

Item # 3IK15UA-9A, 15 W (1/50 HP) Induction Gear Motor (9:1 Gear Ratio, Single-Phase 110/115 VAC)

The next generation KII Series offers higher strength gears that maximize motor performance with ease of use wiring and mounting, all at affordable prices.

Higher Permissible Torque

Long Life (Rated life 10,000 hours)

Low Noise

Combination Type (motor and gearhead come pre-assembled)



[Specifications](#) | [Dimensions](#) | [Capacitor](#) | [Connection](#) | [Product Number](#) | [System](#)

Specifications

Lead Time¹	Contact your local sales office for product lead-times, available to ship dates and shipping methods.
Product Line	Oriental Motor ®
Motor Type	Induction
Frame Size	2.76 in
Output Power	15 W (1/50 HP)
Voltage (VAC)	Single-Phase 110/115 VAC
Frequency (Hz)	60
Current	0.31 A
Electromagnetic Brake	Not Equipped
Type	Lead Wire
Shaft/Gear Type	Parallel Shaft Gearhead
Gear Ratio (X:1)	9 :1
Output Shaft Diameter	1/2 in.
Rated Torque	7.5 lb-in
Rated Speed (rpm)	200
Permissible Load Inertia	62.37 oz-in ²
Permissible Overhung Load	0.39 in. from Shaft End = 45 lb 0.79 in. from Shaft End = 67 lb
Permissible Thrust Load	18 lb
Components	3IK15GV-UA [Motor] 3GV9A [Gearhead]

RoHS Compliant	Yes
Safety Standards	UL CCC CE
CE Marking	Low Voltage Directives
Insulation Resistance	100 M Ω or more when 500 VDC megger is applied between the windings and the case after continuous 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 case for 1 minute after continuous operation under normal ambient temperature and humidity.
Temperature Rise	Temperature rise of windings are 176°F (80°C) or less measured by the resistance change method after rated operation under normal ambient temperature and humidity.
Thermal Class	130 (B)
Overheat Protection	Built-in thermal protector (automatic return type). Open: 266 \pm 9°F (130 \pm 5°C) Close: 185 \pm 36°F (85 \pm 20°C)
Ambient Temperature Range	14°F ~ 104°F (-10°C ~ 40°C) (nonfreezing)
Ambient Humidity	85% or less (noncondensing)
Degree of Protection	IP20

Dimensions

Dimensions Unit = mm (in.)

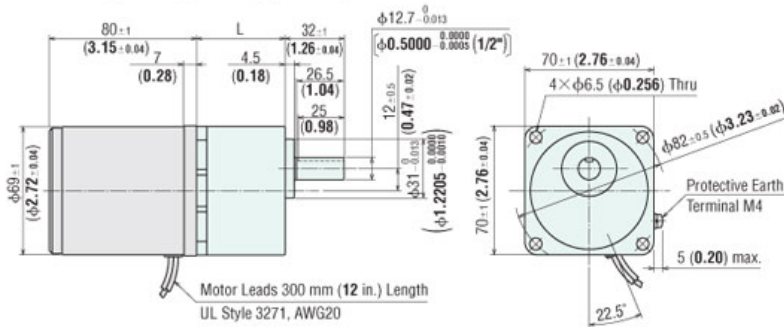
● Mounting screws are included.

● 15 W (1/50 HP)

◇ Motor/Gearhead (Lead Wire Type)

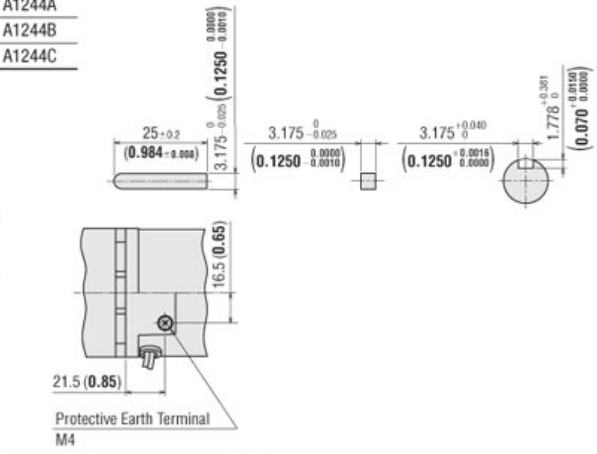
Product Name	Motor Product Name	Gearhead Product Name	Gear Ratio	L	CAD
3IK15 □-□A	3IK15GV-□	3GV□A	5~25	38 (1.50)	A1244A
			30~120	43 (1.69)	A1244B
			150~360	48 (1.89)	A1244C

Mass: 1.7 kg (3.7 lb.) (Including gearhead)



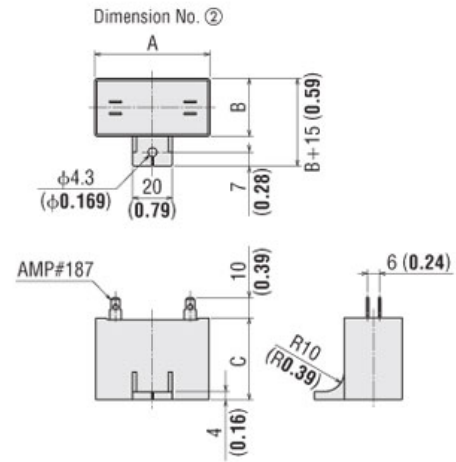
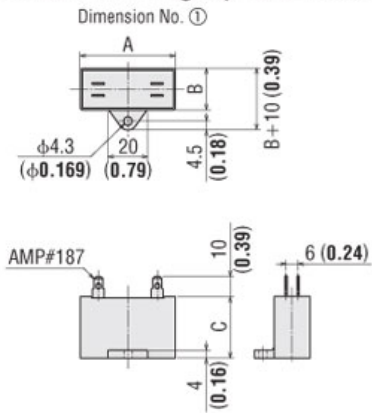
◇ Key and Key Slot

(The key is included with the gearhead)



Capacitor

● Capacitor (Included with single-phase motors)



● Capacitor Dimensions Unit = mm (in.)

◇ Induction Motor

Product Name		Capacitor Product Name	A	B	C	Mass g (oz.)	Capacitor μ F	Dimension No.
Lead Wire Type	Terminal Box Type							
2IK6UA-□A	—	CH25FAUL2	31 (1.22)	17 (0.67)	27 (1.06)	21 (0.74)	2.5	①
2IK6UC-□A	—	CH06BFAUL	31 (1.22)	14.5 (0.57)	23.5 (0.93)	18 (0.64)	0.6	
3IK15UA-□A	—	CH40FAUL2	31 (1.22)	17 (0.67)	27 (1.06)	22 (0.78)	4	
3IK15UC-□A	—	CH10BFAUL	37 (1.46)	18 (0.71)	27 (1.06)	27 (0.95)	1	
4IK25UA-□A	4IK25UAT-□A	CH60CFAUL2	38 (1.50)	21 (0.83)	31 (1.22)	35 (1.24)	6	
4IK25UC-□A	4IK25UCT-□A	CH15BFAUL	38 (1.50)	21 (0.83)	31 (1.22)	37 (1.31)	1.5	
5IK40UA-□A	5IK40UAT-□A	CH90CFAUL2	48 (1.89)	22.5 (0.89)	31.5 (1.24)	45 (1.59)	9.0	②
5IK40UC-□A	5IK40UCT-□A	CH20BFAUL	48 (1.89)	19 (0.75)	29 (1.14)	36 (1.27)	2.0	
5IK60UA-□A	5IK60UAT-□A	CH160CFAUL2	58 (2.28)	23.5 (0.93)	37 (1.46)	71 (2.50)	16	
5IK60UC-□A	5IK60UCT-□A	CH40BFAUL	58 (2.28)	23.5 (0.93)	37 (1.46)	73 (2.6)	4	
5IK90UA-□A	5IK90UAT-□A	CH200CFAUL2	58 (2.28)	29 (1.14)	41 (1.61)	91 (3.2)	20	
5IK90UC-□A	5IK90UCT-□A	CH50BFAUL	58 (2.28)	29 (1.14)	41 (1.61)	93 (3.3)	5	

● A capacitor cap is included with the capacitor.

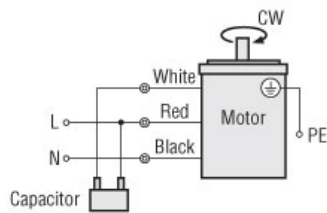
■ Connection Diagram

- The rotation direction of the motor is as viewed from the output shaft of the motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- The rotation direction of the gearhead output shaft may differ from that of the motor output shaft depending on the gear ratio of the gearhead. Refer to the permissible torque table for the rotation direction.

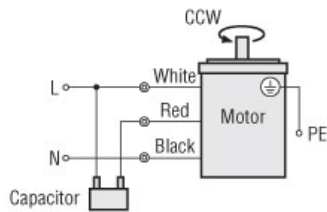
● Induction Motor

Single-Phase 110/115 VAC
Single-Phase 220/230 VAC

Clockwise



Counterclockwise



Note

- Change the direction of single-phase motor rotation only after bringing the motor to a stop. If an attempt is made to change the direction of rotation while the motor is rotating, the motor may ignore the reversing command or change its direction of rotation after some delay.

Product Number

Right-Angle Hypoid Gear

5 I K 90 K JA - 5 H 10 B

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

Motor Product Name

Gearhead Product Name

Motor Product Name	① Motor Frame Size	4 : 80 mm (3.15 in.) 5 : 90 mm (3.54 in.)
	② Motor Type	I: Induction Motor
	③ Series	K: KII Series
	④ Output Power (W)	(Example) 90: 90 W (1/8 HP)
	⑤ Motor Shaft Type	K: Round Shaft Type (with Key)
	⑥ Power Supply Voltage/ Number of Poles	JA: Single-Phase 100 VAC 4-Pole JC: Single-Phase 200 VAC 4-Pole
Gearhead Product Name	⑦ Gearhead Frame Size	4 : 80 mm (3.15 in.) 5 : 90 mm (3.54 in.)
	⑧ Type of Gearhead	H: Right-Angle Hollow Shaft Hypoid JH Gear L: Right-Angle Solid Shaft Hypoid JL Gear
	⑨ Gear Ratio	Number: Gear Ratio for Gearhead
	⑩ Materials of Output Shaft	B: Steel

Parallel Shaft Gearhead GV Gear

5 I K 40 JA T2 - 100 S

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

Round Shaft Type

5 I K 40 A S - JA T2

① ② ③ ④ ⑦ ⑧ ⑤ ⑥

① Motor Frame Size	② Motor Type	I: Induction Motor
	③ Series	K: KII Series
	④ Output Power (W)	(Example) 40: 40 W (1/19 HP)
	⑤ Power Supply Voltage/ Number of Poles	JS, SW: Three-Phase 200/220/230 VAC 4-Pole JA: Single-Phase 100 VAC 4-Pole JC: Single-Phase 200 VAC 4-Pole UA: Single-Phase 110/115 VAC 4-Pole GC: Single-Phase 220/230 VAC(50 Hz) 4-Pole UC: Single-Phase 220/230 VAC(60 Hz) 4-Pole
⑥ T2: Terminal Box Type Blank: Lead Wire Type	⑦ Gear Ratio, Motor Shaft Type	Number: Gear Ratio for Gearhead A: Round Shaft Type
	⑧ Materials of Output Shaft	Blank: Steel S: Stainless

System Configuration

KII Series

Combination Type
(Motor/Gearhead)



Capacitor Cap
(Included)

Capacitor (Included)

AC Power Supply
(Main power supply)

Peripheral Equipment
(Sold separately)

Brake Pack
SB50W



Accessories (Sold separately)



Mounting Brackets



Flexible Couplings