**Ground-Fault Protection—Grounded Systems** 

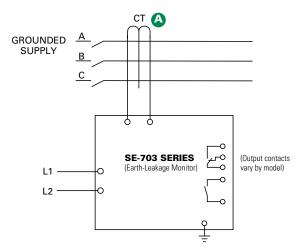


# SE-703 SERIES

## 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 <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

- 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 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	
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 (0-5 V)	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 power supply	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 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

Dimensions H 75 mm (3.0"); W 55 mm (2.2"); D 115 mm (4.5") 25-500 mA

Trip Time Settings INST-500 ms
Contact Operating Mode
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

Analog Output 0-5 V Conformally coated Yes Warranty 5 years

Compliance

Mounting DIN, Surface (standard)

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