

B AC Motors

Induction Motor 40W(□90mm)

40W

Induction Motor
40W(□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*-40□(-T): Gear Type Shaft 91DD*-40(-T): D-Cut Type Shaft 91DK*-40(-T): Key Type Shaft													
91DGA-40□	91DGA-40□-T	40	1φ110	60	4	Cont.	2.60	0.260	1600	0.80	2.80	0.280	10.0 / 250
91DGD-40□	91DGD-40□-T	40	1φ220	60	4	Cont.	2.60	0.260	1600	0.39	2.80	0.280	2.5 / 450
91DGE-40□	91DGE-40□-T	40	1φ220	50	4	Cont.	1.80	0.180	1300	0.33	3.00	0.300	2.0 / 450
			1φ240				2.20	0.220		0.36	3.60	0.360	
91DGG-40□	91DGG-40□-T	40	3φ220	50	4	Cont.	9.00	0.900	1300	0.31	3.20	0.320	-
				60			7.40	0.740	1600	0.27	2.45	0.245	
91DGK-40□	91DGK-40□-T	40	3φ380	50	4	Cont.	9.00	0.900	1300	0.20	3.20	0.320	-
				60			7.20	0.720	1550	0.18	2.80	0.280	
			3φ400	50	4	Cont.	10.00	1.000	1300	0.20	3.40	0.340	
				60			7.80	0.780	1550	0.18	3.00	0.300	
			3φ415	50	4	Cont.	11.00	1.100	1350	0.20	3.00	0.300	
				60			8.60	0.860	1600	0.18	2.80	0.280	
			3φ440	50	4	Cont.	12.00	1.200	1350	0.21	3.40	0.340	
				60			9.80	0.980	1600	0.19	3.00	0.300	

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	Gear Ratio																							
			2	3	3.6	5	6	7.5	9	10	12.5	15	18	25	30	36	40	50	60	75	90	100	120	150	180	200
91DG□-40G	9GBK□ BMH	r/min	900	600	500	360	300	240	200	180	144	120	100	72	60	50	45	36	30	24	20	18	15	12	10	10
		kgfcm	4.6	7.0	8.4	11.6	13.9	17.4	20.9	23.2	29.1	34.9	37.8	52.5	63.0	68.5	76.2	95.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
		N.m	0.46	0.68	0.82	1.14	1.37	1.71	2.05	2.28	2.85	3.42	3.70	5.15	6.17	6.72	7.46	9.33	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80

Motor Model	Gearbox Model	Gear Ratio	Gear Ratio								
			10	12	15	18	25	30	36	50	60
91DG□-40W	9WD□BL/□BR/ □BRL	r/min	180	150	120	100	72	60	50	36	30
		kgfcm	23.0	26.9	32.3	37.3	49.0	55.4	64.5	84.0	92.4
		N.m	2.25	2.63	3.17	3.66	4.80	5.43	6.32	8.23	9.06

50Hz

Motor Model	Gearbox Model	Gear Ratio	Gear Ratio																							
			2	3	3.6	5	6	7.5	9	10	12.5	15	18	25	30	36	40	50	60	75	90	100	120	150	180	200
91DG□-40G	9GBK□ BMH	r/min	750	500	417	300	250	200	167	150	120	100	83	60	50	42	38	30	25	20	17	15	13	10	8	8
		kgfcm	5.6	8.5	10.2	14.1	16.9	21.2	25.4	28.2	35.3	42.3	45.9	63.8	76.5	83.2	92.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
		N.m	0.55	0.83	1.00	1.38	1.66	2.07	2.49	2.77	3.46	4.15	4.50	6.25	7.50	8.16	9.06	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80

Motor Model	Gearbox Model	Gear Ratio	Gear Ratio								
			10	12	15	18	25	30	36	50	60
91DG□-40W	9WD□BL/□BR/ □BRL	r/min	150	125	100	83	60	50	42	30	25
		kgfcm	27.9	32.6	39.3	45.3	59.5	67.3	78.3	102.0	112.2
		N.m	2.73	3.20	3.85	4.44	5.83	6.60	7.68	10.00	11.00

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.

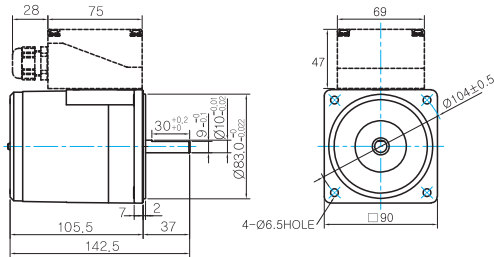
3) A colored background indicates gear shaft rotation in the same direction as the motor shaft; a white background indicates rotation in the opposite direction.

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

MOTOR ONLY

- MOTOR MODEL: 9IDD□-40(-T) (NO FAN)

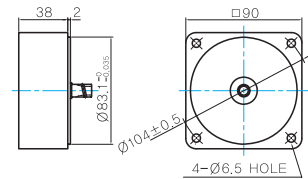


MOTOR OUTPUT SHAFT

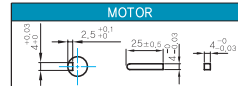
MODEL	SPEC
D-CUT TYPE	
9IDD□-40	
KEY TYPE	
9IDK□-40	

INTER-DECIMAL GEARBOX

- MODEL: 9XD10□□



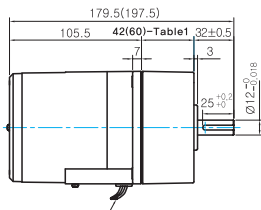
KEY SPEC



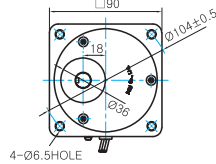
GEARED MOTOR

G TYPE GEARBOX

- MOTOR MODEL: 9IDG□-40G (NO FAN)



- GEARBOX MODEL: 9GBK□BMH



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

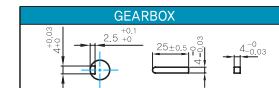
GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	

42(60)-Table1

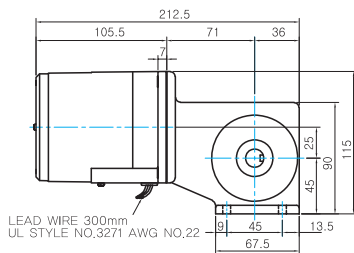
SIZE(mm)	GEAR RATIO
42	9GBK2BMH - 9GBK18BMH
60	9GBK25BMH - 9GBK200BMH

Key Spec

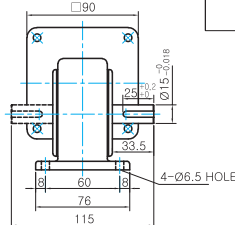


W TYPE GEARBOX

- MOTOR MODEL: 9IDG□-40W (NO FAN)

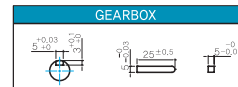


- GEARBOX MODEL: 9WD□BL/BR/BRL



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

KEY SPEC



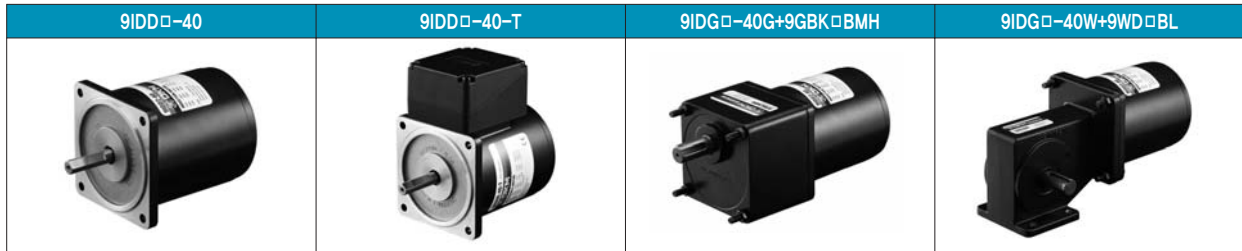
WEIGHT

PART	WEIGHT(Kg)	
MOTOR	2.4	
GEAR BOX	9GBK2BMH ~ 9GBK15BMH	0.67
	9GBK18BMH ~ 9GBK30BMH	0.96
	9GBK36BMH ~ 9GBK200BMH	1.07
	9WD□BL/BR/BRL	1.0
	9XD10□□	0.5

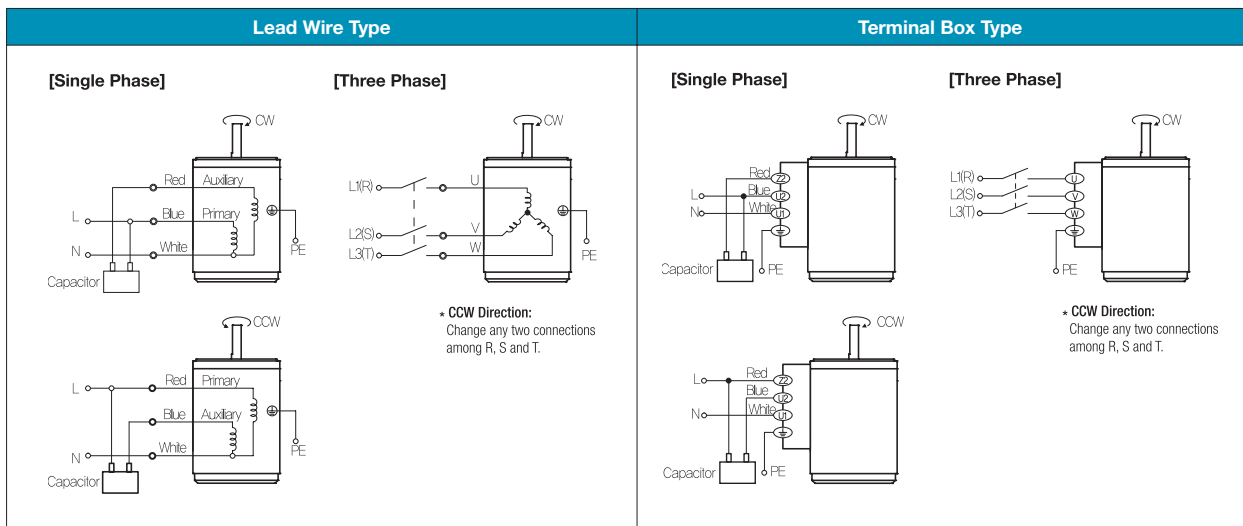
B AC Motors

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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.
- 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.