BFR

BATTERY EARTH FAULT RELAY

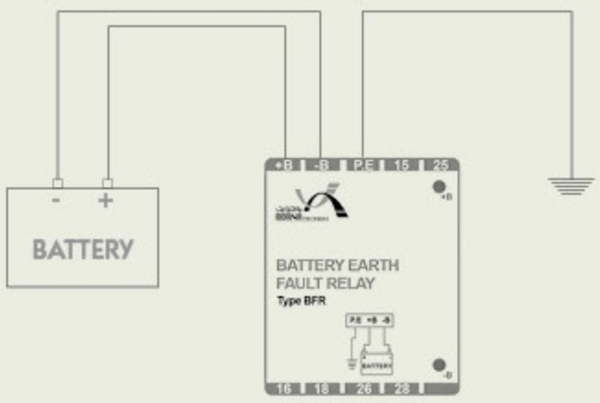
- **Recognition of battery +pole earth fault**
- **Recognition of battery -pole earth fault**
- **Having two separated relays for the above faults**
- **Two display signals:**
  - +B: Battery +pole earth connection
  - -B: Battery -pole earth connection

↘ Principles of Operation

This device is designed for protection against earth connection.
When supply voltage is connected to terminals +B, -B and earth or body is connected to terminal P.E, the device internal relay is open(internal contact of terminals 15 to 18 and 25 to 28 are established) and fault signals would be off.
If battery +pole is grounded, +B signal gets ON and the internal relay related to battery +pole fault closes right away (internal contact of terminal 15 to 16 is made).
If battery -pole is grounded, -B signal gets ON and the internal relay related to battery -pole fault closes right away (internal contact of terminal 25 to 26 is made).
After +B and –B signals get ON, if earth connection is rectified, the related signal gets OFF and relay turns back to its primary status.

↘ Installation and Start-Up

Battery plus and minus wires have to be connected to terminals +B and –B respectively.
Earth or body wire is connected to terminal P.E.
Terminals 15, 16 and 18 and terminals 25, 26 and 28 are the device internal contact points related to battery plus and minus faults respectively which should be put in series with control circuit if required. For example, to activate an alarm or to disconnect and connect the main contactor's command.



↘ Technical Specifications

- Supply Voltage: 24, 48 or 110 VDC
- Output Relay: Two Single-C/O contact relays

- Contact Current: 6 A, 220 VAC / 6 A, 28 VDC