



## UK Technical Data 07

### CT-1/\*\*\*

Toroidal current transformer for use with ELR-3E & ELR-3C



#### Function

CT-1 / Toroidal current transformers are designed for use with ELR-3E and ELR-3C relays. Selection is based on the diameter of the CT aperture to accommodate the cross sectional area of the current carrying conductors. The diameter of the CT determines the minimum level of current that can be detected - see details given in the data sheet

#### Features

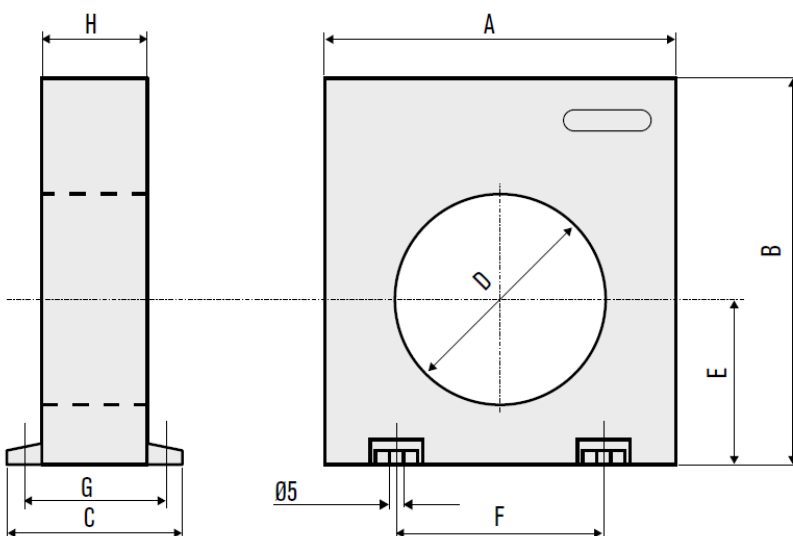
Suitable for detecting type A residual currents, remote mounting with connection by twisted pair or screened cable, internal CT diameters available in 35, 60, 80 and 110 mm.

#### Mounting

Mount inside the panel on a secure back plate. To maintain detection accuracy the monitored cables must be positioned centrally within the CT aperture. Line & Neutral cable if applicable must pass through the CT and be positioned centrally. The PE earth conductor and any metal protection screen must not pass through the CT.

The cable ( twisted pair) connecting the CT to the ELR-3E or 3C must be kept as short as possible and must not be run near power cables (sufficient distance based on the load to ensure currents are not induced into the twisted pair). If there is a risk of induced currents, use screened cable. The control circuit pair must be separated from CT pair - they must not be run together.

TYPE - DIMENSIONS ( mm )	A	B	C	D	E	F	G	H
<b>CT-1/35</b>	100	110	50	<b>35</b>	47	60	43	30
<b>CT-1/60</b>	100	110	50	<b>60</b>	47	60	43	30
<b>CT-1/80</b>	150	160	50	<b>80</b>	70	110	43	30
<b>CT-1/110</b>	150	160	50	<b>110</b>	70	110	43	30



Reference	Measurement Minimume (mA)
<b>CT-1/35</b>	25
<b>CT-1/60</b>	25
<b>CT-1/80</b>	100
<b>CT-1/110</b>	250

**Technical Data**

Technical Data	CT-1/***
<b>Measuring CT</b>	
Toroidal transformer	035 = 35 mm, 060 = 60 mm, 080 = 80 mm, 110 = 110 mm
Permanent overload	1000 A
Short circuit withstand	40 kA for 1 second
Withstand voltage	2.5 kV for 1 minute
Frequency range response	50 Hz ... 60 Hz
CT Ratio	500 / 1
Operating temperature	-10 °C ... 70 °C
Storage temperature	-20 °C ... 80 °C
Terminal Capacity	2.5 mm sq. cable
Degree of protection	IP20
<b>Certification</b>	
Standards	IEC / EN 50081-2, IEC / EN50082-2, IEC / EN 60255,
Design requirements (OEM)	IEC / EN 60947-2 "ANNEX M"

**Wiring example**

