

# **KILOVAC MAP201 Series Contactor with 2 Form A (SPST-NO)** Contacts Rated up to 350 Amps, 12-900 Vdc Dual Contact Material (Cu/Mo)

### **Product Facts**

- Designed to be the smallest, lightest weight, lowest cost sealed contactor in the industry with its current rating for military aerospace
- Built-in coil economizer (models requiring external economizer also available)
- Optional auxiliary contact for easy monitoring of power contact position
- Hermetically sealed intrinsically safe, operates in explosive/harsh environments with no oxidation or contamination of coil or contacts, including long periods of non-operation
- Versatile coil and power connections



### **Physical Data**

# Contact Arrangement —

Power Contacts SPST-NO (form X) 2X Auxiliary Contacts 1 — SPST-NO (form A)

**Dimensions** — See drawing

**Weight, Nominal** — 0.45 Kg (0.99 lb)

### **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 2 — 300 A Auxiliary Contacts - 3 A

#### Contact Resistance -

Main Contacts 3 -100 mΩ max @ 1 amp  $0.3~\text{m}\Omega$  max @ rated current Auxiliary Contacts - $200 \text{ m}\Omega \text{ max}$ 

### **Hot Switching Performance** (Polarity Sensitive)

600A make/ 265A break @ ± 270Vdc — 11,000 cycles

550A make/ break @ ± 360Vdc — 100 cycles

2000Å capacitive make — 100 cycles 2000A make/ break @ +360Vdc -

5 cycles 1000A make/ break @ -360Vdc — 2 cycles

Mechanical Life — 100,000 cycles

### Dielectric Withstand Voltage -

Terminal to Terminal/Terminals to Coil — 1mA max @ 2,200Vrms

Insulation Resistance — Terminal to Terminal/ Terminals to Coil —  $100M\Omega$  min @ 500Vdc

#### Notes:

- 1 Two form A available with electronic coil economizer, 1 form A available with mechanical coil economizer
- <sup>2</sup> Continuous current rating is affected by conductors attached. Keep terminals below 150°C max continuous, 175C for 1 hour max, and 200C for 1 minute max.
- 3 Initial contact resistance may be higher than  $0.3m\Omega$ , but will drop below within 30 minutes maximum

#### **Coil Data**

Coil Voltage, Nominal/Max — 28/32 Vdc

Pick Up (Max) — 16 Vdc Inrush Current @ 28Vdc (Max) —

Inrush Time (Max) — 100 ms

Hold Current (Max) — 0.32 A

**Drop Out** — 4 to 10 Vdc

#### Main Contacts -

Operate Time (Max) - 18 ms Operate Bounce (Max) — 5 ms Release Time — 18 ms

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

## **Ordering Information**

### Typical Part Number

MAP201 A R D E A

### Series: -

MAP201 = 350 Amp, 12-900VDC Contactor

### Contact Form:

A = Normally Open

H = Normally Open with Aux. Contacts

### Coil Voltage:

R = 28 Vdc, Mechanical Economizer

S = 28 Vdc, Electrical Cut-throat Economizer

### Coil Wire Length:

A = 15.3 in (390 mm)

D = Coil connector on relay (requires option "E" or "X" in next step).

### Coil Terminal Connector: \_

N = No connector

E = 9-pin subminiature "D" plug mounted on contactor

X = Special configuration (consult factory)

### Mounting & Power Terminals:

A = Bottom Mount & Male M8 x 1.25 Thread Terminals

B = Bottom Mount & Female 1/4-20 Thread Terminals

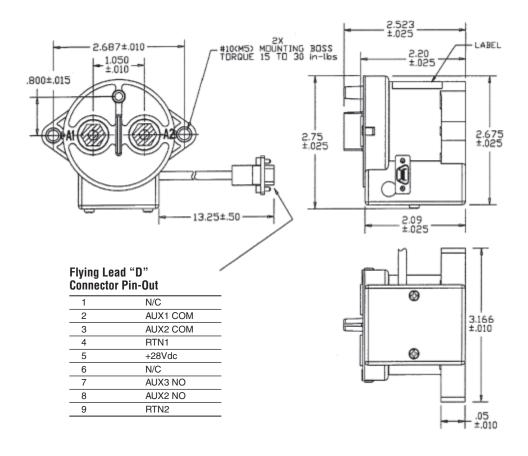
D = Bottom Mount & Female M6 x 1 Thread Terminals

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

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# KILOVAC MAP201 Series Contactor (Continued)

### **Outline Dimensions\***



# MAP200HR D-Sub

Pin Out

Coil+ = Pin 2

Coil - = Pin 6

Aux. COM = Pin 8

Aux. NO = Pin 4

### MAP200AR

Coil+ = Pin 2

Coil - = Pin 6

\*Alternate coil and main terminal connections available, consult factory.

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