

# Electromagnetic Brake Motor

## 60 Watt

Frame Size: □ 90 mm

Continuous Rating with Frequent Start Stop.  
Load Holding & Minimum Overrun.  
Works when Power Off (Brake-Activated),  
By its Failsafe Braking Action.  
Fitted at the Back side Of the Motor.  
Rotates in Clockwise or Counter Clockwise Direction.  
Terminal box or Flying Lead Wires for Connections.



### Specifications :

Output Power W	Model	Frequency Hz	Supply Voltage Volt	Current A	Starting Torque Kg.cm	Rated Torque Kg.cm	Rated Speed RPM	Capacitor μF
60	90 4G EW 60	60	110 V Single Phase	1.15	3.2	3.7	1440	10
60	90 4G EX 60	50	230 V Single Phase	0.56	3.7	4.4	1250	2.5
60	90 4G EY 60	60	230 V Three Phase	0.46	3.8	3.8	1450	-----
60	90 4G EY 60	50	230 V Three Phase	0.54	4.3	4.4	1250	-----
60	90 4G EZ 60	50	415 V Three Phase	0.31	4.3	4.4	1250	-----

### Gearmotor Torque Table:

The maximum permissible torque is 200 kg.cm

#### 50 Hz

Unit: kg.cm

RPM	500	416	300	250	200	166	120	100	83	60	50	41	30	25	20	16	15	12.5	10	8.3
Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
Output Torque	12	15	20	25	30	36	45	56	64	80	98	115	144	173	200	200	200	200	200	200

#### 60 Hz

Unit: kg.cm

RPM	600	500	360	300	240	200	144	120	100	72	60	50	36	30	24	20	18	15	12	10
Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
Output Torque	9.8	12	16	20	25	30	37	45	53	68	80	98	134	159	180	200	200	200	200	200

Gear Boxes are sold separately.

A Sky blue colored background indicates gear shaft rotation in the same direction; a Brown background indicates rotation in the opposite direction as the motor shaft.

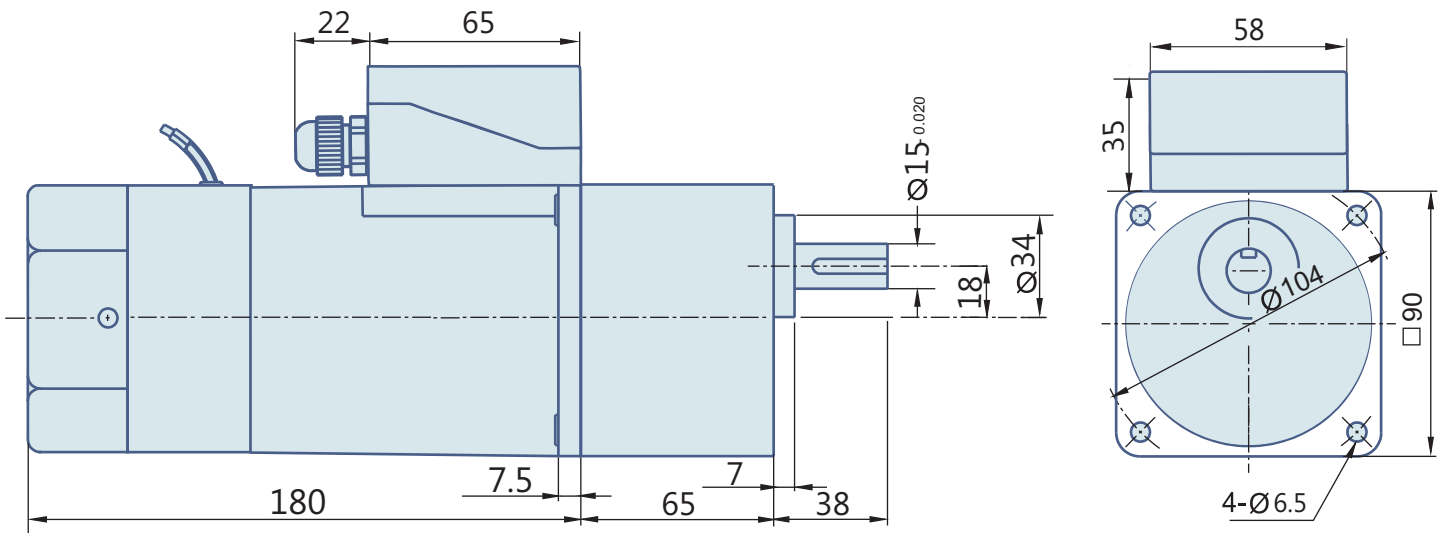
The speed of the Gear Motor is calculated by dividing the motor's synchronous speed (50 Hz; 1500 RPM & 60 Hz; 1800 RPM) by the ratio.

The actual speed is 2~20% less than the displayed value, depending upon the load size.

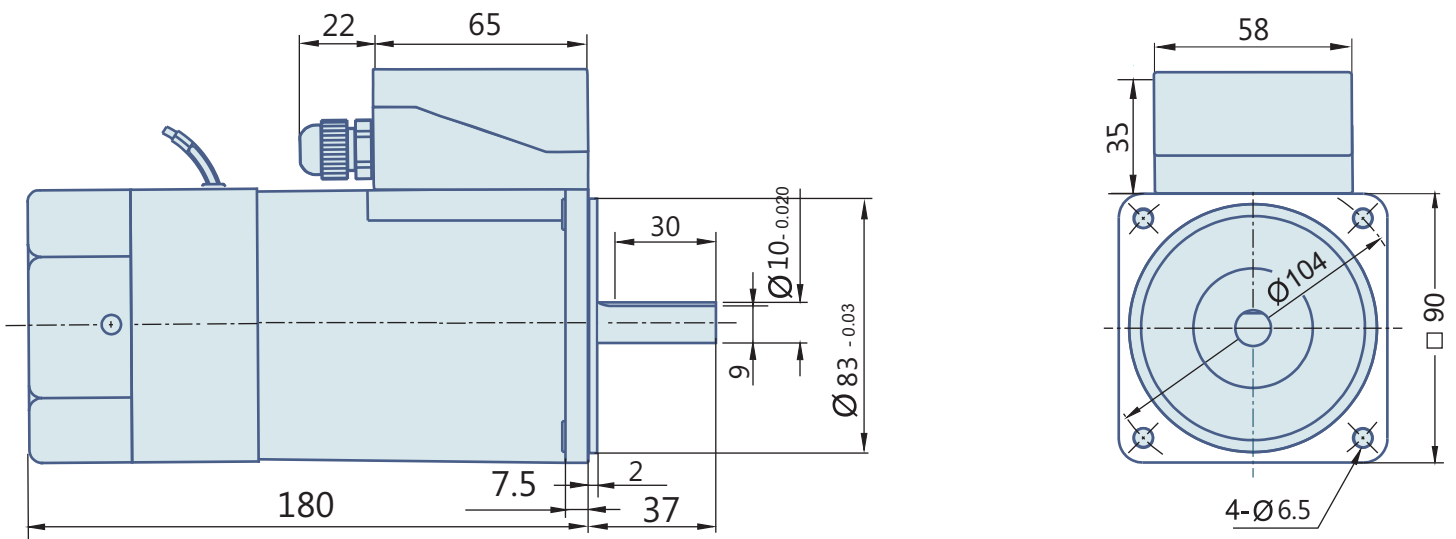
Characteristics, specifications and dimensions are subjected to change without prior notice.

# Brake Motor Dimensions

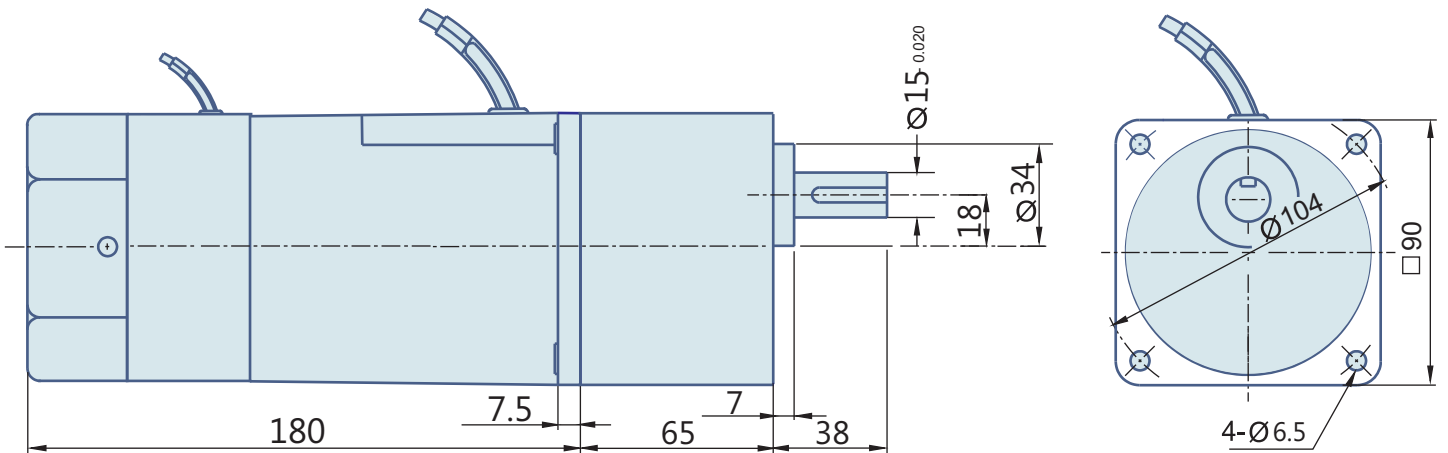
## 60 Watt : AC Geared Motor With Terminal Box



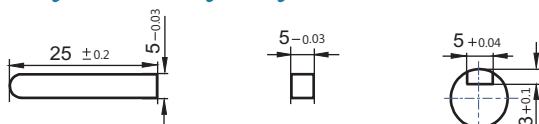
## 60 Watt : Round AC Induction Motor With Terminal Box



## 60 Watt : AC Geared Motor With Lead wires



### Key and Keyway



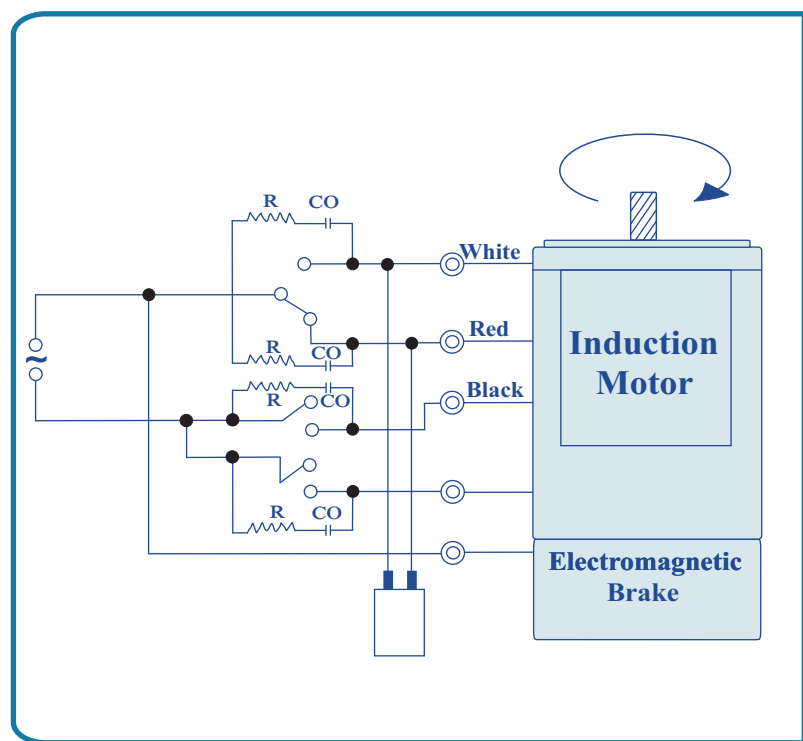
### Weight

Motor 2.6 Kg, Gearbox: 1.5 Kg, Brake: 0.9 Kg.

(Note- All Dimensions are in mm)

# Wiring Diagram

## Wiring diagram for Single Phase Motors

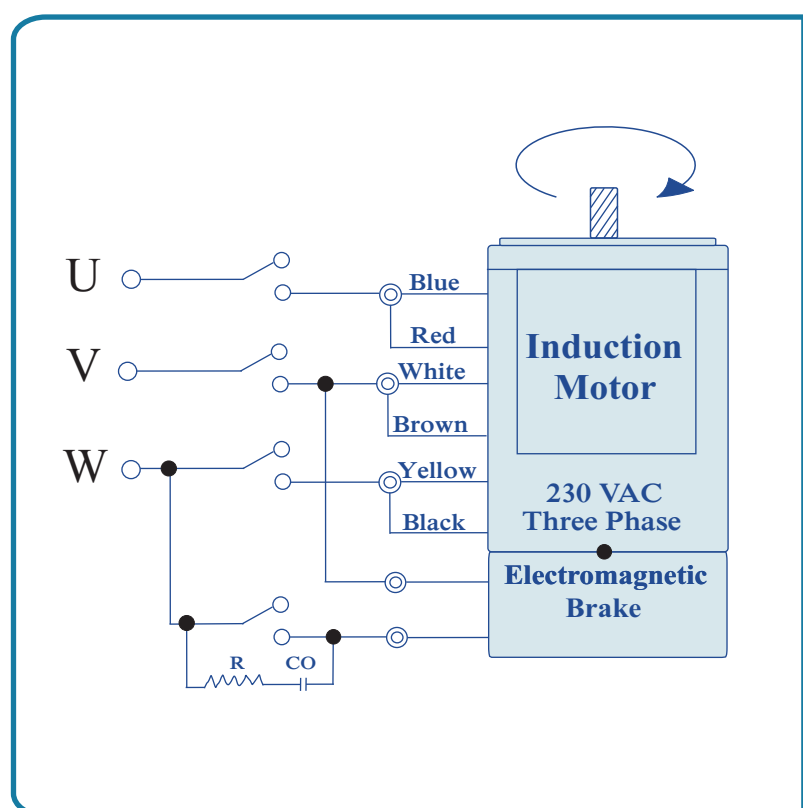


When Sw1 is switched ON, Electromagnetic Brake is released & motor starts rotating. When Sw1 is switched OFF then Electromagnetic Brake will be applied stopping the motor immediately & holding the load.

Apply voltage on the blue brake lead wires only, to release the Electromagnetic Brake.

To change the direction of rotation, flip Cw to CCW.

## Wiring diagram for Three Phase Motors



When Sw1 is switched ON, Electromagnetic Brake is released & motor starts rotating. When Sw1 is switched OFF then Electromagnetic Brake will be applied stopping the motor immediately & holding the load.

Apply voltage on the blue brake lead wires only, to release the Electromagnetic Brake.

To change the direction of rotation, interchange any two wires between U, V & W.

Change the direction of the motor only after it stops rotating, if the attempt is made during rotation, the motor may ignore the reversing command or change the direction after some time.