# 25W Induction Motor 25W(□80mm)

## Motor Specification

| Model (8IDG*-25□(-T): Gear Type Shaft, 8IDD*-25(-T): D-Cut Type Shaft) | | Output | Voltage | Frequency | Poles | Duty | Starting Torque | | Rated Load | | | | Capacitor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Speed | Current | Torque | | |
| Lead Wire Type | Terminal Box Type | W | V | Hz | | | kgfcm | N.m | r/min | A | kgfcm | N.m | μF / VAC |
| 8IDGA-25□ | 8IDGA-25□-T | 25 | 1ø110 | 60 | 4 | Cont. | 1.67 | 0.167 | 1550 | 0.46 | 1.58 | 0.158 | 6.0 / 250 |
| 8IDGD-25□ | 8IDGD-25□-T | 25 | 1ø220 | 60 | 4 | Cont. | 1.80 | 0.180 | 1550 | 0.25 | 1.65 | 0.165 | 1.5 / 450 |
| 8IDGE-25□ | 8IDGE-25□-T | 25 | 1ø220 | 50 | 4 | Cont. | 1.10 | 0.110 | 1200 | 0.23 | 2.10 | 0.210 | 1.3 / 450 |
| | | | 1ø240 | | | | 1.30 | 0.130 | | 0.25 | 2.20 | 0.220 | |
| 8IDGG-25□ | 8IDGG-25□-T | 25 | 3ø220 | 50 | 4 | Cont. | 5.00 | 0.500 | 1300 | 0.32 | 2.00 | 0.200 | – |
| | | | | 60 | | | 0.40 | 0.040 | 1600 | 0.25 | 1.60 | 0.160 | |
| 8IDGK-25□ | 8IDGK-25□-T | 25 | 3ø380 | 50 | 4 | Cont. | 3.60 | 0.360 | 1250 | 0.14 | 2.00 | 0.200 | – |
| | | | | 60 | | | 3.00 | 0.300 | 1500 | 0.12 | 1.65 | 0.165 | |
| | | | 3ø400 | 50 | 4 | Cont. | 3.80 | 0.380 | 1250 | 0.15 | 2.20 | 0.220 | |
| | | | | 60 | | | 3.20 | 0.320 | 1500 | 0.13 | 1.80 | 0.180 | |
| | | | 3ø415 | 50 | 4 | Cont. | 4.10 | 0.410 | 1300 | 0.15 | 2.00 | 0.200 | |
| | | | | 60 | | | 3.40 | 0.340 | 1550 | 0.13 | 1.80 | 0.180 | |
| | | | 3ø440 | 50 | 4 | Cont. | 4.40 | 0.440 | 1300 | 0.17 | 2.20 | 0.220 | |
| | | | | 60 | | | 3.60 | 0.360 | 1600 | 0.14 | 1.60 | 0.160 | |

1) Enter the phase & voltage code in the place * and enter the model type of attaching Gearbox in the box (□) within the motor model name.
2) All models contain a built-in thermal protector.
3) Gear Type Shaft is for attaching Gearbox and D-Cut Type Shaft is for using motor only.

## Max. Permissible Torque at Output Shaft of Gearbox

### 60Hz

| Motor Model | Gearbox Model | Gear Ratio | 3 | 3.6 | 5 | 6 | 7.5 | 9 | 12.5 | 15 | 18 | 25 | 30 | 36 | 40 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 | 200 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | r/min | 600 | 500 | 360 | 300 | 240 | 200 | 144 | 120 | 100 | 72 | 60 | 50 | 45 | 36 | 30 | 24 | 20 | 18 | 15 | 12 | 10 | 9 |
| 8IDG□-25G | 8GBK□ BMH | kgfcm | 4.5 | 5.4 | 7.5 | 9.0 | 11.2 | 13.4 | 18.7 | 22.4 | 26.9 | 33.8 | 40.5 | 44.1 | 49.0 | 61.2 | 73.4 | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 |
| | | N.m | 0.44 | 0.53 | 0.73 | 0.88 | 1.10 | 1.32 | 1.83 | 2.20 | 2.64 | 3.31 | 3.97 | 4.32 | 4.80 | 6.00 | 7.20 | 7.84 | 7.84 | 7.84 | 7.84 | 7.84 | 7.84 | 7.84 |

| Motor Model | Gearbox Model | Gear Ratio | 200 | 250 | 300 | 360 |
|---|---|---|---|---|---|---|
| | | r/min | 9 | 7 | 6 | 5 |
| 8IDG□-25G | 8GBK□BMH | kgfcm | 80.0 | 80.0 | 80.0 | 80.0 |
| | | N.m | 7.84 | 7.84 | 7.84 | 7.84 |

| Motor Model | Gearbox Model | Gear Ratio | 10 | 12 | 15 | 18 | 25 | 30 | 36 | 50 | 60 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | r/min | 180 | 150 | 120 | 100 | 72 | 60 | 50 | 36 | 30 |
| 8IDG□-25W | 8WD□BL/□BR/ □BRL | kgfcm | 13.1 | 15.4 | 18.5 | 21.3 | 28.0 | 31.7 | 36.9 | 48.0 | 52.8 |
| | | N.m | 1.29 | 1.51 | 1.81 | 2.09 | 2.74 | 3.10 | 3.61 | 4.70 | 5.17 |

### 50Hz

| Motor Model | Gearbox Model | Gear Ratio | 3 | 3.6 | 5 | 6 | 7.5 | 9 | 12.5 | 15 | 18 | 25 | 30 | 36 | 40 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 | 200 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | r/min | 500 | 417 | 300 | 250 | 200 | 167 | 120 | 100 | 83 | 60 | 50 | 42 | 38 | 30 | 25 | 20 | 17 | 15 | 13 | 10 | 8 | 7.5 |
| 8IDG□-25G | 8GBK□ BMH | kgfcm | 5.5 | 6.6 | 9.1 | 11.0 | 13.7 | 16.4 | 22.8 | 27.4 | 32.9 | 41.3 | 49.5 | 53.9 | 59.8 | 74.8 | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 |
| | | N.m | 0.54 | 0.64 | 0.89 | 1.07 | 1.34 | 1.61 | 2.24 | 2.68 | 3.22 | 4.04 | 4.85 | 5.28 | 5.86 | 7.33 | 7.84 | 7.84 | 7.84 | 7.84 | 7.84 | 7.84 | 7.84 | 7.84 |

| Motor Model | Gearbox Model | Gear Ratio | 200 | 250 | 300 | 360 |
|---|---|---|---|---|---|---|
| | | r/min | 7 | 6 | 5 | 5 |
| 8IDG□-25G | 8GBK□BMH | kgfcm | 80.0 | 80.0 | 80.0 | 80.0 |
| | | N.m | 7.84 | 7.84 | 7.84 | 7.84 |

| Motor Model | Gearbox Model | Gear Ratio | 10 | 12 | 15 | 18 | 25 | 30 | 36 | 50 | 60 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | r/min | 150 | 125 | 100 | 83 | 60 | 50 | 42 | 30 | 25 |
| 8IDG□-25W | 8WD□BL/□BR/ □BRL | kgfcm | 18.0 | 21.1 | 25.4 | 29.3 | 38.5 | 43.6 | 50.7 | 66.0 | 72.6 |
| | | N.m | 1.77 | 2.07 | 2.49 | 2.87 | 3.77 | 4.27 | 4.97 | 6.47 | 7.11 |

1) Enter the phase & voltage code in the box (□) within the motor model name.
2) Enter the gear ratio in the box (□) within the Gearbox model name.
3) A colored background indicates gear shaft rotation in the same direction as the motor shaft; a white background indicates rotation in the opposite direction.
4) The rotating speed is calculated by dividing the motor's synchronous speed (50Hz: 1,500r/min, 60Hz: 1,800r/min) by the gear ratio. The actual speed is 2~20% less than the displayed value, depending on the size of the load.

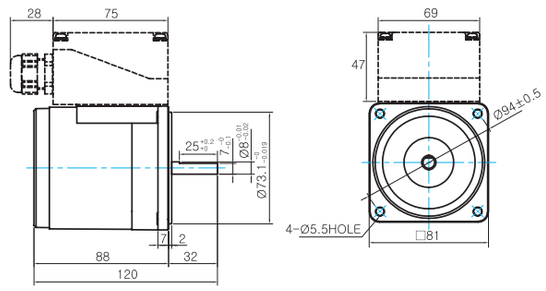
# B AC Motors

## Induction Motor 25W(□80mm)

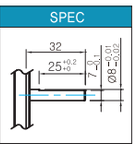
## Dimensions

### MOTOR ONLY

● MOTOR MODEL: 8IDD□-25(-T) (NO FAN)

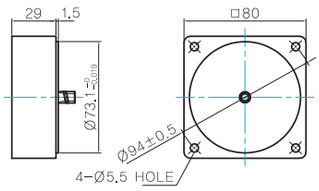



● MOTOR OUTPUT SHAFT

| MODEL | SPEC |
|---|---|
| D-CUT TYPE |  |

### INTER-DECIMAL GEARBOX

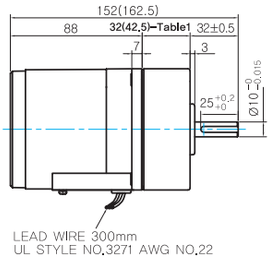
● MODEL: 8XD10□□



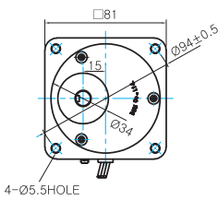

## GEARED MOTOR

### G TYPE GEARBOX

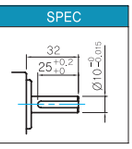
● MOTOR MODEL:
8IDG□-25G (NO FAN)



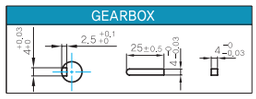

● GEARBOX MODEL:
8GBK□BMH




● GEARBOX OUTPUT SHAFT

| MODEL | SPEC |
|---|---|
| KEY TYPE |  |

● KEY SPEC

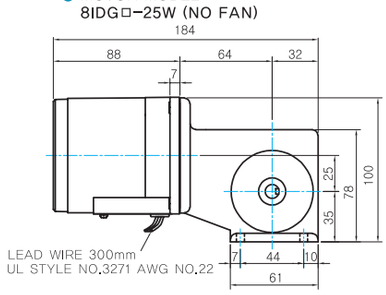



● 30(40)-Table1

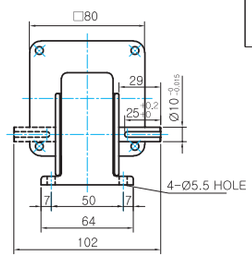
| SIZE(mm) | GEAR RATIO |
|---|---|
| 32 | 8GBK3BMH - 8GBK18BMH |
| 42.5 | 8GBK25BMH - 8GBK360BMH |

### W TYPE GEARBOX

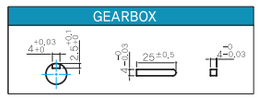
● MOTOR MODEL:
8IDG□-25W (NO FAN)




● GEARBOX MODEL:
8WD□BL/BR/BRL




● KEY SPEC




### WEIGHT

| PART | | WEIGHT(Kg) |
|---|---|---|
| MOTOR | | 1.6 |
| GEAR BOX | 8GBK3BMH ~ 8GBK18BMH | 0.48 |
| | 8GBK25BMH ~ 8GBK30BMH | 0.61 |
| | 8GBK36BMH ~ 8GBK180BMH | 0.67 |
| | 8GBK200BMH ~ 8GBK360BMH | 0.63 |
| | 8WD□BL/BR/BRL | 0.67 |
| | 8XD10□□ | 0.44 |

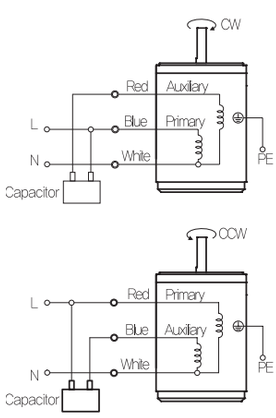
## Motor Images

| 8IDD□-25 | 8IDD□-25-T | 8IDG□-25G+8GBK□BMH | 8IDG□-25W+8WD□BL |
|---|---|---|---|
|  |  |  |  |

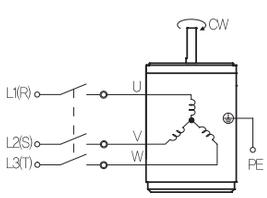
## Connection Diagrams

### Lead Wire Type

**[Single Phase]**



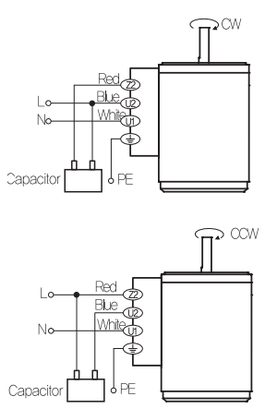

**[Three Phase]**



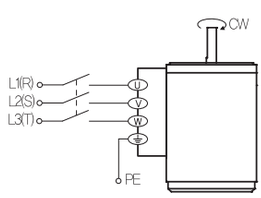

* **CCW Direction:**
Change any two connections among R, S and T.

### Terminal Box Type

**[Single Phase]**




**[Three Phase]**




* **CCW Direction:**
Change any two connections among R, S and T.

1) The direction of motor rotation is as viewed from the shaft end of the motor.
2) CW represents the clockwise direction, while CCW represents the counterclockwise direction.
3) Change the direction of single phase motor rotation only after bringing the motor to a stop. If an attempt is made to change the direction of rotation while the motor is rotating, the motor may ignore the reversing command or change its direction after some delay.