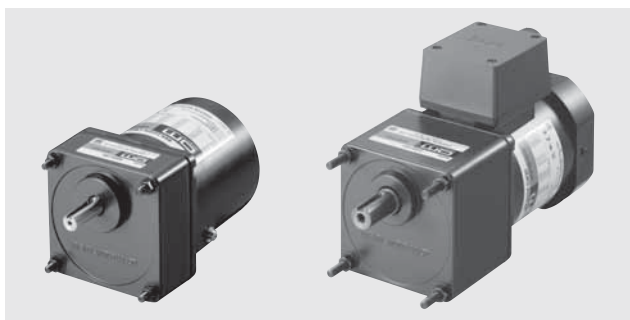


Induction Motors



Features

● Optimal for Uni-Directional Continuous Operation

Induction motors are optimal for uni-directional continuous operation such as a conveyor system.

Safety Standards and CE Marking

Standards	Certification Body	Standards File No.	CE Marking
UL 1004 UL 2111 CSA C22.2 No.100 CSA C22.2 No.77	UL	E64199 (1 W~6 W Type) E64197 (15 W~150 W Type)	Low Voltage Directives
EN 60950-1 EN 60034-1 EN 60034-5 IEC 60664-1		Conform to EN/IEC Standards	
GB 12350	CQC	2005010401150786 (Single-Phase 1 W, 3 W Type) 2003010401091525 (Single-Phase 6 W Type) 2003010401091527 (Three-Phase 6 W Type) 2003010401091522 (Single-Phase 15 W~90 W Type) 2003010401091520 (Three-Phase 25 W~90 W Type) 2005010401150785 (2-Pole, High-Speed Type, Single-Phase 40 W~150 W Type) 2005010401150788 (2-Pole, High-Speed Type, Three-Phase 60 W~150 W Type)	


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

● The following products are not applicable to the table above.


**4IK25GN-UT4, 4IK25A-UT4, 5IK40GN-UT4, 5IK40A-UT4,
5IK60GE-UT4F, 5IK60A-UT4F, 5IK90GE-UT4F, 5IK90A-UT4F**

Standards	Certification Body	Standards File No.	CE Marking
EN 60950-1 EN 60034-1 EN 60034-5 IEC 60034-11	TÜV Rheinland	R50079501	Low Voltage Directives


System Configuration



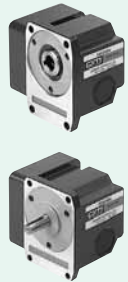
**Mounting Brackets
(Accessories)**
(→ Page 121)



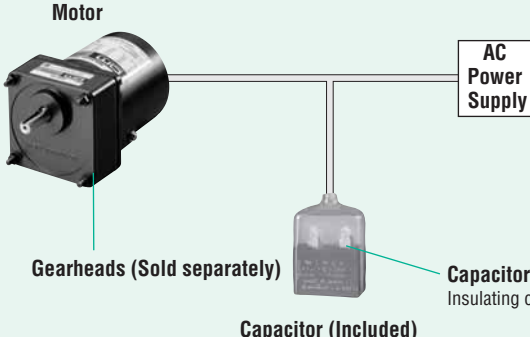
Flexible Couplings (Accessories)
(→ Page 123)



**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
4IK25GN-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 I 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	I: Induction 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/ Number of Poles	AW: Single-Phase 100 VAC, 110/115 VAC 4-Pole BW: Single-Phase 100 VAC, 110/115 VAC 2-Pole CW: Single-Phase 200 VAC, 220/230 VAC 4-Pole DW: Single-Phase 200 VAC, 220/230 VAC 2-Pole SW: Three-Phase 200/220/230 VAC 4-Pole TW: Three-Phase 200/220/230 VAC 2-Pole U: Three-Phase 400 VAC 4-Pole		
⑦	2, 3: RoHS-Compliant			
⑧	T, T4, T4F: 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 Blank: Three-Phase Type		

● 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: **5IK40GN-CW2E** → Motor nameplate and product approved under various safety standards: **5IK40GN-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 K: GN-K Gearhead RH: Right-Angle/Hollow Shaft Gearhead, RoHS-Compliant 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, 3 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 ^{*1} .
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, 2-Pole, High-Speed 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 (three-phase 400 VAC: 2 kV) at 50 Hz and 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 under normal ambient temperature and humidity, after rated motor operation with connecting a gearhead or equivalent heat radiation plate ^{*1} . (Three-phase type: 70°C or less)
Insulation Class ^{*2}	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, Three-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 (Pinion Shaft Type) IP54 25 W, 40 W, 60 W, 90 W Type (Round Shaft Type) IP40

*1 Heat radiation plate (Material: Aluminum)

Motor Type	Size (mm)	Thickness (mm)
1 W, 3 W Type	80×80	5
6 W Type	115×115	
15 W Type	125×125	
25 W Type (2-Pole, High-Speed 4IK40 Type, 4IK60 Type)	135×135	
40 W Type (2-Pole, High-Speed 5IK60 Type)	165×165	
60 W, 90 W, 150 W Type	200×200	

*2 The following products are recognized as class E (120°C).

**4IK25GN-UT4, 4IK25A-UT4, 5IK40GN-UT4, 5IK40A-UT4,
5IK60GE-UT4F, 5IK60A-UT4F, 5IK90GE-UT4F, 5IK90A-UT4F**