



Passionate about protection and control

EARTH LEAKAGE RELAYS

NFC

PROGRAMMABLE

FIXED OR
ADJUSTABLE
SETTINGS

DIN RAIL MOUNT

PANEL MOUNT

CIRCULAR &
RECTANGULAR
TOROIDS



EARTH LEAKAGE RELAYS

ELR01PN & ELR30PN

Programmable using Smartphone with NFC



NEW

Benefits:

- ✓ Pre-defined profiles for quick setting up
- ✓ Tailored for particular markets:
 - Petrochemical, Medical, Entertainment, Leisure
Using **10mA** setting for these high sensitivity applications
 - Radio/TV masts, Traffic Lights, Street Lighting
Auto-reclosure feature provides protection for unmanned locations
 - Airports, Mining
Selectable **Frequency filter** can be enabled where high immunity required
- ✓ Easy to clone settings on additional units
- ✓ Display actual leakage current in the system
- ✓ Can be programmed **without** power applied

Key Features:

- Two ranges available:
(6mA - 1A) ELR01PN
(30mA - 30A) ELR30PN
- Programmable user settings/adjustments
- Customisable with option to select toroid ratio, trip method, relay logic and filter
- LED indication for supply, leakage current and trip status
- Multi-voltage supply (**24 - 230V AC/DC**)
- 2 Relay outputs - user configurable
- Compliant with IEC 60947-2 / Annex M



Dims: to DIN 43880 W. 44mm



LELRF & ELRM44F

Type A with fixed trip and time delay

Key Features:

- True R.M.S. measurements
- Fixed trip level options - 30mA, 100mA or 300mA
- Instantaneous tripping (0s)
- Connection facility for remote "Test" and "Reset" push buttons or N.O. contacts (ELRM44F only)
- Toroid open detection forces unit to trip
- Standard Output (S.O.) relay operation
- SPDT relay output

LELRF Additional Features:

- Compact dimensions for product type (17.5mm wide)
- Single button for Test/Reset operation
- Compliant with IEC 60947-2 / Annex M

NEW



Dims: to DIN 43880

ELR01P & ELR30P

Type A with selectable trip and time delay settings

Key Features:

- Selectable Trip level and Time delay using front mounted adjustments
- Two ranges available 6mA - 1A (ELR01P) and 30mA - 30A (ELR30P)
- True R.M.S. measurements
- Single, combined "Test/Reset" push button
- Connection facility for remote "Test" and "Reset" push buttons or N.O. contact
- Toroid open and short-circuit detection forces unit to trip
- 2 Relay outputs - Relay 1 (SPDT) and Relay 2 (SPNO)
- Wide auxiliary operating supply voltage (**24 - 230V AC/DC**)
- LED indication of Supply status and fault condition after unit has tripped
- Compliant with IEC 60947-2 / Annex M



Dims: to DIN 43880 W. 44mm

ELRM44V & ELRM44V/2

Type A with selectable trip and time delay settings

Key Features:

- True R.M.S. measurements
- Designed to monitor and detect earth fault currents in conjunction with a separate Toroid (CBCT)
- LED bargraph provides constant indication of any leakage current
- 3 current ranges available (3A, 10A and 30A)
- Selectable Trip level ($I_{\Delta n}$) and Time delay
- Separate "Test" and "Reset" push buttons
- Connection facility for remote "Test" and "Reset" push buttons or N.O. contacts
- Toroid open circuit detection forces unit to trip (Red LED flashes)
- Output relay configuration:
 - ELRM44V** - Standard Output (1 x SPDT) and Positive Safety Output (1 x SPNO)
 - ELRM44V/2** - Standard Output (2 x SPNO)
- LED indication of Supply status and fault condition after unit has tripped

NEW



Dims: to DIN 43880 W. 44mm

ELRP48V

Type A with selectable trip and time delay settings

Key Features:

- True R.M.S. measurements
- Panel mounting with pluggable connectors located at the rear of the unit and supplied with mating, re-wireable sockets
- Designed to monitor and detect earth fault currents (up to 30A) in conjunction with a separate Toroid (CBCT)
- LED bargraph provides constant indication of any leakage current
- Microprocessor controlled with internal monitoring (self-checking)
- Selectable Trip level ($I_{\Delta n}$) - 30mA to 30A
- Selectable Time delay (Δt) - 0 (instantaneous) to 10 seconds
- Separate "Test" and "Reset" push buttons
- Connection facility for remote "Test" and "Reset" push buttons
- Toroid open circuit detection forces unit to trip (Red LED flashes during this condition)
- 2 Relay outputs - Standard Output (S.O.) and Positive Safety Output (P.S.O)



Dims:
W x H. 48 x 48mm
L. 96mm

ELR-IF

Type A with integral toroid, fixed trip and time delay

Key Features:

- True R.M.S. measurements
- DIN Rail or Surface mount enclosure
- Integral Toroid - 25mm \varnothing
- Designed to monitor and detect earth fault currents
- Protected against nuisance tripping
- Microprocessor controlled
- Three versions available - 30mA (instantaneous), 100mA (100mS) or 300mA (100mS)
- Separate "Test" and "Reset" push buttons
- SPDT relay output - 5A
- Green LED indicates presence of power supply
- Red LED indicates fault current is >50% of $I_{\Delta n}$ if flashing, or relay has tripped if permanently illuminated



Dims:
W. 70mm
H. 110mm
D. 37mm

EARTH LEAKAGE RELAYS



Key Features:

- Used with all Broyce "Type A" Earth Leakage Relays
- 1000:1 ratio
- Circular versions available intended for cables
- Rectangular versions available intended for bus-bar systems

BZCT070

70mm Ø



BZCT035

35mm Ø



BZCT120

120mm Ø

BZCT160

160mm Ø



BZCT050

50mm Ø



BZCT210

210mm Ø



BZCTR305 & 350

305 and
350mm



BZCTR470

470mm



Smaller sizes
coming soon



Broyce Control Ltd. Pool Street, Wolverhampton,
West Midlands, WV2 4HN. U.K.

Tel: +44 (0) 1902 773746 Fax: +44 (0) 1902 420639

Email: sales@broycecontrol.com Web: www.broycecontrol.com



ISO 9001:2015
Cert. No. 14125771