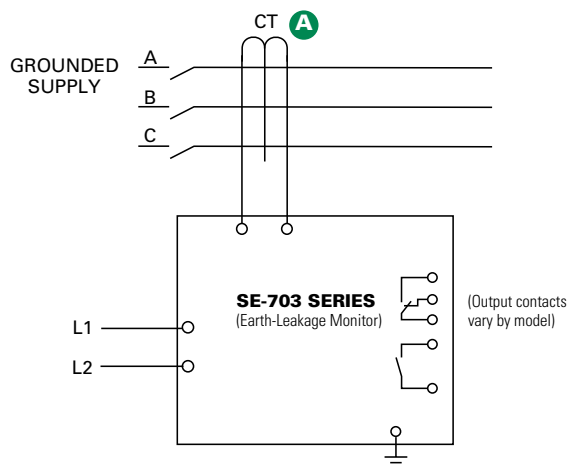


# SE-703 SERIES

## Earth-Leakage Monitor



### Simplified Circuit Diagram



### Ordering Information

ORDERING NUMBER	CONTROL POWER
SE-703-OU	120/240 Vac/Vdc
SE-703-OD	12/24 Vdc
SE-703-OT	48 Vdc
SE-703-03	24 Vac
SE-703-xx-00 <sup>1</sup>	As above
SE-703-xx-02 <sup>1,2</sup>	As above
ACCESSORIES	REQUIREMENT
EFCT Series	Required
PGA-0500	Optional
PMA-55	Optional
PMA-60	Optional
SE-EFVC Voltage Clamp	Optional

**NOTES:**

- Two Form C contacts. CSA and UL certification pending.
- 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 resistance- and 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

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

### 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 ground-fault 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

<b>IEEE Device Numbers</b>	Ground fault (50G/N, 51G/N)
<b>Input Voltage</b>	See ordering information
<b>Dimensions</b>	<b>H</b> 75 mm (3.0"); <b>W</b> 55 mm (2.2"); <b>D</b> 115 mm (4.5")
<b>Trip Level Settings</b>	25-500 mA
<b>Trip Time Settings</b>	INST-500 ms
<b>Contact Operating Mode</b>	Fail-safe unless noted
<b>Harmonic Filtering</b>	Standard feature
<b>Test Button</b>	Standard feature
<b>Reset Button</b>	Standard feature
<b>CT-Loop Monitoring</b>	Standard feature
<b>Output Contacts</b>	Isolated Form A and Form B unless noted
<b>Approvals</b>	CSA certified, UL Listed (E340889), CE (European Union), RCM (Australian) unless noted
<b>Compliance</b>	AS/NZS 2081:2011 unless noted
<b>Analog Output</b>	0-5 V
<b>Conformally coated</b>	Yes
<b>Warranty</b>	5 years
<b>Mounting</b>	DIN, Surface (standard) Panel (with PMA-55 or PMA-60 adapter)