

Power Terminals Stainless M8 X 1.25 Stud Stainless M8 X 1.25 Flanged Nut <u>Mounting Hardware</u> M5 [No. 10] Bolts (not incl.)

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

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

Torque 9-10 Nm [80-90 in-lb]

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

Standup Mount

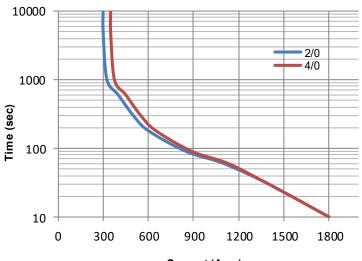
Contactor 300A

MX23



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			
Reference	MIL-R-6106, RoHS			

Current Carry vs Time with 85°C terminal temperature rise



Current (Amp)

GIGAVAC®			P.O. Box 4428 Santa Barbara, CA 93140	
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Technical Specification			Ordering Key			
Continuous Current	300A w/ 2/0 cabl	e (see graph on	reverse)			
Max Current—1 sec	3000A			MX23		
Max Current—10 sec	1800A					
Max Current—90 sec	850A			Coil Voltage: Auxiliary Contacts:		
Contact Voltage Drop (max)	150mV at 300A			Coil Voltage: Auxiliary Contacts: B = 12V Blank = none		
Insulation Resistance (min)	100MΩ (50MΩ a	fter life)		C = 24V / B = SPST, Normally Open		
Dielectric Withstanding	1500VRMS (1050 VRMS after life)			F = 48V		
Operate Time (max)	20 msec (include	bounce)		Coil Wire: /		
Release Time (max)	12 msec			A = 38 cm (15 in) B = 61 cm (24 in)		
Weight	1.0 lb with hardw	are (460 grams))	C = 122 cm (48 in)		
Resi	stive Load Swite	ching		Power Circuit and Installation		
300A at 24 VDC	100,000 cycles					
Mechanical Life	300,000 cycles					
Fault Interrupt @ 28VDC	3000A			Tagage		
Enviro	nmental Specifi	cations		T2 (Aux NO)		
Seal	Hermetic, 10 E-9	atm cc/sec		X2 (Coil -) $X1$ (Coil +)		
Temperature Range	-55°C to +100°C			Black wire Red Wire A1 (-) O		
Shock	Sawtooth @ 20G	6, 11ms, ½ Sine	@ 25G, 11ms	(Optional) Auxiliary contacts Normally Open		
Vibration	10-2000 Hz, 20G	i				
Water / Steam	2750 psi waterjet	, 105 psi steam	, boiling water	T2 0 X2 (-)		
Salt Spray Corrosion	MIL-STD-810G					
Resistant to corrosion, chemi	cals, and fungal g	rowth		T1 O X1 (+)		
Auxiliary contacts (or	otional) - Form A	, SPST Normal	ly Open			
Switching Current (max)	1A at 28VDC					
Switching Current (min)	0.1mA at 5V					
	oil Ratings at 25 ory for additiona					
Coil P/N Designation	В	С	F	EPIC [®] Ceramic		
Coil Voltage, Nominal	12 VDC	24 VDC	48 VDC	Header		
Coil Voltage, Max	16 VDC	32 VDC	64 VDC			
Pick-Up Voltage, Max	8 VDC	16 VDC	40 VDC	Weld		
Drop-Out Voltage	0.5 to 4 VDC	2 to 7.5 VDC	4 to 15 VDC	Auxillary Contact		
Pick-Up Current, Max (75ms)	3.9 A	1.6 A	0.97 A	Contact Actuator		
Coil Current	0.23 A	0.097 A	0.042 A	(Optional)		
Coil Power	2.8 W	2.3 W	2 W			
Internal Coil Suppression	Transorb	Control Circui	t	Green indictates area		
Coil Back EMF	55 V 125 V		125 V	within the enclosure		
Transients, Max (13ms)	±50) V	±75 V			
Reverse Polarity	16 V	32 V	64 V			
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Options and Accessories	G	igA	
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