

## **Holistic Current Shield Relay**





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NEPEAN Power is a proven leader in the supply and manufacture of quality engineered solutions, products and technologies. Established in 1994, through the commitment of our dedicated team we have become a supplier of choice.

The HCS – Holistic Current shield relay has been designed and approved for use on earth fault limited systems providing earth leakage protection (earth fault protection), as per AS/NZS 2081:2011. The relay is also suitable for other applications where equipment or system earth leakage protection is required. The relay provides protection from 0 – 6000Hz making it suitable for zero speed VVVF drive applications.

The HCS is a microprocessor-based AC/DC Sensitive Earth-Leakage Relay that offers complete coverage for all frequencies from 0-6,000 Hz. Two CT's are required for the entire frequency range, or one CT can be used for only low-or high-frequency detection. An RTD/PTC sensor input allows over-temperature protection. The HCS offers metering capabilities, password-protected alarm and trip settings and optional network communications. It is used to add low-level ground-fault protection to variable-speed drives, and to DC currents.

#### **Description**

The HCS relay provides a definite time operating characteristic with adjustable trip sensitivity and time delay. The relay latches when tripped and provides normally open and change-over relay contacts. The relay supports an external reset switch, and a 4-20mA interface allows external monitoring. The user has the ability to individually adjust trip levels for both 20-90Hz frequency's and 190 to 6000 frequencies, allowing visible monitoring and protection.

The HCS Earth Leakage Relay is housed in a robust industrial case and can be either 'DIN Rail' or 'Panel' mounted through a 69 x 39mm cut out. When panel mounted, the front of the HCS relay is designed to provide IP56 ingress protection. An attachment to prevent unauthorised adjustment of the trip settings is available separately.

#### **Features**

- AS/NZS 2081:2011 (Section 6) compliant
- Wide operating bandwidth from DC 0 Hertz to 6000Hz
- Diagnostic digital display
- 16 to 30 Vdc (+20,-25%), Nominal 24 Vdc
- Wide current trip range (30 5000mA)
- Fail safe operation
- Continual monitoring of the toroid
- Adjustable trip level and time delay settings

### **Ordering Information**

Part Number	Description
X0463	HCS-A Harmonic Current Sensor (Series A)
X0464	HCS Toroid 35mm Window - c/w Current Control
X0465	HCS Toroid 80mm Window - c/w Current Control
X0466	HCS Toroid 140mm Window - c/w Current Control
X0472	HCS Din Rail mounting base

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**Wiring Diagram** 

