Australian Standard™

AS 2362.21

Fire detection, warning, control and intercom systems—Methods of test

Method 21: Endurance test

1 SCOPE

This Standard sets out the methods of testing the response of an actuating device to repeated use, and the robustness of any manual switches fitted to it. (See performance requirements in the appropriate device Standard).

2 PRINCIPLE

An actuating device is subjected to repeated alarm cycles to simulate an extended period of service.

3 PROCEDURE

The procedure shall be as follows:

(a) Connect the device to the power supply. If battery-only operated, connect the device to a filtered d.c. supply with an output voltage equivalent to the fresh battery voltage.

(b) Operate the device continuously for 8 h of alternate 5 min periods of being energized in the stand-by and alarm conditions, followed by 72 h of continuous energization in an alarm condition. Check that the device operates as intended.

(c) Operate the device, using the self-test facility, for 1500 cycles at the rate of not more than 10 cycles per minute with outputs loaded at the manufacturer's specified rated load. The time of actuation of any test means shall be sufficient to obtain at least 1 s of alarm. Check that the sensitivity adjustment switches, test means and alarm silencing or reset switches are capable of performing as intended when subjected to 1500 cycles of operation when tested in conjunction with the self-test facility and that there has been no mechanical or electrical failures.

4 REPORTING OF RESULTS

The following shall be reported:

(a) Information identifying the actuating device.

(b) Whether the actuating device was capable of operating in the normal manner throughout the tests.

(c) Reference to this test method, i.e. AS 2362.21.