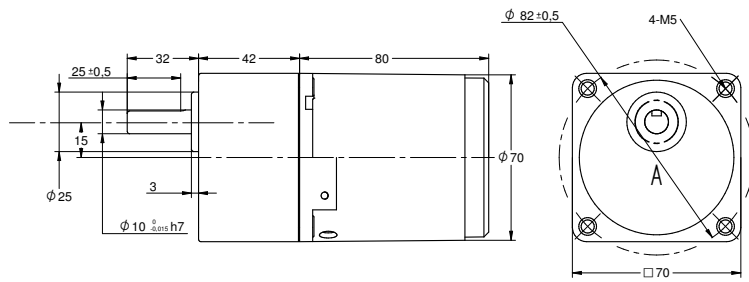


Motor model AI-015W ← **SOLD** → Gear box model S70A  
SEPARATELY

**DRAWING**  
(mm)



**PHOTO**



**MODEL NO. DESIGNATION**

Motor model - Voltage - S/T C/B S= Single phase / T=Three phase C=Cable / B = Terminal box Example: **AI-006W-230-SC (\*)**

Gear box model - Gear ratio Example: **S60A-050 (\*)**

**\* ALL MOTORS AND GEAR BOXES ARE SOLD SEPARATELY. SELECT GEAR BOX FRAME SIZE SAME AS MOTOR FRAME SIZE. ASSEMBLY SCREWS ARE INCLUDED IN DELIVERY**

GEAR MOTOR DATA RATIO	3	3,6	5	6	7,5	9	1	12,5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200	250	300	500	600	750		
<b>230VAC 50Hz 1 phase</b>																															
Nominal rpm 220 VAC	400	333	240	200	160	133	120	96	80	67	60	48	40	33	30	24	20	16	13	12	10	8	7	6	5	4	2	2	2		
Nominal rpm 230 VAC	400	333	240	200	160	133	120	96	80	67	60	48	40	33	30	24	20	16	13	12	10	8	7	6	5	4	2	2	2		
Nominal Nm 220 VAC	0.3	0.4	0.5	0.6	0.8	0.9	1.0	1.3	1.5	1.8	1.8	2.3	2.7	3.3	3.7	4.6	5.0	6.2	7.4	8.3	9.9	12.4	14.9	16.5	18.4	22.1	36.9	44.3	55.3		
Nominal Nm 230 VAC	0.3	0.4	0.5	0.6	0.8	0.9	1.0	1.3	1.5	1.8	1.8	2.3	2.7	3.3	3.7	4.6	5.0	6.2	7.4	8.3	9.9	12.4	14.9	16.5	18.4	22.1	36.9	44.3	55.3		
<b>400VAC 50Hz 3 phase</b>																															
Nominal rpm 380 VAC	400	333	240	200	160	133	120	96	80	67	60	48	40	33	30	24	20	16	13	12	10	8	7	6	5	4	2	2	2		
Nominal Nm 380 VAC	0.3	0.4	0.5	0.6	0.8	0.9	1.0	1.3	1.5	1.8	1.8	2.3	2.7	3.3	3.7	4.6	5.0	6.2	7.4	8.3	9.9	12.4	14.9	16.5	18.4	22.1	36.9	44.3	55.3		
<b>120VAC 60Hz 1 phase</b>																															
Nominal rpm 110 VAC	483	403	290	242	193	161	145	116	97	81	73	58	48	40	36	29	24	19	16	15	12	10	8	7	6	5	3	2	2		
Nominal Nm 110 VAC	0.3	0.3	0.4	0.5	0.6	0.8	0.9	1.1	1.3	1.5	1.5	1.9	2.3	2.8	3.1	3.8	4.2	5.2	6.2	6.9	8.3	10.4	12.5	13.9	15.5	18.6	31.0	37.2	46.5		
<b>208VAC 60Hz 3 phase</b>																															
Nominal rpm 220 VAC	483	403	290	242	193	161	145	116	97	81	73	58	48	40	36	29	24	19	16	15	12	10	8	7	6	5	3	2	2		
Nominal Nm 220 VAC	0.3	0.3	0.4	0.5	0.6	0.8	0.9	1.1	1.3	1.5	1.5	1.9	2.3	2.8	3.1	3.8	4.2	5.2	6.2	6.9	8.3	10.4	12.5	13.9	15.5	18.6	31.0	37.2	46.5		
<b>GEAR HEAD DATA</b>																															
Efficiency (%)	81	81	81	81	81	81	81	81	81	81	73	73	73	73	73	73	66	66	66	66	66	66	66	66	59	59	59	59	59		
Max. torque (Nm)	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5		
Radial F 20 mm shaft (N)	120	120	120	120	120	120	120	120	120	120	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250		
Max. thrust load (N)	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40		
Out rotation when in cw	cw	cw	cw	cw	cw	cw	cw	cw	cw	cw	ccw	ccw	ccw	ccw	ccw	ccw	cw	cw	cw	cw	cw	cw	cw	cw	cw	ccw	ccw	ccw	ccw		

GEAR MOTOR FEATURES	STANDARD	CUSTOMIZATION
Motor type	AC induction	Voltage
Insulation Class	130 (B)	155 (F)
Speed tolerance	± 5%	
Cables 6W-25W   40W-120W	AWG20   AWG-18 300 mm	Harness
Cables wiring	Table at bottom of page	Per request
Housing materials	Aluminium	
Gears and shaft material	40Cr	Shaft dimensions
Bearings types	Ball bearings	
Operating temperature	-10...+40 °C	-40...+40 °C
Manufacturing quality standards	ISO 9001	
RoHS compliance	Yes	
CE   UL label	Yes 230 400 (VAC)   120 208	
IP rating cable   terminal box	IP20   IP54	
<b>Insulation Resistance</b> 100 M Ω or more when 500 VDC megger is applied between the windings and the case after rated operation under normal ambient temperature and humidity.		
<b>Dielectric Strength</b> Sufficient to withstand 1.5 kV 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.		
<b>Temperature Rise</b> 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.		

MOTOR DATA				
Base voltage (VAC)	230	400	120	208
Nominal voltage (VAC) A	220	380	110	220
Nominal voltage (VAC) B	230		120	
Phase   Frequency Hz	1   50	3   50	1   60	3   60
Number of poles	4	4	4	4
Output (W)	15	15	15	15
Nominal speed (rpm) voltage A	1200	1200	1450	1450
Nominal speed (rpm) voltage B	1200		1450	
Nominal torque mNm voltage A	125	125	105	105
Nominal torque mNm voltage B	125		105	
Nominal current (A) voltage A	0.18	0.08	0.30	0.12
Nominal current (A) voltage B	0.20		0.32	
Stall torque mNm voltage A	90	220	65	180
Stall torque mNm voltage B	90		65	
Capacitor μF included in delivery	1.2		5	
Weight motor Kg	1.1	1.1	1.1	1.1
Weight gear motor Kg	1.6	1.6	1.6	1.6

ELECTRIC WIRING CONNECTION	
VERSION C 1 PHASE	capacitor white-blue   neutral N-red   phase-white CW, -blue CWW
VERSION B 1 PHASE	capacitor U2-Z2   neutral N-U1   phase-U2 CW, -Z2 CWW
VERSION C B 3 PHASES	-blue, -red, -white. Swap a pair for inversed rotation