

FACT SHEET EVC 135 – Electric Vehicle Contactor

Hermetically sealed and intrinsically safe, TE Connectivity electric vehicle contactors provide fast and reliable switching of the high voltage battery to the vehicle system in hybrid and electric vehicles. The electric vehicle contactor 135 offers 450VDC and 135A continuous current carrying capabilities in a compact package.

Evolved from fighter jet technology, electric vehicle 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.

This compact solution is designed with 8kV of isolation between open contacts to increase battery system robustness. Configurable mounting orientation and custom connections allow customers to meet their packaging needs.





EVC 135 450VDC, 135A Contactor



RoHS compliant

KEY FEATURES

- Mechanical life 1 million cycles
- Not position sensitive, can be mounted in any orientation
- Hermatically sealed
- 8kV of isolation between open contacts
- 135 Amp continuous current rating
- Voltage rating 450VDC (max. 900VDC, consult factory for details)
- 1250A maximum short circuit current
- Available in side mount or bottom mount configuration

• Customized connections available

- Quiet operation
- Qualified for automotive use

TE SUPPORT CENTER

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Tyco Electronics AMP GmbH certified acc. ISO 14001 and ISO/TS 16949:2002

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APPLICATIONS

- Main power relay for hybrid electric vehicles
- Accessory relays for high voltage system
- High speed pre-charging

MECHANICAL

- Compact epoxy-sealed resin enclosure occupies about 65.5cm³ volume
- Robust mounting plate with side or bottom mounting option for M4 screws
- Inert gas filled contact chamber
- Flying leads for coil connections
- Load terminals threaded for M5 bolts
- Mechanical life: 1 million cycles

ELECTRICAL

- Contactor arrangement: Main contacts SPST-NO-DM (1 form X)
- Voltage rating: 450VDC
- Continuous current rating: 135A
- Short term current rating (3min): 200A
- Coil operation voltage: 12V, 24V
- Coil resistance (+20 °C): 26Ω, 15.3Ω, 3.8Ω available for different pull-in voltages

PRODUCT OFFERING - EVC 135

Order	Part Number	Coil Ohms	Wire Length	Coil Termination	Mounting
2203194-1	EVC135-4BNG	15.3Ω	6 in (150mm)	Stripped Wire	Bottom
2138011-1	EVC135-4ANG	15.3Ω	15 in (380mm)	Stripped Wire	Bottom
2138168-1	EVC135-4BNH	15.3Ω	6 in (150mm)	Stripped Wire	Side
2203120-1	EVC135-4ANH	15.3Ω	15 in (380mm)	Stripped Wire	Side
2098371-1	EVC135-5BNG	26Ω	6 in (150mm)	Stripped Wire	Bottom
2138622-1	EVC135-5ANG	26Ω	15 in (380mm)	Stripped Wire	Bottom
2203012-1	EVC135-5BNH	26Ω	6 in (150mm)	Stripped Wire	Side
2203012-2	EVC135-5ANH	26Ω	15 in (380mm)	Stripped Wire	Side
2138084-1	EVC135-6BNG	3.9Ω	6 in (150mm)	Stripped Wire	Bottom
2138603-1	EVC135-7BNG	96Ω	6 in (150mm)	Stripped Wire	Bottom

DIMENSIONS - Bottom Mount



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