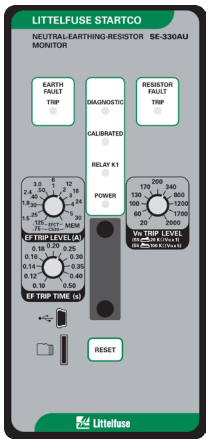
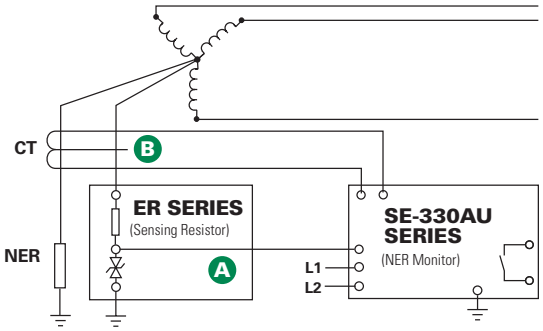
SE-330AU SERIES

Neutral-Earthing-Resistor Monitor - New Revision



Simplified Circuit Diagram



Ordering Information

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

ACCESSORIES	REQUIREMENT
ER Series Sensing Resistor	Required
Current Transformer	Required
SE-IP65CVR-G	Optional
SE-MRE-600	Optional
RK-332	Optional

Description

The SE-330AU is an advanced earth-fault and earthing-resistor monitoring relay for low- and medium-voltage transformers and generators. It monitors neutral current, neutral-to-earth voltage, and neutral-to-earth resistance. It provides continuous monitoring of the neutral-to-earth path to verify that the neutral-earthing resistor (NER) is intact. This is of utmost importance—an open NER renders current-sensing earth-fault protection inoperative and could result in a false belief that the system is functioning properly. The SE-330AU earth-fault function complies with AS/NZS 2081.3:2002. Outputs include four relay outputs, and an analog output. A mini USB port is included to view measured values, configure settings, and check event records. An on-board micro SD card can be used for long-term data logging. Network communications options are available. For non-AS/NZS 2081 applications, see the SE-330 or SE-330HV.

Resistor Monitoring

The SE-330AU combines the measured values of resistance, current, and voltage to continuously determine that the NER is intact. It is able to detect a resistor failure with or without an earth fault present. Sensing resistors are matched to the system voltage and are used to monitor NGRs on systems up to 35 kV.

Earth-Fault Monitoring

The SE-330AU uses a 5- or 30-A-primary current transformer to provide a pickup-setting range of 0.125 to 5 A or 0.75 to 30 A to comply with AS/NZS 2081.3:2002. DFT filtering ensures that false trips due to harmonic noise from adjustable-speed drives do not occur. Open-CT detection is provided.

Accessories

A



ER Series Sensing Resistor
Required interface between the power system and the SE-330AU. Eliminates hazardous voltage levels at the relay.

B



EFCT Series Earth-Fault Current Transformer
Sensitive earth-fault current detection (5 A primary).



SE-CS30 Series Earth-Fault Current Transformer
Sensitive earth-fault current detection (30 A primary).

Specifications

Input Voltage	See ordering information
Dimensions	**H** 213 mm (8.4"), **W** 98 mm (3.9"), **D** 132 mm (5.2")
GF Trip-Level Settings	0.125 to 30 A
GF Trip-Time Settings	0.1 to 0.5 s
Vn Trip-Level Settings	20-2,000 Vac (≤5 kV systems) 100-10,000 Vac (>5 kV systems)
Output Contacts	Two Form A, Two Form C
Operating Mode	Fail-Safe
Harmonic Filtering	Standard feature
Reset	Front panel push button and remote input
Approvals	C-Tick (Australian), CE
Communications	Mini USB (standard); DeviceNet (optional), IEC 61850 (optional), Modbus TCP and EtherNet/IP (optional)
Analog Output	4-20 mA, self or loop powered
Conformal Coating	Standard feature
Warranty	5 years
Mounting	Panel, Surface (optional)

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