

# 40W

Speed Control Induction Motor  
40W(□90mm)

## Motor Specification

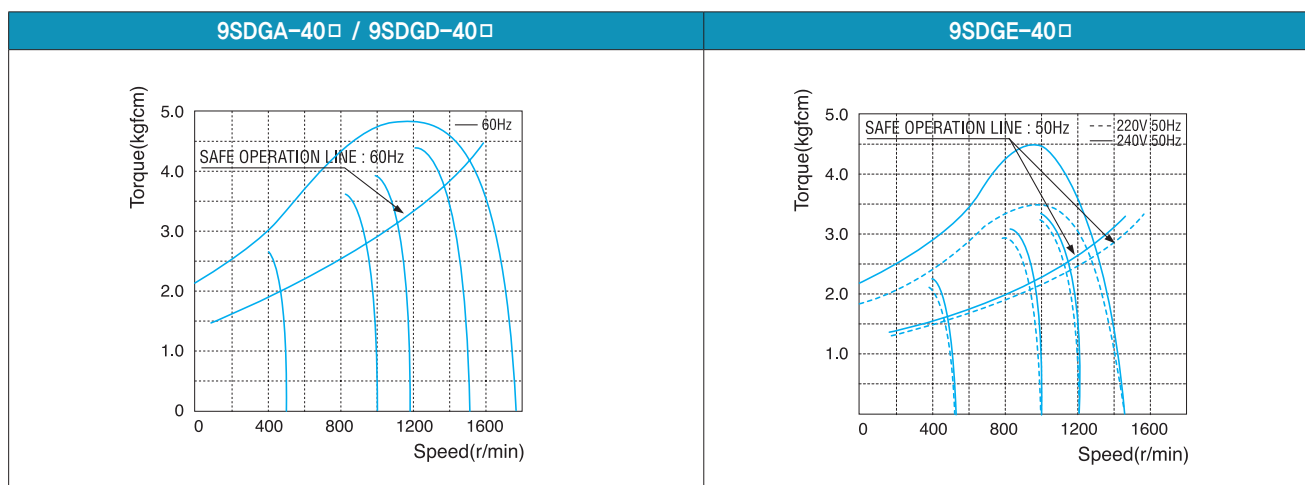
Model 9SDG*-40□: Gear Type Shaft 9SDD*-40: D-Cut Type Shaft 9SDK*-40: Key Type Shaft	Output W	Voltage V	Frequency Hz	Poles	Duty	Speed Range r/min	Starting Torque		Permissible Torque				Capacitor μF / VAC
									1200r/min		90r/min		
									kgfcm	N.m	kgfcm	N.m	
9SDGA-40□	40	1∅ 110	60	4	Cont.	90-1700	2.00	0.200	2.90	0.290	1.20	0.120	10.0 / 250
9SDGD-40□	40	1∅ 220	60	4	Cont.	90-1700	2.00	0.200	2.90	0.290	1.20	0.120	2.5 / 450
9SDGE-40□	40	1∅ 220	50	4	Cont.	90-1400	1.70	0.170	2.50	0.250	0.70	0.070	2.0 / 450
		2.10					0.210	3.00	0.300	0.70	0.070		

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 are for attaching Gearbox and D-Cut & Key Type Shaft are for using motor only.

## Speed-Torque Characteristics



## Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	2	3	3.6	5	6	7.5	9	10	12.5	15	18	25	30
9SDG□ -40G	9GBK□ BMH	1200	110	60	kgfcm	4.8	7.2	8.7	12.0	14.4	18.1	21.7	24.1	30.1	36.1	39.2	54.4	65.3
					N.m	0.47	0.71	0.85	1.18	1.42	1.77	2.12	2.36	2.95	3.54	3.84	5.33	6.39
			220/240	60	kgfcm	4.8	7.2	8.7	12.0	14.4	18.1	21.7	24.1	30.1	36.1	39.2	54.4	65.3
					N.m	0.47	0.71	0.85	1.18	1.42	1.77	2.12	2.36	2.95	3.54	3.84	5.33	6.39
			220/240	50	kgfcm	5.0	7.5	9.0	12.5	14.9	18.7	22.4	24.9	31.1	37.4	40.5	56.3	67.5
					N.m	0.49	0.73	0.88	1.22	1.46	1.83	2.20	2.44	3.05	3.66	3.97	5.51	6.62
		90	110	60	kgfcm	2.0	3.0	3.6	5.0	6.0	7.5	9.0	10.0	12.5	14.9	16.2	22.5	27.0
					N.m	0.20	0.29	0.35	0.49	0.59	0.73	0.88	0.98	1.22	1.46	1.59	2.21	2.65
			220	60	kgfcm	2.0	3.0	3.6	5.0	6.0	7.5	9.0	10.0	12.5	14.9	16.2	22.5	27.0
					N.m	0.20	0.29	0.35	0.49	0.59	0.73	0.88	0.98	1.22	1.46	1.59	2.21	2.65
			220/240	50	kgfcm	1.2	1.7	2.1	2.9	3.5	4.4	5.2	5.8	7.3	8.7	9.5	13.1	15.8
					N.m	0.11	0.17	0.20	0.28	0.34	0.43	0.51	0.57	0.71	0.85	0.93	1.29	1.54

# B AC Motors

## S.C. Induction Motor 40W (□90mm)

### Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	36	40	50	60	75	90	100	120	150	180	200		
9SDG□ -40G	9GBK□ BMH	1200	110	60	kgfcm N.m	71.0 6.96	78.9 7.73	98.6 9.66	100.0 9.80	100.0 9.80	100.0 9.80	100.0 9.80	100.0 9.80	100.0 9.80	100.0 9.80	100.0 9.80	100.0 9.80	
			220	60	kgfcm N.m	71.0 6.96	78.9 7.73	98.6 9.66	100.0 9.80	100.0 9.80	100.0 9.80	100.0 9.80	100.0 9.80	100.0 9.80	100.0 9.80	100.0 9.80	100.0 9.80	100.0 9.80
			220/ 240	50	kgfcm N.m	73.4 7.20	81.6 8.00	100.0 9.80	100.0 9.80	100.0 9.80	100.0 9.80	100.0 9.80	100.0 9.80	100.0 9.80	100.0 9.80	100.0 9.80	100.0 9.80	100.0 9.80
		90	110	60	kgfcm N.m	29.4 2.88	32.6 3.20	40.8 4.00	49.0 4.80	61.2 6.00	73.4 7.20	81.6 8.00	97.9 9.60	100.0 9.80	100.0 9.80	100.0 9.80	100.0 9.80	100.0 9.80
			220	60	kgfcm N.m	29.4 2.88	32.6 3.20	40.8 4.00	49.0 4.80	61.2 6.00	73.4 7.20	81.6 8.00	97.9 9.60	100.0 9.80	100.0 9.80	100.0 9.80	100.0 9.80	100.0 9.80
			220/ 240	50	kgfcm N.m	17.1 1.68	19.0 1.87	23.8 2.33	28.6 2.80	35.7 3.50	42.8 4.20	47.6 4.66	57.1 5.60	71.4 7.00	85.7 8.40	85.7 8.40	85.7 8.40	85.7 8.40

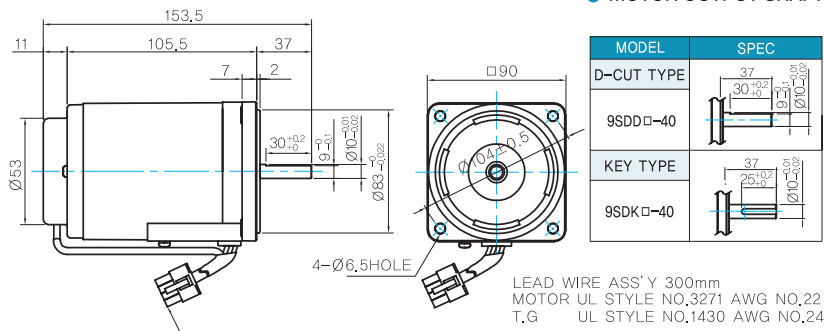
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	10	12	15	18	25	30	36	50	60
9SDG□ -40W	9WD□BL/ □BR/□BRL	1200	110	60	kgfcm N.m	23.8 2.33	27.8 2.73	33.5 3.28	38.6 3.79	50.8 4.97	57.4 5.63	66.8 6.55	87.0 8.53	95.7 9.38
			220	60	kgfcm N.m	24.1 2.36	28.9 2.83	36.1 3.54	43.3 4.25	60.2 5.90	72.2 7.08	86.7 8.49	120.4 11.79	122.4 12.00
			220/240	50	kgfcm N.m	24.6 2.41	28.8 2.82	34.7 3.40	40.0 3.92	52.5 5.15	59.4 5.82	69.1 6.77	90.0 8.82	99.0 9.70
		90	110	60	kgfcm N.m	9.8 0.96	11.5 1.13	13.9 1.36	16.0 1.57	21.0 2.06	23.8 2.33	27.6 2.71	36.0 3.53	39.6 3.88
			220	60	kgfcm N.m	9.8 0.96	11.5 1.13	13.9 1.36	16.0 1.57	21.0 2.06	23.8 2.33	27.6 2.71	36.0 3.53	39.6 3.88
			220/240	50	kgfcm N.m	5.7 0.56	6.7 0.66	8.1 0.79	9.3 0.91	12.3 1.20	13.9 1.36	16.1 1.58	21.0 2.06	23.1 2.26

- 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

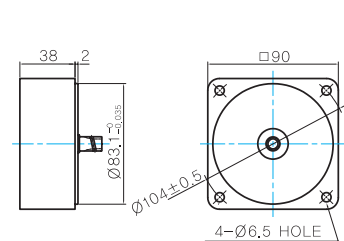
#### MOTOR ONLY

- MOTOR MODEL: 9SDD□-40 (NO FAN)



#### INTER-DECIMAL GEARBOX

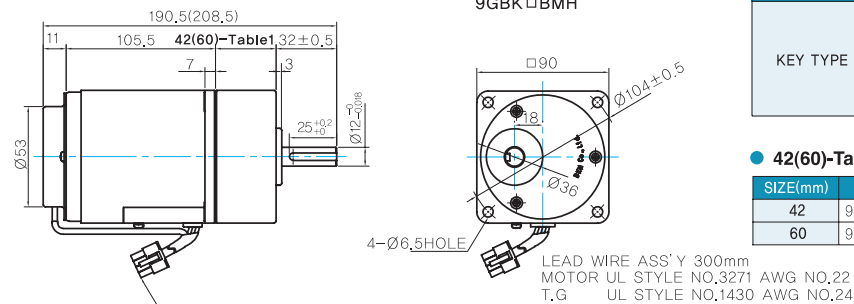
- MODEL: 9XD10□□



#### GEARED MOTOR

#### G TYPE GEARBOX

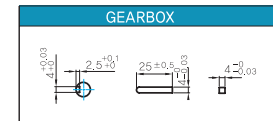
- MOTOR MODEL: 9SDG□-40G (NO FAN)
- GEARBOX MODEL: 9GBK□BMH



#### GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	32 25 <sup>+0.02</sup> <sub>-0.10</sub> Ø70 <sup>+0.03</sup> <sub>-0.08</sub>

#### KEY SPEC

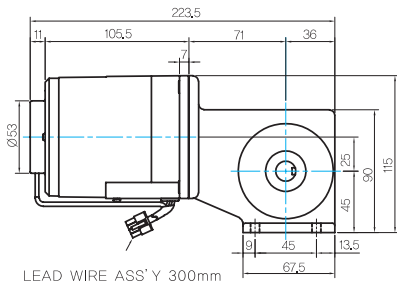


#### 42(60)-Table1

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

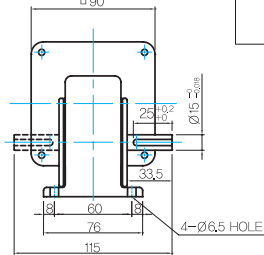
### W TYPE GEARBOX

● MOTOR MODEL:  
9SDG□-40W (NO FAN)

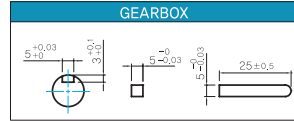


LEAD WIRE ASS'Y 300mm  
MOTOR UL STYLE NO.3271 AWG NO.22  
T.G UL STYLE NO.1430 AWG NO.24

● GEARBOX MODEL:  
9WD□BL/BR/BRL



● KEY SPEC



### WEIGHT

	PART	WEIGHT(Kg)
GEAR BOX	MOTOR	2,4
	9GBK2BMH ~ 9GBK15BMH	0,67
	9GBK18BMH ~ 9GBK30BMH	0,96
	9GBK36BMH ~ 9GBK200BMH	1,07
	9WD□BL/BR/BRL	1,0
	9XD10□□	0,5

### Motor Images

