

SE-330, SE-330HV SERIES

Neutral-Grounding-Resistor Monitor - New Revision



Description

The SE-330 is an advanced ground-fault and neutral-grounding-resistor monitoring relay. It measures neutral current, neutral-to-ground voltage, and neutral-to-ground resistance. It provides continuous monitoring of the neutral-to-ground path to verify that the neutral-grounding resistor (NGR) is intact. This is of utmost importance—an open NGR renders current-sensing ground-fault protection inoperative and could result in a false belief that the system is functioning properly. The SE-330 can be used with low- and medium-voltage transformers and generators with low- or high-resistance grounding used in processing, manufacturing, chemical, pulp and paper, petroleum, and water-treatment facilities. For high-voltage applications, use the SE-330HV. For applications that require conformance to Australian standard AS/NZS 2081.3:2002, use the SE-330AU.

Simplified Circuit Diagram



For detailed wiring diagram, see adjacent page.

Ordering Information

ORDERING NUMBER	POWER SUPPLY	COMM	K4 UNIT HEALTHY CONTACT
SE-330	X	X	0
SE-330 for all apps. 35 kV or less	0=120/240 Vac/Vdc	0=USB Only 1=DeviceNet 3=EtherNet (Dual RJ45) 4=EtherNet (SC Fiber & RJ45) 5=EtherNet (Dual SC Fiber)	0=Normally Open
SE-330HV for 72 kV apps.	2=48 Vdc	6=IEC61850 (Dual RJ45) 7=IEC61850 (SC Fiber & RJ45) 8=IEC61850 (Dual SC Fiber)	1=Normally Closed

NOTE: For Australian applications, see the SE-330AU.

ACCESSORIES	REQUIREMENT
ER Series Sensing Resistor	Required
Current Transformer	Required
SE-IP65CVR-G	Optional
SE-MRE-600	Optional
RK-332	Optional
NGRM-ENC	Optional
PGA-0520	Optional
SE-330-SMA	Optional

Resistor Monitoring

The SE-330 combines the measured values of resistance, current, and voltage to continuously determine that an NGR is intact. It is able to detect a resistor failure with or without a ground fault present. Sensing resistors are matched to the system voltage and are used to monitor NGRs on systems up to 72 kV.

Ground-Fault Monitoring

The SE-330 uses an application-appropriate current transformer to reliably detect ground-fault currents as small as 100 mA. DFT filtering ensures that false trips due to harmonic noise from adjustable-speed drives do not occur. Should the resistor open and a ground fault subsequently occur, the SE-330 will detect the fault through voltage measurement, while other current-only sensing relays would be ineffective.

Pulsing Ground-Fault Location

The SE-330 is capable of controlling a pulsing contactor, which is used to switch the NGR resistance in a pulsing-compatible NGR package. The resulting ground-fault current is distinguishable from charging currents and noise and will only appear upstream of the ground fault, making fault location fast and easy, even without isolating feeders or interrupting loads.

Accessories

- A**  **ER Series Sensing Resistor**
Required interface between the power system and the SE-330/SE-330HV. Eliminates hazardous voltage levels at the relay.
- B**  **EFCT Series Ground-Fault Current Transformer**
Sensitive ground-fault current detection (5 A primary).
-  **SE-CS30 Series Ground-Fault Current Transformer**
Sensitive ground-fault current detection (30 A primary).
-  **Other Current Transformer**
For low-resistance NGRs choose a CT primary approximately equal to the NGR rating. Inputs are provided for 1- and 5- A- secondary CTs.
-  **SE-IP65CVR-G Hinged Transparent Cover**
Watertight cover, tamper resistant, IP65 protection.

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- Поставка более 17-ти миллионов наименований электронных компонентов;
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- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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