

## Australian Standard®

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# Automatic fire detection and alarm systems—Methods of test for actuating devices

## Method 4: Voltage stability test

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**1 SCOPE.** This Standard sets out the method for testing the voltage stability of an actuating device. (See performance requirements in the appropriate device Standard.)

**2 PRINCIPLE.** The operating voltage of the actuating device is varied within specified limits. The actuating device is monitored for alarm or fault state.

**3 APPARATUS.** A current-limited variable power supply and suitable monitoring equipment is required.

**4 PROCEDURE.** The procedure shall be as follows:

- (a) Mount the actuating device in its intended orientation and connect it to monitoring equipment.
- (b) Adjust the output of a current-limited variable power supply, complying with the manufacturer's specifications, to the maximum working voltage of the actuating device. Connect the actuating device to the output of the power supply. After connection, energize the actuating device for not less than 5 min and observe whether the actuating device entered an alarm or fault state.
- (c) Raise the voltage supply to the actuating device to the maximum rated voltage then steadily lower it to zero volts in a period of 1 min and then steadily raise it again to the maximum working voltage over the same period.

Observe whether the actuating device entered an alarm state during the test. The actuating device may enter a fault state outside the manufacturer's specified working voltage range for the actuating device, but shall return to normal state within the range.

**5 REPORTING OF RESULTS.** The following shall be reported:

- (a) Information identifying the actuating device.
- (b) Whether the actuating device generated a fault signal or entered an alarm state when tested as required in Clauses 4(b) and 4(c).
- (c) Reference to this test method.

