



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



## IE 2

### IE 2 EFFICIENCY MOTORS

Starting from June 2011, 2 - 4 - 6 poles electric motors with power included from 0,75kw to 375kw. sold into European Community, must be in accordance with EU MEPS European Union Minimum Energy Performance Standards regulation concerning efficiency level, in order to reduce consumptions and CO2 emissions.

IE 2 mark reported on the motors nameplate will show that it belongs to this class.

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	1.75	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

\* Motors size 160 up to 355 on request

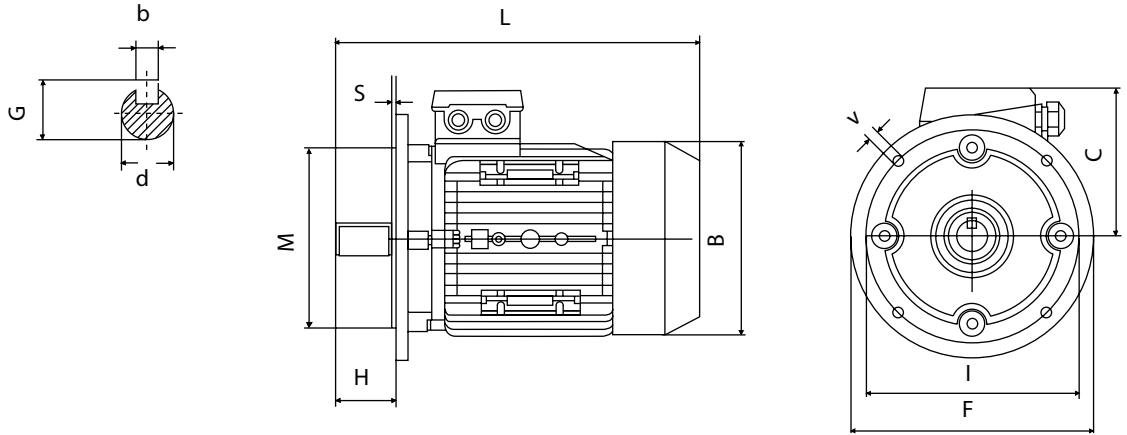
\* Volt 400/690 standard from 160 up to 355 on request for other sizes.

\* **ABB** motor available on request

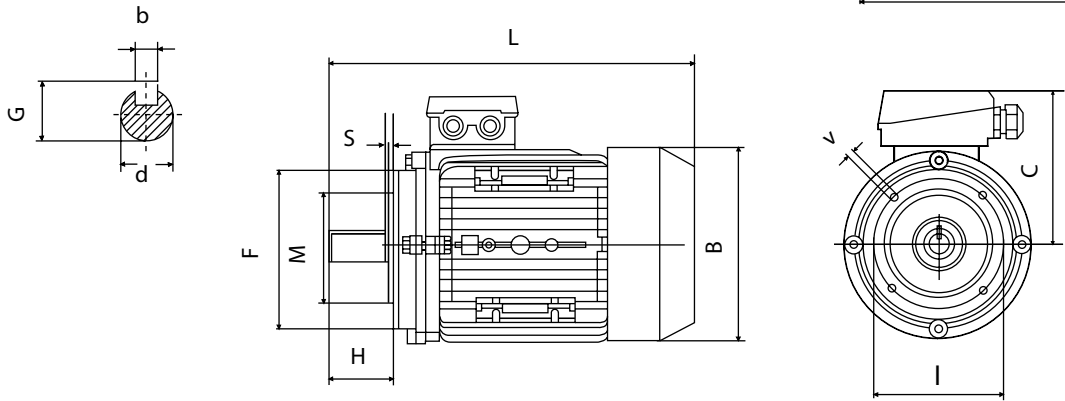
\* **MGM** brake motor available on request



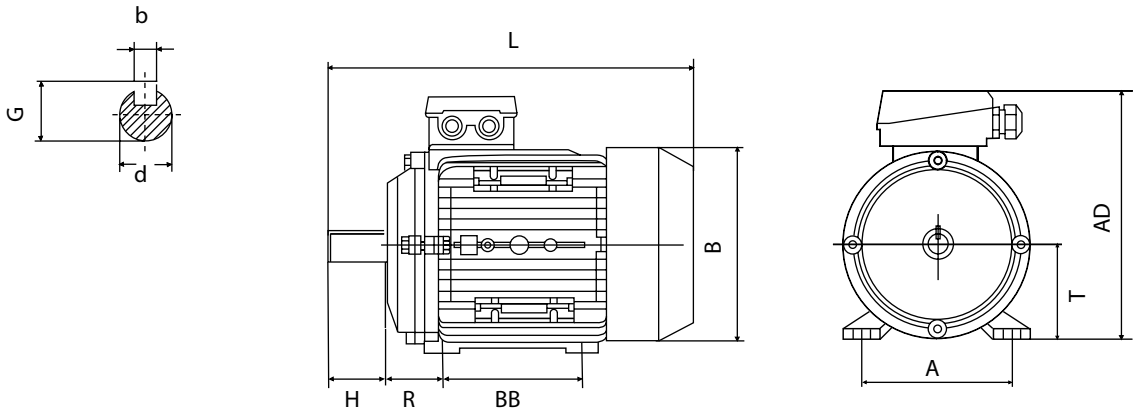
**B5**



**B14**



**B3**

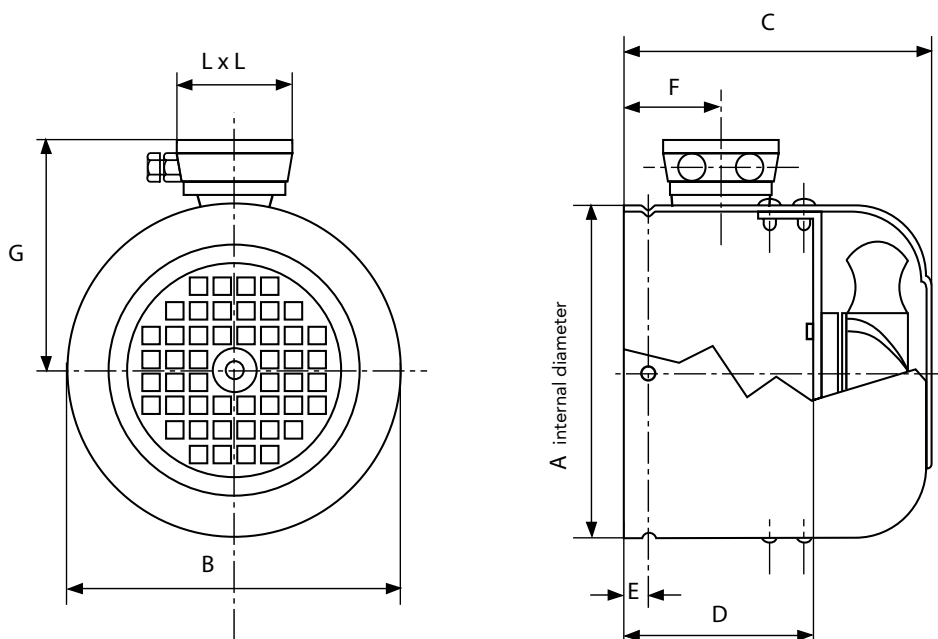


## SIZES AND DIMENSIONS

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			
<b>56</b>	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
<b>63</b>	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
<b>71</b>	14	30	5	16	130	110	160	10	3.5	85	70	105	M6	2.5	45	90	112	71	188	138	117	255
<b>80</b>	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
<b>90S</b>	24	50	8	27	165	130	200	12	3.5	115	95	140	M8	3.0	56	100	140	90	235	176	145	310
<b>90L/90LL</b>	24	50	8	27	165	130	200	12	3.5	115	95	140	M8	3.0	56	125	140	90	235	176	145	335
<b>100L</b>	28	60	8	31	215	180	250	15	4.0	130	110	160	M8	3.5	63	140	160	100	252	197	152	386
<b>112M</b>	28	60	8	31	215	180	250	15	4.0	130	110	160	M8	3.5	70	140	190	112	292	220	180	395
<b>132S</b>	38	80	10	41	265	230	300	15	4.0	165	130	200	M10	4.0	89	140	216	132	325	257	195	436
<b>132M</b>	38	80	10	41	265	230	300	15	4.0	165	130	200	M10	4.0	89	178	216	132	325	257	195	475



# 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 <sup>3</sup> /H
<b>GR.63</b>	230	50 / 60	2750	15 / 14	120 / 100	180
<b>GR.71</b>	230	50 / 60	2750	15 / 14	120 / 100	180
<b>GR.80</b>	230	50 / 60	2750	15 / 14	120 / 100	180
<b>GR.90</b>	230	50 / 60	2900	42 / 36	190 / 180	340
<b>GR.100</b>	230	50 / 60	2900	42 / 36	190 / 180	340
<b>GR.112</b>	230	50 / 60	2900	42 / 36	190 / 180	340
<b>GR.132</b>	230	50 / 60	2900	42 / 36	190 / 180	340

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

\* forced ventilation kit three-phase models available on request