

EFU 50 DC Earth Fault Monitor



The **EFU50** part of the extensive **OPTIMA** range of earth fault protection relays (**RCD's**), represents a major breakthrough in **RCD** technology, since it will detect residual direct current without having to use Hall Effect transducers. It can also be installed to detect when and where an earth fault occurs in a **DC** wired circuit, thus eliminating costly man hours and down-time in locating system faults.

The **EFU50** is designed to react to **DC** current only and will reject induced or stray alternating current from **25Hz to 250Hz** up to **2 Amps** whilst still operating precisely on **DC** residual current against its preset level. This enables the **EFU50** to be used to detect imposed **DC** current on **AC** circuits as well as its primary use of **DC** residual current detection.

The **EFU50** is a fully encapsulated device thus providing excellent temperature stability and high immunity against shock

and vibration. For ease of installation it is housed in a single, compact **Din rail**(or chassis mounted) enclosure with a **28** or **46mm** aperture for the load cables to pass through. It has integral **test and reset** push buttons and **LED** indication of E/F trip.

The **EFU50** is particularly suitable for **DC controls, heating elements, traction** and general **DC bus** applications. It can be used on either Earthed or "special" systems and still provide alarm, indication and location of any Earth Fault problems. Trip level preset between **500mA** and **2000mA**.

For special applications, subject to conductor size, the **EFU50** can be supplied with input/output leads Please contact us for further details.

See overleaf for full specification.

SPECIFICATION

Control voltage	: 110V DC nominal (AC on request) +25 -30% (V nom)
Trip range	: 500mA to 2000mA (factory set)
Monitoring Range	: 12V to 1000V DC
Temperature range	: -25°C to +55°C
Relative humidity	: 95% non condensating
Output relay	: Separate N/O and N/C contacts Rated 8 amps 2000VA (415V max)
Core Balance CT	: Integral 28mm or 46mm (please specify)
Controls	: Integral test, reset push button Power on-Green LED Earth Fault Trip-red LED
Connections	: Terminal connections
Construction	: Totally encapsulated and housed in flame retardant ABS enclosure Din-rail or chassis mounting Finish grey (RAL 7032) (Halogen free polycarbonate enclosure available to special order)
Dimensions	: 70 x 150 x 100 (H x W x D)

CORE BALANCE C.T.	ORDER REFERENCE
28mm ID	EP EFU50/28**
46mm ID	EP EFU50/46**
** State control voltage, trip current required when ordering	

In line with our policy of constant improvements, we reserve the right to vary the specifications contained in this leaflet.

The services of our Technical support staff are available for assistance or guidance on earth leakage problems and possible solutions please contact us at:

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