

SUPER PREMIUM EFFICIENCY MOTORS

THREE-PHASE MOTORS
0.75 TO 200 KW
400 V - 50 HZ



SUPER PREMIUM EFFICIENCY THREE-PHASE MOTORS - IE4

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

NOMINAL FULL LOAD EFFICIENCY ACCORDING TO IE4 CODE @ 400 V - 50 HZ

FOR MAINS VOLTAGE
400 V - 50 HZ

IE4

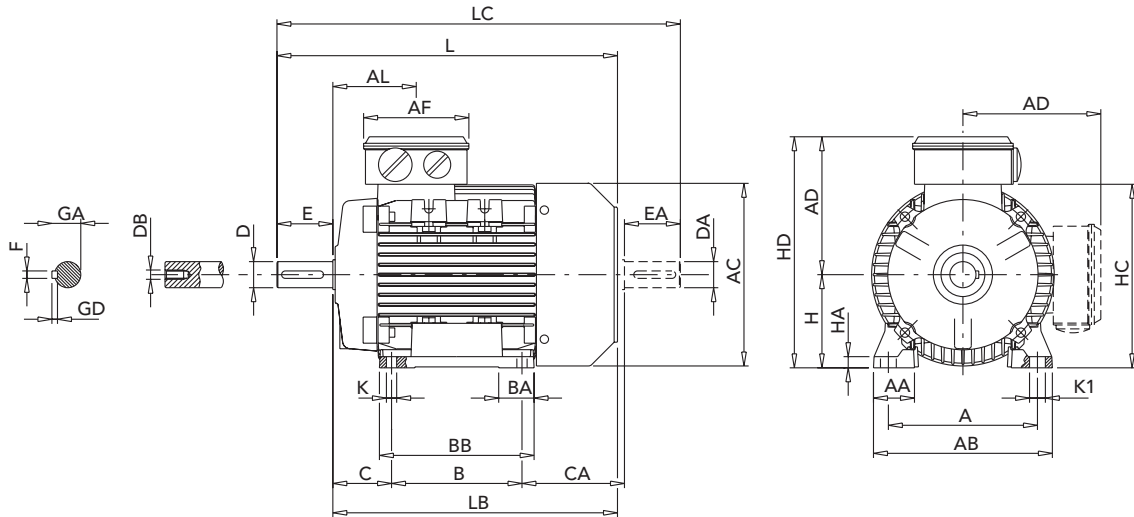
TEMPERATURE RISE TO CLASS B

Type		kW	HP	rpm	M _N Nm	η			cos φ	I _N 460 V	I _A /I _N	M _A /M _N	M _S /M _N	M _K /M _N	J 10 ⁻³ kgm ²	kg
						50 %	75 %	100 %								
ALUMINIUM DESIGN																
3000 rpm (2 poles)																
AMQE 80Z AA	2	0.75	1	2895	2.5	81.6	84.3	83.5	0.79	1.7	8.1	5.1	4.4	5.4	0.7	9.5
AMQE 80Z BA	2	1.1	1.5	2865	3.7	83.8	85.8	85.2	0.76	2.4	8.5	4.9	4.5	4.6	0.9	11.1
AMQE 90S AA	2	1.5	2	2910	4.9	85.6	87.2	86.5	0.81	3.1	9.0	4.8	4.2	5.1	1.6	16.4
AMQE 90L BA	2	2.2	3	2915	7.3	87.7	89.0	88.0	0.79	4.3	9.8	5.0	4.7	5.4	2.0	18.0
AMQE 100L AA	2	3	4	2935	9.8	86.0	88.4	89.1	0.83	5.8	12.3	5.1	4.1	5.6	7.3	26.5
AMQE 112M AA	2	4	5.5	2950	13.0	87.9	89.7	90.0	0.83	7.8	16.0	5.3	4.2	5.7	8.6	33.6
AMQE 132S AA	2	5.5	7.5	2955	17.8	86.4	89.5	90.9	0.87	10.1	14.4	5.3	4.5	6.8	17.5	58.0
AMQE 132S BA	2	7.5	10	2959	24.3	87.8	90.3	91.7	0.82	14.5	12.3	4.1	2.3	5.3	25.0	59.0
AMQE 132M CA	2	9.2	12.4	2953	29.9	90.5	91.4	91.8	0.84	16.6	12.8	4.3	3.7	4.8	28.0	68.0
AMQE 160M AA	2	9.2	12.4	2970	29.9	88.3	91.0	92.2	0.85	16.9	14.0	5.0	4.3	5.2	53.4	88.9
AMQE 160M BA	2	11	15	2965	35.6	89.5	91.7	92.6	0.84	20.3	13.8	5.1	4.5	5.3	53.4	88.9
AMQE 160M CA	2	15	20	2965	48.7	89.8	92.0	93.3	0.84	27.8	12.4	5.1	4.5	5.5	64.0	104.0
1500 rpm (4 poles)																
AMQE 90S AA4	4	0.75	1	1445	5.0	83.0	85.0	85.7	0.76	1.7	8.4	4.7	2.8	4.3	3.7	16.4
AMQE 90L BA4	4	1.1	1.5	1450	7.3	84.1	86.3	86.7	0.72	2.5	8.6	4.3	3.3	4.7	3.9	20.0
AMQE 100L AA4	4	1.1	1.5	1473	7.2	85.2	87.8	87.2	0.74	2.5	9.7	4.3	3.3	4.7	8.9	21.5
AMQE 100L BA4	4	1.5	2	1470	9.8	86.4	88.4	88.2	0.77	3.2	10.7	4.1	3.1	4.6	10.7	25.3
AMQE 100L CA4	4	2.2	3	1472	14.3	87.3	89.2	89.5	0.78	4.6	10.1	4.1	3.5	4.5	14.9	29.0
AMQE 112M BA4	4	3	4	1464	19.7	88.8	90.1	90.4	0.79	6.1	9.0	3.6	2.3	4.2	17.4	38.9
AMQE 132S AA4	4	4	5.5	1477	25.9	89.0	90.7	91.1	0.79	8.1	10.2	4.6	3.9	4.4	33.0	49.0
AMQE 132S BA4	4	5.5	7.5	1476	35.7	90.3	91.7	91.9	0.80	10.8	10.2	3.5	2.8	4.3	45.0	62.0
AMQE 132M CA4	4	7.5	10	1472	49.1	90.8	92.3	92.6	0.81	14.5	8.7	2.9	2.1	3.4	57.0	71.0
AMQE 160M AA4	4	9.2	12.4	1482	59.8	92.3	93.6	93.0	0.80	17.9	8.6	2.7	2.0	3.5	105.0	105.0
AMQE 160M BA4	4	11	15	1482	71.3	91.7	93.0	93.3	0.80	21.4	9.1	2.5	2.0	3.2	120.7	110.0
AMQE 160L CA4	4	15	20	1480	97.4	91.8	93.3	93.9	0.80	29.0	8.1	1.9	1.3	3.0	135.0	125.0
1000 rpm (6 poles)																
AMQE 100L AA	6	0.75	1	970	7.5	82.5	84.6	82.7	0.66	2.0	5.5	2.3	2.3	2.8	9.7	23.0
AMQE 100L BA	6	1.1	1.5	966	10.9	83.1	84.9	84.5	0.65	2.9	5.2	2.4	2.0	2.8	10.7	25.0
AMQE 100L CA	6	1.5	2	967	14.9	85.3	86.6	85.9	0.70	3.6	5.9	2.6	1.9	2.8	13.3	28.0
AMQE 112M AA	6	2.2	3	968	21.8	86.7	87.9	87.4	0.68	5.3	6.7	2.3	1.8	3.0	23.1	36.5
AMQE 132S AA	6	3	4	975	29.6	87.5	89.0	88.6	0.70	7.0	6.5	3.0	2.0	2.7	44.4	46.0
AMQE 132M BA	6	4	5.5	976	39.4	87.6	89.2	89.5	0.68	9.5	6.2	2.0	1.7	2.5	54.1	48.0
AMQE 160M AA	6	5.5	7.5	981	53.6	88.2	90.2	90.5	0.78	10.3	7.9	1.7	1.0	3.1	130.0	105.0
AMQE 160L BA	6	7.5	10	981	73.8	89.1	91.2	91.3	0.73	16.3	10.4	2.1	3.1	3.5	136.0	115.0



THREE-PHASE MOTORS | FRAME SIZE 80 - 160 IM B3

AMQE SERIES - ALUMINIUM ALLOY FRAME



IEC	Poles	kW	H	A	B	C	K ¹⁾	AB	BB	CA	AD ²⁾	HD ²⁾	AC	HC
80	2	all	80	125	100	50	10	153	125	89	129	209	160	162
90S	2 - 4	all	90	140	100	56	10	170	150	116	138	228	180	181
90L	2	2.2	90	140	125	56	10	170	150	114	138	228	180	181
	4	1.1	90	140	125	56	10	170	150	114	138	228	180	181
100L	2	3	100	160	140	63	11	192	166	110	145	245	196	198
	4 - 6	all	100	160	140	63	11	192	166	110	145	245	198	192
112M	2	4	112	190	140	70	12.5	220	176	126	160	272	225	225
	4-6	all	112	190	140	70	12.5	220	176	148	160	272	222	225
132S	2	all	132	216	140	89	12	256	180	184	196	328	248	261
	4	4	132	216	140	89	12	256	180	139	195	328	248	261
	4	5.5	132	216	140	89	12	256	180	234	195	328	248	261
	6	3	132	216	140	89	12	256	180	159	195	328	248	261
132M	2-4	all	132	216	178	89	12	256	218	216	195	328	248	261
	6	4	132	216	178	89	12	256	218	166	195	328	248	261
160M	2 - 4 - 6	all	160	254	210	108	14	320	270	180	238	398	317	316
160L	4 - 6	all	160	254	254	108	14	320	310	180	238	398	317	316
	4	15	160	254	254	108	14	320	310	206	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⁾
80	2	all	9.5	14	272	232	319	79	116	28.5	34.5	19	40	6	6	21.5	M6
90S	2 - 4	all	11	15	317	267	372	85	116	28/53	37	24	50	8	7	27	M8
90L	2	2.2	11	15	340	290	395	85	116	28/53	37	24	50	8	7	27	M8
	4	1.1	11	15	340	290	395	85	116	28/53	37	24	50	8	7	27	M8
100L	2	3	12	17	366	306	433	91	116	38	44	28	60	8	7	31	M10
	4 - 6	all	12	17	366	306	433	92	118	41	44	28	60	8	7	31	M10
112M	2	4	15	19	388	328	456	92	116	46	48	28	60	8	7	31	M10
	4-6	all	15	19	410	350	478	92	116	46	48	28	60	8	7	31	M10
132S	2	all	17	20	485	405	573	100	137	45	59	38	80	10	8	41	M12
	4	4	17	20	445	365	528	100	137	45	59	38	80	10	8	41	M12
	4	5.5	17	20	536	456	623	120	137	45	59	38	80	10	8	41	M12
	6	4	17	20	505	425	593	120	137	45	59	38	80	10	8	41	M12
132M	2-4	all	17	20	556	476	643	120	137	45	59	38	80	10	8	41	M12
	6	4	17	20	505	425	593	120	137	45	59	38	80	10	8	41	M12
160M	2 - 4 - 6	all	23	18	608	498	668	146	155	65	76	42/28	110/60	12/8	8/7	45/31	M16/M10
160L	4 - 6	all	23	18	652	542	712	168	155	65	76	42/28	110/60	12/8	8/7	45/31	M16/M10
	4	15	23	18	678	568	738	168	155	65	76	42/28	110/60	12/8	8/7	45/31	M16/M10

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

SUPER PREMIUM EFFICIENCY THREE-PHASE MOTORS - IE4

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FOR MAINS VOLTAGE
400 V - 50 HZ

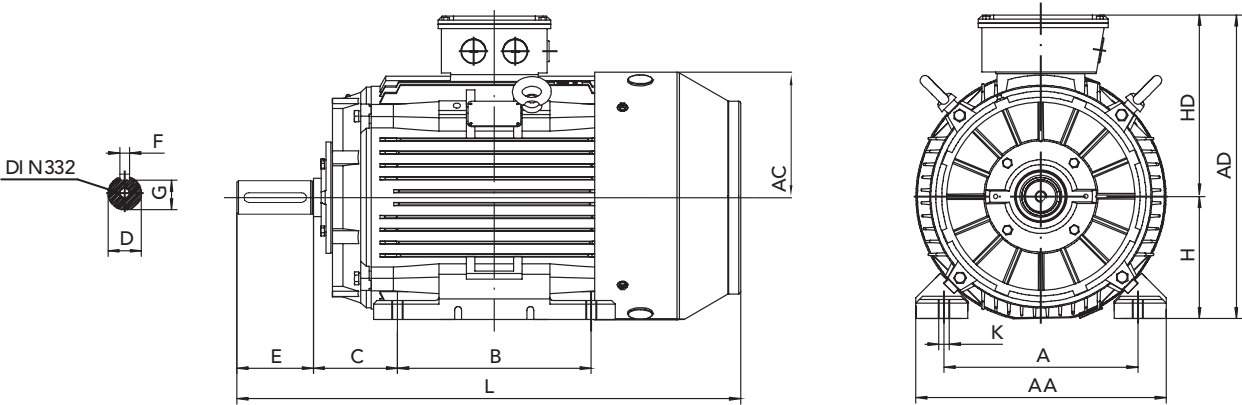
IE4

TEMPERATURE RISE TO CLASS B

Type		kW	HP	rpm	M _N Nm	η			cos φ	I _N 460 V	I _A /I _N	M _A /M _N	M _S /M _N	M _K /M _N	J	
						50 %	75 %	100 %							10 ⁻³ kgm ²	kg
CAST IRON DESIGN																
3000 rpm (2 poles)																
AMQE 180M ZG	2	22	30	2965	70.9	92.1	94.0	94.0	0.89	38.0	8.2	2.0	1.8	2.3	75	221
AMQE 200L PG	2	30	40	2970	96.5	92.6	94.5	94.5	0.89	51.5	7.6	2.0	1.8	2.3	124	260
AMQE 200L RG	2	37	50	2970	119.0	92.9	94.8	94.8	0.89	63.2	7.7	2.0	1.8	2.3	139	309
AMQE 225M PG	2	45	60	2975	144.5	93.1	95.0	95.0	0.90	76.0	7.7	2.0	1.8	2.3	233	370
AMQE 250M PG	2	55	75	2975	176.6	93.4	95.3	95.3	0.90	92.6	7.7	2.0	1.8	2.3	312	520
AMQE 280S G	2	75	100	2980	240.4	93.7	95.6	95.6	0.90	126.0	7.1	1.8	1.7	2.7	579	570
AMQE 280M G	2	90	125	2982	288.2	93.9	95.8	95.8	0.90	151.0	7.1	1.8	1.7	2.3	675	630
AMQE 315S G	2	110	150	2980	352.5	94.1	96.0	96.0	0.90	184.0	7.1	1.8	1.7	2.3	1180	985
AMQE 315M G	2	132	180	2980	423.0	94.3	96.2	96.2	0.90	220.0	7.1	1.8	1.7	2.3	1820	1050
AMQE 315L RG	2	160	200	2980	512.8	94.4	96.3	96.3	0.91	264.0	7.2	1.8	1.7	2.3	2080	1160
AMQE 315L G	2	200	270	2980	640.9	94.6	96.5	96.5	0.91	329.0	7.2	1.8	1.7	2.2	2380	1200
1500 rpm (4 poles)																
AMQE 180M ZG	4	18.5	25	1480	119.4	92.3	94.2	94.2	0.86	33.0	7.8	2.0	1.9	2.3	139	181
AMQE 180L ZG	4	22	30	1480	142.0	92.6	94.5	94.5	0.86	39.1	7.8	2.0	1.9	2.3	158	209
AMQE 200L RG	4	30	40	1480	193.6	93.0	94.9	94.9	0.86	53.1	7.3	2.0	1.9	2.3	262	280
AMQE 225S PG	4	37	50	1485	237.9	93.3	95.2	95.2	0.86	65.2	7.4	2.0	1.9	2.3	406	373
AMQE 225M PG	4	45	60	1485	289.4	93.5	95.4	95.4	0.86	80.2	7.4	2.0	1.9	2.3	469	390
AMQE 250M PG	4	55	75	1485	353.7	93.8	95.7	95.7	0.86	96.5	7.4	2.2	2.1	2.3	660	553
AMQE 280S G	4	75	100	1490	480.7	94.1	96.0	96.0	0.88	128.0	6.9	2.0	1.9	2.3	1120	655
AMQE 280M G	4	90	125	1490	576.8	94.2	96.1	96.1	0.88	154.0	6.9	2.0	1.9	2.3	1460	730
AMQE 315S G	4	110	150	1490	705.0	94.4	96.3	96.3	0.89	185.0	7.0	2.0	1.9	2.2	3110	980
AMQE 315M G	4	132	180	1490	846.0	94.5	96.4	96.4	0.89	222.0	7.0	2.0	1.9	2.2	3620	1031
AMQE 315L RG	4	160	200	1490	1026.0	94.7	96.6	96.6	0.89	269.0	7.1	2.0	1.9	2.2	4130	1093
AMQE 315L G	4	200	270	1490	1282.0	94.8	96.7	96.7	0.90	332.0	7.1	2.0	1.9	2.2	4730	1190
1000 rpm (6 poles)																
AMQE 180L ZG	6	15	20	985	145.4	91.0	92.9	92.9	0.81	28.8	7.3	2.0	2.0	2.1	207	245
AMQE 200L PG	6	18.5	25	985	179.4	91.5	93.4	93.4	0.81	35.3	7.3	2.0	2.0	2.1	315	265
AMQE 200L RG	6	22	30	985	213.3	91.8	93.7	93.7	0.81	41.8	7.4	2.0	2.0	2.1	360	285
AMQE 225M PG	6	30	40	990	289.4	92.3	94.2	94.0	0.83	55.4	6.9	2.0	2.0	2.1	547	335
AMQE 250M PG	6	37	50	990	356.9	92.6	94.5	94.5	0.84	67.3	7.1	2.0	2.0	2.1	843	471
AMQE 280S G	6	45	60	990	434.1	92.9	94.8	94.8	0.85	80.6	7.3	2.0	2.0	2.0	1390	530
AMQE 280M G	6	55	75	990	530.6	93.2	95.1	95.1	0.86	97.1	7.3	2.0	2.0	2.0	1650	670
AMQE 315S G	6	75	100	990	723.5	93.5	95.4	95.4	0.84	135.0	6.6	2.0	2.0	2.0	4110	960
AMQE 315M G	6	90	125	990	868.2	93.7	95.6	95.6	0.85	160.0	6.7	2.0	2.0	2.0	4780	1070
AMQE 315L RG	6	110	150	990	1061.0	93.9	95.8	95.8	0.85	195.0	6.7	2.0	2.0	2.0	5450	1160
AMQE 315L G	6	132	180	990	1273.0	94.1	96.0	96.0	0.86	231.0	6.8	2.0	2.0	2.0	6120	1250



THREE-PHASE MOTORS | FRAME SIZE 180 - 315 IM B3
AMQE SERIES - CAST IRON FRAME



IEC	Poles	H	A	B	C	K	AD	HD	AC	L	AA	D	E	F	G
180M	2-4-6	180	279	241	121	15	451	271	355	661	349	48	110	14	42.5
180L	2-4-6	180	279	279	121	15	451	271	355	699	349	48	110	14	42.5
200	2-4-6	200	318	305	133	19	500	300	397	757	388	55	110	16	49
225S	≥ 4	225	356	286	149	19	548	323	445	798	431	60	140	18	53
225M	2	225	356	311	149	19	548	323	445	823	431	55	110	16	49
	≥ 4	225	356	311	149	19	548	323	445	823	431	60	140	18	53
250	2	250	406	349	168	24	609	359	485	900	484	60	140	18	53
	≥ 4	250	406	349	168	24	609	359	485	900	484	65	140	18	58
280S	2	280	457	368	190	24	691	411	569	979	542	65	140	18	58
	≥ 4	280	457	368	190	24	691	411	569	979	542	75	140	20	67.5
280M	2	280	457	419	190	24	691	411	569	1019	542	65	140	18	58
	≥ 4	280	457	419	190	24	691	411	569	1019	542	75	140	20	67.5
315S	2	315	508	406	216	28	837	522	620	1158	628	65	140	18	58
	≥ 4	315	508	406	216	28	837	522	620	1188	628	80	170	22	71
315M	2	315	508	457	216	28	837	522	620	1268	628	65	140	18	58
	≥ 4	315	508	457	216	28	837	522	620	1298	628	80	170	22	71
315L	2	315	508	508	216	28	837	522	620	1334	628	65	140	18	58
	≥ 4	315	508	508	216	28	837	522	620	1334	628	80	170	22	71

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



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