

Power Terminals

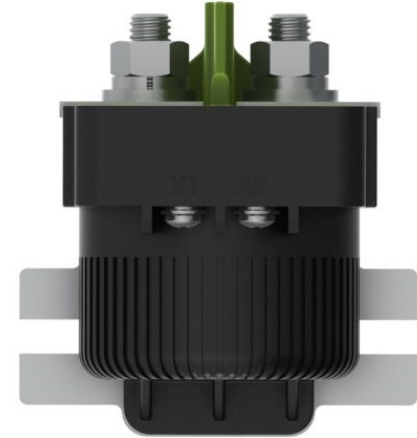
Stainless M8 X 1.25 Stud
Stainless M8 X 1.25 Nut
Stainless Lock Washer
Stainless Flat Washer
Torque 9-10 Nm [80-90 in-lb]

Mounting Hardware

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

Case Material

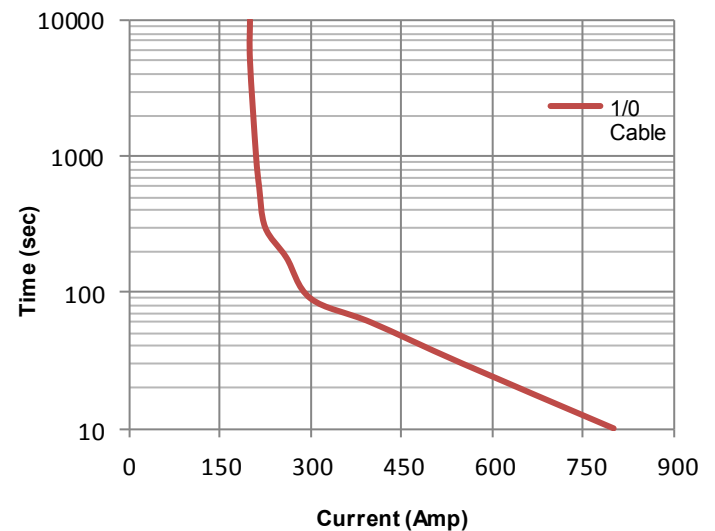
25% GF Nylon 6/6, UL 94 V-O

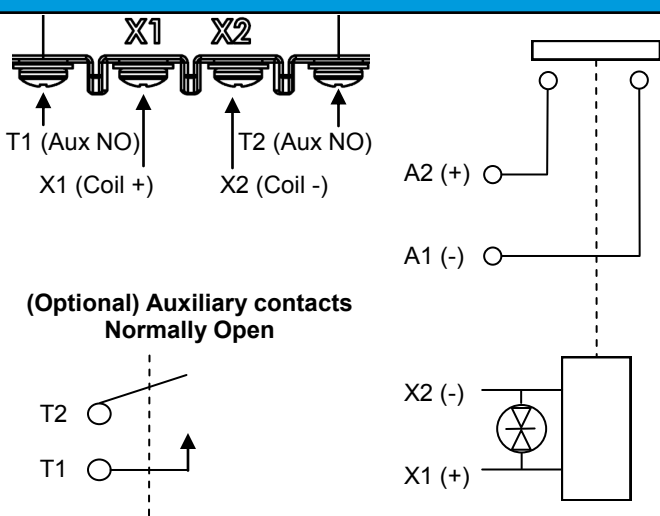
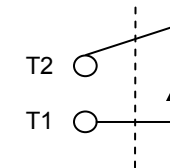
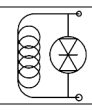
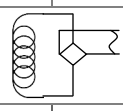
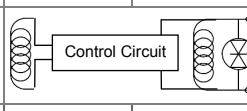
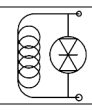
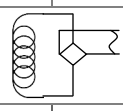
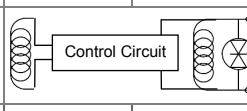
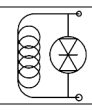
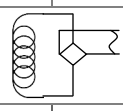
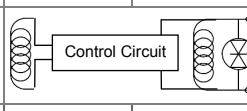


Key Features

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

Current Carry vs Time
with 85°C terminal temperature rise



Technical Specification		Ordering Key																																																																																																																																																													
Continuous Current	200A w/ 1/0 cable (see graph on reverse)	<div><div>MX52</div><div>D</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 Connection: <i>D = M4 Screws</i></div></div>																																																																																																																																																													
Max Current—1 sec	1200A																																																																																																																																																														
Max Current—10 sec	750A																																																																																																																																																														
Max Current—90 sec	250A																																																																																																																																																														
Contact Voltage Drop (max)	150mV at 200A																																																																																																																																																														
Insulation Resistance (min)	100MΩ (50MΩ after life)	<div>Power Circuit and Installation</div> <div></div>																																																																																																																																																													
Dielectric Withstanding	1500VRMS (1050 VRMS after life)																																																																																																																																																														
Weight	1.0 lb with hardware (460 grams)																																																																																																																																																														
Resistive Load Switching																																																																																																																																																															
200A at 24 VDC	100,000 cycles																																																																																																																																																														
Mechanical Life	300,000 cycles	<div>(Optional) Auxiliary contacts Normally Open</div> <div></div>																																																																																																																																																													
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	<div>Coil Ratings at 25°C</div> <div>* S and T coil are dual coil design, all others are standard coils</div> <table><tr><th>Coil P/N Designation</th><th>B</th><th>C</th><th>F</th><th>H</th><th>J</th><th>K</th><th>L</th><th>S*</th><th>T*</th></tr><tr><td>Coil Voltage, Nominal</td><td>12 VDC</td><td>24 VDC</td><td>48 VDC</td><td>72 VDC</td><td>120 VDC</td><td>120 VAC, 50/60Hz</td><td>240 VAC, 50/60Hz</td><td>12 VDC</td><td>24 VDC</td></tr><tr><td>Coil Voltage, Max</td><td>16 VDC</td><td>32 VDC</td><td>64 VDC</td><td>96 VDC</td><td>140 VDC</td><td>140 VAC</td><td>280 VAC</td><td>16 VDC</td><td>32 VDC</td></tr><tr><td>Pick-Up Voltage, Max</td><td>8 VDC</td><td>16 VDC</td><td>28 VDC</td><td>46 VDC</td><td>72 VDC</td><td>80 VAC</td><td>160 VAC</td><td>9 VDC</td><td>15 VDC</td></tr><tr><td>Drop-Out Voltage, Max</td><td>3 VDC</td><td>7 VDC</td><td>10 VDC</td><td>14 VDC</td><td>18 VDC</td><td>30 VAC</td><td>60 VAC</td><td>4.5 VDC</td><td>7 VDC</td></tr><tr><td>Drop-Out Voltage, Min</td><td>0.5 VDC</td><td>0.5 VDC</td><td>1.8 VDC</td><td>2.7 VDC</td><td>4.5 VDC</td><td>4.5 VAC</td><td>9 VAC</td><td>1 VDC</td><td>1.5 VDC</td></tr><tr><td>Pick-Up Current, Max (75ms)</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>1.7 A</td><td>0.76 A</td></tr><tr><td>Coil Current</td><td>0.68 A</td><td>0.28 A</td><td>0.16 A</td><td>0.095 A</td><td>0.06 A</td><td>0.06 A</td><td>0.04 A</td><td>0.084 A</td><td>0.032 A</td></tr><tr><td>Coil Power</td><td>8 W</td><td>6.8 W</td><td>7.6 W</td><td>6.8 W</td><td>7.2 W</td><td>7.2 W</td><td>9.6 W</td><td>1 W</td><td>0.768 W</td></tr><tr><td>Operate Time, Max (incl.bounce)</td><td>20 msec</td><td>20 msec</td><td>30 msec</td><td>30 msec</td><td>20 msec</td><td>30 msec</td><td>30 msec</td><td>20 msec</td><td>20 msec</td></tr><tr><td>Release Time, Max</td><td>12 msec</td><td>12 msec</td><td>12 msec</td><td>12 msec</td><td>12 msec</td><td>50 msec</td><td>55 msec</td><td>12 msec</td><td>12 msec</td></tr><tr><td>Internal Coil Suppression</td><td colspan="5">Transorb </td><td colspan="2"></td><td colspan="2"></td></tr><tr><td>Coil Back EMF</td><td>55 V</td><td>55 V</td><td>80 V</td><td>115 V</td><td>175 V</td><td>N/A</td><td>N/A</td><td>55 V</td><td>55 V</td></tr><tr><td>Transients, Max (13ms)</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>±50 V</td><td>±50 V</td></tr><tr><td>Reverse Polarity</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>16 V</td><td>32 V</td></tr></table>								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
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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																																																																																																																																																						
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																																																																																																																																																														

Options and Accessories	

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