

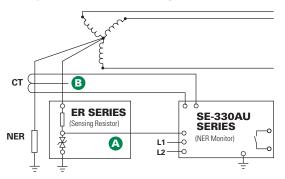
## SE-330AU SERIES

## Neutral-Earthing-Resistor Monitor - New Revision





## **Simplified Circuit Diagram**



## **Ordering Information**

ORDERING NUMBER		POWER SUPPLY	СОММ			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 neutralearthing resistor (NER) is intact. This is of utmost importancean 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





#### **ER Series Sensing Resistor**

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





**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")

0.125 to 30 A **GF Trip-Level Settings 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

Communications

Standard feature

Front panel push button and remote input Reset Approvals C-Tick (Australian), CE

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)

# **Mouser Electronics**

**Authorized Distributor** 

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## Littelfuse:

SE-330AU-22-01 SE-330AU-03-00 SE-330AU-21-01 SE-330AU-23-00 SE-330AU-02-01 SE-330AU-02-00 SE-330AU-20-01 SE-330AU-03-01 SE-330AU-23-01 SE-330AU-21-00 SE-330AU-22-00 SE-330AU-01-00 SE-330AU-01-00 SE-330AU-01-00 SE-330AU-05-00 SE-330AU-05-01 SE-330AU-06-00 SE-330AU-06-01 SE-330AU-07-00 SE-330AU-07-01 SE-330AU-08-00 SE-330AU-08-01 SE-330AU-24-01 SE-330AU-25-00 SE-330AU-25-01 SE-330AU-26-00 SE-330AU-26-00 SE-330AU-26-00 SE-330AU-27-01 SE-330AU-27-01 SE-330AU-28-00 SE-330AU-28-01