

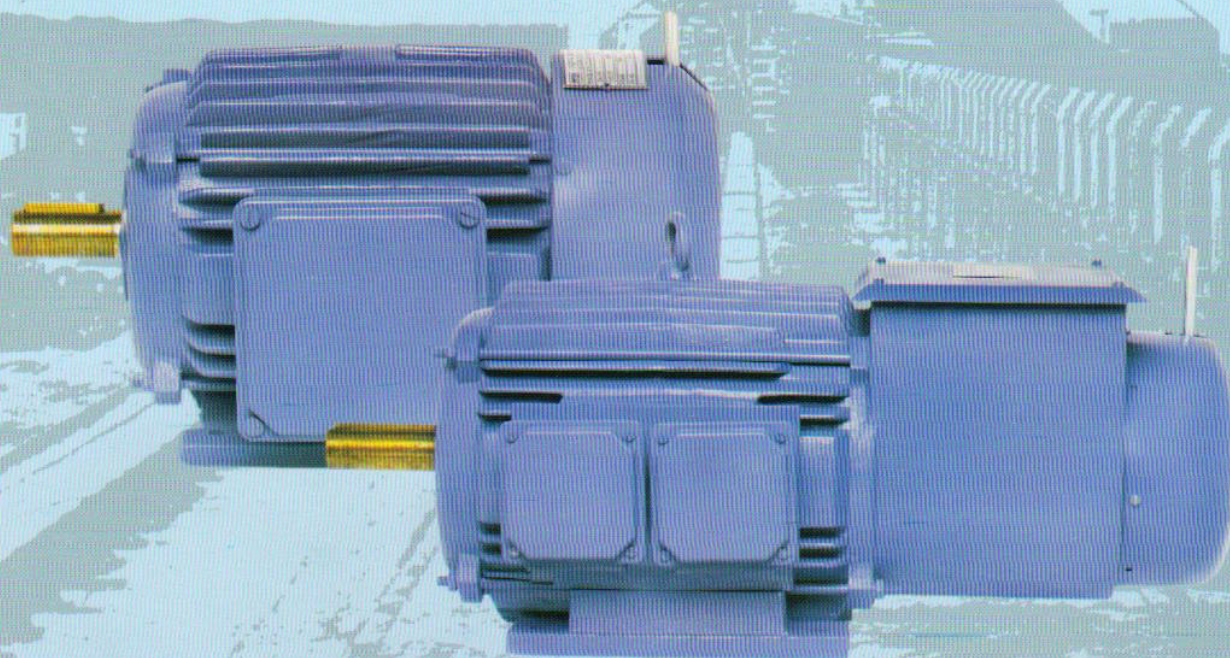


mark elektriks

STALL TORQUE BRAKE MOTORS

FOR CABLE REELING DRUMS

SQUIRREL CAGE TYPE & SLIP RING TYPE



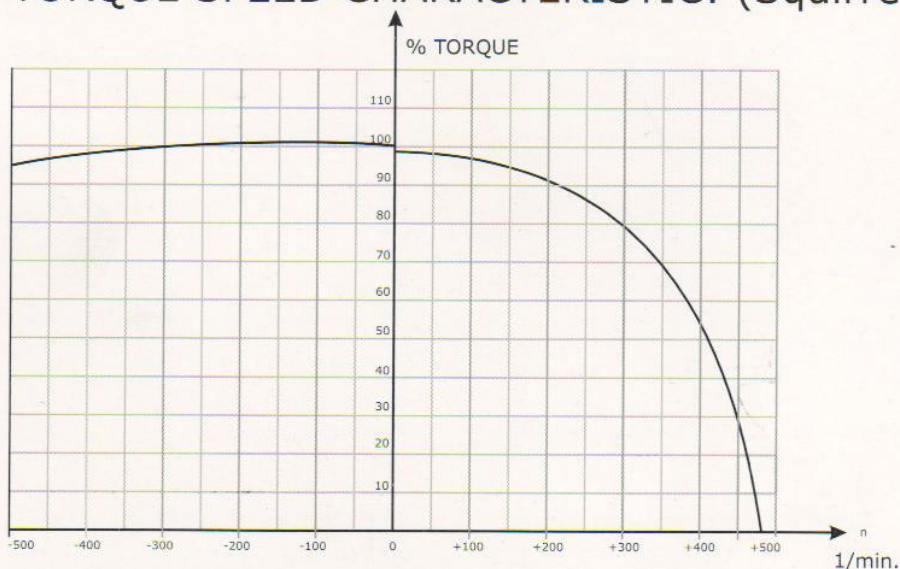
COMMON SPECIFICATIONS: (Squirrel Cage Rotor)

'MARK' make Stall Torque Motor, No Load Speed 450 RPM (12 Pole), 3 Phase, 50 Hz, 415 Volts, Foot Mounted (B-3 Construction), Class 'F' Insulation, suitable for 50°C ambient; Continuous Rating. Rated, S1 Duty (100%), fitted with D.C. Fail Safe Electromagnetic Brake, Totally Enclosed Surface Cooled (TESC) Enclosure, Brake Coil Voltage 200 Volts D.C., Protection IP-55, Tolerance for Stall Torque + 10 % To - 5 %, D.C. Brake of MOD-E-TECH make, Rectifier 415 A.C. to 200 V DC. Motor provided with Spare Rectifier.

RATING CHART

NAME PLATE KW / HP RATING	RATED LOCKED TORQUE OF MOTOR AT 415V N-m (Kg-M)	STALL CURRENT AMPS. @ 415 V	BRAKING TORQUE N-m (Kg-M)	BRAKE MODEL	FRAME SIZE
0.15 / 0.2	2.0 (@ 0.2)	0.4	8 (@ 0.8)	K2	90-L
0.15 / 0.2	3.0 (@ 0.3)	0.7	8 (@ 0.8)	K2	100-L
0.15 / 0.2	3.6 (@ 0.36)	0.8	8 (@ 0.8)	K2	100-L
0.3 / 0.4	4.8 (@ 0.48)	1.1	16 (@ 1.6)	K4	112-M
0.55 / 0.75	8 (@ 0.8)	1.6	16 (@ 1.6)	K4	132-S
0.75 / 1.0	13.5 (@ 1.35)	2.9	35 (@ 3.5)	K5	132-L
1.1 / 1.5	22.0 (@ 2.20)	5.5	80 (@ 8.0)	K7	160-L

TORQUE SPEED CHARACTERISTIC: (Squirrel Cage Rotor)

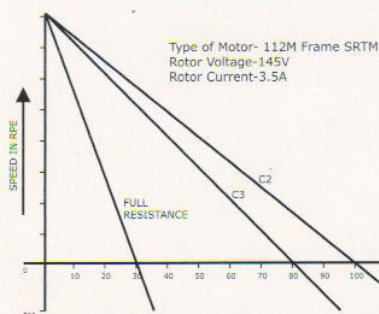


COMMON SPECIFICATIONS: (Slip Ring Rotor)

'MARK' make Stall Torque Motor (Slip Ring Type), No Load Speed 1500 RPM (4 Pole), 3 Phase, 50 Hz, 415 Volts, Foot Mounting (B-3 Construction), Class 'F' Insulation, suitable for 50°C ambient; Continuous Rating, S1 Duty (100%), fitted with D.C. Fail Safe Electromagnetic Brake, (Coil Voltage 200 V DC), Totally Enclosed Surface Cooled (TESC) Enclosure, Protection IP-55, Tolerance for Stall Torque + 10 % To - 5 %, D.C. Brake of MOD-E-TECH make, Rectifier 415 A.C. to 200 V DC, Motor provided with Spare Rectifier.

RATING CHART

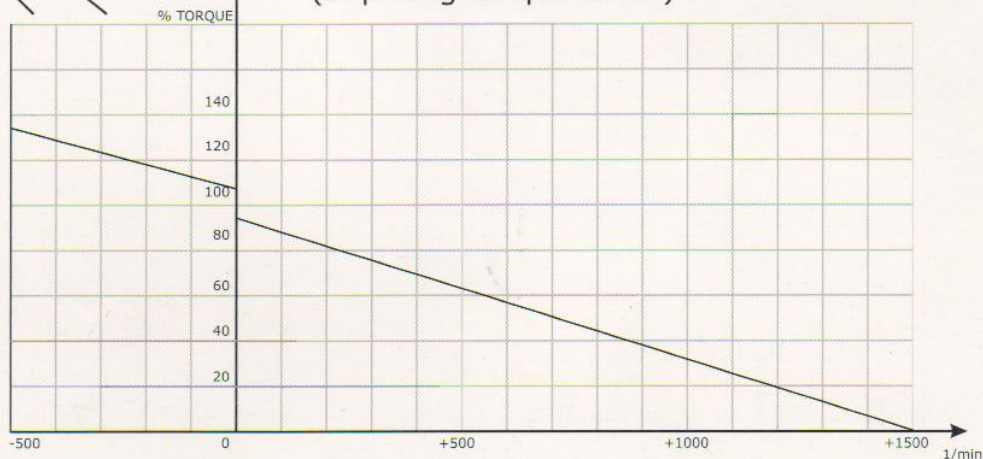
NAME PLATE KW/HP RATING	RATED LOCKED TORQUE @ 415 V Nm	ROTOR VOLTS	BRAKING TORQUE Nm	BRAKE MODEL	ROTOR CURRENT STALL AMPS. MAX.	EXTER- NAL RESIST- ANCE VALUE Ohms PER PHASE (STAR)	STATOR CURRENT STALL @ 415 V, 50 HZ Max.	MOTOR FRAME SIZE
0.75/1.0	4 to 7	145	16	K4	5.0	30 to 16	2.5	112 M
1.5/2.0	8 to 13	145	35	K5	9.5	12 to 8.5	4.8	132 S
3.0/4.0	15 to 18	145	35	K5	13.5	@ 8 to 6.3	6.3	132 L
3.7/5.0	21 to 28	175	80	K7	18.5	@ 5.0	10.0	160 L
5.6/7.5	35 to 38	184	80	K7	21	@ 4.9	12.0	160 L

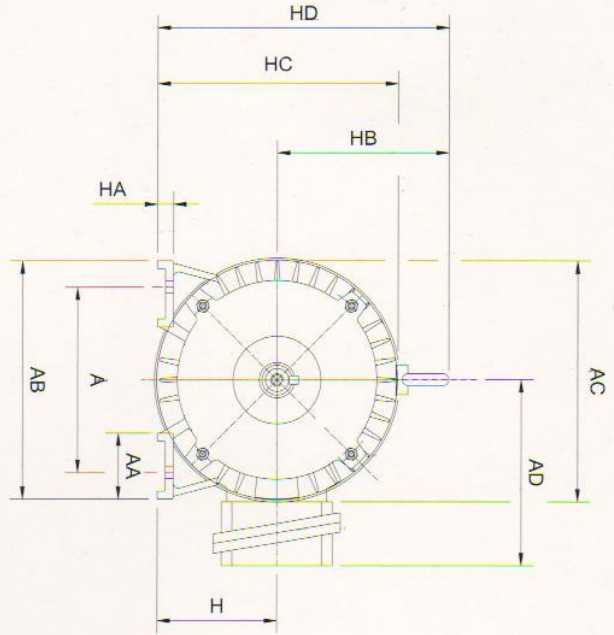


CALCULATION OF RESISTANCE VALUE BASIS OF OHMIC VALUE

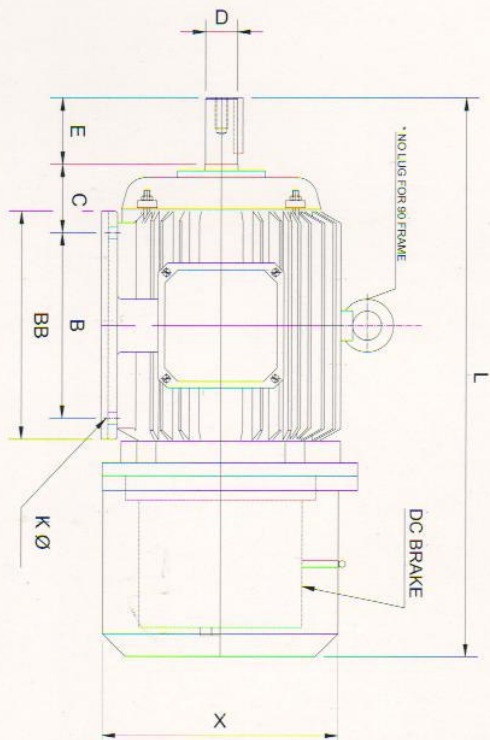
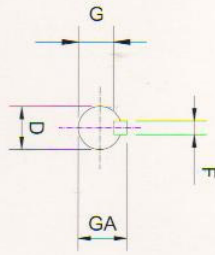
Rotor Voltage = 145V
Rotor Current = 3.5 A
Rotor Resistance = 21.0 Ohm
Considering 30% Torque - $21.0/0.3 = 70.0$ Ohm Full Resistance
Considering 80% Torque - $21.0/0.8 = 26$ Ohm C3
Considering 100% Torque (6NM) - $21.0/1 = 21$ Ohm C2

TORQUE SPEED CHARACTERISTIC (Slip Ring Torque Rotor)





END VIEW OF SHAFT

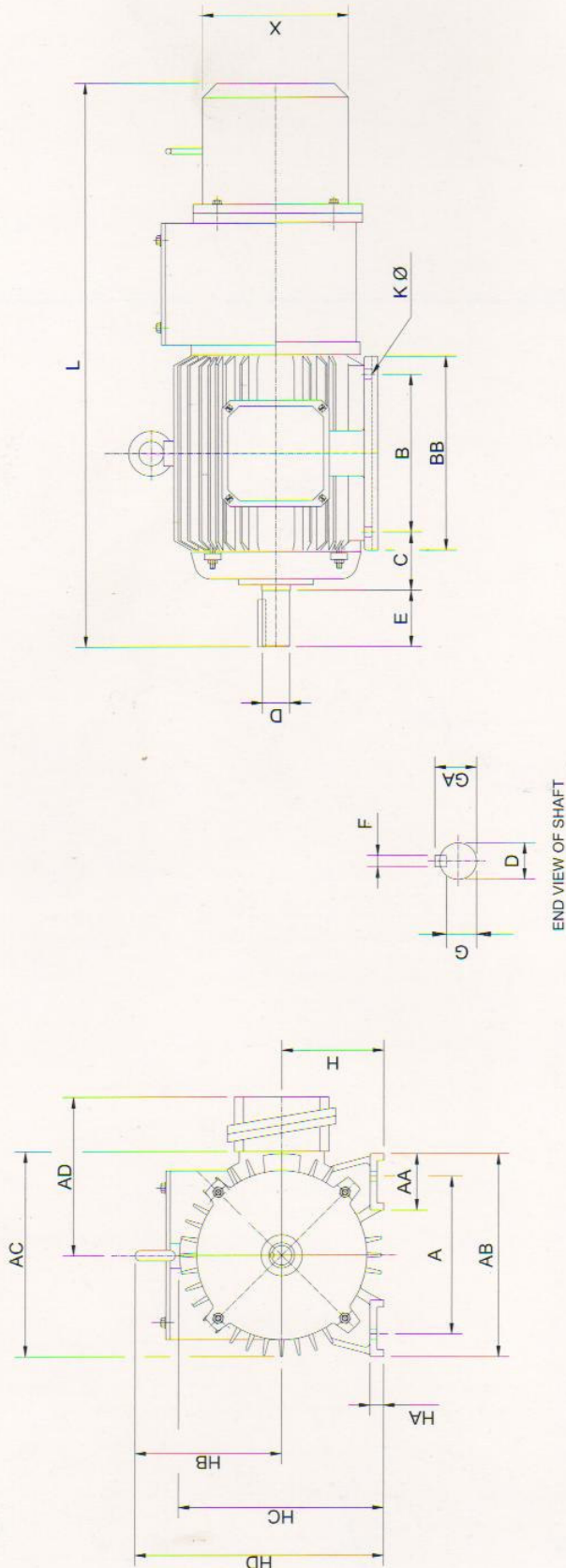


FRAME SIZE	H	A	AA	AB	HA	B	BB	C	K	AD	AC	HB	HC	HD	D	E	F	G	GA	X	L	WT.KG
90-L	90	140	50	180	12	140	172	51.5	10	140	182	N.A.	180	N.A.	24	50	8	20	27	180	355	28
100-L	100	160	50	200	15	140	170	63	12	165	210	159	204	259	28	60	8	24	31	210	400	40
112-M	112	190	60	230	15	140	180	70	12	170	225	164	223	280	28	60	8	24	31	225	415	50
132-S	132	216	68	256	17	140	195	89	12	205	264	188	263	320	38	80	10	33	41	270	480	73
132-L	132	216	82	256	17	240	280	89	12	205	264	188	263	320	38	80	10	33	41	270	565	92
160-L	160	254	68	310	22	254	305	108	15	260	320	220	320	380	42	110	12	37	45	325	670	120

NOTES:

- 1) ALL DIMENSIONS ARE IN MM.
- 2) DIMENSIONS ARE SUBJECT TO ALTERATION ON IMPROVEMENTS IN DESIGN
- 3) THIS DRG. IS VALID FOR STALL TORQUE MOTORS FITTED WITH DC BRAKES

mark elektriks 15, Gultekadi Industrial Estate, Pune-411 037.	
DIMENSION SHEET FOR SQUIRREL CAGE STALL TORQUE BRAKE MOTORS	
SCALE: NTS	REV.
DRG. NO. -G-1/5886	2



FRAME SIZE	H	A	AA	AB	HA	B	BB	C	K	AD	AC	HB	HC	HD	D	E	F	G	GA	X	L	WT.KG
100-L	112	190	60	230	15	140	180	70	12	176	225	164	223	280	28	60	8	24	31	180	505	53
112-M	132	216	68	256	17	140	195	89	12	200	264	188	263	320	38	80	10	33	41	210	610	75
132-S	132	216	82	256	17	240	280	89	12	200	264	188	263	320	38	80	10	33	41	210	695	82
160-L	160	254	68	310	22	254	305	108	15	260	320	220	320	380	42	110	12	37	45	240	860	190

NOTES:

- 1) ALL DIMENSIONS ARE IN MM.
- 2) DIMENSIONS ARE SUBJECT TO ALTERATION ON IMPROVEMENTS IN DESIGN
- 3) THIS DRG. IS VALID FOR SLIPRING TYPE STALL TORQUE MOTORS FITTED WITH DC BRAKES.
- 4) 100-L AVAILABLE IF REQUIRED

mark elektriks

15, Gultekadi Industrial Estate, Pune-411 037.

DIMENSION SHEET FOR

SLIPRING ROTOR STALL TORQUE BRAKE MOTORS

SCALE:NTS

DRG.NO.-G-1/5887

REV.

2



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