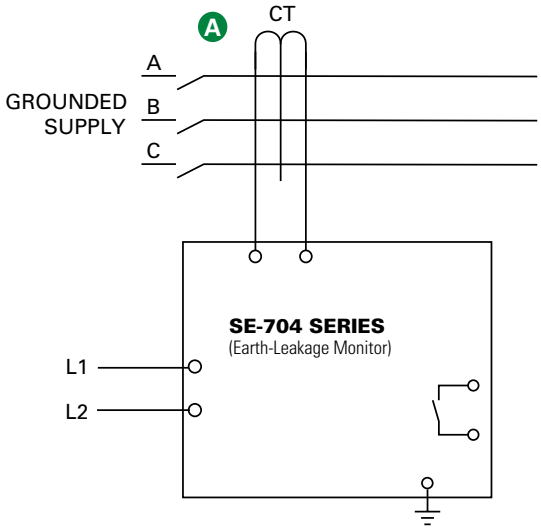
Ground-Fault Protection

SE-704 SERIES (PGR-4704)

Earth-Leakage Monitor • Grounded Systems



Simplified Circuit Diagram



Ordering Information

ORDERING NUMBER	CONTROL POWER
SE-704-0U	120/240 V ac/V dc
SE-704-0D	12/24 V dc
SE-704-0T	48 V dc
SE-704-03	24 V ac

ACCESSORIES	REQUIREMENT
ELCT30 or SE-CS30 Series	Required
PGA-0500	Optional
PMA-55, PMA-60	Optional

Note: For optional conformal coating please consult factory.

Description

The SE-704 is a microprocessor-based ground-fault relay for resistance- and solidly-grounded systems. It offers very sensitive ground-fault detection as low as 10 mA and can be used on systems with significant harmonic content. The output contacts can be connected for use in protective tripping circuits (such as for marina or boatyard feeder circuits) or in alarm indication circuits. The analog output can be used with a PLC or a meter. The SE-704 can be integrated with a shunt trip circuit breaker to meet CE code C22.1-21 Section 78-052(2) and NEC article 555.35(A)(1), 555.35(3), and 555.53 for marina applications.

Features & Benefits

FEATURES	BENEFITS
Adjustable pickup (10 mA-5 A)	Adjustable trip setting provides a wide range of low-level protection and system coordination
Adjustable time delay (30 ms-2.0 s)	Adjustable trip delay allows quick protection and system coordination
Output contacts	Form A and Form B ground-fault output contacts for operation of separate annunciation and trip circuits
Analog output (0-5 V & 0-1 mA)	Allows for connecting an optional meter (PGA-0500) or control system
CT-Loop monitoring	Alarms when CT is not connected
Selectable contact operating mode	Selectable fail-safe or non-fail-safe mode allows connection to shunt or undervoltage breaker coil
Harmonic filtering	Eliminates nuisance tripping
Non-volatile trip memory	Retains trip state when 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



ELCT30 or SE-CS30 Series Current Transformer
Required zero-sequence current transformer specifically designed for low level detection. Flux conditioner is included to prevent saturation.



PGA-0500 Analog % Current Meter
Optional panel-mounted analog meter displays ground-fault current as a percentage of the set-point or 5 A.

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	10 mA-5.0 A
Trip Time Settings	30-2000 ms
Contact Operating Mode	Selectable fail-safe or non-fail-safe
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
Approvals	UL Listed (E340889), CSA, CE (European Union) C-Tick (Australian)
Analog Output	0-5 V & 0-1 mA
Conformally coated	Optional
Warranty	5 years
Mounting	DIN, Surface (standard) Panel (with PMA-55 or PMA-60 adapter)

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