GC-09 : SPLITTER-BOX DUAL-CABLE MONITORING

A single SE-134 (or SE-134C) Ground-Fault Ground-Check Monitor Rev 4B or newer can protect two cables that are terminated with an SE-TA12A-series (SE-TA12A, SE-TA12ASF, SE-TA12ASF-WL, SE-TA12A-WL) and an SE-TA12B Termination Assembly. This reduces the cost and complexity of a splitter box.

When an SE-TA12A-series and an SE-TA12B are used as a set, the parallel combination has the 6-V Zener characteristic required by the SE-134 as a valid ground-check-loop termination. See Fig. 1. An open or short in the ground-check loop of either cable will result in an SE-134 ground-check trip.

To be able to energize either single cable independently, a live-end cover fitted with an SE-TA12A-series and another with an SE-TA12B must be available at the splitter box.

WARNING:

Take proper care to prevent an SE-TA6A-series (SE-TA6A, SE-TA6A-WL, SE-TA6ASF, SE-TA6ASF-WL) Termination Assembly from being used in a dual-termination application. The SE-134 and SE-134C are typically used to monitor a single cable terminated with an SE-TA6A-series. If an SE-TA6A-series terminates one of the cables on a splitter-box application, the second cable will not be monitored. This can result in a hazardous condition: an open ground connection, a shorted ground-check loop, or an energized open connector.

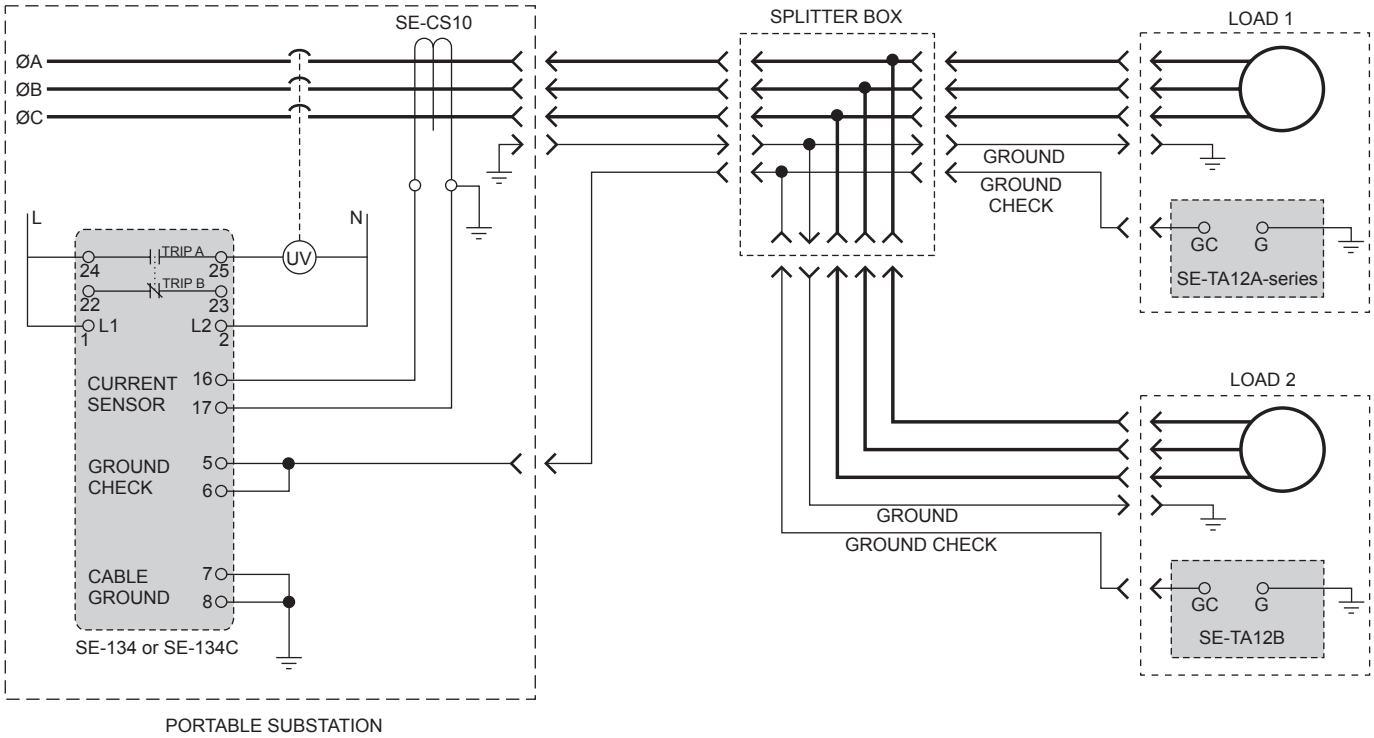

Figure 1: Simplified Connection Diagram