Oriental motor



Standard AC Motor

Equipped with a High-Performance Gearhead New Global Standard

KII Series



Our New Standard in Geared AC Motors, the KII Series.

Oriental Motor, which has set the standard for AC motors, listened and has sought out the next generation in AC motors. The **KII** Series offers higher strength gears that maximizes motor performance with ease of use wiring and mounting, all at affordable prices. These are the characteristics of the new standard in AC motors, the next generation **KII** Series.



The new KII Series AC motors, equipped with the highest strength gearheads are now available at affordable prices.

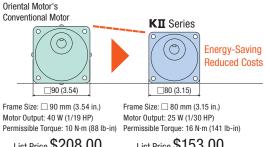
The Strength Has Changed.

The gear strength has increased in order to maximize the performance of the motor.

High Permissible Torque

The maximum permissible torque has doubled compared to conventional products thanks to increased gear strength* which provides a torque range that exceeds anything previously offered. Down sizing is also possible by switching the motors used in the past to the **KII** Series. If a small motor is selected, power consumption can be suppressed and costs can be reduced. *Triple in 40 W products

Down sizing is possible with the same output torque



rmissible Torque: 10 N·m (88 lb-in) Permissible Torque: 16 N·m (141 lb-in)

List Price \$208.00 List Price \$153.00

High Strength

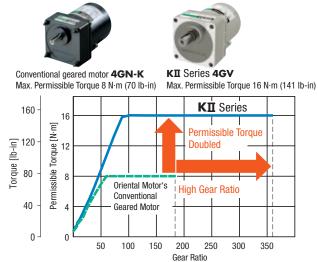
Permissible overhung load and permissible thrust load have doubled compared to conventional products*. This has been made possible by increasing the case rigidity, adding larger diameter bearings and improved gear strength through heat treatment.

*The same in some products



Geared motors with twice the permissible torque compared to conventional geared motors and now with higher gear ratios

• 25 W (1/30 HP) Gearhead Output (Permissible) Torque



Permissible overhung load and permissible thrust load have doubled compared to conventional products



Conventional Geared Motor **4GN-K** Max. Permissible Overhung Load $200\ N\ (45\ lb.)$ Permissible Thrust Load $50\ N\ (11.2\ lb.)$



KI Series 4GV
Max. Permissible Overhung Load
450 N (101 lb.)
Permissible Thrust Load
100 N (22 lb.)

The Performance Has Changed.

Gear strength, performance and user-friendliness has increased.

Long Life

The gearhead ball bearing diameter has increased, resulting in doubling the life of the gearhead (10,000 hours compared to the rated life of 5,000 hours of conventional gearheads). Performing maintenance has decreased as a result of the longer life.

Quiet

The motor and gearhead noise (meshing sound) has decreased by approximately 6 dB compared to conventional motors. Put into perspective, the noise level has decreased by 50%.

Combination Type

The motor and gearhead come preassembled and ready to install. Concerns of damage resulting from improper gearhead installation leading to abnormal noise in the shaft are eliminated.

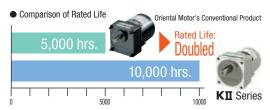
High Gear Ratio

Decimal gearheads were once required for gear ratios above 1:180. Now a single gearhead is available (up to 1:360), saving space and reducing components and costs.

Tap Output Shaft

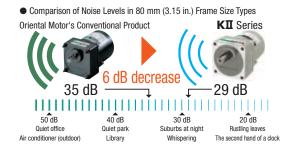
An end tap has been integrated into the tip of the output shaft of gearheads, with a rated output power of 25 W (1/30 HP) and higher. The tap can be used to prevent pulleys and other transmission mechanism from slipping.

The rated life has doubled compared to conventional products



Rated Life: Please visit the following link for Oriental Motor's definition. www.orientalmotor.com/support/service-life.html

The gearhead noise has been decreased by 6 dB compared to conventional products



Easy installation thanks to the preassembled motor and gearhead



What is a combination type?

This type comes with the motor and gearhead pre-assembled with dedicated screws. Replacing or changing the gearhead is possible.

No decimal gearhead is required, allowing the total length to be shortened

• 25 W (1/30 HP) gear ratio 1/360

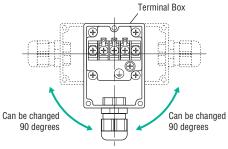
Gear ratio of decimal gear 1/10 Gear ratio 1/36

159.5 mm (6.28 in.) Oriental Motor's (0.93 in.) Conventional Product Short



■Terminal Box Type

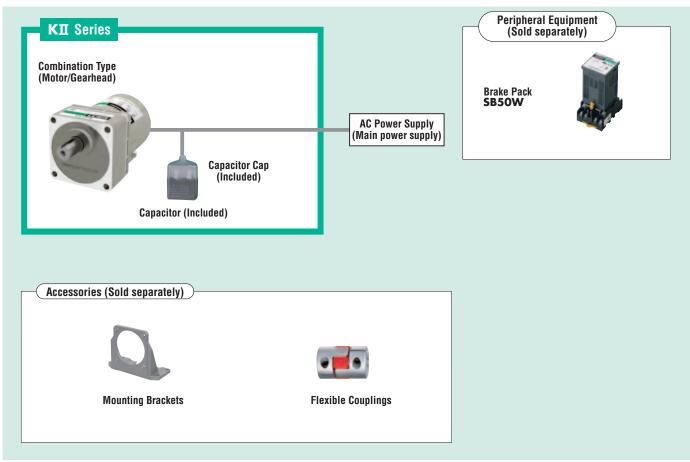
The cable outlet can be changed to three different directions. This can be changed to suit the installation requirements.



Fixed position when shipped



System Configuration



●Example of System Configuration

KII Series		Sold Separately			
Combination Type	+	Brake Pack	Mounting Bracket	Flexible Coupling	
4IK25UA-360A	·	SB50W	SOL4UAF	MCL40F10F10	

The system configuration shown above is an example. Other combinations are available. Motors and gearheads are also available separately.

Product Line



☐ 60 mm (2.36 in.) 6 W (1/125 HP)



☐ 70 mm (2.76 in.) 15 W (1/50 HP)



□ 80 mm (3.15 in.) 25 W (1/30 HP)



90 mm (3.54 in.) 40 W (1/19 HP)



□ 90 mm (3.54 in.) 60 W (1/12 HP)



90 mm (3.54 in.) 90 W (1/8 HP)

Product Line	Voltage (VAC)	Output Power					
Froduct Line		6 W (1/125 HP)	15 W (1/50 HP)	25 W (1/30 HP)	40 W (1/19 HP)	60 W (1/12 HP)	90 W (1/8 HP)
Induction Motor	Single-Phase 110/115	•	•	•	•	•	•
muuction wotoi	Single-Phase 220/230	•	•	•	•	•	•

Product Number

4 I K 25 UA T - 12.5 A

T ! !			U/		12.5	
1) 2	3	4	(5)	6	7	8

1	Motor Frame Size	2: 60 mm (2.36 in.) 3: 70 mm (2.76 in.) 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) 25 : 25 W (1/30 HP)
(5)	Power Supply Voltage	UA: Single-Phase 110/115 VAC UC: Single-Phase 220/230 VAC
6	T: Terminal Box Type	
7	Gear Ratio	
8	A: Imperial	

◇Pinion Shaft Motor

4 I K 25 GV - UA T

(1) (2) (3) (4) (5)	6 7
1	Motor Frame Size	2 : 60 mm (2.36 in.) 3 : 70 mm (2.76 in.) 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) 25 : 25 W (1/30 HP)
(5)	Motor Shaft Type	GV: GV Type Pinion Shaft GVH: GVH Type Pinion Shaft GVR: GVR Type Pinion Shaft
6	Power Supply Voltage	UA: Single-Phase 110/115 VAC UC: Single-Phase 220/230 VAC
7	T: Terminal Box Type	

\Diamond Gearhead

4 GV 12.5 A

_			
1	2	3	4

1	Motor Frame Size	2 : 60 mm (2.36 in.) 3 : 70 mm (2.76 in.) 4 : 80 mm (3.15 in.) 5 : 90 mm (3.54 in.)			
2	Motor Shaft Type	GV: GV Type Pinion Shaft GVH: GVH Type Pinion Shaft GVR: GVR Type Pinion Shaft			
3	Gear Ratio				
(4)	A: Imperial				

General Specifications

Induction Motor

Item	Specification
Insulation Resistance	100 MΩ or more when 500 VDC megger is applied between the windings and the case after rated operation under normal ambient temperature and humidity.
Dielectric Strength	Sufficient to withstand 1.5 kVAC at 50 Hz or 60 Hz applied between the windings and the case for 1 minute after rated operation under normal ambient temperature and humidity.
Temperature Rise	Temperature rise of windings are 80°C (176°F) or less measured by the resistance change method after rated operation under normal ambient temperature and humidity.
Thermal Class	130 (B)
Overheat Protection	6 W (1/125 HP) type has impedance protection. Other Types Built-In thermal protector (automatic return type) Open: 130±5°C (266±9°F), Close: 85±20°C (185±36°F)
Ambient Temperature	Single-phase 110/115 VAC, Single-phase 220/230 VAC: -10~+40°C (+14~+104°F) (non-freezing)
Ambient Humidity	85% or less (non-condensing)
Degree of Protection	Lead Wire Type: IP20 Terminal Box Type, Conduit Box Type: IP65 = 25 W (1/50 HP) -40 W (1/19 HP), IP54 = 60 W (1/12 HP) -90 W (1/8 HP) (excluding the installation surface)

Permissible Overhung Load and Permissible Thrust Load of Gearheads

		Gear Ratio Max. Permissible Torque		Max. Permissible Overhung Load: N				Permissible Thrust Load	
Product Name	Gear Ratio			10 mm (0.39 in	10 mm (0.39 in.) from shaft end		20 mm (0.79 in.) from shaft end		Permissible mirust Load
		N∙m	lb-in	N	lb.	N	lb.	N	lb.
2GV□A	5~25	6	53	150	33	200	45	40	9
2GV⊔A	30~360		55	200	45	300	67	40	9
3GV□A	5~25	10	88	200	45	300	67	80	18
36V_A	30~360	10	00	300	67	400	90	00	
4GV□A	5~25	- 16	16 141	300	67	350	78	100	22
46V_A	30~360	10	141	450	101	550	123		
FOV□A	5~9			400	90	500	112		
5GV□A 5GVH□A	12.5~18	30	260	450	101	600	135	150	33
30VIII_A	25~300	1		500	112	700	157		
	5~9			400	90	500	112	150	33
5GVR□A	12.5~18	40	350	450	101	600	135		
	25~180]		500	112	700	157	1	

Permissible Load Inertia J of Gearhead

When a high load inertia (J) is connected to a gearhead, high torque is exerted instantaneously on the gearhead during intermittent operations (or during stopping by an electromagnetic brake or instantaneous stopping by a brake pack). Excessive impact shocks can cause damage to the gearhead or motor.

The table to the right gives values for the permissible load inertia at the motor shaft. Use the motor and gearhead within these parameters.

The permissible load inertia at the output shaft of the gearhead is calculated with the formula to the right.

The life of a gearhead when operating at the permissible load inertia with instantaneous stopping of electromagnetic brake type motors, brake pack or speed control motors is approximately two million cycles.

Permissible Load Inertia at the Gearhead Output Shaft

When the gear ratio is 1/3 \sim 1/50 $J_G=J_M\times i^2$ When the gear ratio is 1/60 or higher $J_G=J_M\times 2500$

 $\it JG$: Permissible load inertia of gearhead output shaft J [($\times 10^{-4}$ kg·m²) (oz-in²)]

 $\it J_M$: Permissible load inertia of gearhead output shaft J [($\times 10^{-4}$ kg·m²) (oz-in²)]

i: Gear ratio (Example: i=3 means a gear ratio of 1/3)

Permissible Load Inertia at the Motor Shaft

Motor Output Power	Permissible Load Inertia				
Motor Output Fower	J [(×10 ⁻⁴ kg⋅m²) (oz-in²)]				
6 W (1/125 HP)	0.062 (0.34)				
15 W (1/50 HP)	0.14 (0.77)				
25 W (1/30 HP)	0.31 (1.70)				
40 W (1/19 HP)	1.1 (6.0)				
60 W (1/12 HP)	1.1 (6.0)				
90 W (1/8 HP)	1.1 (6.0)				
, ,	. ,				

Induction Motors

■Product Line and List Price

Lead Wire Type

Output Dower		Droduot Nome	Coor Potic	Liot Drice
Output Power	Voltage	Product Name	Gear Ratio 5~18	List Price \$121.00
	Cinala Dhana		25~36	\$127.00
	Single-Phase 110/115 VAC	2IK6UA-□A	50~180	\$134.00
6 W	110/113 VAC		250~360	\$180.00
6 W (1/125 HP)			5~18	\$124.00
(1/125111)	Cinalo Dhooo		3~18 25~36	\$130.00
	Single-Phase 220/230 VAC	2IK6UC-□A	50~180	\$137.00
	220/200 VAO		250~360	\$183.00
			5~18	\$132.00
	Single-Phase		25~36	\$132.00
	110/115 VAC	3IK15UA-□A	50~180	\$145.00
15 W	110/110 1/10		250~360	\$189.00
(1/50 HP)			5~18	\$134.00
(1/00111)	Single-Phase		25~36	\$140.00
	220/230 VAC	3IK15UC-□A	50~180	\$147.00
	220,200 1710		250~360	\$191.00
			5~18	\$140.00
	Single-Phase 110/115 VAC		25~36	\$146.00
		4IK25UA-□A	50~180	\$153.00
25 W			250~360	\$200.00
(1/30 HP)	Single-Phase 220/230 VAC		5~18	\$144.00
(., ,)		4IK25UC-□A	25~36	\$150.00
			50~180	\$157.00
			250~360	\$204.00
			5~18	\$169.00
	Single-Phase	5IK40UA-□A	25~36	\$176.00
	110/115 VAC		50~180	\$183.00
40 W	110/110 1/10		250~300	\$261.00
(1/19 HP)				\$173.00
,	Single-Phase 220/230 VAC		5~18 25~36	\$180.00
		5IK40UC-□A	50~180	\$187.00
			250~300	\$265.00
			5~18	\$224.00
	Single-Phase	FII// 01/2	25~100	\$235.00
	110/115 VAC	5IK60UA-□A	120~180	\$245.00
60 W			250~300	\$279.00
(1/12 HP)			5~18	\$228.00
	Single-Phase		25~100	\$239.00
	220/230 VAC	5IK60UC-□A	120~180	\$249.00
			250~300	\$283.00
	0'1-5'		5~18	\$243.00
	Single-Phase 110/115 VAC	5IK90UA-□A	25∼60	\$263.00
90 W	110/115 VAC		75 ~180	\$273.00
(1/8 HP)	0: 1 -:		5~18	\$248.00
	Single-Phase 220/230 VAC	5IK90UC-□A	25∼60	\$268.00
	220/230 VAU		75 ∼180	\$278.00

The following items are included with each product. -

Motor, Gearhead, Capacitor, Capacitor Cap, Installation Screws, Parallel Key, Operating Manual

Terminal Box Type

0 1 1 1	17.11		0 0 "	
Output Power	Voltage	Product Name	Gear Ratio	List Price
	Single-Phase		5~18	\$162.00
		4IK25UAT-□A	25~36	\$168.00
25 W (1/30 HP)	110/115 VAC		50~180	\$175.00
			250~360	\$222.00
			5~18	\$165.00
	Single-Phase	4IK25UCT-□A	25~36	\$171.00
	220/230 VAC	TIK250CI-LA	50~180	\$178.00
			250~360	\$225.00
			5~18	\$191.00
	Single-Phase	5IK40UAT-□A	25~36	\$198.00
	110/115 VAC	SIK4UUAI-LA	50~180	\$205.00
40 W			250~300	\$283.00
(1/19 HP)			5~18	\$194.00
	Single-Phase 220/230 VAC	5IK40UCT-□A	25~36	\$201.00
			50~180	\$208.00
			250~300	\$286.00
	Single-Phase 110/115 VAC	5IK60UAT-□A	5~18	\$245.00
			25~100	\$256.00
			120~180	\$266.00
60 W			250~300	\$300.00
(1/12 HP)			5~18	\$250.00
	Single-Phase		25~100	\$261.00
	220/230 VAC	5IK60UCT-□A	120~180	\$271.00
			250~300	\$305.00
			5~18	\$265.00
	Single-Phase	5IK90UAT-□A	25~60	\$285.00
90 W	110/115 VAC		75 ∼180	\$295.00
(1/8 HP)			5~18	\$269.00
	Single-Phase	5IK90UCT-□A	25~60	\$289.00
	220/230 VAC		75 ∼180	\$299.00

Specifications

● Induction Motors – Continuous Rating (RoHS)



Product Name	and Type	Output Power	Voltage	Frequency	Current	Starting Torque	Rated Torque	Rated Speed	Capacitor
Lead Wire Type	Terminal Box Type	W (HP)	VAC	Hz	Α	mN·m (oz-in.)	mN·m (oz-in.)	r/min	μF
ŹP 2IK6UA-□A		6 (1/125)	Single-Phase 110	60	0.185	40 (5.6)	41 (5.8)	1450	2.5
ZP ZIKOUA-LA	_	6 (1/125)	Single-Phase 115	60	0.189	40 (5.6)	41 (5.8)	1450	2.5
②P 2IK6UC-□A		6 (1/125)	Single-Phase 220	60	0.093	40 (5.6)	41 (5.8)	1450	0.6
ZP ZIKOUC-LA	_	0 (1/123)	Single-Phase 230	60	0.096	40 (5.6)	41 (5.8)	1450	0.0
TP) 3IK15UA-□A	_	15 (1/50)	Single-Phase 110	60	0.31	65 (9.2)	105 (14.9)	1450	4.0
(IP) SIKTSUA-□A	_	15 (1/50)	Single-Phase 115	60	0.31	65 (9.2)	105 (14.9)	1450	4.0
(TP) 3IK15UC-□A	_	15 (1/50)	Single-Phase 220	60	0.154	65 (9.2)	105 (14.9)	1450	1.0
(IP) SIKTSUC-□A	_	13 (1/30)	Single-Phase 230	60	0.155	65 (9.2)	105 (14.9)	1450	1.0
TP 4IK25UA-□A	4IK25UAT-□A	25 (1/30)	Single-Phase 110	60	0.44	120 (17.0)	170 (24)	1450	6.0
IP TIKZJUA-LA	4IKZJUAI-LA	23 (1/30)	Single-Phase 115	60	0.43	120 (17.0)	170 (24)	1450	0.0
(TP) 4IK25UC-□A	4IK25UCT-□A	25 (1/30)	Single-Phase 220	60	0.22	120 (17.0)	170 (24)	1450	1.5
(F) 4IKZJUC-□A	4IKZJUCI-LA	23 (1/30)	Single-Phase 230	60	0.22	120 (17.0)	170 (24)	1450	1.5
TP) 5IK40UA-□A	5IK40UAT-□A	40 (1/19)	Single-Phase 110	60	0.66	200 (28)	260 (36)	1500	9.0
IP JIK400A-□A	JIK-TOOAI-	40 (1/19)	Single-Phase 115	60	0.65	200 (28)	260 (36)	1500	9.0
(TP) 5IK40UC-□A	5IK40UCT-□A	40 (1/19)	Single-Phase 220	60	0.33	200 (28)	260 (36)	1500	2.0
JIN-100C-□A	JIK-100CI-LA	40 (1/19)	Single-Phase 230	60	0.32	200 (28)	260 (36)	1500	2.0
(TP) 5IK60UA-□A	5IK60UAT-□A	60 (1/12)	Single-Phase 110	60	1.09	320 (45)	405 (57)	1450	16
(IP) SIKOUUA-⊔A	JIKOOOAI-LA	00 (1/12)	Single-Phase 115	60	1.09	320 (45)	405 (57)	1450	10
TP) 5IK60UC-□A	5IK60UCT-□A	60 (1/12)	Single-Phase 220	60	0.53	320 (45)	405 (57)	1450	4.0
(IP) SIKOUUC-□A	JIKOOOCI-LA	•□ A 60 (1/12)	Single-Phase 230	60	0.52	320 (45)	405 (57)	1450	4.0
TP) 5IK90UA-□A	5IK90UAT-□A	90 (1/8)	Single-Phase 110	60	1.44	450 (63)	605 (85)	1500	20
GF SIK900A-□A	JIK700AI-LA	au (1/0)	Single-Phase 115	60	1.44	450 (63)	605 (85)	1500	20
TP 5IK90UC-□A	5IK90UCT-□A	90 (1/8)	Single-Phase 220	60	0.71	450 (63)	605 (85)	1450	5.0
GF SIK900C-□A	JIK 700CI-	30 (1/0)	Single-Phase 230	60	0.71	450 (63)	605 (85)	1450	5.0

ZP: These products are impedance protected.

TP: This indicates that there is a built-in thermal protector (automatic return type). If a motor overheats for any reason, the thermal protector is activated and the motor is stopped. When the motor temperature drops, the thermal protector closes and the motor restarts automatically. Be sure to turn the power supply off before inspecting.

• Enter the gear ratio in the box (

) within the product name. Also, the values in the table are characteristics for the motor only.

Permissible Torque

Induction Motors 60 Hz

 $Unit = N \cdot m \text{ (lb-in)}$

Product Name	Speed r/min	360	300	240	200	144	120	100	72	60	50	36	30	24	20	18	15	12	10	7.2	6	5
Combination Type	Gear Ratio	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180	250	300	360
2IK6UA-□A, 2IK6UC-□A		0.18	0.22	0.28	0.33	0.46	0.55	0.66	0.92	1.1	1.3	1.8	2.1	2.6	3.2	3.5	4.2	5.0	6	6	6	6
ZIROUA-LIA, ZIROUC-LI	1	(1.59)	(1.94)	(2.4)	(2.9)	(4.0)	(4.8)	(5.8)	(8.1)	(9.7)	(11.5)	(15.9)	(18.5)	(23)	(28)	(30)	(37)	(44)	(53)	(53)	(53)	(53)
3IK15UA-□A, 3IK15UC	.ΠΛ	0.47	0.57	0.71	0.85	1.2	1.4	1.7	2.4	2.7	3.3	4.5	5.4	6.8	8.1	9.0	10	10	10	10	10	10
JIK I JOA-LIA, JIK I JOC		(4.1)	(5.0)	(6.2)	(7.5)	(10.6)	(12.3)	(15.0)	(21)	(23)	(29)	(39)	(47)	(60)	(71)	(79)	(88)	(88)	(88)	(88)	(88)	(88)
4IK25UA-□A, 4IK25UA	Г-□А	0.77	0.92	1.1	1.4	1.9	2.3	2.8	3.8	4.4	5.3	7.3	8.8	11.0	13.2	14.6	16	16	16	16	16	16
4IK25UC-□A, 4IK25UC	-□ A	(6.8)	(8.1)	(9.7)	(12.3)	(16.8)	(20)	(24)	(33)	(38)	(46)	(64)	(77)	(97)	(116)	(129)	(141)	(141)	(141)	(141)	(141)	(141)
5IK40UA-□A, 5IK40UA	Г-□А	1.2	1.4	1.8	2.1	2.9	3.5	4.2	5.6	6.7	8.0	11.2	13.4	16.8	20.1	22.4	25.3	30	30	30	30	_
5IK40UC-□A, 5IK40UC	-□ A	(10.6)	(12.3)	(15.9)	(18.5)	(25)	(30)	(37)	(49)	(59)	(70)	(99)	(118)	(148)	(177)	(198)	(220)	(260)	(260)	(260)	(260)	
5IK60UA-□A, 5IK60UA	Г-□А	1.8	2.2	2.7	3.3	4.6	5.5	6.6	8.7	10.4	12.5	17.4	20.9	26.1	30	30	30	30	30	30	30	
5IK60UC-□A, 5IK60UC	- □A	(15.9)	(19.4)	(23)	(29)	(40)	(48)	(58)	(76)	(92)	(110)	(153)	(184)	(230)	(260)	(260)	(260)	(260)	(260)	(260)	(260)	
5IK90UA-□A. 5IK90UA	Г. □А	2.6	3.2	3.9	4.7	6.6	7.9	9.1	12.6	15.1	18.1	25.2	30.2	35.5	40	40	40	40	40			
SIK900A-LA, SIK900A	I-LA	(23)	(28)	(34)	(41)	(58)	(69)	(80)	(111)	(133)	(160)	(220)	(260)	(310)	(350)	(350)	(350)	(350)	(350)			
5IK90UC-□A. 5IK90UC	<u>-</u> □∧	2.7	3.3	4.1	4.9	6.8	8.2	9.4	13.0	15.6	18.7	26.0	31.2	36.8	40	40	40	40	40			
JIK400C-LA, SIK400CI	-LA	(23)	(29)	(36)	(43)	(60)	(72)	(83)	(115)	(138)	(165)	(230)	(270)	(320)	(350)	(350)	(350)	(350)	(350)			

lacksquare Enter the gear ratio in the box (\Box) within the product name.

[•] A _____ colored background indicates gear shaft rotation in the same direction as the motor shaft. Others rotate in the opposite direction.
• The speed is calculated by dividing the motor's synchronous speed (60 Hz: 1800 r/min) by the gear ratio.

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

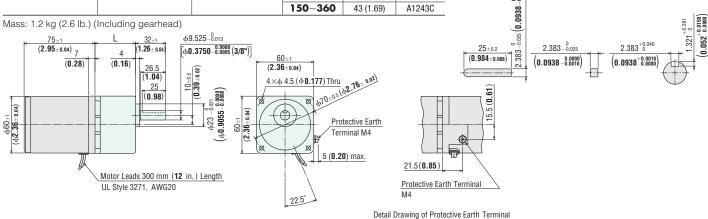
Dimensions Unit = mm (in.)

Mounting screws are included.

●6 W (1/125 HP)

♦ Motor/Gearhead (Lead Wire Type)

Product Name	Motor Product Name	Gearhead Product Name	Gear Ratio	L	CAD
			5~25	34 (1.34)	A1243A
2IK6 Ⅲ -□A	2lK6GV-Ⅲ	2GV□A	30~120	38 (1.50)	A1243B
			150~360	43 (1.69)	A1243C

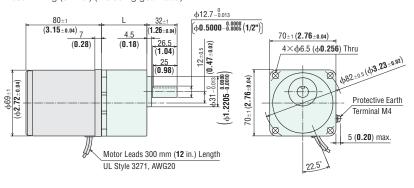


●15 W (1/50 HP)

♦ Motor/Gearhead (Lead Wire Type)

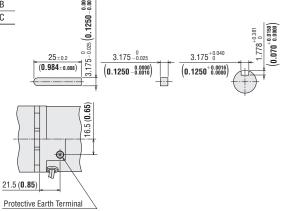
Product Name	Motor Product Name	Gearhead Product Name	Gear Ratio	L	CAD
			5~25	38 (1.50)	A1244A
3IK15 ■ -□A	3IK15GV-■	3GV□A	30~120	43 (1.69)	A1244B
			150~360	48 (1.89)	A1244C

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



(The key is included with the gearhead)

(The key is included with the gearhead)

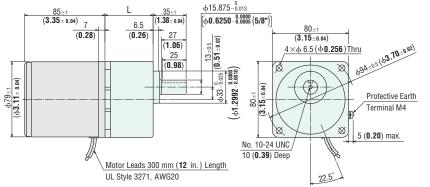


Detail Drawing of Protective Earth Terminal

●25 W (1/30 HP)

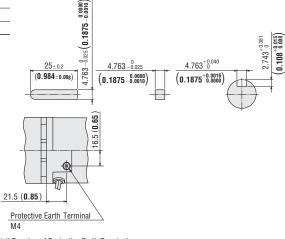
Product Name	Motor Product Name	Gearhead Product Name	Gear Ratio	L	CAD
			5~25	41 (1.61)	A1245A
4IK25 ■ -□A	4lK25GV-■	4GV□A	30~120	46 (1.81)	A1245B
			150~360	51 (2.01)	A1245C

Mass: 2.45 kg (5.4 lb.) (Including gearhead)



Detail Drawing of Protective Earth Terminal

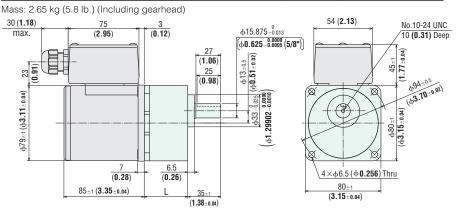
(The key is included with the gearhead)



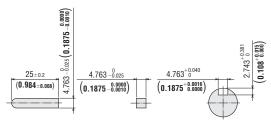
● A UA or UC indicating the power supply voltage is entered where the box (III) is located within the product name. Enter the gear ratio in the box (\Box) within the product name.

●25 W (1/30 HP)

Product Name	Motor Product Name	Gearhead Product Name	Gear Ratio	L	CAD
			5~25	41 (1.61)	A1246A
4IK25 ■ T-□A	4lK25GV-■T	4GV□A	30~120	46 (1.81)	A1246B
			150~360	51 (2.01)	A1246C



(The key is included with the gearhead)

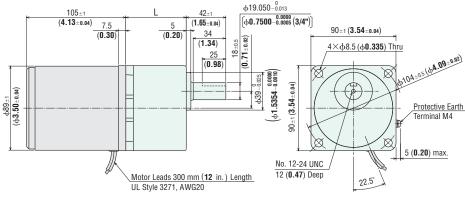


• Use cable with a diameter of $\phi 6 \sim \phi 12$ mm ($\phi 0.24 \sim \phi 0.47$ in.).

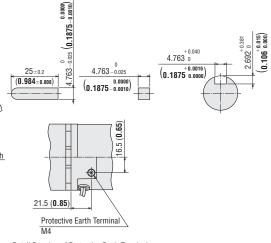
●40 W (1/19 HP)

Product Name	Motor Product Name	Gearhead Product Name	Gear Ratio	L	CAD
			5∼18	45 (1.77)	A1247A
5IK40 Ⅲ -□A	5IK40GV-Ⅲ	5GV□A	25~100	58 (2.28)	A1247B
			120~300	64 (2.52)	A1247C

Mass: 4.0 kg (8.8 lb.) (Including gearhead)



(The key is included with the gearhead)



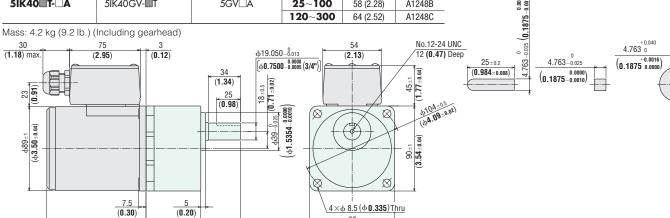
(0.106 0.000)

2.692

Detail Drawing of Protective Earth Terminal

Product Name	Motor Product Name	Gearhead Product Name	Gear Ratio	L	CAD
			5∼18	45 (1.77)	A1248A
5IK40 ⊞ T-□A	5IK40GV-■T	5GV□A	25~100	58 (2.28)	A1248B
			120~300	64 (2.52)	A1248C

(The key is included with the gearhead)



90±1

(3.54±0.04)

• Use cable with a diameter of $\phi 6 \sim \phi 12$ mm ($\phi 0.24 \sim \phi 0.47$ in.).

 $105{\scriptstyle \pm 1}$

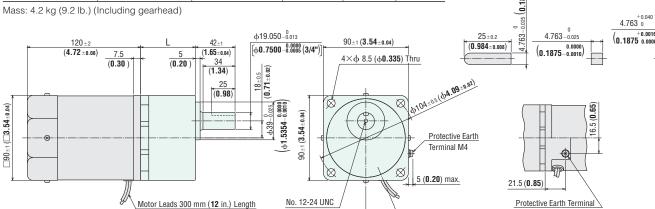
(4.13±0.04)

● A UA or UC indicating the power supply voltage is entered where the box (■) is located within the product name. Enter the gear ratio in the box (\Box) within the product name.

(1.65±0.04)

●60 W (1/12 HP)

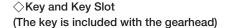
Product Name	Motor Product Name	Gearhead Product Name	Gear Ratio	L	CAD
			5∼18	45 (1.77)	A1249A
5IK60 Ⅲ -□A	5IK60GVH-Ⅲ	5GVH□A	25~100	58 (2.28)	A1249B
			120~300	64 (2.52)	A1249C



12 (**0.47**) Deep

Product Name	Motor Product Name	Gearhead Product Name	Gear Ratio	L	CAD
			5∼18	45 (1.77)	A1250A
5IK60 ⊞ T-□A	5IK60GVH-■T	5GVH□A	25~100	58 (2.28)	A1250B
			120~300	64 (2.52)	A1250C

UL Style 3271, AWG20



Detail Drawing of Protective Earth Terminal

M4

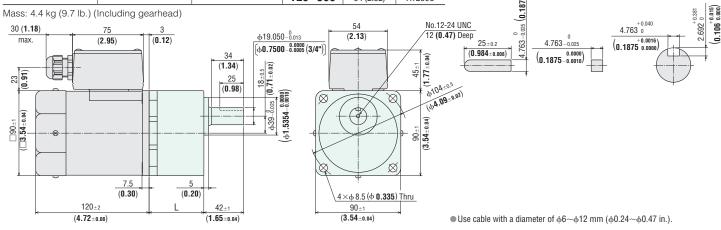
Protective Earth Terminal

Detail Drawing of Protective Earth Terminal

M4

(The key is included with the gearhead)

(The key is included with the gearhead)



22.5°

90 W (1/8 HP)

Product Name	Motor Product Name	Gearhead Product Name	Gear Ratio	L	CAD
			5∼15	45 (1.77)	A1251A
5IK90 □ -□A	5IK90GVR-Ⅲ	5GVR□A	18~36	58 (2.28)	A1251B
			50~180	70 (2.76)	A1251C

Mass: 4.7 kg (10.3 lb.) (Including gearhead)

4.763_0.025 (**0.1875**_0.000 (0.106 0.000) 4.763 °0 +0.040 ф19.050-0.013 90±1 (3.54±0.04) 25 ± 0.2 4.763-0.025 (0.1875 0.0000 (0.984±0.008) $\left[\phi 0.7500 - \stackrel{0.0000}{0.0005} \left(3/4" \right) \right]$ (5.31±0.08) (1.65+0.04) (0.1875-0.0010) 4×φ 8.5 (φ**0.335**) Thru (0.30) (0.20)18±0.5 (**0.71**±0.02) (0.98)Ø (41.5354_0.0010 -0.04) 90±1 (3.54±0.04) Ф39-3.54 Protective Earth Terminal M4 Ø \boxtimes 5 (0.20) max. 21.5 (0.85)

22.5°

No. 12-24 UNC

12 (0.47) Deep

• A UA or UC indicating the power supply voltage is entered where the box (III) is located within the product name. Enter the gear ratio in the box (\Box) within the product name.

Motor Leads 300 mm(12 in.) Length

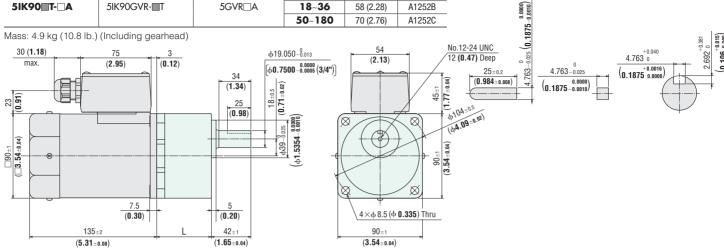
UL Style 3271, AWG20

90 W (1/8 HP)

Product Name Motor Product Name Gearhead Product Name Gear Ratio L CAD 5 IK90 ■ T-□A 5 IK90 GVR-■T 5 GVR□A 5 ~ 15 45 (1.77) A1252A 18~36 58 (2.28) A1252B 50~180 70 (2.76) A1252C

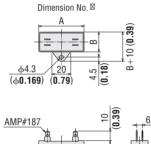
♦ Key and Key Slot

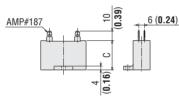
(The key is included with the gearhead)

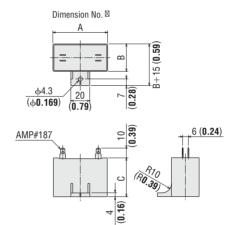


 \bullet Use cable with a diameter of $\varphi 6~\varphi 12~mm$ ($\varphi 0.24~\varphi 0.47$ in.).

Capacitor (Included with single-phase motors)







Capacitor Dimensions Unit = mm (in.)

♦Induction Motor

Produ	ct Name	Capacitor	A	В	С	Mass	Capacitor	Dimension
Lead Wire Type	Terminal Box Type	Product Name	A	D		g (oz.)	μF	No.
2IK6UA-□A	_	CH25FAUL2	31 (1.22)	17 (0.67)	27 (1.06)	21 (0.74)	2.5	
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	
4lK25UA-□A	4IK25UAT-□A	CH60CFAUL2	38 (1.50)	21 (0.83)	31 (1.22)	35 (1.24)	6	1)
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	
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	2
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.

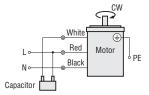
Connection Diagram

- 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.

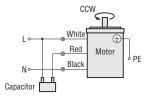
Induction Motor

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.

List of Combination Type Combinations

Product names for motor and gearhead combination type are shown below.

Туре	Product Name	Motor Product Name	Gearhead Product Name		
Lead Wire Type	2IK6UA-□A	2IK6GV-UA	2GV□A		
	2IK6UC-□A	2IK6GV-UC			
	3IK15UA-□A	3IK15GV-UA	2€\/□∧		
	3IK15UC-□A	3IK15GV-UC	3GV□A		
	4IK25UA-□A	4IK25GV-UA	4GV∏A		
	4IK25UC-□A	4IK25GV-UC	4GV∐A		
	5IK40UA-□A	5IK40GV-UA	5GV□A		
	5IK40UC-□A	5IK40GV-UC	JGV∐A		
	5IK60UA-□A 5IK60GVH-UA		5GVH□A		
	5IK60UC-□A	5IK60GVH-UC	JGVIILA		
	5IK90UA-□A	5IK90GVR-UA	5GVR□A		
	5IK90UC-□A	. SGVK∐A			
Terminal Box Type	4IK25UAT-□A	4IK25GV-UAT	4GV∏A		
	4IK25UCT-□A	4IK25GV-UCT	4GV∐A		
	5IK40UAT- □ A 5IK40GV-UAT		FC\/□A		
	5IK40UCT-□A	5IK40GV-UCT	- 5GV□A		
	5IK60UAT-□A	5IK60GVH-UAT	5C)/U□A		
	5IK60UCT-□A	5IK60GVH-UCT	- 5GVH□A		
	5IK90UAT-□A 5IK90GVR-UAT		5GVR□A		
	5IK90UCT-□A	5IK90GVR-UCT	JGVK∐A		

lacksquare Enter the gear ratio in the box (\Box) within the product name.

Accessories (Sold separately)

■Motor/Gearhead Mounting Bracket ®oHS

These dedicated mounting brackets can be used for installing the motors.

Material: Aluminum alloy Surface treatment: Paint

Product Name	Applicabl	List Price		
FIUUUCI Name	Lead Wire Type	Terminal Box Type	LIST FILLE	
SOL2U08F	2IK6U∭-□A	-	\$22.00	
SOL3UAF	3IK15U ■ -□A	_	\$25.00	
SOL4UAF	4IK25U∭-□A	4IK25U ■ T-□A	\$27.00	
SOL5UBF	5IK40U■-□A	5IK40U■T-□A	\$29.00	
	5IK60U∭-□A	5IK60U∭T-□A	\$29.00	
	5IK90U■-□A	5IK90U■T-□A	\$29.00	

■ A A or C indicating the power supply voltage is entered where the box (III) is located within the product name.

Enter the gear ratio in the box (\Box) within the product name.



■ Flexible Coupling (RoHS)

These are clamp type couplings for connecting the motor and gearhead shaft with the driven shaft.

Once the gearhead is determined, the coupling can be selected.



Gearhead Product Name			Chaft Diameter		Connected Device Shaft Diameter							
Geameau P	roduct Name	ict name		Shaft Diameter		F05	F06	F08	F10	F12		
Uniform Load Shock Load	Coupling Type				7.937	9.525	12.7	15.875	19.05	List Price		
			mm	in.	mm	mm	mm	mm	mm			
					5/16	3/8	1/2	5/8	3/4			
						in.	in.	in.	in.	in.		
2IK6U ⊞ -⊟A			F06	9.525	3/8	•	•	•				
2IK6U ⊞ T-⊟A	MCI 30									\$51.00		
3IK15U∭-□A	_	MCLSO	F08	12.7	1/2						ψ51.00	
3IK15U■T-□A			100	12.7	1/2							
_	3IK15U ■ -□A	MCL40		F08	12.7	1/2		•				
	3IK15U■T-□A			12.7	1/2						\$76.00	
4lK25U Ⅲ -□A	_		MCLTO	F10	15.875	5/8						Ψ/0.00
4IK25U■T-□A			110	13.073	3/0			_				
_	4lK25U Ⅲ -□A		F10	15.875	5/8					•		
	4IK25U ■ T-□A			10.070	3/0							
5IK40UIII- — A 5IK40UIIIT- — A 5IK60UIIIT- — A 5IK60UIIIT- — A 5IK90UIII- — A			MCL55	19.05	3/4							
		MCI 55									\$97.00	
		MCLSS									ψυ1.00	
] '''	112									
5IK90L	JШT-□A				ı							

[■] A A or C indicating the power supply voltage is entered where the box () is located within the product name.
Enter the gear ratio in the box () within the product name.

Specifications are subject to change without notice. This catalog was published in July, 2013.

ORIENTAL MOTOR U.S.A. CORP.

Western Sales and Customer Service Center Tel: (310) 715-3301 Fax: (310) 225-2594

Los Angeles Tel: (310) 715-3301 San Jose

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