

# 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 nonoperation
- Comes standard with 1 SPST-NO Aux. contact
- Not position sensitive, can be mounted in any orientation



## **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 G²/Hz), 100 Hz (.002 G²/Hz), 450 Hz (.12 G²/Hz), 900 Hz (.12 G²/Hz), 2000 Hz (.083 G²/Hz)

Operating Temperature Range —  $-55^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ 

## **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 m $\Omega$  max @ 1 amp 0.75 m $\Omega$  max @ rated current Auxiliary Contacts — 200 m $\Omega$  max

Electric Life at Rated Current 270 Vdc, Resistive Load —

25,000 cycles

Mechanical Life — 100,000 cycles

**Dielectric Withstand Voltage** — Terminal to Terminal / Terminals to Coil

Terminal to Terminal/ Terminals to Coil — 1mA max @ 1,300Vrms

# Insulation Resistance —

Terminal to Terminal/ Terminals to Coil —  $100M\Omega$  min @ 500Vdc new  $50M\Omega$  min @ 500Vdc end of life

#### Note:

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

#### **Coil Data**

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

Coil Resistance @ 25°C —

Contacts Close Coil — 18  $\Omega$ Contacts Open Coil — 13  $\Omega$ 

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

# **Ordering Information**

Typical Part Number	MAPIUI R B A F B
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 Mid	cro-D

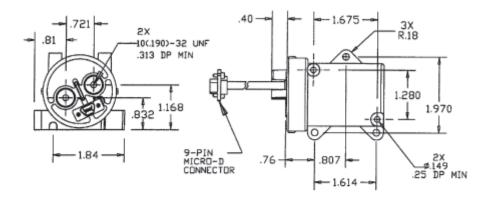
For factory-direct application assistance, dial 800-253-4560, ext. 2055, or 805-220-2055.

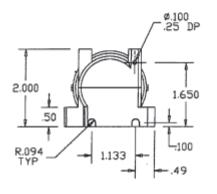
**Mounting & Power Terminals** - E = side mount with 2x#8

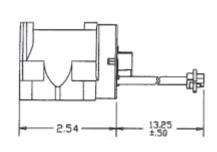
10-32 Female Power Terminals

# KILOVAC MAP101 Series Contactor (Continued)

# **Outline Dimensions**

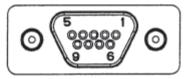






# **Connector Pin-Out**

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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7-7