



Introducing  
**KILOVAC CAP202**  
**Contactors**  
*12 to 900Vdc, 350 amp DC Power*



## PART NUMBERING

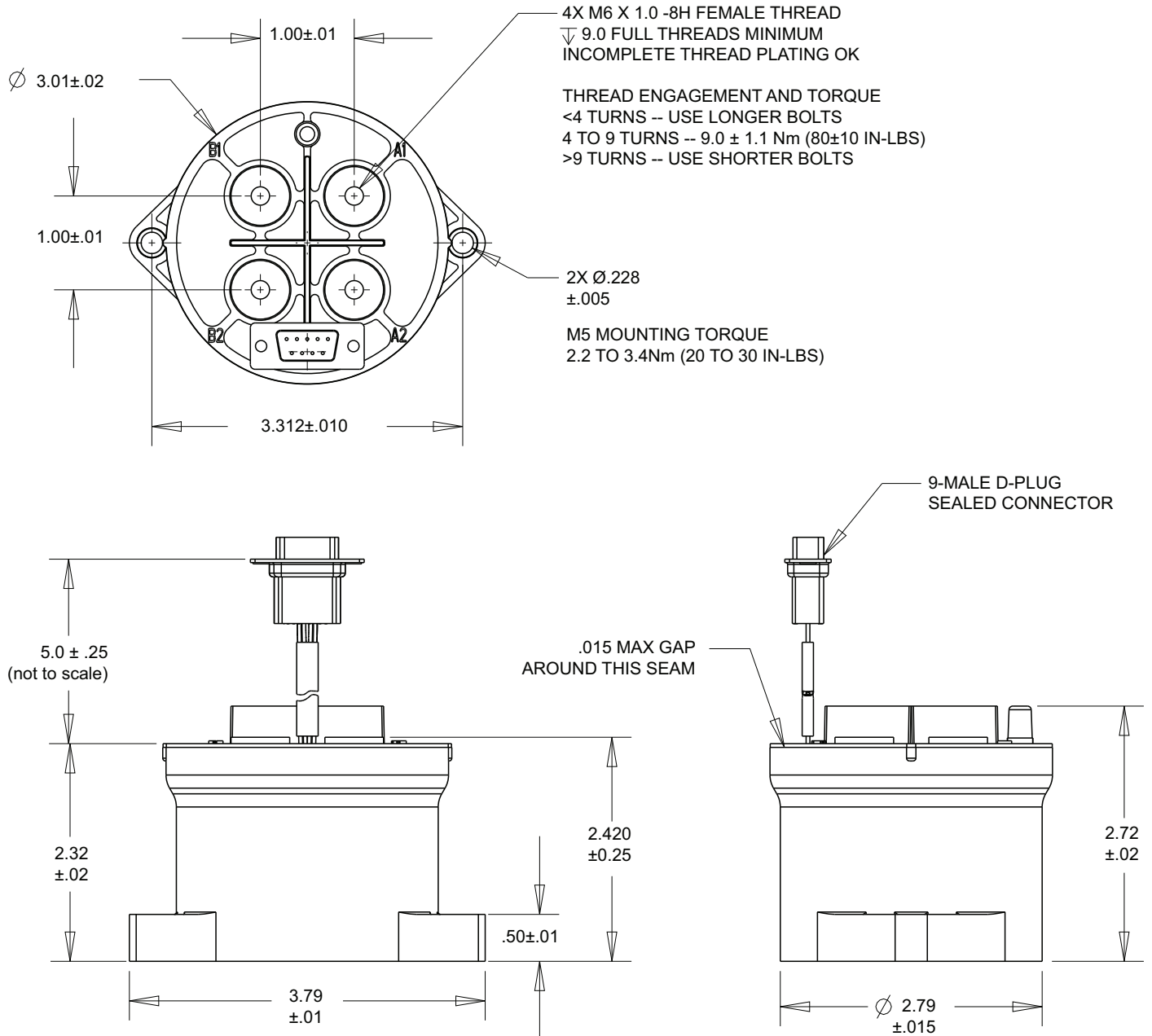
Typical Part Number	CAP202	M	S	B	F	D
<b>Series:</b> CAP202 = 2 form X, DPST-NO-DM Contactor						
<b>Auxiliary Contact Outputs (SPDT form C):</b> A = None    M = Two    F = Four						
<b>Coil Voltage:</b> S = 28V (with built-in electronically switched dual coil economizer)						
<b>Coil and Aux. Wire Length:</b> A = 15.3 inches    B = 6 inches    X = Customer Special						
<b>Coil and Aux. Connector:</b> N = none    F = D Plug on flying leads (may affect wire length)						
<b>Mounting and Power Terminals:</b> D = 2X M5 Bottom Mount with 4X, M6 x 1 Female thread terminals						

Specifications are subject to change without notice.



# KILOVAC CAP202 Series 12-900Vdc Contactors

## DIMENSIONS



# KILOVAC CAP202

## Series 12-900Vdc

### Contactors

## PERFORMANCE DATA

### Physical Data

Contact Arrangement: Power Contacts	DPST-N0 (2 Form X)
Auxiliary Switches	SPDT (form C)
Dimensions	See drawings on previous page
Weight	0.79 Kg (1.74 lb.)

### Electrical Data

Voltage Rating: Main Contacts	12-900Vdc
Auxiliary contacts	30Vdc
Current Rating:	
Continuous : Main Contacts (Note 1)	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
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

### Coil Data

(-40 to +85 °C temp range unless otherwise noted)

Coil Voltage, nominal/maximum	28-32 Vdc
Pick up, maximum	16 Vdc
Dropout Voltage	3 to 8Vdc
Inrush Current @ 28 Vdc nominal/ @32V maximum	3.4/6.0 A
Inrush Time, nominal/maximum	75/150 mS
Hold Current @28V nominal / @32V maximum	0.27 /0.48 A
Internal Coil Suppression (max.)	60 Vdc
Main Contacts:	
Operate Time, nominal/maximum	13/20mS
Operate Bounce, nominal/maximum	3/10 mS
Release Time, nominal/maximum	7/12mS
Release Time, maximum including Maximum arc time	25mS

### Environmental Data

Shock, 11ms 1/2 sine (operating)	20G peak
Sine Vibration, 10G peak	55-2,000 Hz.
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

### 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 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.

# KILOVAC CAP202 Series 12-900Vdc Contactor



## KEY FEATURES

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

## DESCRIPTION

2-pole single throw hermetically sealed DC contactor; 12-900 Vdc/350A per pole

Not position sensitive

Bi-directional switching

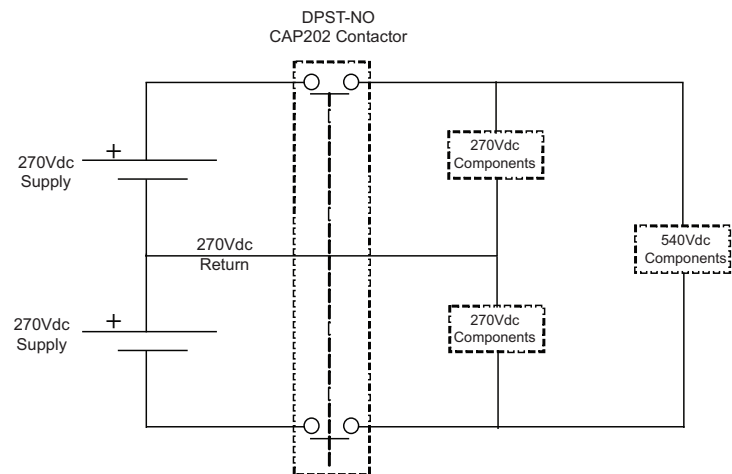
## APPLICATIONS

High Voltage DC Converter Systems (ref schematic below)

Test Equipment

Power Distribution

Power Motion Control



## ELECTRICAL

Contact arrangement:	DPST-No (2 form X)
Voltage rating:	12-900 Vdc (main contacts); 30 Vdc (auxiliary)
Mechanical life:	100,000 cycles

## PHYSICAL OR OTHER PROPERTIES

Weight: 0.79 Kg

Hermetically sealed

Safe for harsh/corrosive environments

No contact oxidation over periods of non-use

Number of SPDT Auxiliary Contacts per Contactor Type:

CAP202AS	None
CAP202MS	Two
CAP202FS	Four

## FOR MORE INFORMATION

[te.com/ADM](http://te.com/ADM)

### TE Technical Support Center

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