**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**

**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"

**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)