

## KILOVAC MAP101 Series Contactor with 1 Form A (SPST-NO) Contacts Rated up to 100 Amps, 12-900 Vdc Dual Contact Material (Cu/Mo)

### Product Facts

- Dual contact material (copper/moly) designed for high current make and interrupt military aerospace, ground vehicle and naval applications
- Hermetically sealed, intrinsically safe, operates in explosive/harsh environments with no oxidation or contamination of coils or contacts, during long periods of non-operation
- Comes standard with 1 SPST-NO Aux. contact
- Not position sensitive, can be mounted in any orientation
- RoHS versions available



### Physical Data

**Contact Arrangement** —  
Main Contacts —  
SPST-Latching (form X)  
1X Auxiliary Contact —  
SPST-NO (form A)

**Dimensions** — See drawing

**Weight, Nominal** —  
0.35 Kg (12.35 oz)

### Environmental Data

**Shock, 11ms 1/2 Sine (Operating)** — 20 G<sub>peak</sub>

**Sine Vibration, 20 G<sub>peak</sub>** —  
55-2000 Hz

**Random Vibration, 14.06 Grms** —  
15 Hz (.002 G<sup>2</sup>/Hz), 100 Hz (.002 G<sup>2</sup>/Hz),  
450 Hz (.12 G<sup>2</sup>/Hz), 900 Hz (.12 G<sup>2</sup>/Hz),  
2000 Hz (.083 G<sup>2</sup>/Hz)

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

### Electrical Data

**Voltage Rating** —  
Main Contacts (max) — 400 Vdc  
Auxiliary Contacts — 30 Vdc

**Current Rating, Continuous** —  
Main Contacts 1 — 100 A  
Auxiliary Contacts — 3 A

**Contact Resistance** —  
Main Contacts —  
100 mΩ max @ 1 amp  
0.75 mΩ max @ rated current  
Auxiliary Contacts —  
200 mΩ max

**Electric Life at Rated Current 270 Vdc, Resistive Load** —  
25,000 cycles

**Mechanical Life** — 1 million cycles

**Dielectric Withstand Voltage** —  
Terminal to Terminal/ Terminals to Coil —  
1mA max @ 1,300Vrms

### Coil Data

**Coil Voltage, Nominal/ Max** —  
28/ 32 Vdc

**Coil Resistance @ 25°C** —  
Contacts Close Coil — 18 Ω  
Contacts Open Coil — 13 Ω

**Pick Up/ Drop Out (Max)** —  
16 Vdc (-55°C to +25°C)  
18 Vdc (+25°C to +85°C)

**Coil Current (Max) @ 32Vdc/ -40°C** — 4.0 A

**Coil Current On Time (Minimum Required to Latch)** — 40 ms

**Main Contacts** —  
Operate Time (Max) — 40 ms  
Operate Bounce (Max) — 5 ms  
Release Time — 25 ms

**Auxiliary Contacts Operate/ Release** — Within ± 5 ms of main

**Insulation Resistance** —  
Terminal to Terminal/ Terminals to Coil —  
100MΩ min @ 500Vdc new  
50MΩ min @ 500Vdc end of life

### Note:

1 Continuous current rating is affected by conductors attached. Keep terminals below 150°C max continuous.

### Ordering Information

**Typical Part Number** ►

**MAP101 R B A F E**

**Series:** \_\_\_\_\_  
MAP101 = 100 Amp, 12-900VDC Contactor

Dual Contact Material

**Contact Form:** \_\_\_\_\_  
R - Latch with 1 SPST NO Aux.

**Coil Voltage:** \_\_\_\_\_  
B = 28 Vdc Coil

**Lead Length:** \_\_\_\_\_  
A = 15.3 in. (300 mm)

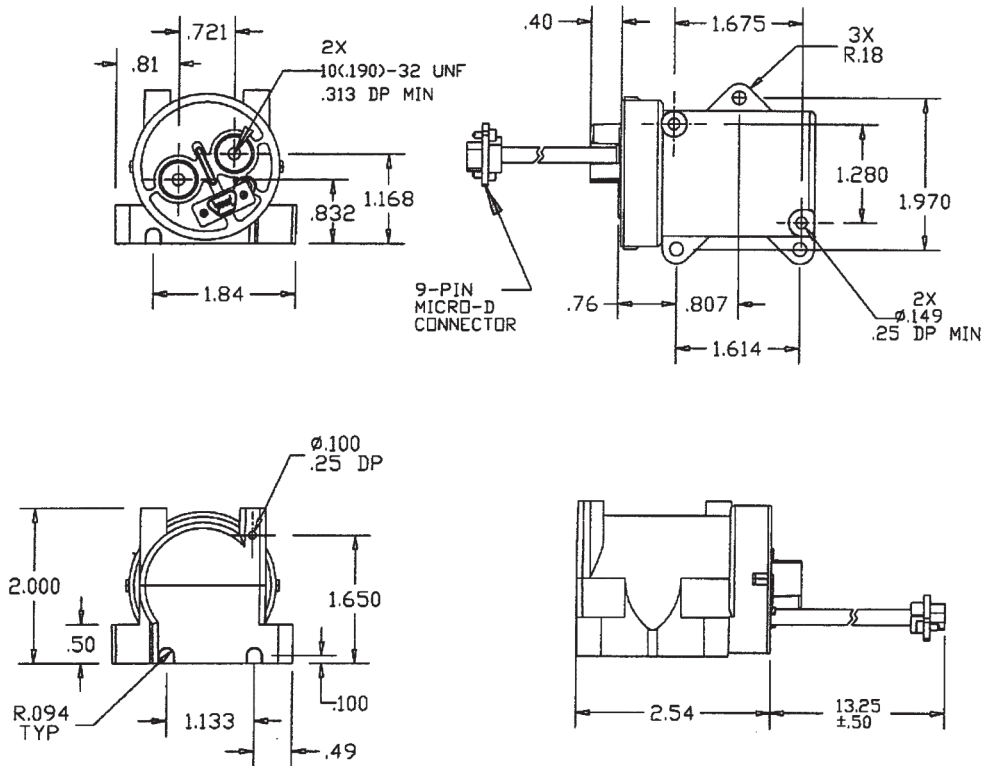
**Coil Terminal Connector:** \_\_\_\_\_  
N = None  
F = Plug on Flying Lead, 9 Pin Micro-D

**Mounting & Power Terminals** \_\_\_\_\_  
E = side mount with 2x#8  
10-32 Female Power Terminals

For factory-direct application assistance, dial 800-253-4560, ext. 2055, or 805-220-2055.

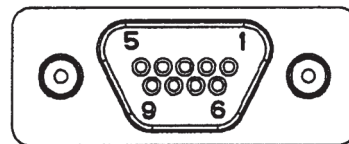
**KILOVAC MAP101 Series Contactor** (Continued)

**Outline Dimensions**



**Connector Pin-Out**

1	Not Connected
2	Aux. NO
3	Close Return
4	Close Return
5	+28Vdc
6	Aux. Com.
7	Open Return
8	Open Return
9	+28V



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