

# Reverse Polarity Protection Unit

Effective Protection Against Reverse Polarity





# TPB-01

## Reverse Polarity Protection Unit

The Tedeg Reverse Polarity Protection Unit is specifically designed to protect alternators and other sensitive components in vehicle battery systems from potential damage caused by incorrect polarity connections. When a vehicle battery is connected in reverse, the resulting current can damage electronic components and the vehicle's electrical system. To prevent this, the unit utilizes internal diode technology to detect reverse polarity and instantly disconnect the circuit, ensuring the safety of all system components.

### Key Features

- **High Protection Capacity:** Provides effective protection in 12V and 24V battery systems.
- **Fast Response Time:** Cuts off the circuit within milliseconds in the event of reverse polarity.
- **Compact and Durable Design:** Built to withstand harsh environmental conditions in vehicles.
- **Easy Installation:** Standard connection terminals and flexible mounting options offer quick and secure setup.
- **Alternator Protection:** Protects the vehicle's alternator from short circuits and excessive current caused by reverse polarity.
- **Internal Diode Technology:** Ensures maximum protection with minimal energy loss.

### Application Areas:

The Tedeg Reverse Polarity Protection Unit offers a wide range of applications in automotive, defense, and industrial sectors. This product is particularly preferred in critical systems such as military vehicles, commercial vehicles, and heavy machinery, providing reliable protection against battery-related connection errors.

### Technical Specifications:

- **Operating Voltage:** 12V / 24V DC
- **Maximum Current Capacity:** Up to 500 Amps
- **Operating Temperature:** -40°C to +120°C
- **Enclosure Type:** Durable design with IP67 protection class
- **Connection Type:** Standard terminal connections
- **Protection Level:** IP67

