

	RECORD OF RCCB TEST	CKE.ITP.10.34.(00).2012
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(Notes & Test Procedure, TP)

A. NOTES

1. This Test Form is for RCCB, without time-delayed operation to IEC 61008.
2. This Test Form is to be used for testing a **two (2) POLE-RCCBs** and **NOT** applicable for **four (4) POLE RCCBs**.
3. Where is the circuit should the RCCB be tested?
The tests can be carried out immediately on the load side of the RCCB **BUT** it is preferred at the extremity of the protected circuit (last point)
4. The RCCB should be tested with the load switch off or the load disconnected from the circuit.

B. TEST PROCEDURE (TP)

(i) RCCB Test Button

The RCCB should be operated first by the test button to check that the RCCB is not faulty before tests on the installation are made.

The test button does not test the circuit, protective conductors or any earthing conductors or earth. The test button is to ensure that the electrical and mechanical elements of the RCCB are functioning.

(ii) ½ I Test (Non-Trip Test):

A test at ½ (50%) of the rated tripping current of the RCCB for a period of two (2) seconds.

This acts as a 'no trip' test and the RCCB must **not trip**. This is intended to verify that the RCCB is not subject to tripping when spurious 'nuisance' current appear in the circuit being protected.

(iii) I Test (Trip Test):

A Test at 100% of rated tripping current of the RCCB.

This act as a 'trip' test and the RCCB must break the circuit within **300ms**.

The choice of polarity, 0° and 180° enables the trip time to be measured accurately, as some RCCBs performs differently if the current occurs at the beginning of a positive (0°) or a negative (180°) cycle.

(iv) 5I Trip Test (Trip Test):

This test mainly for RCCBs rated at not more than **30mA** (ie. 30mA & 10mA). The RCCB must break the circuit within **40ms** at a residual current of 5IΔn. The choice of polarity, 0° and 180° enables the trip to be measured accurately, as some RCCBs performs differently if the current occurs at the beginning of a positive (0°) or a negative (180°) cycle.

(v) RCCB Test Button

Having completed the test, the effectiveness of the test button on the RCCB should **again** be checked to ensure that everything is satisfactory.

(vi) RCCB Ramp Test

This test is to measure the trip current of an RCCB. Current level is slowly increase from half the rated tripping current (0.5 x IΔn) of the RCCB. When the RCCB trips, the actual trip current (in milliamps) displayed. Very useful diagnosing nuisance tripping of RCCB. RCCBs complying with IEC 61008 may operate within the range of 0.5 to 1.0 x rated tripping current of the RCCB. If the RCCB trips less than 0.5 x rated tripping current, replace the RCCB.