

Power Terminals M12 Hardware

Torque 23-34 Nm [200-300 in-lb]

Coil/Auxiliary Terminals

18-8 Stainless Steel Hardware
M4x.7 6mm Phillips Machine Screw
Internal-Tooth Washer

Torque .75 Nm [6.6 in-lb] max

Mounting Hardware
M8 [5/16 in] 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	MX46

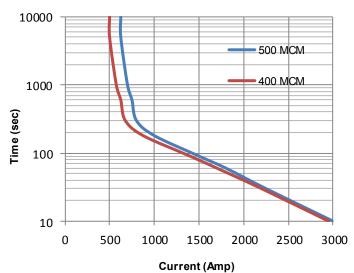
600A

Bottom Mount Contactor



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



GIGAVAC®		P.O. Box 4428 Santa Barbara,	CA 93140	
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Technical Specification			
Continuous Current	600A w/ 500MCM (see graph on reverse)		
Max Current—1 sec	4000A		
Max Current—10 sec	3000A		
Max Current—90 sec	1500A		
Contact Voltage Drop (max)	150mV at 600A		
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	2.1 lb (950 grams)		
Res	Resistive Load Switching		
600A at 24 VDC	100,000 cycles		

Ordering Key
MX46_D_ Coil Voltage: B = 12V C = 24V F = 48V
Auxiliary Contacts: Blank = none B = SPST, Normally Open

Power Circuit and Installation

T2 (Aux NO)

X2 (Coil -)

A2 (+) O

A1 (-) O-

X1

(Optional) Auxiliary contacts Normally Open

X1 (Coil +)

T2 0

Resistive Load Switching		
600A at 24 VDC	100,000 cycles	
Mechanical Life	300,000 cycles	
Fault Interrupt @ 28VDC	4000A	
Environmental Specifications		

Environmental Specifications			
Seal	Hermetic, 10 E-9 atm cc/sec		
Temperature Range	-55°C to +90°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			

Auxilia	v contacts	(ontional	- Form A	, SPST Normally Open
/ taxiiia	y contacto	Optional	,	, or or ittorinanty open

Coil Ratings at 25°C

Switching Current (max)

1A at 28VDC

Switching Current (min)

0.1mA at 5V

*Contact factory 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	64 VDC	
Pick-Up Voltage, Max	8 VDC	16 VDC	30 VDC	
Dropout Voltage	0.5 to 4.5 VDC	0.5 to 7.5 VDC	2 to 15 VDC	
Pick-Up Current, Max (75ms)	3.8 A	1.9 A	0.9 A	
Coil Current	0.64 A	0.32 A	0.16 A	
Coil Power	7.8 W	7.8 W	7.8 W	
Internal Coil Suppression	Transorb Control Circuit			
Coil Back EMF	55 V		125 V	
Transients, Max (13ms)	±50 V		±75 V	



Options and Accessories		

16 V

Reverse Polarity

32 V

64 V

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