# **Core Balance Current Transformer**



### Features:

- ▶ All ratios available to match commonly available ELRs
- Compact
- Light weight
- Encapsulated ABS moulding
- ► Terminals are finger proof touch as per IEC 44-1 and IEC185
- Cost effective



# Advantages:

- Highly linear
- Highly accurate
- Light in weight

# **Applications:**

► For detection of leakage current & transmiting proportional signal to ELR

#### Technical specifications

System Voltage 720V max.

Insulation Voltage 3 kV for 1 minute

System Frequency 50/60 Hz

Maximum permissible current 1 kA continuous

5 kA for 1.5 sec

Current Ratio 1/1000, 1/600 any other on request

#### Mechanical Specifications

Terminal conductor  $\leq$  2.5 sq.mm Distance between toroid  $\leq$  50 meters

and relay

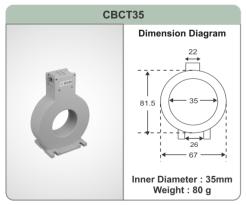
Enclosure Flame retardant glass filled ABS

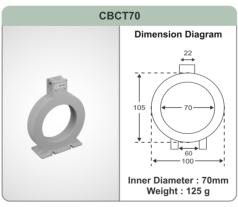
Mounting Four fixing slots

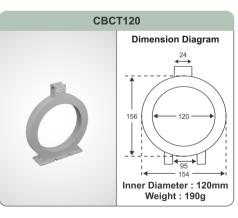
#### **Environmental Specifications**

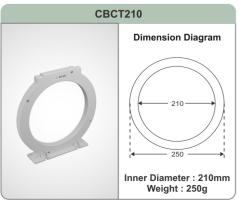
Operating Temperature -20°C to 70°C Humidity < 95 RH

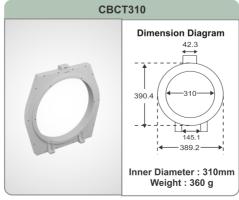
### **Dimension**

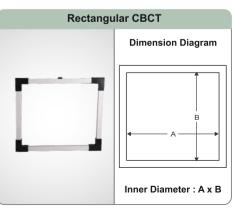








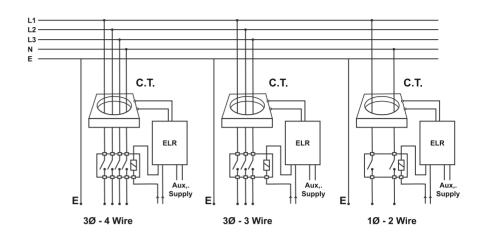






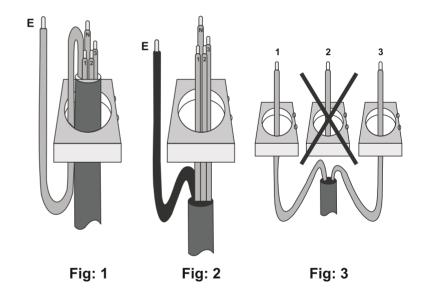


### Connection Diagram



#### Installation Guidelines

- Correct installation of the Earth Lekage Relay and toroid should ensure trouble free operation, if this documents is followed
  - A) 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, as shown in Fig:2 beside
  - B) As a rule, select a toroid that has an inside diameter which is twice that or greater than the outsider diameter of the cables to be passed through
  - C) Ensure the cable is central in the toroid.
  - D) Place the toroid on a straight, section of cable, not near a bend.
  - E) Keep the cable and toroid from intense magnetic fields from nearby equipment.
  - F) Do not pass individual through seperate toroids, as shown in Fig: 3.



# **Ordering Information**

Ordering Code	Description
Standard	
CBCT 35-1000	ABS moulded CBCT 35mm ID with 1/1000 current ratio
CBCT 70-1000	ABS moulded CBCT 70mm ID with 1/1000 current ratio
CBCT 120-1000	ABS moulded CBCT 120mm ID with 1/1000 current ratio
CBCT 210-1000	ABS moulded CBCT 210mm / tape wound ID with 1/1000 current ratio
CBCT 310-1000	ABS moulded CBCT 310mm / tape wound ID with 1/1000 current ratio
Non-Standard	
CBCT AxB -1000	CBCT non standard rectangular ID in mm CBCT with 1/1000 current ratio
CBCT AxB -XXXX	CBCT non standard rectangular ID in mm CBCT with non-standard current ratio
CBCT D -1000	CBCT non standard circular CBCT with 1/1000 current ratio
CBCT D -XXXX	CBCT non standard circular CBCT with non-standard current ratio

Variable denotion explanation:	
xxxx	non standard current ratio eg. 1/1200 is 1200
AxB	inner diameter of rectangular CBCT in mm eg. 500x400 where A=500 mm and B=400 mm
D	Inner diameter of circular CBCT in mm eg. 100 where D =100 mm

tape wound CBCT 210mm ID with 1/1000 current ratio