

# 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



### **Physical Data**

# ${\bf Contact\ Arrangement} - \\$

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 G<sup>2</sup>/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

Electrical Life at Rated Current, 270 Vdc, Resistive Load —

15,000 cycles

Mechanical Life — 100,000 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:

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 ► MAP100 R B A F E Series: 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 in. (300 mm) Coil Terminal Connector: N = None F = Plug on Flying Lead, 9 Pin Micro-D

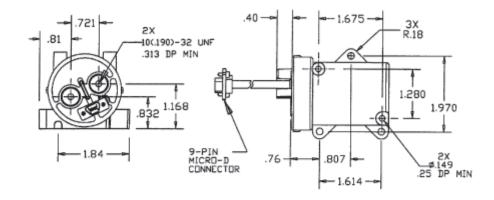
**Mounting & Power Terminals** 

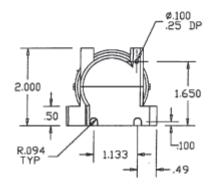
E = side mount with 2x#8 10-32 Female Power Terminals

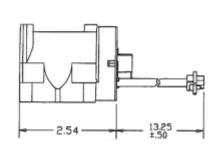
For factory-direct application assistance, dial 800-253-4560, ext. 2055, or 805-220-2055.

# KILOVAC MAP100 Series Contactor (Continued)

# **Outline Dimensions**

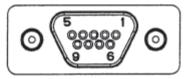






# **Connector Pin-Out**

Not Connected
Aux. NO
Close Return
Close Return
+28Vdc
Aux. Com.
Open Return
Open Return
+28V



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