

# KILOVAC CAP200 Series Contactor with 1 Form A (SPST-NO) Contacts Rated up to 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
- 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, including long periods of nonoperation
- Versatile coil and power connections
- RoHS versions available



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 ▶

CAP200 A A A N A

Series: \_

CAP200 = 500 Amp, 12-900VDC Contactor

### **Contact Form:**

A = Normally Open

H = Normally Open with 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 = 28 Vdc with mechanical economizer

#### Coil Wire Length:

A = 15.3 in (390 mm)

D = Coil connector on relay (requires option

"E" or "X" in next step)

# Coil Terminal Connector: -

N = None

E = 9-pin subminiature "D" plug mounted on contactor housing

F = 9-pin subminiature "D" plug mounted on 15.3 in (390 mm) flying leads.

X = Special configuration (consult factory)

## Mounting & Power Terminals:

A = Bottom Mount & Male 10mm x 8 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 currents

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

**Break Current at 320VDC 1** — 2,000 A, 1 cycle <sup>3</sup>

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. —

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

**Dielectric Withstanding Voltage** — 2,200 Vrms @ sea level

Insulation Resistance @ 500VDC — 100 megohms <sup>2</sup>

Shock, 11ms 1/2 Sine, Peak, Operating —  $20~\mathrm{G}$ 

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

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

**Weight. Nominal** — .95 lb. (.43 kg)

#### Notes:

- <sup>1</sup> Main power contacts
- <sup>2</sup> 50 at end of life
- <sup>3</sup> Does not meet dielectric & IR after test, 1700 amp for unit with Aux. Contacts

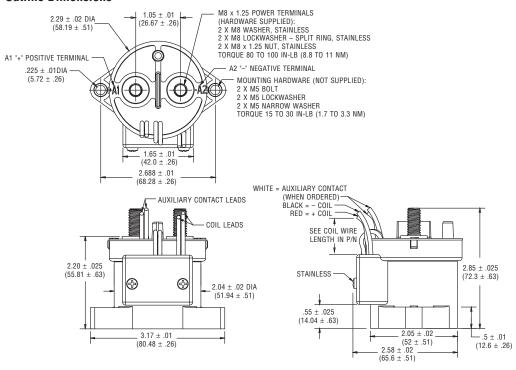
For factory-direct application assistance, dial 800-253-4560, ext. 2055, or 805-220-2055.

www.te.com

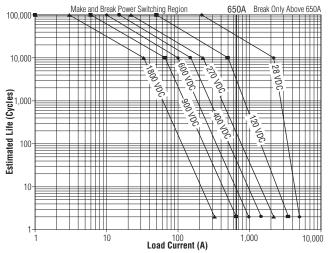


# KILOVAC CAP200 Series (Continued)

## **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.
- The maximum make current is 650A to avoid contact welding.

KILOVAC High Voltage DC Contactors