9-30051

Wire burn test unit

General

The unit is used to test very early warning aspirated smoke detection equipment. The unit provides a 6.3 VAC output from 230 VAC mains supply. High current is passed through a test wire in order to heat it, which causes its insulation to burn giving off smoke.

Commissioning

During the commissioning of an ASD system, the hot wire test unit should be used. The unit must be placed on the ground in the protected area and then activated. The wire which is heated will generate smoke which simulates a real fire in the protected area. The smoke generated will then rises and create a smoke plume similar to a real fire. In this way the ASD can be tested to confirm that it is performing as designed, while taking into account factors like air flow and other environmental factors.

Routine maintenance

To ensure that the ASD is still performing as designed, it is recommended to do a hot wire test as part of the routine maintenance. This might not be possible in all installations due to the nature of the protected area. For example if the protected area is used for food preparation, then it would not be suitable. The hot wire test will confirm both the rising of smoke and formation of a plume, as well as the ASD's performance to detect smoke and raise an alarm.



Details

- Testing to BS5839 and BS6266
- Fuse protected

9-30051
Wire burn test unit

Technical specifications

Electrical

Operating voltage	230 VAC, 50 Hz, 1A
Output transmitter power	6.3 VAC, 16.6 A

Environmental

Environment	Indoor
IP rating	IP30

Regulatory

Certification	EN54-20

Operating time

Maximum on time	3 min.
Minimum off time	7 min.

As a company of innovation, Kidde Global Solutions reserves the right to change product specifications without notice. For the latest product specifications, visit firesecurityproducts.com online or contact your sales representative.

Last updated on 28 July 2025 - 15:21