

Core Balanced Current Transformers

CBT Series Earth Leakage Protection

Features

- » Integral wire sealable terminal cover
- » Flame retardant high impact moulded case
- » Wide operating temperature -10°C to +50°C
- » Mounting hardware kit supplied, metal feet for wall or base mounting



This range of Core Balanced Current Transformers are exclusively for use with our 373-ELR Earth Leakage Protection Relay.

The extremely sensitive toroidal core and secondary winding are encapsulated by a self extinguishing case, giving excellent mechanical strength, protection from damage and electrical insulation.

Performance

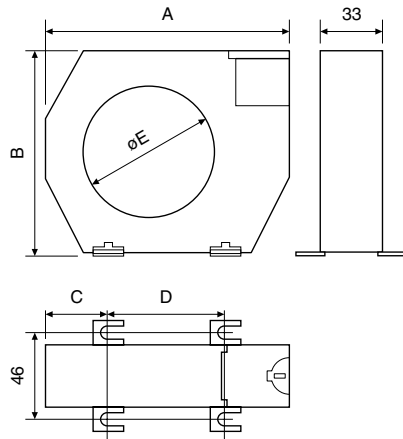
Working Range: 30mA to 10A
Frequency: 50/60 Hz
Enclosure Code: IP20

Rated System Voltage: 720V maximum
Rated Insulation: 3kV AC for 1 minute

For Best Results

- Always select smallest aperture size for the cables
- Make sure cables are in the centre of the aperture
- Place the CT on a straight section of cable

Dimensions (mm's)



Part No.	Aperture 'E'	A	B	C	D
CBT-94F-035	35mm	100	79	26	48.5
CBT-94F-070	70mm	130	110	32	66
CBT-94F-105	105mm	170	146	38	94
CBT-94F-140	140mm	220	196	49	123
CBT-94F-210	210mm	299	284	69	161
CBT-94F-300	300mm	400	380	-	-

Special aperture sizes available - Please contact factory for details.

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Description

Residual current devices are used to detect potentially dangerous earth fault currents before damage is caused. An undetected fault current may lead to cables overheating, which could start a fire. If high fault currents are involved, hazardous voltages may also appear on earthed equipment, putting lives at risk. An earth leakage protection relay allows the fault current to be continuously monitored and compared with the user selectable leakage level. Should the leakage exceed this level, the relay will trip to indicate a fault condition. With a very fast response time of under

40ms, the supply can be disconnected before serious damage can occur.

An earth leakage protection relay is intended to provide a high degree of earth leakage protection and monitoring for any electrical equipment - specifically motors and their control gear, generator sets and transformers. The leakage current is determined by passing the phase conductors (and neutral if present) through a core balanced current transformer.

Recommended cable routing through the current transformer

Primary conductors should be grouped together and fed through the current transformer aperture. It is essential that each conductor passes through the device in the same direction. Each phase conductor (and neutral if present) must pass through the current transformer.

Important: The equipment grounding conductor must always bypass the current transformer. The connections between the current transformer and protector should be kept as short as possible to minimise signal noise. For best results, use screened cable, with the screen grounded at the protector.

Current Transformers

Crompton Instruments supply an extensive range of high quality current transformers providing a comprehensive range of measuring and protective capabilities where traditional reliability and accuracy are required.

All Crompton Instrument's Transformers are

manufactured to meet IEC 60044-1:1999 for measuring and protective duties.