

Product Facts

- Designed to be the smallest, lightest weight, lowest cost sealed contactor in the industry with its current rating.
- Built-in coil economizer (models requiring external economizer also available).
- Optional auxiliary contact for easy monitoring of power contact position.
- Hermetically sealed – intrinsically safe, operates in explosive/harsh environments with no oxidation or contamination of coils or contacts, including long periods of non-operation.
- Versatile coil and power connections.
- MIL-PRF-32085 versions in development



For factory-direct application assistance, dial 800-253-4560, ext. 2053, or 805-220-2053.

Performance Data

Parameter	Units	Value for MAP200 Series
Contact Arrangement, power contacts		1 Form A (SPST-NO)
Rated Operating Voltage	VDC	12 - 900
Continuous (Carry) Current, Typical	A	500 @ 85°C, 400 mcm conductors <i>Consult Factory for required conductors for higher currents</i>
Make/Break Current at Various Voltages ^{1/}	A	See next page
Break Current at 320VDC ^{1/}	A	2,000, 1 cycle
Contact Resistance, Typ. (@200A)	mohms	0.2
Load Life	Cycles	See next page
Mechanical Life	Cycles	1 million
Contact Arrangement, auxiliary contacts		1 Form A (SPST-NO)
Aux. Contact Current, Max.	A	2A @ 30VDC / 3A @ 125VAC
Aux. Contact Current, Min.	mA	100mA @ 8V
Aux. Contact Resistance, Max.	ohms	0.417 @ 30VDC / .150 @ 125VAC
Dielectric Withstanding Voltage	Vrms	2,200 @ sea level
Insulation Resistance @ 500VDC	megohms	100 ^{2/}
Shock, 11ms 1/2 sine, peak, operating	G	20
Vibration, sine, 80-2000Hz., peak	G	20
Operating Temperature	°C	-55 to +85
Weight, Nominal	lb.(kg)	.95 (.43)

^{1/} Main power contacts

^{2/} 50 at end of life

^{3/} Use with AMP LOUVERTAC 5-192013-9. Consult factory for threaded mount socket.

Coil Operating Voltage (valid over temperature range)

Voltage (will operate)	18-32VDC
Voltage (Max.)	32VDC
Pickup (close) Voltage Max.	18VDC
Hold Voltage (Min.)	10VDC
Dropout (open) Voltage (Min.)	2VDC
Inrush Current (Max.)	4.5A
Holding Current (Avg.)	0.5A
Inrush Time (Max.)	100ms

Part Numbering System

Typical Part Number	MAP200	A	R	D	E	A
Series: MAP200 = 500 Amp, 12-900VDC Contactor						
Contact Form: A = Normally Open H = Normally Open with Aux. Contacts						
Coil Voltage: R = 18-32VDC						
Coil Wire Length: A = 15.3 in (390 mm) B = 6.0 in (152 mm) D = Coil connector on relay (requires option "E" or "X" in next step).						
Coil Terminal Connector: N = No connector E = 9-pin subminiature "D" plug mounted on contactor housing F = 9-pin subminiature "D" plug mounted on 15.3 in (390 mm) flying leads. X = Special configuration (consult factory)						
Mounting & Power Terminals: A = Bottom Mount & Male M8 x 1.25 Thread Terminals B = Bottom Mount & Female 1/4-20 Thread Terminals C = Bottom Mount & Plug-in Terminals ^{3/} D = Bottom Mount & Female M6 x 1 Thread Terminals						

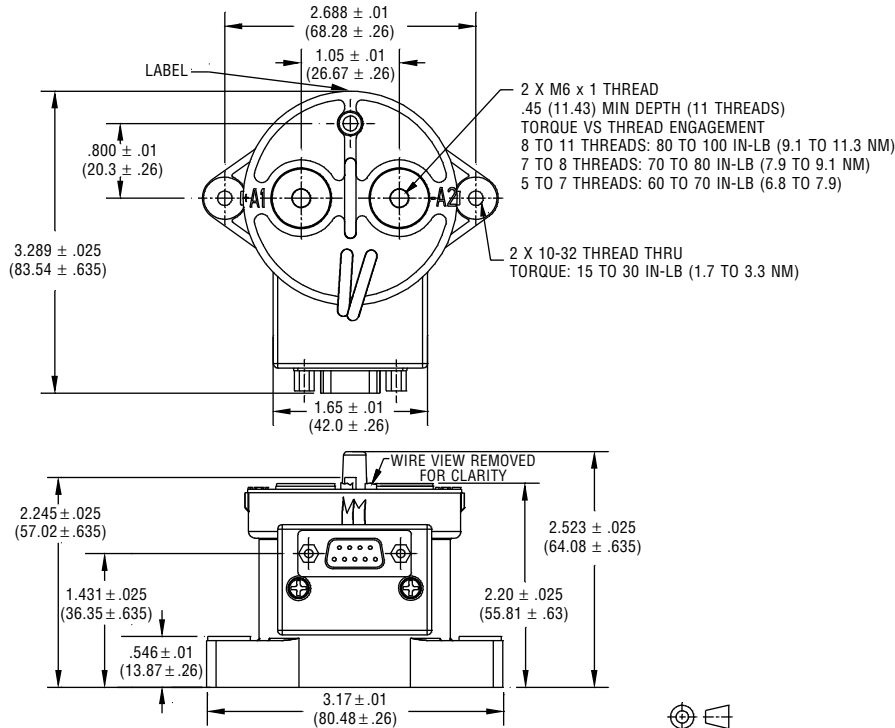
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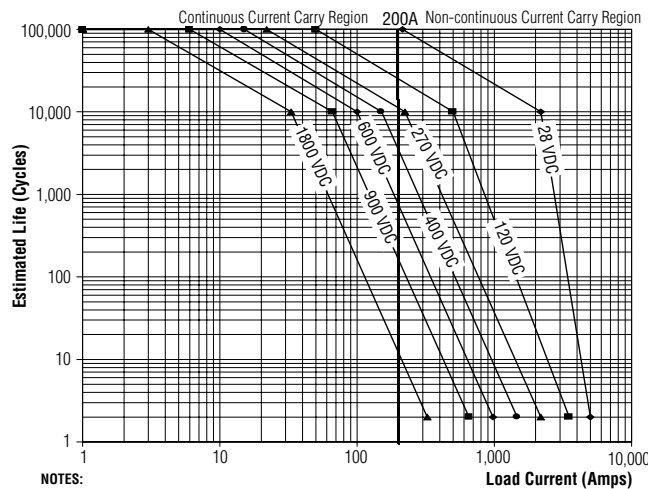
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MAP200 Series (Continued)

Outline Dimensions



Estimated Make & Break Power Switching Ratings



NOTES:

- 1) FOR RESISTIVE LOADS WITH 300μH MAXIMUM INDUCTANCE.
- 2) ESTIMATES BASED ON EXTRAPOLATED DATA. USER IS ENCOURAGED TO VERIFY RATING IN ACTUAL APPLICATION.
- 3) END OF LIFE WHEN DIELECTRIC STRENGTH BETWEEN TERMINALS FALLS BELOW 50MEGOHMS @ 500VDC.
- 4) THE MAXIMUM CONTACT MAKE AND BREAK POWER IS ESTIMATED AT 208KW. BREAK ONLY ABOVE 208KW TO AVOID CONTACT WELDING.

Electrical Load Life Ratings for Typical Applications

Make/Break Life Capacitive & Resistive Loads at 320VDC (1) (2)		
@90% capacitive pre-charge (make only) see chart below	Cycles	50,000
@80% capacitive pre-charge (make only) see chart below	Cycles	50
@200A make/break (2 consecutive, reverse polarity) (1)	Cycles	12
2,000A (break only) (1)	Cycles	1*

(1) Resistive load includes inductance L = 25μH. Load @ 2500A tested @ 200μH.

(2) Life based on projected Weibull Life with 95% reliability.

* Does not meet dielectric and IR after test.

