

Induction Motor 150W(□90mm)

150W

Induction Motor
150W(□90mm)

Motor Specification

| Model | | Output W | Voltage V | Frequency Hz | Poles | Duty | Starting Torque | | Rated Load | | | Capacitor μF / VAC | |
|--------------------------------------------------------------------------------------------------------|-------------------|-------------|--------------|-----------------|-------|-------|-----------------|-------|----------------|--------------|---------------------|-----------------------|---|
| Lead Wire Type | Terminal Box Type | | | | | | kgfcm | N.m | Speed r/min | Current A | Torque kgfcm N.m | | |
| 91DG*~150F□(-T): Gear Type Shaft 91DD*~150F(-T): D-Cut Type Shaft 91DK*~150F(-T): Key Type Shaft | | 150 | 3∅220 | 50 | 4 | Cont. | 22.00 | 2.200 | 1300 | 1.00 | 11.30 | 1.130 | - |
| | | | | 60 | | | 19.00 | 1.900 | 1550 | 0.90 | 9.40 | 0.940 | |
| 91DGK~150F□ | 91DGK~150F□-T | 150 | 3∅380 | 50 | 4 | Cont. | 18.00 | 1.800 | 1250 | 0.46 | 11.70 | 1.170 | - |
| | | | | 60 | | | 15.00 | 1.500 | 1500 | 0.42 | 9.70 | 0.970 | |
| | | | | 50 | | | 19.00 | 1.900 | 1250 | 0.49 | 11.70 | 1.170 | |
| | | | | 60 | | | 16.00 | 1.600 | 1500 | 0.43 | 9.70 | 0.970 | |

- 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 & Key Type Shafts are for using motor only.

Max. Permissible Torque at Output Shaft of Gearbox

60Hz

| Motor Model | Gearbox Model | Gear Ratio | 3 | 3.6 | 6 | 9 | 12.5 | 15 | 18 | 20 | 25 | 30 | 36 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 | 200 |
|-----------------|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 91DG□ -150FH | 9HBK□BH 9HFK□BH | r/min | 600 | 500 | 300 | 200 | 144 | 120 | 100 | 90 | 72 | 60 | 50 | 36 | 30 | 24 | 20 | 18 | 15 | 12 | 10 | 9 |
| | | kgfcm N.m | 24.2 2.37 | 29.0 2.84 | 48.3 4.73 | 72.5 7.10 | 90.9 8.91 | 109.1 10.69 | 131.0 12.83 | 131.9 12.93 | 164.9 16.16 | 197.9 19.39 | 237.5 23.27 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 |

| Motor Model | Gearbox Model | Gear Ratio | 7.5 | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 80 | 100 |
|--------------|---------------|--------------|--------------|--------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|
| 91DG□~150FWH | 9WHD□-030 | r/min | 240 | 180 | 120 | 90 | 72 | 60 | 45 | 36 | 30 | 22.5 | 18 |
| | | kgfcm N.m | 61.1 5.99 | 78.6 7.70 | 110.6 10.84 | 139.7 13.69 | 160.1 15.68 | 186.2 18.25 | 183.7 18.00 | 173.5 17.00 | 163.3 16.00 | 132.7 13.00 | - |
| | 9WHD□-040 | kgfcm | - | - | - | - | - | - | - | 230.0 | 255.0 | 295.0 | 270.0 |
| | | N.m | - | - | - | - | - | - | - | 22.55 | 25.00 | 28.92 | 26.47 |

50Hz

| Motor Model | Gearbox Model | Gear Ratio | 3 | 3.6 | 6 | 9 | 12.5 | 15 | 18 | 20 | 25 | 30 | 36 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 | 200 |
|-----------------|--------------------|--------------|--------------|--------------|--------------|--------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 91DG□ -150FH | 9HBK□BH 9HFK□BH | r/min | 500 | 417 | 250 | 167 | 120 | 100 | 83 | 75 | 60 | 50 | 42 | 30 | 25 | 20 | 17 | 15 | 13 | 10 | 8 | 7.5 |
| | | kgfcm N.m | 28.1 2.76 | 33.8 3.31 | 56.3 5.51 | 84.4 8.27 | 105.9 10.38 | 127.1 12.46 | 152.6 14.95 | 153.7 15.06 | 192.1 18.83 | 230.5 22.59 | 276.6 27.11 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 |

| Motor Model | Gearbox Model | Gear Ratio | 7.5 | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 80 | 100 |
|--------------|---------------|--------------|--------------|--------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------|
| 91DG□~150FWH | 9WHD□-030 | r/min | 200 | 150 | 100 | 75 | 60 | 50 | 37.5 | 30 | 25 | 18.75 | 15 |
| | | kgfcm N.m | 71.2 6.98 | 91.5 8.97 | 128.8 12.62 | 162.7 15.95 | 186.5 18.28 | 204.1 20.00 | 183.7 18.00 | 173.5 17.00 | 163.3 16.00 | 132.7 13.00 | - |
| | 9WHD□-040 | kgfcm | - | - | - | - | - | - | - | 275.0 | 305.0 | 295.0 | 270.0 |
| | | N.m | - | - | - | - | - | - | - | 26.96 | 29.90 | 28.92 | 26.47 |

- 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.

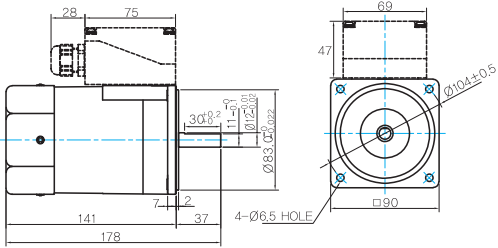
B AC Motors

Induction Motor 150W(□90mm)

Dimensions

MOTOR ONLY

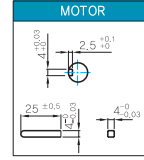
- MOTOR MODEL: 9IDD□-150F(-T) (GENERAL FAN)



- MOTOR OUTPUT SHAFT

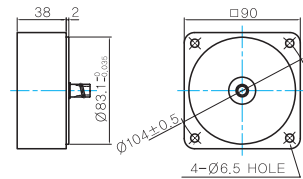
| MODEL | SPEC |
|------------|-----------------------------|
| D-CUT TYPE | 37 30±0.03 Ø7.25±0.03 |
| KEY TYPE | 37 25±0.03 Ø7.25±0.03 |
| 9IDD□-150F | |
| 9IDK□-150F | |

- KEY SPEC



INTER-DECIMAL GEARBOX

- MODEL: 9XD10□□



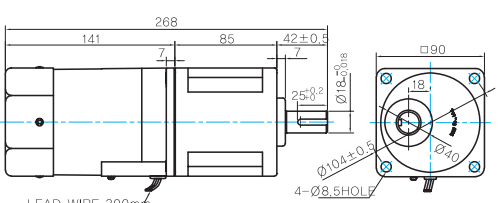
GEARED MOTOR

H TYPE GEARBOX

- MOTOR MODEL: 9IDG□-150FH (GENERAL FAN)

- GEARBOX MODEL: 9HBK□BH

- GEARBOX MODEL: 9HFK□BH

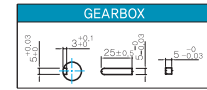


LEAD WIRE 300mm
UL STYLE NO.3271 AWG NO.22

- GEARBOX OUTPUT SHAFT

| MODEL | SPEC |
|----------|----------------------------|
| KEY TYPE | 42 25±0.03 Ø8.5±0.03 |
| 9HBK□BH | |
| 9HFK□BH | |

- KEY SPEC

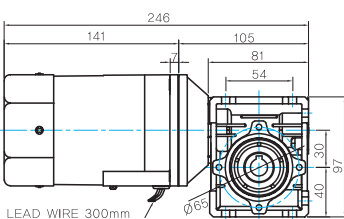


WH TYPE GEARBOX

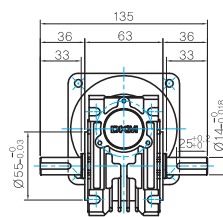
- MOTOR MODEL: 9IDG□-150FWH (GENERAL FAN)

- GEARBOX MODEL: 9WHD□-030

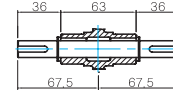
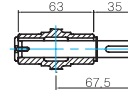
- SHAFT(Unidirectional, Bi-directional)



LEAD WIRE 300mm
UL STYLE NO.3271 AWG NO.22

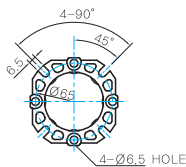


INPUT

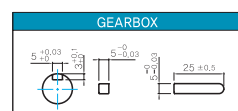


OUTPUT

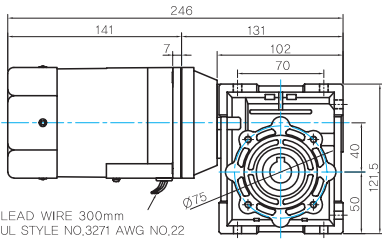
- FLANGE



- KEY SPEC

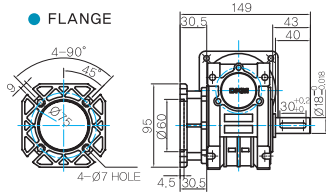


● MOTOR MODEL:
9IDD□-150F(GENERAL FAN)

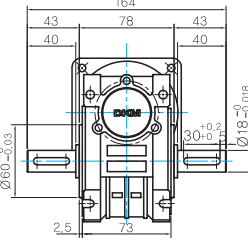


LEAD WIRE 300mm
UL STYLE NO.3271 AWG NO.22

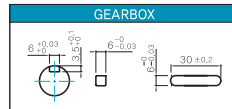
● FLANGE



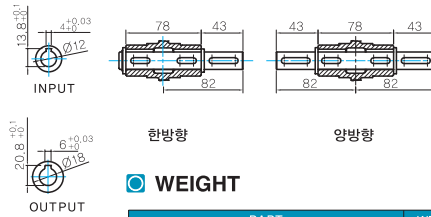
● GEARBOX MODEL:
9WHD□-040



● KEY SPEC



● SHAFT



한방향

양방향

● WEIGHT

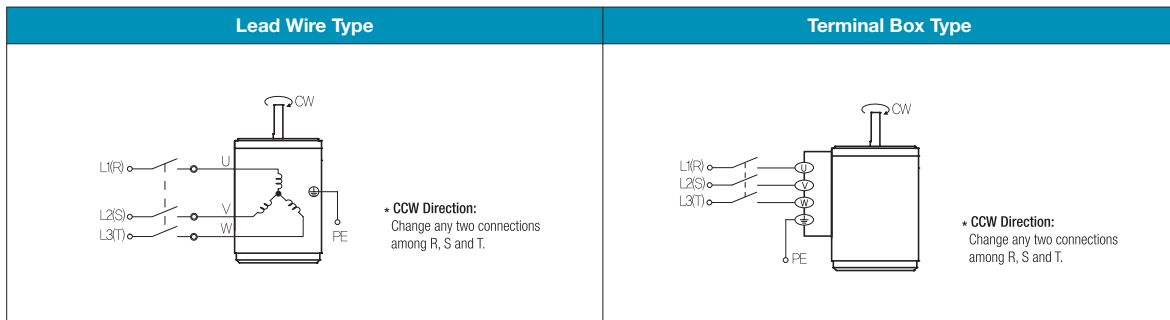
| PART | | WEIGHT(Kg) |
|----------|-----------------------------|------------|
| MOTOR | | 3.0 |
| GEAR BOX | 9HB(F)K3BH ~ 9HB(F)K9BH | 1.45 |
| | 9HB(F)K12.5BH ~ 9HB(F)K18BH | 1.5 |
| | 9HB(F)K20BH ~ 9HB(F)K60BH | 1.7 |
| | 9HB(F)K75BH ~ 9HB(F)K200BH | 1.8 |
| | 9WHD□-030 | 1.13 |
| | 9WHD□-040 | 2.2 |
| | 9XD10□ | 0.5 |

* 출력 FLANGE와 SHAFT는 별매입니다.

Motor Images



Connection Diagrams



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.