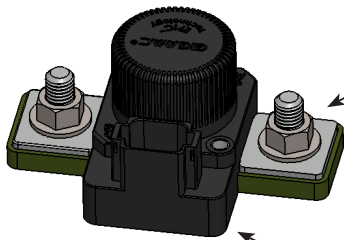


CASE MATERIAL  
DUPONT ZYTEL FR50

3D MODEL AVAILABLE  
UPON REQUEST



**POWER CONNECTION**

ZINC PLATED STEEL, M1 2X1.75 BOLT  
STAINLESS M12X1.75 FLANGED NUT  
TORQUE 200-300 IN-LB (22-33 Nm)

| MATING DEUTSCH CONNECTOR * |                     |
|----------------------------|---------------------|
| PART NUMBER                | DESCRIPTION         |
| DT06-08SA                  | CONNECTOR HOUSING   |
| 0462-201-16141             | SOCKET              |
| 114017                     | SEALING PLUG        |
| HDT-48-00                  | RECOMMENDED CRIMPER |
| W8S                        | WEDGE               |

\* AVAILABLE AS AN ASSEMBLY (0857-TBD)

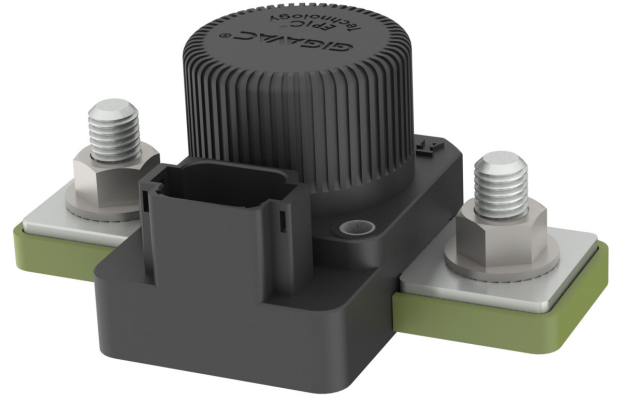
**Coil Ratings (25°C, Currents & Power At Nominal V)**

| Coil P/N Designation                            | B       | C      |
|---|---------|--------|
| Coil Voltage, Nominal                           | 12 VDC  | 24 VDC |
| Coil Voltage, Max                               | 16 VDC  | 32 VDC |
| OPEN and CLOSE Voltage, Min <sup>2,3</sup>      | 7.5 VDC | 15 VDC |
| OPEN and CLOSE Current, Min <sup>2</sup> (75ms) | 3.4 A   | 1.7 A  |
| Coil Back EMF <sup>1</sup>                      | 0       |        |
| Transient on all pins                           | ±50V    |        |
| Reverse polarity on all pins                    | 50V     |        |

**1** Coils are switched internally with a FET, so no fly-back/suppression voltage is seen at the coil inputs.

**2** OPEN and CLOSE inputs must be momentary switches. If either switch is closed all the time, it will prevent the unit from functioning properly.

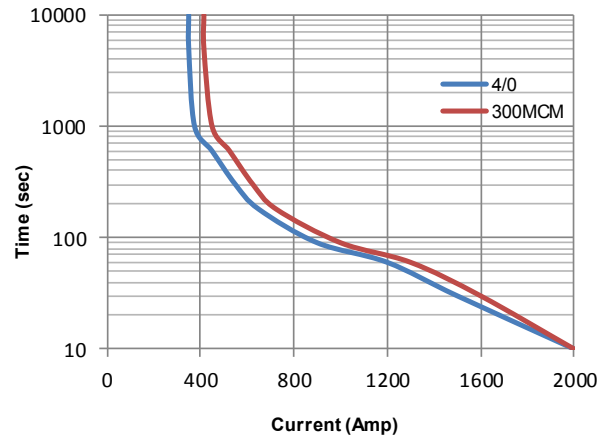
**3** CLOSE input voltage must have a minimum pulse of 100ms.



**Key Features**

|                                 |   |
|---------------------------------|---|
| <b>EPIC® Seal</b>               | Ceramic to metal braze. Gas filled hermetic chamber protects key components. Exceeds IP69K standard |
| <b>Temperature</b>              | Tested to temperatures up to 200°C  |
| <b>Contacts / Form</b>          | Silver / Bi-stable  |
| <b>Coil</b>                     | Contacts held magnetically. No coil holding power required.   |
| <b>High Shock and Vibration</b> | For rugged environments, off-road and tracked vehicles  |
| <b>Installation</b>             | Not direction sensitive   |
| <b>Made in USA</b>              | Designed and manufactured in the USA  |
| <b>Reference</b>                | MIL-R-6106, RoHS  |

**Current Carry vs Time with 85°C terminal temperature rise**



| Technical Specification                              |   |
|--|---|
| Continuous Current                                   | 400A w/ 300MCM (see graph)                      |
| Max Current—1 sec                                    | 3000A   |
| Max Current—10 sec                                   | 2000A   |
| Max Current—90 sec                                   | 1000A   |
| Contact Voltage Drop (max)                           | 150mV at 400A                                   |
| Insulation Resistance (min)                          | 100MΩ (50MΩ after life)                         |
| Dielectric Withstand                                 | 1500VRMS (1050 VRMS after life)                 |
| Operate Time (max)                                   | 20 msec (includes bounce)                       |
| Release Time (max)                                   | 12 msec   |
| Weight   | 1.1 lb with hardware (500 grams)                |
| Resistive Load Switching                             |   |
| 400A at 24 VDC                                       | 100,000 cycles                                  |
| Mechanical Life                                      | 300,000 cycles                                  |
| Fault Interrupt @ 28VDC                              | 3000A   |
| 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 |   |

NOTES:

- To configure auto shutoff voltage, visit GIGAVAC website for Low Voltage Disconnect Configuration.
- How it works:** The LVD is installed between the battery and all loads. If the voltage drops below the setpoint voltage for a predetermined period of time, the LVD will open, disconnecting all loads including the LVD itself, thus protecting the batteries from any further discharge. Once the LVD has opened, the CLOSE pin can be activated forcing the LVD to close, allowing the vehicle/system to be restarted.

| Ordering Key                       |                                       |
|------------------------------------|---------------------------------------|
| <b>MXSL15</b>                      | <b>E</b> EX: MXSL15CE                 |
| COIL VOLTAGE<br>B=12VDC<br>C=24VDC | CONNECTOR<br>E=DEUTSCH DT08 CONNECTOR |

| Power Circuit and Installation |  |
|--------------------------------|--|
|                                |  |
|                                |  |