

CBCT Series

Core Balance Current Transformers



Leakage Current Detection

For use with STEFAN Earth Leakage Relays.

Detects leakage current and transmits a proportional signal to the relay.

Slim design with surface mounting using four fixing slots.

Electrical Specifications

Rated system voltage	720 V AC
Insulation level	3 kV AC
Current ratio	1/1000
Maximum permissible current	1 kA continuous; 5 kA for 1.5 s; 100 kA for 0.05 s
Maximum distance to ELR	50 m between toroid and earth leakage relay
Minimum ELR I _{Δn} setting	0.03 A: 35, 50 and 70 mm internal diameter 0.1 A: 120 mm internal diameter 0.3 A: 160 and 210 mm internal diameter

Environment & Installation

Ambient temperature	-20°C to +60°C
Relative humidity	95%
Housing	Grey ABS
Mounting	Surface mount using fixing slots. CBT-SC160 and CBT-SC210 require separate mounting feet, included.
Terminal conductor size	2.5 mm ² solid; 1.5 mm ² stranded
Compliance	CE compliant; RoHS IEC 44-1, IEC 185 and BS 7676

Selection & Dimensions

Available Sizes / Internal Diameter

CBT-SC35: 35 mm	CBT-SC50: 50 mm	CBT-SC70: 70 mm
CBT-SC120: 120 mm	CBT-SC150: 150 mm	CBT-SC210: 210 mm
CBT-SR1030: 1030 mm	CBT-SR1535: 1535 mm	

Rated Operational Current

Model	Current	Max. phase cable	Model	Current	Max. phase cable
CBT-SC35	65 A	25 mm ²	CBT-SC120	250 A	240 mm ²
CBT-SC50	85 A	50 mm ²	CBT-SC150	320 A	400 mm ²
CBT-SC70	160 A	95 mm ²	CBT-SC210	400 A	500 mm ²

Maximum cable cross-section assumes 3P + N copper cables.

Technical Data / mm

Toroid type	A (Ø)	B	C	D	E	F	Weight
CBT-SC35	35	64	74	40	20	32	77 g
CBT-SC50	50	63	98	40	20	42	88 g
CBT-SC70	70	105	117	40	20	53	135 g
CBT-SC120	120	155	170	40	20	80	265 g
CBT-SC150	160	150	253	60*	33	120	1075 g
CBT-SC210	210	149	304	60*	33	145	1300 g

* Excluding mounting feet.

Dimensional Drawings

