

## SLR-835BH DIRECT-WIRE PHOTOELECTRIC HEAT SMOKE DETECTOR



*Shown With Trim Ring*

### SPECIFICATIONS

Light Source:	GaAl AS Infrared LED
Voltage:	Nominal: 12 VDC or 24 VDC Working: 8.0 - 35.0 VDC (35.0 VDC Max)
Wave Form:	Filtered DC 15% Ripple Max.
Alarm Current:	150mA Maximum
Surge Current:	200µA Maximum (2 wire)
Average Stand-By Current:	38µA AVG @12 VDC 55µA AVG @24 VDC 70µA AVG @35 VDC
Ambient Temperature:	32° F - 120° F (0° C - 49° C)
Sensitivity Test Feature:	Automatic Sensitivity Window Verification Test
Compatibility Identifier:	HD-6
Heat Sensor:	135° F

Order Codes:	2-Wire Detector & Trim Ring White: SLR-835BH-2W Bone: SLR-835BH-2 4-Wire Detector & Trim Ring White: SLR-835BH-4W Bone: SLR-835BH-4
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### STANDARD FEATURES

- Low Profile - Only 2.375" High.
- 2 or 4 Wire Models
- 135° F Latching Heat Sensor
- Highly Stable Operation, RF/Transient Protection
- Two built-in power/sensitivity supervision/alarm LED's
- Non-Directional Smoke Chamber
- Vandal Resistant Security Locking Feature
- Removable smoke labyrinth for cleaning or replacement
- Automatic Sensitivity window verification function meets outlined requirements in NFPA 72, Inspection, Testing and Maintenance.

### APPLICATION

The HOCHIKI America SLR-835BH Series can be used in all areas where Photoelectric Smoke Detectors are required. It is suited for smoldering or flaming fires.

### OPERATION

The SLR-835BH Series photoelectric smoke detector utilizes two bicolored LEDs for indication of status. In a normal standby condition the LEDs flash Green every 3 seconds. When the detector senses that its sensitivity has drifted outside the UL listed sensitivity window the LEDs will flash Red every 3 seconds. When the detector senses smoke and goes into alarm the status LEDs will latch on Red.

The unit is comprised of an LED light source and silicon photo diode receiving element. In a normal standby condition, the receiving element receives no light from pulsing light source. In the event of fire, smoke enters the detector and light is reflected from the smoke particles to the receiving element. The light received is converted to an electronic signal.

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### PRODUCT LISTINGS

Underwriters Laboratories: S1383  
Factory Mutual: 3012444  
CSFM #: 7272-690-0410:107

### Hochiki America Corporation

7051 Village Drive, Suite 100 • Buena Park, CA 90621-2268  
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## OPERATION, *continued*

Signals are processed in the comparator, and when two consecutive signals exceeding the basic level are received within a specific period of time, the time delay circuit triggers the SCR switch to activate the alarm signal. The Status LED lights continuously during alarm period.

## ENGINEERING SPECIFICATIONS

The contractor shall furnish and install where indicated on the plans HOCHIKI America SLR-835BH baseless photoelectric smoke detectors. The combination detector head shall be UL listed compatible with an UL listed fire alarm panel.

The smoke detector shall have flashing status LED for visual supervision. When the detector is actuated, the flashing LED will latch on steady at full brilliance. The detector may be reset by actuating the control panel reset switch.

The detector shall have a sensitivity window verification feature.

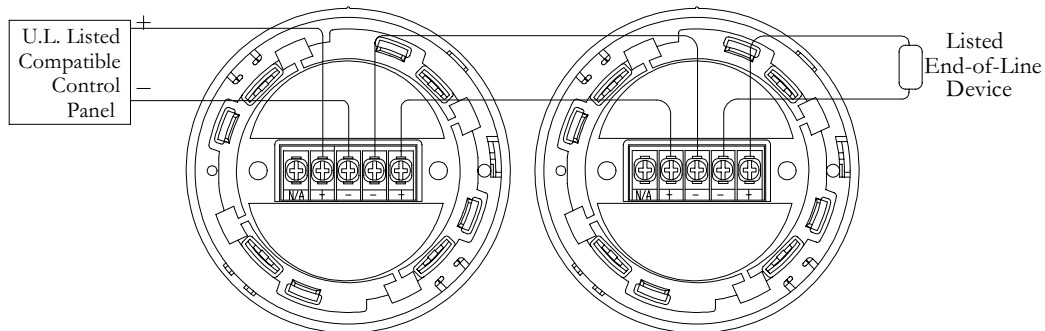
The vandal resistant, security locking feature shall be used in those areas as indicated on the drawing. The locking feature shall be field selectable.

It shall be possible to perform a functional test of the detector without the need of generating smoke. The method shall simulate effects of products of combustion in the chamber to ensure testing of detector circuits.

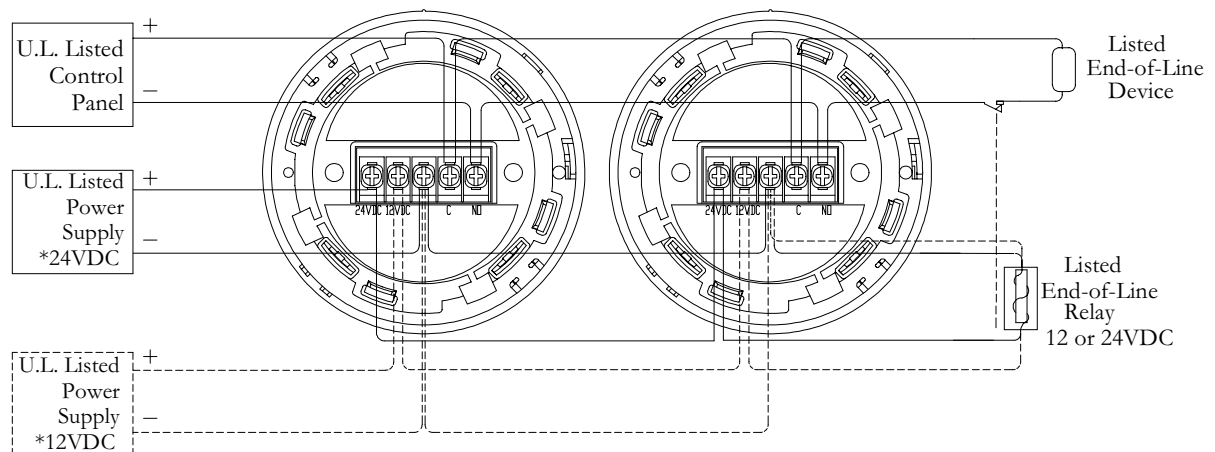
Voltage and RF transient suppression techniques shall be employed to minimize false alarm potential.

## WIRING DIAGRAMS

### 2-Wire Wiring Diagram



### 4-Wire Wiring Diagram



\* Use either 12 OR 24VDC . They cannot be used simultaneously.