

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 (Operating) — 30 G_{peak} (Closed)
10 G_{peak} (Open)

Sine Vibration, 10 G_{peak} —
55-2000 Hz

Random Vibration, 7.1 Grms —
15 Hz (.001 G²/Hz), 100 Hz (.04 G²/Hz),
1000 Hz (.04 G²/Hz), 1500 Hz (.02 G²/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 mΩ max above 300A
0.3 mΩ 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) —
1 million cycles

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

Dropout (Min) — 4/9 Vdc

Pickup Current, Peak ⁶ @ 25°C —
6 A

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.
- ⁶ Pickup duration 100 ms.

Insulation Resistance —
Terminal to Terminal/ Terminals to Coil —
100MΩ min @ 500Vdc new
50MΩ 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

Ordering Information

Typical Part Number ►

Series: EV200 B A A N A
EV200 = 500+ Amp, 12-900VDC Contactor

Contact Form: B
B = Normally Closed
D = Normally Closed, 1 SPDT Aux.

Coil Voltage (with Economizer): A
A = 12/24 Vdc

Coil Terminals: A
A = 15.3 in. (300 mm)

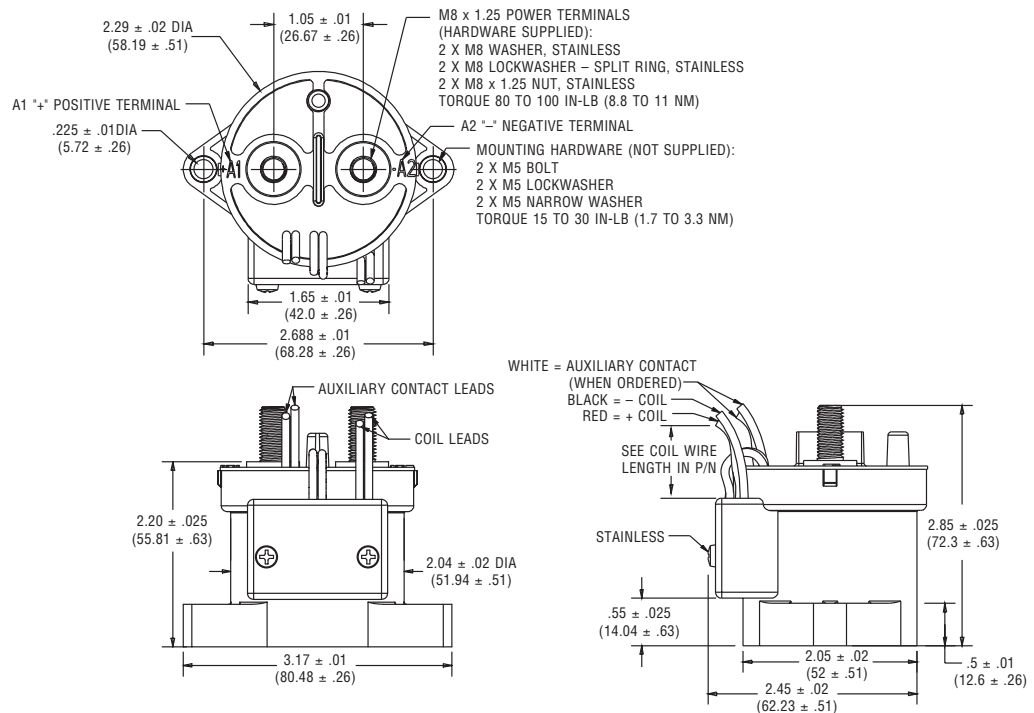
Coil Terminal Connector: N
N = None

Mounting & Power Terminations: A
A = Bottom Mount & Male 10 Max. M8 Threaded Terminals

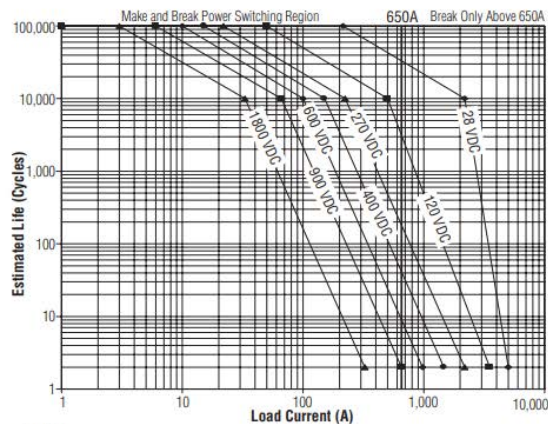
For factory-direct application assistance,
dial 800-253-4560, ext. 2055, or
805-220-2055.

KILOVAC EV200B Series Contactor (Continued)

Outline Dimensions



Estimated Make & Break Power Switching Ratings



NOTES:

- 1) For resistive loads with 300μH maximum inductance. Consult factory for inductive loads.
- 2) Estimates based on extrapolated data. User is encouraged to confirm performance in application.
- 3) End of life when dielectric strength between terminals falls below 50 megohms @ 500VDC.
- 4) The maximum make current is 650A to avoid contact welding.

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