

ELECTRIC MOTORS



INTRODUCTION

CHT series motors have been produced to be mounted on gearboxes and therefore they have mechanical and electrical characteristics particularly right for this use.

All our motors are IP55, insulation class F with phase separator to be used with frequency variators, in this condition they can be provided complete with forced ventilation.

The motors like the gearboxes are painted with RAL 9022 grey colour epoxy powder.



TECHNICAL CHARACTERISTICS

- **Cage rotor motors, locked with outside surface ventilation.**
- **Project, construction and test in compliance with CEI2-3, international norms IEC34-1 and principal foreign/international standard.**
- **Power-sizes in specification with IEC 72, national norms UNEL-MEC.**
- **Insulation: class F**
- **Protection: class IP55**
- **Rated power delivered on continuous: S1**
- **European directive ROHS 2002/95/CE**
- **Phase separator**
- **Motors size 160 up to 355**
- **Volt 400/690 standard from 160 up to 355 on request for other sizes**



FUNCTION WITH A FREQUENCY OF 60

The CHT line motors can function with a frequency of 60 Hz. with differences in performances and electrical sizes as described on the table.

PLATE VOLTAGE 50 Hz	PLATE VOLTAGE 60 Hz	NOMINAL POWER	NOMINAL CURRENT	NOMINAL TORQUE	R.P.M.	STARTING CURRENT	STARTING TORQUE	MAX TORQUE
230 +/- 10%	220 +/- 5%	1	1	0.83	1.2	0.83	0.83	0.83
230 +/- 10%	230 +/- 10%	1	0.95	0.83	1.2	0.83	0.83	0.83
230 +/- 10%	254 +/- 5%	1.15	1.02	0.96	1.2	0.93	0.93	0.93
230 +/- 10%	277 +/- 5%	1.2	1	1	1.2	1	1	1
400 +/- 10%	380 +/- 5%	1	1	0.83	1.2	0.83	0.83	0.83
400 +/- 10%	400 +/- 10%	1	0.95	0.83	1.2	0.83	0.83	0.83
400 +/- 10%	440 +/- 5%	1.16	1.02	0.96	1.2	0.93	0.93	0.93
400 +/- 10%	460 +/- 10%	1.15	1	0.96	1.2	0.96	0.96	0.96
400 +/- 10%	480 +/- 5%	1.2	1	1	1.2	1	1	1



FEEDING VOLTAGE

The CHT line motors are made to be used on the European net system Volt 230/400 +/- 10% - Hz 50 and Volt 400/690 +/- 10% - Hz 50

This means that the same motor can function on the following stili existing nets:

- 220/380 Volt +/- 5%
- 230/400 Volt +/- 10%
- 240/415 Volt +/- 5%
- 380/660 Volt +/- 5%
- 400/690 Volt +/- 10%
- 415/720 Volt +/- 5%

corresponding to the requirements requested by the rules of numerous countries.



ELECTRIC MOTORS 2/4/6 POLES

IE 1

TYPE		POLES	POWER Kw	VOLTAGE V	CURRENT 400 V	TORQUE N/m	EFFICIENCY %	FACTOR COS.φ	WEIGHT Kg.
CHT 56	B2	2	0.13	230/400	0.40	0.42	62.00	0.69	3.20
CHT 56	B4	4	0.09	230/400	0.43	0.64	50.00	0.61	3.20
CHT 63	A2	2	0.18	230/400	0.55	0.63	63.00	0.75	4.00
CHT 63	B2	2	0.25	230/400	0.71	0.88	65.00	0.78	4.40
CHT 63	C2	2	0.37	230/400	1.05	1.30	65.00	0.78	4.90
CHT 63	A4	4	0.12	230/400	0.47	0.85	57.00	0.64	3.90
CHT 63	B4	4	0.18	230/400	0.70	1.27	57.00	0.65	4.50
CHT 63	C4	4	0.22	230/400	0.92	1.77	59.00	0.67	4.80
CHT 63	B6	6	0.12	230/400	0.62	1.27	45.00	0.62	4.80
CHT 71	A2	2	0.37	230/400	0.97	1.29	70.00	0.79	5.60
CHT 71	B2	2	0.55	230/400	1.42	1.90	71.00	0.79	6.10
CHT 71	A4	4	0.25	230/400	0.84	1.77	60.00	0.62	5.60
CHT 71	B4	4	0.37	230/400	1.12	2.58	65.00	0.74	6.20
CHT 71	C4	4	0.55	230/400	1.61	3.81	66.00	0.75	7.00
CHT 71	A6	6	0.18	230/400	0.70	1.95	56.00	0.66	6.00
CHT 71	B6	6	0.25	230/400	0.87	2.65	59.00	0.70	6.50
CHT 71	C6	6	0.37	230/400	1.27	3.97	61.00	0.69	7.20
CHT 80	A4	4	0.55	230/400	1.59	3.81	67.00	0.75	8.90
CHT 80	A6	6	0.37	230/400	1.23	3.93	62.00	0.70	8.20
CHT 80	B6	6	0.55	230/400	1.65	5.80	67.00	0.72	9.90

IE 2

CHT 80	A2	2	0.75	230/400	1.75	2.51	77.40	0.80	9.10
CHT 80	B2	2	1.10	230/400	2.45	3.69	80.00	0.82	10.70
CHT 80	C2	2	1.50	230/400	3.12	4.97	82.70	0.83	13.00
CHT 80	B4	4	0.75	230/400	1.79	5.04	79.60	0.76	11.20
CHT 80	C4	4	1.10	230/400	2.72	7.39	81.40	0.71	13.50
CHT 90	S2	2	1.50	230/400	3.20	4.95	81.40	0.83	13.30
CHT 90	L2	2	2.20	230/400	4.54	7.38	83.20	0.84	16.00
CHT 90	S4	4	1.10	230/400	2.50	7.37	81.40	0.78	13.90
CHT 90	L4	4	1.50	230/400	3.31	10.09	82.80	0.79	16.20
CHT 90	M4	4	2.20	230/400	5.09	14.71	84.30	0.74	20.50
CHT 90	S6	6	0.75	230/400	2.01	7.66	76.00	0.71	13.00
CHT 90	L6	6	1.10	230/400	2.82	11.23	78.10	0.72	16.30
CHT 100	LA2	2	3.00	230/400	5.88	10.05	84.60	0.87	23.00
CHT 100	LA4	4	2.20	230/400	4.83	14.70	84.30	0.78	22.70
CHT 100	LB4	4	3.00	230/400	6.33	20.00	85.50	0.80	26.50
CHT 100	LA6	6	1.50	230/400	3.71	15.20	80.00	0.73	22.00
CHT 112	M2	2	4.00	230/400	7.56	13.13	86.00	0.89	27.00
CHT 112	M4	4	4.00	230/400	8.23	26.60	86.60	0.81	32.50
CHT 112	L4	4	5.50	230/400	11.25	36.57	87.90	0.80	39.00
CHT 112	M6	6	2.20	230/400	5.17	22.30	81.80	0.75	29.50
CHT 132	SA2	2	5.50	230/400	10.25	18.00	87.20	0.89	40.20
CHT 132	SB2	2	7.50	230/400	13.80	24.47	88.10	0.89	45.00
CHT 132	S4	4	5.50	230/400	11.00	36.22	87.90	0.83	44.00
CHT 132	M4	4	7.50	230/400	14.50	50.00	88.70	0.84	53.50
CHT 132	M6	6	4.00	230/400	8.86	40.42	84.60	0.77	45.00
CHT 132	S6	6	3.00	230/400	6.84	30.48	83.30	0.76	36.10



IE 3

IE 3 EFFICIENCY MOTORS

From January 2017, the third phase of the regulation (CE) n° 640/2009 came into force, therefore, starting from this date, the electric motors sold in the European Economic Market at 2, 4 and 6 poles with power included between KW 0,75 and KW 375 Kw must have minimum efficiency IE3, alternatively IE2, if supplied with inverter or destined for countries not belonging to the aforementioned market.

With the entry into force of the third phase, it will be the responsibility of the purchaser to make sure that the IE2 motors, which are included in the regulations, are used as indicated above.

TYPE	POLES	POWER Kw	VOLTAGE V	CURRENT 400 V	TORQUE N/m	EFFICIENCY %	FACTOR COS.φ	WEIGHT Kg.
CHT 80 A2	2	0.75	230/400	1.66	2.51	80.7	0.81	8.5/8.4
CHT 80 B2	2	1.1	230/400	2.31	3.69	82.7	0.83	10.3/10.2
CHT 90 S2	2	1.5	230/400	3.14	5.02	84.2	0.82	14.4/14.3
CHT 90 L2	2	2.2	230/400	4.51	7.38	85.9	0.82	16.3/16.1
CHT 100 LA2	2	3	230/400	5.59	10.05	87.1	0.89	24.1/24.0
CHT 112 M2	2	4	230/400	7.2	13.13	88.1	0.91	30.2/30.1
CHT 132 SA2	2	5.5	230/400	10	18.08	89.2	0.89	44.2/44.00
CHT 132 SB2	2	7.5	230/400	13.4	24.61	90.1	0.90	52.0/52.8
CHT 80 B4	4	0.75	230/400	1.9	5.04	82.2	0.69	12.1/11.3
CHT 90 S4	4	1.1	230/400	2.59	7.37	84.1	0.73	15.0/15.0
CHT 90 L4	4	1.5	230/400	3.43	10.09	85.3	0.74	18.0/18.0
CHT 100 LA4	4	2.2	230/400	4.58	14.69	86.7	0.80	23.5/23.0
CHT 100 LB4	4	3	230/400	6.33	20.03	87.7	0.78	28.2/28.0
CHT 112 M4	4	4	230/400	7.95	26.62	88.6	0.82	32.3/32.0
CHT 132 S4	4	5.5	230/400	10.5	36.73	89.6	0.84	48.0/47.5
CHT 132 M4	4	7.5	230/400	14.3	50.08	90.4	0.84	58.2/58.0
CHT 90 S6	6	0.75	230/400	2.05	7.66	78.9	0.67	14.1/14.0
CHT 10 L6	6	1.1	230/400	2.93	11.23	81.0	0.67	17.8/16.2
CHT 100 LA6	6	1.5	230/400	3.75	15.24	82.5	0.70	22.2/22.0
CHT 112 M6	6	2.2	230/400	5.54	22.35	84.3	0.68	27.0/26.0
CHT 132 S6	6	3	230/400	6.84	30.48	86.8	0.74	40.0/39.0
CHT 132 MA6	6	4	230/400	8.99	40.42	86.8	0.74	47.5/47.2
CHT 132 MB6	6	5.5	230/400	12.7	55.58	88.0	0.71	55.4/54.0

* Motors size 160 up to 355 on request

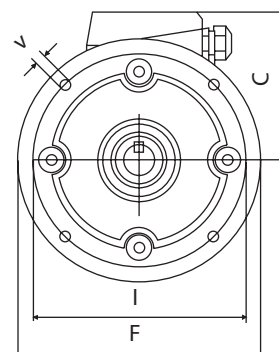
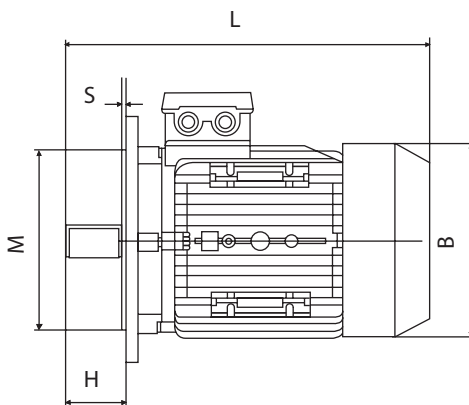
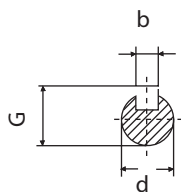
* Volt 400/690 standard from 160 up to 355 on request for other sizes.

* **SIEMENS** motor available on request

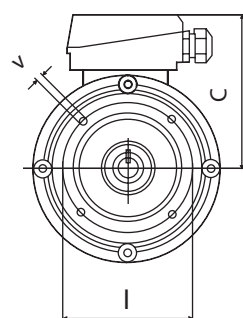
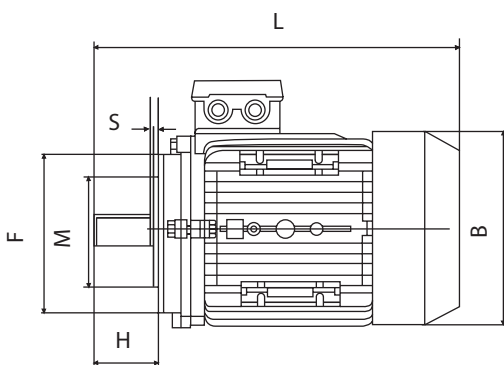
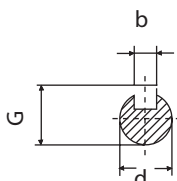
* **MGM** brake motor available on request



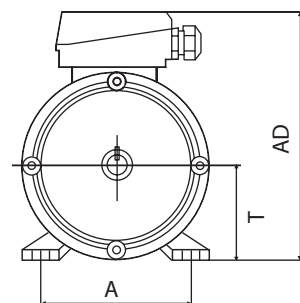
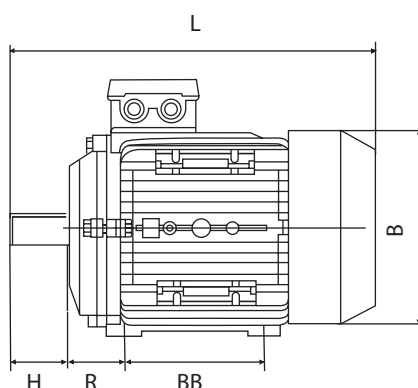
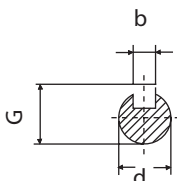
B5



B14



B3



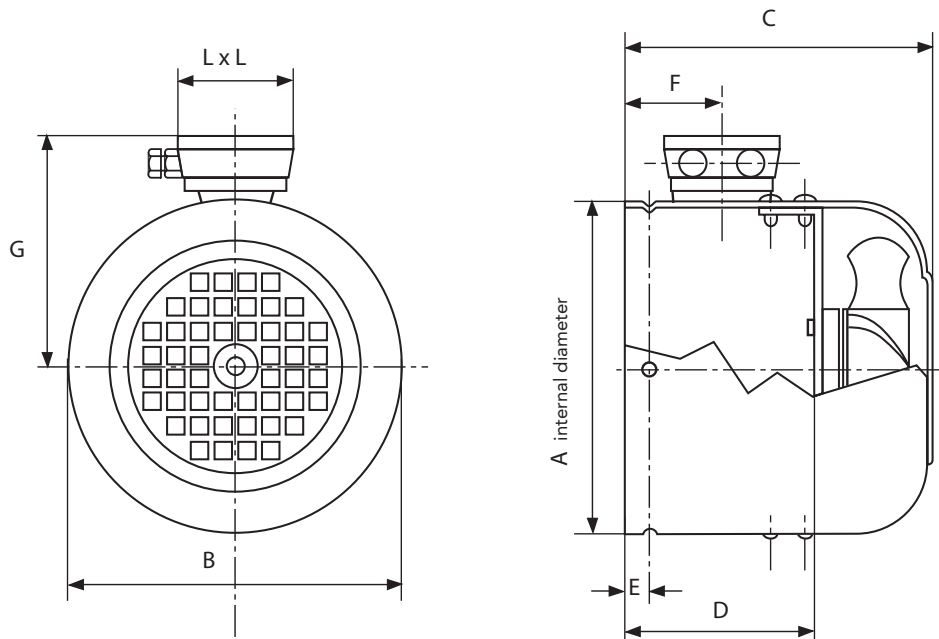
SIZES AND DIMENSIONS

TYPE	MOUNTING DIMENSIONS (mm)														DIMENSIONS							
	d	H	b	G	B5					B14					B3				B	C	L	
					I	M	F	V	S	I	M	F	V	S	R	BB	A	T	AD			
56	9	20	3	10.2	100	80	120	7	3.0	65	50	80	M5	2.5	36	71	90	56	156	110	100	195
63	11	23	4	12.5	115	95	140	10	3.0	75	60	90	M5	2.5	40	80	100	63	173	123	110	215
71	14	30	5	16	130	110	160	10	3.5	85	70	105	M6	2.5	45	90	112	71	188	138	117	255
80	19	40	6	21.5	165	130	200	12	3.5	100	80	120	M6	3.0	50	100	125	80	217	155	137	290
90S	24	50	8	27	165	130	200	12	3.5	115	95	140	M8	3.0	56	100	140	90	235	176	145	310
90L/90LL	24	50	8	27	165	130	200	12	3.5	115	95	140	M8	3.0	56	125	140	90	235	176	145	335
100L	28	60	8	31	215	180	250	15	4.0	130	110	160	M8	3.5	63	140	160	100	252	197	152	386
112M	28	60	8	31	215	180	250	15	4.0	130	110	160	M8	3.5	70	140	190	112	292	220	180	395
132S	38	80	10	41	265	230	300	15	4.0	165	130	200	M10	4.0	89	140	216	132	325	257	195	436
132M	38	80	10	41	265	230	300	15	4.0	165	130	200	M10	4.0	89	178	216	132	325	257	195	475

The dimensions are indicative.



FORCED VENTILATION KIT* SINGLE-PHASE MODELS



Single-phase dimensions with IP55 terminal box

SIZE	VOLTAGE	HZ	NOM. SPEED MIN/1	ABSORB. WATT	CURRENT M.A.	AIR FLOW M ³ /H
GR.63	230	50 / 60	2750	15 / 14	120 / 100	180
GR.71	230	50 / 60	2750	15 / 14	120 / 100	180
GR.80	230	50 / 60	2750	15 / 14	120 / 100	180
GR.90	230	50 / 60	2900	42 / 36	190 / 180	340
GR.100	230	50 / 60	2900	42 / 36	190 / 180	340
GR.112	230	50 / 60	2900	42 / 36	190 / 180	340
GR.132	230	50 / 60	2900	42 / 36	190 / 180	340

SIZE	COD. IP55	A	B	C	D	E	F	G	L x L
GR.63	AS063230	121	123	102	58	6	50	104	75
GR.71	AS071230	136	138	120	70	6	50	111	75
GR.80	AS080230	153	155	130	80	6	55	125	100
GR.90	AS090230	172	176	145	75	6	60	135	100
GR.100	AS100230	195	197	158	85	8	60	150	100
GR.112	AS112230	218	220	160	100	10	60	160	100
GR.132	AS132230	255	257	180	120	8	65	175	100

* forced ventilation kit three-phase models available on request