48 VDC Battery Disconnect Kit

Installation Guide

Circuit disconnect switches are optional equipment on the Telect Seismic Indoor Battery Rack. The 48VDC Battery Disconnect Kit modifies a rack shelf to include one circuit disconnect switch. Each kit includes

- one circuit breaker (1)
- insulating pad (2)
- mounting bracket (3)
- faceplate (4)
- polycarbonate cover (5)
- hardware
- a cable (6) to connect the circuit breaker to the hot terminal of the first battery in the shelf circuit

The circuit breaker functions as a disconnect switch for the battery circuit, not to protect against power surges. A separate kit is required for each shelf. Each shelf is a circuit of four batteries. The circuit breaker connects between the hot collector bus cable and the hot terminal of the first battery in the circuit.

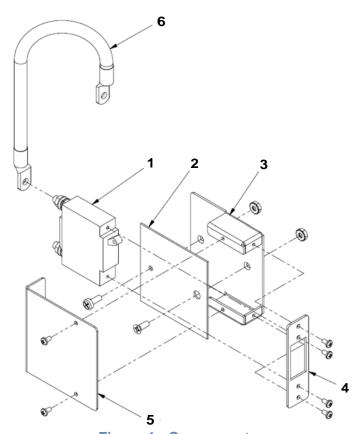


Figure 1 - Components



WARNING

WARNING! Batteries and facility power systems present electrical voltage and amperage levels that are considered an electrical hazard. Make sure that only qualified personnel are allowed to install, operate, maintain, or otherwise come in contact with this equipment. Remove all watches and jewelry before installing battery disconnect kits. Only use insulated tools when working with batteries and facility power.

Procedure steps:

- 1. Disconnect power to the battery rack. Set all circuit breakers to OFF.
- 2. Install a circuit breaker mounting bracket (item 3) and insulating pad (item 2) on the right-hand side of the battery shelf with one 10-32 pan-head screw, one 10-32 flat-head screw, and two 10-32 keps nuts.



- 3. Remove one 1/4-20 nut and flatwasher from each stud on the back of the circuit breaker.
- 4. Disconnect the hot collector bus cable from the hot battery terminal. Reconnect the cable to the lower (load) terminal on the circuit breaker and secure with one 1/4-20 nut and flatwasher.
- 5. Connect the cable (item 6) supplied with the kit to the upper (line) terminal on the circuit breaker and secure with one 1/4-20 nut and flatwasher.
- 6. Connect the cable to the hot battery terminal.
- 7. Install the circuit breaker (item 1) into the mounting bracket face plate (item 4) with two 6-32 pan-head screws.
- 8. Install the mounting bracket face plate (item 4) onto the mounting bracket with two 6-32 panhead screws.
- 9. Torque all battery connections as specified by the battery manufacturer's current specifications.
- 10. Install the circuit breaker cover (item 5) with two 6-32 pan-head screws.

This procedure is complete.

