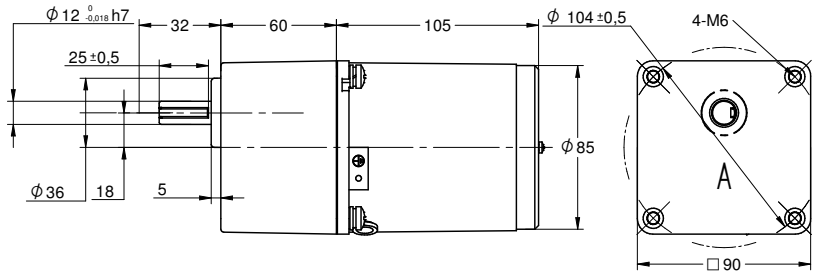


Motor model AI-040W ← SOLD SEPARATELY → Gear box model S90A

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		
230VAC 50Hz 1 phase																															
Nominal rpm 220 VAC	417	347	250	208	167	139	125	100	83	69	63	50	42	35	31	25	21	17	14	13	10	8	7	6	5	4	3	2	2		
Nominal rpm 230 VAC	417	347	250	208	167	139	125	100	83	69	63	50	42	35	31	25	21	17	14	13	10	8	7	6	5	4	3	2	2		
Nominal Nm 220 VAC	0.8	0.9	1.3	1.5	1.9	2.3	2.6	3.2	3.8	4.6	5.1	5.7	6.9	8.3	9.2	11.5	12.5	15.6	18.7	20.8	24.9	31.2	37.4	41.6	46.5	55.8	92.9	112	139		
Nominal Nm 230 VAC	0.8	0.9	1.3	1.5	1.9	2.3	2.6	3.2	3.8	4.6	5.1	5.7	6.9	8.3	9.2	11.5	12.5	15.6	18.7	20.8	24.9	31.2	37.4	41.6	46.5	55.8	92.9	112	139		
120VAC 60Hz 1 phase																															
Nominal rpm 110 VAC	517	431	310	258	207	172	155	124	103	86	78	62	52	43	39	31	26	21	17	16	13	10	9	8	6	5	3	3	2		
Nominal Nm 110 VAC	0.6	0.8	1.1	1.3	1.6	1.9	2.1	2.6	3.2	3.8	4.2	4.7	5.7	6.8	7.6	9.5	10.3	12.9	15.4	17.2	20.6	25.7	30.9	34.3	38.4	46.0	76.7	92.0	115		
208VAC 60Hz 3 phase																															
Nominal rpm 220 VAC	517	431	310	258	207	172	155	124	103	86	78	62	52	43	39	31	26	21	17	16	13	10	9	8	6	5	3	3	2		
Nominal Nm 220 VAC	0.6	0.7	1.0	1.2	1.5	1.8	2.0	2.5	3.0	3.6	4.1	4.6	5.5	6.6	7.3	9.1	9.9	12.4	14.9	16.5	19.8	24.8	29.7	33.0	36.9	44.3	73.8	88.5	111		
GEAR HEAD DATA																															
Efficiency (%)	81	81	81	81	81	81	81	81	81	81	81	73	73	73	73	73	66	66	66	66	66	66	66	66	59	59	59	59	59		
Max. torque (Nm)	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10		
Radial F 20 mm shaft (N)	350	350	350	350	350	350	350	350	350	350	450	450	450	450	450	450	450	450	450	450	450	450	450	450	450	450	450	450	450		
Max. thrust load (N)	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
Out rotation when in cw	cw	cw	cw	cw	cw	cw	cw	cw	cw	cw	ccw	ccw	ccw	ccw	cw	cw	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	
Insulation Resistance 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.		
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 rated 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.		

MOTOR DATA			
Base voltage (VAC)	230	120	208
Nominal voltage (VAC) A	220	110	220
Nominal voltage (VAC) B	230	120	
Phase Frequency Hz	1 50	1 60	3 60
Number of poles	4	4	4
Output (W)	40	40	40
Nominal speed (rpm) voltage A	1250	1550	1550
Nominal speed (rpm) voltage B	1250	1550	
Nominal torque mNm voltage A	315	260	250
Nominal torque mNm voltage B	315	260	
Nominal current (A) voltage A	0.35	0.55	0.25
Nominal current (A) voltage B	0.40	0.60	
Stall torque mNm voltage A	220	200	660
Stall torque mNm voltage B	220	200	
Capacitor μF included in delivery	2.5	8	
Weight motor Kg	2.4	2.4	2.4
Weight gear motor Kg	3.75	3.75	3.75

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