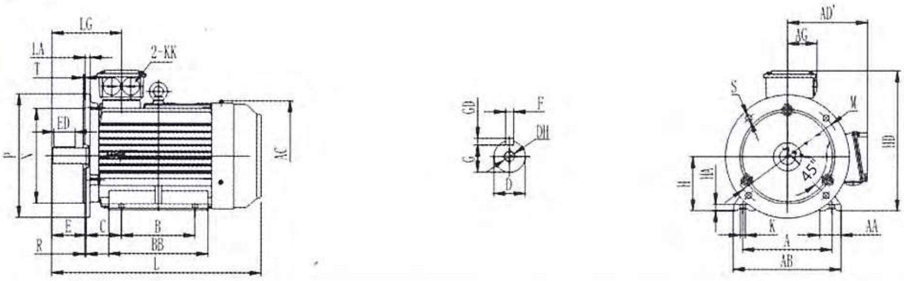
Squirrel-cage motors

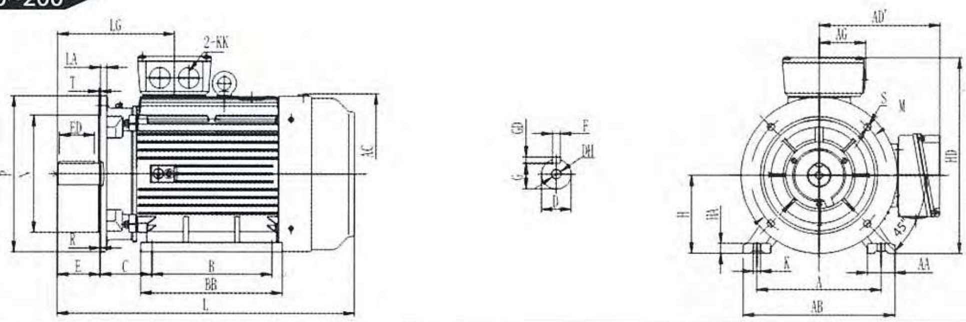
Dimensions foot-flange mount B35

HASCON electric motor

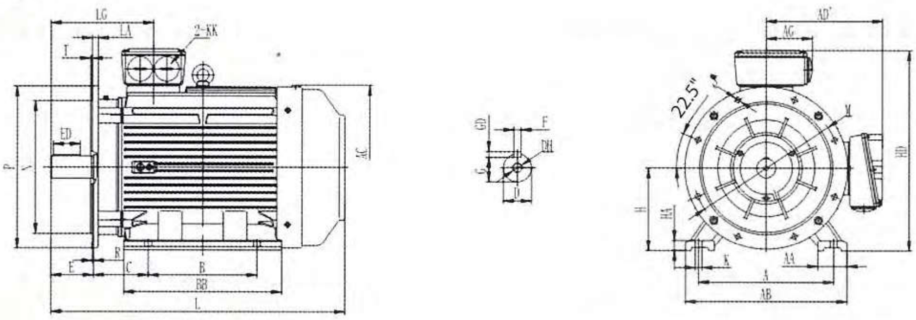
HC-80~132



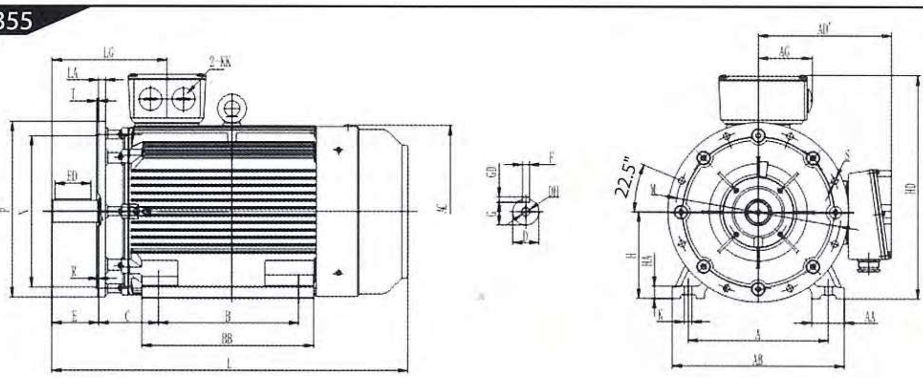
HC-160~200



HC-225~280



HC-315~355



HASCON
electric motor

Squirrel-cage motors

Dimensions foot-flange mount B35

Frame size	A	AA	AB	AC	AD	AG	B	BB	C	D	DH	E	ED	F	G	GD	H	HA	HD	K	KK	L	LG	LA	M	N	P	S	T
80M	125	34	160	175	140	51	100	130	50	19	M6x16	40	25	6	15.5	6	80	10	230	10	M25x1.5	295	106	12	165	130	200	12	3.5
90S	140	36	180	190	150	60	100	135	56	24	M8x19	50	40	8	20	7	90	13	260	10	M25x1.5	320	124	12	165	130	200	12	3.5
90L	140	36	180	190	150	60	125	160	56	24	M8x19	50	40	8	20	7	90	13	260	10	M25x1.5	345	124	12	165	130	200	12	3.5
100L	160	40	200	215	160	60	140	182	63	28	M10x22	60	45	8	24	7	100	14	275	12	M25x1.5	385	140	14	215	180	250	14.5	4
112M	190	45	230	236	185	75	140	195	70	28	M10x22	60	45	8	24	7	112	14	310	12	M32x1.5	410	145	14	215	180	250	14.5	4
132S	216	52	265	275	205	75	140	205	89	38	M12x28	80	63	10	33	8	132	16	350	12	M32x1.5	480	169	14	265	230	300	14.5	4
132M	216	52	265	275	205	75	178	245	89	38	M12x28	80	63	10	33	8	132	16	350	12	M32x1.5	520	169	14	265	230	300	14.5	4
160M	254	65	230	330	250	95	210	260	108	42	M16x36	110	90	12	37	8	160	19	425	14.5	M40x1.5	610	270	15	300	250	350	18.5	5
160L	254	65	320	330	350	95	254	305	108	42	M16x36	110	90	12	37	8	160	19	425	14.5	M40x1.5	655	270	15	300	250	350	18.5	5
180M	279	74	350	380	270	95	241	297	121	48	M16x36	110	90	14	42.5	9	180	22	460	14.5	M40x1.5	680	277	15	300	250	350	18.5	5
180L	279	74	350	380	270	95	279	327	121	48	M16x36	110	90	14	42.5	9	180	22	460	14.5	M40x1.5	720	277	15	300	250	350	18.5	5
200L	318	75	395	420	325	120	305	370	133	55	M20x42	110	90	16	49	10	200	25	515	18.5	M40x1.5	760	300	17	350	300	400	18.5	5
225S(4-8P)	356	75	436	465	335	120	286	355	149	60	M20x42	140	110	18	53	11	225	28	560	18.5	M50x1.5	825	340	20	400	350	450	18.5	5
225M(2P)	356	75	436	465	335	120	311	380	149	55	M20x42	110	90	16	49	10	225	28	560	18.5	M50x1.5	820	310	20	400	350	450	18.5	5
225M(4-8P)	356	75	436	465	335	120	311	380	149	60	M20x42	140	110	18	53	11	225	28	560	18.5	M50x1.5	850	340	20	400	350	450	18.5	5
250M(2P)	406	88	495	520	370	160	349	440	168	60	M20x42	140	110	18	53	11	250	33	620	24	M63x1.5	925	353	20	500	450	550	18.5	5
250M1(4-8P)	406	88	495	520	370	160	349	440	168	65	M20x42	140	110	18	58	11	250	33	620	24	M63x1.5	925	353	20	500	450	550	18.5	5
250M2(4P)	406	88	495	520	370	160	349	440	168	70	M20x42	140	110	20	62.5	12	280	33	620	24	M63x1.5	935	353	20	500	450	550	18.5	5
280S(2P)	457	103	550	570	400	160	368	495	190	65	M20x42	140	110	18	58	11	280	35	685	24	M63x1.5	960	350	22	500	450	550	18.5	5
280S(4-8P)	457	103	550	570	400	160	368	495	190	75	M20x42	140	110	20	67.5	12	280	35	685	24	M63x1.5	975	350	22	500	450	550	18.5	
280M(2P)	457	103	550	570	400	160	419	535	190	65	M20x42	140	110	18	58	11	280	35	685	24	M63x1.5	1000	350	22	500	450	550	18.5	5
280M1(4-8P)	457	103	550	570	400	160	419	535	190	75	M20x42	140	110	20	67.5	12	280	35	685	24	M63x1.5	1015	350	22	500	450	550	18.5	5
280M2(4-8P)	457	103	550	570	400	160	419	535	190	80	M20x42	170	140	22	71	14	280	35	685	24	M63x1.5	1160	380	22	500	450	550	18.5	5
315S(2P)	508	120	630	650	495	195	406	515	216	65	M20x42	140	110	18	58	11	315	45	820	28	M63x1.5	1060	387	24	600	550	660	24	6
315M(2P)	508	120	630	650	495	195	457	625	216	65	M20x42	140	110	18	58	11	315	45	820	28	M63x1.5	1270	387	24	600	550	660	24	6
315L(2P)	508	120	630	650	495	195	508	625	216	65	M20x42	140	110	18	58	11	315	45	820	28	M63x1.5	1270	387	24	600	550	660	24	6
315S(4-8P)	508	120	630	650	495	195	406	515	216	80	M20x42	170	140	22	71	14	315	45	820	28	M63x1.5	1190	417	24	600	550	660	24	6
315M(4-8P)	508	120	630	650	495	195	457	625	216	80	M20x42	170	140	22	71	14	315	45	820	28	M63x1.5	1300	417	24	600	550	660	24	6
315L(4-8P)	508	120	630	650	495	195	508	625	216	80	M20x42	170	140	22	71	14	315	45	820	28	M63x1.5	1300	417	24	600	550	660	24	6
355M(2P)	610	125	735	735	640	330	560	775	254	75	M24x50	140	110	20	67.5	12	355	49	1000	28	M63x1.5	1500	420	25	740	680	800	24	6
355L(2P)	610	125	735	735	640	330	630	775	254	75	M24x50	140	110	20	67.5	12	355	49	1000	28	M63x1.5	1500	420	25	740	680	800	24	6
355M(4-8P)	610	125	735	735	640	330	560	775	254	95	M24x50	170	140	25	86	14	355	49	1000	28	M63x1.5	1530	450	25	740	680	800	24	6
*355M(4-8P)	610	125	735	735	640	330	560	775	254	100	M24x50	210	160	28	90	16	355	49	1000	28	M63x1.5	1570	490	25	740	680	800	24	6
355L(4-8P)	610	125	735	735	640	330	630	775	254	95	M24x50	170	140	25	86	14	355	49	1000	28	M63x1.5	1530	450	25	740	680	800	24	6
*355L(4-8P)	610	125	735	735	640	330	630	775	254	100	M24x50	210	160	28	90	16	355	49	1000	28	M63x1.5	1570	490	25	740	680	800	24	6

The 'R' dimension is zero.

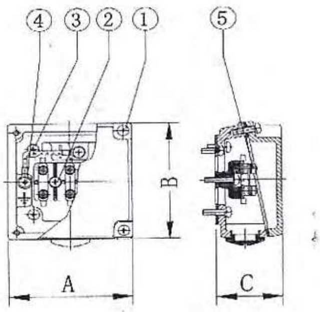
* These motors can also be supplied. Please state the dimensions of the shaft extension on order.

Squirrel-cage motors

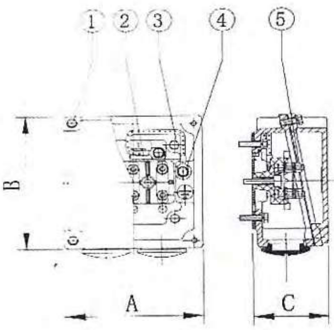
HASCON electric motor

Top terminal box

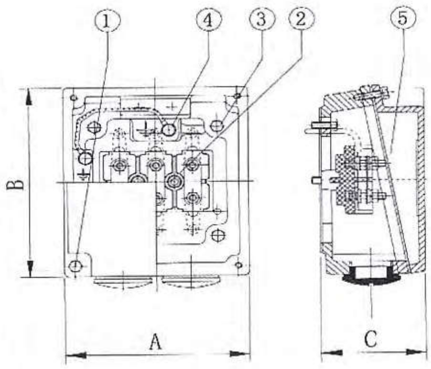
HC-80~100



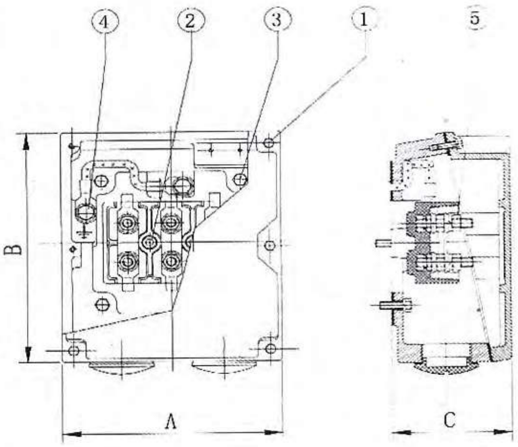
HC-112~132



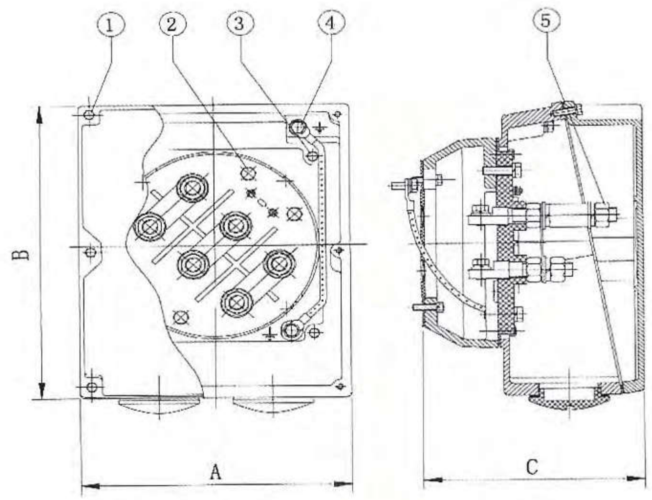
HC-160~225



HC-250~315

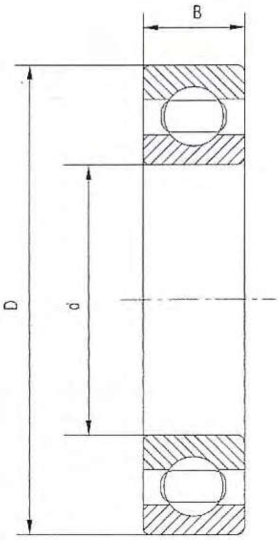


HC-355



FRAME	A	B	C	1	2	3	4	5	METRIC GLAND SIZE	PG GLAND SIZE
HC-80	95	95	56	M5X16	M5X25	M5X16	M5X12	M4	M25X1.5	PG16
HC-90-100	105	109	56	M5X16	M5X25	M5X16	M5X12	M4	M25X1.5	PG16
HC-112-132	117	125	65	M5X16	M5X25	M5X20	M5X16	M5	2XM32X1.5	2XPG21
HC-160-180	155	177	87	M6X16	M6X25	M6X16	M6X12	M6	2XM40X1.5	2XPG29
HC-200-225	179	215	107	M6X25	M8X35	M8X20	M8X16	M8	2XM50X1.5	2XPG36
HC-250-280	217	261	120	M6X30	M8X35	M18X30	M10X20	M10	2XM63X1.5	2XPG42
HC-315	279	331	165	M8X35	M10X45	M10X30	M10X20	M12	2XM63X1.5	2XPG48
HC-355	334	410	278	M8X30	M12X80	M12X30	M10X25	M20	2XM63X1.5	2XPG48

Bearing data



Frame	DE	NDE	d	D	B
HC-80	6204 ZZ C3	6204 ZZ C3	20	47	14
HC-90	6205 ZZ C3	6205 ZZ C3	25	52	15
HC-100	6206 ZZ C3	6206 ZZ C3	30	62	16
HC-112	6306 ZZ C3	6306 ZZ C3	30	72	19
HC-132	6308 ZZ C3	6308 ZZ C3	40	90	23
HC-160	6309 C3	6309 C3	45	100	25
HC-180	6311 C3	6311 C3	55	120	29
HC-200	6312 C3	6312 C3	60	130	31
HC-225	6313 C3	6313 C3	65	140	33
HC-250(Horizontal)	6314 C3	6314 C3	70	150	35
HC-250(Vertical)	6314 C3	7314	70	150	35
HC-280-2P(Horizontal)	6314 C3	6314 C3	70	150	35
HC-280-2P(Vertical)	6314 C3	7314	70	150	35
HC-280-4-8(Horizontal)	6317 C3	6317 C3	85	180	41
HC-280-4-8(Vertical)	6317 C3	7317	85	180	41
HC-315 2 P(Horizontal)	6316 C3	6316 C3	80	170	39
HC-315 2 P(Vertical)	6316 C3	7316	80	170	39
HC-315 4-8P(Horizontal)	N319	6319 C3	95	200	45
HC-315 4-8P(Vertical)	N319	7319	95	200	45
HC-355 2P(Horizontal)	6319 C3	6319 C3	95	200	45
HC-355 2P(Vertical)	6319 C3	7319	95	200	45
HC-355 4-8 P(Horizontal)	N322	6322 C3	110	240	50
HC-355 4-8 P(Vertical)	N322	7322	110	240	50

- HC motors are equipped with bearings from excellent manufacturers.
- In general the bearings have C3 clearances.
- Motors of frame sizes 80-132 are fitted with life-lubricated bearings.
- Motors of frame sizes 160-355 are fitted with open bearings and regreasing device. Depending on the useful life of grease, open bearings must be regreased in good time so that the scheduled bearing service life is reached.

Frame size	Drive end bearing	Non-drive end bearing	Reqreasing period hours for operating temperatures up to 70 C			Quantity of grease in bearing chamber
			<3600r/min	<1800r/min	<1200r/min	grams
HC-160	6309 C3	6309 C3	6000	12000	18000	13
HC-180	6311 C3	6311 C3	4000	11000	16000	15
HC-200	6312 C3	6312 C3	3500	8500	13000	20
HC-225	6313 C3	6313 C3	3000	6000	9000	22
HC-250	6314 C3	6314 C3	2000	5000	8000	23
HC-280 2P	6314 C3	6314 C3	1200	-	-	30
HC-280 4-8P	6317 C3	6317 C3	-	4000	6000	30
HC-315 2P	6316 C3	6316 C3	1200	-	-	30
HC-315 4-8P	N319	6319 C3	-	2000	3000	45
HC-355 2P	6319 C3	6319 C3	1200	-	-	30
HC-355 4-8P	N322	6322 C3	-	1400	2200	60

Notes:
1. Vertical motors should be greased twice as often as horizontal motors.
2. Regreasing time should be reduced if bearing operating temperature is in excess of 70°C
- HASCON reserves right to make changes to this brochure without notics.

HA SERIES THREE-PHASE ASYNCHRONOUS MOTORS

HASCON electric motor

Aluminum housing

HA series aluminum housing three-phase asynchronous motors, with latest design in entirety, are made of selected quality materials and conform to the IEC standard. **HA** motors have good performance, safety and reliable operation, nice appearance, and can be maintained very conveniently, while with low noises, little vibration and at the same time light weight and simple construction. These series motors can be used for general drive.

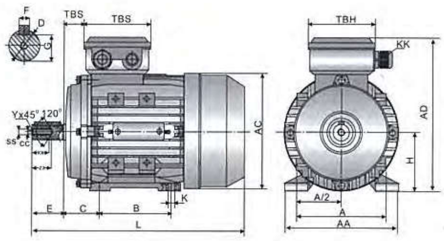
Techinical Data @50Hz

Model	Power (kW)	Current (A)			Current (A)			Current (A)			Speed (r/min)	Eff. (%)	Power Factor	Tstart/Tn (Times)	Tmax/Tn (Times)	Tmax/Tn (Times)	Is/In (Times)	Noise dB(A)	W.t. (Kg)
		220V	380V	660V	230V	400V	690V	240V	415V	720V									
HA561-2	0.09	0.64	0.37	0.21	0.61	0.35	0.20	0.58	0.34	0.19	2670	57	0.65	2.2	2.4	1.6	6	58	2.8
HA562-2	0.12	0.74	0.43	0.25	0.70	0.40	0.23	0.67	0.39	0.22	2730	62	0.69	2.2	2.4	1.6	6	58	3.2
HA563-2	0.18	1.0.	0.58	0.34	0.96	0.56	0.32	0.93	0.54	0.31	2750	65	0.72	2.2	2.4	1.6	6	59	3.5
HA631-2	0.18	1.00	0.58	0.33	0.95	0.55	0.32	0.92	0.53	0.31	2710	63	0.75	2.2	2.4	1.6	6	61	4
HA632-2	0.25	1.29	0.75	0.43	1.23	0.71	0.41	1.19	0.69	0.40	2710	65	0.78	2.2	2.4	1.6	6	61	4.4
HA633-2	0.37	1.92	1.11	0.64	1.82	1.05	0.61	1.76	1.02	0.59	2710	65	0.78	2.2	2.4	1.6	6	62	4.9
HA711-2	0.37	1.76	1.02	0.59	1.67	0.97	0.56	1.61	0.93	0.54	2730	70	0.79	2.2	2.4	1.6	6	64	5.6
HA712-2	0.55	2.57	1.49	0.86	2.45	1.42	0.82	2.36	1.36	0.79	2760	71	0.79	2.2	2.4	1.6	6	64	6.1
HA713-2	0.75	3.33	1.93	1.11	3.18	1.83	1.06	3.06	1.77	1.02	2730	72	0.82	2.2	2.4	1.5	6	65	7
HA801-2	0.75	3.21	1.86	1.07	3.06	1.77	1.02	2.94	1.70	0.98	2770	73	0.84	2.2	2.4	1.5	6	67	9.1
HA802-2	1.1	4.56	2.64	1.52	4.35	2.51	1.45	4.18	2.42	1.39	2770	76.2	0.83	2.2	2.4	1.5	6	67	10.2
HA803-2	1.5	6.04	3.50	2.01	5.87	3.32	1.92	5.54	3.20	1.85	2800	78.5	0.83	2.2	2.4	1.5	6	70	11.7
HA90S-2	1.5	5.97	3.46	1.99	5.76	3.28	1.90	5.47	3.16	1.82	2840	78.5	0.84	2.2	2.4	15	6	72	12
HA90L1-2	2.2	8.39	4.85	2.80	8.0	4.61	2.66	7.69	4.45	2.56	2840	81	0.85	2.2	2.4	1.4	6	72	15
HA90L2-2	3	11.08	6.42	3.69	10.56	6.10	3.52	10.16	5.88	3.39	2840	82.6	0.86	2.2	2.4	1.4	6	74	18.5
HA100L1-2	3	10.96	6.34	3.65	10.44	6.03	3.48	10.04	5.81	3.35	2840	82.6	0.87	2.2	2.3	1.4	7	76	22.3
HA100L2-2	4	14.33	8.30	4.78	13.65	7.88	4.55	13.14	7.60	4.38	2850	84.2	0.87	2.2	2.3	1.4	7.5	77	25.2
HA112M-2	4	14.33	8.30	4.78	13.65	7.88	4.55	13.14	7.60	4.38	2880	84.2	0.87	2.2	2.3	1.4	7.5	77	26.7
HA112L-2	5.5	19.14	11.08	6.38	18.23	10.53	6.08	17.54	10.15	5.85	2880	85.7	0.88	2.2	2.3	1.2	7.5	78	30.2
HA132S1-2	5.5	19.14	11.08	6.38	18.23	10.53	6.08	17.54	10.15	5.85	2900	85.7	0.88	2	2.2	1.2	7.5	80	38.5
HA132S2-2	7.5	25.71	14.88	8.57	24.49	14.14	8.16	23.57	13.63	7.86	2920	87	0.88	2	2.2	1.2	7.5	80	42.2
HA132M1-2	9.2	30.86	17.85	10.28	29.87	17.25	9.96	28.26	16.34	9.42	2930	88	0.89	2	2.2	1.2	7.5	81	51.4
HA132M2-2	11	36.28	21.01	12.09	34.57	19.96	11.52	33.26	19.23	11.09	2930	88.4	0.9	2	2.2	1.2	7.5	83	58.8
HA160M1-2	11	36.28	21.01	12.09	34.57	19.96	11.52	33.26	19.23	11.09	2940	88.4	0.9	2	2.2	1.2	7.5	86	75
HA160M2-2	15	48.39	28.01	16.13	46.09	26.61	15.36	44.35	25.62	14.78	2940	89.4	0.91	2	2.2	1.2	7.5	86	88
HA160L-2	18.5	59.28	34.32	19.76	56.47	32.6	18.82	54.34	31.43	18.11	2940	90	0.91	2	2.2	1.1	7.5	86	99

Techinical Data @50Hz

Model	Power (KW)	Current (A)			Current (A)			Current (A)			Speed (r/min)	Eff. (%)	Power Factor	Tstart/Tn (Times)	Tmax/Tn (Times)	Tmax/Tn (Times)	Is/In (Times)	Noise dB(A)	W.t. (Kg)
		220V	380V	660V	230V	400V	690V	240V	415V	720V									
HA561-4	0.06	0.55	0.32	0.18	0.52	0.30	0.17	0.50	0.29	0.17	1320	48.5	0.59	2.3	2.4	1.7	6	50	3
HA562-4	0.09	0.77	0.45	0.26	0.74	0.43	0.25	0.71	0.41	0.24	1320	50	0.61	2.3	2.4	1.7	6	50	3.3
HA563-4	0.12	0.96	0.56	0.32	0.92	0.53	0.31	0.88	0.51	0.29	1320	52	0.63	2.2	2.4	1.7	6	51	3.5
HA631-4	0.12	0.86	0.50	0.29	0.82	0.47	0.27	0.79	0.46	0.26	1350	57	0.64	2.2	2.4	1.7	6	52	3.9
HA632-4	0.18	1.23	0.71	0.41	1.17	0.68	0.39	1.13	0.65	0.38	1350	59	0.65	2.2	2.4	1.7	6	52	4.3
HA633-4	0.25	1.66	0.96	0.55	1.58	0.91	0.53	1.52	0.88	0.51	1350	60	0.66	2.2	2.4	1.7	6	54	4.8
HA711-4	0.25	1.52	0.88	0.51	1.45	0.84	0.48	1.39	0.81	0.46	1350	60	0.72	2.2	2.4	1.7	6	55	5.4
HA712-4	0.37	2.02	1.17	0.67	1.92	1.11	0.64	1.85	1.07	0.62	1370	65	0.74	2.2	2.4	1.7	6	55	6.2
HA713-4	0.55	2.92	1.69	0.97	2.78	1.60	0.93	2.67	1.55	0.89	1380	66	0.75	2.2	2.4	1.7	6	57	7.3
HA801-4	0.55	2.87	1.66	0.96	2.74	1.58	0.91	2.63	1.52	0.88	1370	67	0.75	2.2	2.4	1.7	6	58	9
HA802-4	0.75	3.50	2.03	1.17	3.34	1.93	1.11	3.21	1.86	1.07	1380	72	0.78	2.2	2.4	1.5	6	58	10
HA803-4	1.1	4.86	2.81	1.62	4.63	2.67	1.54	4.45	2.57	1.48	1390	76.2	0.78	2.2	2.4	1.5	6	60	12.3
HA90S-4	1.1	4.80	2.78	1.60	4.57	2.64	1.52	4.40	2.54	1.47	1400	76.2	0.79	2.2	2.4	1.5	6	61	12.1
HA90L-4	1.5	6.27	3.63	2.09	5.97	3.45	1.99	5.75	3.32	1.92	1400	78.5	0.8	2.2	2.4	1.5	6	61	14.6
HA90L2-4	2.2	8.91	5.16	2.97	8.45	4.90	2.83	8.17	4.72	2.72	1400	81	0.8	2.2	2.4	1.	7	63	18.3
HA100L1-4	2.2	8.80	5.09	2.93	8.38	4.84	2.79	8.07	4.66	2.69	1420	81	0.81	2.2	2.3	1.5	7	64	21
HA100L2-4	3	11.77	6.81	3.92	11.21	6.47	3.74	10.79	6.24	3.60	1420	82.6	0.81	2.2	2.3	1.5	7	64	24.7
HA100L3-4	4	15.20	8.80	5.07	14.18	8.36	4.83	13.94	8.06	4.65	1430	84.2	0.82	2.2	2.2	1.5	7	65	29
HA112M-4	4	15.02	8.70	5.01	14.31	8.26	4.77	13.77	7.96	4.59	1430	84.2	0.83	2.2	2.2	1.5	7	65	30.5
HA112L-4	5.5	20.29	11.75	6.76	19.33	11.16	6.44	18.60	10.76	6.20	1440	85.7	0.83	2.2	2.2	1.4	7	68	34.8
HA132S-4	5.5	20.05	11.61	6.68	19.1	11.03	6.37	18.38	10.63	6.13	1450	85.7	0.84	2.2	2.2	1.4	7	71	40.4
HA132M-4	7.5	26.62	15.41	8.87	25.35	14.64	8.45	24.40	14.11	8.13	1450	87	0.85	2.2	2.2	1.4	7	71	49.6
HA132L1-4	9.2	32.46	18.79	10.82	30.92	17.85	10.31	29.76	17.21	9.92	1460	87.5	0.85	2.2	2.2	1.4	7.5	74	56.6
HA132L2-4	10	35.08	20.31	11.69	33.42	19.3	11.14	32.16	18.60	10.72	1460	88	0.85	2.2	2.2	1.4	7.5	74	58.6
HA132L3-4	11	37.97	21.98	12.66	36.17	20.88	12.06	34.81	20.13	11.60	1460	88.4	0.86	2.2	2.2	1.4	7.5	74	64
HA160M-4	11	37.54	21.73	12.51	35.76	20.64	11.92	34.41	19.90	11.47	1460	88.4	0.87	2.2	2.2	1.4	7	75	78
HA160L-4	15	51.18	29.63	17.06	48.76	28.15	16.25	46.92	27.13	15.64	1460	88.4	0.87	2.2	2.2	1.4	7.5	75	98
HA631-6	0.09	0.92	0.53	0.31	0.88	0.51	0.29	0.85	0.49	0.28	840	42	0.61	2	2	1.5	3.5	50	4.2
HA632-6	0.12	1.129	0.65	0.38	1.08	0.62	0.36	1.03	0.60	0.34	850	45	0.62	2	2	1.5	3.5	50	4.8
HA711-6	0.18	1.28	0.74	0.43	1.22	0.70	0.41	1.17	0.68	0.39	880	56	0.66	1.6	1.7	1.5	4	52	6
HA712-6	0.25	1.6	0.92	0.53	1.51	0.87	0.50	1.46	0.84	0.49	900	59	0.7	2.1	2.2	1.5	4	52	6.5
HA713-6	0.37	2.31	1.34	0.77	2.2	1.27	0.73	2.11	1.22	0.70	890	61	0.69	2	2.1	1.5	4	54	7.2
HA801-6	0.37	2.24	1.30	0.75	2.13	1.23	0.71	2.05	1.19	0.68	900	62	0.7	1.9	1.9	1.5	4	56	8.2
HA802-6	0.55	2.99	1.73	1.00	2.85	1.65	0.95	2.74	1.59	0.91	900	67	0.72	2	2.3	1.5	4	56	9.9
HA803-6	0.75	4.02	2.33	1.34	3.83	2.21	1.28	3.69	2.13	1.23	900	68	0.72	2	2.3	1.5	4	58	11.3
HA90S-6	0.75	3.96	2.29	1.32	3.77	2.18	1.26	3.63	2.10	1.21	920	69	0.72	2.2	2.2	1.5	5.5	59	11.7
HA90L-6	1.1	5.49	3.18	1.83	5.23	3.02	1.74	5.03	2.91	1.68	925	72	0.73	2.2	2.2	1.3	5.5	59	15.1
HA100L-6	1.5	7.00	4.05	2.33	6.67	3.85	2.22	6.42	3.71	2.14	945	74	0.76	2.2	2.2	1.3	6	61	19.1
HA112M-6	2.2	9.74	5.64	3.25	9.28	5.36	3.09	8.93	5.16	2.98	955	78	0.76	2.2	2.2	1.3	6	64	25.4
HA132S-6	3	13.11	7.59	4.37	12.49	7.21	4.16	12.02	6.95	4.01	960	79	0.76	2	2	1.3	6.5	64	36.1
HA132M1-6	4	17.16	9.93	5.72	16.35	9.44	5.45	15.73	9.10	5.24	960	80.5	0.76	2	2	1.3	6.5	68	45
HA132M2-6	5.5	22.58	13.08	7.53	21.51	12.42	7.17	20.70	11.97	6.90	960	83	0.77	2	2	1.3	6.5	68	55.5
HA132L-6	7.5	30.07	17.41	10.02	28.65	16.54	9.55	27.57	15.94	9.19	960	85	0.77	2	2	1.3	6.5	68	60
HA160M-6	7.5	28.61	16.56	9.54	27.25	15.73	9.08	26.22	15.17	8.74	960	86	0.8	2	2.2	1.3	6.5	68	72
HA160L-6	11	41.76	24.18	13.92	39.78	22.97	13.26	38.28	22.14	12.76	960	87.5	0.79	2	2.2	1.3	6.5	73	92
HA711-8	0.09	0.88	0.51	0.29	0.84	0.48	0.28	0.81	0.47	0.27	680	48	0.56	1.5	1.7	1.3	3	50	6
HA712-8	0.12	1.05	0.61	0.35	1.00	0.58	0.33	0.96	0.55	0.32	690	51	0.59	1.6	1.7	1.3	2.7	50	6.8
HA801-8	0.18	1.52	0.88	0.51	1.45	0.84	0.48	1.39	0.80	0.46	680	51	0.61	1.5	1.7	1.3	2.8	52	9.9
HA802-8	0.25	1.92	1.11	0.64	1.83	1.06	0.61	1.76	1.02	0.59	680	56	0.61	1.6	2	1.3	2.7	52	10.9
HA803-8	0.37	2.45	1.42	0.82	2.33	1.35	0.78	2.24	1.30	0.75	680	63	0.63	1.6	1.8	1.3	2.8	56	14.8
HA90S-8	0.55	3.36	1.95	1.12	3.21	1.85	1.07	3.08	1.78	1.03	680	66	0.65	1.6	1.8	1.3	3	56	17.2
HA100L1-8	0.75	4.45	2.58	1.48	4.24	2.45	1.41	4.08	2.36	1.36	710	66	0.67	1.7	2.1	1.3	3.5	59	17.5
HA100L2-8	1.1	5.81	3.36	1.94	5.54	3.20	1.85	5.33	3.08	1.78	710	72	0.69	1.7	2.1	1.2	3.5	59	19.7
HA112M-8	1.5	7.82	4.53	2.61	7.45	4.30	2.48	7.17	4.15	2.39	710	74	0.68	1.8	2.1	1.2	4.2	61	25.6
HA132S-8	2.2	10.84	6.28	3.61	10.33	5.96	3.44	9.94	5.75	3.31	720	75	0.71	2	2	1.2	5.5	64	35.5
HA132M-8	3	14.01	8.11	4.67	13.34	7.70	4.45	12.84	7.43	4.28	720	77	0.73	2	2	1.2	5.5	64	45
HA160M1-8	4	17.97	10.41	5.99	17.12	9.89	5.71	16.48	9.53	5.49	730	80	0.73	1.9	2.1	1.2	6	68	60
HA160M2-8	5.5	23.36	13.52	7.79	22.25	12.85	7.42	21.41	12.38	7.14	720	83.5	0.74	2	2.2	1.2	6	68	72
HA160L-8	7.5	30.87	17.87	10.29	29.41	17.0	9.8	28.30	16.37	9.43	720	85	0.75	1.9	2.2	1.2	6	68	92

Overall & Installation dimensions



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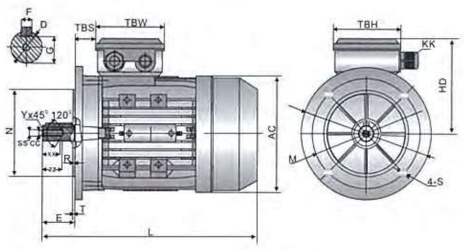

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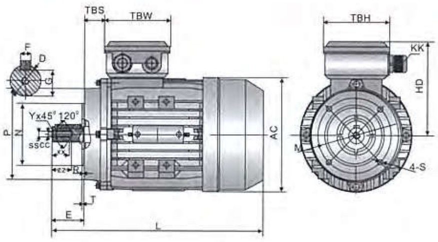

IMB14

B3 Overall & Installation Dimensions

FRAME	H	A	B	C	D	E	F	G	K	AA	AD	AC	L	LHAB☆	KK	TBS	TBW	TBH	SS	XX	ZZ	CC	Y
160M/L	160	254	210/254	108	Φ42	110	12	37	15X19	290	390	Φ320	640	705	2-M32X1.5	64	143	146	M16	35	42	14.2	2
132M/L	132	216	178	89	Φ38	80	10	33	12X16	252	325	Φ270	474/500	564/590	2-M25X1.5	38	112	119	M12	28	34	10.2	1.5
132S	132	216	140	89	Φ38	80	10	33	12X16	252	325	Φ270	436	553	2-M25X1.5	38	112	119	M12	28	34	10.2	1.5
112	112	190	140	70	Φ28	60	8	24	12X16	220	292	Φ230	395	483	2-M25X1.5	32	112	119	M10	22	28	8.5	1.5
100☆☆	100	160	140	63	Φ28	60	8	24	12X16	196	252	Φ205	368(386)	474	1-M20X1.5	26	105	105	M10	22	28	8.5	1.5
90L1/L2	90	140	125	56	Φ24	50	8	20	10X13	175	235	Φ185	335/365	392	1-M20X1.5	30	105	105	M8	20	25	6.8	1
90S	90	140	100	56	Φ24	50	8	20	10X13	175	235	Φ185	310	367	1-M20X1.5	30	105	105	M8	20	25	6.8	1
80	80	125	100	50	Φ19	40	6	15.5	10X13	160	217	Φ165	290	353	1-M20X1.5	27	105	105	M6	16	22	5	1
71☆☆	71	112	90	45	Φ14	30	5	11	7X10	132	188/180	Φ145	240(254)	307	1-M20X1.5	20/27	94/80	94/80	M5	12	18	4.2	0.8
63	63	100	80	40	Φ11	23	4	8.5	7X10	120	173/165	Φ130	215	265	1-M16X1.5	14/21	94/80	94/80	M4	10	15	3.3	0.8
56	56	90	71	36	Φ9	20	3	7.2	5.8X8.8	110	156/151	Φ120	195		1-M16X1.5	14/21	88/63	88/63	M3	8	12	2.5	0.5

B5 Overall & Installation Dimensions

FRAME	B5						B5R						D	E	F	G	KK	AC	HD	L	LHAB☆	TBS	TBW	TBH	SS	XX	ZZ	CC	Y
	M	N	P	T	S	R	M	N	P	T	S	R																	
160M/L	Φ300	Φ250	Φ350	5.0	Φ19	0							Φ42	110	12	37	2-M32X1.5	Φ320	230	640	705	64	143	146	M16	35	42	14.2	2
132M/L	Φ265	Φ230	Φ300	4.0	Φ15	0	Φ215	Φ180	Φ250	4.0	Φ15	0	Φ38	80	10	33	2-M25X1.5	Φ270	193	474/500	564/590	38	112	119	M12	28	34	10.2	1.5
132S	Φ265	Φ230	Φ300	4.0	Φ15	0	Φ215	Φ180	Φ250	4.0	Φ15	0	Φ38	80	10	33	2-M25X1.5	Φ270	193	436	553	38	112	119	M12	28	34	10.2	1.5
112	Φ215	Φ180	Φ250	4.0	Φ15	0	Φ165	Φ130	Φ200	3.5	Φ12	0	Φ28	60	8	24	2-M25X1.5	Φ230	180	395	483	32	112	119	M10	22	28	8.5	1.5
100☆☆	Φ215	Φ180	Φ250	4.0	Φ15	0	Φ165	Φ130	Φ200	3.5	Φ12	0	Φ28	60	8	24	1-M20X1.5	Φ205	152	368(386)	474	26	105	105	M10	22	28	8.5	1.5
90L1/L2	Φ165	Φ130	Φ200	3.5	Φ12	0	Φ130	Φ110	Φ160	3.5	Φ12	0	Φ24	50	8	20	1-M20X1.5	Φ185	145	335/365	392	30	105	105	M8	20	25	6.8	1
90S	Φ165	Φ130	Φ200	3.5	Φ12	0	Φ130	Φ110	Φ160	3.5	Φ12	0	Φ24	50	8	20	1-M20X1.5	Φ185	145	310	367	30	105	105	M8	20	25	6.8	1
80	Φ165	Φ130	Φ200	3.5	Φ12	0	Φ130	Φ110	Φ160	3.5	Φ10	0	Φ19	40	6	15.5	1-M20X1.5	Φ165	137	290	353	27	105	105	M6	16	22	5	1
71☆☆	Φ130	Φ110	Φ160	3.5	Φ10	0	Φ115	Φ95	Φ140	3.0	Φ10	0	Φ14	30	5	11	1-M20X1.5	Φ145	117/109	240(254)	307	20/27	94/80	94/80	M5	12	18	4.2	0.8
63	Φ115	Φ95	Φ140	3.0	Φ10	0							Φ11	23	4	8.5	1-M16X1.5	Φ130	110/102	215	265	14/21	94/80	94/80	M4	10	15	3.3	0.8
56	Φ98	Φ80	Φ120	3.0	Φ7	0							Φ9	20	3	7.2	1-M16X1.5	Φ120	100/95	195		14/21	88/63	88/63	M3	8	12	2.5	0.5

B14 Overall & Installation Dimensions

FRAME	B14						B14B						D	E	F	G	KK	AC	HD	L	LHAB☆	TBS	TBW	TBH	SS	XX	ZZ	CC	Y
	N	M	P	T	R	S	N	M	P	T	R	S																	
132M/L	Φ130	Φ165	Φ200	3.5	0	M10	Φ180	Φ215	Φ250	4.0	0	M12	Φ38	80	10	33	2-M32X1.5	Φ270	193	475/500	564/590	38	112	119	M12	28	34	10.2	1.5
132S	Φ130	Φ165	Φ200	3.5	0	M10	Φ180	Φ215	Φ250	4.0	0	M12	Φ38	80	10	33	2-M25X1.5	Φ270	193	436	553	38	112	119	M12	28	34	10.2	1.5
112	Φ110	Φ130	Φ160	3.5	0	M8	Φ130	Φ165	Φ200	3.5	0	M10	Φ28	60	8	24	2-M25X1.5	Φ230	180	395	483	32	112	119	M10	22	28	8.5	1.5
100☆☆	Φ110	Φ130	Φ160	3.5	0	M8	Φ130	Φ165	Φ200	3.5	0	M10	Φ28	60	8	24	1-M25X1.5	Φ205	152	368(386)	474	26	105	105	M10	22	28	8.5	1.5
90L1/L2	Φ95	Φ115	Φ140	3.0	0	M8	Φ110	Φ130	Φ160	3.5	0	M8	Φ24	50	8	20	1-M20X1.5	Φ185	145	335/365	392	30	105	105	M8	20	25	6.8	1
90S	Φ95	Φ115	Φ140	3.0	0	M8	Φ110	Φ130	Φ160	3.5	0	M8	Φ24	50	8	20	1-M20X1.5	Φ185	145	310	367	30	105	105	M8	20	25	6.8	1
80	Φ80	Φ100	Φ120	3.0	0	M6	Φ110	Φ130	Φ160	3.5	0	M8	Φ19	40	6	15.5	1-M20X1.5	Φ165	137	290	353	27	105	105	M6	16	22	5	1
71☆☆	Φ70	Φ85	Φ105	2.5	0	M6	Φ95	Φ115	Φ140	3.0	0	M8	Φ14	30	5	11	1-M20X1.5	Φ145	117/109	240(254)	307	20/27	94/80	94/80	M5	12	18	4.2	0.8
63	Φ60	Φ75	Φ90	2.5	0	M5	Φ80	Φ100	Φ120	3.0		M6	Φ11	23	4	8.5	1-M16X1.5	Φ130	110/102	215	265		94/80	94/80	M4	10	15	3.3	0.8
56	Φ50	Φ65	Φ80	2.5	0	M5							Φ9	20	3	7.2	1-M16X1.5	Φ120	100/95	195		14/21	88/63	88/63	M3	8	12	2.5	0.5

☆:For Brake Motors

☆☆: This frame size has two housing sizes, the rated output is for normal "L" size, and increased output is for the bigger "L" size (refer to the figures in the bracket "（）")