

Earth Leakage Relays

ELR01PN & ELR30PN

Type A with programmable user settings using NFC



Dims: to DIN 43880 W. 44mm

- Selectable Trip level and Time delay using front mounted adjustments
- Additional programmable user settings/adjustments
- Built-in NFC (Near Field Communication) allows user to access and change settings via compatible Smartphone with installed app^ as well as retrieve historical data
- Two ranges available 6mA - 1A (ELR01PN) and 30mA - 30A (ELR30PN)
- True R.M.S. measurements
- Option to select alternative toroid ratio, tripping method (latch or auto-reclosure modes), output relay logic (pre-alarm, energise or de-energise on trip) and filter cut-off points
- Connection facility for remote "Test" and "Reset" push buttons or N.O. contacts
- Toroid open and short-circuit detection forces unit to trip
- 2 Relay outputs - Relay 1 (SPDT) and Relay 2 (SPNO) - User configurable
- Wide auxiliary operating supply voltage - 24 - 230V AC/DC
- LED indication for supply, leakage current and trip status
- Compliant with IEC 60947-2 / Annex M

^ App available from:



ELR01N & ELR30N

Type A with programmable user settings using NFC



Dims: to DIN 43880 W. 44mm

- Programmable user settings/adjustments
- Built-in NFC (Near Field Communication) allows user to access and change settings via compatible Smartphone with installed app^ as well as retrieve historical data
- Two ranges available 6mA - 1A (ELR01N) and 30mA - 30A (ELR30N)
- True R.M.S. measurements
- Option to select alternative toroid ratio, tripping method (latch or auto-reclosure modes), output relay logic (pre-alarm, energise or de-energise on trip) and filter cut-off points
- Connection facility for remote "Test" and "Reset" push buttons or N.O. contacts
- Toroid open and short-circuit detection forces unit to trip
- 2 Relay outputs - Relay 1 (SPDT) and Relay 2 (SPNO) - User configurable
- Wide auxiliary operating supply voltage - 24 - 230V AC/DC
- LED indication for supply, leakage current and trip status
- Compliant with IEC 60947-2 / Annex M

^ App available from:



ELR01P & ELR30P

Type A with selectable trip and time delay settings



Dims: to DIN 43880 W. 44mm

- 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

Earth Leakage Relays

ELRM44V & ELRM44F

Type A with selectable or fixed trip and time delay settings

- 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 (ELRM44V)
- Microprocessor controlled with internal monitoring (self-checking)
- Selectable Trip level ($I\Delta n$) - 30mA to 30A and Time delay 0 (inst.) to 10s (ELRM44V)
- Fixed Trip level ($I\Delta n$) - 30, 100 or 300mA and Time delay 0 (inst.) (ELRM44F)
- 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 during this condition)
- Relay outputs -
 - ELRM44V (x2) - Standard Output (S.O.) and Positive Safety Output (P.S.O.)
 - ELRM44F (x1) - Standard Output (S.O.)
- LED indication of Supply status and fault condition after unit has tripped

Note: Auto-reclosure version also available Type: [ELRM44V-30A](#)



Dims: to DIN 43880 W. 44mm

ELRP48V

Type A with selectable trip and time delay settings

- 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)
- LED indication of Supply status and fault condition after unit has tripped



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

ELR-IF

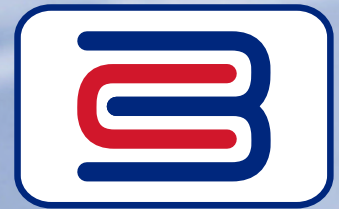
Type A with integral toroid, fixed trip and time delay setting

- 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

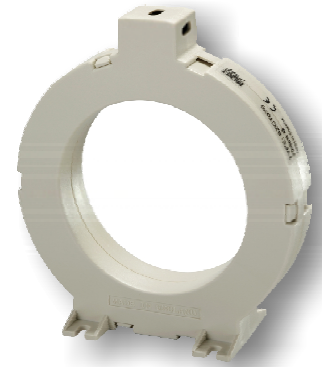
BZCT Toroids (CBCT)



- ❑ 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
- ❑ Encapsulated versions available

BZCT070

70mm Ø



BZCT035

35mm Ø

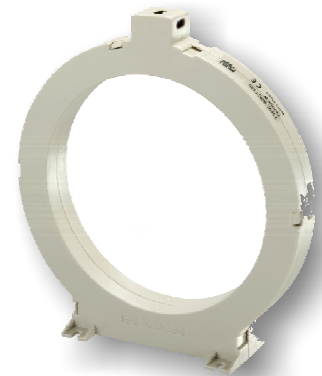


BZCT120

120mm Ø

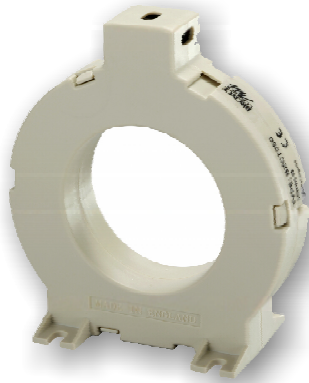
BZCT160

160mm Ø



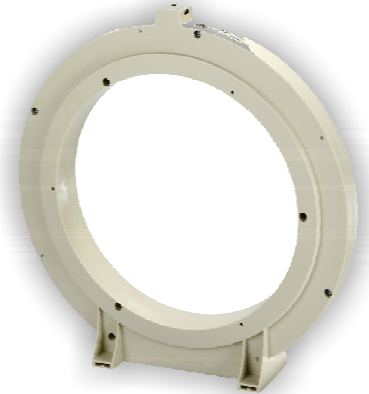
BZCT050

50mm Ø



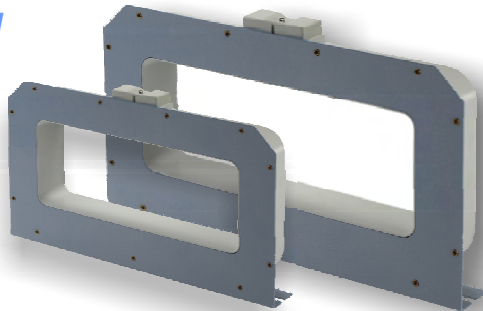
BZCT210

210mm Ø



BZCTR305 & 350

305 and
350mm



BZCTR470

470mm

Smaller sizes
coming soon



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