



INDUCTION MOTORS

Single-Phase

15w (1/50 HP)

Frame Size 2.76 in.sq.(□70mm) or 3.15 in.sq.(□80mm)



Specifications — Continuous Rating

Model		Output Power	Voltage	Frequency	Current	Starting Torque	Rated Torque	Rated Speed	Capacitor				
Upper Model Name:Pinion Shaft Type	Lower Model Name(:):Round Shaft Type												
Lead Wire Type	Lead Wire Type	HP	W	V	Hz	A	oz-in	mN·m	oz-in	mN·m	r/min	μF	
Dimension ①	Dimension ②												
3IK15GN-AWU (3IK15A-AWU)	—	1/50	15	Single-Phase 110	60	0.33	9	65	14.6	105	1450	4.5	
				Single-Phase 115	60	0.34							
3IK15GN-CWE (3IK15A-CWE)	—			Single-Phase 220	60	0.16	9	65	14.6	105	1450		
				Single-Phase 230	50	0.19	10	75	17.4	125	1200	1	
3IK15GN-AUL (3IK15A-AULA)	—			Single-Phase 230	60	0.16	9	65	14.6	105	1450		
— 4IJ15GB-AUL (4IJ15A-AULA)				Single-Phase 115	60	0.33	10.4	75	13.9	100	1500	4	
		Single-Phase 115	60	0.35	10.4	75	13.2	95	1550	3			

- The product contains a built-in thermal protector. When a motor overheats for any reason, the thermal protector is opened and the motor stops. When the motor temperature drops, the thermal protector closes and the motor restarts. Be sure to turn the motor off before inspecting.
- The "U" and "E" at the end of the model name indicate that the unit includes a capacitor. These two letters are not listed on the motor nameplate. When the motor is approved under various safety standards, the nameplate is adopted.

Gearmotor — Torque Table

The maximum permissible torque with a decimal gearhead with a gear ratio of 10 is 43 lb-in (5N-m).

Single-Phase 115V/230V, 60Hz

Unit = Upper values: lb-in / Lower values: N-m

Model	Speed r/min	Gear Ratio																								
		600	500	360	300	240	200	144	120	100	72	60	50	36	30	24	20	18	15	12	10	7.2	6	5		
3IK15GN-AWU / 3IK15GN-CWE / 3GN□KA	Speed	2.2	2.7	3.7	4.4	5.5	6.7	9.2	11	13	17	20	24	30	36	43	43	43	43	43	43	—	—	—		
	Gear Ratio	0.26	0.31	0.43	0.51	0.64	0.77	1.1	1.3	1.5	1.9	2.3	2.8	3.5	4.2	5	5	5	5	5	5	—	—	—		
3IK15GN-AUL / 3GN□KA	Speed	2.1	2.5	3.5	4.2	5.3	6.3	8.8	11	13	16	19	23	29	34	43	43	43	43	43	43	—	—	—		
	Gear Ratio	0.24	0.29	0.41	0.49	0.61	0.73	1.0	1.2	1.5	1.8	2.2	2.6	3.3	4	5	5	5	5	5	5	—	—	—		
4IJ15GB-AUL / 4GB□KA	Speed	2.0	2.4	3.3	4.0	5.0	6.0	8.3	9.9	12	15	18	22	27	32	41	43	43	43	43	43	43	43	43		
	Gear Ratio	0.23	0.28	0.38	0.46	0.58	0.69	0.96	1.2	1.4	1.7	2.1	2.5	3.1	3.8	4.7	5	5	5	5	5	5	5	5		

Single-Phase 230V 50Hz

Unit = Upper values: lb-in / Lower values: N-m

Model	Speed r/min	Gear Ratio																					
		500	416	300	250	200	166	120	100	83	60	50	41	30	25	20	16	15	12.5	10	8.3		
3IK15GN-CWE / 3GN□KA	Speed	2.6	3.2	4.4	5.3	6.6	7.9	11	13	16	20	24	29	36	43	43	43	43	43	43	43	43	43
	Gear Ratio	0.30	0.36	0.51	0.61	0.76	0.91	1.3	1.5	1.8	2.3	2.7	3.3	4.1	5	5	5	5	5	5	5	5	5

- Gearheads are sold separately.
- Enter the gear ratio in the box (□) within the model number. A colored background indicates gear shaft rotation in the same direction as the motor shaft; a white background indicates rotation in the opposite direction.
- The speed is calculated by dividing the motor's synchronous speed (50 Hz: 1500r/min, 60 Hz: 1800 r/min) by the gear ratio. The actual speed is 2 ~ 20% less than the displayed value, depending on the size of the load.

■ Dimensions Scale 1/4, Unit = inch (mm)

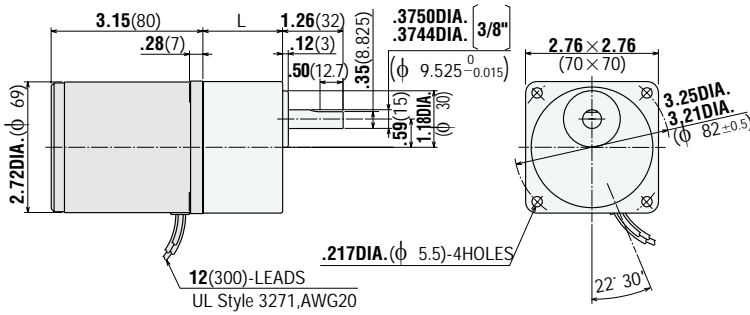
① Motor/Gearhead

3IK15GN-AWU
3IK15GN-CWE
3IK15GN-AUL

Weight (Mass): 2.4 lb.(1.1 kg)

3GN□KA

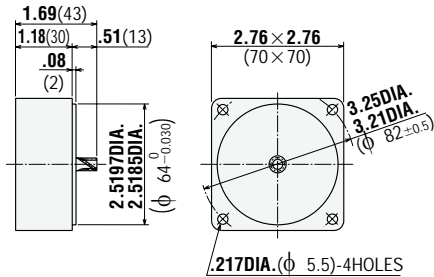
Weight (Mass): 1.21 lb.(0.55 kg)



L = 1.26 (32) **3GN3KA~18KA**
 L = 1.65 (42) **3GN25KA~180KA**

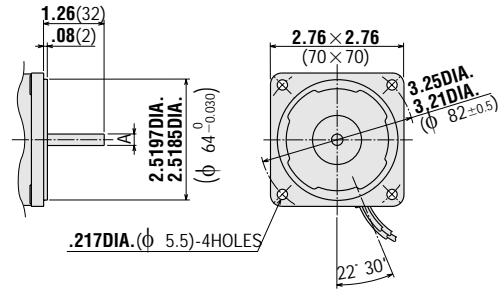
● Decimal Gearhead

3GN10XK Weight (Mass): 0.66 lb.(0.3 kg)



3IK15A-AWU Round Shaft Type
3IK15A-CWE
3IK15A-AULA

Weight (Mass): 2.4 lb.(1.1 kg)



Unit = inch (mm)

Model	Shaft Diameter A
3IK15A-AWU	.2362DIA. (φ 6.0 _{0.012})
3IK15A-CWE	.2357DIA. (φ 6.0 _{0.012})
3IK15A-AULA	.2500DIA. [1/4"] (φ 6.350 _{0.010}) .2496DIA.

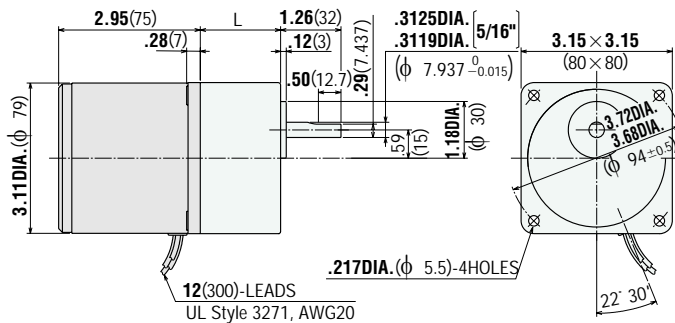
② Motor/Gearhead

4IJ15GB-AUL

Weight (Mass): 3.1 lb.(1.4 kg)

4GB□KA

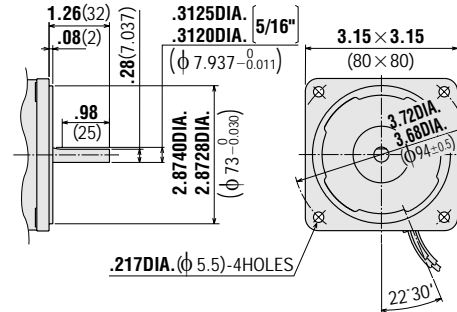
Weight (Mass): 1.43 lb.(0.65 kg)



L = 1.26 (32) **4GB3KA~18KA**
 L = 1.67 (42.5) **4GB25KA~360KA**

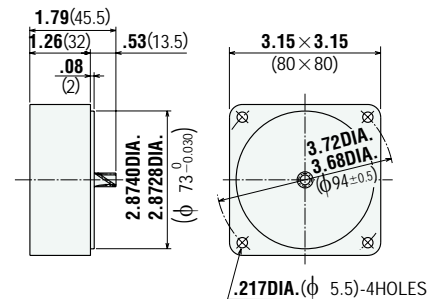
4IJ15A-AULA Round Shaft Type

Weight (Mass): 3.1 lb.(1.4 kg)

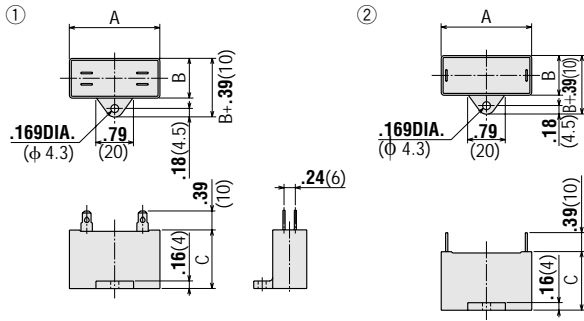


● Decimal Gearhead

4GB10XK Weight (Mass): 0.77 lb.(0.35 kg)



● **Capacitor** (included with the motor)



Motor Model	Capacitor Model	Dimensions inch (mm)			Weight (Mass) oz (g)	Dimension No.
		A	B	C		
3IK15GN-AW□U	CH45FAUL	1.46 (37)	.71 (18)	1.06 (27)	1.06 (30)	①
3IK15A-AW□U						
3IK15GN-CW□E	CH10BFAUL	1.46 (37)	.71 (18)	1.06 (27)	1.06 (30)	①
3IK15A-CW□E						
3IK15GN-AUL	CH40UL	1.46 (37)	.71 (18)	1.06 (27)	0.92 (26)	②
3IK15A-AULA						
4IJ15GB-AUL	CH30UL	1.22 (31)	.67 (17)	1.06 (27)	0.71 (20)	②
4IJ15A-AULA						

If you need to order a capacitor without a motor, add "-C" to the capacitor model number shown. A capacitor cap is always included with a capacitor.

■ **Wiring Diagrams** The direction of motor rotation is as viewed from the shaft end of the motor.

Model / Direction	Lead Wire Type	
	3IK15GN-AWU 3IK15GN-CWE	3IK15GN-AUL 4IJ15GB-AUL
CW		
CCW	<p>To rotate the motor in a clockwise (CW) direction, flip switch SW to CW.</p> <p>To rotate it in a counterclockwise (CCW) direction, flip switch SW to CCW.</p>	

Change the direction of 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.

■ **Accessories**

● **Motor Mounting Brackets**

Optional die-cast aluminum mounting brackets are available. They can be used to install motors with or without gearheads. See page [A-266] for the dimensions.

Model name **SOL3U10**
SOL4U10



● **Flexible Coupling**

Optional clamping couplings are available. See page [A-260] for the dimensions.

