

CAPABLE

- Handles up to 1000 A/1000 V

HERMETICALLY SEALED

- Suitable for application in harsh and explosive environments
- No contact oxidation over periods of non-use

VERSATILE

- Bidirectional switching
- Main contacts not polarity sensitive
- Bottom or buss bar mount
- Available with SPST-NO Auxiliary Contact

EFFICIENT

- Integrated dual-coil electronic “cut-throat” economizer with internal suppression

SPACE AND WEIGHT SAVINGS

- One of the smallest 1000 A/1000 V hermetically-sealed contactors in the industry

APPLICATIONS

- Energy Storage/Battery Storage
- Power Distribution
- Alternative Energy
- Electric Vehicles (Military and Commercial)
- Test Equipment

Specifications

ELECTRICAL

Main Contacts

- **Contact Arrangement:** SPST-NO (Form X)
- **Voltage Rating (Max.):** 1000 VDC
- **Current Rating, Continuous:** 1000 A (At 25°C ambient with four 4/0 conductors or equivalent)
- **Current Rating, Short Term:** 1200 A/180 sec
- **Contact Resistance:** 0.2 mΩ max. at rated current
- **Hot-Switching Performance, Resistive Load:**
 - 50 A/1000 VDC: 25,000 cycles
 - 130 A/1000 VDC: 10,000 cycles
 - 200 A/1000 VDC: 3500 cycles
 - 100 A/600 VDC: 10,000 cycles
 - 240 A/600 VDC: 2000 cycles
 - 1000 VDC/1200 A: 4 cycles (Break Only)
- **Maximum Pulse Through Closed Contacts:** 6000 A (half cycle, 60 Hz)
- **Dielectric Withstanding Voltage over Life:**
 - Between Open Contacts: 2800 V_{rms}
 - Contacts to Coil: 2800 V_{rms}/4000 VDC
 - End of Life Between Open Contacts: 2200 V_{rms}
- **Insulation Resistance over Life,**
 - Terminal to Terminal; Terminals to Coil:** Beginning of Life: 100 MΩ min. @ 500 VDC
 - End of Life: 50 MΩ min. @ 500 VDC

- **Auxiliary Contact Rating 1 A / 30 Vdc**
 - Switching Life at Maximum Rating 100K cycles
 - Auxiliary Contact Resistance (maximum over life) 1 Ω
 - Minimum Load 5 VDC / 5 mA
- **Mechanical Life:** 100,000 cycles minimum

ENVIRONMENTAL/MECHANICAL

- **Shock:** 11 ms, 1/2 sine (operating), 20 g peak
- **Sine Vibration:** 20 gpeak (operating) 55 to 2000 Hz
- **Operating Temperature Range:** -40°C to +105°C
- **Weight, Nominal:** 1.02 kg
- **Sealing:** Hermetic

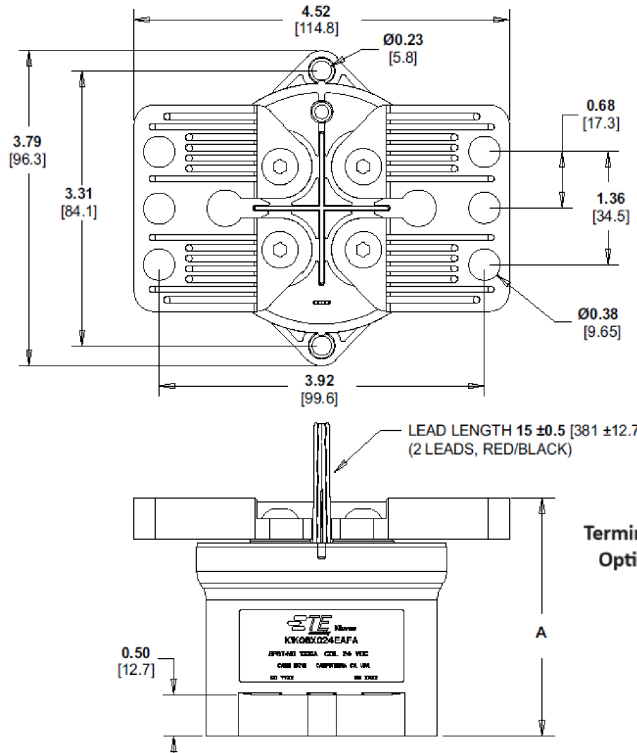
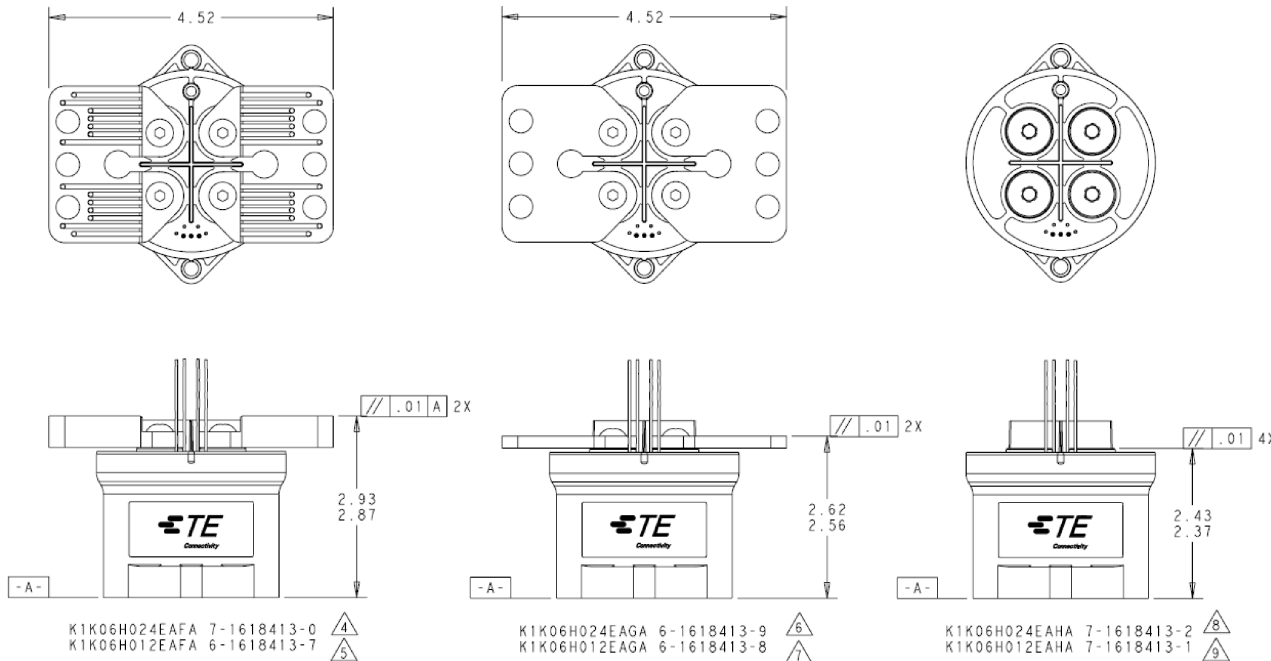
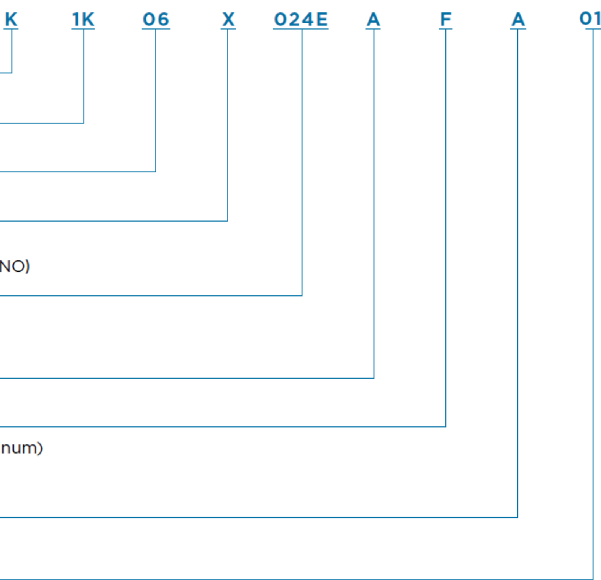
COIL DATA

- **Coil Data @ 20°C (Internal Two-Coil Economizer)**
- **Coil Voltage Range:** 24 VDC nom./32 VDC max.
- **Maximum Pickup Current:** 5.5 A
- **Nominal Holding Current:** 0.33 A
- **Pickup Voltage:** 18 VDC
- **Dropout Voltage:** 10 VDC
- **Pickup Pulse (Max):** 75 ms
- **Coil Resistance ±5%:** 4.7 Ω Pickup/72 Ω Hold
- **Coil Holding Power:** 8 W
- **Main Contacts:**
 - Operate Time (Max): 50 ms
 - Operate Bounce (Typ.): 5 ms
 - Release (Typ.): 8 ms



Part Numbering System

- Part Numbering System
- BRAND
K KILOVAC
- BASIC RATING
1K 1000 V/1000 A
- SIZE
06 Size 06 (EV202 Package)
- CONFIGURATION
X Main contact Form X, (NO)
H Main contact Form X, auxiliary contact Form A (NO)
- COIL VOLTAGE
012E 12 VDC Coil Economized
024E 24 VDC Coil Economized
- COIL LEAD LENGTH
A 15-inch coil leads
- CONTACT TERMINATION
F Finned Heat Sink Bus Bar (Nickel-Plated Aluminum)
G Flat Bus Bar (Nickel-Plated Copper)
H 4X 1/4-20 UNC Female Threads, .187" deep, (2)
- MOUNTING
A Bottom Mount
- STATIONARY CONTACT VARIANT
01 .375 THREAD DEEP

(2) User furnished bus bar must be equivalent to 4X 4/0 conductor. Torque to 45-55 in-lbs. per connection (5.1 - 6.2 NM)



As one of the smallest, lowest cost, hermetically sealed 1000 A/1000 V switching devices in the Industry, the KILOVAC K1K contactor from TE Connectivity (TE) operates reliably in harsh and explosive environments without oxidation or contamination of contacts, even after long periods of non-operation. The K1K is well suited for power switching at voltages as low as 5 VDC and as high as 1000 VDC. Typical applications include main disconnect contactor for large battery bank applications, for carry and interrupt battery fault currents and other high current applications, power/motor control circuit isolation, and circuit protection and safety.

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN RV 13SEP2019		<div>TE Connectivity</div>									
		CHK RV 13SEP2019											
DIMENSIONS: INCHES		TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ± - 1 PLC ± - 2 PLC ± - 3 PLC ± - 4 PLC ± - ANGLES ± -		APVD JR 13SEP2019		NAME							
				PRODUCT SPEC		K1K06-SERIES							
				—									
				APPLICATION SPEC									
MATERIAL		FINISH		—		SIZE		CAGE CODE		DRAWING NO		RESTRICTED TO	
				A3		—		C-K1K06-SERIES		—			
				CUSTOMER DRAWING		SCALE		NTS		SHEET		1 OF 1	