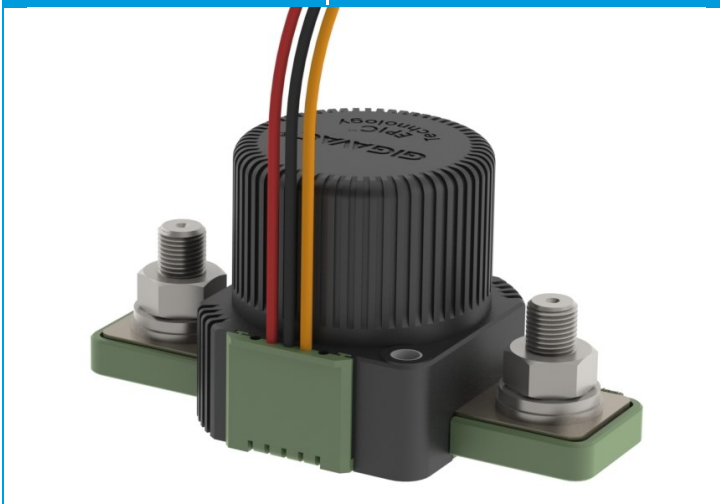


12V - 48V

MXL14

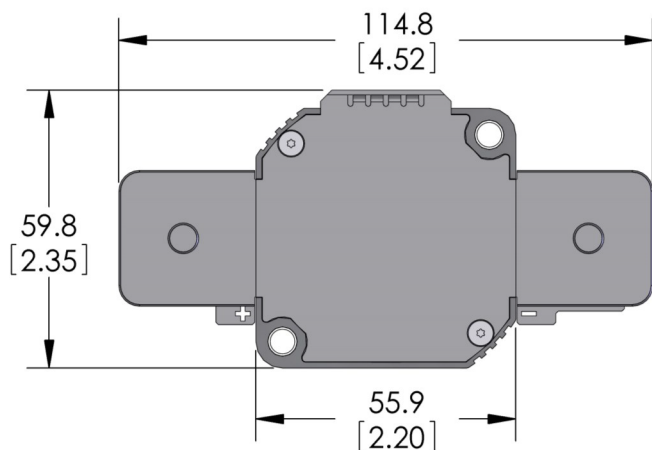
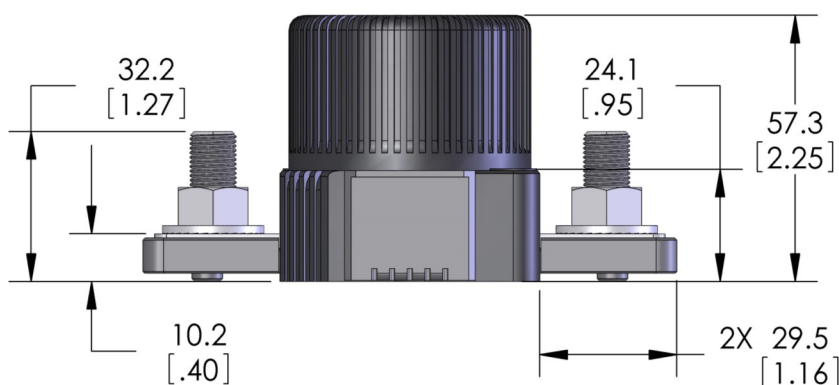
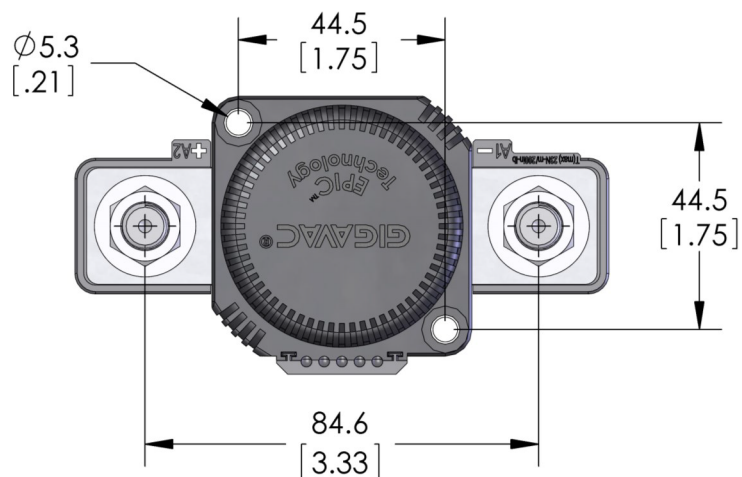
Chassis Mount

**Latching 400A
Bi-stable contactor**



Key Features

<u>EPIC® Seal</u>	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 / Bi-stable
Coil	Contacts held magnetically. No coil holding power required.
High Shock and Vibration	For rugged environments, off-road and tracked vehicles
Installation	Not direction sensitive
Reference	MIL-R-6106, RoHS



Power Terminals

Stainless M10 X 1.5 Bolt
Stainless M10 X 1.5 Flanged Nut

Torque 14-20 Nm [125-175 in-lb]

Mounting Hardware

M5 [No. 10] Bolts (not incl.)

Torque 2-4 Nm [18-35 in-lb]

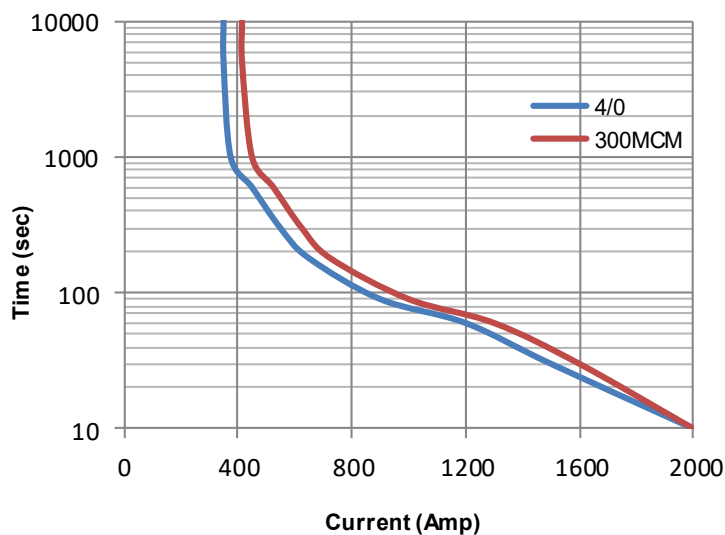
Coil Wire

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	
Continuous Current	400A w/ 300MCM (see graph on reverse)
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 Withstanding	1500VRMS (1050 VRMS after life)
Operate Time (max)	20 msec (include 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	

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	
*Contact factory for additional coil voltages	

Coil P/N Designation	B	C
Coil Voltage, Nominal	12 VDC	24 VDC
Coil Voltage, Max	16 VDC	32 VDC
Set and Reset Voltage, Max ^{2,3}	7.5 VDC	15 VDC
Set and Reset Current, Max ² (75ms)	3.4 A	1.7 A
Coil Back EMF ¹	0 V	
Transients, Max (13ms)	±50 V	
Reverse Polarity	50 V	

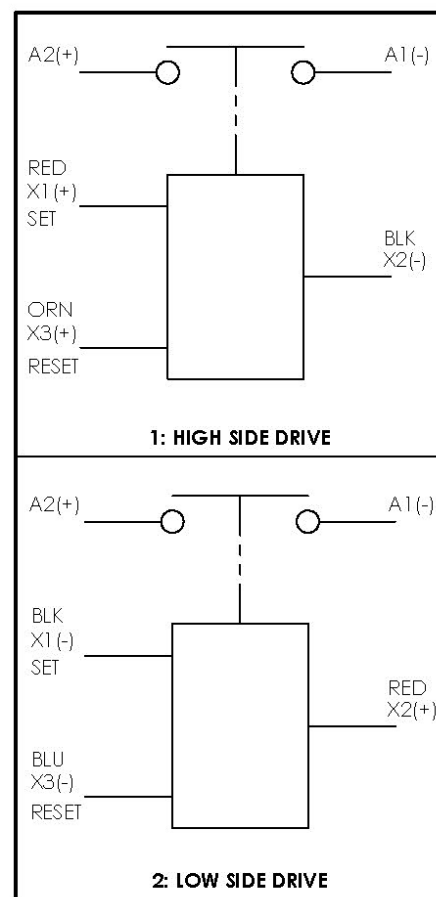
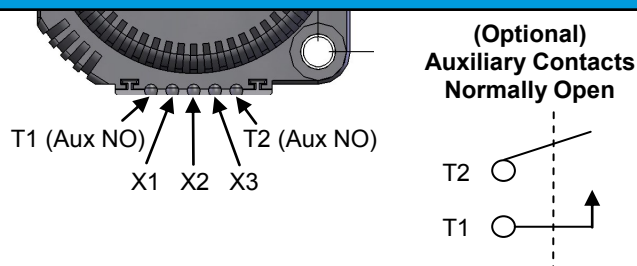
¹ Coils are switched internally with a FET, so no fly-back/suppression voltage is seen at the coil inputs.

² Powering the SET and RESET pins at the same time can damage the coil circuit. Care should be taken to prevent this type of dual input.

³ Set voltage is voltage required to ensure contacts close. Minimum pulse of 100ms required. Coil pulse limited to <100ms by internal electronics.

Ordering Key	
MXL14 Coil Voltage: <i>B = 12V</i> <i>C = 24V</i> Drive: <i>1 = High Side</i> <i>2 = Low Side</i>	Aux. Contacts: <i>Blank = none</i> <i>B = SPST, NO</i> Coil Wire: <i>A = 38 cm (15 in)</i> <i>B = 61 cm (24 in)</i> <i>C = 122 cm (48 in)</i>

Power Circuit and Installation	
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Options and Accessories	

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