Protection Relays and Controls

Neutral-Grounding-Resistor Monitoring

Expertise Applied | Answers Delivered

SE-325 SERIES (PGM-8325)

Neutral-Grounding-Resistor Monitor





Simplified Circuit Diagram



Ordering Information

CONTROL POWER
120 Vac
120 Vac/Vdc
240 Vac

Consult manual online for additional ordering options.

ACCESSORIES	REQUIREMENT
CT200 Series	Required
ER Series	Required
SE-MRE-600	Optional
RK-325, RK-325I, RK-302	Optional
RK-13	Optional
NGRM-ENC	Optional

Description

The SE-325 Neutral-Grounding-Resistor Monitor is used on resistance-grounded systems up to 25 kV to monitor the integrity of the neutral-to-ground path and to detect ground faults. It measures current and voltage in a transformer or generator neutral-to-ground connection and continuity of the neutral-grounding resistor (NGR). The SE-325 coordinates these three measurements to detect a loose connection, corrosion, ground fault, or NGR failure, and provides one alarm or trip output contact.

Features & Benefits

FEATURES	BENEFITS
Continuous NGR monitoring	Detects resistor failure within seconds, reduces transient-overvoltage risk, removes risk of ground- fault-detection failure
Ground-fault Detection	Main or backup protection to detect a ground fault anywhere on the monitored system
Adjustable pickup (0.5-4 A)	Select greatest sensitivity without false operation
Adjustable time delay (0.1-2 s)	Adjustable trip delay allows system coordination
Output contacts	Form A output contact
Selectable contact operating mode	Selectable fail-safe or non-fail-safe operating modes allows connection to shunt or undervoltage breaker coil or alarm system

Accessories



ER Series Sensing Resistor

Required interface between the power system and the SE-325. Eliminates hazardous voltage levels at the monitor.



CT200 Series Current Transformer Required CT detects ground-fault current.

RK Series Remote Indication and Reset

Optional panel-mounted remote indication and reset assemblies. Available in NEMA 1 or NEMA 4 configurations.

Specifications

IEEE Device Numbers

Input Voltage Dimensions

GF Trip Level Settings GF Trip Time Settings RF Trip-Level Settings

Contact Operating Mode Reset Button Output Contacts Approvals Conformally coated

Conformally coat Warranty Mounting Ground Fault (50G/N, 51G/N), Overvoltage (59N), Lockout Relay (86), Checking Relay (3) See ordering information **H** 150 mm (5.9"); **W** 109 mm (4.3"); **D** 100 mm (4.0") 0.5-4.0 A 0.1-2.0 s 20-400 Vac (≤5 kV systems) 100-2,000 Vac (>5 kV systems) Selectable fail-safe or non-fail-safe Standard feature Form A CSA certified, UL Listed (E340889), C-Tick (Australian) Standard feature 5 years Surface