



Introducing AMP+ High Voltage Contactors (EVC) 500-500L

Hermetically sealed and intrinsically safe, TE Connectivity AMP+ high voltage contactors provide fast and reliable switching of the high voltage battery to the vehicle system in hybrid and electric vehicles. The AMP+ high voltage contactor 500-500L offers 900 VDC and 500 Amps continuous current carrying capabilities in a compact package. Capable of 2000 Amp interrupt at 320 VDC.

Evolved from fighter jet technology, AMP+ high voltage contactors reliably provide current switching capability in harsh and explosive operating environments with no oxidation or contamination of contacts during long periods of non-operation. 12kV of isolation between open contacts increase battery system robustness. The AMP+ EVC 500 is designed with an optional built micro-controller or timer based coil economizer; the AMP+ EVC 500L is designed with a 12V coil requiring no external economizer. Both are available with an optional auxiliary switch to monitor contact position.



AMP+ EVC 500 900 VDC, 500 Amp Continuous Current Contactor



EVC 500 KEY FEATURES

- 2000 Amp interrupt at 320 VDC
- 12kV of isolation between open contacts
- Hermetically sealed
- 500 Amp continuous current rating
- Voltage rating (max): 900 VDC
- Compact package
- Fast high voltage interrupt capability
- Optional built micro-controller or timer based coil economizer
- 12V coil version available requiring no external economizer (EVC 500L)
- Available with optional auxiliary switch to monitor contact position
- Robust bottom mounting with optional economizer enclosure

TE Technical Support Center

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APPLICATIONS

- Main power relay to connect the battery system to the electric vehicle

MECHANICAL

- Compact epoxy-sealed resin enclosure
- Robust bottom mounting with optional economizer enclosure
- Inert gas filled contact chamber
- Flying leads for coil connections
- Threaded load terminals
- Mechanical life: 500,000 cycles

ELECTRICAL

- Contactor arrangement: Main contacts SPST-NO-DM (1 Form X)
- Voltage rating (max): 900 VDC
- Continuous current rating: 500 Amps @ 85 °C
- Break current at 320 VDC: 2,000, 1 cycle
- Contact resistance, typical (@200 Amps): 0.2 mohms
- Coil resistance: EVC 500 = 3.14 ohms
EVC 500L = 11 ohms

STANDARDS AND SPECIFICATIONS

- RoHS compliant

AVAILABLE DATE

- EVC 500 = Now
- EVC 500L = Q4 2012

PRODUCT OFFERING

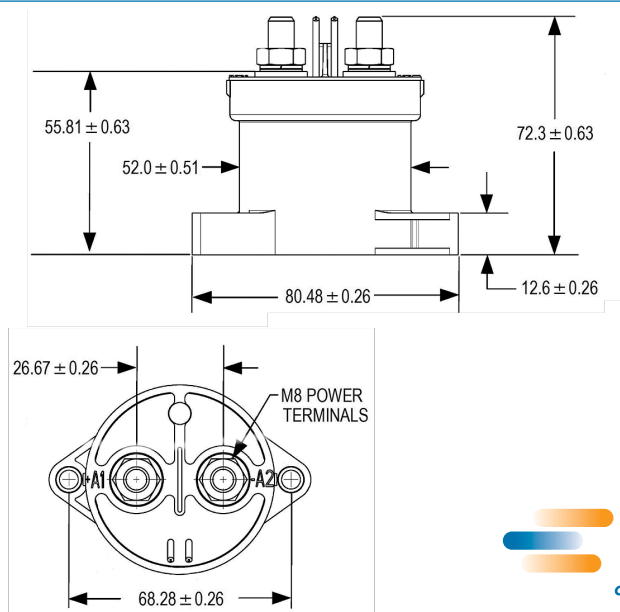
AMP+ EVC 500 & 500L 900VDC, 500 Amp Continuous Current Contactor

Part Number	Part Code	Coil Voltage	Coil Termination	Connection Hardware
2098372-1	EVC500-A1ANAM	12 VDC (external economizer required)	15 in (380 mm) stripped wire	Included
2098190-1	EVC500-AAANAM	12 VDC (with economizer)		None
2138806-1	EVC500-AAANAN			
2203115-1	EVC500-BAANAM			

PRODUCT DIMENSIONS

- EVC 500 without coil economizer (bottom mount)

See data sheet for additional mounting configurations and EVC 500L dimensions.



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