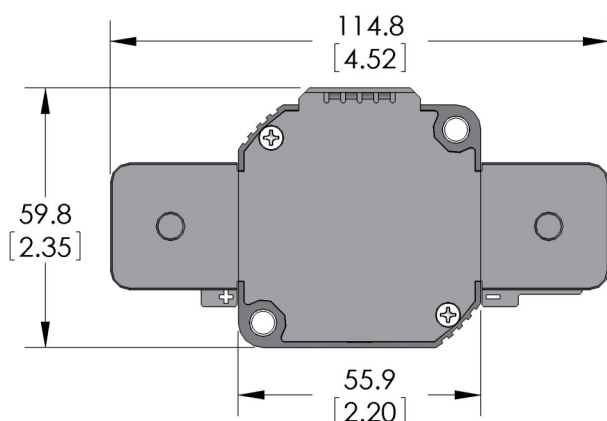


Key Features

| | |
|---------------------------------|---|
| EPIC® Seal | Ceramic to metal braze. Gas filled hermetic chamber protects key components. Exceeds IP69K standard |
| Temperature | Tested to temperatures up to 200°C |
| Contacts / Form | Silver / SPST / NO |
| Coil | Optional efficient two coil design with no PWM or EMI emissions. Coil suppression built in |
| High Shock and Vibration | For rugged environments, off-road and tracked vehicles |
| Installation | Not direction sensitive |
| Made in USA | Designed and manufactured in the USA |
| Reference | MIL-R-6106, RoHS |



Power Terminals

Stainless M10 X 1.5 Bolt
Stainless M10 X 1.5 Nut
Stainless Lock Washer
Stainless Flat Washer
Torque 14-20 Nm [125-175 in-lb]

Mounting Hardware

M5 [No. 10] Bolts (not incl.)
Torque 2-4 Nm [18-35 in-lb]

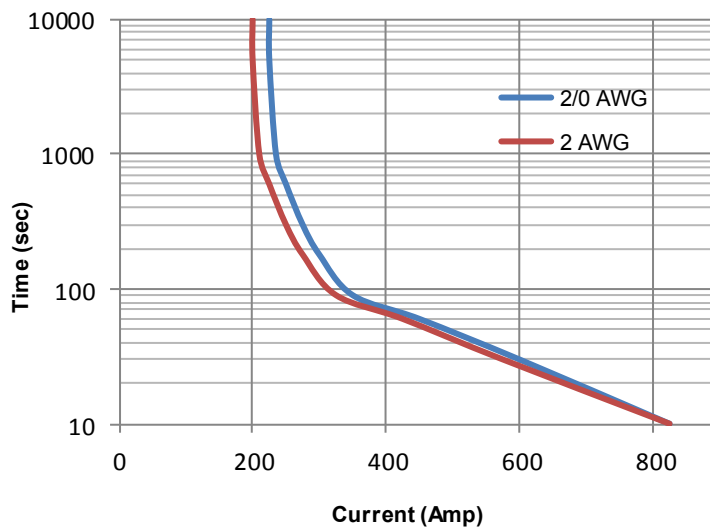
Coil Wire

Silicone, 20 AWG, UL: VW-1

Case Material

25% GF Nylon 6/6, UL 94 V-O

Current Carry vs Time
with 85°C terminal temperature rise



| Technical Specification | | Ordering Key | | | | | | | |
|--|---|--|---------|---------|---------|------------------|------------------|---------|---------|
| Continuous Current | 200A w/ 2 AWG (see graph on reverse) | <div><h1>MX12</h1><div><div>Coil Voltage: <i>See table</i></div><div>Auxiliary Contacts: <i>Blank = none</i> <i>B = SPST, Normally Open</i></div><div>Coil Wire: <i>A = 38 cm (15 in)</i> <i>B = 61 cm (24 in)</i> <i>C = 122 cm (48 in)</i></div></div></div> | | | | | | | |
| Max Current—1 sec | 1200A | | | | | | | | |
| Max Current—10 sec | 800A | | | | | | | | |
| Max Current—90 sec | 300A | | | | | | | | |
| Contact Voltage Drop (max) | 150mV at 200A | | | | | | | | |
| Insulation Resistance (min) | 100MΩ (50MΩ after life) | <h3>Power Circuit and Installation</h3> <div></div> | | | | | | | |
| Dielectric Withstanding | 1500VRMS (1050 VRMS after life) | | | | | | | | |
| Weight | 1.1 lb with hardware (500 grams) | | | | | | | | |
| Resistive Load Switching | | | | | | | | | |
| 200A at 24 VDC | 100,000 cycles | | | | | | | | |
| Mechanical Life | 300,000 cycles | | | | | | | | |
| Fault Interrupt @ 28VDC | 1500A | | | | | | | | |
| Environmental Specifications | | | | | | | | | |
| Seal | Hermetic, 10 E-9 atm cc/sec | | | | | | | | |
| Temperature Range | -55°C to +100°C | | | | | | | | |
| Shock | Sawtooth @ 20G, 11ms, ½ Sine @ 25G, 11ms | | | | | | | | |
| Vibration | 10-2000 Hz, 20G | | | | | | | | |
| Water / Steam | 2750 psi waterjet, 105 psi steam, boiling water | | | | | | | | |
| Salt Spray Corrosion | MIL-STD-810G | | | | | | | | |
| Resistant to corrosion, chemicals, and fungal growth | | | | | | | | | |
| Auxiliary contacts (optional) - Form A, SPST Normally Open | | | | | | | | | |
| Switching Current (max) | 1A at 28VDC | | | | | | | | |
| Switching Current (min) | 0.1mA at 5V | | | | | | | | |
| Coil Ratings at 25°C | | | | | | | | | |
| * S and T coil are dual coil design, all others are standard coils | | | | | | | | | |
| Coil P/N Designation | B | C | F | H | J | K | L | S * | T * |
| Coil Voltage, Nominal | 12 VDC | 24 VDC | 48 VDC | 72 VDC | 120 VDC | 120 VAC, 50/60Hz | 240 VAC, 50/60Hz | 12 VDC | 24 VDC |
| Coil Voltage, Max | 16 VDC | 32 VDC | 64 VDC | 96 VDC | 140 VDC | 140 VAC | 280 VAC | 16 VDC | 32 VDC |
| Pick-Up Voltage, Max | 8 VDC | 16 VDC | 28 VDC | 46 VDC | 72 VDC | 80 VAC | 160 VAC | 9 VDC | 15 VDC |
| Drop-Out Voltage, Max | 3 VDC | 7 VDC | 10 VDC | 14 VDC | 18 VDC | 30 VAC | 60 VAC | 4.5 VDC | 7 VDC |
| Drop-Out Voltage, Min | 0.5 VDC | 0.5 VDC | 1.8 VDC | 2.7 VDC | 4.5 VDC | 4.5 VAC | 9 VAC | 1 VDC | 1.5 VDC |
| Pick-Up Current, Max (75ms) | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 1.7 A | 0.76 A |
| Coil Current | 0.68 A | 0.28 A | 0.16 A | 0.095 A | 0.06 A | 0.06 A | 0.04 A | 0.084 A | 0.032 A |
| Coil Power | 8 W | 6.8 W | 7.6 W | 6.8 W | 7.2 W | 7.2 W | 9.6 W | 1 W | 0.768 W |
| Operate Time, Max (incl. bounce) | 20 msec | 20 msec | 30 msec | 30 msec | 20 msec | 30 msec | 30 msec | 20 msec | 20 msec |
| Release Time, Max | 12 msec | 12 msec | 12 msec | 12 msec | 12 msec | 50 msec | 55 msec | 12 msec | 12 msec |
| Internal Coil Suppression | Transorb | | | | | | | | |
| Coil Back EMF | 55 V | 55 V | 80 V | 115 V | 175 V | N/A | N/A | 55 V | 55 V |
| Transients, Max (13ms) | N/A | N/A | N/A | N/A | N/A | N/A | N/A | ±50 V | ±50 V |
| Reverse Polarity | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 16 V | 32 V |

| Options and Accessories | |
|-------------------------|--|
| | |
| | |

| | | |
|--|--|--|
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