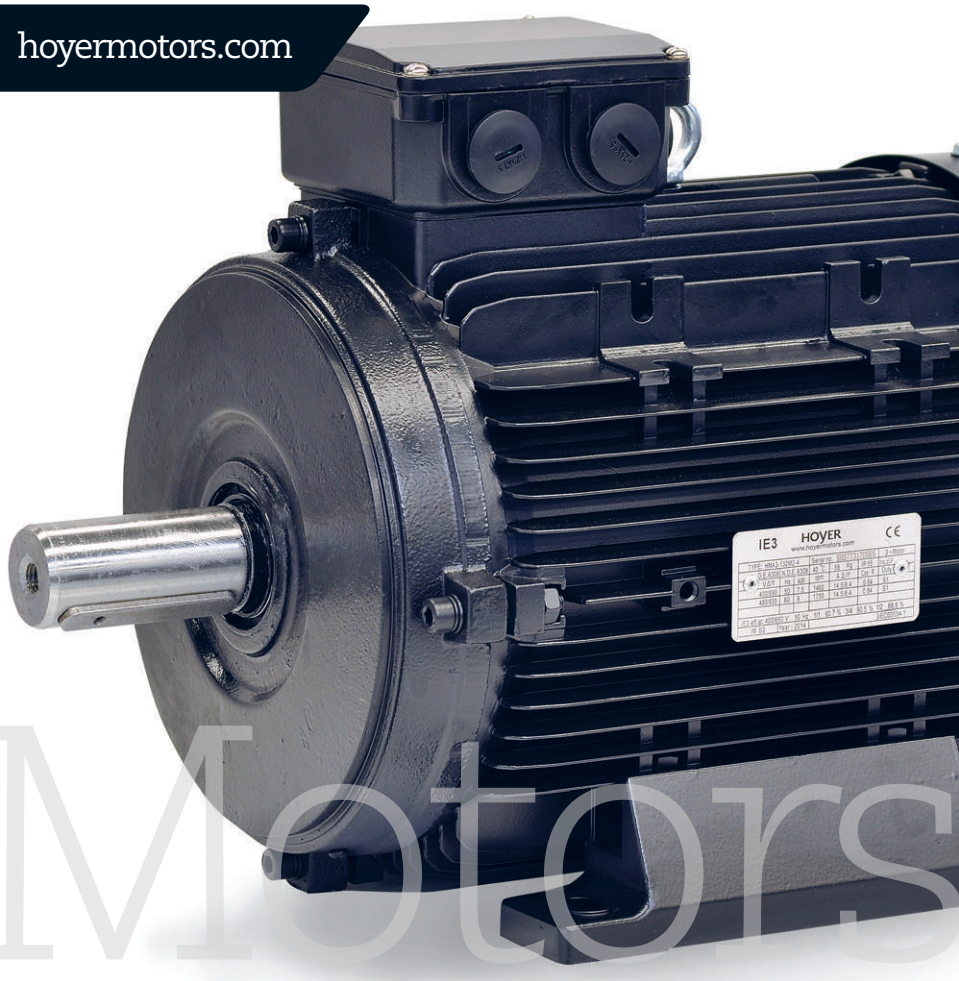
Electric Motors

IE3 Motors

hoyermotors.com



IE3 Motors

HOYER
MOTORS

Behind Hoyer Motors

HOYER

EXCEEDING EXPECTATIONS

Svend Hoyer A/S is an international company comprising the two business units Hoyer Motors and Hoyer Transmissions. Headquartered in Denmark and China, we are represented through subsidiaries and sales offices in a number of countries across the globe. We pride ourselves of being an elite manufacturing enterprise with the highest attention to service and support – a company where dedication, competitiveness and reliability are second to none.

At Svend Hoyer A/S, meeting agreements is as natural as breathing air. Our motto: A promise is a promise, is the foundation for always supplying solutions that meet – or, indeed, exceed our customers' expectations in every respect. Our business policy is always to be direct in our approach, even in the rare case of complaint or criticism.

In other words, Svend Hoyer A/S is a company you can rely on. A trustworthy business partner that always meets our obligations on deliveries and technical solutions – both in the short and long term. This is what we mean by Exceeding Expectations.

Hoyer IE3 Electric Motors

General information about Hoyer IE3 electric motors

Hoyer IE3 electric motors are manufactured according to international standards under IEC 60034-30 and are fulfilling the requirement of the EC Directive 2009/125 (ecodesign for energy-related products).

Hoyer motors are installed in many different fields all over the world, and with a proven quality, high reliability and performance, Hoyer IE3 is the electric motor for the future.

Technical information

Totally enclosed squirrel cage, TEFV, three phase motors type HMA3 (aluminum) in size 56 to 132 (size 160 and 180 on request) and type HMC3 (cast iron) in size 160 to 400 (below size 160 and bigger than size 400 on request).

Rotor is casted with 100% pure aluminum and shaft is made of high quality C45 steel.

HMC3 motors are provided with SKF bearings. HMA3 motors are supplied with C&U bearings. All sizes have fixed bearing in drive-end as standard. Motors size ≤ 180 are with closed bearings greased for life.

Stator winding is made with double coated copper wire and phase to phase insulation. The insulation system is Class F, maximum 105K temperature rise at 40°C ambient temperature.

Motors below 200kW are designed for Class B temperature rise.

Class H insulation system can be delivered on request.

All motors are manufactured according to IEC 60034, IEC60072, EN50347 and tested according to IEC60034-2-1.

Rotor is dynamically balanced with half key to fullfill vibration level IEC60034-14 grade A.
Sound level within limits of IEC60034-9.

Standard voltages:
400V Y – Hoyer IE3 Motors ≤ 3kW
400V D – Hoyer IE3 Motors > 3kW
Other voltages can be supplied on request.

All Hoyer IE3 motors are with PTC terminal protection. Motors can be modified with bimetal detector, heating elements for stand still protection and PT100 for both winding and bearings on request.

All Hoyer IE3 Motors are as standard IP55, prepared for drain holes. Higher protection class on request.
All motors are delivered with blind caps in the terminal box.

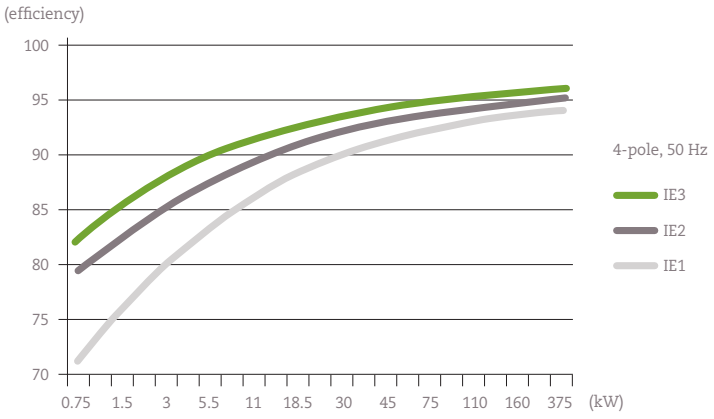
Motor size ≥100 are supplied with eyebolts for lifting.

Hoyer IE3 motors are painted black RAL 9005 with low gloss for use in normal industrial environments.

Application information

Hoyer IE3 electric motors are used within a wide variety of applications. Some of the typical applications are listed below:

- Fans (air handling units, refrigeration plants, oil coolers)
- Hydraulic power packs
- Pumps (for water, fuel, oil)
- Shredders (granulation, crushing)
- Gears (gear reducers, gearmotors)



IE3 / 2 pol

Motor type	Power	Speed	Current at 400V		Efficiency (%)			Pf	Torque			IM	Weight
	kw	rpm	I_N (A)	I_S/I_N	1/1 load	3/4 load	1/2 load	cos φ	T_N	T_S/T_N	T_M/T_N	J(kgm^2)	kg
Aluminium motors													
HMA3 80 1-2	0,75	2900	2,0	7,3	81,1	80,2	75,7	0,71	2,5	2,2	3,0	0,000994	10
HMA3 80 2-2	1,1	2910	2,4	8,7	84,1	83,9	81,7	0,79	3,6	3,0	3,5	0,00134	10
HMA3 90S-2	1,5	2920	3,2	9,5	86,3	86,6	85,3	0,82	4,9	2,4	3,2	0,00224	15
HMA3 90L-2	2,2	2915	4,4	9,3	87,5	87,7	86,3	0,83	7,2	3,0	3,5	0,00278	19
HMA3 100L-2	3	2905	5,6	9,2	87,6	88,1	87,0	0,88	9,9	3,4	3,5	0,00444	25
HMA3 112M-2	4	2920	7,2	8,6	88,6	89,2	88,2	0,9	13,1	2,6	3,0	0,00701	34
HMA3 132S1-2	5,5	2920	9,8	7,9	89,4	89,6	89,0	0,91	18,0	2,1	2,8	0,0141	50
HMA3 132S2-2	7,5	2925	13,0	9,1	90,3	90,8	90,5	0,92	25	2,4	3,0	0,0169	55
Cast iron motors													
HMC3 160M1-2	11	2950	19,5	8,5	92,5	92,7	90,9	0,89	35	2,2	2,9	0,0562	128
HMC3 160M2-2	15	2955	26	8,5	93,0	93,3	91,6	0,89	48	2,2	3,0	0,0661	140
HMC3 160L-2	18,5	2950	34	8,7	93,2	93,5	91,8	0,89	59	3,1	3,5	0,0833	155
HMC3 180M-2	22	2965	38	8,8	92,7	92,6	90,2	0,90	71	2,7	3,2	0,131	192
HMC3 200L1-2	30	2960	52	8,2	93,7	93,8	92,0	0,90	96	2,0	2,7	0,183	246
HMC3 200L2-2	37	2965	65	8,4	93,7	93,8	91,7	0,88	119	2,7	3,0	0,215	267
HMC3 225M-2	45	2975	77	9,4	94,1	93,9	91,4	0,91	146	3,2	2,6	0,343	353
HMC3 250M-2	55	2975	96	7,8	94,4	94,1	91,7	0,89	178	2,5	3,2	0,461	408
HMC3 280S-2	75	2980	128	7,8	94,9	94,7	92,7	0,90	238	2,5	3,1	0,761	548
HMC3 280M-2	90	2980	152	7,5	95,1	95,1	93,6	0,90	287	2,6	3,0	0,890	596
HMC3 315S-2	110	2975	179	7,4	95,7	95,8	94,6	0,93	352	2,1	2,8	1,71	956
HMC3 315M-2	132	2975	215	7,0	95,4	95,7	94,7	0,93	421	2,0	2,7	1,92	1017
HMC3 315L 1-2	160	2970	262	6,4	95,6	95,8	95,1	0,93	515	1,9	2,7	2,11	1139
HMC3 315L 2-2	200	2980	330	8,6	96,0	96,1	94,7	0,92	640	2,1	2,8	2,61	1150
HMC3 355M-2	250	2980	419	6,7	95,8	96,0	95,6	0,90	809	1,7	2,3	3,59	1948
HMC3 355L 1-2	315	2980	524	6,6	95,8	96,2	96,1	0,91	1014	1,7	2,3	4,20	2356

Data at 400V 50Hz
At 230V 50Hz the current is √3 x current at 400V and at 690V the current is current at 400V / √3. All other data are identical.

IE3 / 4 pol

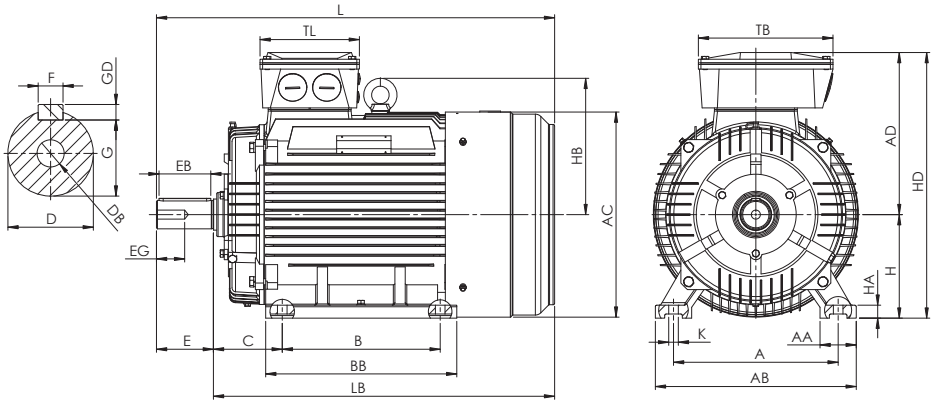
Motor type	Power	Speed	Current at 400V		Efficiency (%)			Pf	Torque			IM	Weight
	kw	rpm	I_N (A)	I_S/I_N	1/1 load	3/4 load	1/2 load	cos φ	T_N	T_S/T_N	T_M/T_N	J(kgm^2)	kg
Aluminium motors													
HMA3 80 2-4	0,75	1445	1,8	7,2	84,4	84,3	81,9	0,72	4,9	3,4	3,9	0,00265	13
HMA3 90S-4	1,1	1445	2,4	8,0	84,5	84,7	83,1	0,77	7,3	2,5	3,0	0,00372	14,5
HMA3 90L-4	1,5	1440	3,4	8,1	85,4	86,2	85,5	0,75	9,9	2,9	3,2	0,00486	18,5
HMA3 100L1-4	2,2	1455	4,8	8,1	86,8	86,5	84,4	0,75	14,4	3,1	3,7	0,00934	27
HMA3 100L2-4	3	1435	6,0	8,7	87,7	88	86,8	0,82	19,7	3,2	3,7	0,0115	30
HMA3 112M-4	4	1440	8,0	9,0	88,6	88,8	87,5	0,82	26	3,0	3,7	0,0163	38
HMA3 132S-4	5,5	1460	10,5	8,7	89,6	89,8	88,5	0,84	36	2,8	4,1	0,0345	50
HMA3 132M-4	7,5	1460	14,5	9,3	90,7	90,5	88,5	0,84	49	3,2	3,8	0,0437	58
Cast iron motors													
HMC3 160M-4	11	1470	21	10,2	91,4	91,9	89,9	0,85	70	3,5	3,8	0,106	141
HMC3 160L-4	15	1470	28	10,1	92,1	92,7	91,1	0,85	96	3,5	3,8	0,134	151
HMC3 180M-4	18,5	1470	33	7,8	92,6	93,2	91,8	0,88	119	2,5	3,4	0,187	190
HMC3 180L-4	22	1470	40	8,0	93,0	93,6	92,1	0,87	142	2,6	2,7	0,234	205
HMC3 200L-4	30	1475	52	8,6	93,6	94	92,3	0,89	194	3,0	3,7	0,410	275
HMC3 225S-4	37	1480	67	9,4	94,2	94,4	92,9	0,86	234	3,4	3,3	0,607	315
HMC3 225M-4	45	1480	77	9,0	94,2	94,4	92,8	0,87	288	3,2	3,5	0,690	345
HMC3 250M-4	55	1480	96	8,5	94,7	95,1	93,8	0,88	356	3,0	3,1	1,01	421
HMC3 280S-4	75	1490	130	8,0	95,5	95,5	94,1	0,88	477	2,7	2,8	1,74	538
HMC3 280M-4	90	1480	153	8,0	95,4	95,8	94,8	0,90	577	2,7	2,8	2,11	638
HMC3 315S-4	110	1485	187	8,2	95,7	95,8	94,4	0,90	707	2,6	2,7	3,33	958
HMC3 315M-4	132	1485	221	8,1	95,8	95,9	94,4	0,91	851	2,5	2,8	3,91	1045
HMC3 315L 1-4	160	1485	264	7,8	96,1	96,3	95,3	0,92	1028	2,3	2,7	4,60	1115
HMC3 315L 2-4	200	1485	327	7,3	96,3	96,6	95,7	0,93	1290	2,1	2,5	5,75	1233
HMC3 355M-4	250	1490	419	6,4	96,2	96,3	95,8	0,90	1613	1,8	2,3	9,41	1744
HMC3 355L 1-4	315	1490	533	7,5	96,0	96,0	95,3	0,90	2044	2,3	2,5	10,8	1950

Data at 400V 50Hz
At 230V 50Hz the current is √3 x current at 400V and at 690V the current is current at 400V / √3. All other data are identical.

IE3 / 6 pol

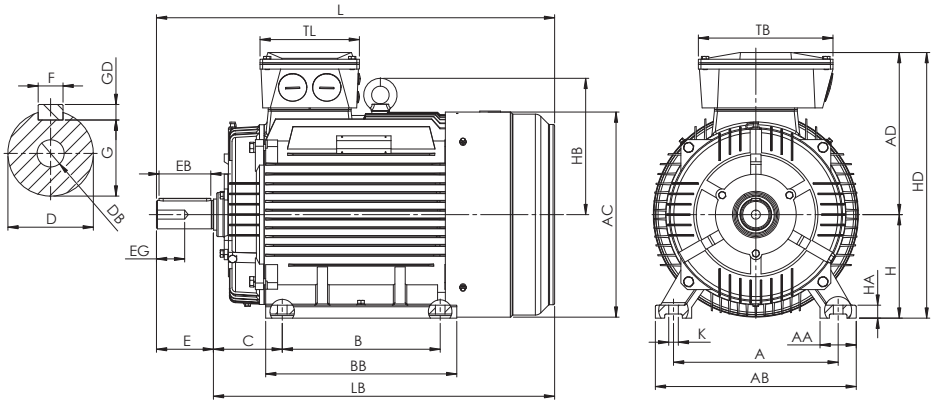
Motor type	Power	Speed	Current at 400V		Efficiency (%)			Pf	Torque			IM	Weight
	kw	rpm	I_N (A)	I_S/I_N	1/1 load	3/4 load	1/2 load	cos φ	T_N	T_S/T_N	T_M/T_N	J(kgm^2)	kg
Aluminium motors													
HMA3 90S-6	0,75	955	2,0	5,2	79,0	79,1	76,5	0,69	7,5	1,9	2,3	0,00481	15
HMA3 90L-6	1,1	955	3,0	5,8	81,3	81,4	79,3	0,67	11,0	2,6	3,0	0,00683	20
HMA3 100L-6	1,5	960	3,8	5,9	82,6	82,4	79,8	0,69	14,9	2,6	3,1	0,0125	27
HMA3 112M-6	2,2	965	5,6	6,0	84,5	84,2	81,5	0,67	21,7	2,2	3,0	0,0170	36
HMA3 132S-6	3	975	7,0	8,1	85,7	84,6	81,1	0,73	29,3	2,7	3,8	0,0368	46
HMA3 132M1-6	4	970	8,8	8,2	87,1	86,9	84,8	0,76	39,2	2,3	2,7	0,0484	55
HMA3 132M2-6	5,5	970	11,6	8,3	88,0	88,1	86,7	0,78	54	2,3	2,7	0,0632	66
Cast iron motors													
HMC3 160M-6	7,5	975	16,5	6,4	89,1	88,9	85,2	0,74	71	2,4	3,1	0,125	154
HMC3 160L-6	11	970	23	5,6	90,3	90,0	88,0	0,82	107	1,9	2,4	0,161	170
HMC3 180L-6	15	980	29	6,0	91,7	92,3	90,5	0,82	144	2,2	2,6	0,284	203
HMC3 200L1-6	18,5	985	37	6,5	92,2	92,2	89,6	0,78	177	2,2	2,5	0,418	241
HMC3 200L2-6	22	985	44	7,0	92,5	92,6	90,2	0,79	215	2,4	2,8	0,482	256
HMC3 225M-6	30	985	58	6,5	93,1	93,6	92,2	0,81	287	2,0	2,3	0,682	322
HMC3 250M-6	37	985	71	6,8	93,6	93,7	91,5	0,82	359	2,1	2,3	1,16	405
HMC3 280S-6	45	990	83	6,5	93,9	94,0	92,0	0,84	437	2,0	2,3	1,88	521
HMC3 280M-6	55	990	110	6,0	94,1	94,3	92,6	0,86	534	2,0	2,3	2,26	570
HMC3 315S-6	75	985	132	5,8	94,6	95,1	94,1	0,87	726	2,0	2,3	4,24	941
HMC3 315M-6	90	985	158	5,7	94,9	95,3	94,5	0,88	872	1,9	2,2	4,62	1021
HMC3 315L1-6	110	990	193	7,0	95,1	95,4	94,0	0,87	1065	2,4	2,6	5,91	1094
HMC3 315L2-6	132	985	229	6,8	95,4	95,6	94,7	0,88	1278	2,2	2,4	7,12	1216
HMC3 355M1-6	160	990	281	7,0	95,6	95,4	94,2	0,86	1546	2,0	2,2	9,93	1591
HMC3 355M2-6	200	990	342	7,0	95,8	95,6	94,8	0,88	1930	2,0	2,2	12,3	1642
HMC3 355L-6	250	990	430	7,0	95,8	95,6	94,8	0,88	2411	2,0	2,2	15,9	1744

Data at 400V 50Hz
At 230V 50Hz the current is √3 x current at 400V and at 690V the current is current at 400V / √3. All other data are identical.



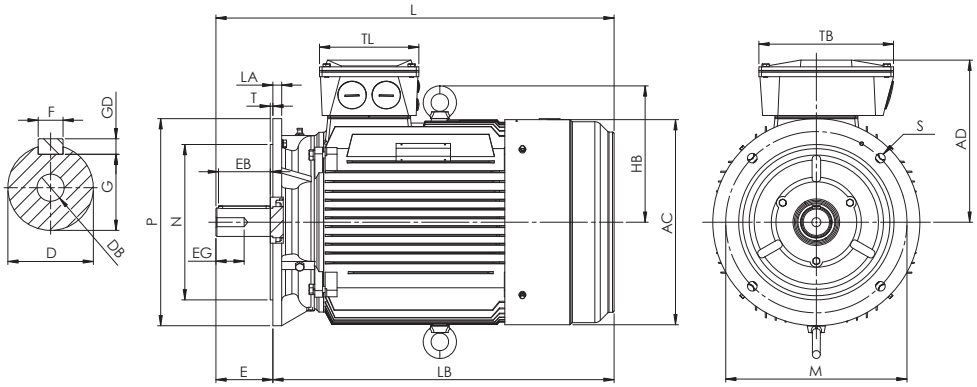
Motor type	Pole	A	AA	AB	AC	AD	B	BB	C	D	DB	E	F	G	GD	EB	EG	H	HA	HB	HD	K	L	LB	TL	TB
Aluminium motors																										
HMA3 80	2,4	125	27	160	159	126	100	122	50	19	M6	40	6	15,5	6	32	16	80	13	-	206	10	298	258	100	100
HMA3 90S	-	140	35	178	175	130	100/125	155	56	24	M8	50	8	20	7	40	19	90	14	-	220	10	328	278	100	100
HMA3 90L	-	140	35	178	175	130	125	155	56	24	M8	50	8	20	7	40	19	90	14	-	220	10	354	304	100	100
HMA3 100L	-	160	42	203	198	147	140	176	63	28	M10	60	8	24	7	50	22	100	12	136	247	12	406	346	100	100
HMA3 112M	4	190	46	222	220	169	140	180	70	28	M10	60	8	24	7	50	22	112	14	150	281	12	430	328	120	120
HMA3 112M	2,6	190	46	222	220	169	140	180	70	28	M10	60	8	24	7	50	22	112	14	150	281	12	388	370	120	120
HMA3 132S	-	216	50	257	260	188	140	180	89	38	M12	80	10	33	8	70	28	132	16	167	320	12	463	383	120	120
HMA3 132M	4,6	216	50	257	260	188	178	218	89	38	M12	80	10	33	8	70	28	132	16	167	320	12	501	421	120	120

IE3 / B3



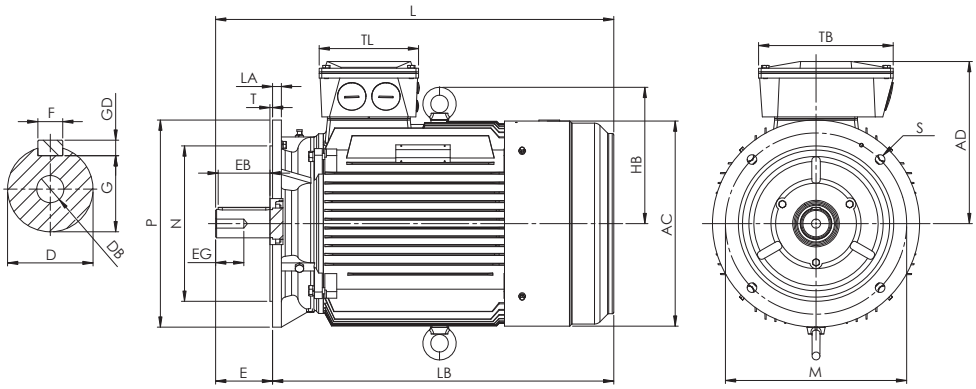
Motor type	Pole	A	AA	AB	AC	AD	B	BB	C	D	DB	E	F	G	GD	EB	EG	H	HA	HB	HD	K	L	LB	TL	TB
Cast iron motors																										
HMC3 160M	-	254	65	314	313	276	210	260	108	42	M16	110	12	37	8	100	36	160	20	221	436	14,5	609	499	162	218
HMC3 160L	-	254	65	314	313	276	254	304	108	42	M16	110	12	37	8	100	36	160	20	221	436	14,5	653	543	162	218
HMC3 180M	-	279	70	349	354	292	241	311	121	48	M16	110	14	42,5	9	100	40	180	22	237	472	14,5	688	578	162	218
HMC3 180L	-	279	70	349	354	292	279	349	121	48	M16	110	14	42,5	9	100	40	180	22	237	472	14,5	726	616	162	218
HMC3 200L	-	318	70	388	396	312	305	369	133	55	M20	110	16	49	10	100	50	200	25	262	512	18,5	770	660	192	260
HMC3 225S	4,6	356	75	431	445	335	286	369	149	60	M20	140	18	53	11	130	56	225	28	285	560	18,5	818	678	192	260
HMC3 225M	2	356	75	431	445	335	311	393	149	55	M20	110	16	49	10	100	56	225	28	285	560	18,5	813	703	192	260
HMC3 225M	4,6	356	75	431	445	335	311	393	149	60	M20	140	18	53	11	130	56	225	28	285	560	18,5	843	703	192	260
HMC3 250M	2	406	80	484	484	375	349	445	168	60	M20	140	18	53	11	130	56	250	30	316	625	24	910	770	230	305
HMC3 250M	4,6	406	80	484	484	375	349	445	168	65	M20	140	18	58	11	130	56	250	30	316	625	24	910	770	230	305
HMC3 280S	2	457	85	542	546	405	368	485	190	65	M20	140	18	58	11	130	56	280	35	361	685	24	960	820	230	305
HMC3 280S	4,6	457	85	542	546	405	368	485	190	75	M20	140	20	67,5	12	130	56	280	35	361	685	24	960	820	230	305
HMC3 280M	2	457	85	542	546	405	419	536	190	65	M20	140	18	58	11	130	56	280	35	361	685	24	1032	892	230	305
HMC3 280M	4,6	457	85	542	546	405	419	536	190	75	M20	140	20	67,5	12	130	56	280	35	361	685	24	1032	892	230	305
HMC3 315S	2	508	120	628	620	550	406	570	216	65	M20	140	18	58	11	130	56	315	45	430	865	28	1195	1055	280	400
HMC3 315S	4,6	508	120	628	620	550	406	570	216	80	M20	170	22	71	14	160	56	315	45	430	865	28	1225	1055	280	400
HMC3 315M	2	508	120	628	620	550	457	680	216	65	M20	140	18	58	11	130	56	315	45	430	865	28	1305	1165	280	400
HMC3 315M	4,6	508	120	628	620	550	457	680	216	80	M20	170	22	71	14	160	56	315	45	430	865	28	1335	1165	280	400
HMC3 315L1	2	508	120	628	620	550	508	680	216	65	M20	140	18	58	11	130	56	315	45	430	865	28	1305	1165	280	400
HMC3 315L1	4,6	508	120	628	620	550	508	680	216	80	M20	170	22	71	14	160	56	315	45	430	865	28	1335	1165	280	400
HMC3 315L2	2	508	120	628	620	550	508	680	216	65	M20	140	18	58	11	130	56	315	45	430	865	28	1305	1165	280	400
HMC3 315L2	4,6	508	120	628	620	550	508	680	216	80	M20	170	22	71	14	160	56	315	45	430	865	28	1335	1165	280	400
HMC3 355M	2	610	116	726	701	665	560	750	254	75	M24	140	20	67,5	12	130	56	355	52	489	1020	28	1516	1376	330	460
HMC3 355M	4,6	610	116	726	701	665	560	750	254	95	M24	170	25	86	14	160	56	355	52	489	1020	28	1546	1376	330	460
HMC3 355L1	2	610	116	726	701	665	630	750	254	75	M24	140	20	67,5	12	130	56	355	52	489	1020	28	1516	1376	330	460
HMC3 355L1	4,6	610	116	726	701	665	630	750	254	95	M24	170	25	86	14	160	56	355	52	489	1020	28	1546	1376	330	460

IE3 / B5

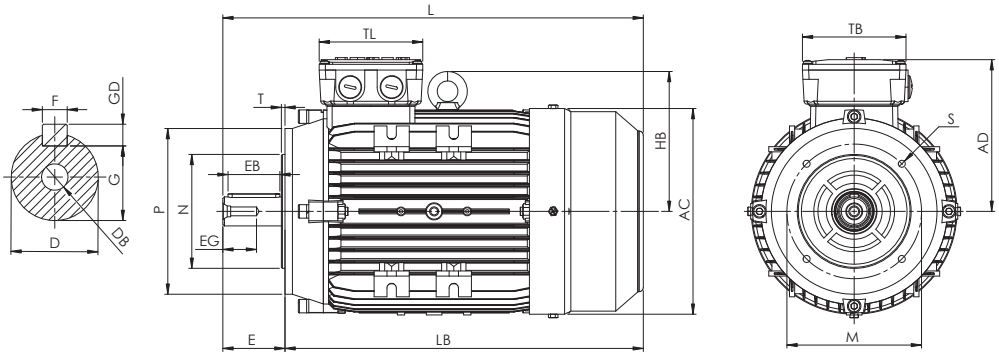


Motor type	Pole	AC	AD	D	DB	E	F	G	GD	EB	EG	HB	L	LA	LB	M	N	P	S	T	TL	TB
Aluminium motors																						
HMA3 80	2,4	159	126	19	M6	40	6	15,5	6	32	16	-	298	10	258	165	130	200	4-ø12	3,5	100	100
HMA3 90S	-	175	130	24	M8	50	8	20	7	40	19	-	328	10	278	165	130	200	4-ø12	3,5	100	100
HMA3 90L	-	175	130	24	M8	50	8	20	7	40	19	-	354	10	304	165	130	200	4-ø12	3,5	100	100
HMA3 100L	-	198	147	28	M10	60	8	24	7	50	22	136	406	14	346	215	180	250	4-ø14,5	4	100	100
HMA3 112M	4	220	169	28	M10	60	8	24	7	50	22	150	430	14	328	215	180	250	4-ø14,5	4	120	120
HMA3 112M	2,6	220	169	28	M10	60	8	24	7	50	22	150	388	14	370	215	180	250	4-ø14,5	4	120	120
HMA3 132S	-	260	188	38	M12	80	10	33	8	70	28	167	463	15	383	265	230	300	4-ø14,5	4	120	120
HMA3 132M	4,6	260	188	38	M12	80	10	33	8	70	28	167	501	15	421	265	230	300	4-ø14,5	4	120	120

IE3 / B5

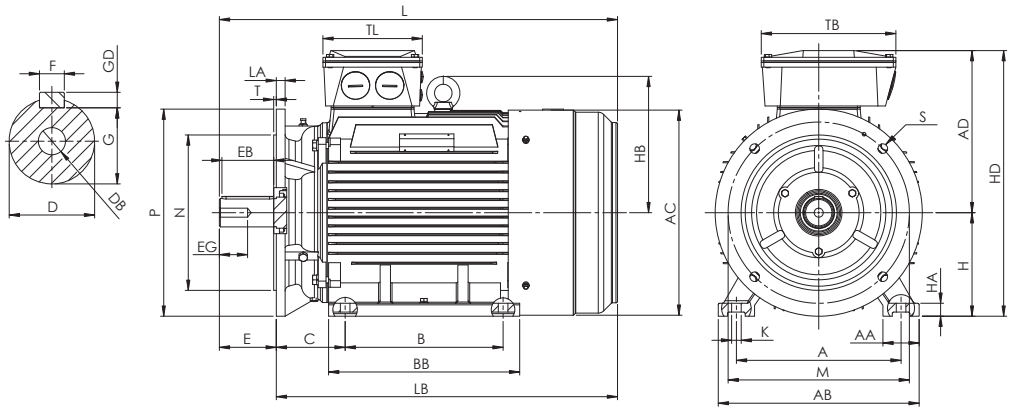


Motor type	Pole	AC	AD	D	DB	E	F	G	GD	EB	EG	HB	L	LA	LB	M	N	P	S	T	TL	TB
Cast iron motors																						
HMC3 160M	-	313	276	42	M16	110	12	37	8	100	36	221	609	14	499	300	250	350	4-ø18,5	5	162	218
HMC3 160L	-	313	276	42	M16	110	12	37	8	100	36	221	653	14	543	300	250	350	4-ø18,5	5	162	218
HMC3 180M	-	354	292	48	M16	110	14	42,5	9	100	40	237	688	15	578	300	250	350	4-ø18,5	5	162	218
HMC3 180L	-	354	292	48	M16	110	14	42,5	9	100	40	237	726	15	616	300	250	350	4-ø18,5	5	162	218
HMC3 200L	-	396	312	55	M20	110	16	49	10	100	50	262	770	17	660	350	300	400	4-ø18,5	5	192	260
HMC3 225S	4,6	445	335	60	M20	140	18	53	11	130	56	285	818	20	678	400	350	450	8-ø18,5	5	192	260
HMC3 225M	2	445	335	55	M20	110	16	49	10	100	56	285	813	20	703	400	350	450	8-ø18,5	5	192	260
HMC3 225M	4,6	445	335	60	M20	140	18	53	11	130	56	285	843	20	703	400	350	450	8-ø18,5	5	192	260
HMC3 250M	2	484	375	60	M20	140	18	53	11	130	56	316	910	22	770	500	450	550	8-ø18,5	5	230	305
HMC3 250M	4,6	484	375	65	M20	140	18	58	11	130	56	316	910	22	770	500	450	550	8-ø18,5	5	230	305
HMC3 280S	2	546	405	65	M20	140	18	58	11	130	56	361	960	22	820	500	450	550	8-ø18,5	5	230	305
HMC3 280S	4,6	546	405	75	M20	140	20	67,5	12	130	56	361	960	22	820	500	450	550	8-ø18,5	5	230	305
HMC3 280M	2	546	405	65	M20	140	18	58	11	130	56	361	1032	22	892	500	450	550	8-ø18,5	5	230	305
HMC3 280M	4,6	546	405	75	M20	140	20	67,5	12	130	56	361	1032	22	892	500	450	550	8-ø18,5	5	230	305
HMC3 315S	2	620	550	65	M20	140	18	58	11	130	56	430	1195	22	1055	600	550	660	8-ø24	6	280	400
HMC3 315S	4,6	620	550	80	M20	170	22	71	14	160	56	430	1225	22	1055	600	550	660	8-ø24	6	280	400
HMC3 315M	2	620	550	65	M20	140	18	58	11	130	56	430	1305	22	1165	600	550	660	8-ø24	6	280	400
HMC3 315M	4,6	620	550	80	M20	170	22	71	14	160	56	430	1335	22	1165	600	550	660	8-ø24	6	280	400
HMC3 315L1	2	620	550	65	M20	140	18	58	11	130	56	430	1305	22	1165	600	550	660	8-ø24	6	280	400
HMC3 315L1	4,6	620	550	80	M20	170	22	71	14	160	56	430	1335	22	1165	600	550	660	8-ø24	6	280	400
HMC3 315L2	2	620	550	65	M20	140	18	58	11	130	56	430	1305	22	1165	600	550	660	8-ø24	6	280	400
HMC3 315L2	4,6	620	550	80	M20	170	22	71	14	160	56	430	1335	22	1165	600	550	660	8-ø24	6	280	400
HMC3 355M	2	701	665	75	M24	140	20	67,5	12	130	56	489	1516	25	1376	740	680	800	8-ø24	6	330	460
HMC3 355M	4,6	701	665	95	M24	170	25	86	14	160	56	489	1546	25	1376	740	680	800	8-ø24	6	330	460
HMC3 355L1	2	701	665	75	M24	140	20	67,5	12	130	56	489	1516	25	1376	740	680	800	8-ø24	6	330	460
HMC3 355L1	4,6	701	665	95	M24	170	25	86	14	160	56	489	1546	25	1376	740	680	800	8-ø24	6	330	460

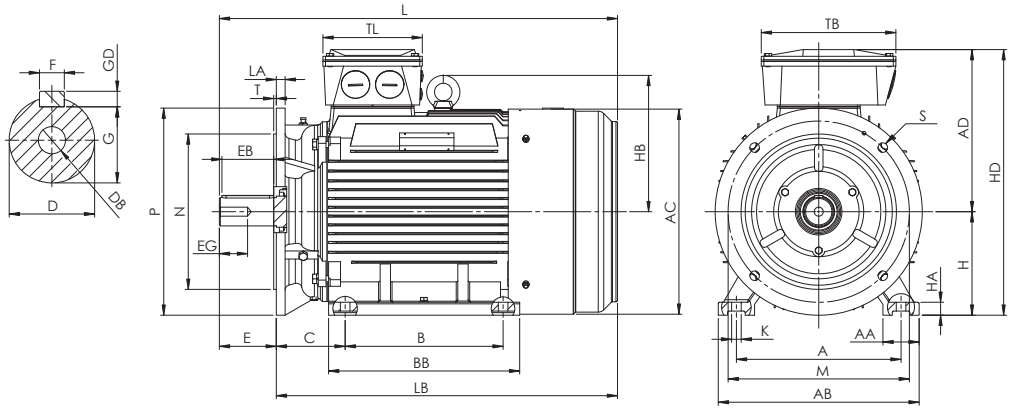


															B14 flange					B14 big flange						
Motor type	Pole	AC	AD	D	DB	E	F	G	GD	EB	EG	HB	L	LB	M	N	P	S	T	M	N	P	S	T	TL	TB
Aluminium motors																										
HMA3 80	2,4	159	126	19	M6	40	6	15,5	6	32	16	-	298	258	100	80	120	4-øM6	3	130	110	160	4-øM8	3,5	100	100
HMA3 90S	-	175	130	24	M8	50	8	20	7	40	16	-	328	278	115	95	140	4-øM8	3	130	110	160	4-øM8	3,5	100	100
HMA3 90L	-	175	130	24	M8	50	8	20	7	40	19	-	354	304	115	95	140	4-øM8	3	130	110	160	4-øM8	3,5	100	100
HMA3 90L(B14B)	4,6	175	130	24	M8	50	8	20	7	40	19	-	374	324	/	/	/	/	/	130	110	160	4-øM8	3,5	100	100
HMA3 100L	-	198	147	28	M10	60	8	24	7	50	22	136	406	346	130	110	160	4-øM8	3,5	165	130	200	4-øM10	3,5	100	100
HMA3 112M	4	220	169	28	M10	60	8	24	7	50	22	150	430	370	130	110	160	4-øM8	3,5	165	130	200	4-øM10	3,5	120	120
HMA3 112M	2,6	220	169	28	M10	60	8	24	8	50	22	150	388	328	130	110	160	4-øM8	3,5	165	130	200	4-øM10	3,5	120	120
HMA3 132S	-	260	188	38	M12	80	10	33	8	70	28	167	453	370	165	130	200	4-øM10	3,5	215	180	250	4-øM12	4	120	120
HMA3 132M	4,6	260	188	38	M12	80	10	33	8	70	28	167	501	421	165	130	200	4-øM10	3,5	215	180	250	4-øM12	4	120	120

IE3 / B35



Motor type	Pole	A	AA	AB	AC	AD	B	BB	C	D	DB	E	F	G	GD	EB	EG	H	HA	HB	HD	K	L	LA	LB	M	N	P	S	T	TL	TB
Aluminium motors																																
HMA3 80	2,4	125	27	160	159	126	100	122	50	19	M6	40	6	15,5	6	32	16	80	13	-	206	10	298	10	258	165	130	200	4-ø12	3,5	100	100
HMA3 90S	-	140	35	178	175	130	100/125	155	56	24	M8	50	8	20	7	40	19	90	14	-	220	10	328	10	278	165	130	200	4-ø12	3,5	100	100
HMA3 90L	-	140	35	178	175	130	125	155	56	24	M8	50	8	20	7	40	19	90	14	-	220	10	354	10	304	165	130	200	4-ø12	3,5	100	100
HMA3 100L	-	160	42	203	198	147	140	176	63	28	M10	60	8	24	7	50	22	100	12	136	247	12	406	14	346	215	180	250	4-ø14,5	4	100	100
HMA3 112M	4	190	46	222	220	169	140	180	70	28	M10	60	8	24	7	50	22	112	14	150	281	12	430	14	370	215	180	250	4-ø14,5	4	100	100
HMA3 112M	2,6	190	46	222	220	169	140	180	70	28	M10	60	8	24	7	50	22	112	14	150	281	12	388	14	328	215	180	250	4-ø14,5	4	120	120
HMA3 132S	-	216	50	257	260	188	140	180	89	38	M12	80	10	33	8	70	28	132	16	167	320	12	463	15	383	265	230	300	4-ø14,5	4	120	120
HMA3 132M	4,6	216	50	257	260	188	178	218	89	38	M12	80	10	33	8	70	28	132	16	167	320	12	501	15	450	265	230	300	4-ø14,5	4	120	120



Motor type	Pole	A	AA	AB	AC	AD	B	BB	C	D	DB	E	F	G	GD	EB	EG	H	HA	HB	HD	K	L	LA	LB	M	N	P	S	T	TL	TB
Cast iron motors																																	
HMC3 160M	-	254	65	314	313	276	210	260	108	42	M16	110	12	37	8	100	36	160	20	221	436	14,5	609	14	499	300	250	350	4-ø18,5	5	162	218
HMC3 160L	-	254	65	314	313	276	254	304	108	42	M16	110	12	37	8	100	36	160	20	221	436	14,5	653	14	543	300	250	350	4-ø18,5	5	162	218
HMC3 180M	-	279	70	349	354	292	241	311	121	48	M16	110	14	42,5	9	100	40	180	22	237	472	14,5	688	15	578	300	250	350	4-ø18,5	5	162	218
HMC3 180L	-	279	70	349	354	292	279	349	121	48	M16	110	14	42,5	9	100	40	180	22	237	472	14,5	726	15	616	300	250	350	4-ø18,5	5	162	218
HMC3 200L	-	318	70	388	396	312	305	369	133	55	M20	110	16	49	10	100	50	200	25	262	512	18,5	770	17	660	350	300	400	4-ø18,5	5	192	260
HMC3 225S	4,6	356	75	431	445	335	286	369	149	60	M20	140	18	53	11	130	56	225	28	285	560	18,5	818	20	678	400	350	450	8-ø18,5	5	192	260
HMC3 225M	2	356	75	431	445	335	311	393	149	55	M20	110	16	49	10	100	56	225	28	285	560	18,5	813	20	703	400	350	450	8-ø18,5	5	192	260
HMC3 225M	4,6	356	75	431	445	335	311	393	149	60	M20	140	18	53	11	130	56	225	28	285	560	18,5	843	20	703	400	350	450	8-ø18,5	5	192	260
HMC3 250M	2	406	80	484	484	375	349	445	168	60	M20	140	18	53	11	130	56	250	30	316	625	24	910	22	770	500	450	550	8-ø18,5	5	230	305
HMC3 250M	4,6	406	80	484	484	375	349	445	168	65	M20	140	18	58	11	130	56	250	30	316	625	24	910	22	770	500	450	550	8-ø18,5	5	230	305
HMC3 280S	2	457	85	542	546	405	368	485	190	65	M20	140	18	58	11	130	56	280	35	361	685	24	960	22	820	500	450	550	8-ø18,5	5	230	305
HMC3 280S	4,6	457	85	542	546	405	368	485	190	75	M20	140	20	67,5	12	130	56	280	35	361	685	24	960	22	820	500	450	550	8-ø18,5	5	230	305
HMC3 280M	2	457	85	542	546	405	419	536	190	65	M20	140	18	58	11	130	56	280	35	361	685	24	1032	22	892	500	450	550	8-ø18,5	5	230	305
HMC3 280M	4,6	457	85	542	546	405	419	536	190	75	M20	140	20	67,5	12	130	56	280	35	361	685	24	1032	22	892	500	450	550	8-ø18,5	5	230	305
HMC3 315S	2	508	120	628	620	550	406	570	216	65	M20	140	18	58	11	130	56	315	45	430	865	28	1195	22	1055	600	550	660	8-ø24	6	280	400
HMC3 315S	4,6	508	120	628	620	550	406	570	216	80	M20	170	22	71	14	160	56	315	45	430	865	28	1225	22	1055	600	550	660	8-ø24	6	280	400
HMC3 315M	2	508	120	628	620	550	457	680	216	65	M20	140	18	58	11	130	56	315	45	430	865	28	1305	22	1165	600	550	660	8-ø24	6	280	400
HMC3 315M	4,6	508	120	628	620	550	457	680	216	80	M20	170	22	71	14	160	56	315	45	430	865	28	1335	22	1165	600	550	660	8-ø24	6	280	400
HMC3 315L1	2	508	120	628	620	550	508	680	216	65	M20	140	18	58	11	130	56	315	45	430	865	28	1305	22	1165	600	550	660	8-ø24	6	280	400
HMC3 315L1	4,6	508	120	628	620	550	508	680	216	80	M20	170	22	71	14	160	56	315	45	430	865	28	1335	22	1165	600	550	660	8-ø24	6	280	400
HMC3 315L2	2	508	120	628	620	550	508	680	216	65	M20	140	18	58	11	130	56	315	45	430	865	28	1305	22	1165	600	550	660	8-ø24	6	280	400
HMC3 315L2	4,6	508	120	628	620	550	508	680	216	80	M20	170	22	71	14	160	56	315	45	430	865	28	1335	22	1165	600	550	660	8-ø24	6	280	400
HMC3 355M	2	610	116	726	701	665	560	750	254	75	M24	140	20	67,5	12	130	56	355	52	489	1020	28	1516	25	1376	740	680	800	8-ø24	6	330	460
HMC3 355M	4,6	610	116	726	701	665	560	750	254	95	M24	170	25	86	14	160	56	355	52	489	1020	28	1546	25	1376	740	680	800	8-ø24	6	330	460
HMC3 355L1	2	610	116	726	701	665	630	750	254	75	M24	140	20	67,5	12	130	56	355	52	489	1020	28	1516	25	1376	740	680	800	8-ø24	6	330	460
HMC3 355L1	4,6	610	116	726	701	665	630	750	254	95	M24	170	25	86	14	160	56	355	52	489	1020	28	1546	25	1376	740	680	800	8-ø24	6	330	460

Bearings and Terminal box

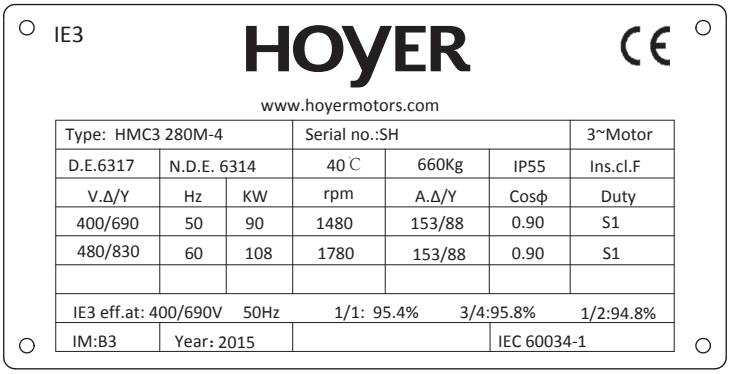
Bearings

	Drive End		None drive end	
Motor type	2 pole	4,6 pole	2 pole	4,6 pole
HMA3 80	6204-2Z/C3		6204-2Z/C3	
HMA3 90	6205-2Z/C3		6205-2Z/C3	
HMA3 100	6206-2Z/C3		6206-2Z/C3	
HMA3 112	6306-2Z/C3		6306-2Z/C3	
HMA3 132	6308-2Z/C3		6308-2Z/C3	
HMC3 160	6309-2Z/C3		6309-2Z/C3	
HMC3 180	6311-2Z/C3		6311-2Z/C3	
HMC3 200	6312/C3		6312/C3	
HMC3 225	6312/C3	6313/C3	6312/C3	
HMC3 250	6313/C3	6314/C3	6313/C3	
HMC3 280	6314/C3	6317/C3	6314/C3	
HMC3 315	6317/C3	NU319 (B3) 6319/C3 (B5/B35)	6317/C3	6319/C3
HMC3 355	6319/C3	NU322 (B3) 6322/C3 (B5/B35)	6319/C3	6322/C3

Terminal box

Motor type	Main Blindcaps	Ass. Blindcaps
HMA3 80	2xM20x1,5	/
HMA3 90	2xM20x1,5	/
HMA3 100	2xM20x1,5	/
HMA3 112	2xM20x1,5	/
HMA3 132	2xM25x1,5	1xM20x1,5
HMC3 160	2xM40x1,5	2xM20x1,5
HMC3 180	2xM40x1,5	2xM20x1,5
HMC3 200	2xM50x1,5	2xM20x1,5
HMC3 225	2xM50x1,5	2xM20x1,5
HMC3 250	2xM63x1,5	2xM20x1,5
HMC3 280	2xM63x1,5	2xM20x1,5
HMC3 315	2xM63x1,5	2xM20x1,5
HMC3 355	2xM72x2,0	2xM20x1,5

Rating plate



Rating table amb. temp.

Amb. temp.	30°C	35°C	40°C	45°C	50°C	55°C	60°C
P/P_N	1,05	1,02	1,00	0,97	0,93	0,87	0,82

Rating table altitude

Altitude	1000m	1500m	2000m	2500m	3000m	3500m	4000m
P/P_N	1,00	0,98	0,95	0,91	0,87	0,83	0,78

Workshop and Extras

Workshop

In combination with the wide-ranging stock our highly skilled and certified workshop secures the most flexible stock in the business. Among other things the options for rebuild includes:

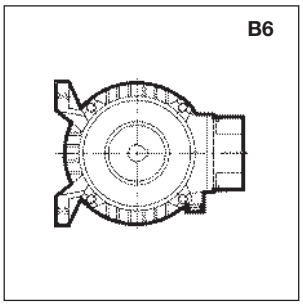
- Anti condensation heating
- ATEX Zone 22 / 2 (ExnA)
- Special bearings
- SPM nipples
- Forced fan cooling
- Pt100 built in thermo sensors
- Balancing class “A” or “B” (IEC60034-14)
- IP56, IP65 and IP66
- TENV (IC410) for mounting on open deck
- Encoders

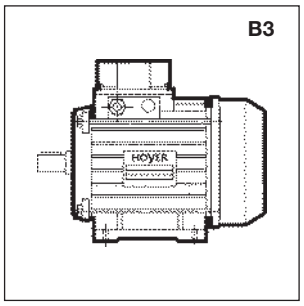
Extras

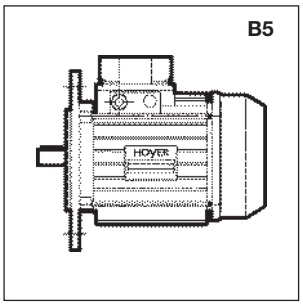
Due to the shared facilities with Hoyer Transmissions we are able to provide an unique combination of extras:

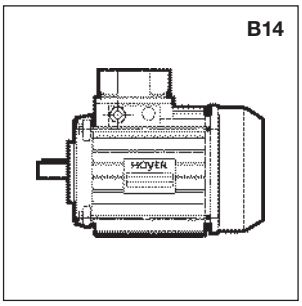
- Pulleys
- Taper locks
- Belts
- Motor slides and rails
- Couplings
- Locking elements

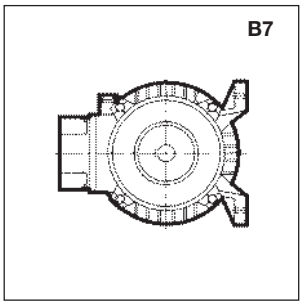
Mounting Positions

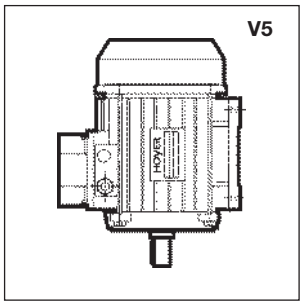


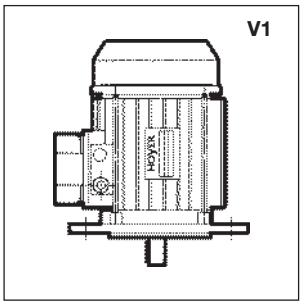


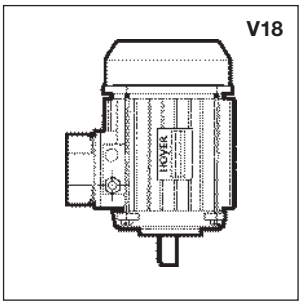


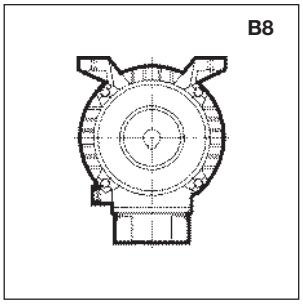


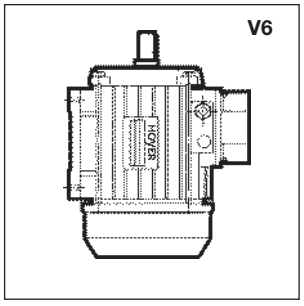


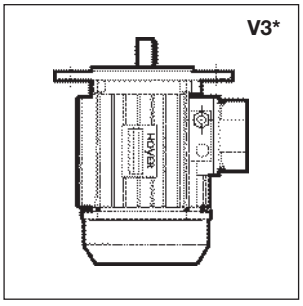


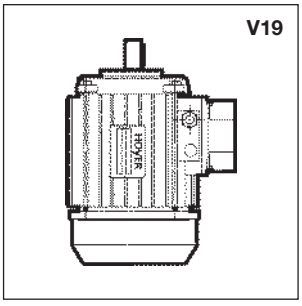


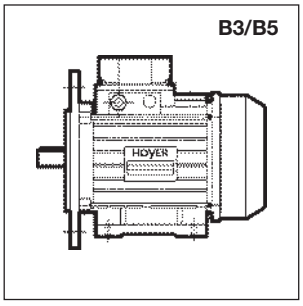


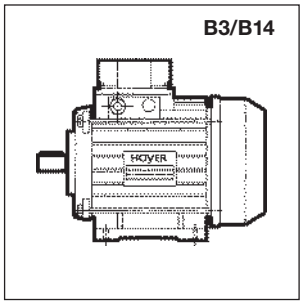


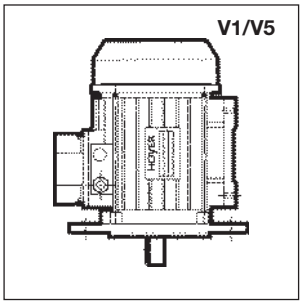


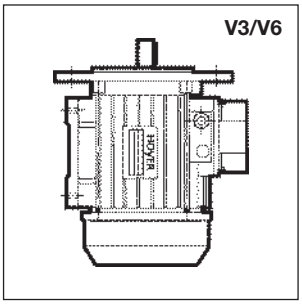










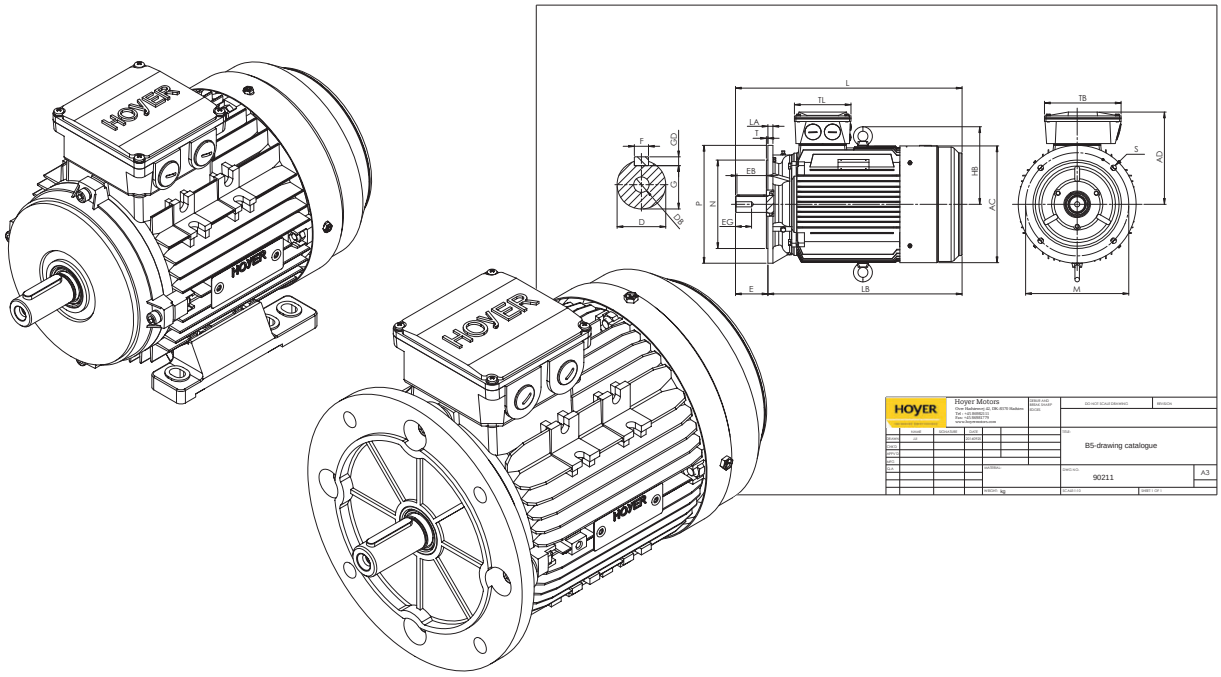


**Important notice:* V3 mounting with standard housing only accepted up to frame size 250. Motors frame size 280 and up need special housing and flange.

Drawings and Website

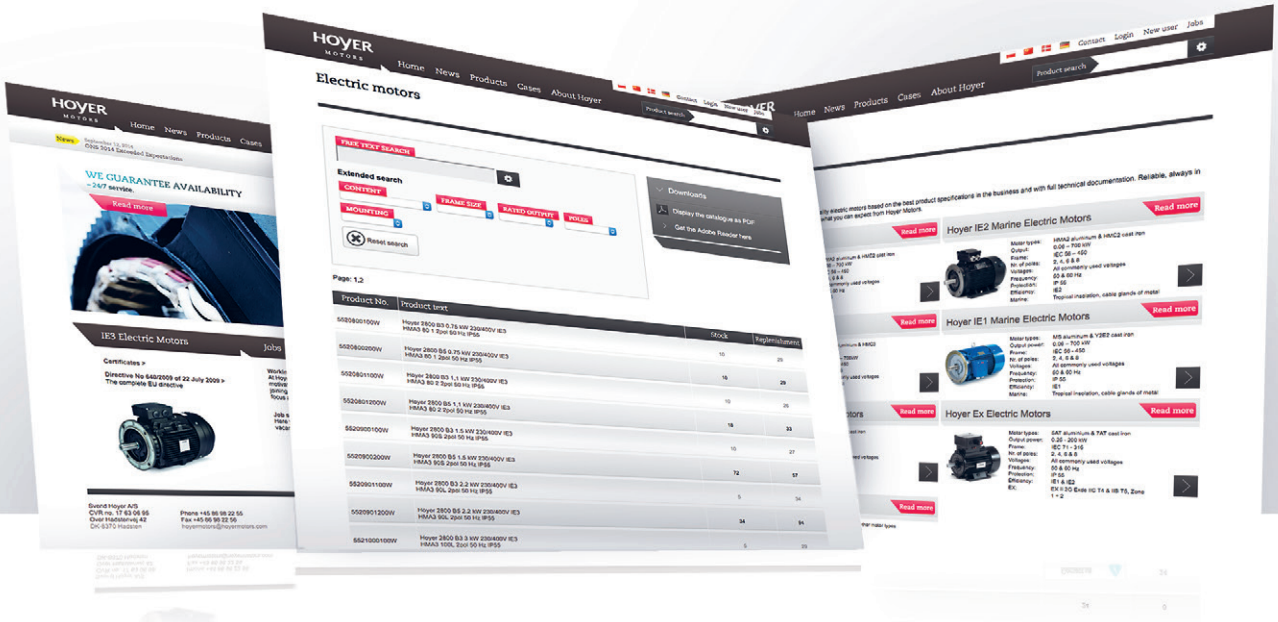
Drawings

At hoyermotors.com both 2D and 3D drawings of our IE3 programme are available for download.

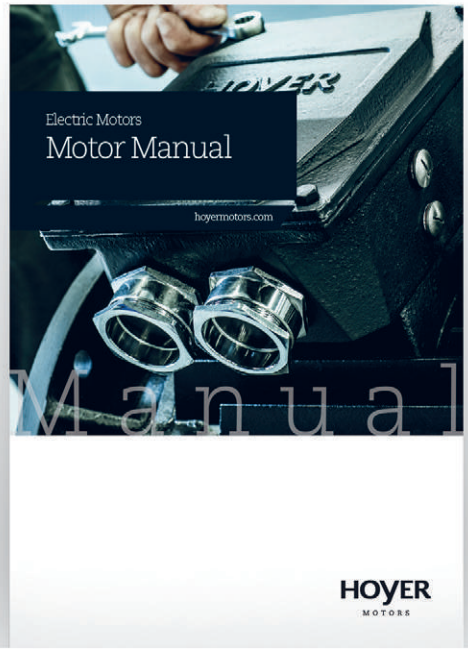


Website

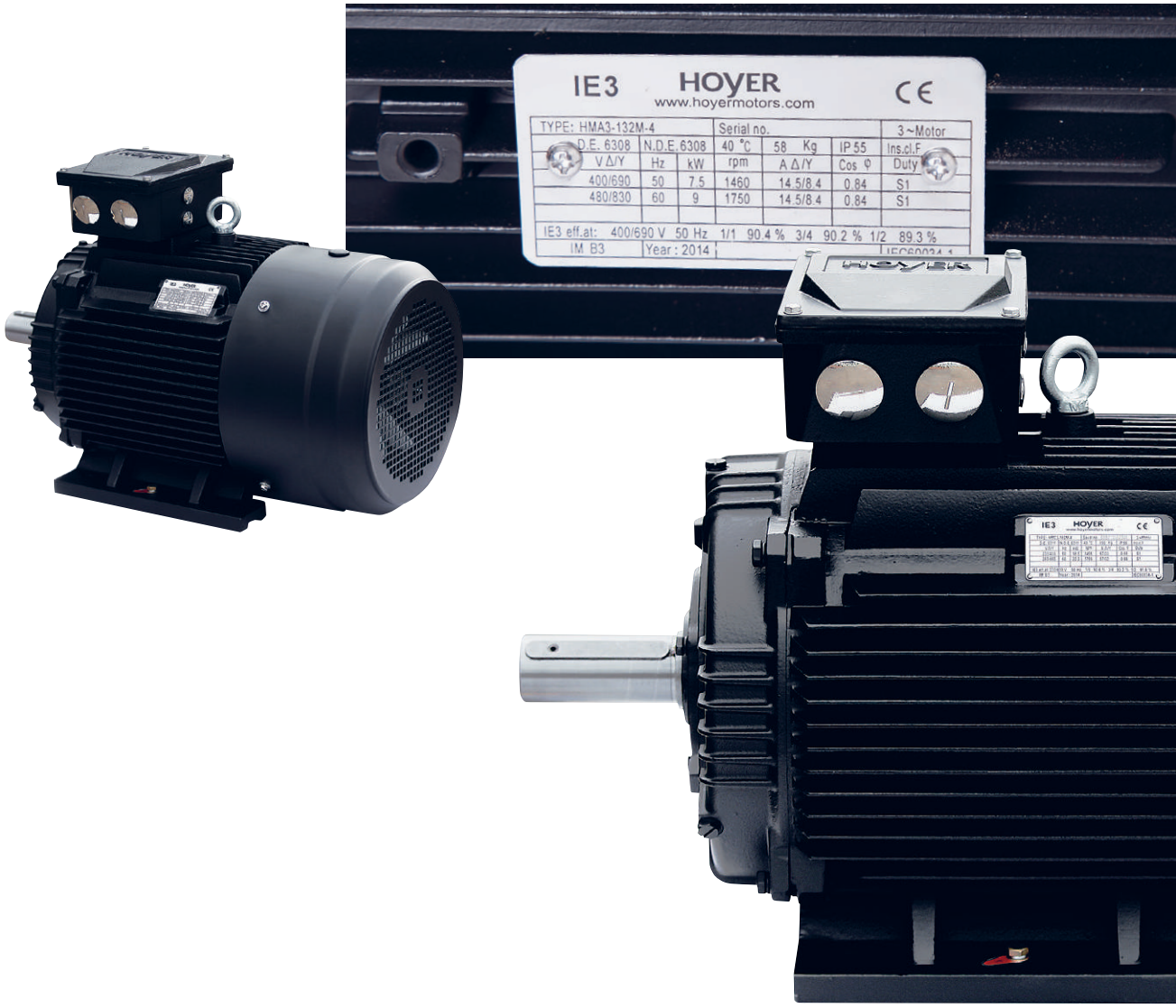
On the website you will also find information about our full product range and details on our extensive stock.



Other Hoyer Catalogues



Personal Notes



HOYER

EXCEEDING EXPECTATIONS

Hoyer Motors, IE3 Motors, January 2015

Head Offices

Denmark
Over Hadstenvej 42 · DK-8370 Hadsten
T +45 86 98 21 11 · F +45 86 98 17 79
hoyermotors@hoyermotors.com
hoyermotors.com

China
19 Jingwu Middle Road · Beilun District
Ningbo 315821 · Zhejiang
T +86 574 26 28 15 77 · F + 86 574 2628 1573
hoyermotors@hoyermotors.cn
hoyermotors.cn

Branch Offices

Germany
Landsberger Straße 155 · 80687 München
T +49 89 700 88 235 · F +49 89 543 56 333
germany@hoyermotors.com
hoyermotors.com

Sweden
Liljeholmsvägen 30 · PO box 44017
SE-100 73 Stockholm
T +46 8 446 877 13
sweden@hoyermotors.com
hoyermotors.com

Benelux
Vasteland 78 · 3011 BN, Rotterdam
Tel. +31 10 420 35 20 · Fax.+31 10 420 44 51
benelux@hoyermotors.com
hoyermotors.com

Korea
118dong 205ho · Busan T-Plex, 3153-1
Daejeo 2-dong · Gangseo-gu · Busan · Korea
T +82 51 996 0251 · F +82 51 996 0252
korea@hoyermotors.com
hoyermotors.com

Important notice. Text and data in this catalogue are not binding and we reserve the right to implement changes without further notice.