

# KILOVAC EV200B Series Contactor With 1 Form Y (SPST-NC) Contacts Rated 500+ Amps, 12-900 Vdc

#### **Product Facts**

- Normally closed version of popular EV200 series contactors
- Designed to be the smallest, lowest cost, lightest weight sealed contactor in the industry at its current rating
- Optional auxiliary contacts for monitoring position of power contacts
- Hermetically sealed —
   operates in explosive/harsh
   environments with no
   oxidation or contamination
   of coil or contacts during
   long periods of non operation
- Not position sensitive, can be mounted in any orientation
- RoHS versions available



#### **Physical Data**

## Contact Arrangements —

Main Contacts — SPST, Normally Closed

**Dimensions** — See drawing

Weight, Nominal — .95 lb. (.43 kg)

#### **Environmental Data**

Shock, 11ms 1/2 Sine

 $\begin{array}{l} \textbf{(Operating)} \longrightarrow 30 \; G_{peak} \; \text{(Closed)} \\ 10 \; G_{peak} \; \text{(Open)} \end{array}$ 

**Sine Vibration, 10 G**<sub>peak</sub>—55-2000 Hz

# Random Vibration, 7.1 Grms —

15 Hz (.001 G<sup>2</sup>/Hz), 100 Hz (.04 G<sup>2</sup>/Hz), 1000 Hz (.04 G<sup>2</sup>/Hz), 1500 Hz (.02 G<sup>2</sup>/Hz)

Operating Temperature Range  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ 

## **Electrical Data**

#### Voltage Rating -

Main Contacts (Max) — 750 Vdc

# Current Rating, Continuous —

Main Contacts 1 — 500A

#### **Contact Resistance -**

Main Contacts 2 —

0.2 m $\Omega$  max above 300A 0.3 m $\Omega$  max between 50 and 300A

# Hot Switching Performance (Positive Polarity) <sup>3</sup> —

200A make/ break @ 270Vdc —

10,000 cycles

600A make/ break @ 360Vdc --

100 cycles

800A break only @ 360Vdc —

15 cycles

1500A break only @ 360Vdc — 1 cycle

#### Mechanical Life (Min) —

1 million cycles

# Dielectric Withstand Voltage —

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

#### Insulation Resistance —

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

#### Coil Data 4

# Nominal Coil Voltage 5 —

Low range — 9.6-14 Vdc High range — 19-28 Vdc

Pick Up (Max) @ 25°C — 9.6/18.5 Vdc

# Pick Up @ Max Coil Temperature - 10.5/22 Vdc

**Hold (Min)** — 6/12 Vdc

## Dropout (Min) — 4/9 Vdc Pickup Current, Peak 6 @ 25°C —

Operate Specs @ 25°C —

Operate Time (Typ) — 15 ms Operate Bounce (Max) — 5 ms Release Time (Typ) — 15 ms

Economizer Operating Frequency —

18 kHz

#### Hold Current —

0.9A/12 Vdc 0.3A/24 Vdc

#### Notes:

- 1 Ambient conditions and conductor design affect rating. Terminal temperature rise should be 75°C max above ambient. Keep relay terminals below 150°C max continuous, 175°C max for two hours, and 200°C for 1 minute.
- 2 Stabilized reading. Contact resistance may exceed spec in the first 10 minutes of current carry.
- 3 Units are polarity sensitive. Approximately 50% de-rating for reverse polarity switching. Consult factory for review of specific requirements.
- 4 Over temperature range unless noted.
- 5 Voltage ranged sensed by contactor 10 ms after application of source voltage.
- <sup>6</sup> Pickup duration 100 ms.

#### **Ordering Information**

# Typical Part Number ► EV200 B A A N A Series: EV200 = 500+ Amp, 12-900VDC Contactor Contact Form: B = Normally Closed D = Normally Closed, 1 SPDT Aux. Coil Voltage (with Economizer): A = 12/24 Vdc Coil Terminals: A = 15.3 in. (300 mm) Coil Terminal Connector: N = None

Mounting & Power Terminations:

A = Bottom Mount & Male 10 Max. M8 Threaded Terminals

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

7-23



# KILOVAC EV200B Series Contactor (Continued)

## **Outline Dimensions**

