

STANDARD EFFICIENCY BRAKE MOTORS - IE1

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

IE code not applicable to motors 2, 4, 6 poles with PN < 0.75 kW. Efficiency testing method: IEC 60034-2;1996

FOR MAINS VOLTAGE
400 V - 50 HZ

IE1

Type	kW	HP	min ⁻¹	M _N Nm	IE1 η			cos φ	I _N		I _A /I _N	M _A /M _N	M _K /M _N	
					50%	75%	100%		400V	380-420V				
1500 min⁻¹ (4 poles)														
AM... 63Z AA	4	0.12	0.16	1350	0.8	46.0	50.0	57.0	0.65	0.50	0.55	2.4	2.0	2.0
AM... 63Z BA	4	0.18	0.25	1330	1.3	47.0	50.0	58.0	0.70	0.65	0.70	2.3	1.9	1.9
AM... 63Z CA	4*	0.25	0.33	1360	1.8	49.0	52.5	58.0	0.74	0.85	0.90	2.7	2.2	2.1
AM... 71Z AA	4	0.25	0.33	1340	1.8	55.0	59.0	64.0	0.66	0.90	1.00	3.2	1.9	2.0
AM... 71Z BA	4	0.37	0.5	1370	2.6	60.0	63.0	67.0	0.67	1.20	1.25	3.3	2.2	2.2
AM... 71Z CA	4*	0.55	0.75	1380	3.8	61.0	64.0	69.0	0.68	1.70	1.80	3.6	2.4	2.4
AM... 80Z AA	4	0.55	0.75	1400	3.8	67.0	69.0	70.0	0.72	1.6	1.7	3.6	2.6	2.6
AM... 80Z BA	4	0.75	1.0	1410	5.1	68.7	70.8	72.4	0.72	2.1	2.2	4.4	2.8	2.8
AM... 80Z CA	4*	1.1	1.5	1385	7.6	73.4	75.7	75.2	0.77	2.8	2.9	4.4	2.5	2.6
AM... 90S AA	4	1.1	1.5	1400	7.5	75.8	76.0	75.4	0.78	2.7	2.9	5.2	2.5	2.8
AM... 90L BA	4	1.5	2.0	1400	10.2	77.6	77.8	77.5	0.78	3.6	3.7	5.7	2.8	3.0
AM... 90L CA	4*	1.8	2.5	1380	12.5	76.3	76.5	75.9	0.81	4.2	4.3	5.5	2.7	2.9
AM... 90L DA	4*	2.2	3.0	1400	15.0	78.3	78.5	77.9	0.77	5.3	5.5	4.8	2.9	3.2
AM... 100L AA	4	2.2	3.0	1435	14.6	76.5	79.1	79.9	0.74	5.4	5.6	5.3	2.5	2.7
AM... 100L BA	4	3.0	4.0	1425	20.1	82.0	83.0	81.6	0.78	6.8	6.9	4.6	2.4	2.5
AM... 100L CA	4*	4.0	5.5	1400	27.3	80.8	81.8	80.4	0.78	9.2	9.3	6.0	2.6	2.9
AM... 112M AA	4	4.0	5.5	1430	26.7	83.2	83.9	83.1	0.82	8.5	8.8	6.3	2.2	2.8
AM... 112M BA	4*	5.5	7.5	1430	36.7	84.1	84.8	84.0	0.83	11.4	11.7	6.5	2.2	2.9
AM... 132S ZA	4	5.5	7.5	1430	36.7	87.2	87.1	86.1	0.82	11.3	11.7	5.8	3.0	3.0
AM... 132M ZA	4	7.5	10	1440	49.7	87.3	87.2	86.2	0.83	15.3	15.5	6.8	3.1	3.1
AM... 132M RA	4*	9.2	12.5	1440	61.0	86.5	87.5	87.3	0.86	17.7	17.9	8.0	3.5	3.5
AM... 132M TA	4*	11.0	15	1440	72.9	83.5	83.9	84.5	0.87	21.5	22.0	8.3	3.1	3.3
AM... 160M XA	4	11	15	1460	71.9	88.5	89.3	88.7	0.80	22.4	22.7	7.5	2.5	3.1
AM... 160L XA	4	15	20	1460	98.1	89.4	90.2	89.6	0.84	28.8	29.6	7.0	2.5	3.3
AM ... 160L ZA	4*	18.5	25	1460	121.8	89.9	90.7	90.1	0.84	35.4	36.0	7.6	2.5	3.3
AM ... 160L RA	4*	22	30	1460	143.9	90.4	91.2	90.6	0.86	41.0	42.0	7.8	2.4	3.2

* Higher output (progressive motor)

For maximum friction work per stop consult us

STANDARD EFFICIENCY BRAKE MOTORS – IE1

AMBY SERIES – HIGH TORQUE - DC BRAKE

AMBZ SERIES – HIGH TORQUE - AC BRAKE

AMS SERIES – LOW TORQUE - DC BRAKE

IE1

Type	AMBY					AMBZ					AMS			
	J 10 ⁻³ kgm ²	M _{b max} Nm	z _L ¹⁾ c/h	kg		J 10 ⁻³ kgm ²	M _{b max} Nm	z _L ¹⁾ c/h	kg		J 10 ⁻³ kgm ²	M _b Nm	z _L ¹⁾ c/h	kg
1500 min⁻¹ (4 poles)														
AM... 63Z AA	4	0.31	3.5	13200	5.4	0.31	3.5	15000	5.2		0.54	3	7500	4.8
AM... 63Z BA	4	0.35	3.5	12500	6.2	0.35	3.5	14000	6.0		0.59	3	7500	5.6
AM... 63Z CA	4*	0.38	3.5	11800	6.3	0.38	3.5	13200	6.1		0.61	3	6700	5.7
AM... 71Z AA	4	0.70	3.5(7.5) ²⁾	7500	8.1	0.70	3.5(7.5) ²⁾	8500	7.9		1.13	4	5000	7.5
AM... 71Z BA	4	0.87	7.5	7250	9.1	0.87	7.5	8150	8.8		1.26	4	4850	7.8
AM... 71Z CA	4*	1.11	7.5	6900	10.4	1.11	7.5	7800	10.1		1.50	4	4500	9.1
AM... 80Z AA	4	1.49	7.5(15) ²⁾	6700	12.4	1.49	7.5(15) ²⁾	6700	12.1		2.37	7	4250	11.0
AM... 80Z BA	4	1.93	15	6300	14.4	1.93	15	6300	14.3		2.77	7	4000	12.1
AM... 80Z CA	4*	2.33	15	6000	15.7	2.33	15	6000	15.6		3.16	7	3750	13.4
AM... 90S AA	4	2.36	15(40) ²⁾	5000	18.0	2.36	15(40) ²⁾	5650	17.9		3.28	7	3550	15.5
AM... 90L BA	4	3.12	40	4750	21.1	3.12	40	5350	21.8		3.85	7	3350	16.3
AM... 90L CA	4*	3.69	40	4550	22.3	3.69	40	5150	23.0		4.43	7	3250	17.5
AM... 90L DA	4*	3.98	40	4300	24.8	3.98	40	4850	25.5		4.71	7	3150	20.0
AM... 100L AA	4	4.83	40(75) ²⁾	4500	28.1	4.83	40(75) ²⁾	5050	28.8		7.4	13	2500	23.8
AM... 100L BA	4	6.08	40(75) ²⁾	4250	31.1	6.08	40(75) ²⁾	4800	31.8		8.7	13	2350	26.8
AM... 100L CA	4*	7.24	75	4000	37.0	7.24	75	4500	38.4		9.3	13	2200	29.3
AM... 112M AA	4	11.60	75	2500	42.4	11.60	75	2800	43.8		13.7	13	1500	34.2
AM... 112M BA	4*	14.42	75	2240	46.9	14.42	75	2500	48.3		16.5	13	1320	38.7
AM... 132S ZA	4	22.02	75(150) ²⁾	2000	60	22.02	75(150) ²⁾	2250	61		25.9	30	1180	51
AM... 132M ZA	4	28.70	75(150) ²⁾	1800	69	28.70	75(150) ²⁾	2000	70		32.6	30	1000	60
AM... 132M RA	4*	33.41	150	1500	87	33.41	150	1690	89		35.9	30	800	74
AM... 132M TA	4*	33.41	150	1500	87	33.41	150	1690	89		35.9	30	800	74
AM... 160M XA	4	69	150(250) ²⁾	670	115	69	150(250) ²⁾	750	118		71	30	560	98
AM... 160L XA	4	90	150(250) ²⁾	600	133	90	150(250) ²⁾	675	136		92	30	500	117
AM... 160L ZA	4*	108	250	580	157	108	250	650	156		105	30	480	126
AM... 160L RA	4*	120	250	550	168	120	250	600	168		- 3)	- 3)	- 3)	- 3)

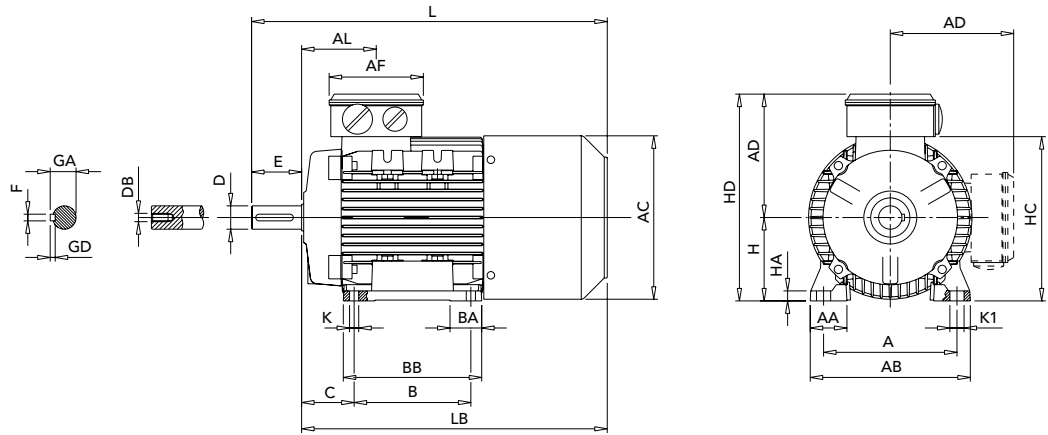
* Higher output (progressive motor)

1) Max. Number of no-load starts/hour with cyclic duration factor 50%

2) On request

3) Motor not available

BRAKE MOTORS FRAME SIZE 63-160 IM B3 AMBY-AMBZ SERIES



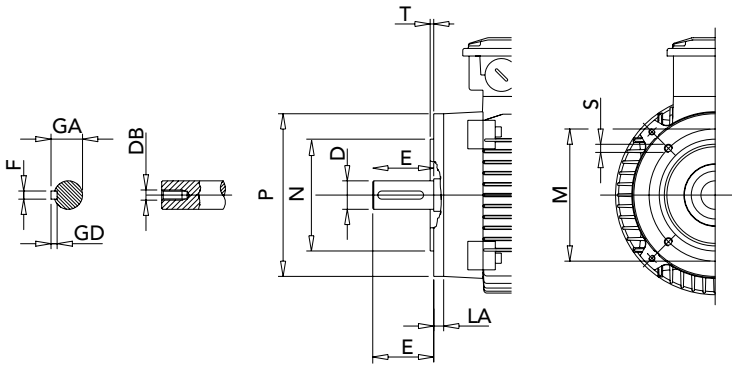
	IEC	H	A	B	C	K ¹⁾	AB	BB	AD ²⁾	HD ²⁾	AC	HC	HA
63		63	100	80	40	7	120	100	96	159	124	120	8
71		71	112	90	45	8	135	108	110	181	138	142	8
80		80	125	100	50	10	153	125	129	208	156	161	9.5
90S		90	140	100	56	10	170	150	137	227	178	180	11
90L		90	140	125	56	10	170	150	137	227	178	180	11
100		100	160	140	63	11	192	166	144	244	192	197	12
112		112	190	140	70	12.5	220	175	160	272	222	225	15
132S		132	216	140	89	12	256	180	194	326	259	261	17
132M		132	216	178	89	12	256	218	194	326	259	261	17
160M		160	254	210	108	14	320	270	237	397	316	317	23
160L		160	254	254	108	14	320	310	237	397	316	317	23
160L⁴⁾		160	254	254	108	14	320	310	237	397	316	317	23

	IEC	K1	L	LB	AL	AF	BA	AA	D	E	F	GD	GA	DB ³⁾
63		11	267	244	63	92	29	30	11	23	4	4	12.5	M4
71		11	300	270	69	92	28	31	14	30	5	5	16	M5
80		14	350	310	79	116	29	35	19	40	6	6	21.5	M6
90S		15	403	353	85	116	28/53	37	24	50	8	7	27	M8
90L		15	403	353	85	116	28/53	37	24	50	8	7	27	M8
100		17	465	405	91	116	38	44	28	60	8	7	31	M10
112		19	487	427	92	116	46	48	28	60	8	7	31	M10
132S		20	592	512	100	133	45	59	38	80	10	8	41	M12
132M		20	612	532	120	133	45	59	38	80	10	8	41	M12
160M		18	721	611	146	150	65	76	42	110	12	8	45	M16
160L		18	763	653	168	150	65	76	42	110	12	8	45	M16
160L⁴⁾		18	790	680	168	150	65	76	42	110	12	8	45	M16

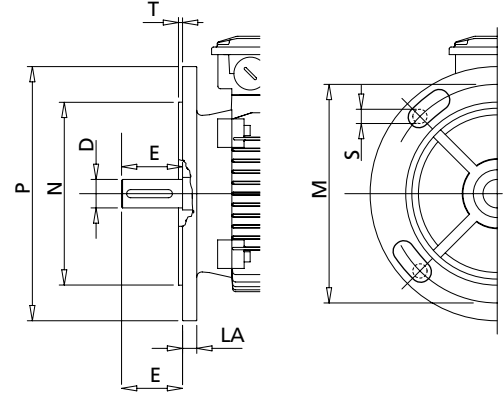
- 1) Clearance hole for screw
- 2) Maximum dimension
- 3) Centering holes in shaft extensions to DIN 332 part 2
- 4) Only for LR A4

BRAKE MOTORS FRAME SIZE 63-160 IM B5-IM B14 AMBY - AMBZ - AMS SERIES

IM B14

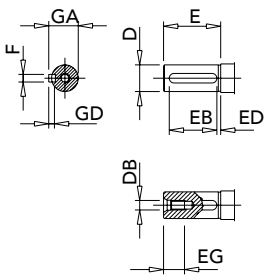


IM B5



IEC	SMALL FLANGE B14						LARGE FLANGE B14						FLANGE B5					
	P	N	LA	M	T	S	P	N	LA	M	T	S	M	N	P	T	LA	S ¹⁾
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) Clearance hole for screw. Hole as standard for 132 to 160 frame size



IEC	D	E	F h9	GD	GA	DB ¹⁾	EG	EB	ED
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