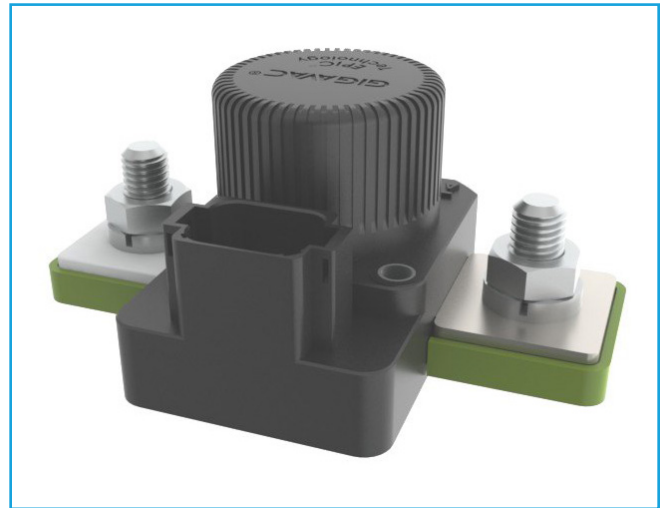


POWER CONNECTION
ZINC PLATED, M12X1.75 BOLT
STAINLESS M12X1.75 FLANGED NUT
TORQUE 200-300 IN-LB (22-33 Nm)

| 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 (0857-7)



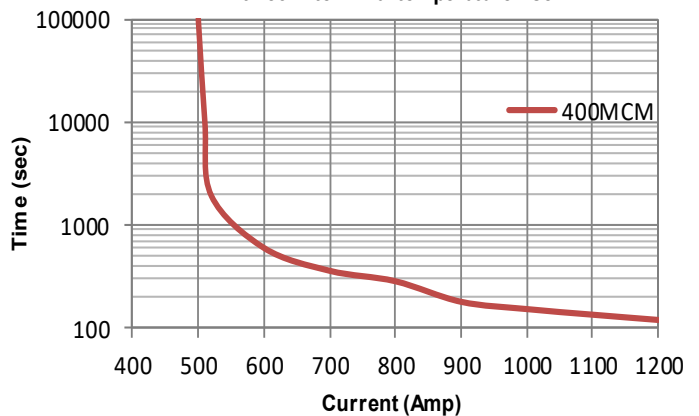
Key Features

| | |
|---------------------------------|---|
| EPIC® Seal | Ceramic to metal braze. Gas filled hermetic chamber protects key components. Exceeds IP69K standard |
| Contacts / Form | Silver / SPST / NO |
| Coil | Efficient two coil design with no PWM or EMI emissions. |
| Suppression | Coil suppression built in |
| High Shock and Vibration | For rugged environments, off-road and tracked vehicles |
| Installation | Not direction sensitive |
| Reference | MIL-R-6106, RoHS |

| Coil Ratings (25°C, Currents & Power At Nominal V) | | | |
|--|-----------|-------|---|
| Series | 15 | | |
| Coil P/N Designation | B | C | |
| Coil Voltage (Nominal) | 12 | 24 | V |
| Maximum Safe Voltage | 16 | 30 | V |
| Inrush Current (max, includes both coils) | 3.9 | 1.6 | A |
| Hold Current after inrush (max) | 0.23 | 0.097 | A |
| Coil Hold Power (max) | 2.8 | 2.3 | W |
| Coil Back EMF ¹ | 0 | | V |
| Transient on all pins | +50V 13ms | | |
| Reverse polarity on all pins | -80 | | V |

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

Current Carry vs Time
with 85°C terminal temperature rise



| Environmental And Switching Specification | | |
|--|---|-----|
| Series | 15 | |
| Contacts | | |
| Contact form | SPST-NO | |
| Contact Voltage Rating | 12-48V | |
| Insulation resistance, A1-A2 and A1&A2 to controls | 500V, 100MΩ (50MΩ after life) | |
| Dielectric, A1-A2 and A1&A2 to controls | 2200VAC, 60Hz, 1mA | |
| Contact Resistance (max) | 1.5 mΩ (.4 avg) | |
| Current (see chart for Temp. derating) | 350A, 400MCM | |
| 90s | 1000A | |
| 10s | 2000A | |
| 1s | 3000A | |
| Optional Aux, SPST, NO or NC | 2A @ 28V | |
| Resistive Load Switching | | |
| Fault interrupt | 3000A | |
| Resistive switching @ 28V | 100,000 cycles @ 350A | |
| Please contact factory for more detailed resistive switching specifications. | | |
| Mechanical life | 300,000 cycles | |
| Environmental Specifications | | |
| Weight (Max, with hardware) | 1.6lbs, 725g | |
| Vibration (10 - 2000Hz) | 15G | |
| Shock, 1/2 Sine, 11ms | 20G | |
| Temperature Range (ambient) | -40°C to 85°C | |
| Max Terminal Temperature | 125°C | |
| Water Resistance | IP67 and IP69K | |
| Seal: Hermetic Vacuum Braze, tested to E-9 std cc/sec | | |
| Steam/Water-Jet/ Boiling Water | 105psi Steam/2750psi Jet/ Submersion in BW | |
| Chemicals, Corrosion, Fungal Growth | Resistant | |
| Timing (Max Values @ 25°C) | | |
| Operate (including bounce) | 20 | ms |
| Inrush | 75 | ms |
| For details, contact factory for App. Note | 8 | 9 # |

NOTES:

- The MXST Delay on Break contactor is designed for applications that require electrical power to be maintained for a specific amount of time after the engine is shut off. The contactor is triggered by an "OFF" signal - usually from the ignition key - and then maintains power for a programmed amount of time before it turns OFF (open).
- Contactor has two coils. Both are used for pull-in. After approximately 75 milliseconds, one coil is electronically removed from the coil drive circuit. The remaining coil supplies low continuous hold power sufficient for the contactor to meet all of its specified performance specifications. This provides the lowest coil power possible without the use of PWM electronics that have been known to cause EMI emissions and/or crosstalk on system control power.
- The Bypass pin overrides the timing circuit and can be used in cases where an immediate opening of the contactor is required. The Bypass pin does not need to be connected if this function is not required.
- Caution: In Voltage Control Mode, Pin 1 is digital input - leave it open or pull it low. Pin 6 is digital output - leave it open only.
- Also available with I²C option that allows customer to program and control the time delay feature. Please contact GIGAVAC for more details.

| Ordering Key | |
|---|--|
| MXST15 | -mm-ss EX: MXST15B-30-00 |
| COIL VOLTAGE B=12VDC C=24VDC | DELAY-SECONDS ss=SECONDS FROM 00 TO 59 DELAY-MINUTES mm=MINUTES FROM 00 TO 99 |
| Power Circuit and Installation | |
| Voltage Control Mode Connection (See Note 4): | |
| | |
| I²C Control Mode Connection (See Note 5): | |
| | |
| Timing Diagram: | |
| | |

| Settings Parameters | | | |
|--------------------------------------|----------------|-------|----|
| Coil Voltage | B | C | |
| Vin Input Voltage Range | 10-16 | 20-30 | V |
| Vcontrol Pin (10kΩ input resistance) | 30 max | | V |
| Vcontrol_Close | ≥2.0 | | V |
| Vcontrol_Open | ≤0.8 | | V |
| Bypass_Active | Pull Low (0) | | V |
| Bypass_Inactive | Leave Open (5) | | V |
| Max Sink Current on LED Driver Pin | 10 | | mA |

| | | | |
|-------|---------|--|--|
| | | P.O. Box 4428 Santa Barbara, CA 93140 | |
| | | www.gigavac.com | info@gigavac.com |
| Rev 4 | 10-1-15 | © 2015 GIGAVAC, LLC | Page 2 of 2 MXST15 |