



# Datasheet



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[www.sunbeltrentals.co.uk](http://www.sunbeltrentals.co.uk)

# RCDT300 Series

## Residual Current Device Testers



- Tests standard, DC and selective RCDs
- Ramp testing
- Auto (Remote) testing
- 3 Phase safe
- Enables testing on 110 V centre tapped supplies.
- Tough rubber armoured case with built-in cover
- Weatherproof to IP54

### DESCRIPTION

#### Standard test ranges

- The RCDT300 series can perform  $\Delta I$ , 1xI and 5xI tests on RCDs rated at 30 mA, 100 mA, 300 mA and 500 mA on general and selective (time delayed) RCDs. The RCDT320 can also test RCDs rated at 10 mA and 1000 mA. All units offer DC testing of RCD's.

- Test times for normal and Selective RCDs are:

	Normal	Selective
$\Delta I$	2s	2s
I	300ms	2s
5I	40ms	150ms

- 5I tests are available on RCDs rated upto 100 mA.

#### Polarity

- All RCDs can be tested at 0° or 180°

#### Selective RCDs

- Selective breakers have a time delay in tripping. When selected, trip test times are extended and a 30s delay is allowed between the measurement of the fault voltage and the application of the test current.

#### Touch voltage

- Touch voltage is measured at the start of the RCD test. If enabled it is displayed on the analogue arc on completion of testing.

Touch voltage inhibit is selectable from 25 V or 50 V

Tough:-

- Designed to take the bashing that testers receive on site, the Megger RCDT insulation testers are rubber armoured.
- The rigid display cover folds right out of the way during testing and locks down to protect the display when it is finished.

Simple to use:-

- No buried functions mean it is obvious how to use the Megger RCDT.
- Colour coded ranges help test range selection, reducing test times and fault location.
- A user guide in the lid provides all the basic information.

Hands free use:-

- It hangs comfortably around the neck for hands-free use because the instrument is carefully balanced.

#### DC sensitive RCDs

- DC sensitive RCDs can be tested at  $\Delta I$ , 1xI and 5xI.

#### Ramp testing (RCDT320)

- To measure the trip current of an RCD. Current level is slowly increased from  $\Delta I$  to 1I (+10%). When the RCD trips the trip current is displayed and held on the screen.
- Very useful diagnosing nuisance tripping of RCDs.

#### Auto testing (RCDT320)

- Where the RCD under test and tester need to be in different locations, the user connects the RCDT320 to the

circuit and go to stand by the RCD under test to reset it. The RCDT320 will automatically perform a  $\Delta I$ , I and 5I test at both 0° and 180°. The RCD is reset each time it trips by the electrician and the tester proceeds to the next test automatically. All results are displayed at the end of the test.

■ Save time and energy

Safety features:- To protect the user and the tester from incorrect use the RCDT series all has an extensive range of features known as Megger Intelligent Safety System including:

- LED connection indicators – show test lead connections and supply status
- Safety Interlock – prevents unsafe connection of test leads
- 3 Phase safe - Even if the RCDT is connected across phases, the instruments will remain safe and not be damaged.
- Test inhibit – If supply voltage exceeds 300V testing will be inhibited.

All the Megger RCDT300 series RCD testers meet or exceed the UK and International Wiring Regulations, including requirements of BS7671 and VDE 0413 parts 1 and 4, HD 384, IEC 364, NFC15-100, and NEN3140, ES59009, AS/NZS 3000 and EN 61557.

In addition the range meets the requirements of BSEN 61010-1 for safe connection to Category III supply (300 V Phase to Earth).

The new Megger electrician's testers are simple, no fuss electrical testers that are tough, reliable and easy to use. Available in separate instruments, the series consists of the:

- |                 |                             |
|-----------------|-----------------------------|
| - MIT300 range  | - Insulation and continuity |
| - LT300 range   | - Loop testing              |
| - RCDT300 range | - RCD testing               |

Between them they meet all the requirements for modern electrical testing.

	RCDT310	RCDT320
<b>RCD testing</b>		
$\Delta I$ , I, 5I RCD trip time test	■	■
Selective breakers	■	■
DC breakers ( $I_{\Delta n}$ I, I, 5I)	■	■
30, 100, 300, 500 mA RCDs	■	■
10 mA /1 A RCDs		■
RCD trip current test (RAMP)		■
Auto sequence test		■
0°/180° polarity selection	■	■
Touch voltage display (selectable)	■	■
Max Touch voltage (25V/50 V)	■	■
Operating range 100 to 280 V		■
Operating range 50 to 290 V		■
<b>Features</b>		
3 Phase Safe	■	■
Large clear display	■	■
Backlight		■
Battery status indication	■	■
Auto power down	■	■
Fuse blown indication	■	■
IP54 weatherproof	■	■
<b>Accessories</b>		
Plug ended test lead	■	■
2 wire ended test lead probe/ croc clip ended		■
IEC61010-1 CATIII 300 V	■	■
EN61557	■	■
Calibration Certificate	■	■
3 year warranty	■	■

## SPECIFICATIONS

### RCD Test Ranges (to EN61557-6)

#### Test Current Accuracy:

<b>No Trip Test:</b>	(ΔI) -8% to -2%
<b>Trip Test:</b>	(I, 5I) +2% to +8%
<b>Trip Time:</b>	±1% ±1ms

### Voltage measurement

(All Models)

<b>Range ac:</b>	0V - 300V 25Hz to 450Hz
<b>Accuracy:</b>	±2% ±2 digits

### Frequency measurement

(RCDT320 only)

<b>Range:</b>	25Hz to 450Hz
<b>Accuracy:</b>	25.0Hz to 199.9Hz ±0.1Hz 200Hz to 450Hz ±1Hz

### Fault (Touch) Voltage

**Displayed range:** 0 V to 90 V

**Error:** +5%/+15% ±0.5 V

### Temperature and humidity

**Operating Range:** -5°C to +40°C

**Operating Humidity:** 93% R.H. at +40°C max.

**Storage Range:** -25°C to +70°C

**Maximum altitude:** 2000m

**Environmental Protection:** IP54

### Safety

Meets the requirements of EN61010-1 Cat III 300V phase to earth.

### IEC61557

Complies with the following parts of EN61557, Electrical safety in low voltage systems up to 1000 V ac and 1500 V dc- Equipment for testing, measuring or monitoring of protective measures:

Part1-General Requirements

Part4-Residual current devices

### Power supply

**Batteries:** 8 x 1,5 V cells IEC LR6 type (AA alkaline).

**Rechargeable:** 8 x 1.2 V NiCd or NiMH cells.

**Battery Life:** 1000 consecutive tests

### Weight

All units 980gms

### Dimensions

All units 190 x 140 x 75 mm

### E.M.C.

In accordance with IEC61326 including amendment No.1

## ORDERING INFORMATION

Item (Qty)	Order Code	Item (Qty)	Order Code
<b>RCDT310 RCD Tester 30, 100, 300, 500 mA</b>	<b>RCDT310-EN-BS</b>	<b>RCDT310 RCD Tester 30, 100, 300,500 mA</b>	<b>RCDT310-EN-SC</b>
<b>Included Accessories</b>		<b>Included Accessories</b>	
Mains plug test lead (BS1363)	6220-740	Mains plug test lead (CEE 7/7)	6220-741
Test lead set and crocodile clips	6220-784	Test lead set and crocodile clips	6220-784
<b>RCDT320 RCD Tester 10, 30, 100, 300, 500, 1000 mA</b>	<b>RCDT320-EN-BS</b>	<b>RCDT320 RCD Tester 10, 30, 100, 300, 500, 1000 mA</b>	<b>RCDT320-EN-SC</b>
<b>Included Accessories</b>		<b>Included Accessories</b>	
Mains plug test lead (BS 1363)	6220-740	Mains plug test lead (CEE 7/7)	
Test lead set and crocodile clips	6220-784	Test lead set and crocodile clips (2 wire)	6220-784
<b>RCDT310 RCD Tester 30, 100, 300, 500 mA</b>	<b>RCDT310-EN-AU</b>	<b>Optional Accessories for all RCDT's</b>	
<b>Included Accessories</b>		Test lead set and crocodile clips (2 wire)	6220-784
Mains plug test lead (AS/NZS 3112)			
Test lead set and crocodile clips	6220-784		
<b>RCDT320 RCD Tester 10, 30, 100, 300, 500, 1000 mA</b>	<b>RCDT320-EN-AU</b>		
<b>Included Accessories</b>			
Mains plug test lead (AS/NZS 3112)	6220-790		
Test lead set and crocodile clips	6220-784		

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Registered to ISO 9001:2000 Reg no. Q 09290  
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**RCDT300\_DS\_en\_V01**

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**We are supporting you to deliver  
a world class service, every day,  
in every sector...**

## LOCATIONS

### LONDON, HEATHROW

#### Sunbelt Rentals UK Test & Monitoring

242-252 London Road, Staines, London TW18 4JQ

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### REDCAR

#### Sunbelt Rentals UK Test & Monitoring

Unit 5 Kirkleatham Business Park, Redcar TS10 5SQ

0370 330 6021

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### STOKESLEY

#### Sunbelt Rentals UK Test & Monitoring

2 Ellerbeck Way, Stokesley Business Park, Stokesley, North Yorkshire TS9 5JZ

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