

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]

<u>Coil Wire</u> Silicone, 20 AWG, UL: VW-1

Mounting Hardware

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

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

<u>Case Material</u> 25% GF Nylon 6/6, UL 94 V-O 12V - 48V

MX23

Standup Mount

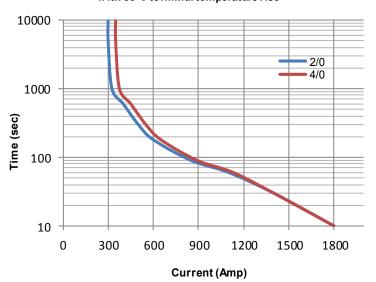
Contactor

300A



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	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



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Technical Specification			
Continuous Current	300A w/ 2/0 cable (see graph on reverse)		
Max Current—1 sec	3000A		
Max Current—10 sec	1800A		
Max Current—90 sec	850A		
Contact Voltage Drop (max)	150mV at 300A		
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	1.0 lb with hardware (460 grams)		
Res	istive Load Switching		
300A at 24 VDC	100,000 cycles		

	Ordering Key			
	MX23 ↑			
┨	Coil Voltage: / Auxiliary Contacts:			
4	B = 12V / Blank = none			
l	C = 24V / $B = SPST$, Normally Open			
1	F = 48V			
1	Coil Wire:			
1	A = 38 cm (15 in)			
	B = 61 cm (24 in)			
	C = 122 cm (48 in)			
	Power Circuit and Installation			

T1 (Aux NO)

X1 (Coil +) Red Wire

T2 (Aux NO)

T2

T1

X2 (Coil -) Black wire

(Optional) Auxiliary contacts Normally Open A2 (+) O

A1 (-) O-

X1 (+)

Resistive Load Switching		
300A at 24 VDC	100,000 cycles	
Mechanical Life	300,000 cycles	
Fault Interrupt @ 28VDC	3000A	

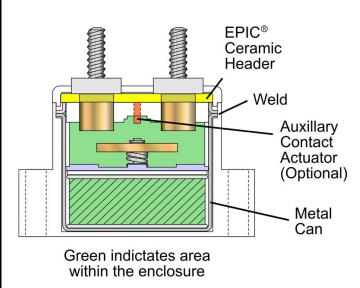
Environmental Specifications			
Seal	Hermetic, 10 E-9 atm cc/sec		
Temperature Range	-55°C to +100°C		
Shock	Sawtooth @ 20G, 11ms, ½ Sine @ 25G, 11ms		
Vibration	10-2000 Hz, 20G		
Water / Steam	2750 psi waterjet, 105 psi steam, boiling water		
Salt Spray Corrosion	MIL-STD-810G		

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
	oil Ratings at 25°C ory for additional coil voltages

Coil P/N Designation	В	С	F	
Coil Voltage, Nominal	12 VDC	24 VDC	48 VDC	
Coil Voltage, Max	16 VDC	32 VDC	60 VDC	
Pick-Up Voltage, Max	8 VDC	16 VDC	40 VDC	
Drop-Out Voltage	0.5 to 4 VDC	2 to 7.5 VDC	4 to 15 VDC	
Pick-Up Current, Max (75ms)	4.3 A	1.6 A	0.98 A	
Coil Current	0.24 A	0.09 A	0.044 A	
Coil Power	2.9 W	2.1 W	2.1 W	
Internal Coil Suppression	Transorb			
Coil Back EMF	55 V		125 V	
Transients, Max (13ms)	±50 V		±75 V	
Reverse Polarity	16 V 32 V		64 V	



Options and Accessories		

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Rev 2	6/19/13	© 2013 GIGAVAC, LLC	Page 2 of 2	MX23