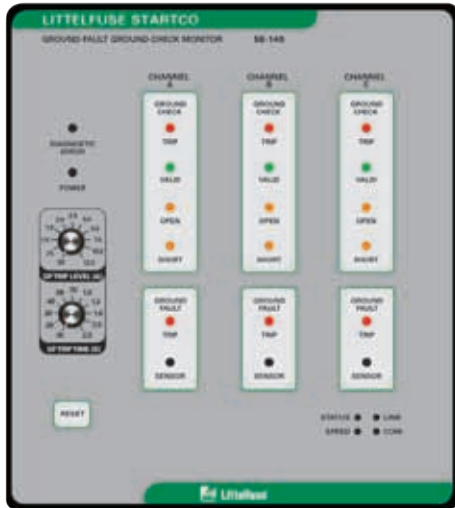


SE-145 SERIES

Ground-Fault Ground-Check Monitor



GROUND-FAULT PROTECTION RELAYS

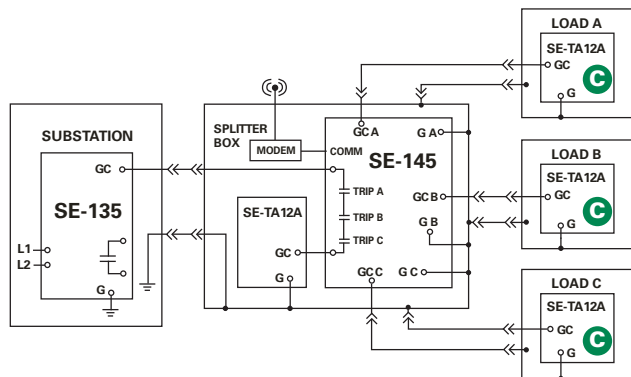
Description

The SE-145 is a three-channel, microprocessor-based, combination ground-wire monitor and ground-fault relay for resistance-grounded or solidly grounded systems. It continuously monitors the integrity of the ground wire to protect portable equipment from hazardous voltages caused by ground faults. The SE-145 is designed for use on three-way splitter box applications.

Features & Benefits

FEATURES	BENEFITS
Adjustable Pickup (0.5 - 12.5 A)	Unit can be used on a wide variety of trailing cable applications
Adjustable Time Delay (1 - 2.5 s)	Adjustable trip delay for quick protection and system coordination
Output Contacts	Separate annunciation of ground-fault and ground-check faults
Ground-Check LED Indication	Indication of open or short ground-check wire makes it easier to find faults
CT-Loop Monitoring	Alarms when CT is not connected
High-Induced-ac Rejection	Makes unit suitable for applications with high voltages and long cables
DFT (Harmonic) Filter	Prevents false operation
Zener-Characteristic Termination Assembly	Provides reliable ground-check loop verification
Fail-Safe Circuits	Ensures ground-check and ground-fault circuits remain safe even in the event of equipment failure
Conformal Coating	Additional coating protects circuit boards against harsh environment

Simplified Circuit Diagram



Ordering Information

CATALOG/SYSTEM NUMBER	CONTROL POWER	COMM
SE-145-00-00	60-265 Vac; 80-370 Vdc	–
SE-145-00-10	24/48 Vdc	–
SE-145-03-00	60-265 Vac; 80-370 Vdc	Ethernet
SE-145-03-10	24/48 Vdc	Ethernet

ACCESSORIES	REQUIREMENT	PAGE
SE-CS10 or SE-CS40 Series	Required	49
SE-TA12A Series	Required	55
RK-132	Optional	52

See pg. 48-56 for Current Transformer Selection Guide and Accessory Information.

Accessories

A



SE-CS10 Series Ground-Fault Current Transformer

Zero-sequence current transformer detects ground-fault current. Provides 0.5 to 12.5 A trip range.

B



SE-CS40 Series Ground-Fault Current Transformer

Zero-sequence current transformer detects ground-fault current. Provides 2.0 to 50 A trip range.

C



SE-TA12A Series Termination Assembly

Required termination assembly; temperature compensated.

For detailed wiring diagram, see page 82.

Specifications

IEEE Device Numbers	Checking or Interlocking Relay (3GC), Ground fault (50G/N, 51G/N)
Input Voltage	60-265 Vac; 80-370 Vdc 15W
Dimensions	H 213 mm (8.4"); W 192 mm (7.6"); D 176 mm (7.0");
Trip Level Settings	0.5-12.5 A or 2.0-50.0 A
Trip Time Settings	0.1-2.5 s
Contact Operating Mode	Selectable fail-safe or non-fail-safe
Harmonic Filtering	Standard feature
Test Button	Standard feature
Reset Button	Standard feature
Communications	Ethernet Optional
Output Contacts	Isolated Form A and Form B
Conformally Coated	Standard feature
Warranty	5 years
Mounting	Panel, Surface