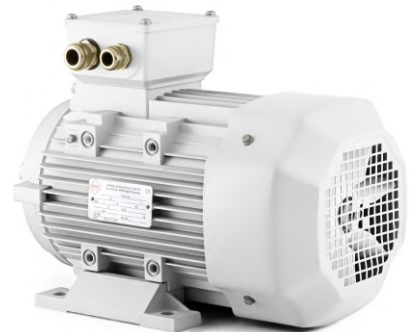






2AL series

Electric motors for standard and heavy duty in an aluminium frame



Technical data 2AL

NO	Frame and size Type	Full load current			Rated power Power	Rated speed Speed	Efficiency EFF.	Power factor Power factor (cos ϕ)	Direct on line starting torque ratio	Direct on line starting current ratio	Direct on line pull out torque ratio	Noise Noise	Weight Weight	Rotor inertia J
		380V	400V	415V					LRT	LRA	BDT			
2 poles electric motors														
1	2AL-562-2	0,44	0,41	0,4	0,12	2700	53,6	0,78	2,2	5,2	2,1	57	4	0,23
2	2AL-63M1-2	0,57	0,54	0,52	0,18	2720	60,4	0,8	2,3	5,5	2,3	61	4,5	0,31
3	2AL-63M2-2	0,72	0,69	0,66	0,25	2720	64,8	0,81	2,3	5,5	2,3	61	4,7	0,6
4	2AL-71M1-2	1	0,95	0,91	0,37	2755	69,5	0,81	2,2	6,1	2,3	64	6,2	0,75
5	2AL-71M2-2	1,38	1,31	1,26	0,55	2790	74,1	0,82	2,3	6,1	2,3	64	6,3	0,9
6	2AL-80M1-2	1,79	1,7	1,51	0,75	2850	77,4	0,82	2,3	6,8	2,3	62	11	1
7	2AL-80M2-2	2,53	2,4	2,13	1,1	2870	79,6	0,83	2,3	7,1	2,3	62	12,5	1,3
8	2AL-90S-2	3,37	3,2	2,84	1,5	2880	81,3	0,84	2,3	7,3	2,3	67	14,5	2
9	2AL-90L-2	4,74	4,5	4	2,2	2880	83,2	0,85	2,3	7,6	2,3	67	18	2,6
10	2AL-100L1-2	6,21	5,9	5,24	3	2880	84,6	0,87	2,2	7,8	2,3	74	21	4,3
11	2AL-112M-2	8	7,6	6,76	4	2900	85,8	0,88	2,3	8,1	2,3	77	28	5,9
12	2AL-132S1-2	10,9	10,4	9,24	5,5	2910	87	0,88	2,2	8,2	2,3	79	40,5	13
13	2AL-132S2-2	14,5	13,8	12,3	7,5	2910	88,1	0,89	2,2	7,8	2,3	79	49	15,3
14	2AL-160M1-2	21,1	20	17,8	11	2940	89,4	0,89	2,2	7,9	2,3	81	83	49,3
15	2AL-160M2-2	28,3	26,9	23,9	15	2940	90,3	0,89	2,2	8	2,3	81	95	56,4
16	2AL-160L-2	34,7	33	29,3	18,5	2940	90,9	0,89	2,2	8	2,3	81	106	65,4
17	2AL-180M-2	41,2	39,1	34,8	22	2950	91,3	0,89	2,2	8,1	2,3	83	140	81,5
4 poles electric motors														
18	2AL-63M1-4	0,43	0,41	0,39	0,12	1310	59,1	0,72	2,2	4,4	2,1	52	4,7	0,5
19	2AL-63M2-4	0,58	0,55	0,53	0,18	1310	64,7	0,73	2,2	4,4	2,1	52	5	0,6
20	2AL-71M1-4	0,75	0,71	0,69	0,25	1340	68,5	0,74	2,2	5,2	2,1	55	6	0,8
21	2AL-71M2-4	1,03	0,98	0,94	0,37	1340	72,7	0,75	2,2	5,2	2,1	55	6,6	1,3
22	2AL-80M1-4	1,45	1,37	1,32	0,55	1390	77,1	0,75	2,3	5,2	2,4	58	11,5	1,8
23	2AL-80M2-4	1,89	1,8	1,6	0,75	1420	79,6	0,76	2,3	6,4	2,3	56	13	2,5
24	2AL-90S-4	2,74	2,6	2,31	1,1	1420	81,4	0,77	2,3	6,6	2,3	59	16,5	3
25	2AL-90L-4	3,68	3,5	3,11	1,5	1420	82,8	0,78	2,3	6,7	2,3	59	20,5	3,9
26	2AL-100L1-4	4,95	4,7	4,18	2,2	1440	84,3	0,8	2,3	7,3	2,3	64	24	7,8
27	2AL-100L2-4	6,53	6,2	5,51	3	1440	85,5	0,81	2,3	7,5	2,3	64	28,5	9,4
28	2AL-112M-4	8,53	8,1	7,2	4	1445	86,6	0,81	2,3	7,5	2,3	65	36,5	13
29	2AL-132S-4	11,7	11,1	9,87	5,5	1450	87,7	0,82	2	7,5	2,3	71	47,5	28,8
30	2AL-132M-4	15,5	14,7	13,1	7,5	1450	88,7	0,83	2	7,3	2,3	71	59	37
31	2AL-160M-4	22,4	21,3	18,9	11	1470	89,8	0,83	2,2	7,4	2,3	73	87	77,8
32	2AL-160L-4	29,9	28,4	25,2	15	1470	90,6	0,84	2,2	7,5	2,3	73	103	102
33	2AL-180M-4	36,2	34,4	30,6	18,5	1470	91,2	0,85	2,2	7,6	2,3	76	135	153
34	2AL-180L-4	42,9	40,8	36,3	22	1470	91,6	0,85	2,2	7,7	2,3	76	151	189



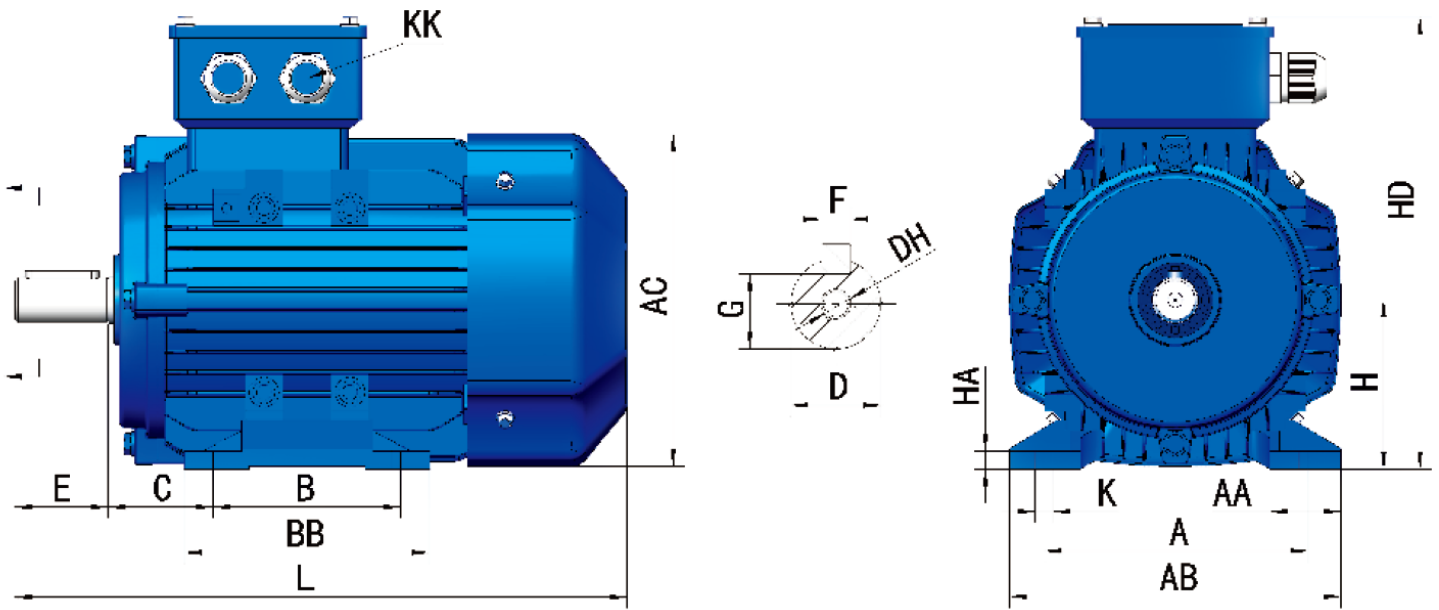
Technical data 2AL

Frame and size		Full load current			Rated power	Rated speed	Efficiency	Power factor	Direct on line starting torque ratio	Direct on line starting current ratio	Direct on line pull out torque ratio	Noise	Weight	Rotor inertia
		Amps (A)			Power	Speed	EFF.	Power factor	LRT	LRA	BDT	Noise	Weight	J
NO	Type	380V	400V	415V	kW	r/min	%	(cos ϕ)	RLT	RLA	RLT	LwdB (A)	kg	kg*m
6 poles electric motors														
35	2AL-71M1-6	0,73	0,7	0,67	0,18	870	56,6	0,66	2	4	1,9	52	6,3	1,1
36	2AL-71M2-6	0,91	0,86	0,83	0,25	870	61,6	0,68	2	4	1,9	52	6,6	1,4
37	2AL-80M1-6	1,19	1,13	1,09	0,37	880	67,6	0,7	2	4,7	1,9	54	10,6	1,6
38	2AL-80M2-6	1,59	1,51	1,45	0,55	880	73,1	0,72	2,1	4,7	1,9	54	11,7	1,9
39	2AL-90S-6	2,11	2	1,78	0,75	930	75,9	0,71	2	5,8	2,1	57	16,5	3,9
40	2AL-90L-6	2,95	2,8	2,49	1,1	930	78,1	0,72	2	5,9	2,1	57	21	5,4
41	2AL-100L1-6	3,89	3,7	3,29	1,5	930	79,8	0,72	2	5,9	2,1	61	23,4	10,8
42	2AL-112M-6	5,68	5,4	4,8	2,2	945	81,8	0,72	2,1	6,2	2,1	65	31,5	15,3
43	2AL-132S-6	7,47	7,1	6,31	3	960	83,3	0,72	2	6,4	2,1	69	40,5	32,2
44	2AL-132M1-6	9,68	9,2	8,18	4	965	84,6	0,74	2	6,6	2,1	69	49	39,9
45	2AL-132M2-6	12,9	12,3	10,9	5,5	965	86	0,75	2	6,8	2,1	69	62,5	50
46	2AL-160M-6	16,7	15,9	14,1	7,5	970	87,2	0,78	2,1	6,8	2,1	73	82	97,2
47	2AL-160L-6	23,9	22,7	20,2	11	970	88,7	0,79	2,1	6,9	2,1	73	106	128
48	2AL-180L-6	31,4	29,8	26,5	15	980	89,7	0,81	2	7,3	2,1	73	140	229
8 poles electric motors														
49	2AL-80M1-8	0,98	0,93	0,89	0,18	645	45,9	0,61	1,8	3,3	1,9	52	10	2,7
50	2AL-80M2-8	1,23	1,17	1,13	0,25	645	50,6	0,61	1,8	3,3	1,9	52	11	3,2
51	2AL-90S-8	1,64	1,56	1,5	0,37	675	56,1	0,61	1,8	4	1,9	56	13	5,5
52	2AL-90L-8	2,22	2,11	2,03	0,55	680	61,7	0,61	1,8	4	2	56	15	7
53	2AL-100L1-8	2,57	2,44	2,35	0,75	680	66,2	0,67	1,8	4	2	59	23	9,7
54	2AL-100L2-8	3,42	3,25	3,13	1,1	680	70,8	0,69	1,6	5	2	59	25	11,9
55	2AL-112M-8	4,39	4,17	4,02	1,5	690	74,1	0,7	1,8	5	2	61	28	24,5
56	2AL-132S-8	6,07	5,76	5,56	2,2	710	77,6	0,71	1,8	6	2	64	40	31,4
57	2AL-132M-8	7,81	7,41	7,15	3	710	80	0,73	1,8	6	2	64	45	39,5
58	2AL-160M1-8	10,2	9,66	9,31	4	720	81,9	0,73	1,9	6	2	68	71	79,8
59	2AL-160M2-8	13,5	12,8	12,3	5,5	720	83,8	0,74	1,9	6	2	68	82,5	98,7
60	2AL-160L-8	17,8	16,9	16,3	7,5	720	85,3	0,75	1,9	6	2	68	99	134
61	2AL-180L-8	25,6	24,4	23,5	11	730	86,9	0,75	2	6,5	2	70	131	215



Installation and overall dimensions

IM B3 2AL-56-180

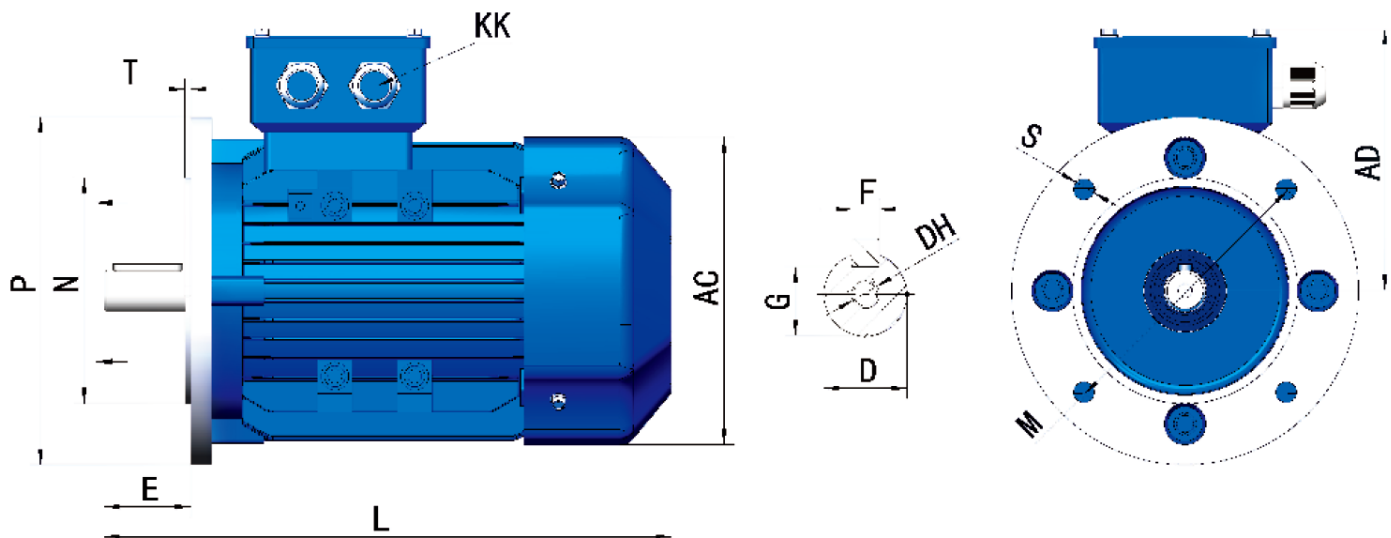


Frame size	A	AA	AB	AC	HD	B	BB	C	D	DH	E	F	G	H	HA	K	KK	L
56	90	23	115	112	100	71	88	36	9	M4*12	20	3	72	56	7	5.8*8.8	2-M20*1.5	199
63	100	24	135	123	109	80	100	40	11	M4*12	23	4	8,5	63	7	7*10	2-M20*1.5	221
71	112	26	150	136	127	90	110	45	14	M5*12	30	5	11	71	8	7*10	2-M20*1.5	247
80M	125	35	153	157	220	100	125	50	19	M6*16	40	6	15,5	80	8	10*14	2-M25*1.5	295
90S	140	37	177	177	240	100	125	56	24	M8*19	50	8	20	90	10	10*14	2-M25*1.5	327
90L	140	37	177	177	240	125	150	56	24	M8*19	50	8	20	90	10	10*14	2-M25*1.5	357
100L	160	40	196	197	267	140	172	63	28	M10*22	60	8	24	100	11	12*16	2-M32*1.5	403
112M	190	41	226	219	289	140	180	70	28	M10*22	60	8	24	112	12	12*16	2-M32*1.5	430
132S	216	51	260	258	328	140	186	89	38	M12*28	80	10	33	132	15	12*16	2-M32*1.5	460
132M	216	51	260	258	328	178	224	89	38	M16*36	80	10	33	132	15	12*16	2-M32*1.5	499
160M	254	55	314	315	416	210	260	108	42	M16*36	110	12	37	160	18	15*18	2-M40*1.5	613
160L	254	55	314	315	416	254	304	108	42	M16*36	110	12	37	160	18	15*18	2-M40*1.5	658
180M	279	75	349	355	451	241	311	121	48	M16*36	110	14	42,5	180	22	15*18	2-M40*1.5	698
180L	279	75	349	355	451	279	350	121	48	M16*36	110	14	42,5	180	22	15*18	2-M40*1.5	734



Installation and overall dimensions

IM B5 2AL-56-180

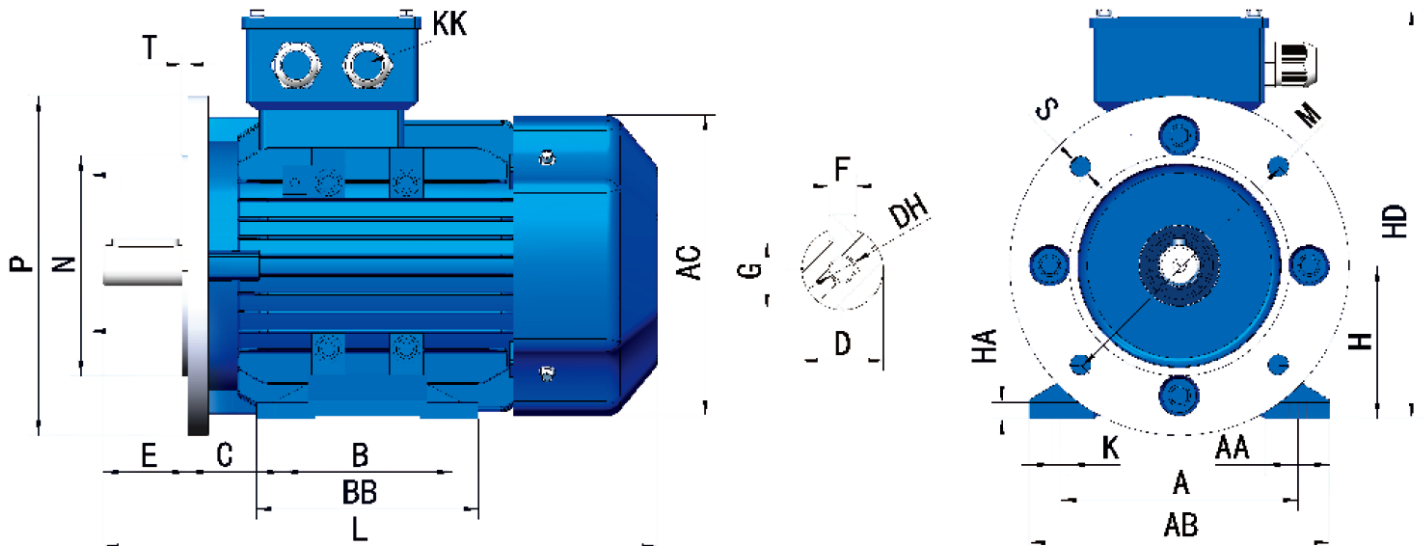


Frame size	P	N	M	S	T	AC	AD	D	DH	E	F	G	KK	L
56	120	80	100	7	3	112	100	9	M4*12	20	3	7,2	2- M20*1.5	199
63	140	95	115	10	3	123	109	11	M4*12	23	4	8,5	2- M20*1.5	221
71	160	110	130	10	3,5	136	127	14	M5*12	30	5	11	2-M20*1.5	247
80M	200	130	165	12	3,5	157	129	19	M6*16	40	6	15,5	2-M25*4.5	295
90S	200	130	165	12	3,5	1477	140	24	M8*19	50	8	20	2-M25*1.5	327
90L	200	130	165	12	3,5	177	140	24	M8*19	50	8	20	2-M25*1.5	357
100L	250	180	215	14,5	4	197	156	28	M10*22	60	8	24	2-M32*1,5	403
112M	250	180	245	14,5	4	219	166	28	M10*22	60	8	24	2-M32*1,5	430
132S	300	230	265	14,5	4	258	178	38	M12*28	80	10	33	2-M32*1,5	460
132M	300	230	265	14,5	4	258	188	38	M16*36	80	10	33	2-M32*1,5	499
160M	350	250	300	18,5	5	315	242	42	M16*36	110	12	37	2-M40*1.5	613
160L	350	250	300	18,5	5	315	242	42	M16*36	110	12	37	2-M40*1.5	658
180M	350	250	300	18,5	5	355	272	48	M16*36	111	14	42,5	2-M40*1.5	698
180L	350	250	300	18,5	5	355	272	48	M16*36	110	14	42,5	2-M40*1.5	734



Installation and overall dimensions

IM B35 2AL-56-180

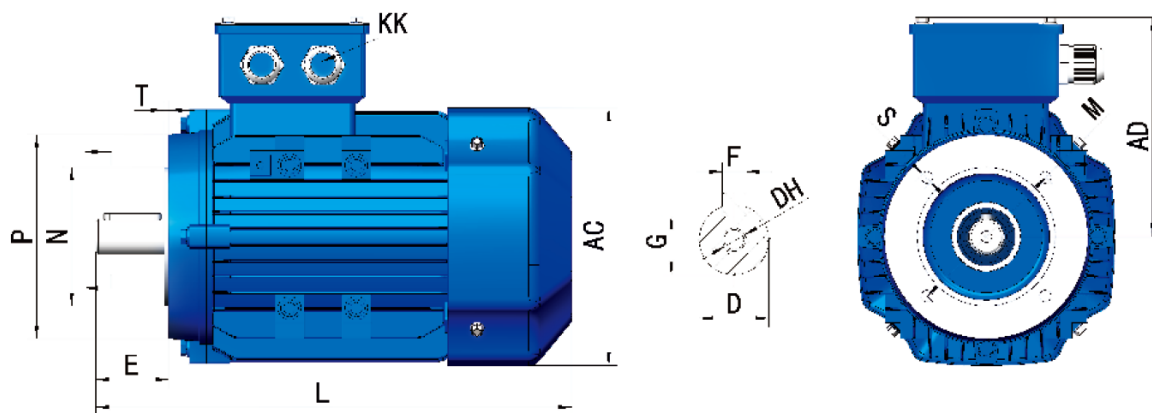


Frame size	P	N	M	S	T	A	AA	AB	AC	HD	B	BB	C	D	DH	E	F	G	H	HA	K	KK	L
56	120	80	100	7	3	90	23	115	112	100	71	88	36	9	M4*12	20	3	7,2	56	7	5,8*8,8	2-M20*1,5	199
63	140	95	115	10	3	100	24	135	123	109	80	100	40	11	M4*12	23	4	8,5	63	7	7*10	2-M20*1,5	221
71	160	110	130	10	4	112	26	150	136	127	90	110	45	14	M5*12	30	5	11	71	8	7*10	2-M20*1,5	247
80M	200	130	165	12	4	125	35	153	157	220	100	125	50	19	M6*16	40	6	16	80	8	10*14	2-M25*1,5	295
90S	200	130	165	12	4	140	37	177	177	240	100	125	56	24	M8*19	50	8	20	90	10	10*14	2-M25*1,5	327
90L	200	130	165	12	4	140	37	177	177	240	125	150	56	24	M8*19	50	8	20	90	10	10*14	2-M25*1,5	357
100L	250	180	215	15	4	160	40	196	197	267	140	172	63	28	M10*22	60	8	24	100	11	12*16	2-M32*1,5	403
112M	250	180	215	15	4	190	41	226	219	289	140	180	70	28	M10*22	60	8	24	112	12	12*16	2-M32*1,5	430
132S	300	230	265	15	4	216	51	260	258	328	140	186	89	38	M12*28	80	10	33	132	15	12*16	2-M32*1,5	460
132M	300	230	265	15	4	216	51	260	258	328	178	224	89	38	M16*36	80	10	33	132	15	12*16	2-M32*1,5	499
160M	350	250	300	19	5	254	55	314	315	416	210	260	108	42	M16*36	110	12	37	160	18	15*18	2-M40*1,5	613
160L	350	250	300	19	5	254	55	314	315	416	254	304	108	42	M16*36	110	12	37	160	18	15*18	2-M40*1,5	658
180M	350	250	300	19	5	279	75	349	355	451	241	311	121	48	M16*36	110	14	43	180	22	15*18	2-M40*1,5	698
180L	350	250	300	19	5	279	75	349	355	451	279	350	121	48	M16*36	110	14	43	180	22	15*18	2-M40*1,5	734

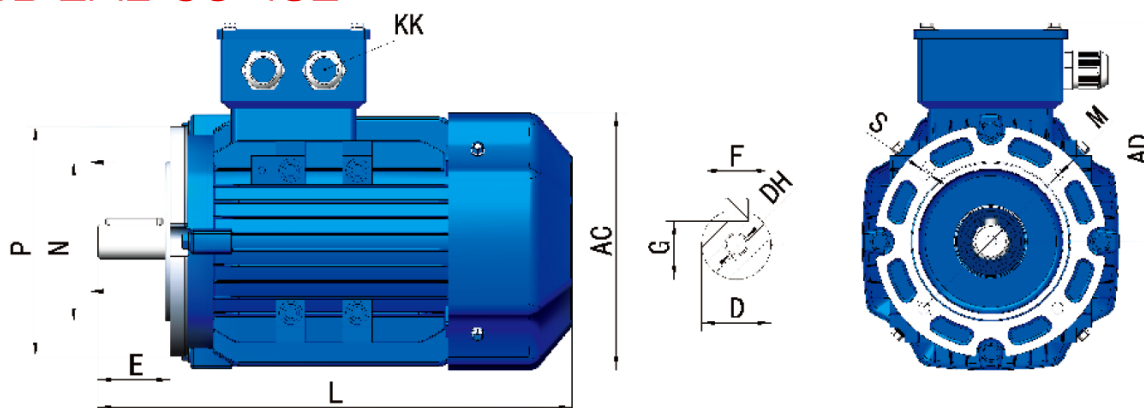


Installation and overall dimensions

IM B14A 2AL-56-132



IM B14B 2AL-56-132

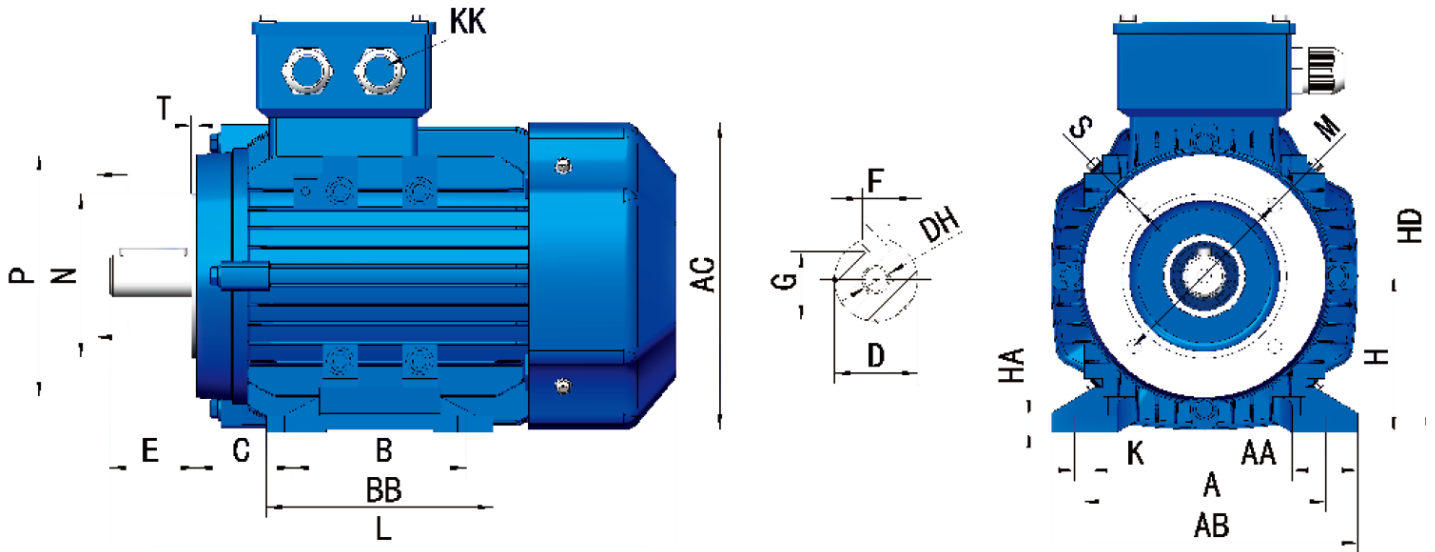


Frame size	AC	AD	D	DH	E	F	G	KK	L	P	N	B14A				B14B			
												M	S	T	P	N	M	S	T
56	112	100	9	M4*12	20	3	7,2	2-M20*1,5	199	80	50	65	M5	2,5	105	70	85	M6	2,5
63	123	109	11	M4*12	23	4	8,5	2-M20*1,5	221	90	60	75	M5	2,5	120	80	100	M6	2,5
71	136	127	14	M5*12	30	5	11	2-M20*1,5	247	105	70	85	M6	2,5	140	95	115	M8	3
80M	157	129	19	M6*16	40	6	15,5	2-M25*1,5	295	120	80	100	M6	3	160	110	130	M8	3,5
90S	177	140	24	M8*19	50	8	20	2-M25*1,5	327	140	95	115	M8	3	160	110	130	M8	3,5
90L	177	140	24	M8*19	50	8	20	2-M25*1,5	357	140	95	115	M8	3	160	110	130	M8	3,5
100L	197	156	28	M10*22	60	8	24	2-M32*1,5	403	160	110	130	M8	3,5	200	130	165	M10	3,5
112M	219	166	28	M10*22	60	8	24	2-M32*1,5	430	160	110	130	M8	3,5	200	130	165	M10	3,5
132S	258	188	38	M12*28	80	10	33	2-M32*1,5	460	200	130	165	M10	3,5	250	180	215	M12	4
132M	258	188	38	M16*36	80	10	33	2-M32*1,5	490	200	130	165	M10	3,5	250	180	215	M12	4



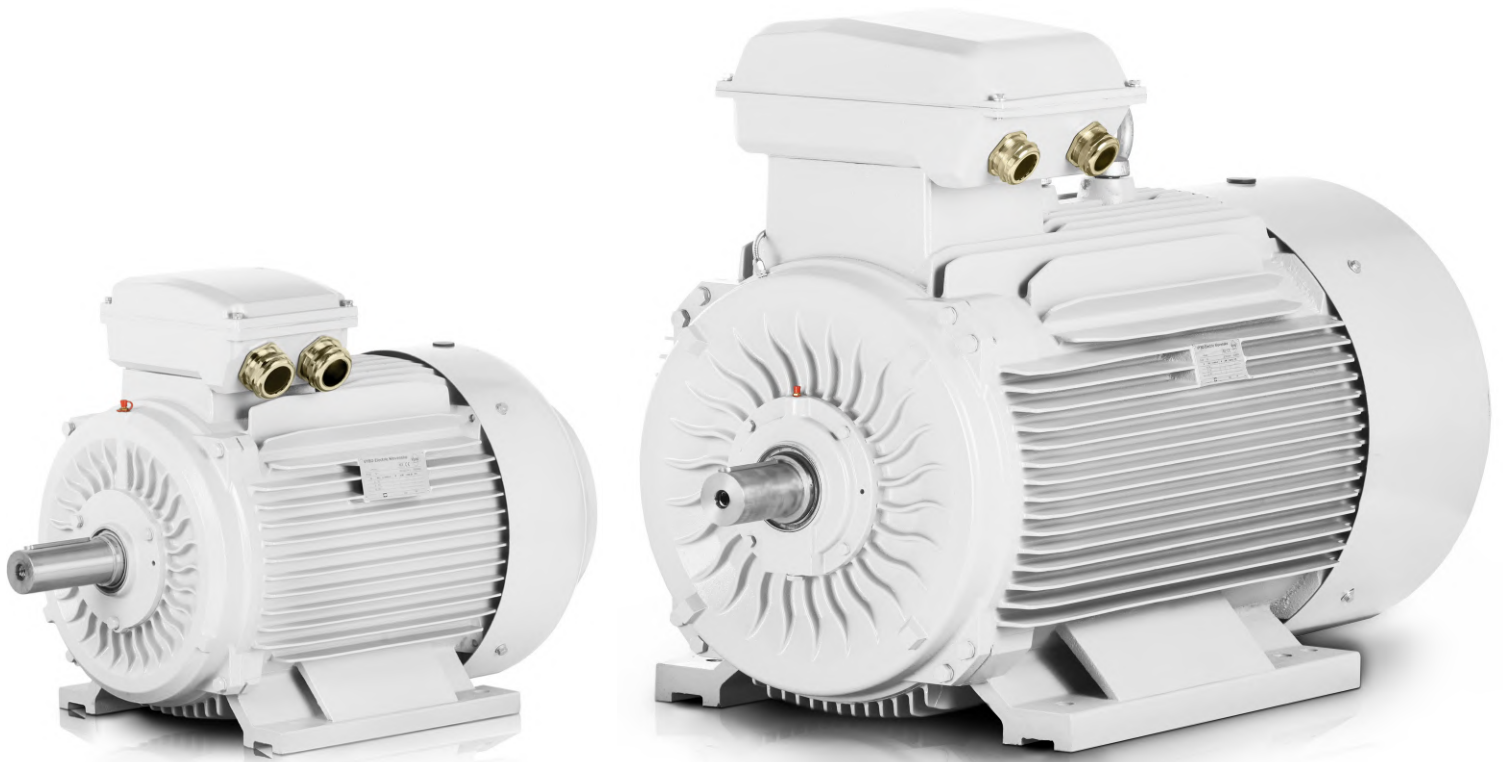
Installation and overall dimensions

IM B34 2AL-56-132



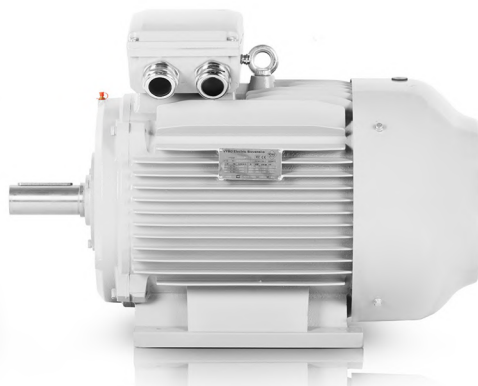
Frame size	P	N	M	S	T	A	AA	AB	AC	AD	B	BB	C	D	DH	E	F	G	H	HA	K	KK	L
56	80	50	65	M5	2,5	90	23	115	112	100	71	88	36	9	M4*12	20	3	7,2	56	7	5,8*8,8	2-M20*1,5	199
63	90	60	75	M5	2,5	100	24	135	123	109	80	100	40	11	M4*12	23	4	8,5	63	7	7*10	2-M20*1,5	221
71	105	70	85	M6	2,5	112	26	150	136	127	90	110	45	14	M5*12	30	5	11	71	8	7*10	2-M20*1,5	247
80M	120	80	100	M6	3	125	35	153	157	129	100	125	50	19	M6*16	40	6	16	80	8	10*14	2-M25*1,5	295
90S	140	95	115	M8	3	140	37	177	177	140	100	125	56	24	M8*19	50	8	20	90	10	10*14	2-M25*1,5	327
90L	140	95	115	M8	3	140	37	177	177	140	125	150	56	24	M8*19	50	8	20	90	10	10*14	2-M25*1,5	357
100L	160	110	130	M8	3,5	160	40	196	197	156	140	172	63	28	M10*22	60	8	24	100	11	12*16	2-M32*1,5	403
112M	160	110	130	M8	3,5	190	41	226	219	166	140	180	70	28	M10*22	60	8	24	112	12	12*16	2-M32*1,5	430
132S	200	130	165	M10	3,5	216	51	260	258	188	140	186	89	38	M12*28	80	10	33	132	15	12*16	2-M32*1,5	460
132M	200	130	165	M10	3,5	216	51	260	258	188	178	224	89	38	M16*36	80	10	33	132	15	12*16	2-M32*1,5	499





2LC series

Electric motors for standard and heavy duty in a cast iron frame



SOLUTIONS FOR INDUSTRY

Technical data 2LC

NO	Frame and size Type	Full load current			Rated power kW	Rated speed r/min	Efficiency %	Power factor (cos φ)	Direct on line starting torque ratio LRT	Direct on line starting current ratio LRA	Direct on line pull out torque ratio BDT	Noise LwdB (A)	Weight kg	Rotor inertia J
		380V	400V	415V										
2 poles electric motors														
1	2LC-80M 1-2	1,79	1,7	1,51	0,75	2850	77,4	0,82	2,3	6,8	2,3	62	17	1
2	2LC-80M2-2	2,53	2,4	2,13	1,1	2870	79,6	0,83	2,3	7,1	2,3	62	19	1,3
3	2LC-90S-2	3,37	3,2	2,84	1,5	2880	81,3	0,84	2,3	7,3	2,3	67	26	2
4	2LC-90L-2	4,74	4,5	4	2,2	2880	83,2	0,85	2,3	7,6	2,3	67	30	2,6
5	2LC-100L1-2	6,21	5,9	5,24	3	2880	84,6	0,87	2,2	7,8	2,3	74	40	4,3
6	2LC-112M -2	8	7,6	6,76	4	2900	85,8	0,88	2,3	8,1	2,3	77	46	5,9
7	2LC-132S1-2	10,9	10,4	9,24	5,5	2910	87	0,88	2,2	8,2	2,3	79	64	13
8	2LC-132S2-2	14,5	13,8	12,3	7,5	2910	88,1	0,89	2,2	7,8	2,3	79	70	15,3
9	2LC-160M 1-2	21,1	20	17,8	11	2940	89,4	0,89	2,2	7,9	2,3	81	120	49,3
10	2LC-160M2-2	28,3	26,9	23,9	15	2940	90,3	0,89	2,2	8	2,3	81	132	56,4
11	2LC-160L-2	34,7	33	29,3	18,5	2940	90,9	0,89	2,2	8	2,3	81	150	65,4
12	2LC-180M-2	41,2	39,1	34,8	22	2950	91,3	0,89	2,2	8,1	2,3	83	199	81,5
13	2LC-200L1-2	55,7	52,9	47	30	2960	92	0,89	2	7,5	2,3	84	243	164
14	2LC-200L2-2	68,3	64,9	57,7	37	2960	92,5	0,89	2	7,5	2,3	84	263	174
15	2LC-225M-2	82,7	78,6	69,9	45	2960	92,9	0,89	2,2	7,5	2,3	86	312	305
16	2LC-250M-2	101	96	85,3	55	2970	93,2	0,89	2,2	7,6	2,3	89	407	424
17	2LC-280S-2	137	130	116	75	2975	93,8	0,89	2	6,9	2,3	91	536	994
18	2LC-280M -2	163	155	138	90	2975	94,1	0,89	2	6,9	2,3	91	609	1049
19	2LC-315S-2	197	187	166	110	2975	94,3	0,9	2	7	2,2	92	875	1341
20	2LC-315M -2	236	224	199	132	2975	94,6	0,9	2	7	2,2	92	940	1893
21	2LC-315L1-2	282	268	238	160	2975	94,8	0,91	2	7,1	2,2	92	1004	2147
22	2LC-315L2-2	352	334	297	200	2975	95	0,91	2	7,1	2,2	92	1080	2380
23	2LC-355M -2	440	418	372	250	2980	95	0,91	1,6	7,1	2,2	100	1900	3000
24	2LC-355L-2	554	526	468	315	2980	95	0,91	1,6	7,2	2,2	100	2300	3500



Technical data 2LC

NO	Frame and size Type	Full load current			Rated power kW	Rated speed r/min	Efficiency %	Power factor (cos ϕ)	Direct on line starting torque ratio LRT	Direct on line starting current ratio LRA	Direct on line pull out torque ratio BDT	Noise LwdB (A)	Weight kg	Rotor inertia J
		380V	400V	415V										
4 poles electric motors														
25	2LC-80M2-4	1,89	1,8	1,6	0,75	1420	79,6	0,76	2,3	6,4	2,3	56	20	2,5
26	2LC-90S-4	2,74	2,6	2,31	1,1	1420	81,4	0,77	2,3	6,6	2,3	59	28	3
27	2LC-90L-4	3,68	3,5	3,11	1,5	1420	82,8	0,78	2,3	6,7	2,3	59	33	3,9
28	2LC-100L1-4	4,95	4,7	4,18	2,2	1440	84,3	0,8	2,3	7,3	2,3	64	42	7,8
29	2LC-100L2-4	6,53	6,2	5,51	3	1440	85,5	0,81	2,3	7,5	2,3	64	46	9,4
30	2LC-112M-4	8,53	8,1	7,2	4	1445	86,6	0,81	2,3	7,5	2,3	65	56	13
31	2LC-132S-4	11,7	11,1	9,87	5,5	1450	87,7	0,82	2	7,5	2,3	71	73	28,8
32	2LC-132M-4	15,5	14,7	13,1	7,5	1450	88,7	0,83	2	7,3	2,3	71	87	37
33	2LC-160M-4	22,4	21,3	18,9	11	1470	89,8	0,83	2,2	7,4	2,3	73	122	77,8
34	2LC-160L-4	29,9	28,4	25,2	15	1470	90,6	0,84	2,2	7,5	2,3	73	146	102
35	2LC-180M-4	36,2	34,4	30,6	18,5	1470	91,2	0,85	2,2	7,6	2,3	76	191	153
36	2LC-180L-4	42,9	40,8	36,3	22	1470	91,6	0,85	2,2	7,7	2,3	76	214	189
37	2LC-200L-4	58,1	55,2	49,1	30	1470	92,3	0,85	2,2	7,1	2,3	76	265	287
38	2LC-225S-4	70,5	67	59,6	37	1480	92,7	0,86	2,2	7,3	2,3	78	322	477
39	2LC-225M-4	85,4	81,1	72,1	45	1480	93,1	0,86	2,2	7,3	2,3	78	344	559
40	2LC-250M-4	104	99	88	55	1480	93,5	0,86	2,2	7,3	2,3	79	450	757
41	2LC-280S-4	139	132	117	75	1480	94	0,87	2,2	6,8	2,3	80	589	1936
42	2LC-280M-4	165	157	140	90	1480	94,2	0,88	2,2	6,9	2,3	80	682	2341
43	2LC-315S-4	199	189	168	110	1480	94,5	0,89	2,1	6,9	2,2	88	898	3252
44	2LC-315M-4	238	226	201	132	1480	94,7	0,89	2,1	6,9	2,2	88	984	3776
45	2LC-315L1-4	284	270	240	160	1480	94,9	0,9	2,2	6,9	2,2	88	1053	4130
46	2LC-315L2-4	355	337	300	200	1480	95,1	0,9	2,1	6,9	2,2	88	1150	4730
47	2LC-355M-4	444	422	375	250	1490	95,1	0,9	2,1	6,9	2,2	95	1700	6500
48	2LC-355L-4	559	531	472	315	1490	95,1	0,9	2,1	6,9	2,2	95	1900	8200



Technical data 2LC

NO	Frame and size Type	Full load current			Rated power kW	Rated speed r/min	Efficiency %	Power factor (cos ϕ)	Direct on line starting torque ratio	Direct on line starting current ratio	Direct on line pull out torque ratio	Noise LwdB (A)	Weight kg	Rotor inertia J
		Amps (A)	380V	400V					415V	LRT	LRA			
6 poles electric motors														
49	2LC-90S-6	2,11	2	1,78	0,75	930	75,9	0,71	2	5,8	2,1	57	26	3,9
50	2LC-90L-6	2,95	2,8	2,49	1,1	930	78,1	0,72	2	5,9	2,1	57	32	5,4
51	2LC-100L1-6	3,89	3,7	3,29	1,5	930	79,8	0,72	2	5,9	2,1	61	41	10,8
52	2LC-112M-6	5,68	5,4	4,8	2,2	945	81,8	0,72	2,1	6,2	2,1	65	48	15,3
53	2LC-132S-6	7,47	7,1	6,31	3	960	83,3	0,72	2	6,4	2,1	69	61	32,2
54	2LC-132M1-6	9,68	9,2	8,18	4	965	84,6	0,74	2	6,6	2,1	69	74	39,9
55	2LC-132M2-6	12,9	12,3	10,9	5,5	965	86	0,75	2	6,8	2,1	69	87	50
56	2LC-160M-6	16,7	15,9	14,1	7,5	970	87,2	0,78	2,1	6,8	2,1	73	118	97,2
57	2LC-160L-6	23,9	22,7	20,2	11	970	88,7	0,79	2,1	6,9	2,1	73	148	128
58	2LC-180L-6	31,4	29,8	26,5	15	980	89,7	0,81	2	7,3	2,1	73	195	229
59	2LC-200L1-6	38,4	36,5	32,4	18,5	980	90,4	0,81	2,1	7,2	2,1	73	234	338
60	2LC-200L2-6	45,4	43,1	38,3	22	980	90,9	0,81	2,1	7,3	2,1	73	253	384
61	2LC-225M-6	60,6	57,6	51,2	30	980	91,7	0,82	2	6,8	2,1	74	288	570
62	2LC-250M-6	73,5	69,8	62	37	980	92,2	0,83	2,1	7	2,1	76	405	885
63	2LC-280S-6	86,3	82	72,9	45	980	92,7	0,85	2,1	7,2	2	78	521	1746
64	2LC-280M-6	105	100	88,9	55	980	93,1	0,85	2,1	7,2	2	78	602	2138
65	2LC-315S-6	143	136	121	75	990	93,7	0,85	2	6,5	2	83	833	4110
66	2LC-315M-6	172	163	145	90	990	94	0,85	2	6,6	2	83	897	4780
67	2LC-315L1-6	208	198	176	110	990	94,3	0,85	2	6,6	2	83	1004	5450
68	2LC-315L2-6	246	234	208	132	990	94,6	0,86	2	6,6	2	83	1111	6120
69	2LC-355M1-6	298	283	252	160	990	94,8	0,86	1,9	6,7	2	85	1550	9500
70	2LC-355M2-6	372	353	314	200	990	95	0,86	2	6,8	2	85	1600	10400
71	2LC-355L-6	465	442	393	250	990	95	0,86	2	6,8	2	85	1700	12400

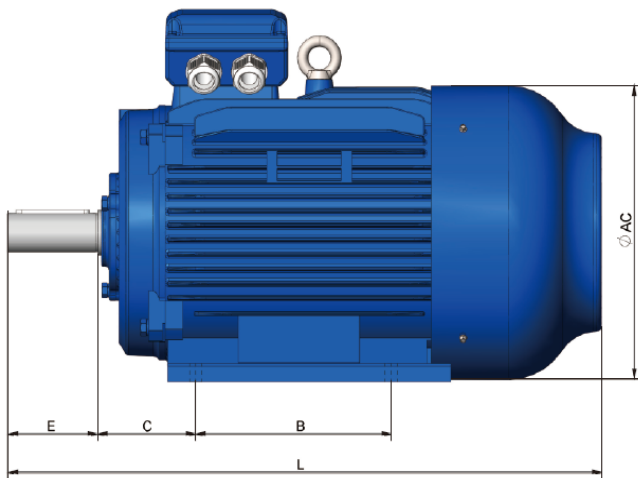


Technical data 2LC

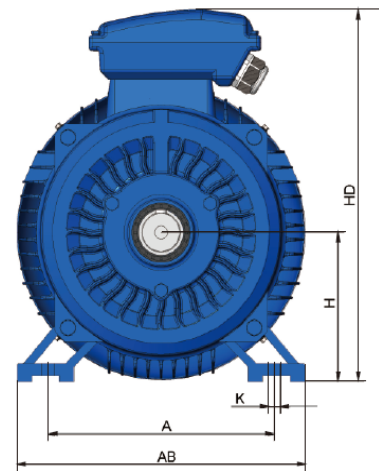
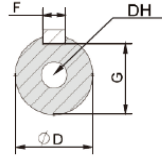
NO	Frame and size Type	Full load current			Rated power kW	Rated speed r/min	Efficiency %	Power factor (cos ϕ)	Direct on line starting torque ratio LRT	Direct on line starting current ratio LRA	Direct on line pull out torque ratio BDT	Noise LwdB (A)	Weight kg	Rotor inertia J
		380V	400V	415V										
8 poles electric motors														
72	2LC-80M1-8	0,98	0,93	0,89	0,18	645	45,9	0,61	1,8	3,3	1,9	52	15	2,7
73	2LC-80M2-8	1,23	1,17	1,13	0,25	645	50,6	0,61	1,8	3,3	1,9	52	16	3,2
74	2LC-90S-8	1,64	1,56	1,5	0,37	675	56,1	0,61	1,8	4	1,9	56	20	5,5
75	2LC-90L-8	2,22	2,11	2,03	0,55	680	61,7	0,61	1,8	4	2	56	23	7
76	2LC-100L1-8	2,57	2,44	2,35	0,75	680	66,2	0,67	1,8	4	2	59	29	9,7
77	2LC-100L2-8	3,42	3,25	3,13	1,1	680	70,8	0,69	1,6	5	2	59	31	11,9
78	2LC-112M-8	4,39	4,17	4,02	1,5	690	74,1	0,7	1,8	5	2	61	41	24,5
79	2LC-132S-8	6,07	5,76	5,56	2,2	710	77,6	0,71	1,8	6	2	64	61	31,4
80	2LC-132M-8	7,81	7,41	7,15	3	710	80	0,73	1,8	6	2	64	74	39,5
81	2LC-160M1-8	10,2	9,7	9,3	4	720	81,9	0,73	1,9	6	2	68	95,5	79,8
82	2LC-160M2-8	13,5	12,8	12,3	5,5	720	83,8	0,74	1,9	6	2	68	107	98,7
83	2LC-160L-8	17,8	16,9	16,3	7,5	720	85,3	0,75	1,9	6	2	68	128	134
84	2LC-180L-8	25,6	24,4	23,5	11	730	86,9	0,75	2	6,5	2	70	169	215
85	2LC-200L-8	34,1	32,4	31,2	15	730	88	0,76	2	6,6	2	73	236	359
86	2LC-225S-8	41,7	39,7	38,2	18,5	730	88,6	0,76	1,9	6,6	2	73	274	520
87	2LC-225M-8	48,1	45,7	44	22	730	89,1	0,78	1,9	6,6	2	73	290	580
88	2LC-250M-8	64,3	61	58,8	30	735	89,8	0,79	1,9	6,5	2	75	370	834
89	2LC-280S-8	78,8	74,9	72,2	37	740	90,3	0,79	1,9	6,6	2	76	488	1650
90	2LC-280M-8	95,4	90,7	87,4	45	740	90,7	0,79	1,9	6,6	2	76	563	1930
91	2LC-315S-8	115	109	105	55	735	90	0,81	1,8	6,6	2	82	852	4790
92	2LC-315M-8	154	146	141	75	735	91,6	0,81	1,8	6,2	2	82	933	5580
93	2LC-315L1-8	181	172	166	90	735	91,9	0,82	1,8	6,4	2	82	1027	6370
94	2LC-315L2-8	221	210	202	110	735	92,3	0,82	1,8	6,4	2	82	1117	7230
95	2LC-355M1-8	264	251	242	132	740	92,6	0,82	1,8	6,4	2	90	2000	7900
96	2LC-355M2-8	319	303	292	160	740	93	0,82	1,8	6,4	2	90	2150	10300
97	2LC-355L-8	392	372	359	200	740	93,5	0,83	1,8	6,4	2	90	2250	12300



Installation data for 2LC



80-355



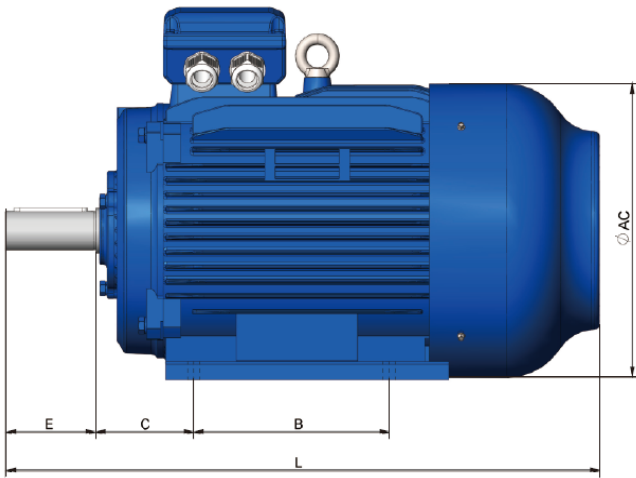
80-355

Frame with feet and end-shield without flange (IM B3)

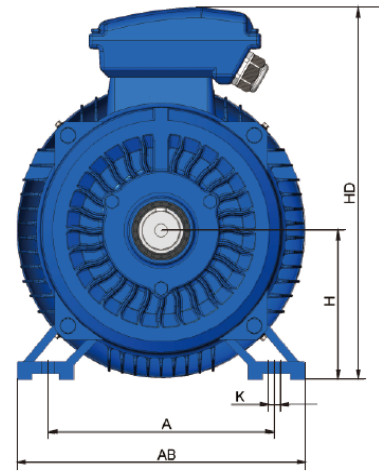
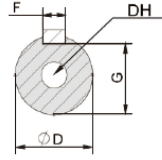
Frame size	Poles	A	A/2	B	C	D	E	F	G	H	K	AB	AC	AD	HD	L	DH*
80M	2 4 6	125	62,5	100	50	19	40	6	15,5	80	10	153	157	140	220	295	M6X16
90S	2 4 6	140	70	100	56	24	50	8	20	90	10	177	177	150	240	327	M8X19
90L	2 4 6	140	70	125	56	24	50	8	20	90	10	177	177	150	240	357	M8X19
100L	2 4 6	160	80	140	63	28	60	8	24	100	12	196	197	167	267	403	M10X22
112M	2 4 6	190	95	140	70	28	60	8	24	112	12	226	219	177	289	430	M10X22
132S	2 4 6	216	108	140	89	38	80	10	33	132	12	260	258	196	328	460	M12X28
132M	2 4 6	216	108	178	89	38	80	10	33	132	12	260	258	196	328	499	M12X28
160M	2 4 6	254	127	210	108	42	110	12	37	160	15	314	314	255	415	615	M16X36
160L	2 4 6	254	127	254	108	42	110	12	37	160	15	314	314	255	415	660	M16X36
180M	2 4 6	279	139,5	241	121	48	110	14	42,5	180	15	355	356	270	450	700	M16X36
180L	2 4 6	279	139,5	279	121	48	110	14	42,5	180	15	355	356	270	450	740	M16X36
200L	2 4 6	318	159	305	133	55	110	16	49	200	19	395	397	302	502	770	M20X42
225S	4	356	178	286	149	60	140	18	53	225	19	435	445	323	548	815	M20X42



Installation data for 2LC



80-355



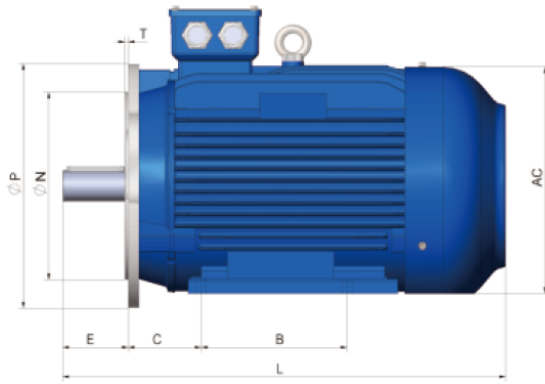
80-355

Frame with feet and end-shield without flange (IM B3)

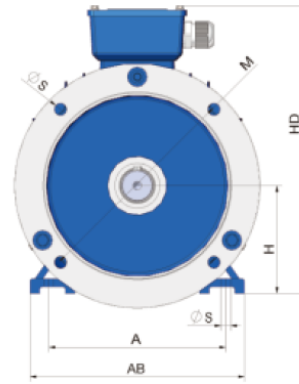
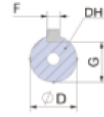
Frame size	Poles	A	A/2	B	C	D	E	F	G	H	K	AB	AC	AD	HD	L	DH*
225M	2	356	178	311	149	55	110	16	49	225	19	435	445	323	548	825	M20X42
	4 6	356	178	311	149	60	140	18	53	225	19	435	445	323	548	845	M20X42
250M	2	406	203	349	168	60	140	18	53	250	24	490	485	372	622	920	M20X42
	4 6	406	203	349	168	65	140	18	58	250	24	490	485	372	622	920	M20X42
280S	2	457	228,5	368	190	65	140	18	58	280	24	542	546	390	670	991	M20X42
	4 6	457	228,5	368	190	75	140	20	67,5	280	24	542	546	390	670	991	M20X42
280M	2	457	228,5	419	190	65	140	18	58	280	24	542	546	390	670	1046	M20X42
	4 6	457	228,5	419	190	75	140	20	67,5	280	24	542	546	390	670	1046	M20X42
315S	2	508	254	406	216	65	140	18	58	315	28	628	620	540	855	1185	M20X42
	4 6	508	254	406	216	80	170	22	71	315	28	628	620	540	855	1220	M20X42
315M	2	508	254	457	216	65	140	18	58	315	28	628	620	540	855	1290	M20X42
	4 6	508	254	457	216	80	170	22	71	315	28	628	620	540	855	1325	M20X42
315L	2	508	254	508	216	65	140	18	58	315	28	628	620	540	855	1290	M20X42
	4 6	508	254	508	216	80	170	22	71	315	28	628	620	540	855	1325	M20X42
355M	2	610	305	560	254	75	140	20	67,5	355	28	726	700	647	1002	1484	M20X42
	4 6	610	305	560	254	95	170	25	86	355	28	726	700	647	1002	1514	M20X42
355L	2	610	305	630	254	75	140	20	67,5	355	28	726	700	647	1002	1484	M20X42
	4 6	610	305	630	254	95	170	25	86	355	28	726	700	647	1002	1514	M20X42



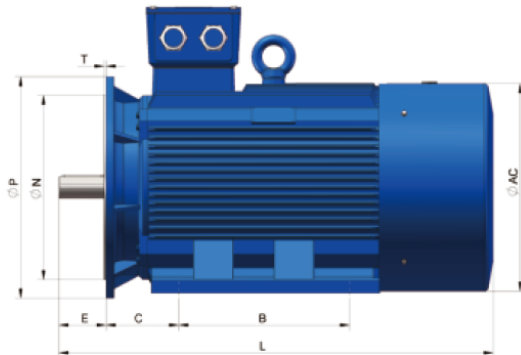
Installation data for 2LC



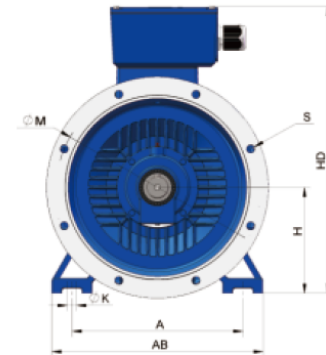
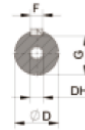
80-132



80-132



160-355



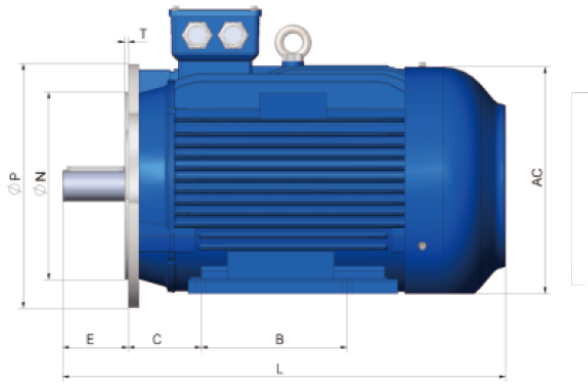
160-355

Frame with feet and end-shield with flange (IM B35)

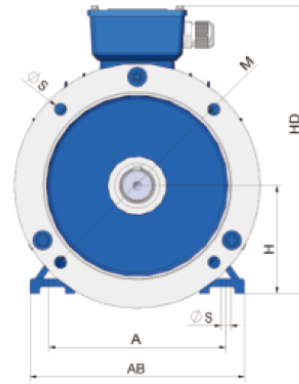
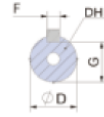
Frame size	Poles	A	A/2	B	C	D	E	F	G	H	K	M	N	P	S	T	Flange holes	AB	AC	AD	HD	L	DH*
80M	2 4 6	125	62,5	100	50	19	40	6	15,5	80	10	165	130	200	12	3,5	4	153	157	140	220	295	M6X16
90S	2 4 6	140	70	100	56	24	50	8	20	90	10	165	130	200	12	3,5	4	177	177	150	240	327	M8X19
90L	2 4 6	140	70	125	56	24	50	8	20	90	10	165	130	200	12	3,5	4	177	177	150	240	357	M8X19
100L	2 4 6	160	80	140	63	28	60	8	24	100	12	215	180	250	15	4	4	196	197	167	267	403	M10X22
112M	2 4 6	190	95	140	70	28	60	8	24	112	12	215	180	250	15	4	4	226	219	177	289	430	M10X22
132S	2 4 6	216	108	140	89	38	80	10	33	132	12	265	230	300	15	4	4	260	258	196	328	460	M12X28
132M	2 4 6	216	108	178	89	38	80	10	33	132	12	265	230	300	15	4	4	260	258	196	328	499	M12X28
160M	2 4 6	254	127	210	108	42	110	12	37	160	15	300	250	350	19	5	4	314	314	255	415	615	M16X36
160L	2 4 6	254	127	254	108	42	110	12	37	160	15	300	250	350	19	5	4	314	314	255	415	660	M16X36
180M	2 4 6	279	139,5	241	121	48	110	14	42,5	180	15	300	250	350	19	5	4	355	356	270	450	700	M16X36
180L	2 4 6	279	139,5	279	121	48	110	14	42,5	180	15	300	250	350	19	5	4	355	356	270	450	740	M16X36
200L	2 4 6	318	159	305	133	55	110	16	49	200	19	350	300	400	19	5	4	395	397	302	502	770	M20X42
225S	4	356	178	286	149	60	140	18	53	225	19	400	350	450	19	5	8	435	445	323	548	815	M20X42
225M	2	356	178	311	149	55	110	16	49	225	19	400	350	450	19	5	8	435	445	323	548	825	M20X42
	4 6	356	178	311	149	60	140	18	53	225	19	400	350	450	19	5	8	435	445	323	548	845	M20X42



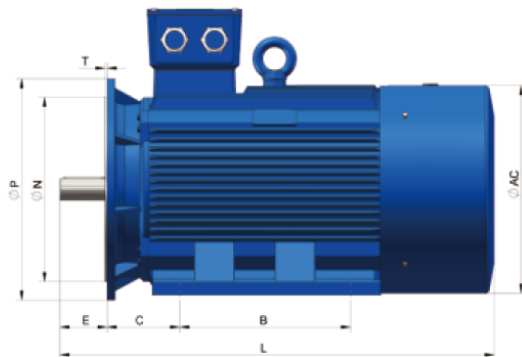
Installation data for 2LC



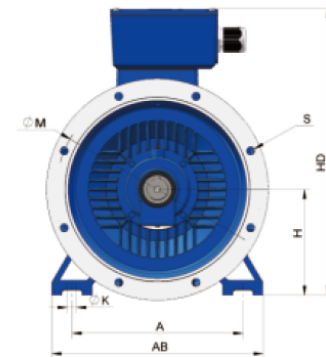
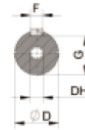
80-132



80-132



160-355



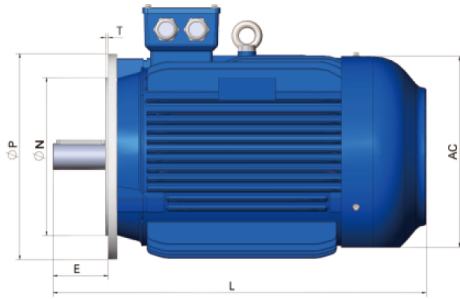
160-355

Frame with feet and end-shield with flange (IM B35)

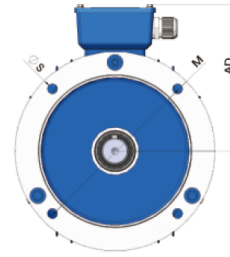
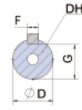
Frame size	Poles	A	A/2	B	C	D	E	F	G	H	K	M	N	P	S	T	Flange holes	AB	AC	AD	HD	L	DH*
250M	2	406	203	349	168	60	140	18	53	250	24	500	450	550	19	5	8	490	485	372	622	920	M20X42
	4/6	406	203	349	168	65	140	18	58	250	24	500	450	550	19	5	8	490	485	372	622	920	M20X42
280S	2	457	228,5	368	190	65	140	18	58	280	24	500	450	550	19	5	8	542	546	390	670	991	M20X42
	4/6	457	228,5	368	190	75	140	20	67,5	280	24	500	450	550	19	5	8	542	546	390	670	991	M20X42
280M	2	457	228,5	419	190	65	140	18	58	280	24	500	450	550	19	5	8	542	546	390	670	1046	M20X42
	4/6	457	228,5	419	190	75	140	20	67,5	280	24	500	450	550	19	5	8	542	546	390	670	1046	M20X42
315S	2	508	254	406	216	65	140	18	58	315	28	600	550	660	24	6	8	628	620	540	855	1185	M20X42
	4/6	508	254	406	216	80	170	22	71	315	28	600	550	660	24	6	8	628	620	540	855	1220	M20X42
315M	2	508	254	457	216	65	140	18	58	315	28	600	550	660	24	6	8	628	620	540	855	1290	M20X42
	4/6	508	254	457	216	80	170	22	71	315	28	600	550	660	24	6	8	628	620	540	855	1325	M20X42
315L	2	508	254	508	216	65	140	18	58	315	28	600	550	660	24	6	8	628	620	540	855	1290	M20X42
	4/6	508	254	508	216	80	170	22	71	315	28	600	550	660	24	6	8	628	620	540	855	1325	M20X42
355M	2	610	305	560	254	75	140	20	67,5	355	28	740	680	800	24	6	8	726	700	647	1002	1484	M20X42
	4/6	610	305	560	254	95	170	25	86	355	28	740	680	800	24	6	8	726	700	647	1002	1514	M20X42
355L	2	610	305	630	254	75	140	20	67,5	355	28	740	680	800	24	6	8	726	700	647	1002	1484	M20X42



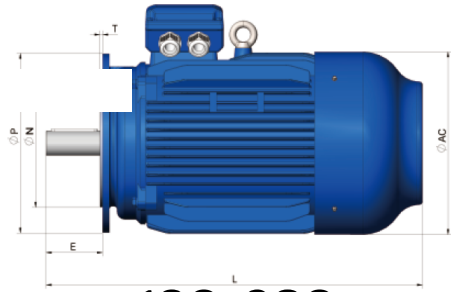
Installation data for 2LC



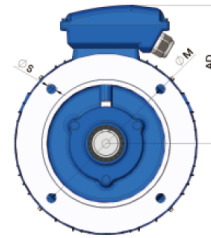
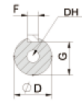
80-132



80-132



160-280



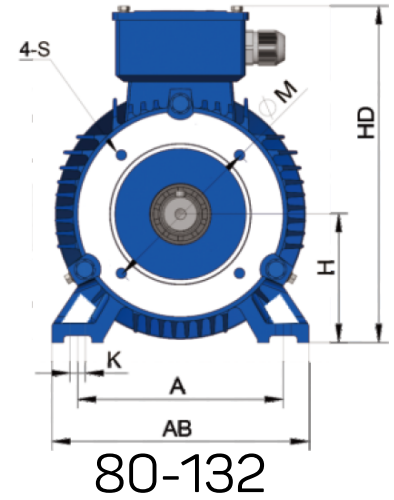
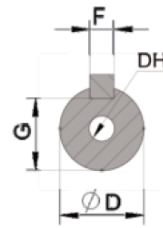
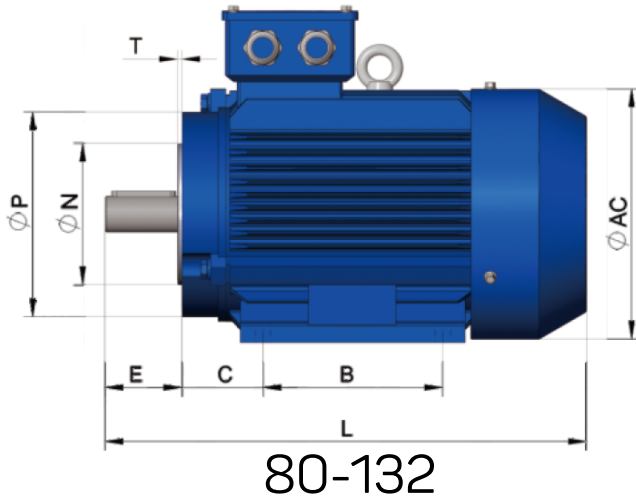
160-280

Frame without feet and end-shield with flange (IM B5)

Frame size	Poles	D	E	F	G	M	N	P	S	T	Flange holes	AC	AD	HF	L	DH*
80M	2 4 6	19	40	6	15,5	165	130	200	12	3,5	4	157	140	220	295	M6X16
90S	2 4 6	24	50	8	20	165	130	200	12	3,5	4	177	150	240	327	M8X19
90L	2 4 6	24	50	8	20	165	130	200	12	3,5	4	177	150	240	357	M8X19
100L	2 4 6	28	60	8	24	215	180	250	15	4	4	197	167	267	403	M10X22
112M	2 4 6	28	60	8	24	215	180	250	15	4	4	219	177	289	430	M10X22
132S	2 4 6	38	80	10	33	265	230	300	15	4	4	258	196	328	460	M12X28
132M	2 4 6	38	80	10	33	265	230	300	15	4	4	258	196	328	499	M12X28
160M	2 4 6	42	110	12	37	300	250	350	19	5	4	314	255	415	615	M16X36
160L	2 4 6	42	110	12	37	300	250	350	19	5	4	314	255	415	660	M16X36
180M	2 4 6	48	110	14	42,5	300	250	350	19	5	4	356	270	450	700	M16X36
180L	2 4 6	48	110	14	42,5	300	250	350	19	5	4	356	270	450	740	M16X36
200L	2 4 6	55	110	16	49	350	300	400	19	5	4	397	302	502	770	M20X42
225S	4	60	140	18	53	400	350	450	19	5	8	445	323	548	815	M20X42
225M	2	55	110	16	49	400	350	450	19	5	8	445	323	548	825	M20X42
	4 6	60	140	18	53	400	350	450	19	5	8	445	323	548	845	M20X42
250M	2	60	140	18	53	500	450	550	19	5	8	485	372	622	920	M20X42
	4 6	65	140	18	58	500	450	550	19	5	8	485	372	622	920	M20X42
280S	2	65	140	18	58	500	450	550	19	5	8	546	390	670	991	M20X42
	4 6	75	140	20	67,5	500	450	550	19	5	8	546	390	670	991	M20X42
280M	2	65	140	18	58	500	450	550	19	5	8	546	390	670	1046	M20X42
	4 6	75	140	20	67,5	500	450	550	19	5	8	546	390	670	1046	M20X42

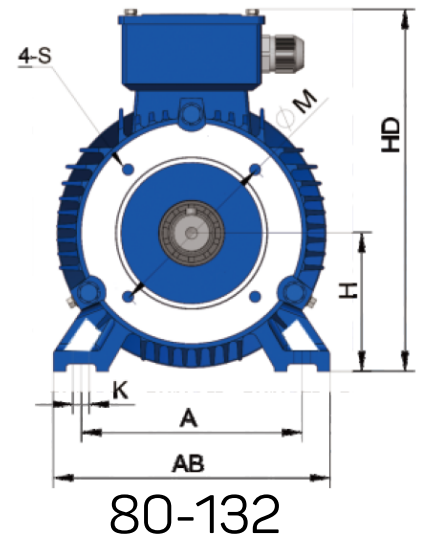
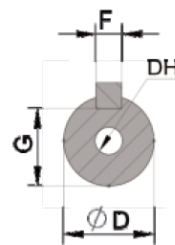
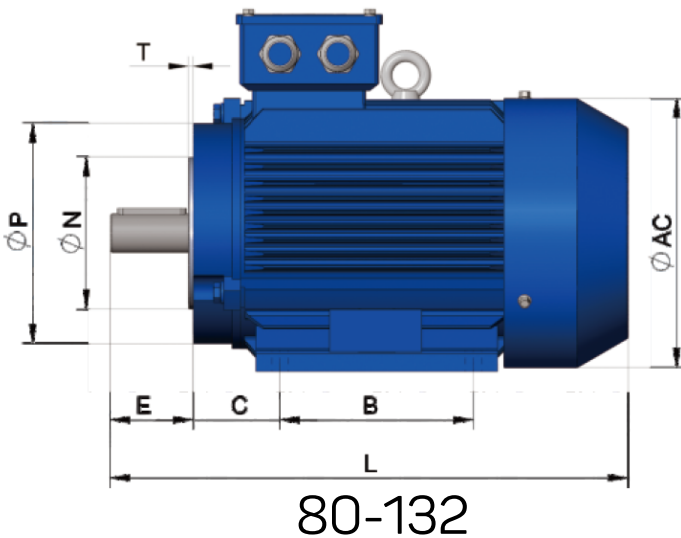


Installation data for 2LC



Frame with feet and end-shield with flange (IM B34)

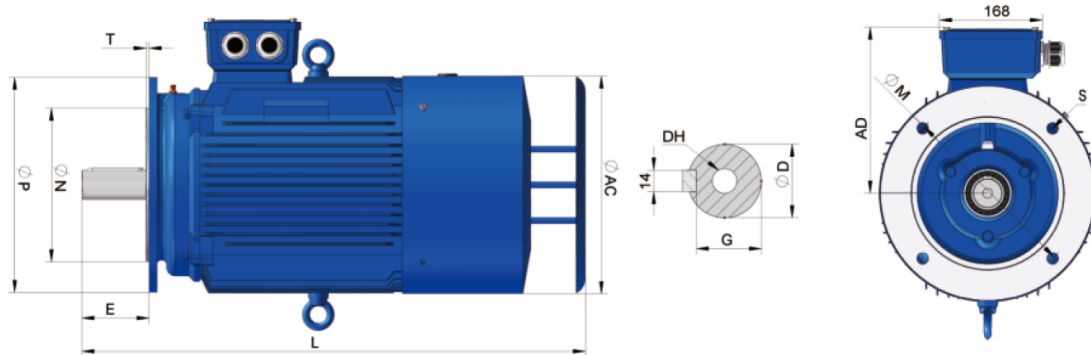
Frame size	Poles	A	A/2	B	C	D	E	F	G	H	K	M	N	P	S	T	Flange holes	AB	AC	AD	HD	L	DH
80M	2 4 6	125	62,5	100	50	19	40	6	15,5	80	10	100	80	120	M6	3,0	4	153	157	140	220	295	M6X16
90S	2 4 6	140	70	100	56	24	50	8	20	90	10	115	95	140	M8	3,0	4	177	177	150	240	327	M8X19
90L	2 4 6	140	70	125	56	24	50	8	20	90	10	115	95	140	M8	3,0	4	177	177	150	240	357	M8X19
100L	2 4 6	160	80	140	63	28	60	8	24	100	12	130	110	160	M8	3,5	4	196	197	167	267	403	M10X22
112M	2 4 6	190	95	140	70	28	60	8	24	112	12	130	110	160	M8	3,5	4	226	219	177	289	430	M10X22
132S	2 4 6	216	108	140	89	38	80	10	33	132	12	165	130	200	M10	3,5	4	260	258	196	328	460	M12X28
132M	2 4 6	216	108	178	89	38	80	10	33	132	12	165	130	200	M10	3,5	4	260	258	196	328	499	M12X28



Installation data for 2LC

Frame without feet and end-shield with flange (IM B14)

Frame size	Poles	D	E	F	G	M	N	P	S	T	Flange holes	AC	AD	HF	L	DH
80M	2 4 6	19	40	6	15,5	100	80	120	M6	3,0	4	157	140	215	295	M6X16
90S	2 4 6	24	50	8	20	115	95	140	M6	3,0	4	177	150	250	327	M8X19
90L	2 4 6	24	50	8	20	115	95	140	M6	3,0	4	177	150	252	357	M8X19
100L	2 4 6	28	60	8	24	130	110	160	M8	3,5	4	197	167	270	403	M10X22
112M	2 4 6	28	60	8	24	130	110	160	M8	3,5	4	219	177	300	430	M10X22
132S	2 4 6	38	80	10	33	165	130	200	M10	3,5	4	258	196	315	460	M12X28
132M	2 4 6	38	80	10	33	165	130	200	M10	3,5	4	258	196	315	499	M12X28



Frame without feet and end-shield with flange (IM V1)

Frame size	Poles	D	E	F	M	N	P	S	T	Flange holes	AC	AD	HF	L
160M	2 4 6	42	110	12	300	250	350	19	5	4	314	255	455	615
160L	2 4 6	42	110	12	300	250	350	19	5	4	314	255	455	660
180M	2 4 6	48	110	14	300	250	350	19	5	4	356	270	500	700
180L	2 4 6	48	110	14	300	250	350	19	5	4	356	270	500	740
200L	2 4 6	55	110	16	350	300	400	19	5	4	397	302	550	770
225S	4	60	140	18	400	350	450	19	5	8	445	323	610	815
225M	2	55	110	16	400	350	450	19	5	8	445	323	610	825
	4 6	60	140	18	400	350	450	19	5	8	445	323	610	845
250M	2	60	140	18	500	450	550	19	5	8	485	372	650	920
	4 6	65	140	18	500	450	550	19	5	8	546	372	650	920
280S	2	65	140	18	500	450	550	19	5	8	546	390	720	991
	4 6	75	140	20	500	450	550	19	5	8	546	390	720	991
280M	2	65	140	18	500	450	550	19	5	8	620	390	720	1046
	4 6	75	140	20	500	450	550	19	5	8	620	390	900	1046
315S	2	65	140	18	600	550	660	24	6	8	620	540	900	1185
	4 6	80	170	22	600	550	660	24	6	8	620	540	900	1220
315M	2	65	140	18	600	550	660	24	6	8	620	540	900	1290
	4 6	80	170	22	600	550	660	24	6	8	620	540	900	1325
315L	2	65	140	18	600	550	660	24	6	8	620	540	900	1290
	4 6	80	170	22	600	550	660	24	6	8	620	540	900	1325
355M	2	75	140	20	740	680	800	24	6	8	700	647	1010	1484
	4 6	95	170	25	740	680	800	24	6	8	700	647	1010	1514
355L	2	75	140	20	740	680	800	24	6	8	700	647	1010	1484
	4 6	95	170	25	740	680	800	24	6	8	700	647	1010	1514





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052 01 Spišská Nová Ves
Slovenská republika

www.vyboelectric.com



SOLUTIONS FOR INDUSTRY

BUREAU VERITAS
Certification



VYBO Electric a.s.
Radlinského 18, 052 01 Spišská Nová Ves
Slovak Republic

Bureau Veritas Certification Holding SAS – UK Branch certifies that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

ISO 14001: 2015

Scope of certification

MANUFACTURE AND SALE OF ELECTRIC MOTORS. SALES AND DEVELOPMENT OF VARIABLE FREQUENCY DRIVES.

Original cycle start date: 18.05.2022
Expiry date of previous cycle: N/A
Certification Audit date: 31.03.2022
Certification cycle start date: 18.05.2022

Subject to the continued satisfactory operation of the organization's Management System, this certificate expires on: 17.05.2025

Certificate No. SK-U22 055E Version: 1 Issue date: 18.05.2022

Certification body address: 5th Floor, 66 Prescot Street, London E1 8HQ, United Kingdom
Local office: Plynárskeho 7/B, BRATISLAVA 821 09, Slovak Republic



Further clarifications regarding the scope of this certificate and the applicability of the management system requirements may be obtained by consulting the organisation. To check this certificate validity please call: +421 2 5341 4165

Page 1 of 1



Bureau Veritas Certification

Certificate

Awarded to

VYBO Electric a.s.
Radlinského 18, 052 01 Spišská Nová Ves
Slovak Republic

BUREAU VERITAS CERTIFICATION (Z) s.r.o. certifies that the Management System of the above organisation has been assessed and found to be in accordance with the requirements of the management system standard detailed below

Standard

ISO 45001:2018

Scope of supply

MANUFACTURE AND SALE OF ELECTRIC MOTORS. SALES AND DEVELOPMENT OF VARIABLE FREQUENCY DRIVES.

Original Approval Date: 18-05-2022
Expiry date of previous cycle: N/A
Certification Cycle Start Date: 18-05-2022
Certification Cycle End Date: 17-05-2025
Subject to the continued satisfactory operation of the organisation's Management System, this certificate is valid until: 17-05-2025

To check this certificate validity please call: +420 210 068 215

Further clarifications regarding the scope of this certificate and the applicability of the management system requirements may be obtained by consulting the organisation.

Version 1 Issue Date: 18-05-2022

Certificate Number: CZF - 2200117

MANAGING OFFICE: BUREAU VERITAS CERTIFICATION (Z) s.r.o., Obchodní 1, 116 09 Praha 4, Czech Republic
ISSUING OFFICE ADDRESS: BUREAU VERITAS CERTIFICATION (Z) s.r.o., Obchodní 1, 143 02 Praha 4, Czech Republic

1/1

ZERTIFIKAT ◆ CERTIFICATE ◆ 認證證書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT



CERTIFICATE

TÜV SÜD Slovakia s.r.o.
Certification Body for Management Systems
Accredited by SNAS
Certificate on accreditation No. Q-011
certifies that



VYBO Electric a.s.
Radlinského 18
SK – 052 01 Spišská Nová Ves
IČO: 45 537 143

has established and applies
a Quality Management System for

**Manufacture and sale of electric motors.
Sales and development of variable frequency drives.**

An audit was performed, Report No. 2264/40/22/Q/AS/C
Proof has been furnished that the requirements
according to

STN EN ISO 9001:2016

are fulfilled. The certificate is valid from 2022-04-14 until 2025-04-13
Certificate Registration No. Q 2264-1

Bratislava, 2022-04-14

TÜV SÜD Slovakia s.r.o.
Certification Body for Management Systems
Member of Group TÜV SÜD
Jaskóva 6, 821 03 Bratislava

F-Q-019/26

Certificate SK22/3701

The management system of

VYBO Electric a.s.
Radlinského 18
052 01 Spišská Nová Ves, Slovakia

has been assessed and certified as meeting the requirements of

EN ISO 50001:2018

For the following activities

**Production & sales of electric motors.
Sales & development of variable frequency drives.**

Further clarifications regarding the scope of this certificate and the applicability of EN ISO 50001:2018 requirements may be obtained by consulting the organisation.

This certificate is valid from 7 April 2022 until 6 April 2025
and remains valid subject to satisfactory surveillance audits.
Recertification audit due a minimum of 60 days
before the expiration date.
Issue 1. Certified with SGS since 7 April 2022

Authorised by

Ing. Róbert Bodnár
Director

SGS Slovakia spol. s r. o.
Klyučská 14, 040 11 Košice, Slovakia
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Page 1 of 1



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