

# **KILOVAC MAP100 Series Contactor with 1 Form A (SPST-NO)** Contacts Rated up to 100 Amps, 12-900 Vdc

### **Product Facts**

- Solid copper contacts designed for high current carry military aerospace, ground vehicle and naval applications
- Hermetically sealed, intrinsically safe, operates in explosive/harsh environments with no contact oxidation or contamination of coil 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 (or NO 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 G2/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 - $100 \text{ m}\Omega \text{ max} @ 1 \text{ amp}$  $0.75 \text{ m}\Omega$  max @ rated current Auxiliary Contacts —  $200~\text{m}\Omega~\text{max}$ 

**Electrical Life at Rated Current,** 270 Vdc, Resistive Load -

15,000 cycles

Mechanical Life — 1 million cycles

Dielectric Withstand Voltage -

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:

<sup>1</sup> Continuous 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 À

**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 ▶ MAP100 R B A F E MAP100 = 100 Amp, 12-900VDC Contactor Contact Form: -H = NO with 1 SPST NO Aux. R - Latch with 1 SPST NO Aux. Coil Voltage: B = 28 Vdc Coil Lead Length: $A = 15.3 \, \text{in}. \, (300 \, \text{mm})$ Coil Terminal Connector: -N = None

### **Mounting & Power Terminals**

F = Plug on Flying Lead, 9 Pin Micro-D

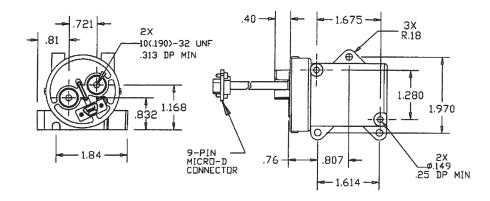
E =side mount with 2x#8 10-32 Female Power Terminals

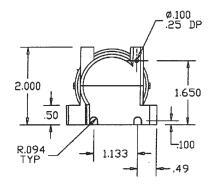
For factory-direct application assistance. dial 800-253-4560, ext. 2055, or 805-220-2055.

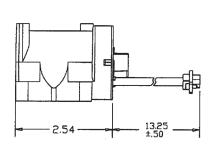


# **KILOVAC MAP100 Series Contactor** (Continued)

## **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

