

# B AC Motors

## S.C. Reversible Motor 40W (□90mm)

# 40W

Speed Control  
Reversible Motor  
40W(□90mm)

### Motor Specification

| Model<br>9SRDG*-40□: Gear Type Shaft<br>9SRDD*-40: D-Cut Type Shaft<br>9SRDK*-40: Key Type Shaft | Output<br>W | Voltage<br>V | Frequency<br>Hz | Poles | Duty   | Speed Range<br>r/min | Starting Torque |       | Permissible Torque |       |         |       | Capacitor<br>μF / VAC |
|--|-------------|--------------|-----------------|-------|--------|----------------------|-----------------|-------|--------------------|-------|---------|-------|-----------------------|
|  |             |              |                 |       |        |                      |                 |       | 1200r/min          |       | 90r/min |       |                       |
|  |             |              |                 |       |        |                      | kgfcm           | N.m   | kgfcm              | N.m   | kgfcm   | N.m   |                       |
| 9SRDGA-40□   | 40          | 1φ 110       | 60              | 4     | 30min. | 90-1700              | 2.00            | 0.200 | 2.90               | 0.290 | 1.20    | 0.120 | 16.0 / 250            |
| 9SRDGD-40□   | 40          | 1φ 220       | 60              | 4     | 30min. | 90-1700              | 2.00            | 0.200 | 2.90               | 0.290 | 1.20    | 0.120 | 4.0 / 400             |
| 9SRDGE-40□   | 40          | 1φ 220       | 50              | 4     | 30min. | 90-1400              | 1.70            | 0.170 | 2.50               | 0.250 | 0.70    | 0.070 | 3.0 / 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.

### 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    | 36    | 40    | 50    | 60    | 75    | 90    | 100   | 120   | 150   | 180   | 200   |       |       |
|----------------|---------------|-------|-------|-------|------------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 9SRDG<br>□-40G | 9GBK<br>□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  | 71.0  | 78.9  | 98.6  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |       |
|                |               |       |       |       | 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  | 6.96  | 7.73  | 9.66  | 9.80  | 9.80  | 9.80  | 9.80  | 9.80  | 9.80  | 9.80  | 9.80  | 9.80  | 9.80  |
|                |               |       | 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 | 71.0 | 78.9  | 98.6  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
|                |               | 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 | 6.96 | 7.73 | 9.66  | 9.80  | 9.80  | 9.80  | 9.80  | 9.80  | 9.80  | 9.80  | 9.80  | 9.80  | 9.80  | 9.80  | 9.80  | 9.80  |
|                |               | 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 | 73.4 | 81.6 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
|                |               | 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 | 7.20 | 8.00 | 9.80  | 9.80  | 9.80  | 9.80  | 9.80  | 9.80  | 9.80  | 9.80  | 9.80  | 9.80  | 9.80  | 9.80  | 9.80  | 9.80  |
|                | 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 | 29.4  | 32.6  | 40.8  | 49.0  | 61.2  | 73.4  | 81.6  | 97.9  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
|                |               |       |       | 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 | 2.88  | 3.20  | 4.00  | 4.80  | 6.00  | 7.20  | 8.00  | 9.60  | 9.60  | 9.60  | 9.60  | 9.60  | 9.60  | 9.60  |
|                |               | 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 | 29.4 | 32.6 | 40.8  | 49.0  | 61.2  | 73.4  | 81.6  | 97.9  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
|                |               | 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 | 2.88 | 3.20 | 4.00  | 4.80  | 6.00  | 7.20  | 8.00  | 9.60  | 9.60  | 9.60  | 9.60  | 9.60  | 9.60  | 9.60  | 9.60  | 9.60  |
|                |               | 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 | 17.1 | 19.0 | 23.8  | 28.6  | 35.7  | 42.8  | 47.6  | 57.1  | 71.4  | 85.7  | 85.7  | 85.7  | 85.7  | 85.7  | 85.7  | 85.7  |
|                |               | 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 | 1.68 | 1.87 | 2.33  | 2.80  | 3.50  | 4.20  | 4.66  | 5.60  | 7.00  | 8.40  | 8.40  | 8.40  | 8.40  | 8.40  | 8.40  | 8.40  |

| Motor Model    | Gearbox Model       | r/min | V     | Hz   | Gear Ratio | 10   | 12   | 15   | 18   | 25    | 30    | 36    | 50   | 60   |
|----------------|---------------------|-------|-------|------|------------|------|------|------|------|-------|-------|-------|------|------|
| 9SRDG□<br>-40W | 9WD□BL/<br>□BR/□BRL | 1200  | 110   | 60   | kgfcm      | 23.8 | 27.8 | 33.5 | 38.6 | 50.8  | 57.4  | 66.8  | 87.0 | 95.7 |
|                |                     |       |       |      | N.m        | 2.33 | 2.73 | 3.28 | 3.79 | 4.97  | 5.63  | 6.55  | 8.53 | 9.38 |
|                |                     |       | kgfcm | 24.1 | 28.9       | 36.1 | 43.3 | 60.2 | 72.2 | 86.7  | 120.4 | 122.4 |      |      |
|                |                     | N.m   | 2.36  | 2.83 | 3.54       | 4.25 | 5.90 | 7.08 | 8.49 | 11.79 | 12.00 |       |      |      |
|                |                     | kgfcm | 24.6  | 28.8 | 34.7       | 40.0 | 52.5 | 59.4 | 69.1 | 90.0  | 99.0  |       |      |      |
|                |                     | N.m   | 2.41  | 2.82 | 3.40       | 4.00 | 5.15 | 5.82 | 6.77 | 8.82  | 9.70  |       |      |      |
| 90             | 110                 | 60    | kgfcm | 9.8  | 11.5       | 13.9 | 16.0 | 21.0 | 23.8 | 27.6  | 36.0  | 39.6  |      |      |
|                |                     |       | N.m   | 0.96 | 1.13       | 1.36 | 1.57 | 2.06 | 2.33 | 2.71  | 3.53  | 3.88  |      |      |
|                | kgfcm               | 9.8   | 11.5  | 13.9 | 16.0       | 21.0 | 23.8 | 27.6 | 36.0 | 39.6  |       |       |      |      |
| N.m            | 0.96                | 1.13  | 1.36  | 1.57 | 2.06       | 2.33 | 2.71 | 3.53 | 3.88 |       |       |       |      |      |
| kgfcm          | 5.7                 | 6.7   | 8.1   | 9.3  | 12.3       | 13.9 | 16.1 | 21.0 | 23.1 |       |       |       |      |      |
| N.m            | 0.56                | 0.66  | 0.79  | 0.91 | 1.20       | 1.36 | 1.58 | 2.06 | 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.

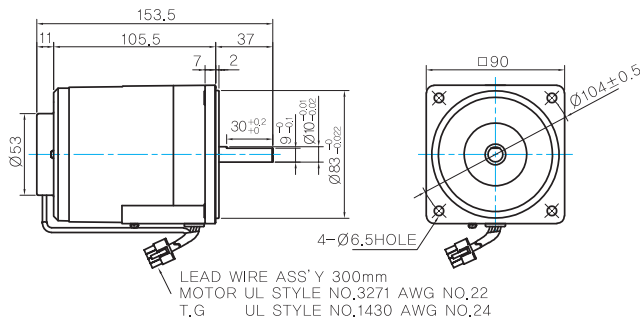
4) The rotating speed is calculated by dividing the motor's synchronous speed (50Hz: 1,500r/min, 60Hz: 1,800r/min) by the gear ratio.

The actual speed is 2~20% less than the displayed value, depending on the size of the load.

## Dimensions

### MOTOR ONLY

- MOTOR MODEL: 9SRDD□-40 (NO FAN)



### MOTOR OUTPUT SHAFT

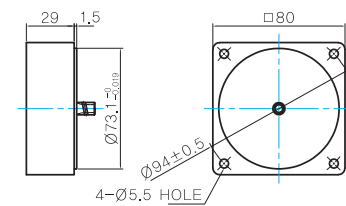
| MODEL      | SPEC |
|------------|------|
| D-CUT TYPE |      |
| 9SRDD□-40  |      |
| KEY TYPE   |      |
| 9SRDK□-40  |      |

### KEY SPEC

| GEARBOX |
|---------|
|         |

### INTER-DECIMAL GEARBOX

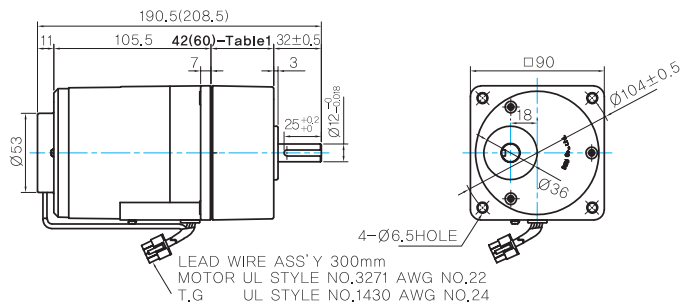
- MODEL: 9XD10□□



## GEARED MOTOR

### G TYPE GEARBOX

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



### GEARBOX OUTPUT SHAFT

| MODEL    | SPEC |
|----------|------|
| KEY TYPE |      |

### KEY SPEC

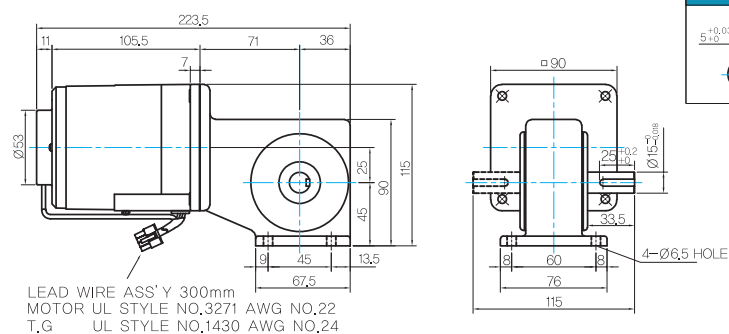
| GEARBOX |
|---------|
|         |

### 42(60)-Table1

| SIZE(mm) | GEAR RATIO              |
|----------|-------------------------|
| 42       | 9GBK2BMH - 9GBK18BMH    |
| 60       | 9GBK25BMH - 9GBK2000BMH |

### W TYPE GEARBOX

- MOTOR MODEL: 9SRDG□-40W (NO FAN)
- GEARBOX MODEL: 9WD□BL/BR/BRL



### KEY SPEC

| GEARBOX |
|---------|
|         |

### WEIGHT

| PART     | WEIGHT(Kg)                |      |
|----------|---------------------------|------|
| MOTOR    | 2.5                       |      |
| GEAR BOX | 9GBK2BMH<br>~ 9GBK15BMH   | 0.67 |
|          | 9GBK18BMH<br>~ 9GBK30BMH  | 0.96 |
|          | 9GBK36BMH<br>~ 9GBK200BMH | 1.07 |
|          | 9WD□BL/BR/BRL             | 1.0  |
|          | 9XD10□□                   | 0.5  |

## Motor Images

