Ground-Fault Protection—Grounded Systems

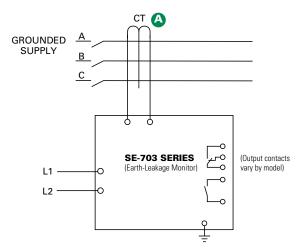


SE-703 SERIES

Earth-Leakage Monitor



Simplified Circuit Diagram



Ordering Information

ORDERING NUMBER	CONTROL POWER
SE-703-0U	120/240 Vac/Vdc
SE-703-0D	12/24 Vdc
SE-703-0T	48 Vdc
SE-703-03	24 Vac
SE-703-xx-00 ¹	As above
SE-703-xx-02 ^{1,2}	As above
ACCESSORIES	REQUIREMENT
EFCT Series	Required
PGA-0500	Optional
PMA-55	Optional
PMA-60	Optional
SE-EFVC Voltage Clamp	Optional
NOTES	•

- 1 Two Form C contacts. CSA and UL certification pending.
- 2 Selectable fail-safe/non-fail-safe operating modes (AS/NZS 2081:2002 compliant)

Description



The SE-703 is a microprocessor-based earth-fault relay for resistanceand solidly earthed systems. It offers sensitive earth-fault detection as low as 25 mA and can be used on systems with significant harmonic content. The SE-703 provides feeder-level protection or individual-load protection. The output contacts can be connected for use in protective tripping circuits or in alarm indication circuits. The analog output can be used with a PLC or a meter. The SE-703 is specifically designed to be AS/NZS 2081 compliant to either 2011 or 2002 (see ordering options).

Features & Benefits

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FEATURES	BENEFITS
Adjustable pickup (25-500 mA)	Adjustable trip setting provides a wide range of low-level protection and system coordination
Adjustable time delay (INST-500 ms)	Adjustable trip delay allows quick protection and system coordination
Output contacts	Form A and Form B or 2 Form C ground-fault output contacts for operation of separate annunciation and trip circuits
Analog output (0-5V)	Allows for connecting an optional meter (PGA-0500) or control system
CT-Loop monitoring	Alarms when CT is not connected
Contact operating mode	Fail-safe operating mode for undervoltage applications, optional non-fail-safe mode available
Harmonic filtering	Eliminates nuisance tripping
Non-volatile trip memory	Retains trip state while de-energized to simplify troubleshooting
Microprocessor based	No calibration required, saves maintenance cost
Universal	Allows operation in application where one side of PT is

Accessories



EFCT Series Ground-Fault Current Transformer

Required zero-sequence current transformer specifically designed for low-level detection.



PGA-0500 Analog % Current Meter

Optional panel-mounted analog meter displays groundfault current as a percentage of the set-point or 5 A.



PMA-60 Series - Mounting Adapter

Required when panel mounting for AS/NZS 2081:2011 compliance

Specifications

IEEE Device Numbers Ground fault (50G/N, 51G/N) Input Voltage See ordering information **Dimensions H** 75 mm (3.0"); **W** 55 mm (2.2"); **D** 115 mm (4.5") **Trip Level Settings** 25-500 mA

Trip Time Settings INST-500 ms **Contact Operating Mode** Fail-safe unless noted **Harmonic Filtering** Standard feature **Test Button** Standard feature **Reset Button** Standard feature **CT-Loop Monitoring** Standard feature

Output Contacts Isolated Form A and Form B unless noted **Approvals** CSA certified, UL Listed (E340889),

CE (European Union), RCM (Australian) unless noted

AS/NZS 2081:2011 unless noted

Compliance **Analog Output** 0-5 V Conformally coated Yes

Warranty 5 years Mounting DIN, Surface (standard)

Panel (with PMA-55 or PMA-60 adapter)