

MA860C 36-80VDC 1.58-7.2A Leadshinie 2 Phase Nema23/34 Stepper Motor Driver

Features

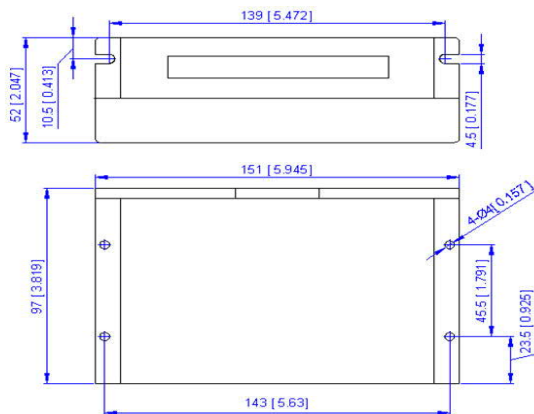
- Extra-low motor noise offers excellent quietness
- Anti-Resonance, provides optimum torque and nulls mid-range instability
- Self-test and Auto-configuration technology, offers optimum responses with different motors
- Microstep resolutions programmable
- Supply voltage up to +80 VAC
- Output current programmable, from 2.4A to 7.2A
- Pulse input frequency up to 300 KHz
- Automatic idle-current reduction
- Supports PUL/DIR and CW/CCW modes



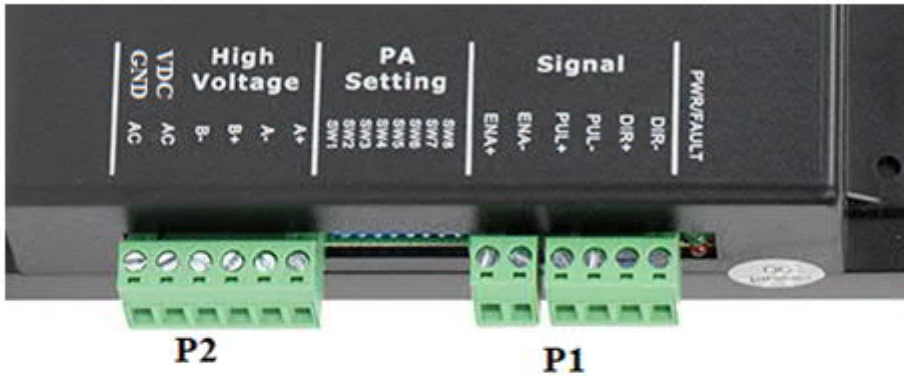
Specifications

| Parameters | MA860C | | | |
|-------------------------|---------------|---------|---------------|-----------|
| | Min | Typical | Max | Unit |
| Output Current | 1.8 | - | 7.2 (5.1 RMS) | A |
| Supply Voltage | 36VAC | 48VAC | 80VAC | VAC |
| | 50 | 68 | 110 | VDC |
| Logic Signal Current | 7 | 10 | 16 | mA |
| Pulse Input Frequency | 0 | - | 300 | kHz |
| Step Revolution | 400 | - | 51200 | Pulse/Rev |
| Isolation Resistance | - | 500 | - | MΩ |
| Suitable Stepper Motors | NEMA 23,34,42 | | | |

Mechanical Specifications (unit: mm[inch])



Pin Assignment and Description



| P1 Function | MA860C Details |
|-------------|--|
| PUL+ | Pulse signal: In single pulse (pulse/direction) mode, this input represents pulse signal, active at each rising or falling edge (set by inside jumper J3); 4-5V when PUL-HIGH, 0-0.5V when PUL-LOW. In double pulse mode (pulse/pulse), this input represents clockwise (CW) pulse, active at high level or low level (set by inside jumper J3). For reliable response, pulse width should be longer than 1.5μs. Series connect resistors for current-limiting when +12V or +24V used. |
| PUL- | |
| DIR+ | DIR signal: In single-pulse mode, this signal has low/high voltage levels, representing two directions of motor rotation; in double-pulse mode (set by inside jumper J1), this signal is counter-clock (CCW) pulse, active at high level or low level (set by inside jumper J3). For reliable motion response, DIR signal should be ahead of PUL signal by 5μs at least. 4-5V when DIR-HIGH, 0-0.5V when DIR-LOW. Please note that motion direction is also related to motor-driver wiring match. Exchanging the connection of two wires for a coil to the driver will reverse motion direction. |
| DIR- | |
| ENA+ | Enable signal: This signal is used for enabling/disabling the drive. High level (NPN control signal, PNP and Differential control signals are on the contrary, namely Low level for enabling.) for enabling the drive and low level for disabling the drive. Usually left UNCONNECTED (ENABLED). |
| ENA- | |

| P2 Function | MA860C Details |
|-------------|---|
| A+, A- | Motor Phase A |
| B+, B- | Motor Phase B |
| +Vdc | Power supply, 20~50 VDC, Including voltage fluctuation and EMF voltage. |
| GND | Power Ground. |