KRUGER

Ecowatt®

IE4 & IE5
/KPM Series

Permanent Magnet
Synchronous Motors

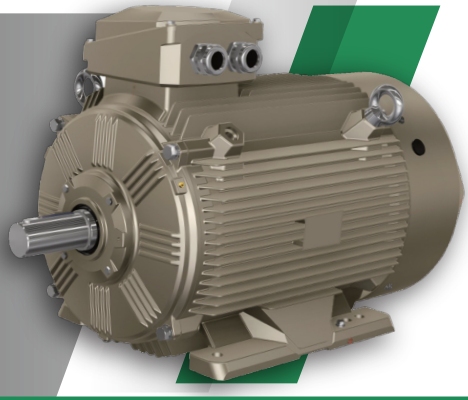
KRUGER

Why KRUGER ?

KRUGER has been a leading innovator and manufacturer of residential, commercial and industrial fan application solutions across Asia since 1985. Today with a direct presence in over 18 regions throughout Asia; world class R&D and manufacturing facilities; KRUGER are able to offer their customers unparalleled service and support at a local level. Our customers place their trust in KRUGER.

Why use a KRUGER Ecowatt® KPM Motors?

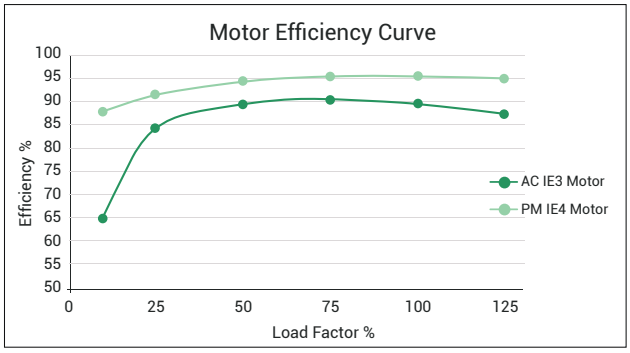
The growing demand for energy is in opposition to limited resources for fossil fuels a major reason for the further rise in energy costs. The development of electricity prices will have a significant impact on the competitiveness of companies, which is why a low energy consumption and thus lower energy cost is a decisive factor and motivation for your company success.



The innovative Ecowatt® KPM Series represent a special energy-efficient solution. These permanent-magnet synchronous motors are operated exclusively with our **Ecowatt® Drives** and are characterized by a considerably higher efficiency level over a wide speed range

Motor Technology Advantages

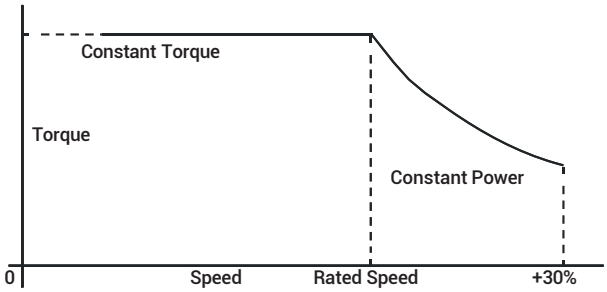
Ultra High Efficiency at Full Range of Speeds or Loads



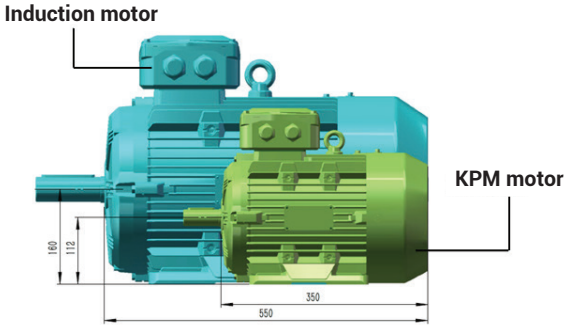
The motor's rotor relies on permanent magnet to generate magnetic field, no need for reactive excitation current, can significantly improve the power factor (up to 1), regardless of speed or load, can provide ultra high efficiency. It has superior efficiency compared with the induction motor in the full speed range, especially in the case of low speed or low torque output, the efficiency and power factor increase is more significant.

Maintain Constant Torque in a Wide Range of Speed Regulation

The motors can operate at constant torque over a wide range of rotational speeds, no need for forced ventilation. This feature makes it an ideal choice for applications that require variable speed and constant torque, even at low speeds, without the need for an encoder.



Greater Power Density - Reduced Mass and Volume



Permanent magnet synchronous motor with IE4&IE5 efficiency,compared with the same power and speed induction motor (IE3), the volume is reduced by 1-2 frame size, not only improve the motor efficiency, but also reduce the motor weight and volume. WEPM motors have shafts and bearings that can withstand higher power and torque in a smaller housing size.

Motor Specification

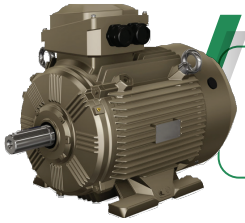
Technical Characteristics

Nomenclature

KPM X 5 - 132S - 22 - 3000

- 3000 — Rated speed (rpm)
- 22 — Rated power (kW)
- 132S — Frame size
- 5 — Efficiency level: 5 = IE5 , 4 = IE4
- X — Housing material code (cast iron motor by default)
  A- aluminum enclosure motor
- KPM — Product code: Kruger Permanent Magnet Synchronous Motor

Aluminium motor
Flexible feet
Frame size 56~160



Cast iron motor
Fixed feet
Frame size 80~315

Specification

Item	The motor features	
	Standard features	Optional (special)
Frame size	IE5 : 63~315 IE4 : 56~315	-
Rated power	IE 5 :0.18~315kW IE4 : 0.25~315kW	-
Rated speed	3000 ,1500 ,1000 rpm-	-
Rated voltage	380V	400V or customization
Duty	S1	S2, S3 and so on
Mounting option	B3	B5, B35, V1 and so on
Insulation	F(Δ T 80K)	H
S.F	1	>1.0
Protection	IP56, IP65, IP66 and so on	
Cooling mode	IC411	IC416
Frame material	Cast iron	Cast aluminium
Terminal box material	Cast aluminium	-
Terminal box position	Top	Right or left
Bearing lubrication	"H180 and below --Maintenance-free bearings, H200 and above-- Open type bearing with oil injection and discharge device "	
Thermal protection device	-	PTC, PTO, PT100, PT1000, Anticondensation heater
Variable Frequency Drive	Kruger K354 Series	Kruger K320 Series or K354 Series

Note: The voltage is the input voltage when the motor drives the frequency converter to run.

Electrical Performance Parameters

KPM-3000rpm IE5 Aluminum Housing Motor

Model Name	Rate Power		Frame	Full-load torque	Pole	380 V				Rated Current	Ke	Noise		Moment of inertia	Weight
						Frequency	Speed	Full-Load				LWA	LPA		
	kW	HP		Nm.	P	Hz	rpm	Efficiency%	P.F.	A	V/krpm	dB(A)	dB(A)	($kgm^2 \times 10^{-3}$)	kg
KPMA5-63M-0.25-3000	0.25	0.35	63M	0.8	4	100	3000	78.3	0.95	0.44	111	50	62	0.28	4.3
KPMA5-71M-0.37-3000	0.37	0.5	71M	1.2	4	100	3000	81.7	0.95	0.72	109	50	62	0.46	5.6
KPMA5-71M-0.55-3000	0.55	0.75	71M	1.8	4	100	3000	87.3	0.95	1.05	106	50	62	0.53	6
KPMA5-80M-0.75-3000	0.75	1	80M	2.4	4	100	3000	88.6	0.95	1.33	111	50	62	1.12	8.4
KPMA5-80M-1.1-3000	1.1	1.5	80M	3.5	4	100	3000	89.8	0.95	1.95	110	50	62	1.18	10.6
KPMA5-90S-1.5-3000	1.5	2	90S	4.8	4	100	3000	90.9	0.95	2.8	105	55	67	2.08	12.7
KPMA5-90L-2.2-3000	2.2	3	90L	7	4	100	3000	91.8	0.95	4	107	55	67	2.39	13.=8
KPMA5-100L-3-3000	3	4	100L	9.5	4	100	3000	92.6	0.95	5.8	109	62	74	5.56	18.4
KPMA5-112M-4-3000	4	5.5	112M	12.7	4	100	3000	93.3	0.95	7.3	110	65	77	9.16	25
KPMA5-132S-5.5-3000	5.5	7.5	132S	17.5	6	150	3000	94	0.95	10	112	67	79	42.3	29.1
KPMA5-132S-7.5-3000	7.5	10	132S	23.9	6	150	3000	94.5	0.95	13.3	111	67	79	44.5	30.3
KPMA5-160M-11-3000	11	15	160M	35	6	150	3000	95	0.95	19.5	114	68	81	53.8	50.3
KPMA5-160M-15-3000	15	20	160M	48	6	150	3000	95.3	0.95	26.5	112	68	81	74.3	60.2
KPMA5-160L-18.5-3000	18.5	25	160L	59	6	150	3000	95.6	0.95	33	114	68	81	78.4	63.5

KPM-3000rpm IE5 Cast Iron Motor

Model Name	Rate Power		Frame	Full-load torque	Pole	380 V				Rated Current	Ke	Noise		Moment of inertia	Weight
						Frequency	Speed	Full-Load				LWA	LPA		
	kW	HP		Nm.	P	Hz	rpm	Efficiency%	P.F.	A	V/krpm	dB(A)	dB(A)	($kgm^2 \times 10^{-3}$)	kg
KPM5-80M-1.1-3000	1.1	1.5	80M	3.5	4	100	3000	89.8	0.95	1.95	110	50	62	1.18	16.3
KPM5-90S-1.5-3000	1.5	2	90S	4.8	4	100	3000	90.9	0.95	2.8	105	55	67	2.08	20.1
KPM5-90L-2.2-3000	2.2	3	90L	7	4	100	3000	91.8	0.95	4	107	55	67	2.39	22
KPM5-100L-3-3000	3	4	100L	9.5	4	100	3000	92.6	0.95	5.8	109	62	74	5.56	30
KPM5-112M-4-3000	4	5.5	112M	12.7	4	100	3000	93.3	0.95	7.3	110	65	77	9.16	38.7
KPM5-132S-5.5-3000	5.5	7.5	132S	17.5	6	150	3000	94	0.95	10	112	67	79	42.3	48.1
KPM5-132S-7.5-3000	7.5	10	132S	23.9	6	150	3000	94.5	0.95	13.3	111	67	79	44.5	49.3
KPM5-160M-11-3000	11	15	160M	35	6	150	3000	95	0.95	19.5	114	68	81	53.8	83.3
KPM5-160M-15-3000	15	20	160M	48	6	150	3000	95.3	0.95	26.5	112	68	81	74.3	93.2
KPM5-160L-18.5-3000	18.5	25	160L	59	6	150	3000	95.6	0.95	33	114	68	81	78.4	100
KPM5-180M-22-3000	22	30	180M	70	6	150	3000	95.9	0.95	39	115	70	83	121	122
KPM5-200L-30-3000	30	41	200L	95.5	6	150	3000	96.1	0.95	53	110	71	84	218	189
KPM5-200L-37-3000	37	50	200L	118	6	150	3000	96.3	0.95	65	108	71	84	256	200
KPM5-225M-45-3000	45	61	225M	143	6	150	3000	96.4	0.95	82	115	73	86	425	246
KPM5-250M-55-3000	55	75	250M	175	6	150	3000	96.5	0.95	92	117	75	89	639	333
KPM5-280S-75-3000	75	102	280S	239	6	150	3000	96.6	0.95	127	108	77	91	873	422
KPM5-280M-90-3000	90	123	280M	287	6	150	3000	96.7	0.95	152	111	77	91	1019	459
KPM5-315S-110-3000	110	150	315S	350	6	150	3000	96.8	0.95	190	115	78	92	1463	765
KPM5-315S-132-3000	132	180	315S	420	6	150	3000	96.9	0.95	228	110	78	92	1647	787
KPM5-315L-160-3000	160	218	315L	510	6	150	3000	97	0.95	275	112	78	92	1894	852
KPM5-315L-200-3000	200	272	315L	637	6	150	3000	97.2	0.95	342	108	78	92	2140	879

Electrical Performance Parameters

KPM-1500rpm IE5 Aluminum Housing Motor

Model Name	Rate Power		Frame	Full-load torque	Pole	380 V				Rated Current	Ke	Noise		Moment of inertia	Weight
						Frequency	Speed	Full-Load				LWA	LPA		
	kW	HP		Nm.	P	Hz	rpm	Efficiency%	P.F.	A	V/krpm	dB(A)	dB(A)	($kgm^2 \times 10^{-3}$)	kg
KPMA5-63M-0.12-1500	0.12	0.17	63M	0.8	4	50	1500	74.3	0.95	0.22	194	43	55	1.31	3.9
KPMA5-63M-0.18-1500	0.18	0.25	63M	1.2	4	50	1500	78.7	0.95	0.32	203	43	55	1.57	4.2
KPMA5-71M-0.25-1500	0.25	0.35	71M	1.6	4	50	1500	81.5	0.95	0.48	203	43	55	0.53	6
KPMA5-71M-037-1500	0.37	0.5	71M	2.4	4	50	1500	84.3	0.95	0.71	213	43	55	0.86	7.7
KPMA5-80M-0.55-1500	0.55	0.75	80M	3.5	4	50	1500	86.7	0.95	1	220	44	56	1.18	10.6
KPMA5-80M-0.75-1500	0.75	1	80M	4.8	4	50	1500	88.2	0.95	1.3	220	44	56	1.87	11.4
KPMA5-90S-1.1-1500	1.1	1.5	90S	7	4	50	1500	89.5	0.95	2.2	203	47	59	2.23	13.3
KPMA5-90L-1.5-1500	1.5	2	90L	9.6	4	50	1500	90.4	0.95	2.9	209	47	59	2.99	14.9
KPMA5-100L-2.2-1500	2.2	3	100L	14	4	50	1500	91.4	0.95	4.1	219	52	64	7.97	22.5
KPMA5-100L-3-1500	3	4	100L	19.1	4	50	1500	92.1	0.95	5.5	220	52	64	10.4	26.9
KPMA5-112M-4-1500	4	5.5	112M	25.5	4	50	1500	92.8	0.95	7.4	218	53	65	14.4	33.3
KPMA5-132S-5.5-1500	5.5	7.5	132S	38	6	75	1500	93.4	0.95	10.2	213	59	71	59.9	37.7
KPMA5-132M-7.5-1500	7.5	10	132M	47.8	6	75	1500	94	0.95	13.5	219	59	71	78.9	47.5
KPMA5-160M-11-1500	11	15	160M	70	6	75	1500	94.6	0.95	19.1	222	60	73	84.6	65.2
KPMA5-160L-15-1500	15	20	160L	95.5	6	75	1500	95.1	0.95	26	222	60	73	109	78.4

KPM-1500rpm IE5 Cast Iron Motor

Model Name	Rate Power		Frame	Full-load torque	Pole	380 V				Rated Current	Ke	Noise		Moment of inertia	Weight
						Frequency	Speed	Full-Load				LWA	LPA		
	kW	HP		Nm.	P	Hz	rpm	Efficiency%	P.F.	A	V/krpm	dB(A)	dB(A)	($kgm^2 \times 10^{-3}$)	kg
KPM5-80M-0.55-1500	0.55	0.75	80M	3.5	4	50	1500	86.7	0.95	1	220	44	56	1.18	16.3
KPM5-80M-0.75-1500	0.75	1	80M	4.8	4	50	1500	88.2	0.95	1.3	220	44	56	1.87	17.2
KPM5-90S-1.1-1500	1.1	1.5	90S	7	4	50	1500	89.5	0.95	2.2	203	47	59	2.23	20.7
KPM5-90L-1.5-1500	1.5	2	90L	9.6	4	50	1500	90.4	0.95	2.9	209	47	59	2.99	23.1
KPM5-100L-2.2-1500	2.2	3	100L	14	4	50	1500	91.4	0.95	4.1	219	52	64	7.97	34.2
KPM5-100L-3-1500	3	4	100L	19.1	4	50	1500	92.1	0.95	5.5	220	52	64	10.4	38.6
KPM5-112M-4-1500	4	5.5	112M	25.5	4	50	1500	92.8	0.95	7.4	218	53	65	14.4	47
KPM5-132S-5.5-1500	5.5	7.5	132S	38	6	75	1500	93.4	0.95	10.2	213	59	71	59.9	56.7
KPM5-132M-7.5-1500	7.5	10	132M	47.8	6	75	1500	94	0.95	13.5	219	59	71	78.9	68.4
KPM5-160M-11-1500	11	15	160M	70	6	75	1500	94.6	0.95	19.1	222	60	73	84.6	98.1
KPM5-160L-15-1500	15	20	160L	95.5	6	75	1500	95.1	0.95	26	222	60	73	109	115
KPM5-180M-18.5-1500	18.5	25	180M	118	8	100	1500	95.3	0.95	31.5	212	63	76	153	130
KPM5-180L-22-1500	22	30	180L	140	8	100	1500	95.5	0.95	38	223	63	76	182	146
KPM5-200L-30-1500	30	41	200L	191	8	100	1500	95.9	0.95	50.5	218	63	76	331	219
KPM5-225S-37-1500	37	50	225S	236	6	75	1500	96.1	0.95	63	220	65	78	545	264
KPM5-225M-45-1500	45	61	225M	287	6	75	1500	96.3	0.95	76	216	65	78	724	302
KPM5-250M-55-1500	55	75	250M	350	6	75	1500	96.5	0.95	93	225	65	79	996	654
KPM5-280S-75-1500	75	102	280S	478	6	75	1500	96.7	0.95	127	222	66	80	1572	485
KPM5-280M-90-1500	90	123	280M	573	6	75	1500	96.9	0.95	151	222	66	80	1787	575
KPM5-315S-110-1500	110	150	315S	700	6	75	1500	97	0.95	197	220	74	88	2509	890
KPM5-315M-132-1500	132	180	315M	841	6	75	1500	97.1	0.95	240	216	74	88	3002	983
KPM5-315L-160-1500	160	218	315L	1019	6	75	1500	97.2	0.95	286	222	74	88	3864	1083
KPM5-315L-200-1500	200	272	315L	1273	6	75	1500	97.4	0.95	356	218	74	88	4480	1154

Electrical Performance Parameters

KPM-1000rpm IE5 Aluminum Housing Motor

Model Name	Rate Power		Frame	Full-load torque	Pole	380 V				Rated Current	Ke	Noise		Moment of inertia	Weight
						Frequency	Speed	Full-Load				LWA	LPA		
	kW	HP		Nm.	P	Hz	rpm	Efficiency%	P.F.	A	V/krpm	dB(A)	dB(A)	(kgm² x 10⁻³)	kg
KPMA5-71M-0.18-1000	0.18	0.25	71M	1.7	4	33.3	1000	74.6	0.95	0.36	292	40	52	0.53	6
KPMA5-71M-0.25-1000	0.25	0.35	71M	2.4	4	33.3	1000	78.1	0.95	0.5	315	40	52	0.86	7.7
KPMA5-80M-0.37-1000	0.37	0.5	80M	3.5	4	33.3	1000	81.6	0.95	0.7	308	42	54	1.18	10.6
KPMA5-80M-0.55-1000	0.55	0.75	80M	5.3	4	33.3	1000	85.9	0.95	1.1	303	42	54	1.87	11.4
KPMA5-90S-0.75-1000	0.75	1	90S	7.2	4	33.3	1000	87.4	0.95	1.5	305	45	57	2.12	13.8
KPMA5-90L-1.1-1000	1.1	1.5	90L	10.5	4	33.3	1000	88.7	0.95	2.2	307	45	57	3.45	16.4
KPMA5-100L-1.5-1000	1.5	2	100L	14.3	4	33.3	1000	89.9	0.95	2.9	321	49	61	8.77	24
KPMA5-112M-2.2-1000	2.2	3	112M	21	4	33.3	1000	90.9	0.95	4.1	327	53	65	12.9	31
KPMA5-132S-3-1000	3	4	132S	28.7	4	33.3	1000	91.8	0.95	5.5	318	57	69	55.5	35.7
KPMA5-132M-4-1000	4	5.5	132M	38.2	6	50	1000	92.7	0.95	7.3	322	57	69	70.1	43.1
KPMA5-132M-5.5-1000	5.5	7.5	132M	47.8	6	50	1000	93.4	0.95	10	322	57	69	87.7	51.5
KPMA5-160M-7.5-1000	7.5	10	160M	71.7	6	50	1000	94	0.95	13.5	327	60	73	84.6	64.9
KPMA5-160L-11-1000	11	15	160L	105	6	50	1000	94.5	0.95	19.8	338	60	73	116	81.5

KPM-1000rpm IE5 Cast Iron Motor

Model Name	Rate Power		Frame	Full-load torque	Pole	380 V				Rated Current	Ke	Noise		Moment of inertia	Weight
						Frequency	Speed	Full-Load				LWA	LPA		
	kW	HP		Nm.	P	Hz	rpm	Efficiency%	P.F.	A	V/krpm	dB(A)	dB(A)	(kgm² x 10⁻³)	kg
KPM5-80M-0.37-1000	0.37	0.5	80M	3.5	4	33.3	1000	81.6	0.95	0.7	308	42	54	1	16.3
KPM5-80M-0.55-1000	0.55	0.75	80M	5.3	4	33.3	1000	85.9	0.95	1.1	303	42	54	2	17.2
KPM5-90S-0.75-1000	0.75	1	90S	7.2	4	33.3	1000	87.4	0.95	1.5	305	45	57	2	21.2
KPM5-90L-1.1-1000	1.1	1.5	90L	10.5	4	33.3	1000	88.7	0.95	2.2	307	45	57	3	24.6
KPM5-100L-1.5-1000	1.5	2	100L	14.3	4	33.3	1000	89.9	0.95	2.9	321	49	61	9	35.7
KPM5-112M-2.2-1000	2.2	3	112M	21	4	33.3	1000	90.9	0.95	4.1	327	53	65	13	44.7
KPM5-132S-3-1000	3	4	132S	28.7	4	33.3	1000	91.8	0.95	5.5	318	57	69	56	54.7
KPM5A-132M-4-1000	4	5.5	132M	38.2	6	50	1000	92.7	0.95	7.3	322	57	69	70	64
KPM5A-132M-5.5-1000	5.5	7.5	132M	47.8	6	50	1000	93.4	0.95	10	322	57	69	88	72.5
KPM5-160M-7.5-1000	7.5	10	160M	71.7	6	50	1000	94	0.95	13.5	327	60	73	85	97.9
KPM5-160L-11-1000	11	15	160L	105	6	50	1000	94.5	0.95	19.8	338	60	73	116	118
KPM5-180L-15-1000	15	20	180L	143	8	66.7	1000	94.9	0.95	26.5	336	60	73	183	146
KPM5-200L-18.5-1000	18.5	25	200L	177	8	66.7	1000	95.3	0.95	33	324	60	73	341	222
KPM5-200L-22-1000	22	30	200L	210	8	66.7	1000	95.6	0.95	38	322	60	73	444	251
KPM5-225M-30-1000	30	41	225M	287	8	66.7	1000	95.8	0.95	54	326	61	74	654	290
KPM5-250M-37-1000	37	50	250M	354	8	66.7	1000	96	0.95	64	324	62	76	1038	394
KPM5-280S-45-1000	45	61	280S	430	8	66.7	1000	96.2	0.95	78	317	64	78	1292	484
KPM5-280M-55-1000	55	75	280M	525	8	66.7	1000	96.3	0.95	96	321	64	78	1508	532
KPM5-315S-75-1000	75	102	315S	716	8	66.7	1000	96.4	0.95	131	320	69	83	2140	835
KPM5-315M-90-1000	90	123	315M	890	8	66.7	1000	96.5	0.95	156	315	69	83	2509	912
KPM5-315L-110-1000	110	150	315L	1051	8	66.7	1000	96.6	0.95	197	316	69	83	3002	966
KPM5-315L-132-1000	132	180	315L	1261	8	66.7	1000	96.8	0.95	235	311	69	83	3618	1032

Electrical Performance Parameters

KPM-3000rpm IE4 Aluminum Housing Motor

Model Name	Rate Power		Frame	Full-load torque	Pole	380 V				Rated Current	Ke	Noise		Moment of inertia	Weight
						Frequency	Speed	Full-Load				LWA	LPA		
	kW	HP		Nm.	P	Hz	rpm	Efficiency%	P.F.	A	V/krpm	dB(A)	dB(A)	($kgm^2 \times 10^{-3}$)	kg
KPMA4-56M-0.55-3000	0.55	0.75	56M	1.8	4	100	3000	81.5	0.95	1.2	110	61	49	0.14	3.5
KPMA4-56M-0.75-3000	0.75	1	56M	2.4	4	100	3000	83.5	0.95	1.6	110	61	49	0.2	4
KPMA4-63M-1.1-3000	1.1	1.5	63M	3.5	4	100	3000	85.2	0.95	2.3	113	61	49	0.4	5.2
KPMA4-63M-1.5-3000	1.5	2	63M	4.8	4	100	3000	86.5	0.95	3.1	113	61	49	0.53	5.8
KPMA4-71M-2.2-3000	2.2	3	71M	7	4	100	3000	88	0.95	4.5	109	61	49	0.94	10
KPMA4-80M-3-3000	3	4	80M	9.5	4	100	3000	89.1	0.95	6	104	62	50	2.17	13
KPMA4-80M-4-3000	4	5.5	80M	12.7	4	100	3000	90	0.95	7.9	106	62	50	2.6	15
KPMA4-90L-5.5-3000	5.5	7.5	90L	17.5	4	100	3000	90.9	0.95	10.8	104	67	55	3.03	16.1
KPMA4-100L-7.5-3000	7.5	10	100L	23.9	4	100	3000	91.7	0.95	"14,6"	102	74	62	4.03	20
KPMA4-100L-11-3000	11	15	100L	35	4	100	3000	92.6	0.95	21.2	109	74	62	13.1	31
KPMA4-112M-15-3000	15	20	112M	47.7	4	100	3000	93.3	0.95	28.7	112	77	65	15.44	32
KPMA4-112M-18.5-3000	18.5	25	112M	58.9	4	100	3000	93.7	0.95	35.3	109	77	65	19	39
KPMA4-132S-22-3000	22	30	132S	70	4	100	3000	94	0.95	41.8	108	79	67	30	47
KPMA4-132M-30-3000	30	40	132M	95.5	4	100	3000	94.5	0.95	56.7	107	79	67	40	60
KPMA4-160M-37-3000	37	50	160M	117.8	4	100	3000	94.8	0.95	69.8	112	81	68	75.5	81
KPMA4-160M-45-3000	45	60	160M	143.2	4	100	3000	95	0.95	84.7	110	81	68	92.6	89

KPM-3000rpm IE4 Cast Iron Housing Motor

Model Name	Rate Power		Frame	Full-load torque	Pole	380 V				Rated Current	Ke	Noise		Moment of inertia	Weight
						Frequency	Speed	Full-Load				LWA	LPA		
	kW	HP		Nm.	P	Hz	rpm	Efficiency%	P.F.	A	V/krpm	dB(A)	dB(A)	($kgm^2 \times 10^{-3}$)	kg
KPM4-80M-3-3000	3	4	80M	9.5	4	100	3000	89.1	0.95	6	104	62	50	2.17	16.2
KPM4-80M-4-3000	4	5.5	80M	12.7	4	100	3000	90	0.95	7.9	106	62	50	2.6	17
KPM4-90L-5.5-3000	5.5	7.5	90L	17.5	4	100	3000	90.9	0.95	10.8	104	67	55	3.03	23
KPM4-100L-7.5-3000	7.5	10	100L	23.9	4	100	3000	91.7	0.95	14.6	102	74	62	4.03	29
KPM4-100L-11-3000	11	15	100L	35	4	100	3000	92.6	0.95	21.2	109	74	62	13.1	36
KPM4-112M-15-3000	15	20	112M	47.7	4	100	3000	93.3	0.95	28.7	106	77	65	15.44	54.1
KPM4-112M-18.5-3000	18.5	25	112M	58.9	4	100	3000	93.7	0.95	35.3	109	77	65	19	56
KPM4-132S-22-3000	22	30	132S	70	6	150	3000	94	0.95	41	105	79	67	30	67
KPM4-132M-30-3000	30	40	132M	95.5	6	150	3000	94.5	0.95	55	107	79	67	40	76
KPM4-160M-37-3000	37	50	160M	117.8	6	150	3000	94.8	0.95	68	106	81	68	76	112
KPM4-160M-45-3000	45	60	160M	143.2	6	150	3000	95	0.95	82	106	81	68	93	132
KPM4-180M-55-3000	55	75	180M	175.1	8	200	3000	95.3	0.95	100	105	83	70	205	245
KPM4-180M-75-3000	75	100	180M	238.7	8	200	3000	95.6	0.95	136	106	83	70	220	258
KPM4-200L-90-3000	90	125	200L	286.5	8	200	3000	95.8	0.95	163	107	84	71	450	355
KPM4-200L-110-3000	110	150	200L	350.1	8	200	3000	96	0.95	199	106	84	71	508	365
KPM4-225M-132-3000	132	175	225M	420.2	8	200	3000	96.2	0.95	238	107	86	73	748	400
KPM4-250M-160-3000	160	220	250M	509.3	8	200	3000	96.3	0.95	288	107	89	75	1450	475
KPM4-250M-185-3000	185	250	250M	588.9	8	200	3000	96.4	0.95	333	107	89	75	1536	485
KPM4-280S-200-3000	200	270	280S	636.6	8	200	3000	96.5	0.95	360	106	91	77	1700	655
KPM4-280S-220-3000	220	300	280S	700.3	8	200	3000	96.5	0.95	396	106	91	77	1792	702
KPM4-280S-250-3000	250	340	280S	795.8	8	200	3000	96.5	0.95	450	105	91	77	2697	743

Electrical Performance Parameters

KPM-1500rpm IE4 Aluminum Housing Motor

Model Name	Rate Power		Frame	Full-load torque	Pole	380 V				Rated Current	Ke	Noise		Moment of inertia	Weight
						Frequency	Speed	Full-Load				LWA	LPA		
	kW	HP		Nm.	P	Hz	rpm	Efficiency%	P.F.	A	V/krpm	dB(A)	dB(A)	($kgm^2 \times 10^{-3}$)	kg
KPMA4-56M-0.25-1500	0.25	0.35	56M	1.6	4	50	1500	77.9	0.95	0.6	219	55	43	0.14	3.5
KPMA4-63M-0.37-1500	0.37	0.5	63M	2.4	4	50	1500	81.1	0.95	0.8	226	55	43	0.28	4.8
KPMA4-63M-0.4-1500	0.4	0.55	63M	2.5	4	50	1500	81.7	0.95	0.9	226	55	43	0.28	4.8
KPMA4-63M-0.55-1500	0.55	0.75	63M	3.5	4	50	1500	83.9	0.95	1.2	226	55	43	0.4	5.2
KPMA4-71M-0.75-1500	0.75	1	71M	4.8	4	50	1500	85.7	0.95	1.6	217	55	43	0.73	8
KPMA4-71M-1.1-1500	1.1	1.5	71M	7	4	50	1500	87.2	0.95	2.3	217	56	44	0.94	10
KPMA4-80M-1.5-1500	1.5	2	80M	9.5	4	50	1500	88.2	0.95	3	212	56	44	2.17	14
KPMA4-90S-2.2-1500	2.2	3	90S	14	4	50	1500	89.5	0.95	4.4	204	59	47	2.52	15.4
KPMA4-90L-3-1500	3	4	90L	19.1	4	50	1500	90.4	0.95	5.9	215	59	47	3.53	16.8
KPMA4-100L-4-1500	4	5.5	100L	25.5	4	50	1500	91.1	0.95	7.8	218	64	52	9.63	25
KPMA4-100L-5.5-1500	5.5	7.5	100L	35	4	50	1500	91.9	0.95	10.7	217	64	52	13.1	31
KPMA4-112M-7.5-1500	7.5	10	112M	47.7	4	50	1500	92.6	0.95	14.5	219	65	53	15.44	45
KPMA4-132S-11-1500	11	15	132S	70	4	50	1500	93.3	0.95	21.1	212	71	59	30	47
KPMA4-132M-15-1500	15	20	132M	95.5	4	50	1500	93.9	0.95	28.6	213	71	59	40	61
KPMA4-160M-18.5-1500	18.5	25	160M	117.8	4	50	1500	94.2	0.95	35.1	223	73	60	75.5	81
KPMA4-160M-22-1500	22	30	160M	140.1	4	50	1500	94.5	0.95	41.6	219	73	60	92.6	89

KPM-1500rpm IE4 Cast Iron Housing Motor

Model Name	Rate Power		Frame	Full-load torque	Pole	380 V				Rated Current	Ke	Noise		Moment of inertia	Weight
						Frequency	Speed	Full-Load				LWA	LPA		
	kW	HP		Nm.	P	Hz	rpm	Efficiency%	P.F.	A	V/krpm	dB(A)	dB(A)	($kgm^2 \times 10^{-3}$)	kg
KPM4-80M-1.5-1500	1.5	2	80M	9.5	4	50	1500	88.2	0.95	3	212	56	44	2.17	16.2
KPM4-90S-2.2-1500	2.2	3	90S	14	4	50	1500	89.5	0.95	4.4	204	59	47	2.52	23.4
KPM4-90L-3-1500	3	4	90L	19.1	4	50	1500	90.4	0.95	5.9	215	59	47	3.53	23.8
KPM4-100L-4-1500	4	5.5	100L	25.5	4	50	1500	91.1	0.95	7.8	218	64	52	9.63	33.6
KPM4-100L-5.5-1500	5.5	7.5	100L	35	4	50	1500	91.9	0.95	10.7	217	64	52	13.1	36
KPM4-112M-7.5-1500	7.5	10	112M	47.7	4	50	1500	92.6	0.95	14.5	219	65	53	15.44	54.1
KPM4-132S-11-1500	11	15	132S	70	6	75	1500	93.3	0.95	20	214	71	59	30	66
KPM4-132M-15-1500	15	20	132M	95.5	6	75	1500	93.9	0.95	28	215	71	59	40	78
KPM4-160M-18.5-1500	18.5	25	160M	117.8	6	75	1500	94.2	0.95	34	213	73	60	76	115
KPM4-160M-22-1500	22	30	160M	140.1	6	75	1500	94.5	0.95	40	213	73	60	93	135
KPM4-180M-30-1500	30	40	180M	191	8	100	1500	94.9	0.95	55	215	76	63	185	180
KPM4-180M-37-1500	37	50	180M	235.5	8	100	1500	95.2	0.95	67	215	76	63	195	259
KPM4-180L-45-1500	45	60	180L	286.5	8	100	1500	95.4	0.95	82	213	76	63	239	343
KPM4-200L-55-1500	55	75	200L	350.1	8	100	1500	95.7	0.95	100	212	76	63	508	368
KPM4-225S-75-1500	75	100	225S	477.5	8	100	1500	96	0.95	136	211	78	65	788	385
KPM4-225M-90-1500	90	125	225M	572.9	8	100	1500	96.1	0.95	163	213	78	65	1536	463
KPM4-250M-110-1500	110	150	250M	700.3	8	100	1500	96.3	0.95	198	214	79	65	1792	518
KPM4-280S-132-1500	132	175	280S	840.3	8	100	1500	96.4	0.95	238	215	80	66	2517	665
KPM4-280M-160-1500	160	220	280M	1018.6	8	100	1500	96.6	0.95	288	215	80	66	3056	732
KPM4-280M-185-1500	185	250	280M	1177.7	8	100	1500	96.7	0.95	332	210	80	66	3536	789
KPM4-315S-200-1500	200	270	315S	1273.2	8	100	1500	96.7	0.95	359	210	88	74	4200	880
KPM4-315S-220-1500	220	297	315S	1400.5	8	100	1500	96.7	0.95	395	210	88	74	4500	910
KPM4-315S-250-1500	250	340	315S	1591.5	8	100	1500	96.7	0.95	449	213	88	74	4724	950
KPM4-315M-280-1500	280	380	315M	1782.5	8	100	1500	96.7	0.95	503	211	88	74	5153	995

Electrical Performance Parameters

KPM-1000rpm IE4 Aluminum Housing Motor

Model Name	Rate Power		Frame	Full-load torque	Pole	380 V				Rated Current	Ke	Noise		Moment of inertia	Weight
						Frequency	Speed	Full-Load				LWA	LPA		
	kW	HP		Nm.	P	Hz	rpm	Efficiency%	P.F.	A	V/krpm	dB(A)	dB(A)	($kgm^2 \times 10^{-3}$)	kg
KPMA4-63M-0.25-1000	0.25	0.35	63M	2.4	4	33.3	1000	74.1	0.95	0.6	339	52	41	0.28	4.8
KPMA4-63M-0.37-1000	0.37	0.5	63M	3.5	4	33.3	1000	78	0.95	0.8	339	52	40	0.4	5.2
KPMA4-63M-0.4-1000	0.4	0.55	63M	3.8	4	33.3	1000	78.8	0.95	0.9	339	52	40	0.4	5.2
KPMA4-71M-0.55-1000	0.55	0.75	71M	5.3	4	33.3	1000	80.9	0.95	1.2	326	54	42	0.73	8
KPMA4-71M-0.75-1000	0.75	1	71M	7.2	4	33.3	1000	82.7	0.95	1.6	326	54	42	0.94	10
KPMA4-80M-1.1-1000	1.1	1.5	80M	10.5	4	33.3	1000	84.5	0.95	2.3	316	54	42	2.17	14
KPMA4-90S-1.5-1000	1.5	2	90S	14.3	4	33.3	1000	85.9	0.95	3.1	308	57	45	2.52	15.4
KPMA4-100L-2.2-1000	2.2	3	100L	21	4	33.3	1000	87.4	0.95	4.5	304	61	49	3.53	19
KPMA4-100L-3-1000	3	4	100L	28.6	4	33.3	1000	88.6	0.95	6.1	325	61	49	10.94	25
KPMA4-100L-4-1000	4	5.5	100L	38.2	4	33.3	1000	89.5	0.95	8	326	61	49	13.1	32
KPMA4-112M-5.5-1000	5.5	7.5	112M	52.5	4	33.3	1000	90.5	0.95	10.9	326	65	53	17.2	45.8
KPMA4-132S-7.5-1000	7.5	10	132S	71.6	4	33.3	1000	91.3	0.95	14.7	320	69	57	30	47
KPMA4-160M-11-1000	11	15	160M	105	4	33.3	1000	92.3	0.95	21.3	335	73	60	75.5	81
KPMA4-160M-15-1000	15	20	160M	143.2	4	33.3	1000	92.9	0.95	28.9	338	73	60	92.6	89
KPMA4-160L-18.5-1000	18.5	25	160L	176.7	4	33.3	1000	93.4	0.95	35.4	335	73	60	113.2	94

KPM-1000rpm IE4 Cast Iron Housing Motor

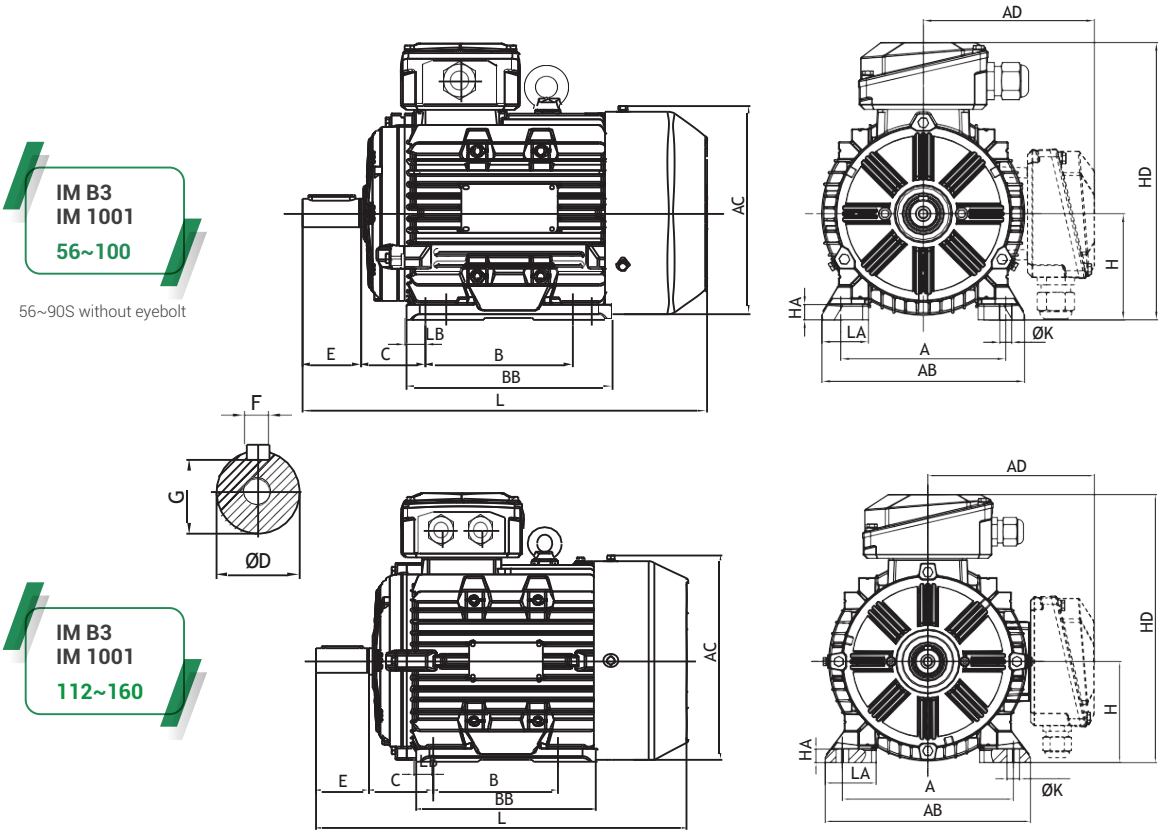
Model Name	Rate Power		Frame	Full-load torque	Pole	380 V				Rated Current	Ke	Noise		Moment of inertia	Weight
						Frequency	Speed	Full-Load				LWA	LPA		
	kW	HP		Nm.	P	Hz	rpm	Efficiency%	P.F.	A	V/krpm	dB(A)	dB(A)	($kgm^2 \times 10^{-3}$)	kg
KPM4-80M-1.1-1000	1.1	1.5	80M	10.5	4	33.3	1000	84.5	0.95	2.3	316	54	42	2.17	16.2
KPM4-90S-1.5-1000	1.5	2	90S	14.3	4	33.3	1000	85.9	0.95	3.1	308	57	45	2.52	22.4
KPM4-100L-2.2-1000	2.2	3	100L	21	4	33.3	1000	87.4	0.95	4.5	304	61	49	3.53	27.8
KPM4-100L-3-1000	3	4	100L	28.6	4	33.3	1000	88.6	0.95	6.1	325	61	49	10.94	34.5
KPM4-100L-4-1000	4	5.5	100L	38.2	4	33.3	1000	89.5	0.95	8	326	61	49	13.1	36
KPM4-112M-5.5-1000	5.5	7.5	112M	52.5	4	33.3	1000	90.5	0.95	10.9	326	65	53	17.2	54.8
KPM4-132S-7.5-1000	7.5	10	132S	71.6	6	50	1000	91.3	0.95	14	329	69	57	30	59
KPM4-160M-11-1000	11	15	160M	105	6	50	1000	92.3	0.95	21	323	73	60	76	85
KPM4-160M-15-1000	15	20	160M	143.2	6	50	1000	92.9	0.95	28	324	73	60	93	131
KPM4-160L-18.5-1000	18.5	25	160L	176.7	6	50	1000	93.4	0.95	34	326	73	60	113	165
KPM4-180M-22-1000	22	30	180M	210.1	8	66.7	1000	93.7	0.95	41	327	73	60	176	193
KPM4-180L-30-1000	30	40	180L	286.5	8	66.7	1000	94.2	0.95	55	329	73	60	239	233
KPM4-200L-37-1000	37	50	200L	353.3	8	66.7	1000	94.5	0.95	68	320	73	60	508	257
KPM4-225M-45-1000	45	60	225M	429.7	8	66.7	1000	94.8	0.95	82	321	74	61	709	367
KPM4-225M-55-1000	55	75	225M	525.2	8	66.7	1000	95.1	0.95	100	322	74	61	867	396
KPM4-250M-75-1000	75	100	250M	716.2	8	66.7	1000	95.4	0.95	137	323	76	62	1792	468
KPM4-280M-90-1000	90	125	280M	859.4	8	66.7	1000	95.6	0.95	163	324	78	64	2637	685
KPM4-280M-110-1000	110	150	280M	1050.4	8	66.7	1000	95.8	0.95	199	325	78	64	3176	743
KPM4-280M-132-1000	132	175	280M	1260.5	8	66.7	1000	96	0.95	239	326	78	64	3835	810
KPM4-315S-160-1000	160	220	315S	1527.8	8	66.7	1000	96.2	0.95	289	326	83	69	4724	932
KPM4-315M-185-1000	185	250	315M	1766.6	8	66.7	1000	96.2	0.95	334	326	83	69	5153	1000

Motor Installation and Dimensions

B3 H56-160 Cast Aluminum

IM B3
IM 1001
56~100

56~90S without eyebolt



IM B3
IM 1001
112~160

Shape and Mounting Dimensions (B3) - Cast Aluminum

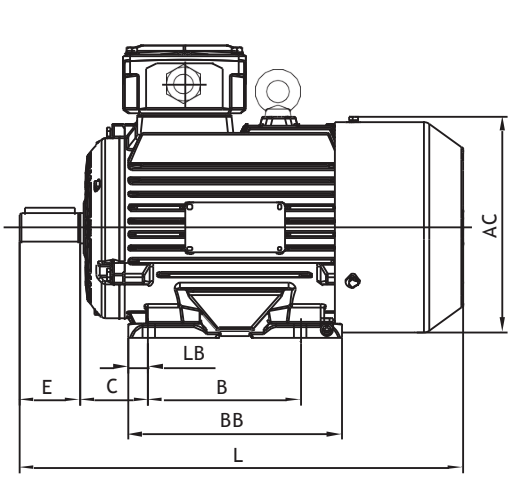
Frame	Mounting dimensions (mm)									Boundary dimension (mm)								
	A	B	C	D	E	F	G	H	K	LA	LB	AB	BB	HA	AC	AD	HD	L
56M	90	71	36	9	20	3	7.2	56	6	25	12.5	110	91	7.5	106	96	152	186
63M	100	80	40	11	23	4	8.5	63	7	31	12.5	125	100	8	125	102	165	233
71M	112	90	45	14	30	5	11	71	7	30	14.5	138	115	9	141	110	181	250
80M	125	100	50	19	40	6	15.5	80	10	38.5	12.5	156	125	10	160	131	211	315
90S	140	100	56	24	50	8	20	90	10	39.5	16.6	172	150	13	177	149	244	329
90L	140	125	56	24	50	8	20	90	10	39.5	16.6	172	175	13	177	149	244	351
100L	160	140	63	28	60	8	24	100	12	46.5	19	200	198	13	208	163	268	401
112M	190	140	70	28	60	8	24	112	12	56.5	19	228	201	15	226	189	305	417
132S	216	140	89	38	80	10	33	132	12	60	45	262	230	18	260	210	345	450
132M	216	178	89	38	80	10	33	132	12	60	36	262	250	18	260	210	345	490
160M	254	210	108	42	110	12	37	160	14.5	69.5	27	314	280	20	320	260	422	620
160L	254	254	108	42	110	12	37	160	14.5	69.5	27	314	324	20	320	260	422	665

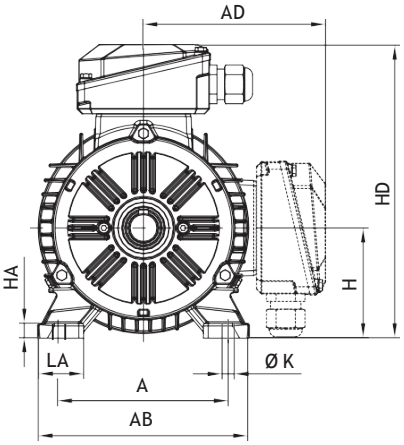
Motor Installation and Dimensions

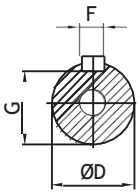
B3 H80-315 Cast Iron

IM B3
IM 1001
80~100

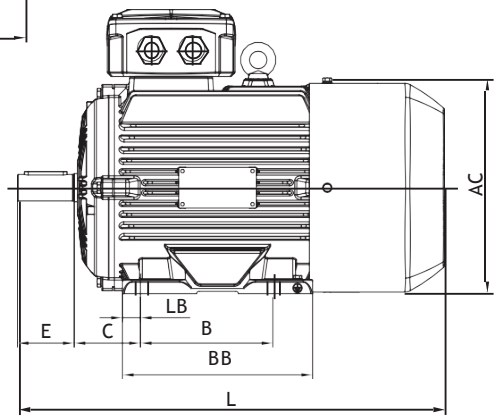
56~90S without eyebolt

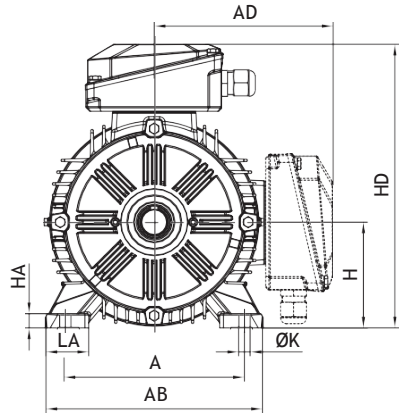




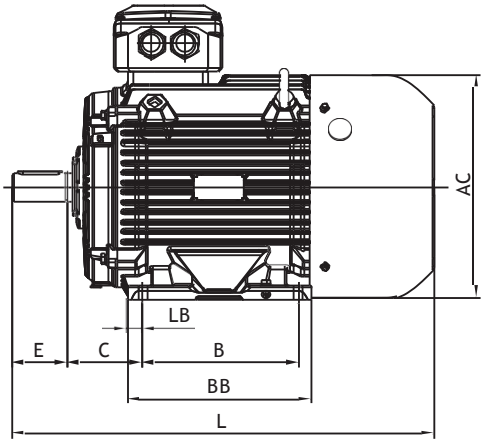


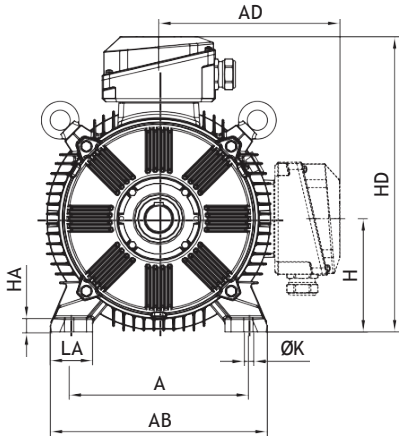
IM B3
IM 1001
112~180





IM B3
IM 1001
200~315





Motor Installation and Dimensions

Shape and Mounting Dimensions (B3) - Cast Iron

Frame	Speed (rpm)	Mounting dimensions (mm)									Boundary dimension (mm)								
		A	B	C	D	E	F	G	H	K	LA	LB	AB	BB	HA	AC	AD	HD	L
80M	1000~3000	125	100	50	19	40	6	15.5	80	10	32	15	157	146	10	163	136	221	299 (320)
90S	1000~3000	140	100	56	24	50	8	20	90	10	37	16.6	172	153	12	177	149	244	329
90L	1000~3000	140	125	56	24	50	8	20	90	10	37	16.6	172	175	12	177	149	244	351 (370)
100L	1000~3000	160	140	63	28	60	8	24	100	12	45	19	200	198	15	208	163	268	401
112M	1000~3000	190	140	70	28	60	8	24	112	12	45	19	228	201	15	226	189	305	417 (465)
132S	1000~3000	216	140	89	38	80	10	33	132	12	56.5	21.5	262	184	18	252	203	340	454
132M	1000~1500	216	178	89	38	80	10	33	132	12	56.5	21.5	262	222	18	252	203	340	492
160M	1000~3000	254	210	108	42	110	12	37	160	14.5	65	46	314	280	20	318	256	421	590
160L	1000~3000	254	254	108	42	110	12	37	160	14.5	65	46	314	324	20	318	256	421	634
180M	1500~3000	279	241	121	48	110	14	42.5	180	14.5	68	26.5	349	297	22	360	279	463	655
180L	1000~1500	279	279	121	48	110	14	42.5	180	14.5	68	26.5	349	335	22	360	279	463	693
200L	1000~3000	318	305	133	55	110	16	49	200	18.5	84	30	388	380	25	396	321	526	796
225S	1500	356	286	149	60	140	18	53	225	18.5	84	43	431	368	28	442	345	570	846
225M	3000	356	311	149	55	110	16	49	225	18.5	84	30.5	431	368	28	442	345	570	841
225M	1000~1500	356	311	149	60	140	18	53	225	18.5	84	30.5	431	368	28	442	345	570	871
250M	3000	406	349	168	60	140	18	53	250	24	80	43	484	421	30	488	421	671	929
250M	1000~1500	406	349	168	65	140	18	58	250	24	80	43	484	421	30	488	421	671	929
280S	3000	457	368	190	65	140	18	58	280	24	84	55	542	460	35	547	449	728	1007
280S	1000~1500	457	368	190	75	140	20	67.5	280	24	84	55	542	460	35	547	449	728	1007
280M	3000	457	419	190	65	140	18	58	280	24	84	58.5	542	515	35	547	449	728	1055
280M	1000~1500	457	419	190	75	140	20	67.5	280	24	84	58.5	542	515	35	547	449	728	1055
315S	3000	508	406	216	65	140	18	58	315	28	115	46	628	540	40	631	507	822	1190
315S	1000~1500	508	406	216	80	170	22	71	315	28	115	46	628	540	40	631	507	822	1220
315M	3000	508	457	216	65	140	18	58	315	28	115	46	628	640	40	631	507	822	1290
315M	1000~1500	508	457	216	80	170	22	71	315	28	115	46	628	640	40	631	507	822	1320
315L	3000	508	508	216	65	140	18	58	315	28	115	46	628	640	40	631	507	822	1290
315L	1000~1500	508	508	216	80	170	22	71	315	28	115	46	628	640	40	631	507	822	1320

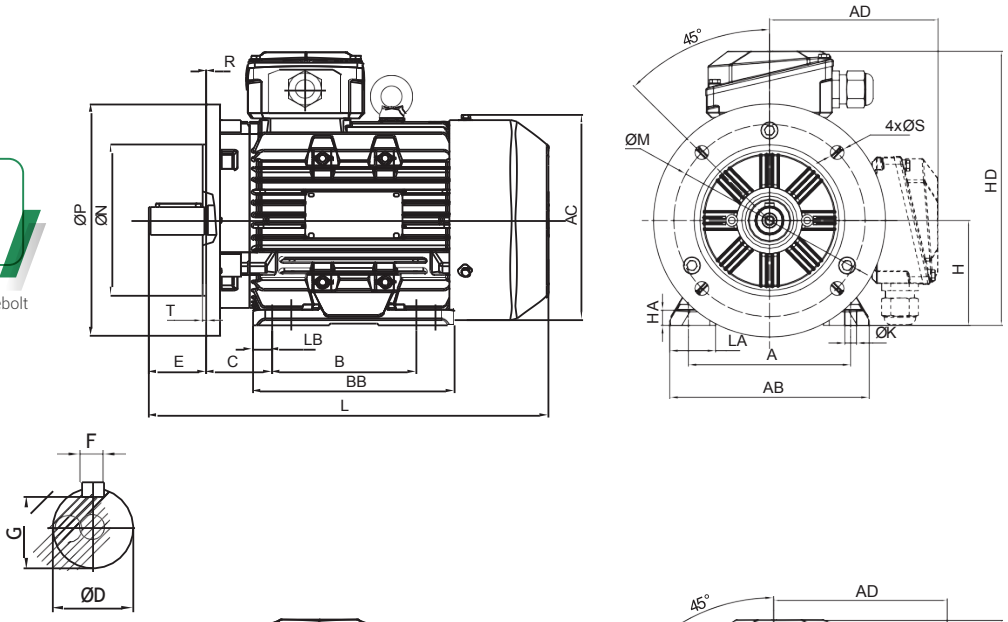
Note: The dimensions in brackets are the dimensions of the descending center height series.

Motor Installation and Dimensions

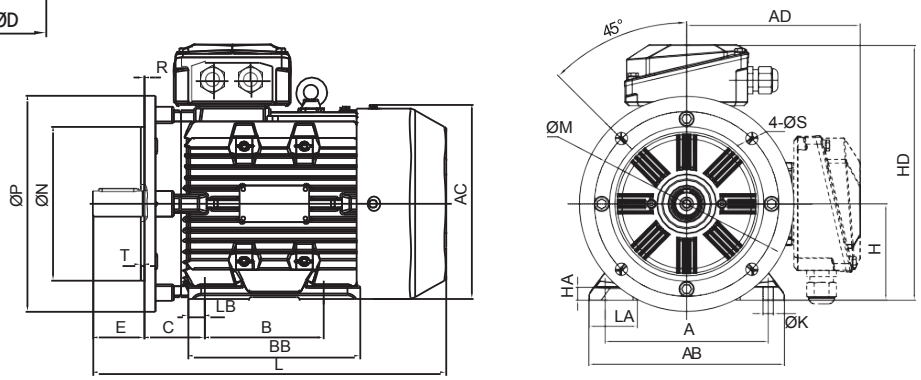
B35 H56-160 Cast Aluminum

IM B35
IM 2001
56~100

56~90S without eyebolt



IM B35
IM 2001
112~160



Shape and Mounting Dimensions (B35) - Cast Aluminum

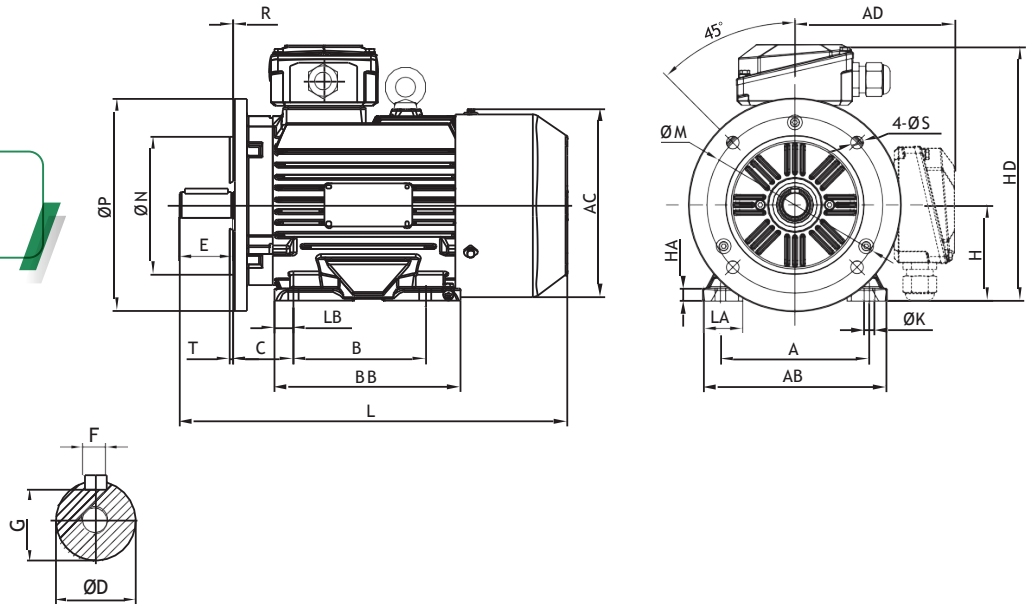
Frame	Speed (rpm)	Mounting dimensions (mm)														Boundary dimension (mm)								
		A	B	C	D	E	F	G	H	K	M	N	P	R	S	T	LA	LB	AB	BB	HA	AC	AD	HD	L
63M	1000~3000	100	80	40	11	23	4	8.5	63	7	115	95	140	0±1.0	10	3	31	12.5	125	100	8	125	102	165	233
71M	1000~3000	112	90	45	14	30	5	11	71	7	130	110	160	0±1.0	10	3.5	30	14.5	138	115	9	141	110	181	250
80M	1000~3000	125	100	50	19	40	6	15.5	80	10	165	130	200	0±1.5	12	3.5	38.5	12.5	156	125	10	160	131	211	315 (336)
90S	1000~3000	140	100	56	24	50	8	20	90	10	165	130	200	0±1.5	12	3.5	39.5	16.6	172	150	13	177	149	244	329
90L	1000~3000	140	125	56	24	50	8	20	90	10	165	130	200	0±1.5	12	3.5	39.5	16.6	172	175	13	177	149	244	351 (370)
100L	1000~3000	160	140	63	28	60	8	24	100	12	215	180	250	0±2.0	14.5	4	46.5	19	200	198	13	208	163	268	401
112M	1000~3000	190	140	70	28	60	8	24	112	12	215	180	250	0±2.0	14.5	4	56.5	19	228	201	15	226	189	305	417 (465)
132S	1000~3000	216	140	89	38	80	10	33	132	12	265	230	300	0±2.0	14.5	4	60	45	262	230	18	260	210	345	450
132M	1000~3000	216	178	89	38	80	10	33	132	12	265	230	300	0±2.0	14.5	4	60	36	262	250	18	260	210	345	490
160M	1000~3000	254	210	108	42	110	12	37	160	14.5	300	250	350	0±3.0	18.5	5	69.5	27	314	280	20	320	260	422	620
160L	1000~3000	254	254	108	42	110	12	37	160	14.5	300	250	350	0±3.0	18.5	5	69.5	27	314	324	20	320	260	422	665

Note: The dimensions in brackets are the dimensions of the descending center height series.

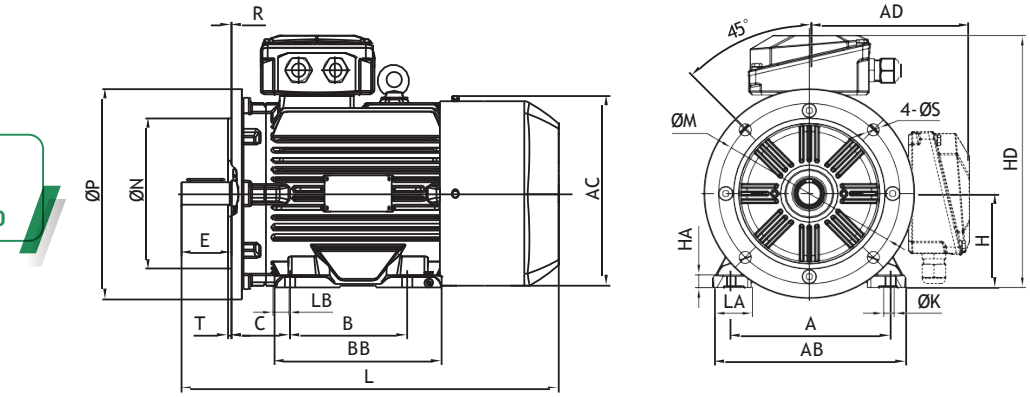
Motor Installation and Dimensions

B35 H80-315 Cast Iron

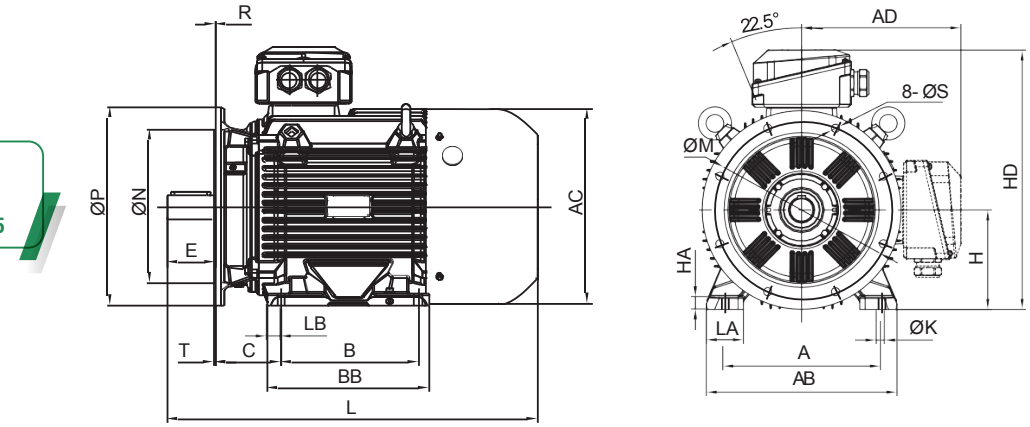
IM B35
IM 2001
80~100



IM B35
IM 2001
112~180



IM B35
IM 2001
200~315



Motor Installation and Dimensions

Shape and Mounting Dimensions (B35) - Cast Iron

Frame	Speed (rpm)	Mounting dimensions (mm)															Boundary dimension (mm)								
		A	B	C	D	E	F	G	H	K	M	N	P	R	S	T	LA	LB	AB	BB	HA	AC	AD	HD	L
80M	1000~3000	125	100	50	19	40	6	15.5	80	10	165	130	200	0±1.5	12	3.5	32	15	157	146	10	163	136	221	299 (320)
90S	1000~3000	140	100	56	24	50	8	20	90	10	165	130	200	0±1.5	12	3.5	37	16.6	172	153	12	177	149	244	329
90L	1000~3000	140	125	56	24	50	8	20	90	10	165	130	200	0±1.5	12	3.5	37	16.6	172	175	12	177	149	244	351 (370)
100L	1000~3000	160	140	63	28	60	8	24	100	12	215	180	250	0±2.0	14.5	4	45	19	200	198	15	208	163	268	401
112M	1000~3000	190	140	70	28	60	8	24	112	12	215	180	250	0±2.0	14.5	4	45	19	228	201	15	226	189	305	417 (465)
132S	1000~3000	216	140	89	38	80	10	33	132	12	265	230	300	0±2.0	14.5	4	56.5	21.5	262	184	18	252	203	340	454
132M	1000~1500	216	178	89	38	80	10	33	132	12	265	230	300	0±2.0	14.5	4	56.5	21.5	262	222	18	252	203	340	492
160M	1000~3000	254	210	108	42	110	12	37	160	14.5	300	250	350	0±3.0	18.5	5	65	46	314	280	20	318	256	421	590
160L	1000~3000	254	254	108	42	110	12	37	160	14.5	300	250	350	0±3.0	18.5	5	65	46	314	324	20	318	256	421	634
180M	1500~3000	279	241	121	48	110	14	42.5	180	14.5	300	250	350	0±3.0	18.5	5	68	26.5	349	297	22	360	279	463	655
180L	1000~1500	279	279	121	48	110	14	42.5	180	14.5	300	250	350	0±3.0	18.5	5	68	26.5	349	335	22	360	279	463	693
200L	1000~3000	318	305	133	55	110	16	49	200	18.5	350	300	400	0±3.0	18.5	5	84	30	388	380	25	396	321	526	796
225S	1500	356	286	149	60	140	18	53	225	18.5	400	350	450	0±4.0	18.5	5	84	43	431	368	28	442	345	570	846
225M	3000	356	311	149	55	110	16	49	225	18.5	400	350	450	0±4.0	18.5	5	84	30.5	431	368	28	442	345	570	841
225M	1000~1500	356	311	149	60	140	18	53	225	18.5	400	350	450	0±4.0	18.5	5	84	30.5	431	368	28	442	345	570	841
250M	3000	406	349	168	60	140	18	53	250	24	500	450	550	0±4.0	18.5	5	80	43	484	421	30	488	421	671	929
250M	1000~1500	406	349	168	65	140	18	58	250	24	500	450	550	0±4.0	18.5	5	80	43	484	421	30	488	421	671	929
280S	3000	457	368	190	65	140	18	58	280	24	500	450	550	0±4.0	18.5	5	84	55	542	460	35	547	449	728	1007
280S	1000~1500	457	368	190	75	140	20	67.5	280	24	500	450	550	0±4.0	18.5	5	84	55	542	460	35	547	449	728	1007
280M	3000	457	419	190	65	140	18	58	280	24	500	450	550	0±4.0	18.5	5	84	58.5	542	515	35	547	449	728	1055
280M	1000~1500	457	419	190	75	140	20	67.5	280	24	500	450	550	0±4.0	18.5	5	84	58.5	542	515	35	547	449	728	1055
315S	3000	508	406	216	65	140	18	58	315	28	600	550	660	0±4.0	24	6	115	46	628	540	40	631	507	822	1190
315S	1000~1500	508	406	216	80	170	22	71	315	28	600	550	660	0±4.0	24	6	115	46	628	540	40	631	507	822	1220
315M	3000	508	457	216	65	140	18	58	315	28	600	550	660	0±4.0	24	6	115	46	628	640	40	631	507	822	1290
315M	1000~1500	508	457	216	80	170	22	71	315	28	600	550	660	0±4.0	24	6	115	46	628	640	40	631	507	822	1320
315L	3000	508	508	216	65	140	18	58	315	28	600	550	660	0±4.0	24	6	115	46	628	640	40	631	507	822	1290
315L	1000~1500	508	508	216	80	170	22	71	315	28	600	550	660	0±4.0	24	6	115	46	628	640	40	631	507	822	1320

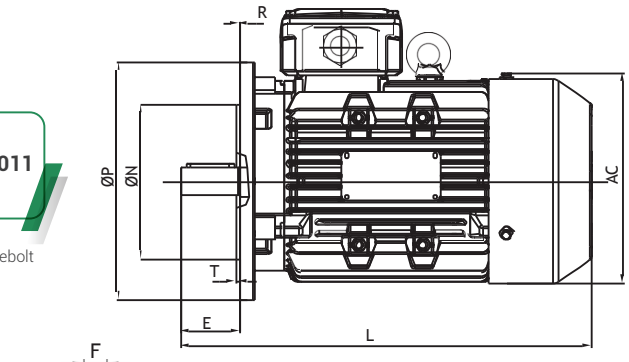
Note: The dimensions in brackets are the dimensions of the descending center height series.

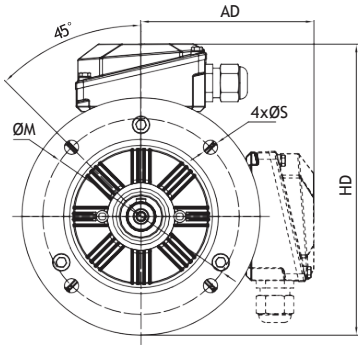
Motor Installation and Dimensions

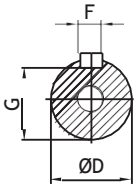
B5 H56-160/V1 H56-160 Cast Aluminum

IM B5/IM V1
IM 3001/IM 3011
56~100

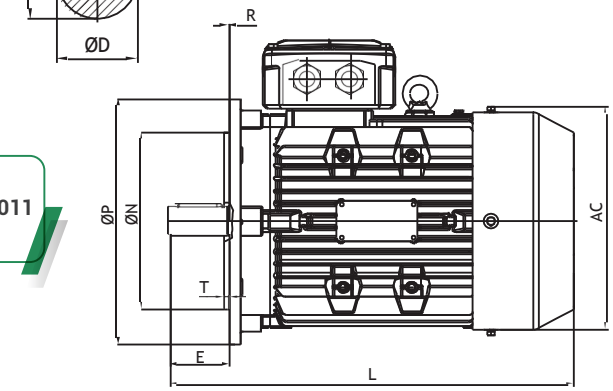
56~90S without eyebolt

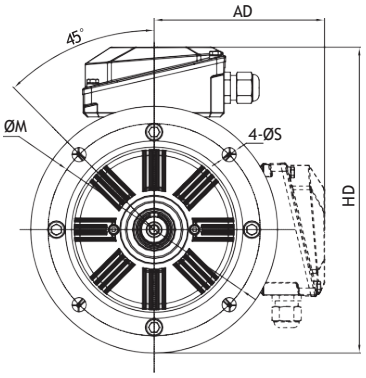






IM B5/IM V1
IM 3001/IM 3011
112~160





Shape and Mounting Dimensions (B5/V1) - Cast Aluminum

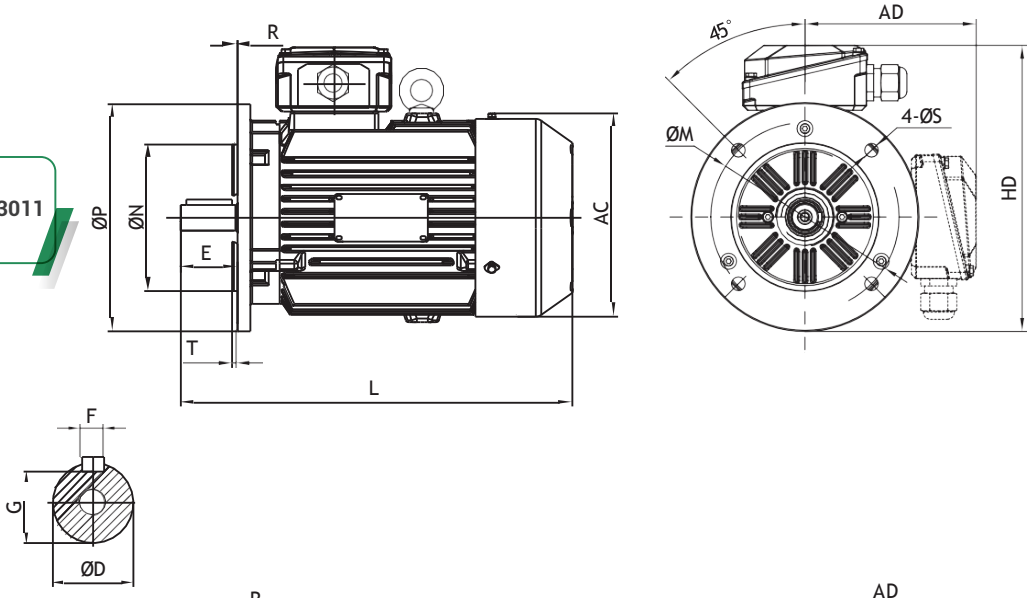
Frame	Speed (rpm)	Mounting dimensions (mm)										Boundary dimension (mm)			
		D	E	F	G	M	N	P	R	S	T	AC	AD	HD	L
63M	1000~3000	11	23	4	8.5	115	95	140	0±1.0	10	3	125	102	172	233
71M	1000~3000	14	30	5	11	130	110	160	0±1.0	10	3.5	141	110	190	250
80M	1000~3000	19	40	6	15.5	165	130	200	0±1.5	12	3.5	160	131	231	315
90S	1000~3000	24	50	8	20	165	130	200	0±1.5	12	3.5	177	149	254	329
90L	1000~3000	24	50	8	20	165	130	200	0±1.5	12	3.5	177	149	254	351
100L	1000~3000	28	60	8	24	215	180	250	0±2.0	14.5	4	208	163	293	401
112M	1000~3000	28	60	8	24	215	180	250	0±2.0	14.5	4	226	189	315	417
132S	1000~3000	38	80	10	33	265	230	300	0±2.0	14.5	4	260	210	363	450
132M	1000~3000	38	80	10	33	265	230	300	0±2.0	14.5	4	260	210	363	490
160M	1000~3000	42	110	12	37	300	250	350	0±3.0	18.5	5	320	260	437	620
160L	1000~3000	42	110	12	37	300	250	350	0±3.0	18.5	5	320	260	437	665

Note: The dimensions in brackets are the dimensions of the descending center height series.

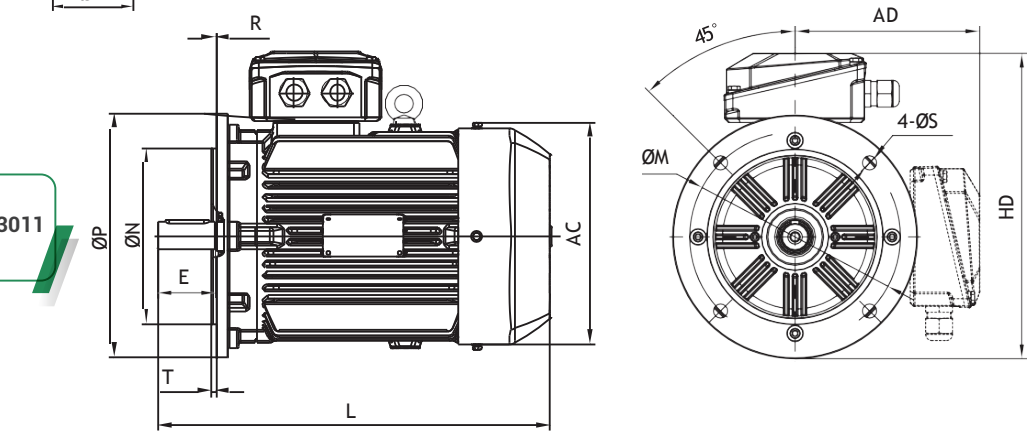
Motor Installation and Dimensions

B5 H80-315/V1 H56-160 Cast Iron

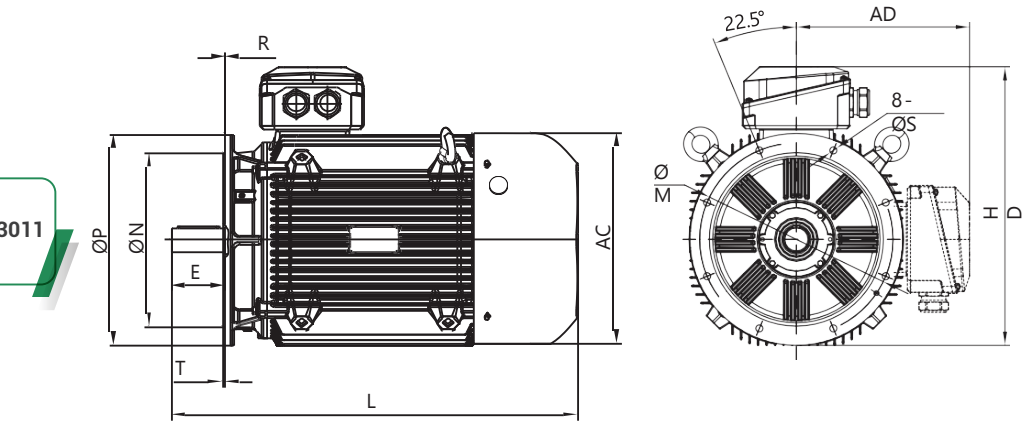
IM B5/IM V1
IM 3001/IM 3011
80~100



IM B5/IM V1
IM 3001/IM 3011
112~180



IM B5/IM V1
IM 3001/IM 3011
200~315



Motor Installation and Dimensions

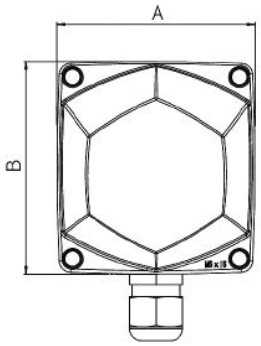
Shape and Mounting Dimensions (B5/V1) - Cast Iron

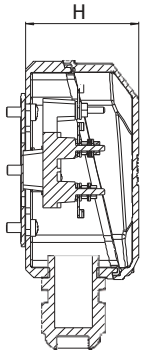
Frame	Speed (rpm)	Mounting dimensions (mm)										Boundary dimension (mm)			
		D	E	F	G	M	N	P	R	S	T	AC	AD	HD	L
80M	1000~3000	19	40	6	15.5	165	130	200	0±1.5	12	3.5	163	136	241	299 (320)
90S	1000~3000	24	50	8	20	165	130	200	0±1.5	12	3.5	177	149	254	329
90L	1000~3000	24	50	8	20	165	130	200	0±1.5	12	3.5	177	149	254	351 (370)
100L	1000~3000	28	60	8	24	215	180	250	0±2.0	14.5	4	208	163	293	401
112M	1000~3000	28	60	8	24	215	180	250	0±2.0	14.5	4	226	189	318	417 (465)
132S	1000~3000	38	80	10	33	265	230	300	0±2.0	14.5	4	252	203	358	454
132M	1000~1500	38	80	10	33	265	230	300	0±2.0	14.5	4	252	203	358	492
160M	1000~3000	42	110	12	37	300	250	350	0±3.0	18.5	5	318	256	436	590
160L	1000~3000	42	110	12	37	300	250	350	0±3.0	18.5	5	318	256	436	634
180M	1500~3000	48	110	14	42.5	300	250	350	0±3.0	18.5	5	360	279	458	655
180L	1000~1500	48	110	14	42.5	300	250	350	0±3.0	18.5	5	360	279	458	693
200L	1000~3000	55	110	16	49	350	300	400	0±3.0	18.5	5	396	321	526	796
225S	1500	60	140	18	53	400	350	450	0±4.0	18.5	5	442	345	580	846
225M	3000	55	110	16	49	400	350	450	0±4.0	18.5	5	442	345	580	841
225M	1000~1500	60	140	18	53	400	350	450	0±4.0	18.5	5	442	345	580	871
250M	3000	60	140	18	53	500	450	550	0±4.0	18.5	5	488	421	696	929
250M	1000~1500	65	140	18	58	500	450	550	0±4.0	18.5	5	488	421	696	929
280S	3000	65	140	18	58	500	450	550	0±4.0	18.5	5	547	449	723	1007
280S	1000~1500	75	140	20	67.5	500	450	550	0±4.0	18.5	5	547	449	723	1007
280M	3000	65	140	18	58	500	450	550	0±4.0	18.5	5	547	449	723	1055
280M	1000~1500	75	140	20	67.5	500	450	550	0±4.0	18.5	5	547	449	723	1055
315S	3000	65	140	18	58	600	550	660	0±4.0	24	6	631	507	850	1190
315S	1000~1500	80	170	22	71	600	550	660	0±4.0	24	6	631	507	850	1220
315M	3000	65	140	18	58	600	550	660	0±4.0	24	6	631	507	850	1290
315M	1000~1500	80	170	22	71	600	550	660	0±4.0	24	6	631	507	850	1320
315L	3000	65	140	18	58	600	550	660	0±4.0	24	6	631	507	850	1290
315L	1000~1500	80	170	22	71	600	550	660	0±4.0	24	6	631	507	850	1320

Note: The dimensions in brackets are the dimensions of the descending center height series.

Parts

Terminal Box





IE5 Terminal box

Frame	Boundary dimension AxBxH(mm)	Number and size of outlet holes	Single hole screw sleeve can lock cable diameter range (mm)	Thread of terminal
63~80	90x96x50	1-M25x1.5	ø8~ø12	M4
90~100	102x110x57.5	1-M25x1.5	ø8~ø12	M4
112~132	136x146x72	2-M25x1.5	ø8~ø12	M5
160~180	171x181x91	2-M32x1.5	ø16~ø21	M6
200~225	220x230x113	2-M50x1.5	ø32~ø39	M8
250~280	270x280x162	2-M63x1.5	ø37~ø44	M10
315	312x329x175	2-M63x1.5	ø37~ø44	M12

IE4 Terminal box

Frame	Boundary dimension AxBxH(mm)	Number and size of outlet holes	Single hole screw sleeve can lock cable diameter range (mm)	Thread of terminal
56~80	90x96x50	1-M20x1.5	ø6-ø12	M4
90~100	102x110x57.5	1-M25x1.5	ø13-ø18	M4
112~132	136x146x72	2-M32x1.5	ø16-ø21	M6
160~180	171x181x91	2-M40x1.5	ø22-ø32	M8
200~225	220x230x113	2-M50x1.5	ø32-ø39	M10
250~280	270x280x116.5	2-M63x1.5	ø37-ø44	M12
315	312x329x175	2-M72x2	ø42-ø52	M16

Lifting ring

Frame	Lifting ring	Quantity	Horizontal installation
			Location
56~90S	-	-	-
90L~112	M8	1	A lifting ring mounted on top of the frame
132	M10	1	
160	M12	1	
180	M16	1	Two lifting rings, viewed from the shaft extension, one at the front left of the terminal box.The other is located behind the terminal box to the right.
200~225	M20	2	
250~280	M24	2	
315	M30	2	

Parts

Bearing type

Frame	Speed rpm	DE	NDE
63	1000-3000	6201ZZ	6201ZZ
71	1000-3000	6202ZZ	6202ZZ
80	1000-3000	6204ZZ	6204ZZ
90	1000-3000	6205ZZ	6203ZZ
100	1000-3000	6206ZZ	6205ZZ
112	1000-3000	6206ZZ	6206ZZ
132	1000-3000	6208ZZ	6305ZZ
160	1000-3000	6309ZZ	6307ZZ
180	1000-3000	6310ZZ	6308ZZ
200	1000-3000	6312	6212
225	3000	6312	6312
225	1000-1500	6313	6312
250	3000	6313	6313
250	1000-1500	6314	6313
280	3000	6314	6314
280	1000-1500	6317	6314
315	3000	6317	6317
315	1000-1500	6319	6319

Note: Bearing selection can be changed according to the requirements of customers' working conditions.
Choice angular contact bearings or short cylindrical bearings,for example.

Ordering guide

The following factors should be taken into account in motor selection:

- **Voltage:** ☐ 380V ☐ 660V ☐ 400V ☐ 690V ☐ Others
- **Speed:** ☐ 3000r/min ☐ 1500r/min ☐ 1000r/min
- **Mounting type:** ☐ IMB3 IMB35 ☐ IMB5 ☐ IMV1Others
- **Operating environment:** ☐ Indoor ☐ Outdoor ☐ Ambient temperature ☐ Altitude
- **Protection grade:** ☐ IP55 ☐ IP56
- **Equipment type and moment of inertia of load**
- **Connection mode between the motor and load**
- **Start mode, start frequency, start voltage drop, etc**
- **Operating mode:** ☐ S1 ☐ Others
- **Insulation grade:** ☐ 155(F) ☐ 180(H)
- **Rotation direction:** ☐ Clockwise ☐ Counterclockwise ☐ Bidirectional
- **Wiring box position:** ☐ Top of motor ☐ Right side of motor ☐ Left side of motor (viewed from the shaft extension end)
- **Energy Efficiency Level:** ☐ IE5 ☐ IE4

Example

- **Requirements:** The center height of the frame is 280, 220kW,3000r/min, the frame is with bottom foot, end cover without flange, 380V, clockwise direction, IP55 protection class, insulation class F, efficiency IE4. The motors are labeled as follows: KPM-280S-220-3000 380V IMB3 IP55 F IE4.
- If users have special requirements on voltage, speed, protection level, rotation direction, installation mode, double shaft extension, noise, vibration, and connection of junction box, they should get the approval of technicians before manufacturing.

High Performance Drive & Smart service

Kruger Ecowatt Drive

Product introduction

Drive series are high-performance inverters that offer premium energy-savings and perfect match with all of Kruger's ventilation fans. It's a plug&play Installation which requires no extra skills, and it only takes minutes to get the product up and running.

Asynchronous motor

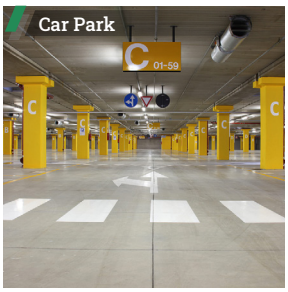
Synchronous motor

Application motor

Kruger Ecowatt Drive series can drive various types of motors such as asynchronous motors, variable frequency motors, various synchronous motors, high-speed motors, and so on.

Application field

Kruger Ecowatt Drive series are operated exclusively with all Kruger fan application (HVAC, Tunnels, Commercial building, Residential, Transport and other industries)



KRUGER

KRUGER
Ventilation Group

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