Additional testing and verification requirements for RCBOs

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Testing

RCBOs are required to be tested and comply with the requirements of *AS/NZS 61009 - Residual current operated circuit-breakers with integral overcurrent protection for household and similar use (RCBOs) - General rules*. In addition to these requirements the following tests shall also be conducted. They shall be applied to two separate samples, one sample for each test.

1. The RCBO, in the closed position, is to be set up as per the circuit diagram on the following page to have 240V applied on both L terminals. The variable resistor R of the test circuit is to be set so that a residual current of 40mA is passed through the neutral terminals of the device. The link between the two L terminals shall be as short as practicable. The residual current is applied for 60 seconds if allowed by the construction of the RCBO.

2. The RCBO is setup as per test (1), however the variable resistor is disconnected from the circuit. The RCBO is closed and the test button is pressed and held for 10 seconds.

After these tests, a verification of the operating characteristics of the RCBOs under residual current conditions is performed by the test of clause 9.9.1.2a of AS/NZS 61009:2015.

Results and publication

The testing and verification results must be submitted to ESV with two new product samples. The product samples and the test results should be posted to:

Attention Electrical Equipment Safety
RCBO Compliance
Energy Safe Victoria
Level 5, Building 2, 4 Riverside Quay
Southbank Victoria 3006

For further information, please email info@energysafe.vic.gov.au.

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