

Power Terminals
Stainless M10 X 1.5 Stud
Stainless M10 X 1.5 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]

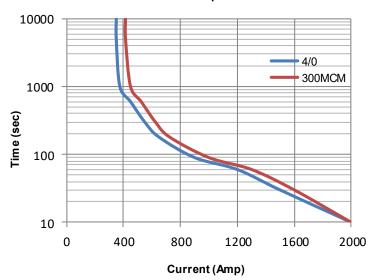
<u>Case Material</u> 25% GF Nylon 6/6, UL 94 V-O

12V - 48V	MX54	
<b>Side Mount</b>	Contactor 400A	



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



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Technical Specification			
Continuous Current	400A w/ 300MCM (see graph on reverse)		
Max Current—1 sec	3000A		
Max Current—10 sec	2000A		
Max Current—90 sec	1000A		
Contact Voltage Drop (max)	150mV at 400A		
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	1.1 lb with hardware (500 grams)		
Res	Resistive Load Switching		
400A at 24 VDC	100 000 cycles		

Ordering Key		
MX54 _ D _	_	
Coil Voltage:  B = 12V C = 24V F = 48V		
Auxiliary Contacts:  Blank = none B = SPST, Normally Open		

Resistive Load Switching			
400A 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, 1/2 Sine @ 25G, 11ms		
Vibration	10-2000 Hz, 20G		
Water / Steam	2750 psi waterjet, 105 psi steam, boiling water		
Salt Spray Corrosion	MIL-STD-810G		

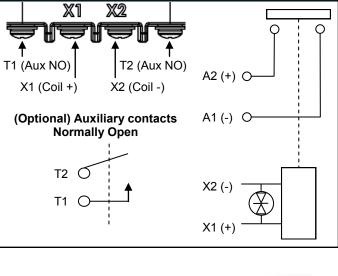
Resistant to corrosion, chemicals, and fungal growth

## Auxiliary contacts (optional) - Form A, SPST Normally Open Switching Current (max) 1A at 28VDC

Switching Current (min) 0.1mA at 5V

Coil Ratings at 25°C
*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	40 VDC
Drop-Out Voltage	0.5 to 4 VDC	2 to 7.5 VDC	4 to 15 VDC
Pick-Up Current, Max (75ms)	3.9 A	1.6 A	0.97 A
Coil Current	0.23 A	0.097 A	0.042 A
Coil Power	2.8 W	2.3 W	2 W
Internal Coil Suppression	Transorb Control Circuit  55 V  ±50 V		
Coil Back EMF			125 V
Transients, Max (13ms)			±75 V
Reverse Polarity	16 V	32 V	64 V



**Power Circuit and Installation** 



Options and Accessories		

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