

POWER CONNECTION ZINC PLATED, M12X1.75 BOLT STAINLESS M12X1.75 FLANGED NUT

TORQUE 200-300 IN-LB (22-33 Nm)

MATING DEUTSCH CONNECTOR *			
DESCRIPTION			
CONNECTOR HOUSING			
SOCKET			
SEALING PLUG			
RECOMMENDED CRIMPER			
WEDGE			

^{*} AVAILABLE AS AN ASSEMBLY (0857-1/2)

Coil Ratings (25°C, Currents & Power At Nominal V)					
Series	15		16		
Coil P/N Designation	В	С	В	С	
Coil Voltage (Nominal)	12	24	12	24	٧
Maximum Safe Voltage	16	32	16	32	٧
Pickup Voltage (max)	8.0	16.0	9.0	18.0	٧
Dropout Voltage (min)	0.5	2.0	1.0	2.0	٧
Dropout Voltage (max)	4.0	7.5	4.5	7.0	٧
Inrush Current (max, includes both coils)	3.9	1.6	3.8	1.9	А
Hold Current after inrush (max)	0.23	0.097	0.64	0.32	А
Coil Hold Power (max)	2.8	2.3	7.7	7.8	W
Coil Back EMF	55			٧	
Transient on all pins	+50V 13ms				
Reverse polarity on all pins	-80			٧	

Current Sensing Contactor

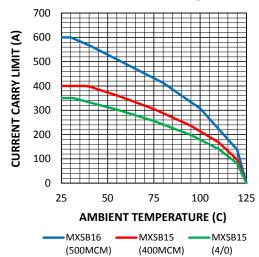
350 amp and 600 amp versions





Key Features				
EPIC® Seal	Ceramic to metal braze. Gas filled hermetic chamber protects key components. Exceeds IP69K standard			
Contacts / Form	Silver / SPST / NO			
Coil	Efficient two coil design with no PWM or EMI emissions.			
Suppression	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			

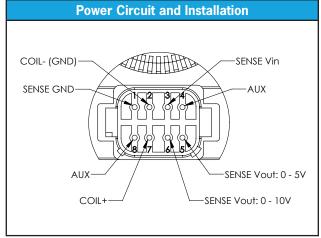
Current Carry



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Environmental And Switching Specification					
Series	15 16				
Contacts	S				
Contact form	SPST-NO				
Contact Voltage Rating		12-	48V		
Insulation resistance, A1-A2 and A1&A2 to ctrls	500V, 100M Ω (50M Ω after life)			er life)	
Dielectric, A1-A2 and A1&A2 to controls	2	200VAC,	60Hz, 1m	A	
Contact Resistance (max)		$1.5~\text{m}\Omega$	(0.4 avg)		
Current (see chart for Temp. derating)	35 400N		60 500l	OA MCM	
90s	100	OA	150)OA	
10s	200	OA	300)OA	
1s	300	OA	400)OA	
Optional Aux, SPST, NO or NC		2A @	28V		
Resistive Load S	Switching	g			
Fault interrupt	300)OA	500)OA	
Resistive switching @ 28V	100,000 35			cycles @ 0A	
Please contact factory for more detailed resistive switching specifications.					
Mechanical life	300,000 cycles				
Environmental Specifications					
Weight (Max, with hardware)	1.6lbs, 725g 2lbs, 910g			910g	
Vibration (10 - 2000Hz)	15G				
Shock, 1/2 Sine, 11ms	20G				
Temperature Range, Operating (ambient)	-55°C to 85°C				
Temperature Range, Storage (ambient)		-55°C to	150°C		
Max Terminal Temperature	125℃				
			IP67 and IP69K		
Water Resistance		IP67 an	d IP69K		
·	-9 std cc		d IP69K		
Water Resistance		/ sec osi Steam	d IP69K /2750psi ion in BW	Jet/	
Water Resistance Seal: Hermetic Vacuum Braze, tested to E Steam/Water-Jet/		/ sec osi Steam Submers	/2750psi	Jet/	
Water Resistance Seal: Hermetic Vacuum Braze, tested to E Steam/Water-Jet/ Boiling Water	105	/sec osi Steam Submers Resi	/2750psi ion in BW	Jet/	
Water Resistance Seal: Hermetic Vacuum Braze, tested to E Steam/Water-Jet/ Boiling Water Chemicals, Corrosion, Fungal Growth	105	/sec osi Steam Submers Resi	/2750psi ion in BW	Jet/	
Water Resistance Seal: Hermetic Vacuum Braze, tested to E Steam/Water-Jet/ Boiling Water Chemicals, Corrosion, Fungal Growth Timing (Max Value)	105	/sec osi Steam Submers Resi:	/2750psi ion in BW stant	Jet/	
Water Resistance Seal: Hermetic Vacuum Braze, tested to E Steam/Water-Jet/ Boiling Water Chemicals, Corrosion, Fungal Growth Timing (Max Value) Operate (including bounce)	105	/sec osi Steam Submers Resi: /C) 20	/2750psi ion in BW stant ms		

SERIES 15-350A 16-600A COIL VOLTAGE B=12VDC C=24VDC Power Circuit and Installation



Settings Parameters			
Current Sense Range	-600 to +600	Α	
Current Sense Accuracy (including temperature)	± 7%		
Sense Vin	12-33	V	
Sense Circuit Current (typical)	20m	mA	

NOTES:

1. Operation: Contactor is energized by applying power to Coil+ and Coil- (GND). The current sensing circuit is isolated from the coil and requires power at Sense Vin and Sense Gnd. There are two Sense Vout pins, each with a different 0 amp voltage and range. They both indicate the current through the main contacts (A2 & A1).

Pin 5:

0 to 5V

Sense Vout = I/240 + 2.5

Pin 6:

0 to 10V

Sense Vout = I/120 + 5.0

2. Contactor has two coils. Both are used for pull-in. After approximately 75 milliseconds, one coil is electronically removed from the coil drive circuit. The remaining coil supplies low continuous hold power sufficient for the contactor to meet all of its specified performance specifications. This provides the lowest coil power possible without the use of PWM electronics that have been known to cause EMI emissions and/or crosstalk on system control power.

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