

APPLICATIONS

The CBT3 and CBT4 are suitable for testing RCDs fitted to provide protection in wiring installations. Both selective and non-delayed RCDs can be tested simply with automatic test parameters. Either instrument can be used to test RCDs to BS4293 and IEC1008.

It is a requirement of IEC 364, HD384 and BS7671 that RCDs should be tested to verify their correct operation. The CBT3 and CBT4 are ideal for this application. 3 phase RCDs may be tested if they have a neutral and earth connection. Connections must only be made to one phase, neutral and earth.

SPECIFICATION

Standard RCD Trip Current
Ratings: 6 mA 10 mA 30 mA
100 mA 300 mA 500 mA

Test Current Multipliers:

x1/2 x1 x5 (150 mA fixed
value), max current output 500
mA

Accuracy

Test Current:

CBT3: ± 4% at 230/240 V

CBT4: ± 4% at 220 V
± 8% at 230 V

Time Measurement:

± 1% ± 1 ms

Time Delay: From voltage
waveform zero crossing point

to initiation of test current;
<1 ms

Display:

2 range 4 digit L.C.D 0 to
999,9 ms with resolution of
0,1 ms and 2,000 seconds
with resolution of 1 ms.
Includes arrowheads for test
types selected and indicates
test failure.

Temperature Coefficient:

<0,03%/°C for time
measurement
<0,01%/°C for test current

Temperature Range

Operating:

–5°C to +40°C

Storage:

–25°C to +65°C

Humidity

Operating:

90% R.H. at 40°C non
conducting

Storage:

90% R.H. at 40°C non
conducting

Safety

The instrument will, in
general, meet the requirements
of IEC 1010-1 (1990). Safety
Class II (double insulation),
Installation Category 3.

Fuse

1 A, 250 V ceramic 20 mm x 5
mm HBC (internal) type F

Power Supply

CBT3:

230/240 V 50 Hz (UK supply)

CBT4:

220/230 V 50 Hz

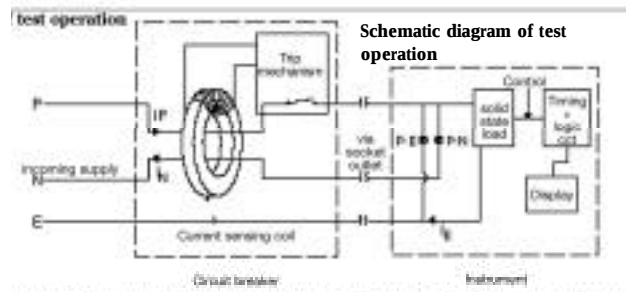
Dimensions

175 mm x 95 mm x 57 mm
(6⁷/₈ in x 3³/₄ in x 2¹/₄ in
approx.)

Weight

400 g (⁷/₈ lb) approx.

Test Current	'A' type		'B' type		'C' type	
	Effect on RCD Trip	Effect on RCD No Trip	Effect on RCD Trip	Effect on RCD No Trip	Effect on RCD Trip	Effect on RCD No Trip
1/2 I	Display shows trip time	Display shows '>2 s'	Display shows 'FAIL'	Display shows '>2 s'	Display shows 'FAIL'	Display shows '>2 s'
I	Display shows trip time	Display shows '>2 s'	Display shows trip time unless time <130 ms	Display shows '>500 ms' and then 'FAIL'	Display shows trip time then 'FAIL'	Display shows '>300 ms' and then 'FAIL'
150 mA	Display shows trip time	Display shows '>40 ms'	Display shows trip time	Display shows '>40 ms' and then 'FAIL'	Display shows trip time	Display shows '>40 ms' and then 'FAIL'
5I	Display shows trip time	Display shows '>200 ms' time <50 ms then 'FAIL'	Display shows trip time unless	Display shows '>150 ms' then 'FAIL'	Display shows trip time	Display shows '>40 ms' then 'FAIL'



Test Current effects on RCD types (summary of the tests available and the results expected).

(i) under normal operating conditions IP = IN (ii) instrument causes leakage current IE to flow (ii) when IP π IN current balance is upset and when the 'Test' button is pressed the circuit breaker trips

ORDERING INFORMATION

Included Accessories

Order Code

CBT3: Mains supply lead (13A plug) 6280-190
Operating instruction book 6172-303
Zip-up carrying case 6420-132

Included Accessories

CBT4: Mainssupply lead (Schuko) 6180-334
Operating instruction book 6171-992
Zip-up carrying case 6420-132

Optional Accessories

CBT3/4: Flying Lead Set
(3 Crocodile Clips) Fused 500mA 6231-522