Ground-Fault Protection – Solidly & Resistance-Grounded System (5000 Family)



PGR-5701 SERIES

Ground-Fault Relay



Wiring Diagram



Ordering Information

CATALOG/SYSTEM NUMBER	CONTROL POWER	
PGR-5701-0D	9-36 Vdc Control Power	
PGR-5701-0T	32-70 Vdc Control Power	
PGR-5701-0U	75-275 Vac/dc Control Power	
ACCESSORIES	REQUIREMENT	PAGE
Current Transformers	Required	38
PGA-0500	Optional	41

Note: For optional conformal coating please consult factory.

Description

The PGR-5701 is a microprocessor-based ground-fault relay for resistance- and solidly grounded systems. It is uniquely suited for use on systems with significant harmonic content. The PGR-5701 can provide main-plant protection, feeder-level protection, or individual-load protection. Proper current transformer selection provides the desired pickup range. 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.

Features & Benefits

FEATURES	BENEFITS
Adjustable Pickup (unlimited)	Trip setting based on input CT primary, allows use with any CT
Adjustable Time Delay (50 ms–2.5 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)	Allows for connecting an optional (PGA-0500) meter or a control system
CT-Loop Monitoring	Alarms when CT is not connected
Selectable DFT or Peak Detection Algorithm	Compatible with variable-speed drives
Harmonic Filtering	Eliminates nuisance tripping
Non-Volatile Trip Memory	Retains trip state when de-energized to simplify troubleshooting
Microprocessor Based	No calibration required saves on maintenance cost
Universal Power Supply	Allows operation in application where one side of PT is faulted

Accessories



PGC Family Ground-Fault Current Transformer

Required current transformer, model depending on application. We offer a variety of sensitive CTs with 5- and 30-A primaries.



PGA-0500 Analog % Current Meter

Optional panel-mounted analog meter displays ground-fault current as a percentage of the CT primary rating.

Specifications

IEEE Device Numbers Input Voltage Dimensions **Trip Level Settings Trip Time Settings Contact Operating Mode** Harmonic Filtering **Test Button Reset Button CT-Loop Monitoring Output Contacts Approvals** Communications **Conformally coated** Warranty Mounting

Ground fault (50G/N, 51G/N) See ordering information **H** 75 mm (3.0"); **W** 55 mm (2.2"); **D** 115 mm (4.5") 1-99% CT-Primary Rating 0.05-2.5 s Selectable fail-safe or non-fail-safe Standard feature Standard feature Standard feature Standard feature Isolated Form A and Form B CSA certified to US and Canadian standards Analog output Consult factory 5 years DIN, Surface (standard) Panel (with PGK-0055 or PGK-0060 adapter)

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