

987 SERIES HIGH VOLTAGE, HIGH CURRENT ENGINE CONNECTOR



TE Connectivity's (TE) new 987 series connector is suitable for high voltage and high current applications, such as Electric Vertical Take-Off and Landing (eVTOL) vehicles, hybrid and fully electrical systems in commercial aerospace.

Due to the modular approach and the usage of our reliable 983 connector series, the time to market for customized versions is relatively short. TE offers shells for size 8 up to 28 and contacts from size 22 up to 0000 AWG. The integration of several safety features will contribute to ease of usage in the end application.

By making use of an integrated backshell, a weight reduction can be achieved and allows termination of shielded power cables.

FEATURES AND BENEFITS

- Based on highly reliable 983 series connector technology
- Lightweight by optimum insert arrangement
- Contact latching with safety pin protection
- Helps withstand vibration under harsh and demanding conditions
- Corona free design suitable for high voltages
- Quick time to market by using modular concept
- Wide contact range available, from large (0000 AWG) to small gauges (22 AWG)
- Interlock contact option available for extra security
- Touch proof contacts
- Performance at high altitude—up to 50,000 ft

TARGET MARKETS

- Electric Vertical Take-Off and Landing (eVTOL)
- Commercial Aerospace

APPLICATIONS

- Hybrid and Fully Electrical Systems



ELECTRICAL DATA

- **DC DWV at Sea Level:** 3 KV
- **AC (rms) DWV at Sea Level:** 3 KV
- **DC Operating Voltage at 15000 ft:** 2 KV
- **AC (rms) Operating Voltage at 15000 ft:** 2 KV
- **AC (rms) Operating Voltage at 35000 ft:** 1 KV
- **Nominal Current Rating:** 50A to 300A through AWG 06 to 4/0

ENVIRONMENTAL DATA

- **Temperature Range:** -60°C to +200°C
- Shielding up to +360°
- **Sealing:** Altitude Immersion to 121 hPa (1.7 psi) (37,000 meters/100,000 ft): $\geq 1000\text{ M}\Omega$ Mated Condition
- IP68 Mated Condition
- **Vibration:** Level K as per EN 2591 or EIA-364-28

PHYSICAL DATA

- **Touch Safety:** IP2X Unmated Condition

For more information on specific product offerings, technical information, availability and customization, please contact your TE Sales Representative.