# **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 nonoperation
- Not position sensitive, can be mounted in any orientation



### **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

**(Operating)** — 30 G<sub>peak</sub> (Closed) 10 G<sub>peak</sub> (Open)

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

## Random Vibration, 7.1 Grms -

15 Hz (.001 G2/Hz), 100 Hz (.04 G2/Hz), 1000 Hz (.04 G<sup>2</sup>/Hz), 1500 Hz (.02 G<sup>2</sup>/Hz)

**Operating Temperature Range** – -40°C to +85°C

## **Electrical Data**

#### Voltage Rating -

Main Contacts (Max) — 750 Vdc

# Current Rating, Continuous -

Main Contacts 1 — 500A

### Contact Resistance -

Main Contacts 2  $0.2~\text{m}\Omega$  max above 300A  $0.3~\text{m}\Omega$  max between 50 and 300A

### **Hot Switching Performance** (Positive Polarity) 3 -

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) —

100,000 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:

- <sup>1</sup> 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.
- Stabilized reading. Contact resistance may exceed spec in the first 10 minutes of current carry.
- <sup>3</sup> Units are polarity sensitive. Approximately 50% de-rating for reverse polarity switching. Consult factory for review of specific requirements.
- <sup>4</sup> 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

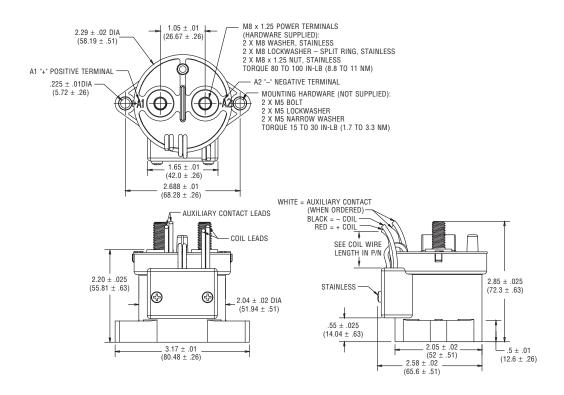
For factory-direct application assistance, dial 800-253-4560, ext. 2055, or 805-220-2055.

KILOVAC High Voltage



# KILOVAC EV200B Series Contactor (Continued)

## **Outline Dimensions**



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