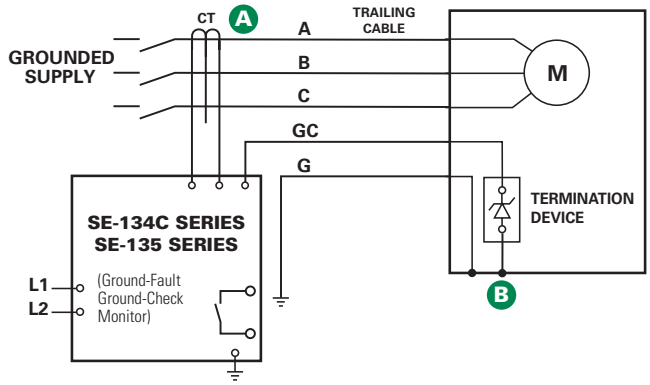
SE-134C, SE-135 SERIES

Ground-Fault Ground-Check Monitor



Simplified Circuit Diagram



Ordering Information

ORDERING NUMBER	OPTION	POWER SUPPLY	COMM
SE-134C	Blank or XGC	0=120/240 Vac/Vdc 1=24/48 Vdc (1)	0=None
SE-135	Blank or XGC	0=120/240 Vac/Vdc 1=24/48 Vdc (1) (2)	0=None 3=Ethernet (1)

ACCESSORIES	REQUIREMENT
SE-CS10 Series	Required
SE-CS40 Series (for SE-135)	Optional
SE-TA6A Series (for SE-134C)	Required
SE-TA12A/SE-TA12B Combination (for SE-134C)	Optional
SE-TA12A Series (for SE-135)	Required
SE-IP65CVR-G	Optional
RK-132	Optional
PPI-600V	Optional

(1) CE/C-Tick not available.
(2) Not available with Ethernet option 3.
(3) See ordering information.
See Current Transformer Selection Guide and Accessory Information.

Description

The SE-134C/SE-135 is a 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 conductor to protect portable equipment from hazardous voltages caused by ground faults. The SE-134C/SE-135 is field proven in monitoring trailing cables on large mobile equipment such as drag-lines, mining shovels, shore-to-ship power cables, dock-side cranes, stacker-reclaimers, submersible pumps, and portable conveyors.

Features & Benefits

FEATURES	BENEFITS
Adjustable pickup (0.5-12.5 A for SE-CS10) (2 - 50 A for SE-CS40)	Unit can be used on a wide variety of trailing cable applications
Adjustable time delay (0.1-2.5 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
XGC option	Increases maximum cable length for ground-check monitoring (10 km typical)

Accessories

A 

SE-CS10 or SE-CS40 Series Ground-Fault Current Transformer
Required zero-sequence current transformer detects ground-fault current.

B 

SE-TA6A Series, SE-TA12A Series Termination Assembly
Required termination assembly; temperature compensated.

Specifications

IEEE Device Numbers	Checking or Interlocking Relay (3GC), Ground fault (50G/N, 51G/N)
Input Voltage	65-265 Vac; 85-275 Vdc; 18-72 Vdc
Dimensions	**H** 213 mm (8.4"); **W** 99 mm (3.9"); **D** 132 mm (5.2");
Trip Level Settings	0.5-12.5 A for SE-CS10, 2 - 50 A for SE-CS40
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
Output Contacts	Isolated Form A and Form B, Two Form C
Approvals	CSA certified, UL Listed (E340889), C-Tick (Australia)(3), CE(3)
Conformally Coated	Standard feature
Warranty	5 years
Mounting	Panel, Surface
GC Trip Resistance	28Ω (Standard), 45Ω (XGC Option)

© 2014 Littelfuse Protection Relays & Controls

Rev: 4-D-102214
SE-134C Based on Manual Rev: 7-C-100114
SE-135 Based on Manual Rev: 3-C-100314