# 8.0 to 35 VDC Smoke Detector

#### For DMP Command Processor™ Panels

# **Description**

The SLK-835 detector offers unrivaled smoke detection performance backed by over 70 years of fire detection engineering expertise. The SLK-835 is highly stable and works equally well in any application where photoelectric smoke detectors are specified. The extremely low profile and clean decorative lines of the detector and base combination are ideally suited for architecturally sensitive environments such as public access areas and homes.

# **Advanced Smoke Chamber Technology**

The smoke chamber in the SLK-835 detector consists of a pulsing LED light source and a photodiode receiving element that is angled away from the light source. During normal operation, the receiving element does not detect light from the light source and remains in a normal condition. In the event of a fire, smoke particles enter the detector smoke chamber and cause light from the LED light source to be reflected into the receiving element. The received light is processed by the detector circuitry and indicated as an alarm to the Fire Alarm Control Panel (FACP).

#### **Built-in Status/Alarm LED**

The SLK-835 Smoke Detector head contains a built-in LED that flashes at regular intervals for visual supervision and turns on steady during an alarm condition. The LED stays on until the detector is reset.

# TRT-A100 Smoke Detector Tester w/ Pole

# For use with SLK-835 Photoelectric Smoke Detectors

# Description

The TRT-A100 Smoke Detector Tester w/ Pole enables you to access, test, remove and reinstall the SLK-835 smoke detector without the use of any additional equipment. The dual sensitivity test unit with extendable pole means you can completely test the SLK-835 smoke detector from the floor. The TRT-A100 complies with NFPA standards which requires smoke detectors to be tested within specific alarm limits. The TRT-A100 also meets the requirements of a UL listed calibrated test without the use of combustion materials.

#### Operation

Two magnetic reed switches are incorporated in the SLK-835 detector circuitry. When the TRT-A100 magnets are aligned and placed on the SLK-835 test points, the detector will internally test the sensitivity of the actual chamber and will notify you if your unit has drifted outside the UL sensitivity window.



#### **SLK-835 Features**

- Extremely low profile at only 1.5" high
- 2-wire base configuration
- Highly stable operation in harsh environments
- Superior RF and transient voltage protection
- Built-in Status/Alarm LED
- · Non-directional smoke chamber
- · Tamper-resistant security locking feature
- · Built-in magnetic detector sensitivity feature
- UL compatible with DMP XR5, XR10, XR20, and XR200 Command Processor™ panels and DMP 715 Zone Expander Modules
- Extremely low startup and operating current
- Made in the USA by Hochiki America Corporation

# **TRT-A100 Features**

- Combination tester/ removal tool
- Hand held 15' extension pole w/ easy grip black handle
- Stainless steel 5" diameter holder
- · No combustion material needed
- No meter, batteries, or screwdriver required
- · Color coded label for easy alignment
- UL listed
- Meets test requirements outlined in <u>NFPA 72</u>
  Inspection, Testing and Maintenance, Chapter 7
- Made in the USA by Hochiki America Corporation



# **SLK-835 Engineering Specifications**

The contractor shall furnish and install where indicated on the plans, DMP/Hochiki Model SLK-835 Photoelectric Smoke Detectors. The combination detector head and base shall be UL listed compatible with UL listed fire alarm panels. The base shall permit direct field interchange of SLK-835 detector heads and the limiting of alarm current available to the detectors.

The smoke detector shall have a flashing status LED for visual supervision. When the detector is actuated, the flashing LED shall latch steady at full brilliance. The detector shall be able to be reset from the FACP reset switch.

The sensitivity of the detector shall be capable of being measured. The vandal resistant security locking feature shall be used in those areas as indicated on the plans. The locking feature shall be field removable when not required.

It shall be possible to perform a functional test of the detector without the need to generate smoke. The test method shall simulate effects of products of combustion in the chamber to ensure testing of detector circuits. To facilitate installation, the detector shall be non-polarized.



TRT-A100 Tester shown with SLK-835 Detector

#### **SLK-835 Specifications**

Operating Voltage	Nominal: 12 VDC or 24 VDC Working: 8.0 to 35.0 VDC
Startup Current	230μA avg. at 24 VDC 170μA avg. at 12 VDC
Supervisory Current	100μA avg. at 24 VDC 45μA avg. at 12 VDC
Alarm Current	.150 Amps maximum
Compatibility Identifier	SLK-835 Detector Head – HD-5 HSB-200 2-Wire Base – HB-55
Operating Temperature	32°F to 120°F

# **SLK-835 Listings and Approvals**

- Underwriters Laboratories S1383
- Factory Mutual OB5AZ.AY
- California State Fire Marshal 7272-0410:107

# **TRT-A100 Specifications**

Dimensions	3.4" D x 2.4" H
Material	PVC molded plastic
Color	Grey

# **TRT-A100 Listings and Approvals**

- Underwriters Laboratories S3516
- M.E.A. 284-91-E Vol.2

# SLK-835 & TRT-A100 Ordering Information

Model	Description
SLK-835	Photoelectric Smoke Detector
HSB-200	Smoke Detector 2-Wire Base
TRT-A100	Smoke Detector Tester with Pole
715/SLK-835	Smoke Detector Package