

## Introducing EVC 250 Main Contactor

The EVC 250 main contactor (EVC 250), a next generation product, has specifically been designed for use in hybrid, full-electric and fuel cell vehicles, as well as in vehicle charging systems and works without pressurized contact chamber.

The new EVC 250 features larger contact gaps, optimized switching dynamics, high performance arc suppressing magnets and other measures to effectively control the switching arc. The contactor achieves continuous current ratings of 250A which ensures a safe short circuit carry capability of 6kA and complies with the demanding switching requirements in hybrid and electric vehicles. Service replacement due to pressure loss or gas leaking is no longer necessary.

This innovative design allows for compact dimensions of only 93 x 55.3 x 49.8mm (3.7 x 2.2 x 2.0"). Due to the contactor's simplified construction, with optimized parts, the EVC 250 can allow for a fully automated production. In addition to the standard version with separate coils for pull-in and hold with automatic, internal switch, a second version with single coil for pulsed excitation (PWM) is also available. The EVC 250 fulfills the insulation requirements of IEC 60664.



[www.te.com](http://www.te.com) | [www.te.com/auto-relays-ecat](http://www.te.com/auto-relays-ecat)  
<http://www.te.com/evc-250>



## EVC 250 Main Contactor 450VDC, 250A



RoHS compliant

### KEY FEATURES

- Compact high voltage main contactor
- Works without pressurized contact chamber
- Voltage rating up to 450VDC
- 250A continuous current rating
- Short circuit carry currents up to 6,000A
- Limiting break currents up to 2,000A
- Not position sensitive, can be mounted in any orientation
- Available with dual coil (internal switch) and single coil (external pwm required)

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### APPLICATIONS

- DC high voltage high current applications
- Main contactors for hybrid, full battery electric vehicles and fuel cell cars (HEV, PHEV, BEV and FCV)
- Battery charging systems

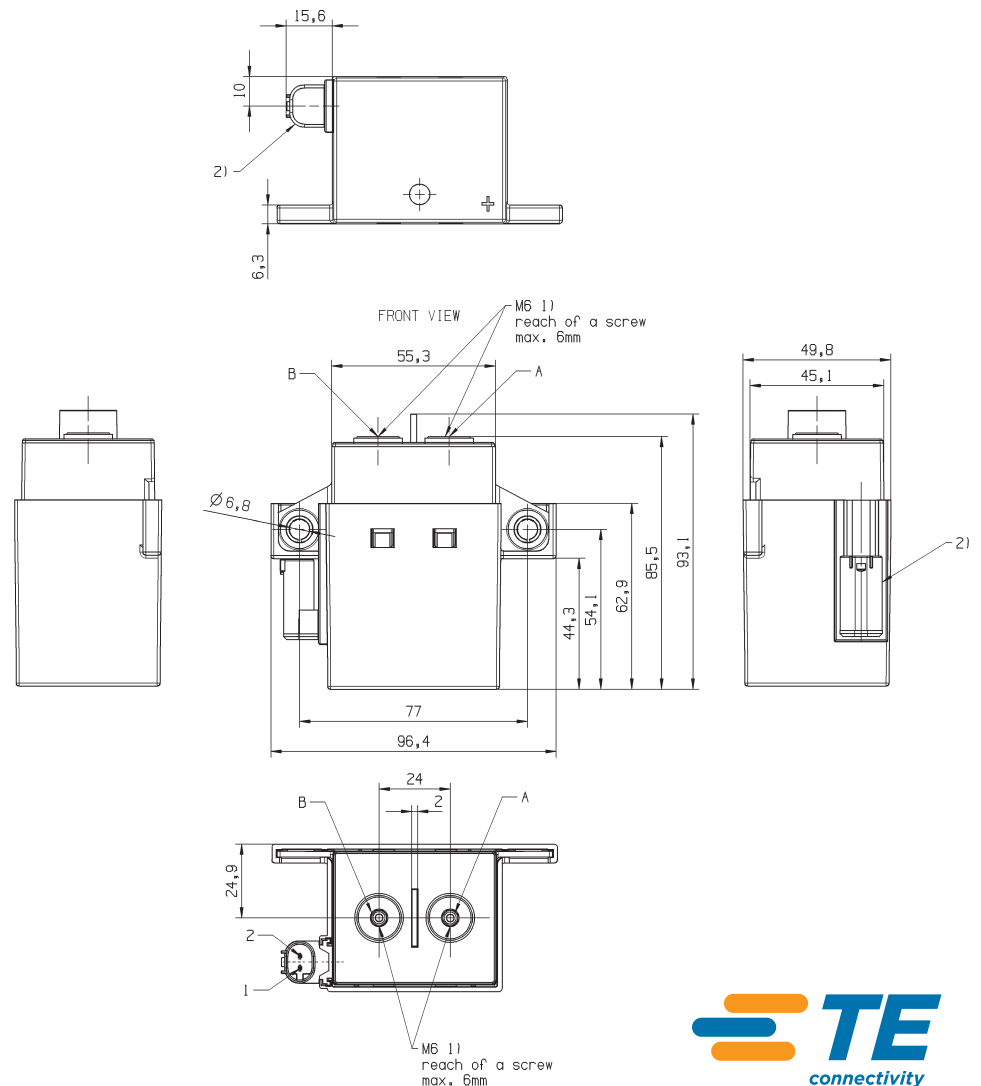
### MECHANICAL

- Compact IP54 allows for dimensions of only 93 x 55.3 x 49.8mm (3.7 x 2.2 x 2.0")
- Load terminals threaded for M6 bolts
- Robust mounting plate for M6 screws
- Design without pressurized contact chambers
- Integrated coil connector, flying leads on request

### ELECTRICAL

- Contactor arrangement: Main contacts SPST-NO-DM (1 form X)
- Voltage rating: 450VDC
- Continuous current rating: 250A
- Short term current rating (1min): 600A
- Short circuit carry current (20ms): 6,000A
- Max. break current at 400VDC: 2,000A
- Coil rated voltage: 12V
- Coil resistance (+23 °C): 36Ω (holding coil of dual coil version)

### DIMENSIONS - Bottom Mount



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