# KILOVAC EV200P Series Latching Contactor With 1 Form X (SPST Latch) Contacts Rated 500+ Amps, 12-900 Vdc

#### **Product Facts**

- Latching version of popular EV200 Series
- 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



#### **Physical Data**

Contact Arrangements –

Main Contacts — SPST, Latching Auxiliary Contacts 1 — Up to 2 Form A

**Dimensions** — See drawing

Weight, Nominal — .95 lb. (.43 kg)

## **Environmental Data**

Shock, 11ms 1/2 Sine (Operating) — 30 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** — -40°C to +85°C

# **Electrical Data**

Voltage Rating –

Main Contacts (Max) — 750 Vdc

Current Rating, Continuous —

Main Contacts <sup>2</sup> — 500A

#### Contact Resistance -

Main Contacts  $^3$  — 0.2 m $\Omega$  max above 300A 0.3 m $\Omega$  max between 50 and 300A

# Hot Switching Performance

(Positive Polarity) 4 — 200A make/ break @ 270Vdc — 10.000 cvcles

600A make/ break @ 360Vdc ---

100 cycles

800A break only @ 360Vdc —

15 cycles 2000A 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 5

Nominal Coil Voltage 6 — 12 Vdc

Pick Up/Latch (Max) @ 25°C — 9 Vdc

#### Release Time (Max) — 15 ms

9 Vdc

Hold (Min) - N/A

Reset (Max)/Dropout (Min) -

Coil Resistance @ 25°C —  $2.5 \Omega$ 

Duty Cycle, Max 7 — 20%

Operate Specs @ 25°C —

Operate Time (Typ) — 15 ms

Operate Bounce (Max) — 7 ms

- Notes:

  1 Product can be configured alternately with form B or C auxiliary switches if required. This changes the product part number, depending on specific auxiliary configuration. Consult Tyco Electronics for availability and part number
- <sup>2</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.
- <sup>3</sup> Stabilized reading. Contact resistance may exceed spec in the first 10 minutes of current carry.
- 4 Units are polarity sensitive. Approximately 50% de-rating for reverse polarity switching. Consult factory for review of specific requirements.
- 5 Over temperature range unless noted. Suggested coil pulse = 50-100 ms.
- <sup>6</sup> 24V and 48V coils available on request consult factory.
- 7 Intermittent Duty Coil. Coil overheating can occur if duty cycle is exceeded. Limit average coil power to 10W maximum.

# Ordering Information

# Typical Part Number ► EV200 P 4 A N A Series: EV200 = 500+ Amp, 12-900VDC Contactor Contact Form: P = Latching F = Latching with 1 SPDT Aux. Coil Voltage: 4 = 12 Vdc 5 = 24 Vdc 6 = 48 Vdc Coil Terminations: A = 15.3 in. (300 mm) Coil Termination Connector: N = None

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

Mounting & Power Terminals: -

M8 Threaded Terminals

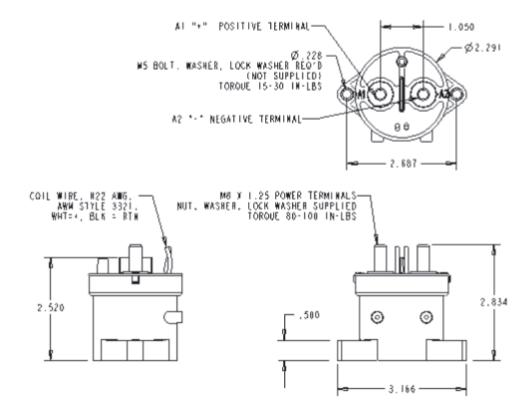
A = Bottom Mount & Male 10mm x

KILOVAC High Voltage



# KILOVAC EV200P Series Latching Contactor (Continued)

# **Outline Dimensions**



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