

Correct Circuit Connections



This test confirms that earth conductors do not carry current in non-fault conditions, that there is no short circuit between phase, neutral or earth conductors and that there is no interconnection of conductors between different circuits.



YOU'LL NEED:

- an ohm meter
- a volt meter.



BEFORE YOU START:

1. Ensure you are using all relevant personal protective equipment.
2. Turn off the main switch or the relevant MCB. **Lock out and tag out.**

TIP

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

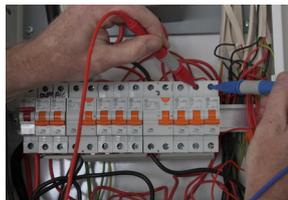


HOW:

SUBCIRCUITS

This test checks for short circuits or interconnections.

1. Ensure there is no voltage present using the prove-test-prove method.
2. Disconnect the neutrals of all subcircuits you are testing from the neutral busbar.
3. Test for voltage between each neutral conductor and the earth busbar.
4. **Test phase conductors**
 - a. With all control switches on and automatic switches bypassed, test between the load side of each protective device and the load side of each other subcircuit protective device.
5. **Test neutrals**
 - a. Test between the first disconnected neutral and each other neutral.
 - b. Check ohm meter reading – **confirm no continuity.**
 - c. Test between the disconnected neutral and the earth busbar.
 - d. Check ohm meter reading – **confirm no continuity.**
 - e. Repeat steps **a–d** for all other neutrals.
 - f. Reconnect the neutrals.





6. Test phase to neutral

- a. Turn all protective devices on, and put fuses in place, with main switch still off.
- b. Test between each phase and neutral on the load side of the main switch.
- c. Check ohm meter reading – **this should be consistent with the load.**

SUBCIRCUIT – NO TRANSPOSITION OF CONDUCTORS

To confirm there is no transposition of conductors, do the Circuit Polarity test and Earth Continuity test. If you have already done them, you do not need to repeat them.

