

# Residual Current Device test

This test ensures that Residual Current Devices (RCDs) have been correctly installed so they will disconnect if a fault occurs.



## YOU'LL NEED:

- a volt meter
- an RCD tester (optional)



## BEFORE YOU START:

Ensure you are using all relevant personal protective equipment.

## TIP

Use the **ME Hub app** to document your test results as you work.



## HOW:

**The volt meter method is mandatory. Use the RCD tester method for fault finding and proving the trip time.**

### VOLT METER METHOD

1. Test for voltage on load side of RCD – **reading should be 230 volts between each phase and neutral.**
2. Confirm the RCD is functioning by pushing the trip button.
3. On load side of RCD:
  - a. Test from each load side phase to the neutral busbar – **reading should be zero volts.**
  - b. Test from load side neutral to line side phase – **reading should be zero volts.**
4. Repeat all steps for every RCD in the installation.

### RCD TESTER METHOD

#### Confirm the RCD works

1. On the RCD tester, enter the mA rating of the RCDs you are testing.
2. Confirm the RCD is functioning by pushing the trip button.



#### Test at half the rated current

3. Connect the RCD tester to the circuit controlled by the RCD.
4. Test the RCD at half its rated current, with the sine wave set to 0 degrees.
5. Check result – **RCD should not trip.**
6. Test the RCD at half its rated current, with the sine wave set to 180 degrees.



**7.** Check result – **RCD should not trip.**

**Test at the rated current**

**8.** Test the RCD at the rated current, with the sine wave set to 0 degrees.



**9.** Check result – **RCD tester should display 'Pass'.**

**10.** Test the RCD at the rated current, with the sine wave set to 180 degrees.



**11.** Check result – **RCD tester should display 'Pass'.**

**Test at 5 times the rated current**

**12.** Test the RCD at five times the rated current, with the sine wave set to 0 degrees.



**13.** Check result – **RCD tester should display 'Pass'.**

**14.** Test the RCD at five times the rated current, with the sine wave set to 180 degrees.



**15.** Check result – **RCD tester should display 'Pass'.**

**Repeat entire test for every RCD in the installation.**

