EARTH FAULT RELAY

TYPE: YWRI/EF

FEATURES

3 earth fault primary ranges 5-100mA, 50mA-1A, 0.5-10A

■ Fixed hysteresis at 5% (other values on request)

Latching facility (manual or auto reset)

- Test input
- Adjustable time delay on tripping 0.1-10sec
- LED for output relay status & supply healthy
- SPCO output rated 10Amps

DESCRIPTION & MODE OF OPERATION

Din rail mounted current sensing relay dedicated for earth fault monitoring in conjunction with a core balance CT. The YWRI/EF has three adjustable earth fault input ranges selectable via terminal tapings 5-100mA, 0.05-1A, 0.5-10A. On connection of the auxiliary supply the green LED illuminates. Exceeding the set earth fault level and after the adjustable tripping time has elapsed, the output relay energises and the red LED illuminates. The YWRI/EF has a fixed hysteresis of 5% of the set value, should the earth fault level fall below the set value less 5%, the output relay will de-energise and the red LED will extinguish (auto reset). However, should the optional latch facility be utilised between terminals Y1 and Y2 via a remote NC contact, the NC contact has to be opened or the auxiliary supply removed to reset the unit (manual reset). The YWIR/EF via terminals Y2 and B1 also has a remote test input operated by a NO contact.

SPECIFICATIONS

Auxiliary supply: 400VAC, 230VAC, 110VAC, 48VAC, 24VAC

48VDC, 24VDC +/-15% (50/60Hz) Via transformer

Isolation: Via transfo **Power consumption:** Max 3VA

Earth fault ranges: 5-100mA, 50mA-1A, 0.5-10A Input impedance: 100mA range 1 K0hm 1A range 100 0hms

10A range 10 Ohms

Hysteresis: Fixed at 5% of set value (other values on request)

Tripping delay: Adjustable 0.1-10secs (-0% + 30%)

Repeat accuracy: $\pm 2\%$ at constant ambient, to VDE0435 $\pm 5\%$

Operating temperature: $-10^{\circ}\text{C to} + 65^{\circ}\text{C}$

Response time: 100mSec on make, 200mSec on break
Output relay: Max power 2200VA, 30W DC

Max power 2200VA, 30W DC 250VACDC @ 10A AC, 1A DC

Mechanical life: 30 Million ops/max 600 ops/hr Electrical life: 200 000 at 2200VA (resistive)

Max cable size: 4mm CE marked Yes

In accordance with: EN61000-6-1: 2007

EN61000-6-3: 2007 EN61010-1: 2002

Housing material: Polycarbonate, Auto extinguishable

to UL 94 V-0

NOTE

The YWRI/EF and its associated CT's are designed to monitor insulation break down.

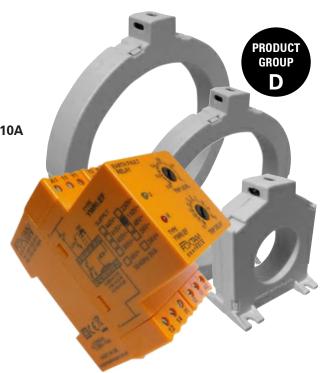
IT MUST NOT BE USED AS THE MAIN SAFEGUARD FOR LIFE PROTECTION

ORDERING INFORMATION

TYPE AUXILIARY SUPPLY OPTIONS

YWRI/EF 400VAC, 230VAC, 110VAC, 48VAC, 24VAC, 48VDC, 24VDC

A core balance CT from the four options listed on the right of this page must be used with this product, do not use any other type of CT or manufacturer of CT's Tel: $0161\ 626\ 5316\ /\ 01276\ 25858$



CORE BALANCE CURRENT TRANSFORMER

A core balance current transformer must be used with our earth fault relay type YWRI/EF and must be selected from the options below. One core balance current transformer is required per YWRI/EF, all conductors must pass through the CT. Core balance CTs are not sensitive to polarity either on the primary or secondary. However, the primary conductors must all pass in the same direction together.

SPECIFICATIONS

Conforms to: IEC44-1, IEC185, BS7676

Rated system voltage: 720VAC Insulation: 3KV Frequency range: 50/60Hz Max secondary cable size: 2.5mm

Internal dimensions: 290W x 70H (mm)

External dimensions: 350W x 220H (mm)
Including feet 425W (mm)

	EARTH FAULT SUITABILITY			DIMENSIONS mm				
P/No.	5-100mA	50mA-1A	0.5A-10A	Int Dia	Height	Width	Depth	Depth Inc Feet
CTB35	√.	√,	√,	35	74	64	20	40
CTB70	√.	√,	√,	70	117	105	20	40
CTB120	\checkmark	✓	√,	120	172	160	20	40
CTB210			✓	211	271	271	25	75

