

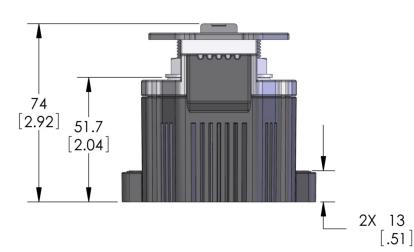


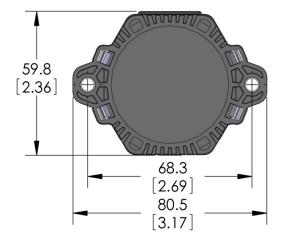
## **MX21**

**Contactor** 150A



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
Reference	MIL-R-6106, RoHS





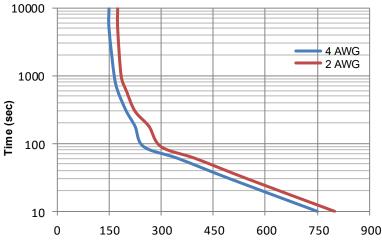
<u>Power Terminals</u> Stainless M8 X 1.25 Stud Stainless M8 X 1.25 Flanged Nut

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

Coil Wire 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 Current Carry vs Time with 85°C terminal temperature rise



Current (Amp)

GIG	P.O. Box 4428 Santa Barbara, CA 93140				
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Rev 6 27/Jar	/22	© 2013 GIGAVAC, LLC	Page 1 of 2	MX21	

Technical Specification				Ordering Key						
Continuous Current	150A w/ 4 A	WG (see gra	aph on revers	e)						
Max Current—1 sec	1200A				M	X21				
Max Current—10 sec	750A							<u>.</u>		
Max Current—90 sec	250A								to ata .	
Contact Voltage Drop (max)	150mV at 1	50A			Coil Vo See tat	U U		liary Con = none	tacts:	
Insulation Resistance (min)	100MΩ (50M	MΩ after life)			000 14.			PST, Norma	ally Open	
Dielectric Withstanding	1500VRMS	(1050 VRMS	Safter life)							
Weight	1.0 lb with h	ardware (460	0 grams)		Coil Wire: / A = 38 cm (15 in) B = 61 cm (24 in) C = 122 cm (48 in)					
Res	sistive Load	Switching								
150A at 24 VDC	200,000 cyc	les								
Mechanical Life	300,000 cyc	les				Power Cire	cuit and Inst	tallation		
Fault Interrupt @ 28VDC	1500A							г		
Envir	onmental Sp	ecifications						(	<u> </u>	
Seal	Hermetic, 10	) E-9 atm cc/	/sec			BABAB				
Temperature Range	-55°C to +10	0°C			7		ŀ	A2 (+) O		
Shock	Sawtooth @	20G, 11ms,	1⁄2 Sine @ 2	5G, 11ms	T2 (Aux NO)		Aux NO)			
Vibration	10-2000 Hz	10-2000 Hz, 20G			X2 (Coil -) X1 (Coil +) Black wire Red Wire A1 (-) O (Optional) Auxiliary contacts					
Water / Steam	2750 psi wa	2750 psi waterjet, 105 psi steam, boiling water								
Salt Spray Corrosion	MIL-STD-81	0G			No	rmally Open				
Resistant to corrosion, chem	icals, and fun	gal growth					>	K2 (-)	_	
Auxiliary contacts (optional) - Form A, SPST Normally Open										
Switching Current (max) 1A at 28VDC			T1		>	×1 (+)				
Switching Current (min)	0.1mA at 5\	/				i				
	1			atings at 2						
	* S a	ind T coil ar	e dual coil d	lesign, all o	others are sta	indard coils		1		
Coil P/N Designation	В	С	F	Н	J	К	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®			
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 Page 2 of 2

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