B AC Motors

Clutch & Brake Motor 60W (□90mm)

60W Clutch & Brake Motor 60W(□90mm)

Motor Images

9CIDG□-60F2P+9PBK□BH	9CIDG□-60F2P+9PFK□BH
	

Motor Specification

Model 9CIDG□-60F2P: Gear Type Shaft	Output W	Voltage V	Frequency Hz	Poles	Duty	Starting Torque kgfcm	 N.m	Rated Load Speed r/min	 Current A	 Torque kgfcm	 N.m	Capacitor μF / VAC
9CIDGA-60F2P	60	1ø110	60	4	Cont.	3.40	0.340	1600	1.40	4.60	0.460	16.0 / 250
9CIDGD-60F2P	60	1ø220	60	4	Cont.	4.20	0.420	1600	0.63	4.60	0.460	4.0 / 450
9CIDGE-60F2P	60	1ø220	50	4	Cont.	3.40	0.340	1300	0.48	4.80	0.480	3.5 / 450
		1ø240				4.00	0.400		0.54	5.40	0.540	
9CIDGG-60F2P	60	3ø220	50	4	Cont.	15.00	1.500	1350	0.59	4.60	0.460	–
			60			12.80	1.280	1600	0.49	4.20	0.420	
9CIDGK-60F2P	60	3ø380	50	4	Cont.	17.00	1.700	1350	0.33	4.80	0.480	–
			60			13.80	1.380	1600	0.29	4.60	0.460	
		3ø400	50	4	Cont.	18.60	1.860	1350	0.36	5.20	0.520	
			60			15.20	1.520	1600	0.30	5.00	0.500	
		3ø415	50	4	Cont.	20.00	2.000	1350	0.40	5.60	0.560	
			60			16.20	1.620	1600	0.33	5.20	0.520	
		3ø440	50	4	Cont.	22.00	2.200	1350	0.44	6.00	0.600	
			60			18.20	1.820	1600	0.36	5.80	0.580	

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	2	3	3.6	5	6	7.5	9	12.5	15	18	20	25	30	36	40
		r/min	900	600	500	360	300	240	200	144	120	100	90	72	60	50	45
9CIDG□ -60F2P	9PBK□BH 9PFK□BH	kgfcm	7.0	10.5	12.5	17.4	20.9	26.1	31.4	39.4	47.3	56.7	57.1	71.4	85.7	102.8	114.2
		N.m	0.68	1.02	1.23	1.71	2.05	2.56	3.07	3.86	4.63	5.56	5.60	7.00	8.40	10.08	11.20

Motor Model	Gearbox Model	Gear Ratio	50	60	75	90	100	120	150	180	200
		r/min	36	30	24	20	18	15	12	10	9
9CIDG□ -60F2P	9PBK□BH 9PFK□BH	kgfcm	142.8	171.4	192.2	200.0	200.0	200.0	200.0	200.0	200.0
		N.m	13.99	16.79	18.83	19.60	19.60	19.60	19.60	19.60	19.60

50Hz

Motor Model	Gearbox Model	Gear Ratio	2	3	3.6	5	6	7.5	9	12.5	15	18	20	25	30	36	40
		r/min	750	500	417	300	250	200	167	120	100	83	75	60	50	42	38
9CIDG□ -60F2P	9PBK□BH 9PFK□BH	kgfcm	8.6	12.9	15.5	21.6	25.9	32.4	38.8	48.8	58.5	70.2	70.7	88.4	106.1	127.3	141.4
		N.m	0.85	1.27	1.52	2.11	2.54	3.17	3.81	4.78	5.73	6.88	6.93	8.66	10.40	12.48	13.86

Motor Model	Gearbox Model	Gear Ratio	50	60	75	90	100	120	150	180	200
		r/min	30	25	20	17	15	13	10	8	7.5
9CIDG□ -60F2P	9PBK□BH 9PFK□BH	kgfcm	176.8	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
		N.m	17.33	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60

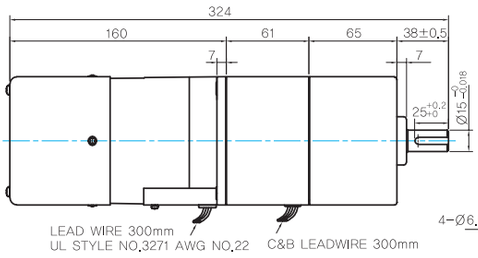
1) Enter the phase & voltage code in the box (□) within the motor model name.
2) Enter the gear ratio in the box (□) within the Gearbox model name.
3) A colored background indicates gear shaft rotation in the same direction as the motor shaft; a white background indicates rotation in the opposite direction.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

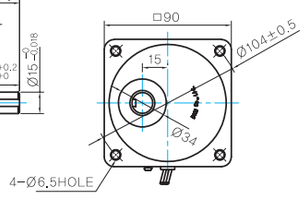
GEARED MOTOR

P TYPE GEARBOX

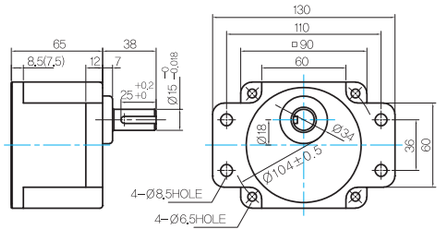
● MOTOR MODEL:
9CIDG□-60F2P (POWERFUL FAN)



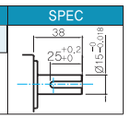
● GEARBOX MODEL:
9PBK□BH



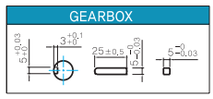
● GEARBOX MODEL:
9PFK□BH



● GEARBOX OUTPUT SHAFT

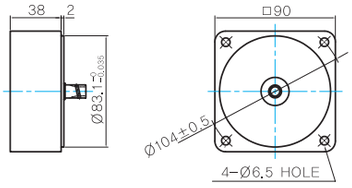
MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

● KEY SPEC

GEARBOX


INTER-DECIMAL GEARBOX

● MODEL:
9XD10□□

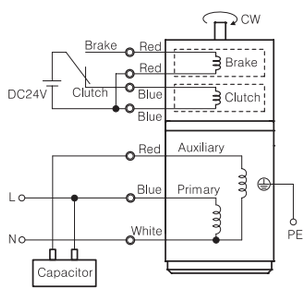


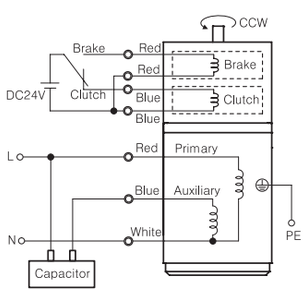
WEIGHT

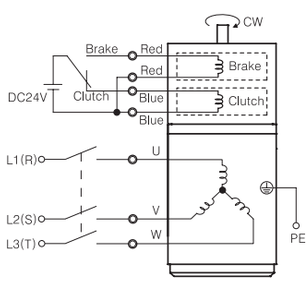
PART		WEIGHT(Kg)
MOTOR		2.6
CLUTCH & BRAKE		1.35
GEAR BOX	9PB(F)K2BH – 9PB(F)K18BH	1.3
	9PB(F)K20BH – 9PB(F)K180B	1.4
	9XD10□□	0.5

Connection Diagrams

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.