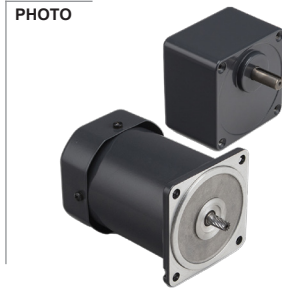
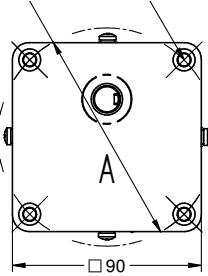
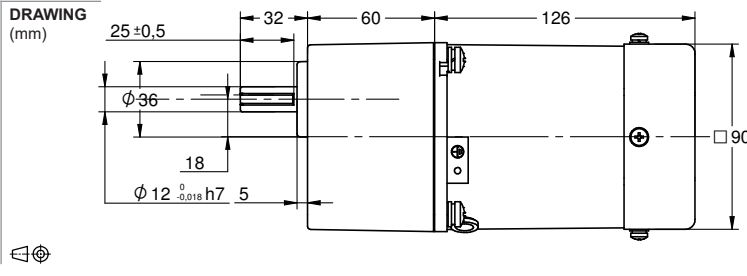


Motor model AI-060W ← **SOLD** → Gear box model S90A
SEPARATELY



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 | 1.1 | 1.4 | 1.9 | 2.3 | 2.9 | 3.4 | 3.8 | 4.8 | 5.7 | 6.9 | 7.6 | 8.6 | 10.3 | 12.4 | 13.7 | 17.2 | 18.6 | 23.3 | 27.9 | 31.0 | 37.2 | 46.5 | 55.8 | 62.0 | 69.3 | 83.2 | 139 | 166 | 208 | | |
| Nominal Nm 230 VAC | 1.1 | 1.4 | 1.9 | 2.3 | 2.9 | 3.4 | 3.8 | 4.8 | 5.7 | 6.9 | 7.6 | 8.6 | 10.3 | 12.4 | 13.7 | 17.2 | 18.6 | 23.3 | 27.9 | 31.0 | 37.2 | 46.5 | 55.8 | 62.0 | 69.3 | 83.2 | 139 | 166 | 208 | | |
| 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 | 0.9 | 1.1 | 1.5 | 1.8 | 2.3 | 2.8 | 3.1 | 3.8 | 4.6 | 5.5 | 6.2 | 6.9 | 8.3 | 10.0 | 11.1 | 13.9 | 15.0 | 18.8 | 22.6 | 25.1 | 30.1 | 37.6 | 45.1 | 50.2 | 56.1 | 67.3 | 112 | 135 | 168 | | |
| 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 | 0.9 | 1.1 | 1.5 | 1.8 | 2.3 | 2.8 | 3.1 | 3.8 | 4.6 | 5.5 | 6.2 | 6.9 | 8.3 | 10.0 | 11.1 | 13.9 | 15.0 | 18.8 | 22.6 | 25.1 | 30.1 | 37.6 | 45.1 | 50.2 | 56.1 | 67.3 | 112 | 135 | 168 | | |
| 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) | 60 | 60 | 60 |
| Nominal speed (rpm) voltage A | 1250 | 1550 | 1550 |
| Nominal speed (rpm) voltage B | 1250 | 1550 | |
| Nominal torque mNm voltage A | 470 | 380 | 380 |
| Nominal torque mNm voltage B | 470 | 380 | |
| Nominal current (A) voltage A | 0.50 | 0.80 | 0.40 |
| Nominal current (A) voltage B | 0.55 | 0.85 | |
| Stall torque mNm voltage A | 340 | 300 | 800 |
| Stall torque mNm voltage B | 340 | 300 | |
| Capacitor μF included in delivery | 4 | 12 | |
| Weight motor Kg | 2.7 | 2.7 | 2.7 |
| Weight gear motor Kg | 4.05 | 4.05 | 4.05 |

| 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 |