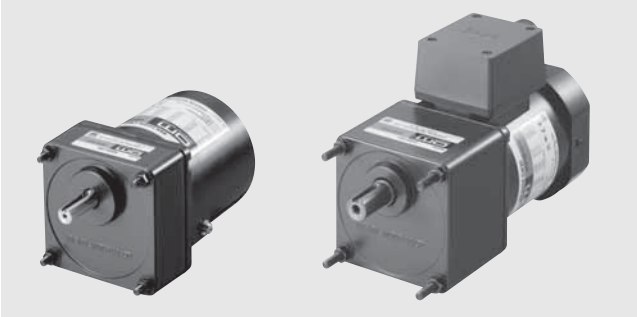
RoHS RoHS-Compliant

Reversible Motors



Features

Optimal for Bi-Directional Operation

These are 30 minutes rated motors that can change directions instantaneously. They are designed for applications where reversal of direction is frequently required.

*30 minutes rating: The motors may be operated continuously for 30 minutes, but depending on operating conditions (intermittent operation, etc), they can be operated for more than 30 minutes.

Safety Standards and CE Marking

Standards	Certification Body	Standards File No.	CE Marking
UL 1004 UL 2111	UL	E64199 (1 W～6 W Type) E64197 (15 W～90 W Type)	Low Voltage Directives
CSA C22.2 No.100 CSA C22.2 No.77			
EN 60950-1 EN 60034-1 EN 60034-5 IEC 60664-1	Conform to EN/IEC Standards		
GB 12350	CQC	2005010401150787 (Single-Phase 1 W Type) 2003010401091525 (Single-Phase 6 W Type) 2003010401091522 (Single-Phase 15 W～90 W Type)	

●When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

System Configuration

Mounting Brackets (Accessories)
(➜ Page 121)

Flexible Couplings (Accessories)
(➜ Page 123)

Brake Pack
SB50W (Sold separately)
Equipped with instantaneous stopping functions, thermal protector open detection functions.
(➜ Page 114)

Right-Angle Gearheads (Sold separately)
(➜ Page 108)

Motor

AC Power Supply

Gearheads (Sold separately)

Capacitor Cap* (Included)
Insulating cap for capacitor terminal section.

Capacitor (Included)

●Example of System Configuration

(Body) (Sold separately)

Motor (Pinion Shaft)		Long Life/Low Noise GN-S Gearhead	Mounting Bracket	Flexible Coupling
4RK25GN-CW2E	+	4GN25S	SOL4M5	MCL301012
		◎	○	○

◎: Required under this system.
○: Selectable according to necessity. Oriental Motor provides.
*Capacitor cap is included.

● The system configuration shown above is an example. Other configurations are available.

Product Number Code

●Motor

5 R K 40 GN - CW 2 T E
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

①	Motor Frame Size	**0**: 42 mm **2**: 60 mm **3**: 70 mm **4**: 80 mm **5**: 90 mm
②	Motor Type	**R**: Reversible Motor
③	Series	**K**: **K** Series
④	Output Power (W)	(Example) **40**: 40 W
⑤	Motor Shaft Type	**GN**: **GN** Type Pinion Shaft **GE**: **GE** Type Pinion Shaft **A**: Round Shaft
⑥	Power Supply Voltage	**AW**: Single-Phase 100 VAC, 110/115 VAC **CW**: Single-Phase 200 VAC, 220/230 VAC
⑦	**2**, **3**: RoHS-Compliant	
⑧	**T**: Terminal Box Type	
⑨	Included Capacitor	**J**: For Single-Phase 100 VAC, 200 VAC **U**: For Single-Phase 110/115 VAC **E**: For Single-Phase 220/230 VAC

● The **J**, **U** and **E** at the end of the model name indicate that the unit includes a capacitor. These letters are not listed on the motor nameplate. When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.
(Example) Model: **5RK40GN-CW2E** ➜ Motor nameplate and product approved under various safety standards: **5RK40GN-CW2**

●Gearhead

5 GN 50 S
① ② ③ ④

①	Gearhead Frame Size	**0**: 42 mm **2**: 60 mm **3**: 70 mm **4**: 80 mm **5**: 90 mm	
②	Type of Pinion	**GN**: **GN** Type Pinion **GE**: **GE** Type Pinion	
③	Gear Ratio	(Example) **50**: Gear Ratio of 1:50 **10X** denotes the decimal gearhead of gear ratio 1:10	
④	**GN** Type Pinion	**S**: Long Life/Low Noise **GN-S** Gearhead, RoHS-Compliant **RH**: Right-Angle/Hollow Shaft Gearhead, RoHS-Compliant	**K**: **GN-K** Gearhead **RA**: Right-Angle/Solid Shaft Gearhead, RoHS-Compliant
	GE Type Pinion	**S**: Long Life **GE-S** Gearhead **RH**: Right-Angle/Hollow Shaft Gearhead, RoHS-Compliant	**RA**: Right-Angle/Solid Shaft Gearhead, RoHS-Compliant

*__GN-K__ gearhead of frame size 42 mm complies to RoHS directive.

General Specifications of Motors

1 W Type

Item	Specifications
Insulation Resistance	100 MΩ or more when 500 VDC megger is applied between the windings and the frame after rated motor operation under normal ambient temperature and humidity.
Dielectric Strength	Sufficient to withstand 1.5 kV at 50 Hz or 60 Hz applied between the windings and the frame for 1 minute after rated motor operation under normal ambient temperature and humidity.
Temperature Rise	Temperature rise of windings are 75˚C or less measured by the resistance change method after rated motor operation under normal ambient temperature and humidity, with connecting a gearhead or equivalent heat radiation plate*.
Insulation Class	UL/CSA standards: Class A (105˚C), EN standards: Class E (120˚C)
Overheat Protection	Impedance protected
Ambient Temperature	−10˚C～+40˚C (nonfreezing)
Ambient Humidity	85% or less (noncondensing)
Degree of Protection	IP20

6 W～90 W Type

Item	Specifications
Insulation Resistance	100 MΩ or more when 500 VDC megger is applied between the windings and the frame after rated motor operation under normal ambient temperature and humidity.
Dielectric Strength	Sufficient to withstand 1.5 kV at 50 Hz or 60 Hz applied between the windings and the frame for 1 minute after rated motor operation under normal ambient temperature and humidity.
Temperature Rise	Temperature rise of windings are 80˚C or less measured by the resistance change method after rated motor operation under normal ambient temperature and humidity, with connecting a gearhead or equivalent heat radiation plate*. However, a heat radiation plate that is 200×200 mm with a thickness of 5 mm is necessary even when the gearhead is connected for the 90 W type (200 VAC, 220/230 VAC).
Insulation Class	Class B (130˚C)
Overheat Protection	6 W type has impedance protection. All others have built-in thermal protector (automatic return type) Operating temperature; open: 130˚C±5˚C, close: 82˚C±15˚C
Ambient Temperature	Single-phase 100 VAC, Single-phase 200 VAC: −10˚C～+50˚C (nonfreezing) Other voltage: −10˚C～+40˚C (nonfreezing)
Ambient Humidity	85% or less (noncondensing)
Degree of Protection	Lead Wire Type: IP20 Terminal Box Type: 6 W Type IP65 (excluding the installation surface of the round shaft type) 25 W, 40 W, 60 W, 90 W Type IP40

*Heat radiation plate (Material: Aluminum)

Motor Type	Size (mm)	Thickness (mm)
1 W Type	80×80	5
6 W Type	115×115	
15 W Type	125×125	
25 W Type	135×135	
40 W Type	165×165	
60 W Type 90 W Type (100 VAC, 110/115 VAC)	200×200	
90 W Type (200 VAC, 220/230 VAC)	200×200	10