Rev.
B

EV202 SERIES

DPST-NO CONTACTOR (2 form X)

With option of 2 SPDT (form C)
Auxiliary Switch Outputs.

- ***2 Pole Single-Throw Contactor – 400Vdc/ 350A per Pole***
- ***12 or 24 VDC Coil***
- ***Optional 2-SPDT auxiliary switch outputs:***
  - ***30Vdc/ 2A max switching, or***
  - ***6V/ 5mA min signal***
- ***Hermetically Sealed***
- ***Integrated Coil Economizer with Coil Suppression***
- ***EMC Compliant – No radiated coil emission***
- ***-55C to + 85C Operating Range***
- ***Bidirectional Switching – Main contacts not polarity sensitive***
- ***Mount in any orientation – not position sensitive***
- ***RoHS Compliant***



EV202MSAND Shown (2 Aux Switches)

TE Kilovac connectivity

550 Linden Ave.
Carpinteria, CA US 93013
Internet: www.te.com

TITLE	**EV202 CONTACTOR SERIES**			
SD-	**EV202**			
CD	**CUSTOMER DRAWING**	CAGE CODE 18741	SCALE NONE	SHEET 1 of 6

General Specifications

Physical Data	**Units**	
Contact Arrangement: Power Contacts	-	DPST-NO (2 form X)
Auxiliary Switches		SPDT (form C)
Number of Switches per Contactor Type: EV202AS		None
EV202MS		Two
Dimensions	-	See drawing
Weight, Nominal (not including hardware)	Kg	0.77

Environmental Data

Shock, 11ms ½ sine (operating)	G_{peak}	20				
Sine Vibration, 10 G_{peak}	Hz	10-2000				
Random Vibration, 14 Grms	Hz	15	100	300	900	2000
	G^2/Hz	.01	.01	.2	.2	.01
Operating Temperature Range	°C	-55 to +85				

Electrical Data

Voltage Rating: Main Contacts (max)	Vdc	600
Auxiliary contacts	Vdc	30
Current Rating: Continuous: Main Contacts (1)	A/Pole	350
Auxiliary contacts	A	3
Contact Resistance: Main Contacts (2)	mΩ	100 max @ 1 amp 0.3 max @ 200A after 3 minutes
Auxiliary Contacts	mΩ	200 max
Hot Switching performance @ ± 400Vdc (3)	cycles	
100A make/ break		10,000
250A make/ break		2,500
700A break only		10
Hot Switching performance @ ± 270Vdc (4)	cycles	
100A make/ break		40,000
250A make/ break		7,500
2000A break only @ ± 370Vdc (5)		2
Maximum Closing Into (Make) Current	A	700
Mechanical Life	cycles	100,000
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

(1) Using 4/0 conductor. Current rating is affected by attached conductor size and design. Keep terminals below 150C max continuous, 175C for 2 hours max, and 200C for 1 minute max. For mounting large conductors, request terminal adapter PN 3-1618396-7.

(2) 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 minutes maximum.

(3) Voltage applied to each contact set separately.

(4) Voltage applied across both contact sets in series

(5) Dielectric Withstand Voltage may be degraded following 2000A interrupts at 370Vdc.

Coil Data (over -40 to +85C temperature range unless otherwise specified)

Coil Voltage, nominal/ maximum	Vdc	**12/16**	**24/32**
Pick Up, maximum (applied as step voltage only)	Vdc	8	16
Drop Out	Vdc	2.5 - 4	3 - 8
Inrush Current @ V-nominal, max	A	5	4.5
Inrush Time, nominal/ maximum	mS	75/ 150	75/ 150
Hold Current @V-nominal, max.	A	0.6	0.2
Internal Coil Suppression (max)	Vdc	40	60
Main Contacts: Operate Time, nominal/ maximum	mS	13/ 20	13/ 20
Operate Bounce, nominal/ maximum	mS	3/ 10	3/ 10
Release Time, nominal/ maximum	mS	7/ 12	7/ 12
Release time, maximum including maximum arc time	mS	25	25

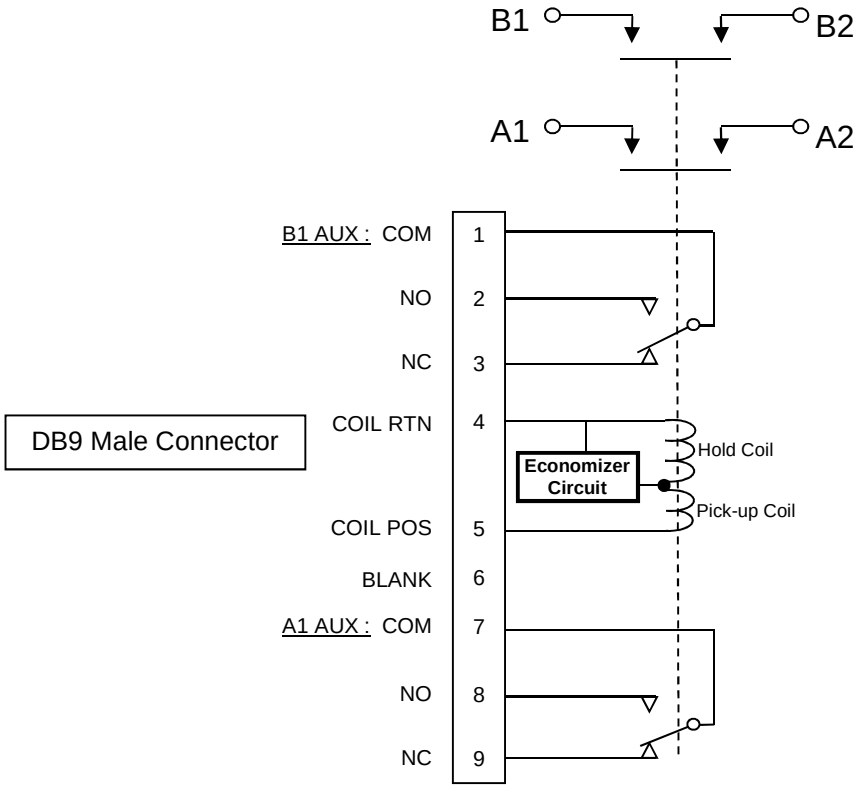
Wire Color Code

Function	Color
Coil +	Red
Coil Return	Black
Aux A1 COM	Brown
NO	Yellow
NC	Purple
Aux B1 COM	Orange
NO	Green
NC	White

Note: EV202ASxxx type has 2 coil wires, with no auxiliary switches
EV202MSxxx type has 8 wires, with 2 auxiliary switches: A1 and B1

Schematic

EV202MSBFD shown for example.
Other versions may have different connectors and/ or different numbers of auxiliary switches



Part Numbering Reference

TYPICAL PART NUMBER	EV202	M	S	B	F	D

Series:
EV202 = 2 form X, DPST-NO-DM Contactor

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

Coil Voltage:
S = 24V; V = 12V (with built in electronically switched dual coil economizer)

Coil and Aux Wire Length (inches):
A = 15.3, B = 6, X = Customer specified configuration

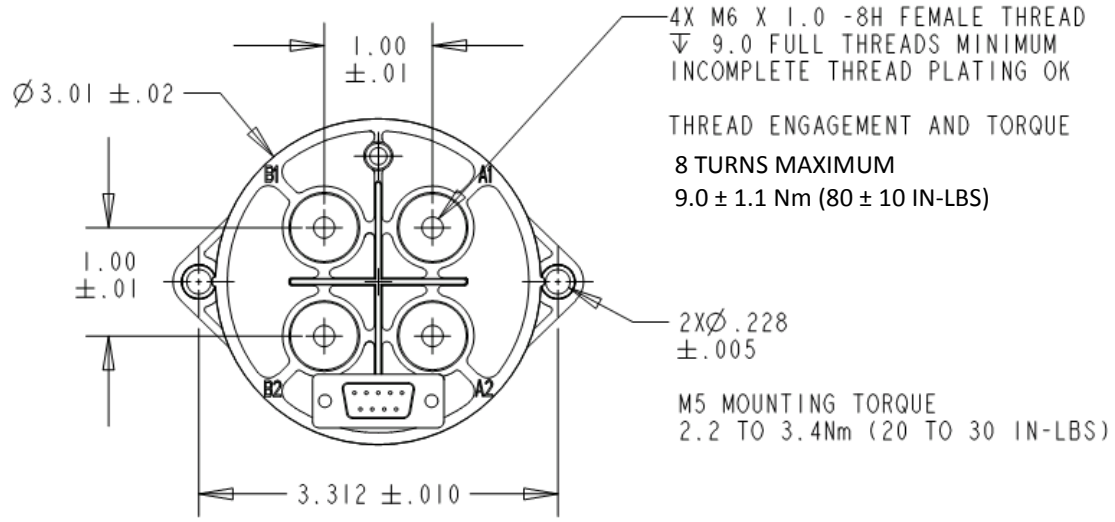
Coil and Aux Connector:
N = none, F = "D" Plug on flying leads (may affect wire length)

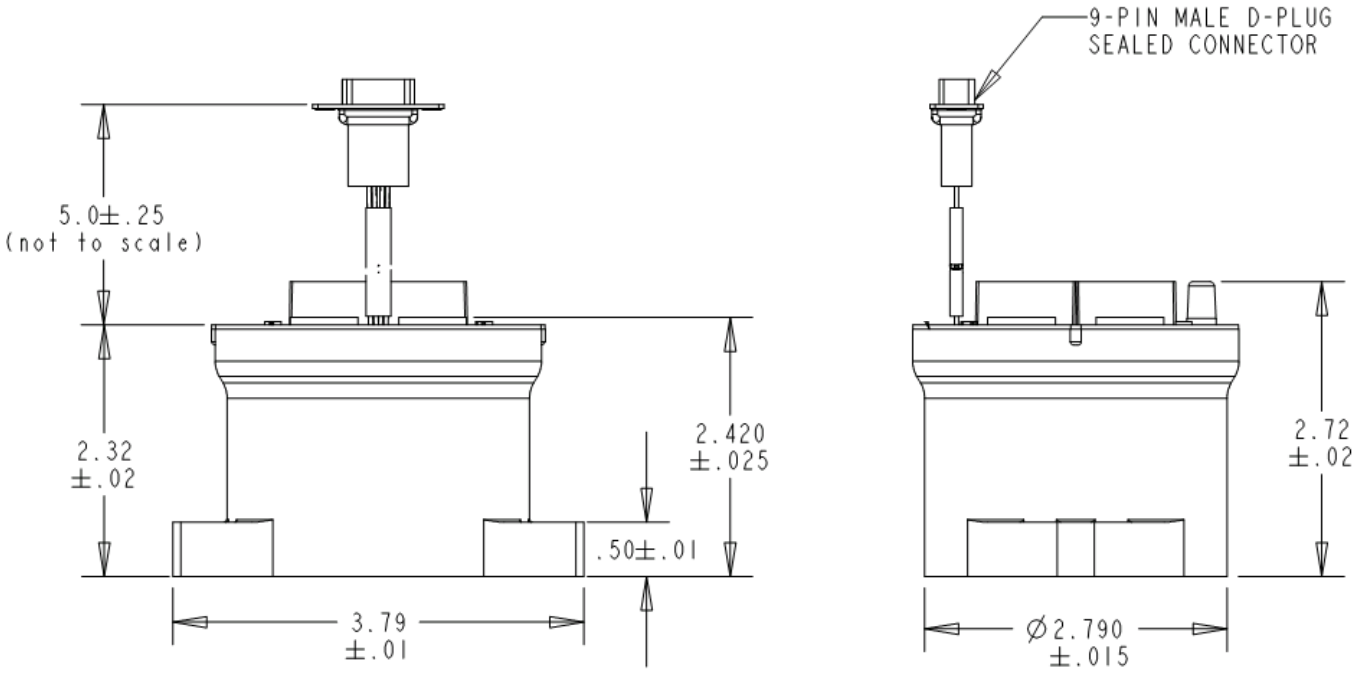
Mounting and Power Terminals
D = 2X M5 Bottom Mount with 4X, M6 X 1 Female thread terminals

Rev.
B

Part Drawing

EV202MSBFD shown for example.
Other versions may have different connectors or flying leads.





Dimensions in Inches
Tolerances (except as noted)
.xx = ±.03
.xxx = ±.010
∠x° = ±5°

TE Kilovac connectivity		**CUSTOMER DRAWING**		
		SD-	**EV202**	
THIRD ANGLE PROJECTION	THIS DRAWING PREPARED IN ACCORDANCE WITH ANSI/ASME Y14.5M-1982	CAGE CODE 18741	SCALE NONE	SHEET 5 of 6

Revisions

REV.	DESCRIPTION	DCO#	DATE	APP.
1	Preliminary Release	16255	01/05/15	D. Lewis
A	Release to Production	16334	11/12/15	D. Lewis
B	Add RoHS compliance, edit note 5.	16370	9/12/16	J.Reyes

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TE Connectivity:

141991-2 2310537-1 2834055-1 CPF0402B37K4E1 MPT100C18RF U5254-000005-030PA 1-794222-0
3631B101LL 650075-000 917696-1 SBCHE154R7K SMW73R0JT 1743455-2 1903112-2 1969656-1
3430B2F51RTDF 1393431-1 2-292161-3 RH73H2A40MKTN 175977-2 2377783-2 2380312-2 1-962915-1
3-1393225-0 TE50BR39J 936348-1 ROX05SJ18R SBCHE64R7K 2005330-1 CRGCQ2010J3K3