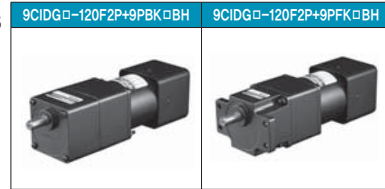


B AC Motors

Clutch & Brake Motor 120W (□90mm)

120W Clutch & Brake Motor 120W(□90mm)

Motor Images



Motor Specification

| Model 9CIDG□-120F2P: Gear Type Shaft | Output W | Voltage V | Frequency Hz | Poles | Duty | Starting Torque | | Rated Load | | | | Capacitor μF / VAC |
|--|-------------|--------------|-----------------|-------|-------|-----------------|-------|----------------|--------------|---------------------|-------|-----------------------|
| | | | | | | kgfcm | N.m | Speed r/min | Current A | Torque kgfcm N.m | | |
| 9CIDGA-120F2P | 120 | 1∅110 | 60 | 4 | Cont. | 6.60 | 0.660 | 1600 | 2.00 | 7.40 | 0.740 | 25.0 / 250 |
| 9CIDGD-120F2P | 120 | 1∅220 | 60 | 4 | Cont. | 6.00 | 0.600 | 1600 | 1.00 | 7.60 | 0.760 | 6.0 / 450 |
| 9CIDGE-120F2P | 120 | 1∅220 | 50 | 4 | Cont. | 6.40 | 0.640 | 1250 | 0.90 | 9.40 | 0.940 | 6.0 / 450 |
| | | 7.80 | | | | 0.780 | 1.00 | | 10.20 | 1.020 | | |
| 9CIDGG-120F2P | 120 | 3∅220 | 50 | 4 | Cont. | 22.00 | 2.200 | 1300 | 0.82 | 9.20 | 0.920 | - |
| | | | 60 | | | 20.00 | 2.000 | 1550 | 0.78 | 7.80 | 0.780 | |
| 9CIDGK-120F2P | 120 | 3∅380 | 50 | 4 | Cont. | 25.00 | 2.500 | 1300 | 0.48 | 9.00 | 0.900 | - |
| | | | 60 | | | 20.00 | 2.000 | 1550 | 0.43 | 8.00 | 0.800 | |
| | | 3∅400 | 50 | 4 | Cont. | 27.40 | 2.740 | 1300 | 0.53 | 9.80 | 0.980 | |
| | | | 60 | | | 21.80 | 2.180 | 1550 | 0.45 | 8.60 | 0.860 | |
| | | 3∅415 | 50 | 4 | Cont. | 29.80 | 2.980 | 1300 | 0.57 | 10.00 | 1.000 | |
| | | | 60 | | | 23.80 | 2.380 | 1600 | 0.44 | 7.80 | 0.780 | |
| | | 3∅440 | 50 | 4 | Cont. | 32.00 | 3.200 | 1350 | 0.64 | 8.80 | 0.880 | |
| | | | 60 | | | 26.80 | 2.680 | 1600 | 0.48 | 8.60 | 0.860 | |

- 1) Enter the phase & voltage code in the in the box (□) within the motor model name.
- 2) All models contain a built-in thermal protector.
- 3) For using clutch & brake motor, Gearbox has to be attached. (Output shaft of motor: Gear Type Shaft)

Max. Permissible Torque at Output Shaft of Gearbox

60Hz

| Motor Model | Gearbox Model | Gear Ratio r/min | 2 | 3 | 3.6 | 5 | 6 | 7.5 | 9 | 12.5 | 15 | 18 | 20 | 25 | 30 | 36 | 40 |
|-------------------|--------------------|---------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| 9CIDG□ -120F2P | 9PBK□BH 9PFK□BH | kgfcm | 12.6 | 18.9 | 22.7 | 31.5 | 37.8 | 47.3 | 56.8 | 71.3 | 85.5 | 102.6 | 103.4 | 129.2 | 155.0 | 186.0 | 200.0 |
| | | N.m | 1.24 | 1.85 | 2.23 | 3.09 | 3.71 | 4.64 | 5.56 | 6.98 | 8.38 | 10.05 | 10.13 | 12.66 | 15.19 | 18.23 | 19.60 |

| Motor Model | Gearbox Model | Gear Ratio r/min | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 | 200 |
|-------------------|--------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 9CIDG□ -120F2P | 9PBK□BH 9PFK□BH | kgfcm | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 |
| | | N.m | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 |

50Hz

| Motor Model | Gearbox Model | Gear Ratio r/min | 2 | 3 | 3.6 | 5 | 6 | 7.5 | 9 | 12.5 | 15 | 18 | 20 | 25 | 30 | 36 | 40 |
|-------------------|--------------------|---------------------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| 9CIDG□ -120F2P | 9PBK□BH 9PFK□BH | kgfcm | 16.3 | 24.4 | 29.3 | 40.7 | 48.8 | 61.0 | 73.2 | 101.7 | 122.0 | 146.4 | 162.7 | 200.0 | 200.0 | 200.0 | 200.0 |
| | | N.m | 1.59 | 2.39 | 2.87 | 3.99 | 4.78 | 5.98 | 7.17 | 9.96 | 11.96 | 14.35 | 15.94 | 19.60 | 19.60 | 19.60 | 19.60 |

| Motor Model | Gearbox Model | Gear Ratio r/min | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 | 200 |
|-------------------|--------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 9CIDG□ -120F2P | 9PBK□BH 9PFK□BH | kgfcm | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 |
| | | N.m | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 |

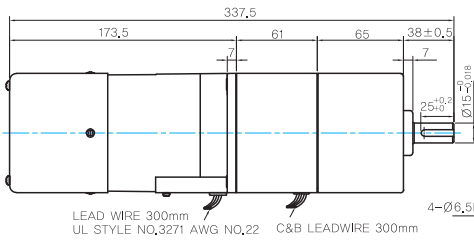
- 1) Enter the phase & voltage code in the box (□) within the motor model name.
- 2) Enter the gear ratio in the box (□) within the Gearbox model name.
- 3) A colored background indicates gear shaft rotation in the same direction as the motor shaft; a white background indicates rotation in the opposite 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.

Dimensions

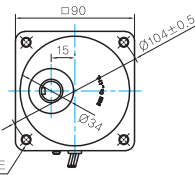
GEARED MOTOR

P TYPE GEARBOX

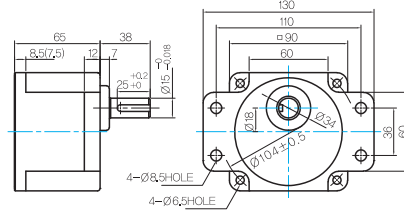
● MOTOR MODEL:
9CIDG□-120F2P (POWERFUL FAN)



● GEARBOX MODEL:
9PBK□BH



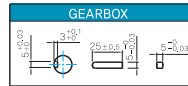
● GEARBOX MODEL:
9PFK□BH



GEARBOX OUTPUT SHAFT

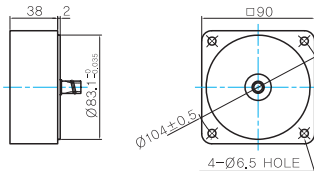
| MODEL | SPEC |
|----------|------|
| KEY TYPE | |
| 9PBK□BH | |
| 9PFK□BH | |

KEY SPEC



INTER-DECIMAL GEARBOX

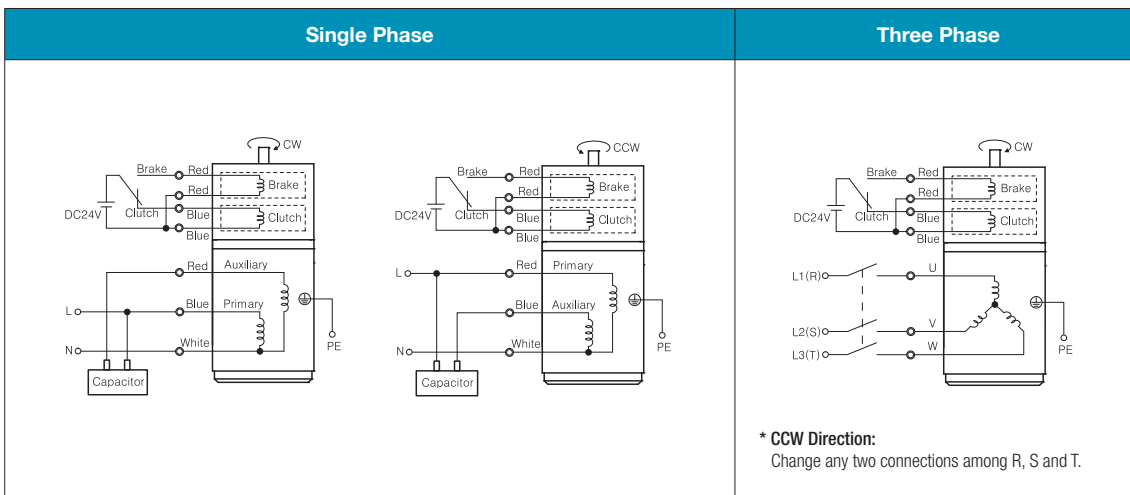
● MODEL:
9XD10□□



WEIGHT

| PART | WEIGHT(Kg) | |
|----------------|------------------------------|-----|
| MOTOR | 3,0 | |
| CLUTCH & BRAKE | 1,35 | |
| GEAR BOX | 9PB(F)K2BH - 9PB(F)K18BH | 1,3 |
| | 9PB(F)K20BH - 9PB(F)K200B | 1,4 |
| 9XD10□□ | 0,5 | |

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.
- 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.