Electro-Magnetic Brake Motor / Three Phase Induction

Motor

M8MA25GB4Y 4P 25W 25/200 220V

Scale 1/4 Unit mm

Weight 1.75kg helical gear module 0.6 number of teeth 11

Motor lead wire 300mm
Electromagnetic brake lead wire 300mm

M9MA40GB4Y 4P 40W 200 220V

Scale 1/4 Unit mm

Weight 2.95kg helical gear module 0.6 number of teeth 11

Motor lead wire 300mm
Electromagnetic brake lead wire 300mm

Connecting Diagram

R1 C1 Yellow
R1 C2 White
R2 C1 grey
R2 C2 Black

Counter Clock wise

As for CW rotation, change the 2 leads among R. S. T. shown above.
(Caution 1) The brake operates to a holding condition when the electromagnetic brake is 'off'.
(Caution 2) Use R1+C1 inbetween the contacts.
Also OV-OPOOBIs available as an option.

Gear Head

M8GA□M (metal bearing type) weight 0.68kg
M8GA□B (ball bearing type)

Note: The value in '()' is for gear ratio of 1/20 or larger.

M9GA□M (metal bearing type) weight 1.2kg
M9GA□B (ball bearing type)

Note: The value in '()' is for gear ratio of 1/20 or larger.

Key and Key Slot

M8GA□M(B)
M9GA□M(B)

Specifications

<table>
<thead>
<tr>
<th>Size</th>
<th>Type</th>
<th>Type</th>
<th>Output (W)</th>
<th>Voltage (V)</th>
<th>Frequency (Hz)</th>
<th>Duty</th>
<th>Rated load (Kg-m)</th>
<th>Starting Torque (Kg-m)</th>
<th>Brake torque (Kg-m)</th>
<th>Brake current (A)</th>
<th>Brake power (W)</th>
<th>Applied gearhead type</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>M8MA25GB4Y</td>
<td>4</td>
<td>250</td>
<td>100</td>
<td>50</td>
<td>CONT.</td>
<td>4.60 1325 1.8 0.56 5.2 6 0.06 1</td>
<td>0.3 2.7 1.10 3.8 7 0.07 2</td>
<td>0.27 1675 2.3 1.00 6.6 7 0.07 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>M9MA40GB4Y</td>
<td>4</td>
<td>400</td>
<td>100</td>
<td>50</td>
<td>CONT.</td>
<td>6.60 1400 2.9 1.10 6.6 7 0.07 2</td>
<td>0.27 1675 2.3 1.00 6.6 7 0.07 2</td>
<td>0.27 1675 2.3 1.00 6.6 7 0.07 2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MD8GA□M M8GA□B M9GA10XM
MD9GA□M M9GA□B M9GA10XM
### Geared Motor Maximum Permissible Torque Table [kg·cm]

Note: rpm figures are based on synchronous speed. The actual output rpm, under rated torque conditions, is about 2~20% less than synchronous speed. A grey background indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor. A white background indicates rotation in the opposite direction.

#### GEAR HEAD

With decimal gearhead

| Speed (rpm) | 500 | 300 | 200 | 180 | 150 | 120 | 100 | 90  | 75  | 60  | 50  | 40  | 30  | 20  | 15  | 10  | 9   | 7.5 | 6   | 5   | 3   | 2   | 1.5| 1   |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gear reduction ratio 50Hz 60Hz | 3 | 5 | 3.6 | 6 | 9 | 10 | 11 | 12.5 | 16 | 15 | 18 | 20 | 21 | 26 | 20 | 30 | 32 | 45 | 65 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 |
| Maximum permissible torque (kg·cm) | 4.0 | 6.7 | 7.5 | 10 | 11 | 13 | 16 | 20 | 21 | 26 | 32 | 39 | 65 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 |
| Maximum permissible torque (kg·cm) | 6.7 | 11 | 16 | 18 | 23 | 28 | 33 | 36 | 45 | 54 | 65 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Note: The box (□) represents the desired gear reduction ratio, which thereby becomes part of the code for geared motor.
Electro-Magnetic Brake Motor / Three Phase Induction

Motor

M9MC60GB4Y 4P 60W 200-220V

Motor lead wire 300mm
Electromagnetic brake lead wire 300mm

Gear Head

M9GC□B (ball bearing type) 1.5kg

Scale 1/4 Unit mm

C type 200kg·cm/max. permissible torque
S type 300kg·cm/max. permissible torque

M9GS□B (ball bearing type)

Scale 1/4 Unit mm

Connecting Diagram

Key and Key Slot

M9GC□B
M9GS□B

Type
A
B
C
D
E
M9GC□B 25 5 0.030 6 0.030 5 +0.050 0 12 0.15
M9GS□B 30 6 0.030 6 0.030 6 +0.050 0 14.5 0.15

Specifications

| Size mm² | Type   | poles | Output (W) | Voltage (V) | Frequency (Hz) | Duty | Rated load | Starting current | Starting torque | Brake current | Brake torque | Capacitor (μF) | Applied gearhead type |
|---------|--------|-------|------------|-------------|----------------|------|------------|------------------|----------------|---------------|-------------|--------------|----------------|-----------------------|
| 90      | M9MC60GB4Y | 4     | 60         | 200         | 50 CONT.       | 101  | 0.44       | 1350             | 4.3            | 1.4           | 10          | 7            | 0.07 4       | M9GC□B                  |
|         |        |       | 60         | 220         | 50 CONT.       | 97   | 0.40       | 1625             | 3.6            | 1.2           | 7           | 3            | 0.07 4       | M9GC18XB                |
| 90      | M9MC90GB4Y | 4     | 90         | 200         | 50 CONT.       | 101  | 0.46       | 1400             | 4.2            | 1.5           | 12          | 7            | 0.07 4       | M9GS□B                  |
|         |        |       | 60         | 220         | 50 CONT.       | 97   | 0.40       | 1675             | 3.5            | 1.4           | 8.6         | 7            | 0.07 4       | M9GS18XB                |
Geared motor maximum permissible torque table [kg·cm]

Note: rpm figures are based on synchronous speed. The actual output rpm, under rated torque conditions, is about 2–20% less than synchronous speed. A grey background indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor. A white background indicates rotation in the opposite direction.

- Gear head

| Speed (rpm) | 500 | 300 | 200 | 180 | 160 | 150 | 120 | 100 | 90 | 80 | 75 | 60 | 50 | 40 | 30 | 20 | 15 | 10 | 9 | 7.5 | 5 | 5 | 3 | 2 | 1.5 | 1 | 0.9 | 0.75 |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Maximum permissible torque (kg·cm) | 10 | 16 | 24 | 27 | 32 | 40 | 48 | 54 | 64 | 77 | 93 | 155 | 200 | 300 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| Maximum permissible torque (kg·cm) | 14 | 23 | 35 | 38 | 46 | 58 | 69 | 77 | 92 | 111 | 133 | 206 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 | 200 |

Note: The box (□) represents the desired gear reduction ratio, which thereby becomes part of the code for geared motor.