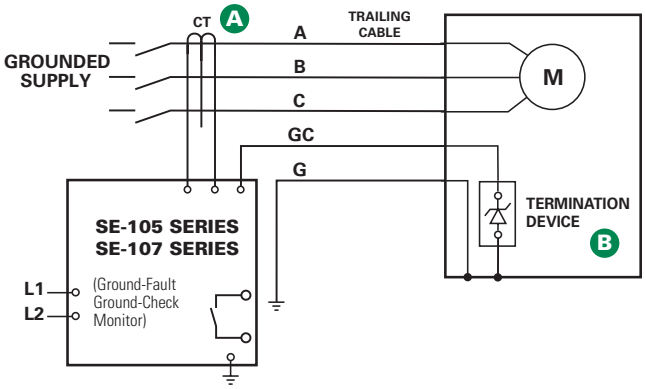
SE-105, SE-107 SERIES

Ground-Fault Ground-Check Monitor



Simplified Circuit Diagram



Ordering Information

ORDERING NUMBER	CONTROL POWER
SE-105	120 Vac
SE-105D	120 Vac/Vdc
SE-105E	240 Vac
SE-107	120 Vac
SE-107D	120 Vac/Vdc
SE-107E	240 Vac

Consult manual online for additional ordering options.

ACCESSORIES	REQUIREMENT
CT200 Series	Required
1N5339B	Included
SE-TA6, SE-TA6-SM	Optional
SE-TA6A Series	Optional
RK-102, RK-105, RK-105I	Optional
RK-13	Optional
PPI-600V	Optional

Description

The SE-105/SE-107 is a combination ground-wire monitor and ground-fault relay for resistance-grounded systems. It continuously monitors the integrity of the ground conductor to protect portable equipment from hazardous voltages caused by ground faults. The SE-105/SE-107 is an excellent choice for trailing cables 5 kV and under in underground mining applications. For higher voltages or long-cable applications, see the SE-134C/SE-135.

Features & Benefits

FEATURES	BENEFITS
Adjustable pickup (0.5, 2.0, 4.0 A)	Unit can be used on a wide variety of trailing cable applications
Adjustable time delay (0.1-2.0 s)	Adjustable trip delay for quick protection and system coordination
Harmonic filter	Prevents false operation
Zener-characteristic termination assembly	Provides reliable ground-check loop verification
Fail-safe ground-check circuit	Ensures ground-check circuit remains safe even in the event of equipment failure
Conformal coating	Additional coating protects circuit boards against harsh environment
SE-105: Selectable UV- or shunt-trip mode	Provides flexibility for different applications
SE-107: UV-trip mode only	Eliminates chance of unauthorized change to trip circuit

Accessories



A **CT200 Series Current Transformer**
Required CT detects ground-fault current.



B **1N5339B Termination Device**
5 W axial-lead ground-check termination; included with SE-105/SE-107.



SE-TA6 Termination Assembly
Optional termination assembly with convenient terminals and mounting holes



SE-TA6-SM Stud-Mount Termination Assembly
Optional 50 W ground-check termination that is robust and compact for submersible pumps. Wire lead simplifies installation.

Specifications

IEEE Device Numbers	Checking or Interlocking Relay (3GC), Ground Fault (50G/N, 51G/N)
Input Voltage	See ordering information
Dimensions	**H** 150 mm (5.9"); **W** 109 mm (4.3"); **D** 100 mm (4.0")
Trip Level Settings	0.5, 2.0, 4.0 A
Trip Time Settings	0.1-1.0 s
Contact Operating Mode	Selectable fail-safe or non-fail-safe (SE-105) Fail-safe only (SE-107)
Harmonic Filtering	Standard feature
Reset Button	Local and remote
Output Contacts	Isolated Form A
Approvals	CSA certified, UL Listed (E340889), C-Tick (Australian)
Conformally Coated	Standard feature
Warranty	5 years
Mounting	Surface

© 2015 Littelfuse Protection Relays & Controls

Rev: 4-B-102214
SE-105 Based on Manual Rev: 13-D-050315
SE-107 Based on Manual Rev: 5-C-050715