HIGH EFFICIENCY THREE-PHASE MOTORS – IE2

EFFICIENCY LEVEL ACCORDING TO IEC 60034-30-1:2014
EFFICIENCY TESTING METHOD IEC 60034-2-1;2007

FOR MAINS VOLTAGE
400 V - 50 HZ

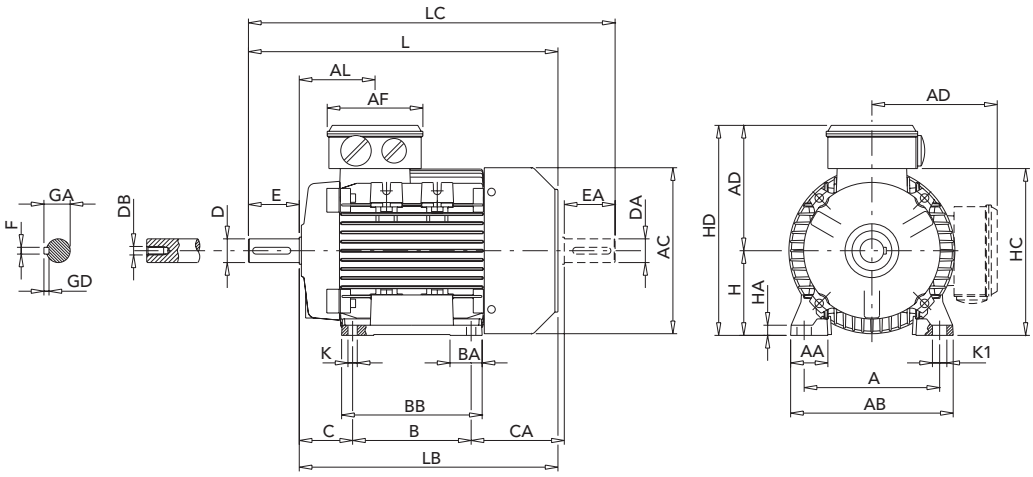
IE2

TEMPERATURE RISE TO CLASS B

Type		kW	HP	min^{-1}	M_N Nm	IE2 η 50%	IE2 η 75%	IE2 η 100%	cos φ	I_N 400V	I_A/I_N	M_A/M_N	M_S/M_N	M_K/M_N	J 10^{-3} kgm^2	kg
3000 min^{-1} (2 poles)																
AMEE 71Z AA	**2***	0.75	1	2820	2.5	73.3	76.5	77.5	0.74	1.9	5.5	3.4	3.2	3.4	0.61	7.2
AMEE 80Z AA	**2**	0.75	1	2825	2.5	71.7	76.1	77.4	0.74	1.9	7.5	4.3	4.1	4.4	0.75	8.4
AMEE 80Z BA	**2**	1.1	1.5	2820	3.7	77.6	80.0	79.6	0.78	2.5	7.6	4.3	4.1	4.4	0.96	12.0
AMEE 80Z CA	**2***	1.5	2	2880	5.0	80.5	82.1	82.3	0.83	3.4	7.7	4.3	4.1	4.4	1.1	13.5
AMEE 90S AA	**2**	1.5	2	2850	5.0	79.1	81.4	81.3	0.80	3.4	6.8	3.0	3.0	3.1	1.37	12.7
AMEE 90L CA	**2**	2.2	3	2870	7.3	80.5	83.2	83.6	0.81	4.7	6.8	3.0	3.0	3.2	1.8	16.0
AMEE 90L DA	**2***	3	4	2870	10.0	82.4	84.5	84.6	0.79	6.6	6.8	3.4	3.4	3.9	2.1	18.7
AMEE 100L AA	**2**	3	4	2900	9.9	83.5	84.6	84.6	0.86	5.9	9.8	4.3	3.6	4.0	3.3	19.7
AMEE 100L BA	**2***	4	5.5	2910	13.1	85.3	86.7	86.6	0.83	8.0	9.8	4.2	3.6	4.0	4.1	22.8
AMEE 112M AA	**2**	4	5.5	2900	13.2	82.8	85.2	85.8	0.82	8.3	9.1	3.2	3.2	3.5	12.2	29.5
AMEE 112M BA	**2***	5.5	7.5	2920	18.0	85.8	87.4	87.3	0.88	10.4	8.7	3.1	2.6	3.5	8.58	34.0
AMEE 112M CA	**2***	7.5	10	2900	24.7	86.5	88.3	88.3	0.92	13.2	9.6	3.4	2.8	3.7	10.5	36.0
AMEE 132S YA	**2**	5.5	7.5	2910	18.0	85.9	87.8	87.8	0.84	11.0	8.2	2.7	2.7	3.2	10.63	37.0
AMEE 132S ZA	**2**	7.5	10	2910	24.6	89.3	89.5	88.9	0.86	14.1	8.2	2.7	2.7	3.2	13.8	42.6
AMEE 132M ZA	**2**	9.2	12.5	2920	30.1	89.1	90.4	89.4	0.90	16.3	9.4	3.0	2.8	4.0	16.0	53.0
AMEE 132M RA	**2***	11	15	2920	36.0	88.1	90.0	89.7	0.90	19.8	9.6	3.0	2.9	4.2	17.5	58.0
AMEE 132M TA	**2***	15	20	2920	49.1	88.9	90.6	90.3	0.89	27.0	9.6	3.8	2.2	4.0	21.0	64.0
AMEE 160M YA	**2**	11	15	2935	35.8	87.7	89.4	89.6	0.81	22.0	8.6	3.6	2.8	3.1	40.0	77.0
AMEE 160M ZA	**2**	15	20	2930	48.9	89.9	90.8	90.3	0.89	26.7	9.2	3.5	2.6	3.3	51.8	77.0
AMEE 160L ZA	**2**	18.5	25	2930	60.3	89.0	90.6	90.9	0.81	36.3	8.7	3.3	3.1	3.9	53.4	88.9
AMEE 160L TA	**2**	22	30	2935	71.6	91.0	91.7	91.5	0.90	38.6	9.0	4.4	4.3	3.6	64.0	108.7

* Higher output (progressive motor)

THREE-PHASE FRAME SIZE 71-160 IMB3
AMEE SERIES - ALLUMINIUM ALLOY FRAME

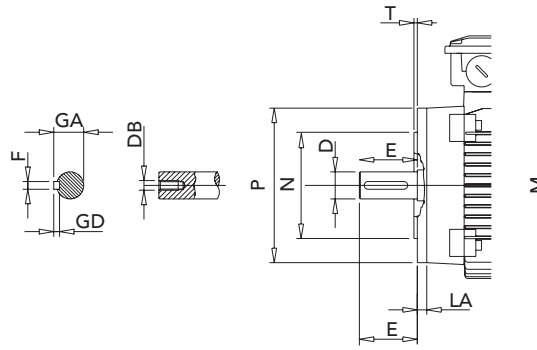


IEC	Poles	kW	H	A	B	C	K[1]	AB	BB	CA	AD[2]	HD[2]	AC	HC
71	**2**	**0.75**	71	112	90	45	8	135	107	81	110	181	139	142
80	**2-4**	**all**	80	125	100	50	10	153	125	89	129	209	160	162
90S	**2-4-6**	**all**	90	140	100	56	10	170	150	116	138	228	180	181
90L	**2-4-6**	**all**	90	140	125	56	10	170	150	91	138	228	180	181
100	**2-4-6**	**all**	100	160	140	63	11	192	166	110	145	245	196	198
112	**2**	**4-5.5**	112	190	140	70	12.5	220	176	126	160	272	225	225
	2	**7.5**	112	190	140	70	12.5	220	176	148	160	272	222	225
	4	**4**	112	190	140	70	12.5	220	176	126	160	272	225	225
	4	**5.5**	112	190	140	70	12.5	220	176	148	160	272	222	225
	6	**all**	112	190	140	70	12.5	220	176	126	160	272	225	225
132S	**2-4-6**	**all**	132	216	140	89	12	256	180	134	194	326	248	261
132M	**2**	**9.2**	132	216	178	89	12	256	218	136	194	326	248	261
	2	**11**	132	216	178	89	12	256	218	156	194	326	248	261
	2	**15**	132	216	178	89	12	256	218	207	194	326	248	261
	4	**7.5**	132	216	178	89	12	256	218	136	194	326	248	261
	4	**9.2**	132	216	178	89	12	256	218	136	194	326	248	261
	6	**4**	132	216	178	89	12	256	218	136	194	326	248	261
	6	**5.5**	132	216	178	89	12	256	218	136	194	326	248	261
160M	**2-4-6**	**all**	160	254	210	108	14	320	270	180	238	398	317	316
160L	**2-4-6**	**all**	160	254	254	108	14	320	310	180	238	398	317	316

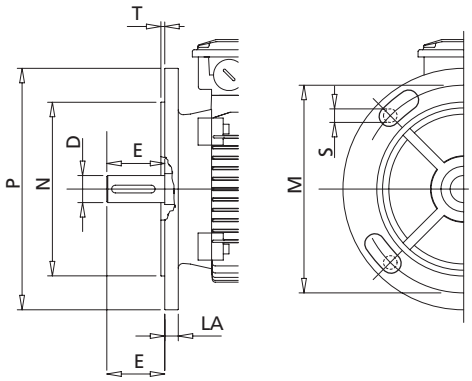
IEC	Poles	kW	HA	K1	L	LB	LC	AL	AF	BA	AA	D/DA	E/EA	F	GD	GA	DB[3]
71	**2**	**0.75**	9	11	246	216	278	69	92	28	31	14	30	5	5	16	M5
80	**2-4**	**all**	9.5	14	272	232	319	79	116	29	35	19	40	6	6	21.5	M6
90S	**2-4-6**	**all**	11	15	317	267	372	85	116	28/53	37	24	50	8	7	27	M8
90L	**2-4-6**	**all**	11	15	317	267	372	85	116	28/53	37	24	50	8	7	27	M8
100	**2-4-6**	**all**	12	17	366	306	433	91	116	38	44	28	60	8	7	31	M10
112	**2**	**4-5.5**	15	19	388	328	456	92	116	46	48	28	60	8	7	31	M10
	2	**7.5**	15	19	410	350	478	92	116	46	48	28	60	8	7	31	M10
	4	**4**	15	19	388	328	456	92	116	46	48	28	60	8	7	31	M10
	4	**5.5**	15	19	410	350	478	92	116	46	48	28	60	8	7	31	M10
	6	**all**	15	19	388	328	456	92	116	46	48	28	60	8	7	31	M10
132S	**2-4-6**	**all**	17	20	445	365	523	102	133	45	59	38	80	10	8	41	M12
132M	**2**	**9.2**	17	20	485	405	563	122	133	45	59	38	80	10	8	41	M12
	2	**11**	17	20	505	425	583	122	133	45	59	38	80	10	8	41	M12
	2	**15**	17	20	556	476	634	122	133	45	59	38	80	10	8	41	M12
	4	**7.5**	17	20	485	405	563	122	133	45	59	38	80	10	8	41	M12
	4	**9.2**	17	20	505	425	583	122	133	45	59	38	80	10	8	41	M12
	6	**4**	17	20	485	405	563	122	133	45	59	38	80	10	8	41	M12
	6	**5.5**	17	20	505	425	583	122	133	45	59	38	80	10	8	41	M12
160M	**2-4-6**	**all**	23	18	608	498	668	146	150	65	76	42/28	110/60	12/8	8/7	45/31	M16/M10
160L	**2-4-6**	**all**	23	18	652	542	712	168	150	65	76	42/28	110/60	12/8	8/7	45/31	M16/M10

1) Clearance hole for screw 2) Maximun distance 3) Centering holes in shaft extensions to DIN 332 part 2

IM B14

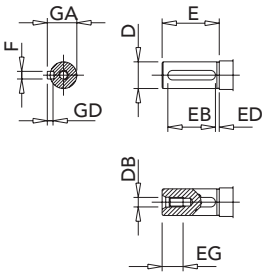


IM B5



	SMALL FLANGE B14						LARGE FLANGE B14						FLANGE B5					
IEC	P	N	LA	M	T	S	P	N	LA	M	T	S	M	N	P	T	LA	S[1]
56	80	50	8	65	2.5	M5	105	70	8	85	2.5	M6	100	80	120	2.5	7	M6
63	90	60	8	75	2.5	M5	120	80	8	100	2.5	M6	115	95	140	3	8	M8
71	105	70	8	85	2.5	M6	140	95	8	115	3	M8	130	110	160	3.5	10	M8
80	120	80	9	100	3	M6	160	110	8.5	130	3.5	M8	165	130	200	3.5	10	M10
90	140	95	9	115	3	M8	160	110	9	130	3.5	M8	165	130	200	3.5	12	M10
100	160	110	10	130	3.5	M8	200	130	12	165	3.5	M10	215	180	250	4	14	M12
112	160	110	10	130	3.5	M8	200	130	12	165	3.5	M10	215	180	250	4	14	M12
132	200	130	30	165	3.5	M10	250	180	12	215	4	M12	265	230	300	4	14	M12
160	250	180	12	215	4	M12	300	230	12	265	5	M16	300	250	350	5	15	M16

1) Clearence hole for screw. Hole as standard for 132 to 160 frame size



IEC	D	E	F h9	GD	GA	DB[1]	EG	EB	ED
56	9 j6	20	3	3	10.2	M3	10	15	2.5
63	11 j6	23	4	4	12.5	M4	10	15	4
71	14 j6	30	5	5	16	M5	12.5	20	4
80	19 j6	40	6	6	21.5	M6	16	30	4
90	24 j6	50	8	7	27	M8	19	40	4
100	28 j6	60	8	7	31	M10	22	50	4
112	28 j6	60	8	7	31	M10	22	50	4
132	38 k6	80	10	8	41	M12	28	70	4
160	42 k6	110	12	8	45	M16	36	100	4

1) Centering holes in shaft extension to DIN 332 part 2