# sabar

Three Phase AC Induction Motors

Foot Mounted B3

Flange Mounted B5

Cooling Tower
Motor - B5

Ginning Motor
Foot Mounted B3

Brake Motor
Foot Mounted B3

Flange Mounted With
Extended Shaft B5

Dual Shaft
Foot Mounted B3

Foot Mounted B3 With
Alluminium Body

Foot Cum Flange
Mounted B3 B5

Face Mounted B14

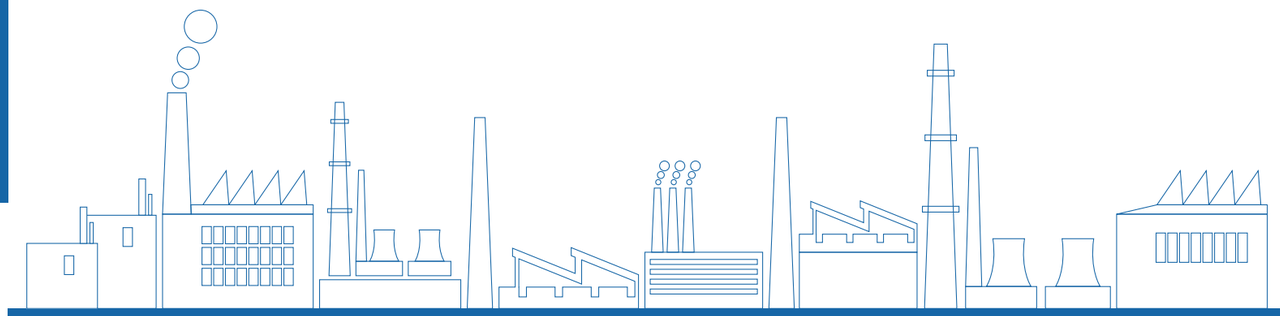
Flange Mounted B5 With
Alluminium Body

Contact us


**sabar Engineering Pvt. Ltd.**
A-2, 3912, G.I.D.C. Estate, Phase-IV, B/H. Cadmach,
Vatva, Ahmedabad - 382 445. (India).
Tel : (+91 79) 25840213, 25840261 Fax : (+91 79) 25840289
E-mail : marketing@sabarelectricmotors.com
Web site : www.sabarelectricmotors.com
CIN: U29300GJ2007PTC050500


Distributor / Dealer


Ashoi Designs : 98252 65336

# Powering Industrial Progress

# sabar

Three Phase AC Induction Motors

CE

TUV QM 0200282 NABCB QM 002
ISO : 9001-2008

A product from Sabar Group (Established since 1975)

# TEFC THREE PHASE SQUIRREL CAGE INDUCTION MOTORS

## ELECTRICAL & MECHANICAL DATA

### RANGE :
Standard 3 Phase Induction motors with rating 0.12 Kw to 55 Kw are available from frame sizes 63 to 250 with standard speeds and various types of construction.

### STANDARDS :
Performance conforms to IS : 325 and dimensions according to IS : 1231 and IS : 2223

### RATINGS :
Motors are rated for continuous duty type S1 at an ambient of $45^0$ Deg. C and site altitudes of upto 1000 M above mean sea level.

### VOLTAGE AND FREQUENCY :
Motors designed are for a rated voltage of 415V +/-10%, 3 Phase, 50 Hz +/-5% supply. Motors with special designs of Voltage/Frequency can be offered on request.

### PAINT :
Standard synthetic enamel paint is provided which is suitable for tropical conditions. However, special paint can be provided on request.

### INSULATION SYSTEM :
All standard motors are provided with class "F" insulation system. Motors with any other class of insulation ("H") / ("A") can be offered on request.

### DEGREE OF PROTECTION :
Motors have IP55 degree of protection as a standard feature conforming to IS 4691. Motors can be supplied with protection IP56 as well as IP65 on special request.

### TERMINAL BOX :
All motors are provided with terminal box on the top front as seen from the drive end or on the side of the motor body. Terminal box can be rotated in steps of 90 deg.

### COOLING & VENTILATION :
Type of cooling is as per IS 6362. All motors have an external bi-directional centrifugal fan.

### NOISE :
Motors are designed for low noise level in accordance with IS 12065.

### BEARING SYSTEM :
All motors are equipped with pre-lubricated bearings. Regreasing facility can be provided on request.

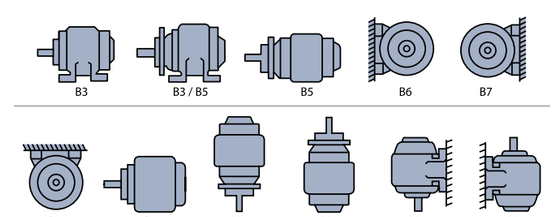
### EARTHING TERMINALS :
Terminals are provided in all the motors. Two on the stator housing and one in T. Box.

### APPLICATION :
Air Compressor, Pumps, Textile Machinery, Pharmaceutical Machinery, Chemical Machinery, Machine Tools, Crane and Hoists, Blowers, Material Handling Equipments, Geared Motors.

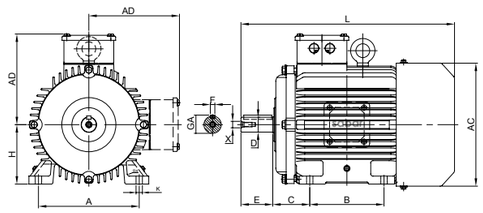
### CONSTRUCTION :
Standard motors with single shaft extension are for horizontal foot mounting *(B3 as per IS : 1231) and vertical flange / face mounting (B5 & B14 as per IS : 2223). Other types of construction as shown below can be offered on request.

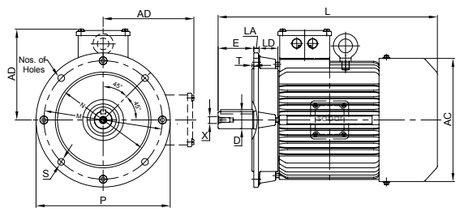
### MATERIAL OF CONSTRUCTION :
All standard motors are in CI material. Motors up to 100L frame can be offered in Aluminum body also. * We are also equipped to supply motors in different construction of materials and also special designs, voltage, frequency, protection class as per specification of our International standard or as per requirement of our valued customers.

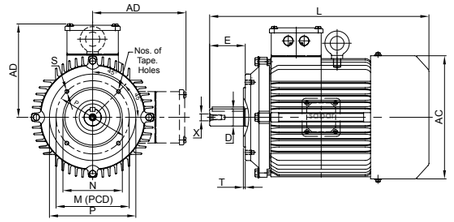
### TYPES OF CONSTRUCTION (SYMBOL AS PER IS: 2253)




Due to continuous R&D, design and specifications are subject to change without notice




**OUTPUT HP AT SPEED (RPM)**

| Frame | 3000 | 1500 | 1000 | 750 | 600 | 500 |
|---|---|---|---|---|---|---|
| 63 | 0.25/0.33 | 0.16/0.25 | | | | |
| 71 | 0.5/0.75 | 0.33/0.5 | 0.25/0.33 | | | |
| 80 | 1.0/1.5 | 0.75/1.0 | 0.5/0.75 | 0.25 | | |
| 90S | 2 | 1.5 | 1 | 0.5 | | |
| 90L | 3 | 2 | 1.5 | 0.75 | 0.75 | |
| 100L | 3/5 | 3 | 2 | 1.0/1.5 | 1 | 0.75 |
| 112M | 5 | 5 | 3 | 2 | 1.5 | 1 |
| 132S | 7.5/10 | 7.5 | 5 | 3 | 2 | 1.5 |
| 132M | 12.5 | 10 | 7.5 | 5 | 3 | 2 |
| 160M | 15/20 | 12.5/15 | 10 | 5/7.5 | | 3 |
| 160L | 25 | 20 | 12.5/15 | 10 | 4/5 | 4 |
| 180M | 30 | 25 | - | 12.5 | 7.5/10 | 5 |
| 180L | - | 30 | 20 | 15 | 12.5 | 7.5/10 |
| 200L | 35/40/50 | 35/40 | 25/30 | 20 | 15/20 | 12.5 |
| 225S | | | | | | |
| 225S | - | 50 | 35 | 25 | 20 | 15 |
| 225M | 60 | | | | | |
| 225M | | 60 | 40 | 30/35 | 25 | 20 |
| 250M | 75 | | | | | |
| 250M | - | 75 | 50 | 40 | 30 | 25 |

**FRAME DIMENSIONS**

| Frame | AC | AD | D | E | F | GA | L | X Shaft end Taping |
|---|---|---|---|---|---|---|---|---|
| 63 | 118 | 96 | 11 | 23 | 4 | 12.5 | 206 | M4 |
| 71 | 141 | 105 | 14 | 30 | 5 | 16 | 251 | M4 |
| 80 | 158 | 125 | 19 | 40 | 6 | 21.5 | 281 | M6 |
| 90S | 179 | 132 | 24 | 50 | 8 | 27 | 321 | M8 |
| 90L | 179 | 132 | 24 | 50 | 8 | 27 | 346 | M8 |
| 100L | 202 | 160 | 28 | 60 | 8 | 31 | 368 | M10 |
| 112M | 225 | 171 | 28 | 60 | 8 | 31 | 392 | M10 |
| 132S | 260 | 188 | 38 | 80 | 10 | 41 | 443 | M12 |
| 132M | 260 | 188 | 38 | 80 | 10 | 41 | 481 | M12 |
| 160M | 309 | 220 | 42 | 110 | 12 | 45 | 606 | M16 |
| 160L | 309 | 220 | 42 | 110 | 12 | 45 | 650 | M16 |
| 180M | 347 | 255 | 48 | 110 | 14 | 51.5 | 740 | M16 |
| 180L | 347 | 255 | 48 | 110 | 14 | 51.5 | 740 | M16 |
| 200L | 398 | 280 | 55 | 110 | 16 | 59 | 762 | M20 |
| 225S(3000 RPM) | 440 | 315 | 55 | 110 | 16 | 59 | 780 | M20 |
| 225S(Other RPM) | 440 | 315 | 60 | 140 | 18 | 64 | 810 | M20 |
| 225M(3000 RPM) | 440 | 315 | 55 | 110 | 16 | 59 | 780 | M20 |
| 225M(Other RPM) | 440 | 315 | 60 | 140 | 18 | 64 | 810 | M20 |
| 250M(3000 RPM) | 470 | 380 | 60 | 140 | 18 | 64 | 878 | M20 |
| 250M(Other RPM) | 470 | 380 | 65 | 140 | 18 | 69 | 878 | M20 |

**FOOT MOUNTED MOTORS - B3 CONSTRUCTION (IS:1231)**

| A | B | C | H | K | K-For Bolt |
|---|---|---|---|---|---|
| 100 | 80 | 40 | 63 | 7 | M6 |
| 112 | 90 | 45 | 71 | 7 | M6 |
| 125 | 100 | 50 | 80 | 10 | M8 |
| 140 | 100 | 56 | 90 | 10 | M8 |
| 140 | 125 | 56 | 90 | 10 | M8 |
| 160 | 140 | 63 | 100 | 12 | M10 |
| 190 | 140 | 70 | 112 | 12 | M10 |
| 216 | 140 | 89 | 132 | 12 | M10 |
| 216 | 178 | 89 | 132 | 12 | M10 |
| 254 | 210 | 108 | 160 | 15 | M12 |
| 254 | 254 | 108 | 160 | 15 | M12 |
| 279 | 241 | 121 | 180 | 15 | M12 |
| 279 | 279 | 121 | 180 | 15 | M12 |
| 318 | 305 | 133 | 200 | 19 | M16 |
| 356 | 286 | 149 | 225 | 19 | M16 |
| 356 | 286 | 149 | 225 | 19 | M16 |
| 356 | 311 | 149 | 225 | 19 | M16 |
| 356 | 311 | 149 | 225 | 19 | M16 |
| 406 | 349 | 168 | 250 | 24 | M20 |
| 406 | 349 | 168 | 250 | 24 | M20 |

**FLANGE MOUNTED MOTORS - B5 CONSTRUCTION (IS : 2223)**

| Frame | Flange Number | LA | LD | M | N | P | S | T | NO.OF HOLES |
|---|---|---|---|---|---|---|---|---|---|
| 63 | F115B | 9 | 18 | 115 | 95 | 140 | 10 | 3 | 4 |
| 71 | F130B | 9 | 18 | 130 | 110 | 160 | 10 | 3.5 | 4 |
| 80 | F165B | 10 | 20 | 165 | 130 | 200 | 12 | 3.5 | 4 |
| 90S | F165B | 10 | 21 | 165 | 130 | 200 | 12 | 3.5 | 4 |
| 90L | F165B | 10 | 21 | 165 | 130 | 200 | 12 | 3.5 | 4 |
| 100L | F215B | 11 | 29 | 215 | 180 | 250 | 15 | 4 | 4 |
| 112M | F215B | 11 | 31 | 215 | 180 | 250 | 15 | 4 | 4 |
| 132S | F265B | 12 | 42 | 265 | 230 | 300 | 15 | 4 | 4 |
| 132M | F265B | 12 | 42 | 265 | 230 | 300 | 15 | 4 | 4 |
| 160M | F300B | 13 | 47 | 300 | 250 | 350 | 19 | 5 | 4 |
| 160L | F300B | 13 | 47 | 300 | 250 | 350 | 19 | 5 | 4 |
| 180M | F300B | 13 | 54 | 300 | 250 | 350 | 19 | 5 | 4 |
| 180L | F300B | 13 | 54 | 300 | 250 | 350 | 19 | 5 | 4 |
| 200L | F350B | 15 | 42 | 350 | 300 | 400 | 19 | 5 | 4 |
| 225S | F400B | 16 | 50 | 400 | 350 | 450 | 19 | 5 | 8 |
| 225M | F400B | 16 | 50 | 400 | 350 | 450 | 19 | 5 | 8 |
| 250M | F500B | 22 | 60 | 500 | 450 | 550 | 19 | 5 | 8 |

**FACE MOUNTED MOTORS - B14 CONSTRUCTION (IS : 2223)**

| Frame | Flange Number | M | N | P | S | T | NO.OF TAP. HOLES |
|---|---|---|---|---|---|---|---|
| 63 | F75C | 75 | 60 | 90 | M5 | 2.5 | 4 |
| 71 | F85C | 85 | 70 | 105 | M6 | 2.5 | 4 |
| 80 | F100C | 100 | 80 | 120 | M6 | 3.0 | 4 |
| 90S | F115C | 115 | 95 | 140 | M8 | 3.0 | 4 |
| 90L | F115C | 115 | 95 | 140 | M8 | 3.0 | 4 |
| 100L | F130C | 130 | 110 | 160 | M8 | 3.5 | 4 |
| 112M | F130C | 130 | 110 | 160 | M8 | 3.5 | 4 |
| 132S | F165C | 165 | 130 | 200 | M12 | 3.5 | 4 |
| 132M | F165C | 165 | 130 | 200 | M12 | 3.5 | 4 |

C: PDD: 03 / R4

*All dimensions are in mm