

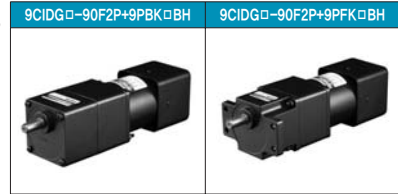
B AC Motors

Clutch & Brake Motor 90W (□90mm)

90W

Clutch & Brake Motor
90W(□90mm)

Motor Images



Motor Specification

Model 9CIDG□-90F2P: 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-90F2P	90	1φ110	60	4	Cont.	5.00	0.500	1600	1.90	6.20	0.620	20.0 / 250
9CIDGD-90F2P	90	1φ220	60	4	Cont.	5.20	0.520	1600	0.90	6.20	0.620	5.0 / 450
9CIDGE-90F2P	90	1φ220	50	4	Cont.	5.00	0.500	1300	0.70	7.40	0.740	5.0 / 450
		6.00				0.600	0.76		8.60	0.860		
9CIDGG-90F2P	90	3φ220	50	4	Cont.	20.00	2.000	1300	0.66	7.80	0.780	-
			60			16.60	1.660	1600	0.55	5.80	0.580	
9CIDGK-90F2P	90	3φ380	50	4	Cont.	21.80	2.180	1300	0.40	7.80	0.780	-
			60			17.20	1.720	1600	0.33	5.80	0.580	
		3φ400	50	4	Cont.	24.00	2.400	1300	0.43	8.60	0.860	
			60			19.20	1.920	1600	0.36	6.20	0.620	
		3φ415	50	4	Cont.	26.00	2.600	1350	0.43	7.40	0.740	
			60			20.20	2.020	1600	0.37	6.80	0.680	
		3φ440	50	4	Cont.	29.00	2.900	1350	0.48	8.00	0.800	
			60			23.80	2.380	1650	0.37	6.00	0.600	

- 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
			900	600	500	360	300	240	200	144	120	100	90	72	60	50	45
9CIDG□ -90F2P	9PBK□BH 9PFK□BH	kgfcm	11.3	16.9	20.3	28.2	33.9	42.3	50.8	63.8	76.5	91.8	92.5	115.6	138.7	166.5	185.0
		N.m	1.11	1.66	1.99	2.77	3.32	4.15	4.98	6.25	7.50	9.00	9.06	11.33	13.59	16.31	18.13

Motor Model	Gearbox Model	Gear Ratio r/min	50	60	75	90	100	120	150	180	200
			36	30	24	20	18	15	12	10	9
9CIDG□ -90F2P	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
			750	500	417	300	250	200	167	120	100	83	75	60	50	42	38
9CIDG□ -90F2P	9PBK□BH 9PFK□BH	kgfcm	12.3	18.4	22.1	30.7	36.9	46.1	55.3	69.4	83.3	99.9	100.6	125.8	151.0	181.2	200.0
		N.m	1.20	1.81	2.17	3.01	3.61	4.51	5.42	6.80	8.16	9.79	9.86	12.33	14.79	17.75	19.60

Motor Model	Gearbox Model	Gear Ratio r/min	50	60	75	90	100	120	150	180	200
			30	25	20	17	15	13	10	8	7.5
9CIDG□ -90F2P	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

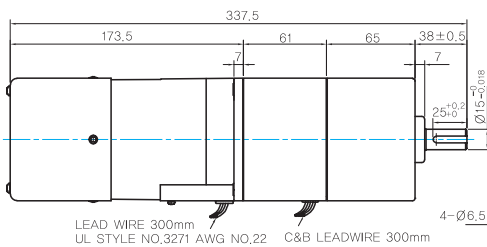
- 1) Enter the phase & voltage code in the box (□) within the motor model name.
- 2) Enter the gear ratio in the box (□) within the Gearbox model name.
- 3) A colored background indicates gear shaft rotation in the same direction as the motor shaft; a white background indicates rotation in the opposite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

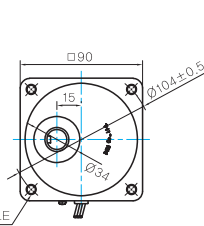
GEARED MOTOR

P TYPE GEARBOX

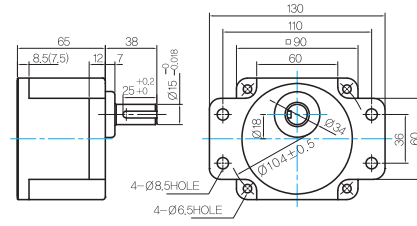
- MOTOR MODEL:
9CIDG□-90F2P (POWERFUL FAN)



- GEARBOX MODEL:
9PBK□BH



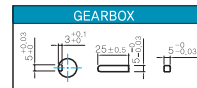
- GEARBOX MODEL:
9PFK□BH



GEARBOX OUTPUT SHAFT

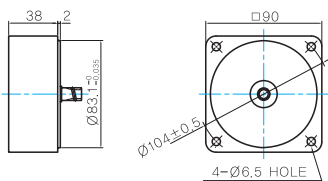
MODEL	SPEC
KEY TYPE	38
9PBK□BH	23 ^{+0.2} _{-0.2}
9PFK□BH	11 ^{+0.05} _{-0.05}

KEY SPEC



INTER-DECIMAL GEARBOX

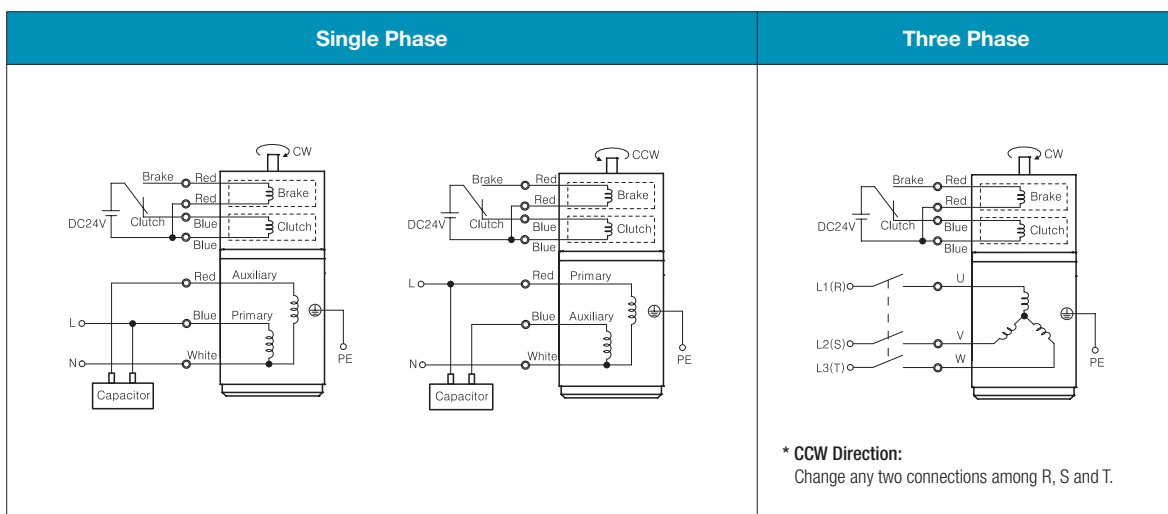
- MODEL:
9XD10□□



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



- The direction of motor rotation is as viewed from the shaft end of the motor.
- CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- 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.