

KILOVAC EV200 Series Contactor With 1 Form X (SPST-NO) Contacts Rated 500+ Amps, 12-900 Vdc

Product Facts

- Designed to be the smallest, lightest weight, lowest cost sealed contactor in the industry with its current rating (500+A carry, 2000A interrupt at 320VDC)
- Built-in coil economizer — only 1.7W hold power @ 12VDC and it limits back EMF to 0V. 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, during long periods of non-operation
- Versatile coil/power connections
- UL Recognized for the U.S. and Canada (File E208033) All contact ratings & coil versions may not be UL Recognized
- CE marked for EC applications
- AIAG QS9000 designed, built and approved
- RoHS versions available



EV200 Series Contactor (CZONKA Relay, Type III)

| Coil Operating Voltage (Valid Over Temperature Range) | | | |
|---|-------------------------|-----------|-----------|
| Voltage (Will Operate) | 9-36VDC | 32-95VDC | 48-95VDC |
| Voltage (Max.) | 36VDC | 95VDC | 95VDC |
| Pickup (Close) Voltage Max. | 9VDC | 32VDC | 48VDC |
| Hold Voltage (Min.) | 7.5VDC | 22VDC | 34VDC |
| Dropout (Open) Voltage (Min.) | 6VDC | 18VDC | 27VDC |
| Inrush Current (Max.) | 3.8A | 1.3A | 0.7A |
| Holding Current (Avg.) | 0.13A@12V, 0.07A@24V | 0.03A@48V | 0.02A@72V |
| Inrush Time (Max.) | 130ms | 130ms | 130ms |

Ordering Information

Typical Part Number ►

EV200 A A A N A

Series: _____
EV200 = 500+ Amp, 12-900VDC Contactor

Contact Form: _____
A = Normally Open
H = Normally Open with NO Aux. Contacts
G = Normally Open with NC Aux. Contacts

Coil Voltage: _____
A = 9-36VDC (1 = requires external coil economizer)
D = 32-95VDC (2 = requires external coil economizer)
J = 48-95VDC (3 = requires external coil economizer)
R = 28VDC with Mechanical Economizer

Coil Wire Length: _____
A = 15.3 in (390 mm)

Coil Terminal Connector: _____
N = None
C = Molex Mini-fit Jr, 2 Skt, Female 18-24,
P/N 39-01-2020 & 39-00-0060 +red is pin 1
(A length only)

Mounting & Power Terminals: _____
A = Bottom Mount & Male 10mm x M8 Terminals

Performance Data

Contact Arrangement, Power Contacts — 1 Form A (SPST-NO)

Rated Operating Voltage — 12 - 900 VDC

Continuous (Carry) Current, Typical — 500 A @ 85°C, 400 mcm conductors

Consult Factory for required conductors for higher (500+ A) currents

Make/Break Current at Various Voltages ¹ — See graph next page

Break Current at 320VDC ¹ — 2,000 A, 1 cycle ³

Contact Resistance, Typ. (@200A) — 0.2 mohms

Load Life — See graph next page

Mechanical Life — 1 million cycles

Contact Arrangement, Auxiliary Contacts — 1 Form A (SPST-NO)

Aux. Contact Current, Max. — 2A @ 30VDC / 3A @ 125VAC

Aux. Contact Current, Min. — 100mA @ 8V

Aux. Contact Resistance, Max. — 0.417 ohms @ 30VDC / .150 ohms @ 125VAC

Operate Time @ 25°C — Close (includes bounce), Typ. — 15 ms
Bounce (after close only), Max. — 7 ms
Release (includes arcing), Max @ 2000A — 12 ms

Dielectric Withstanding Voltage — 2,200 Vrms @ sea level (leakage <1mA)

Insulation Resistance @ 500VDC — 100 megohms ²

Shock, 11ms 1/2 Sine, Peak, Operating — 20 G

Vibration, Sine, 80-2000Hz., Peak — 20 G

Operating Ambient Temperature — -40°C to +85°C

Weight, Nominal — .95 lb. (.43 kg)

Notes:

¹ Main power contacts

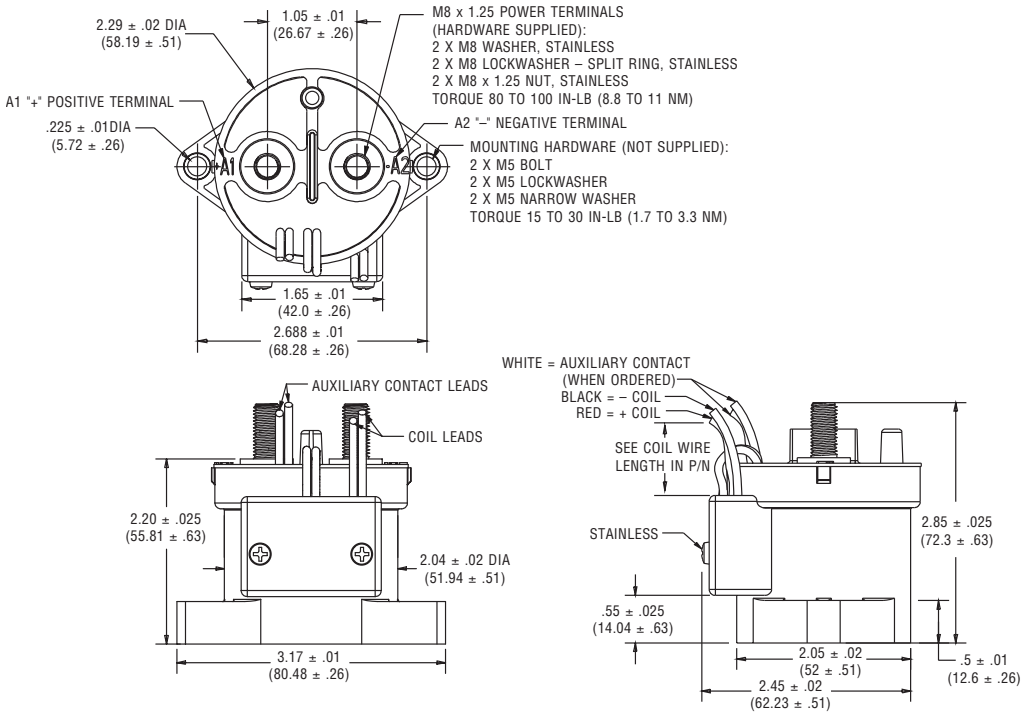
² 50 at end of life

³ Does not meet dielectric & IR after test, 1700 amp for unit with Aux. Contacts

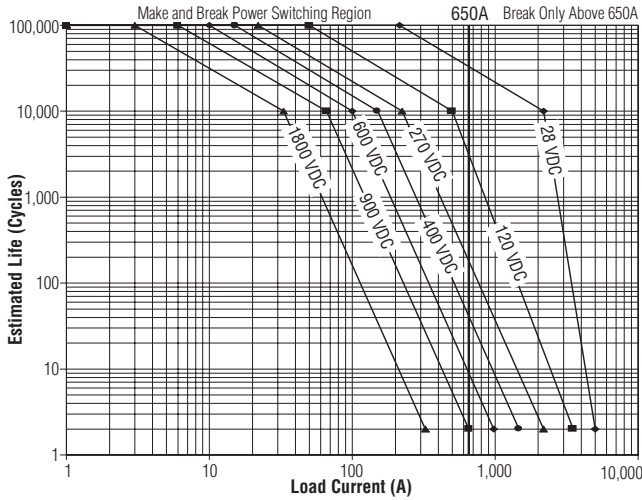
For factory-direct application assistance, dial 800-253-4560, ext. 2055, or 805-220-2055.

KILOVAC EV200 Series (CZONKA Relay, Type III) (Continued)

Outline Dimensions

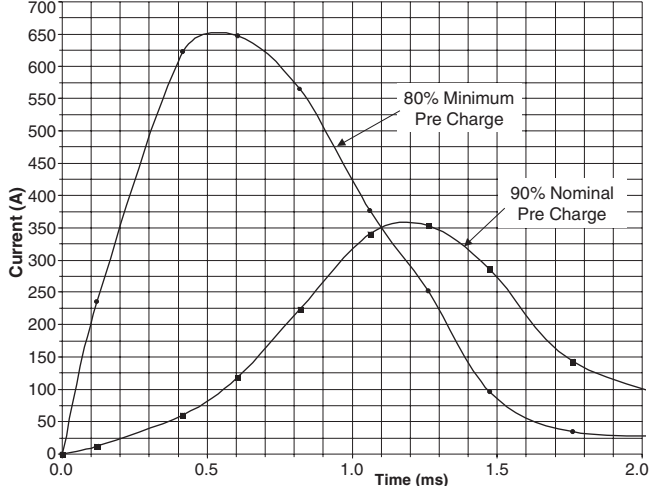


Estimated Make & Break Power Switching Ratings



- 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.

EV200 Capacitive Make Test Curves for Pre-Charged Motor Controller



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