Type: BZCTR305, 350 & 470

Rectangular Toroids

- ❑ **For use in conjunction with Broyce "Type A" Earth Leakage Relays**
- ❑ **Designed to detect leakage current and transmit a proportional signal to an Earth Leakage Relay**
- ❑ **Suitable for installations that use busbars**
- ❑ **Three sizes available**

BZCTR3xx

BZCTR470

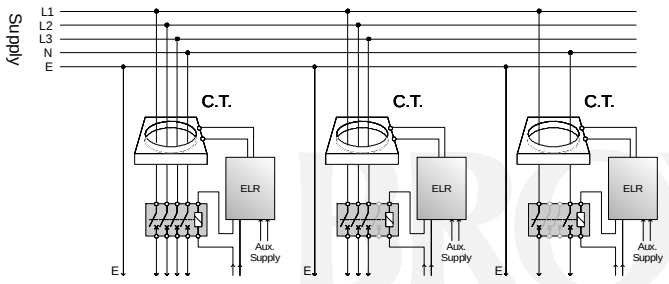
• INSTALLATION NOTE

Installation work must be carried out by qualified personnel.

- **BEFORE INSTALLATION, ISOLATE THE SUPPLY TO THE BUSBARS/CONDUCTORS THAT ARE TO BE PASSED THROUGH THE TOROID.**
- Installation of the toroid, along with the Earth Leakage Relay must be carried out in accordance with the latest wiring practices and regulations.

• CONNECTION EXAMPLES

Typical connection examples are shown below.



• TECHNICAL SPECIFICATION

Size availability and part number:	115 x 305mm (BZCTR305)[1] 150 x 350mm (BZCTR350)[1] 160 x 470mm (BZCTR470)
Current ratio:	1/1000
Maximum permissible current:	2kA (BZCTR305 & 350) 2.5kA (BZCTR470)
Rated supply voltage: Rated insulation voltage:	720V AC 3kV AC
Minimum IΔn setting on Earth Leakage Relay:	1A
Distance between toroid and relay:	50 metres (max.)
Ambient temp: Relative humidity:	-10 to +50°C +95%
Housing:	Self extinguishing, shock resistant, black ABS (Resin cast, natural finish for BZCTR470)
Mounting:	Using fixing slots provided on metal bracket (Using 4 x 9mmØ corner holes for BZCTR470)
Approvals:	CE Compliant.

Note:

[1] Part number change as of August 2010 (see below)

BZCTR305 (previously known as BZCTR115)
BZCTR350 (previously known as BZCTR150)

• INSTALLATION DO's and DONT's

- Correct installation of the Earth Leakage Relay and toroid should ensure trouble free operation, in particular, if this document is followed.

1. Always ensure the Earth conductor DOES NOT pass through the toroid. If it is unavoidable, the Earth must be routed back through the toroid again and around.
2. Ensure the busbars are located centrally in the toroid. (Fig.1)
3. Place the toroid on a straight section of the busbars, not near a bend.
4. Keep the busbars and toroid away from intense magnetic fields from nearby equipment.
5. DO NOT pass individual busbars through separate toroids.

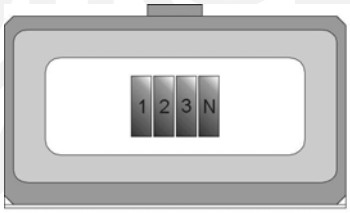


Fig. 1

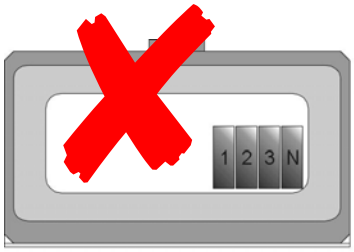
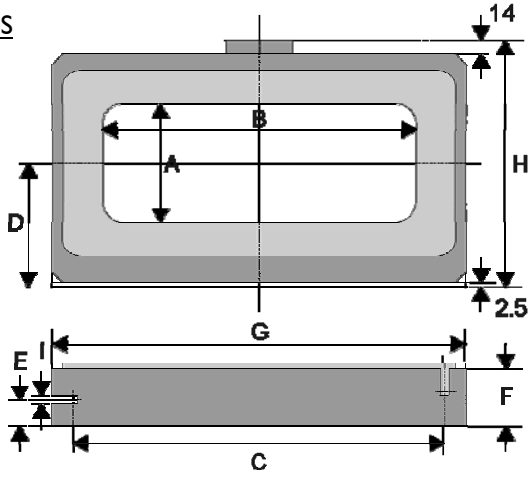
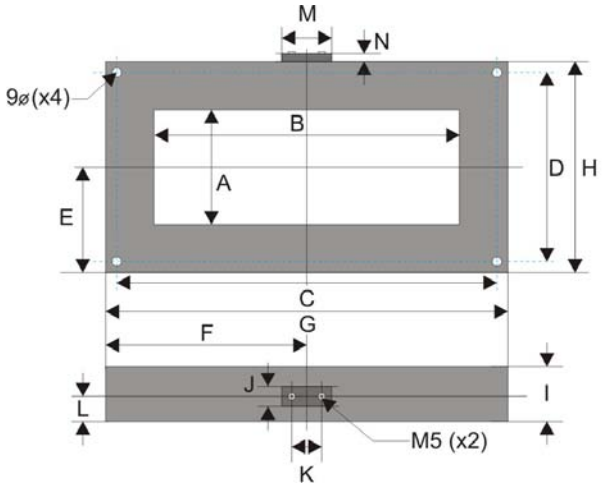


Fig. 2

• DIMENSIONS



BZCTR305 & 350



BZCTR470

Dimensions in mm

Toroid Type:	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Weight
BZCTR305	115	305	360	116	25	55	402	240	8						5.45kg
BZCTR350	150	350	415	140	28	55	460	285	8						7.40kg
BZCTR470	160	470	552	242	131.5	286	572	263	72	32	40	36	80	8	14kg

Tolerances = ±0.1

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