

# **RHA** RATE OF RISE/FIXED TEMPERATURE HEAT DETECTOR



Product includes a 5 year warranty

## Description

The combination Rate of Rise/Fixed Temperature Heat Sensor (RHA) is a listed Analog/Addressable combination temperature heat sensor compatible with any fire alarm control panel that has the Potter/ Nohmi protocol. The heat sensing portion utilizes a proven thermistor for accurate and reliable heat detection. The sensor and base (not included) are made of a durable plastic in an eggshell white (off white) to blend in with the ceiling.

The RHA is UL and cUL listed with a selectable fixed temperature point from 135° to 174° and a rate of rise feature. The rate-of-rise operates when the temperature increases 12-15°F occurs. The heat sensor is ideal for installations needing the earlier heat detection.

The RHA has two LEDs that allow for 360° viewing. The sensor is compatible with any of the Potter/Nohmi bases and simply twists on. The RHA is addressed using the hand held programmer or the control panel addressing function.

## Spacing

The RHA spacing is dependent on the alarm set-point. The unit is listed from 135°F to 174°F. However as the temperature setting increases, the spacing decreases.

Alarm set-point	RHA Spacing
135 to 170 °F (57 to 76 °C)	Max. 50 ft
171 to 174 °F (77 to 79 °C)	Max. 15 ft

The system has a maximum of 13 LEDs that can be turned on simultaneously. If the system already has 13 LEDs on, the RHA will operate even though the LED will not illuminate.

## Setting the Address

Each addressable module, smoke sensor, heat detector and combination sensor/detector must have the address set before connecting the device to the SLC loop. The address is set using the hand held device programmer or the addressing feature on the control

#### Features

- Adjustable fixed 135° to 174° Fahrenheit
- Rate of rise feature with 10-12°F per minute detection
- LEDs for 360° viewing
- Low profile
- Reliable detection technology

#### panel.

Before connecting a device to the SLC loop, take the following precautions to prevent potential damage to SLC or device. Verify the following:

- 1. Power to the device is removed
- 2. Field wiring is correctly installed.
- 3. Field wiring has no open or short circuits.

Document discrepancies and notify appropriate personnel.

#### Specifications

Item	FHA
Working voltage range	22.0 to 24.0 V
Standby current	250 μΑ
Alarm indicator	2 LEDs
Alarm indicator current	1.2 mA D.C.
Alarm set-point range	135 to 174 °F/ 57 to 79 °C
Rate-of-rise	12 to 15°F
Installation temperature range	32 to 100 °F / 0 to 38 °C
Operating relative humidity range	0% to 93% (Non-condensing)
Start-up time	Max. 1 sec.
Maximum number of addresses per loop	127
Maximum number of lighted indicators in alarm per zone.	13
Color	Eggshell White
Weight (without base)	73g (2.57oz)
Dimensions (without base)	Height: 1.50 in (38mm)
	Diameter: 4.0 inches (99mm)
Approvals / Listings	UL, ULC, CSFM, MEA

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# Operation

The RHA is an analog/addressable sensor that uses one address on the Signaling Line Circuit (SLC) of a compatible fire alarm control panel. The unit communicates with the control panel as it is polled. The LEDs flash every time the unit is polled and they will latch steady if the unit is in an active status.

The RHA is a single sensor that may be used in a wide variety of applications for property protection. The RHA has a the rate of rise heat detection to provide detection of an escalating fire. The unit has a sleek design and low profile for pleasing aesthetics. The temperature sensor is protected within the mold of the unit to prevent accidental damage.

# **Compatible Bases**

All bases will mount on a single gang, double gang, octagon, 4" square or mud ring electrical box.

Device	Description
AB-4	4" Standard Base
AB-6	6" Standard Base
AIB	6" base with an isolator module included. The base is pre-wired with a pluggable jumper to the module.
ARB-6	6" base with a dual relay module included. One relay is rated for 8 amps at 240 VAC/30 VDC and the second is rated for 2 amps at 240 VAC/30 VDC. The base is pre-wired with a pluggable jumper to the module.
ASB-6	6" base with sounder module included. Sound pattern is provided from external source. The base is pre-wired with a pluggable jumper into the module.