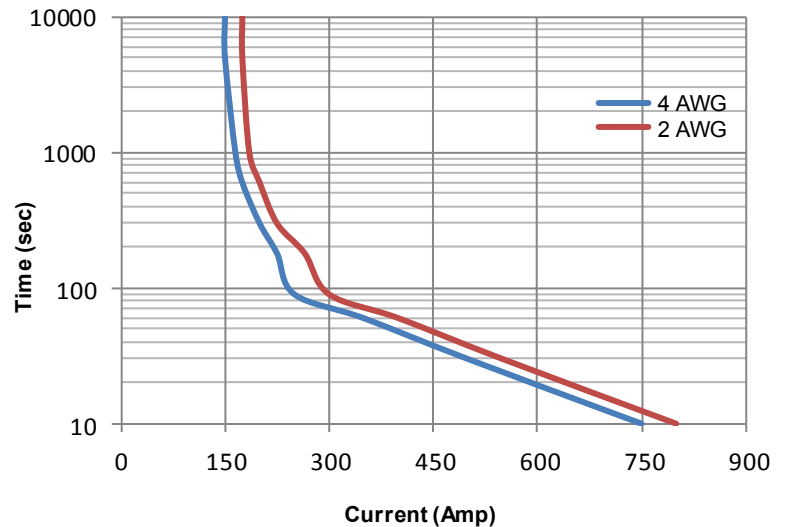


Key Features

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



Power Terminals
Stainless M8 X 1.25 Stud
Stainless M8 X 1.25 Flanged Nut

Torque 9-10 Nm [80-90 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

Technical Specification	
Continuous Current	150A w/ 4 AWG (see graph on reverse)
Max Current—1 sec	1200A
Max Current—10 sec	750A
Max Current—90 sec	250A
Contact Voltage Drop (max)	150mV at 150A
Insulation Resistance (min)	100MΩ (50MΩ after life)
Dielectric Withstanding	1500VRMS (1050 VRMS after life)
Weight	1.0 lb with hardware (460 grams)

Resistive Load Switching	
150A at 24 VDC	200,000 cycles
Mechanical Life	300,000 cycles
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
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	

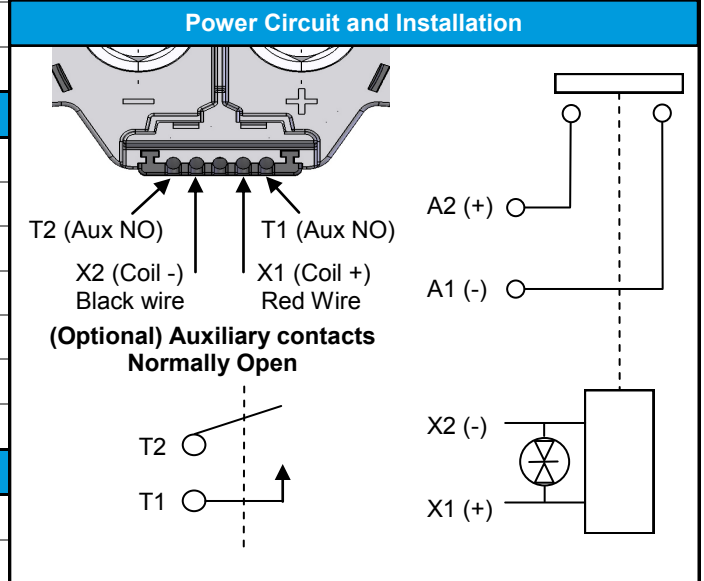
Auxiliary contacts (optional) - Form A, SPST Normally Open	
Switching Current (max)	1A at 28VDC
Switching Current (min)	0.1mA at 5V

MX21

Coil Voltage: *See table*

Auxiliary Contacts:
Blank = none
B = SPST, Normally Open

Coil Wire:
A = 38 cm (15 in)
B = 61 cm (24 in)
C = 122 cm (48 in)



Coil Ratings at 25°C
** S and T coil are dual coil design, all others are standard coils*

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 VAC
Pick-Up Current, Max (75ms)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.8 A	1 A
Coil Current	0.68 A	0.28 A	0.16 A	0.095 A	0.06 A	0.06 A	0.04 A	0.082 A	0.057 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	1.4 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	32

Options and Accessories	

GIGAVAC®

P.O. Box 4428
Santa Barbara, CA 93140

www.gigavac.com info@gigavac.com **+805-684-8401**

Rev 5 9/24/15 © 2013 GIGAVAC, LLC Page 2 of 2 **MX21**