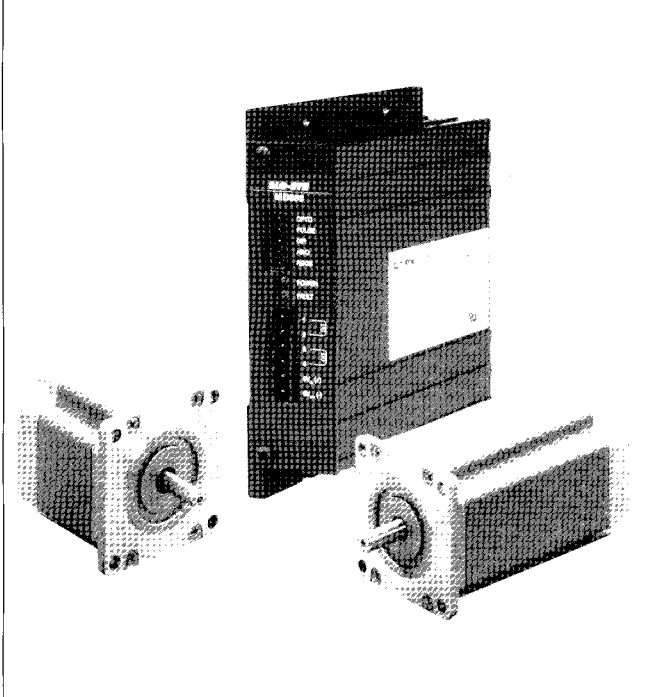


**Models MD808 and MD808-128**



**Affordable Versatility, With Micro-Stepping, Higher Current, Higher Voltage, Active Stabilisation**

SLO-SYN MD808 and MD808-128 Microstep Drive Modules are dependable and affordable options for a wide variety of OEM, single-axis, and multi-axis applications.

Both models in this series, feature a bi-polar PWM drive for maximum torque over a wide range of speed. Designed for DC input, MD808 and MD808-128 drives operate from a single 20 to 80 VDC power supply to help you conserve on space and cost.

The MD808 provides up to 20,000 micro-steps per revolution for smooth, low speed operation. For even greater resolution and flexibility, choose model MD808-128, featuring up to 25,600 micro-steps per revolution.

If precise operation, customized micro-stepping ranges, rugged dependability, and solid cost-efficiency are high on your list of priorities, once again, we have the answer.

**FEATURES**

- 8 Amp 80 VDC modular drive
- Bi-polar PWM two phase step motor drive with **active mid-range stabilisation**
- Ideally matched to **KM Series high torque step motors**
- Micro-stepping to 20,000 steps per revolution (MD808) or 25,600 steps per revolution (MD808-128)
- Full short circuit protection (phase-to-phase and phase-to-ground)
- Under voltage and transient overvoltage protection
- Thermal protection
- Single input voltage (20 to 80 VDC)
- Patented sturdy all-aluminum case and efficient thermal design minimize heat sink requirements
- Optically isolated inputs
- Switch selectable current levels from 3 thru 8 amperes; no external resistors or jumpers required
- Switch selectable step resolution
- Reduce Current and Windings Off inputs
- Auto Reduce Motor Current at standstill can be selected
- Optimal motor performance
- LED fault and power indicators
- Removable Screw Clamp Connectors
- Optional heat sink available
- Bookcase or Flat Mount
- CE Compliant

**Specifications**

**General**

Drive Type: Modular DC power input  
bi-polar chopping drive

Chop Frequency: 24KHz minimum (above audible range)

Output Device Type: MOSFET

Number of Phases: Two phase micro- stepping output

**Mechanical**

Size (mm): 35 W x 133 H x 132 D

Weight: 0.680 kg

**Input Power**

Power Required: 20 VDC to 80 VDC unregulated

Maximum Drive Dissipation: 40 watts

Recommended Power Supply: Warner Electric Model PS860

**Output**

Current: 3 to 8\* Amps in 1 amp increments

Microstepping Capabilities:  
MD808: Full (200 ppr), 1/2 (400 ppr),  
1/5 (1000 ppr), 1/10 (2000 ppr),  
1/20 (4000 ppr), 1/25 (5000 ppr),  
1/50 (10,000 ppr), 1/100 (20,000 ppr)  
MD808-128: Full (200 ppr), 1/2 (400 ppr),  
1/4 (800 ppr), 1/8 (1600 ppr),  
1/16 (3200 ppr), 1/32 (6400 ppr),  
1/64 (12,800 ppr), 1/128 (25,600 ppr)

**Control Inputs**

Pulse Input: Input type - sinking,  
High speed opto-coupler  
Maximum frequency - 500 kHz  
Maximum rise time - 1 micro-sec.  
Maximum fall time - 1 micro-sec.  
Signal active steps on low - high  
Transition (.2 mA to 16 mA sink)

Direction Input: Delay time < 5 microseconds

All Other Inputs: Delay time < 50 microseconds

**Protection**

Short Circuit Protection

Unbalanced Phase Protection (Ground)

Over Voltage Protection

Over Temperature Protection

**Motor Compatibility**

Motor type: Warner SLO-SYN® KM Series

KM Series Frame sizes: KML060 (NEMA 23)  
thru KM093 (NEMA 34)

Number of connections: 4, 6, 8

Minimum Inductance: 1 mH

Maximum Resistance including leads: = .25 x VDC supply / I

**Setting**

Example:  
VDC = 30 I Setting = 3.0  
R max. = 0.25 x 30 ÷ 3.0 = 2.5 ohms

**Environmental**

Operating Temperature: 0°C to +50°C

Maximum Heat Sink Temperature: +70°C

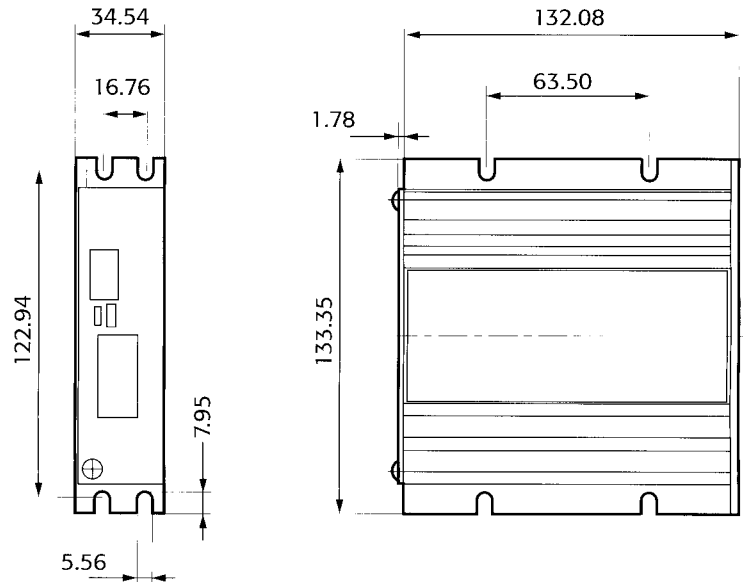
Storage Temperature Range: -40°C to +75°C

Humidity: 5% max., non-condensing

Altitude: 2000m above sea level

\*Heat sink Part Number 221576-001 recommended if motor current is 4 amps or above Case temperature must be less than +70°C.

**DIMENSIONS (mm)**



**WIRING**

