# INTRODUCING

# KILOVAC CAP120 HIGH VOLTAGE CONTACTORS

- Help increase system flexibility and reliability with high break levels - 1000A at 400 Vdc and 600A at 600 Vdc
- Operate in explosive and harsh environments with a hermetically sealed contactor and no contact oxidation over periods of non-use



TE Connectivity (TE) introduces the KILOVAC CAP120 contactor, a single pole, hermetically sealed 150 amp DC contactor designed for reliability in harsh environments for long-lasting systems. Energy storage and power distribution systems require reduced-sized contactors able to withstand high currents in a range of applications. A reduced-size version of the MAP and CAP series contactors, the CAP120 contactor's small size and light weight opens up new application possibilities for a 150A/600 Vdc device. The contactor allows versatile installation through bidirectional load switching, and the main contacts are not polarity sensitive. CAP120 contactors provide reliable and long-lasting performance in military ground, military and commercial aerospace and marine applications.

#### **KEY BENEFITS**

- Save space and weight with a reduced size version of the MAP/CAP 100 series contactors
- Operate in explosive and harsh environment with a hermetically sealed contactor and no contact oxidation over periods of non-use
- Offer a versatile option with bidirectional switching and non-polarity sensitive main contacts
- Mount in any orientation due to no position sensitivity
- Help increase system flexibility and reliability with high break levels – 1000A at 400 Vdc and 600A at 600 Vdc

## **MECHANICAL**

- Shock: 11ms 1/2 sine (operating): 20 g peak
- Sine Vibration: 25 g peak: 55 to 2000 Hz
- Random Vibration: 13.3 grms:
  - Hz 15 100 450 900 2000
  - g2/Hz 0.002 0.002 0.12 0.12 0.083
- Operating Temperature Range: -40°C to +85°C
  - Weight: 0.14 kgSealing: Hermetic

#### **LEARN MORE**

KILOVAC CAP120 High Voltage Contactors Product Listing Page
KILOVAC CAP120 High Voltage Contactors Flyer

KILOVAC CAP120 High Voltage Contactors Press Release

#### **APPLICATIONS**

- Energy storage systems
- Power distribution
- High-current battery systems
- Lithium ion battery systems
- Solar power

## **ELECTRICAL**

- Contact Arrangement: SPST-NO (form X)
- Voltage Rating: 600 Vdc
- Current Rating: 150 A continuous
- Contact Resistance: 0.6 m∧
- Contact Voltage Drop @ 150 A: 80 mV max.
- Hot-Switching Performance, Resistive Load @ 600 Vdc:
  - 100 A Make/Break: 1000 cycles
  - 600 A Break: 5 cycles
  - 600 A Make: 25 cycles
- Hot-Switching Performance, Resistive Load @ 400 Vdc:
  - 150 A Make/Break: 3250 cycles
  - 1000 A Break Only: 5 cycles
- Maximum Pulse Through Closed Contacts: 1250 A
- Dielectric Withstanding Voltage over Life:
  - Terminal to Terminal: 1 mA max. @2800 Vrms
  - Terminals to Coil: 1 mA max. @1500 Vrms
- · Insulation Resistance over Life:
  - Terminal to Terminal: 100 M∧ @ 500 Vdc new
  - Terminals to Coil: 50 M∧ min. @ 500 Vdc end of life
- Mechanical Life: 100,000 cycles min.

