Earth Fault Relays

	Non-Adjustable		Adjustable						
	HR500	HR502	HR510	HR520	HR522	HR523	HR525/HR534	HR440	HR441
Supply Voltage ~50/60Hz	220-240V	1		1	1	1	1	I	
Residual Voltage ~50/60Hz	500V Maximum								
Power Absorbed	3VA 5VA								
Output	Volt Free Contacts								
Contact Rating	6A / 250V AC-1								
Sensitivity l∆n	30mA	300mA	30mA / 100mA / 3 500mA / 1A / 3A /			500mA / 1A / 3A / 5A / 10A / 20A / 30A	30mA / 100mA / 300mA / 500mA / 1A / 3A / 5A / 10A / 30A	30mA / 100mA / 300mA / 500mA / 1A / 3A	
Instantaneous / Time Delay	Instantaneous		Instantaneous or Time Delay 0.1 - 0.3 - 0.4 - 0.5 - 1 - 3 seconds		Instantaneous or Time Delay 0.1 - 0.2 - 0.25 - 0.3 - 0.4 - 0.5 seconds		Instantaneous or Time Delay 0.02 - 0.1 - 0.3 - 0.4 - 0.5 - 1 - 3 - 5 - 10 seconds	Instantaneous or Time Delay 0.1 - 0.3s - 0.5s - 0.75s - 1s	
Torroid Withstand Capacity	50kA / 0.2s								
Distance between Torroid and Relay	50 Meter Maximum								
Relay Cable Connection Rigid Flexible 	1.5mm ² to 10mm ² 1mm ² to 6mm ²								
Torroid Cable Conection Rigid Flexible 	1.5mm ² to 4mm ² 1mm ² to 2.5mm ²								
Relay • Working Temperature • Storage Temperature	-10°C to +55°C -5°C to +55°C -25°C to +40°C -25°C to +40°C								
Torroid • Working Temperature • Storage Temperature	-10°C to +70°C -10°C to +70°C -40°C to +70°C -40°C to +70°C								

Main Characteristics

"Reset" Button

When pressed, the output remains switched and return to normal is obtained by either: by pr wessing the "reset" clear pushbutton or cutting off the power supply. If the "reset" button is not pressed the device remains in the fault position.

Test Button

Pressing the test button allows a fault simulation which operates the relay and the output contacts. The fault level display is shown by an LED on the front of the product.

I∆n Selector

Sensitivity setting: 0.03A instantaneous 0.1A/0.3A/1A and 3A time delay

Time Delay Selector

Adjustable time setting - instantaneous / 0.13s / 0.3s / 1s and 3s



Sealable Settings

A sealable cover prevents interference once the settings have been made.

Standard Output (1 C/O contact)

- Switching to state 1 on:
- Failure of the core/relay connection
- Fault current in the monitored installation

Positive Safety Outlet (1 C/O contact)

Switching to state 1: Switching on the power Switching to state 0: Failure of the core/relay connection fault current in the monitored installation failure of relay supply internal failure of relay

Optical scale display by 5 LEDs of the fault in % of $I\Delta n$ Optical scale display by (5 LEDs) of the fault in % of $I\Delta n$ Common pin 6:

State 1 : output terminal 8 State 0 : output terminal 4

- 1. Reset push button
- 2. Test push button
- 3. Fault signal LED
- 4. Device on indicator
- 5. Sensitivity setting
- 6. Time delay setting
 7. Standard output
- 8. Safety output
- 9. Prealarm output
- 10. Remore reset
- 11. Optical scale

