

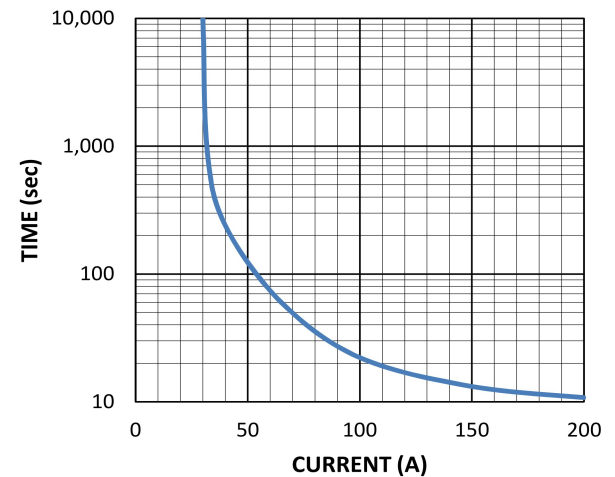
FEATURES

- > Small, lightweight, and cost effective patented design
- > Hermetic seal ensures clean consistent contact environment
- > RoHS2 compliant
- > Make / Break switching to 1200Vdc
- > Can be installed in any position
- > Capable of bi-directional switching
- > Perfect choice for pre-charge, charge, and solar applications

PRODUCT SPECIFICATIONS

| Specifications | Units | Data |
|--|--------|------------|
| Contact Arrangement | Form X | SPST-NO |
| Dielectric at Sea Level | Vdc | 6000 |
| Contact Voltage, Operating Max | Vdc | 1200 |
| Continuous Current Carry, Max (8 AWG) | A | 30 |
| Electrical Life (Resistive Load) | | |
| Make and Break, 1A @ 1200Vdc | Cycles | 1000 |
| Make and Break, 5A @ 1000Vdc | Cycles | 1000 |
| Make and Break, 10A @ 800Vdc | Cycles | 2000 |
| Make and Break, 20A @ 600Vdc | Cycles | 5000 |
| Make and Break, 50A @ 300Vdc | Cycles | 5000 |
| Make and Break, 50A @ 24Vdc | Cycles | 50,000 |
| Mechanical Life | Cycles | 1,000,000 |
| Contact Voltage Drop, Max @ 50A | mV | 100 |
| Contact Resistance, Max @ 50A (after 30 sec) | mOhms | 3.25 |
| Operate Time, Max | ms | 25 |
| Release Time, Max | ms | 8 |
| Vibration, Sinusoidal (50-200Hz Peak) | G | 5 |
| Shock, Operating, 1/2 Sine, 11ms | G | 20 |
| Temperature, Operating Range ^{1/} | °C | -40 to +65 |
| Humidity, No Freezing or Condensing at Low Temperature | RH | 5% to 85% |
| Weight | grams | 90 |

CURRENT CARRY RATINGS



COIL RATINGS @ 25°C ^{2/}

| Coil P/N Designation | B | C | F |
|--|----------------------------------|----------------------------------|------------------------------|
| Coil Voltage, Nominal | 12 Vdc | 24 Vdc | 48 Vdc |
| Coil Voltage, Max | 16 Vdc | 32 Vdc | 64 Vdc |
| Pick-up Voltage, Max | 7.5 Vdc | 15 Vdc | 30 Vdc |
| Drop Out Voltage, Max | 5 Vdc | 9 Vdc | 18 Vdc |
| Drop Out Voltage, Min | 0.20 Vdc | 0.40 Vdc | 0.80 Vdc |
| Coil Resistance, +/-10% | 70 Ohms | 280 Ohms | 1092 Ohms |
| Coil Current at Nominal Voltage | 0.170 A | 0.085 A | 0.045 A |
| Recommended External Coil Suppression (not included) | SMAJ40CA or P6KE47CA-E3/54 | SMAJ40CA or P6KE47CA-E3/54 | SMAJ100CA or P6KE120CA |

DIMENSIONS



Mounting

PCB

Case Material

Patented EVOH Blend

Power Connection

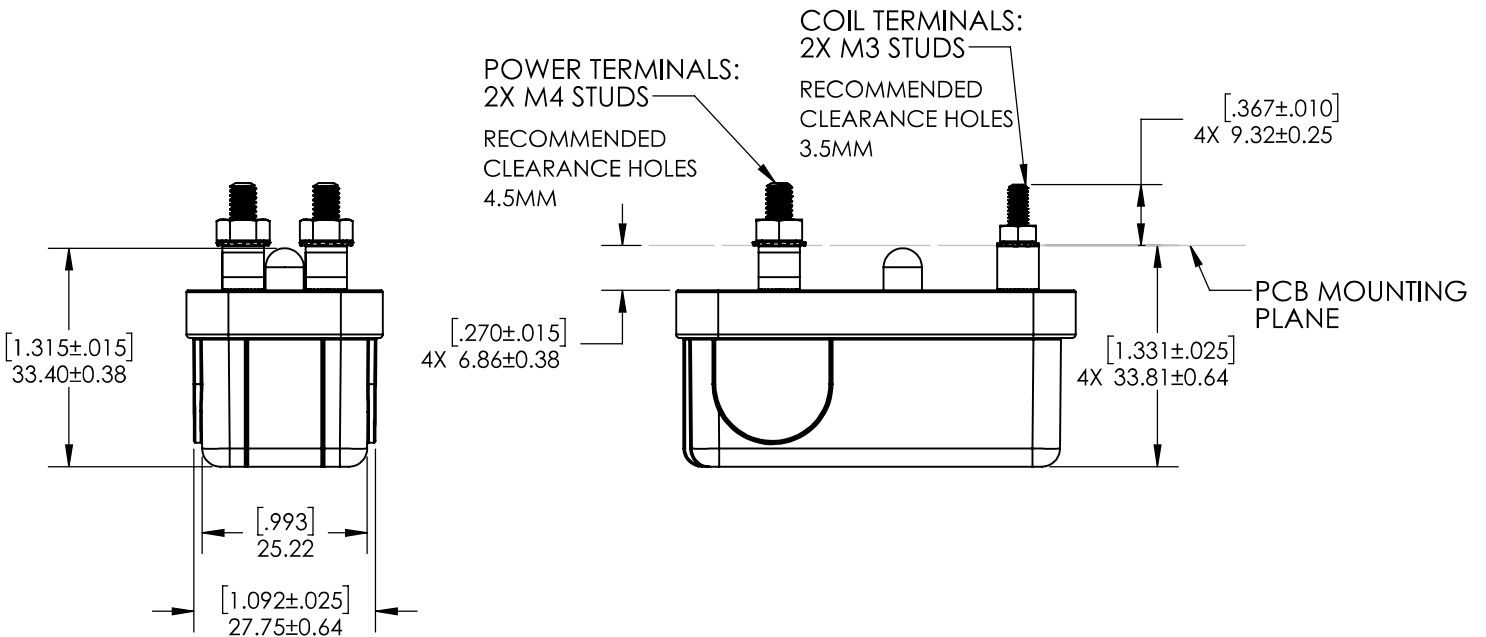
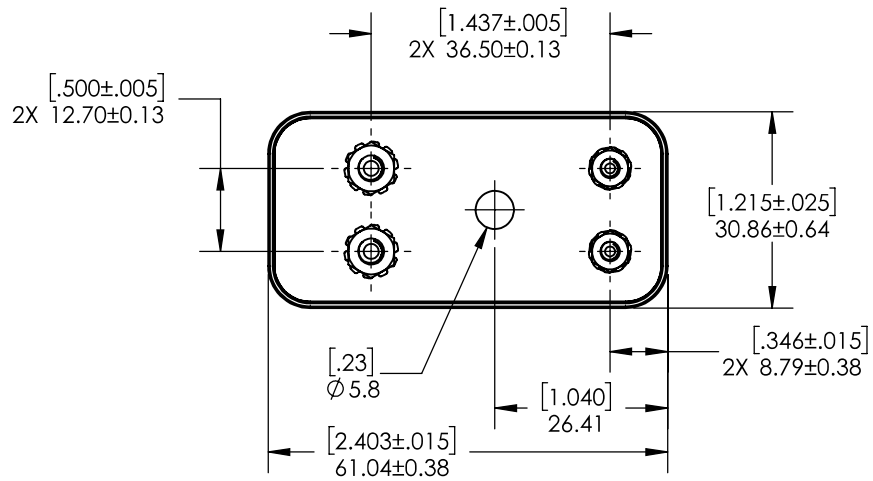
M4 Studs

Torque 2.2Nm [19.5in-lb] max

Coil Termination

M3 Studs

Torque 0.5Nm [5in-lb] max



PART NUMBER SYSTEM

| P125 | B | D | A |
|-----------------|----------|-------------|-------------|
| Coil Voltage | B=12 Vdc | | |
| | C=24 Vdc | | |
| | F=48 Vdc | | |
| Coil Terminals | | D=Studs, M3 | |
| Power Terminals | | | A=Studs, M4 |

Notes & Definitions:

1/ Temperature range refers to ambient conditions. Terminal temperature can exceed listed values.

2/ Contactor is operated by a coil that changes resistance with temperature. Since pick-up current, coil current and coil power are specified at nominal voltage, they will be lower than indicated at temperatures above 25°C and higher than indicated at temperatures below 25°C. Similarly, pick-up and drop-out voltages will be higher than indicated at temperatures above 25°C and lower than indicated at temperatures below 25°C.

APPLICATION NOTES

Electrical life rating is based on resistive load with 27μH maximum inductance in circuit. Because your application may be different, we suggest you test the contactor in your circuit to verify life is as required.

Contactor is bi-directional and therefore can carry, make, and break current in both directions.

Contactor is not sensitive to direction of installation and can be mounted in any position or axis.