

REVISIONS					
P	LTR	DESCRIPTION	DATE	DWN	APVD
B		ECO-20-007395	02JUN2020	SR	PM

Ordering Information

Typical Part Number ▶ **CAP202 M S B F D**

Series:
CAP202 = 2 form X, DPST-NO-DM Contactor

Auxiliary Contact Outputs (SPDT form C):
A = None
M = Two
F = Four

Coil Voltage:
S = 28V (with built-in electronically switched dual coil economizer)

Coil and Aux. Wire Length:
A = 15.3 inches
B = 6 inches
X = Customer Special

Coil and Aux. Connector:
N = None
F = D Plug on flying leads (may affect wire length)

Mounting & Power Terminals:
D = 2X M5 Bottom Mount with 4X, M6 x 1 Female thread terminals

Specifications are subject to change without notice.

Performance Data

Physical Data
Contact Arrangement — DPST-NO (2 Form X)
Power Contacts — DPST-NO (2 Form X)
Auxiliary Switches — SPDT (form C)

Dimensions — See drawings on next page

Weight — 0.79 Kg (1.74 lb.)

Electrical Data
Voltage Rating —
Main Contacts — 12-900Vdc
Auxiliary Contacts — 30Vdc

Current Rating —
Main Contacts¹ — 350A/pole
Auxiliary Contacts — 3A

Contact Resistance —
Main Contacts — (2)
100 mΩ max @ 1 amp
0.3 mΩ max. @ 200A after 3 mins.
Auxiliary Contacts — 200 mΩ max

Random Vibration, 14 Grms —
15 100 300 900 2000 Hz
.01 .01 .2 .2 .01 G2/Hz

Operating Temperature Range —
-55°C to +85°C

Hot Switching Performance @ ± 400 Vdc (3) —
100A make/break — 10,000 cycles
250A make/break — 2,500 cycles
700A break only — 10 cycles

Hot Switching Performance @ ± 270 Vdc (4) —
100A make/break — 40,000 cycles
250A make/break — 7,500 cycles
2000A break only @ ±370Vdc (5) — 2 cycles

Maximum Make Current — 700A

Dielectric Withstand Voltage over Life — Terminal to Terminal/Terminals to Coil — 1mA max @ 2,200Vrms

Insulation Resistance over Life — Terminal to Terminal/Terminals to Coil — 50mΩ min @ 500Vdc

Mechanical Life — 100,000 cycles

Environmental Data
Shock, 11ms 1/2 sine (operating) — 20G peak

Sine Vibration, 10G peak — 55-2,000 Hz.

Physical or Other Properties

Weight: 0.79 Kg
Hermetically sealed
Safe for harsh/corrosive environments
No contacts oxidation over periods on non-use
Number of SPDT Auxiliary Contacts per Contactor Type:
CAP202AS — None
CAP202MS — Two
CAP202FS — Four

Description

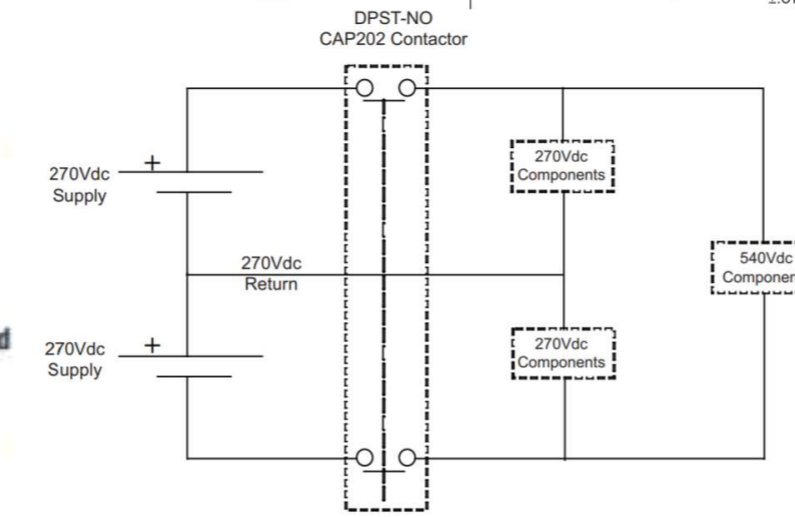
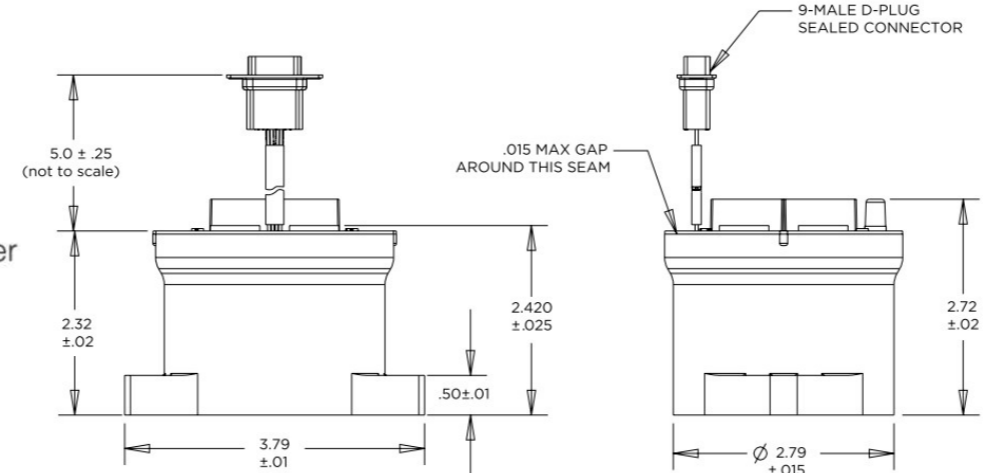
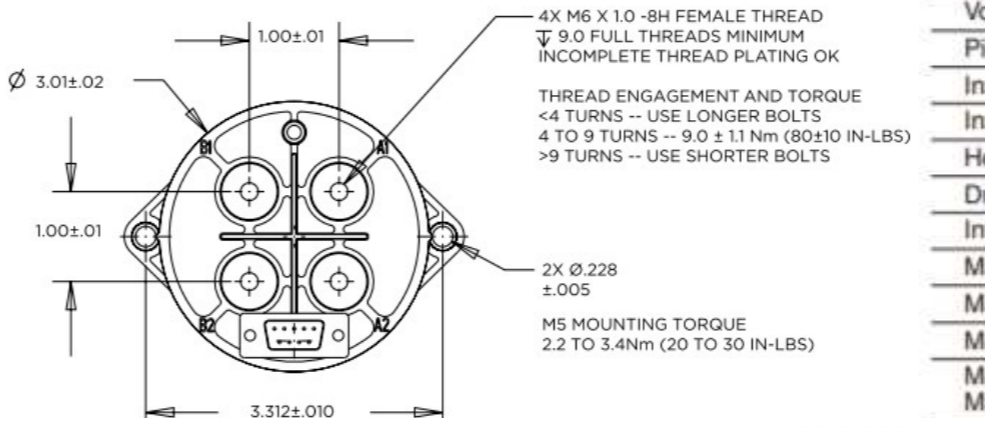
2-pole single throw hermetically sealed DC contactor; 12-900 Vdc/350A per pole
Not position sensitive
Bi-directional switching

Applications

High Voltage DC Converter Systems (ref schematic below)
Test Equipment
Power Distribution
Power Motion Control

Product Facts

- Hermetically sealed
- Up to 4X SPDT auxiliary switch outputs: 30 Vdc/2A max switching or 6V/5mA min. signal
- Integrated coil economizer with coil suppression
- EMC compliant - no radiated coil emission
- Bidirectional switching - main contacts not polarity sensitive
- Mount in any orientation - not position sensitive



NOTES:

- Using 4/0 conductor. Current rating is affected by attached conductor size and design. Keep terminals below 150°C max. continuous, 175°C for 2 hours max. and 200°C for 1 minute max. For mounting large conductors, request terminal adapter PN 3-1618396-7.
- Operational contact resistance is measured by millivolt drop across contacts at a > 100A current. Initial contact resistance may be higher than 0.3mΩ, but will drop below within 30 mins. max.
- Voltage applied to each contact set separately.
- Voltage applied across both contact sets in series.
- May not pass 2,200 Vrms dielectric testing after second interrupt cycle.

Coil Data (-40 to +85°C temp range unless otherwise noted)	
Voltage/Nominal Max.	28-32VDC
Pickup Voltage Max.	16VDC
Inrush Current @ 28 Vdc nominal/@32V maximum	3.4/6.0A
Inrush Time (nominal/maximum)	75/150mS
Hold Current @28V nominal / @32V maximum	0.27/0.48A
Drop Out Voltage	3 to 8Vdc
Internal Coil Suppression (max.)	60Vdc
Main Contacts: Operate Time, nominal/maximum	13/20mS
Main Contacts: Operate Bounce, nominal/maximum	3/10mS
Main Contacts: Release Time, nominal/maximum	25mS
Main Contacts: Release Time, maximum including Maximum arc time	7/12mS



ALL DIMENSIONS ARE IN INCHES(MM)

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN VM 26AUG2019			
		CHK RV 26AUG2019			
DIMENSIONS: INCHES		APVD MP 26AUG2019	NAME		
		PRODUCT SPEC	CAP202 SERIES		
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APPLICATION SPEC	-		
0 PLC ± -			SIZE	CAGE CODE	DRAWING NO
1 PLC ± -			A3	00779	©=CAP202-SERIES
2 PLC ± -			RESTRICTED TO		
3 PLC ± -			-		
4 PLC ± -			-		
ANGLES ± -			-		
MATERIAL		WEIGHT 0	-		
FINISH		CUSTOMER DRAWING			
		SCALE NTS	SHEET 1 of 1		REV B

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TE Connectivity:](#)

[6-1618406-7](#)