ATG-EA HEAT SENSOR

STANDARD FEATURES

- Low Profile - Only 2.0" high, including base.
- Simple and reliable device addressing method.
- Very low current consumption using the unique "Low Power Mode".
- Built-in optical fire test feature.
- Uses the noise immune Digital Communication Protocol (DCP), which utilizes interrupts for fast response to fires.
- Adjustable threshold temperature 134°F - 149°F (determined by panel)

SPECIFICATIONS

Operating Voltage	17-41 VDC
Current Consumption	
Standby:	Normal: 350μA (typical)
	Low Power Mode:
	110μA (@ 0.75 sec.)
Average when Polled:	2mA
Alarm:	8mA
Transmission Method	DCP - *Digital Communication Protocol*
Maximum Humidity	95% RH Non-Condensing
UL Ambient Installation Temperature Range	32°F to 100° F (0° C to 37.8° C)
Operating Temperature Range	134°F to 149° F (56.7° C to 65° C)
Color & Case Material	Bone PC / ABS Blend
Weight	3.2oz (4.9 oz. with 4" base)
Bases	4" YBN-NSA-4
	6" HSB-NSA-6

APPLICATION

The HOCHIKI America ATG-EA Sensor provides accurate temperature measurement data to the fire alarm control panel. This sensor is particularly suited to environments where smoke detectors are unsuitable because of the precense of system or cooking fumes such as in a kitchen.

OPERATION

The ATG-EA Heat sensor incorporates a highly linear thermistor circuit, with the thermistor mounted externally. The specially designed cover protects the thermistor while allowing maximum air flow. The thermistor circuit produces a voltage proportional to temperature which is scaled, and transmitted as a digitally encoded value to the control panel. When the ambient temperature exceeds a pre-programmed threshold (fixed temperature), the sensor transmits an interrupt to the control panel indicating a fire alarm. The fire alarm control panel can adjust the sensor threshold for different Standard's requirements. The rate of rise function is calculated within the fire alarm control panel, which can also initiate a fire test which functionally tests the sensor.

Up to 127 devices are permitted on each loop. A sensor address can be set by a hand-held programming unit. The sensor mounts to an electronics free base and incorporates a locking mechanism for secure installation. The Base provides mounting slots, terminals for field wiring and sea third contact for a remote indicator/LED. The sensor incorporates dual LEDs for easy viewing of sensor status.

ENGINEERING SPECIFICATIONS

Heat sensors are installed in accordance with NFPA (National Fire Pretection Association) 72, the UL Listed Spacing Requirements and the rules and regulations set forth by the local authorities having

Continued on back.

PRODUCT LISTINGS

Underwriters Laboratories: S2966
CSFM #: 7272-0410:147

Hochiki America Corporation
7051 Village Drive, Suite 100 • Buena Park, CA 90621-2268
Phone: 714/522-2246 • Fax: 714/522-2268
Technical Support: 800/845-6692 or technicalsupport@hochiki.com

ISO 9002 REGISTERED

07/2002

ENGINEERING SPECIFICATIONS, *continued*

jurisdiction. Automatic heat sensors shall be Underwriters Laboratories listed.

The base shall permit direct interchange with the HOCHIKI America AIE-EA ionization type smoke sensor, and the ALG-V photoelectric smoke sensor.

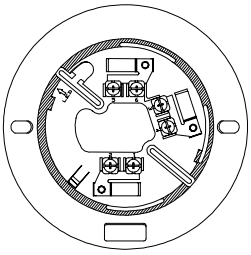
The vandal-resistant, security locking feature shall be used in those areas as indicated on the drawing. The locking feature shall be optional and can be implemented when required.

It shall be possible to perform a functional test of the sensor without generating heat. The test metod shall simulate the effects of heat on the device to insure testing of internal circuitry.

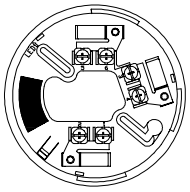
BASES

The HOCHIKI America HSB-NSA-6 and the YBN-NSA-4 mounting bases are electronic free and are a simple rugged design with screw terminals for wiring connections. A common mounting base allows sensor interchange and maintains loop continuity when sensors are removed. A simple anti-tamper head locking system is provided which is enabled by removing a small plastic tab on the back of the sensor. Once locked, the head can be removed using a small diameter screw driver.

(DIAGRAM OF 2 BASES HERE)

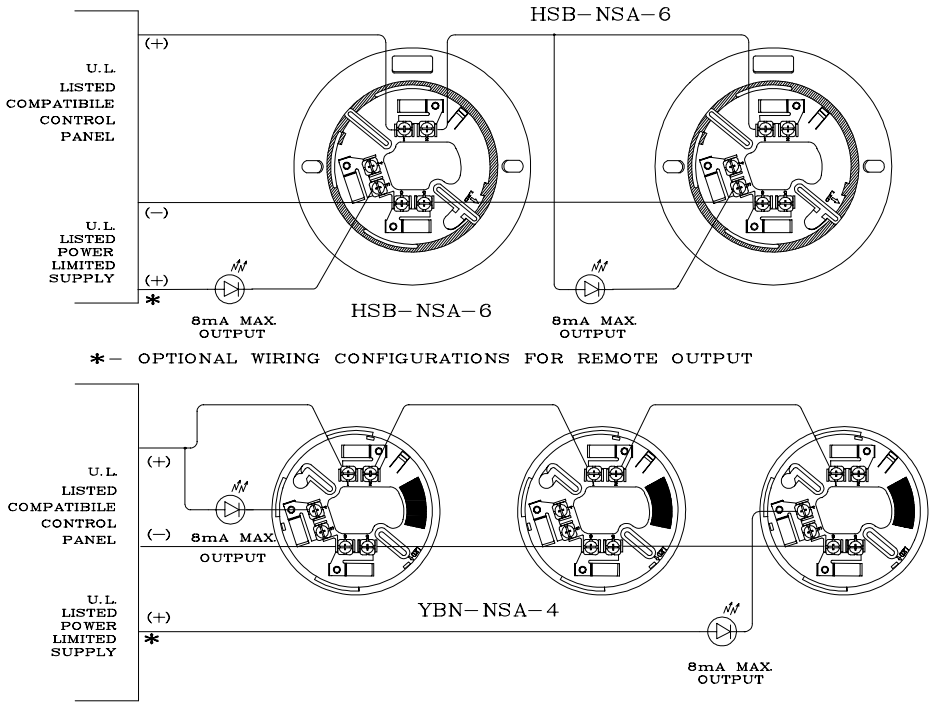


HSB-NSA-6 Base



YBN-NSA-4 Base

TYPICAL WIRING DIAGRAMS



NOTE: Fire alarm control panel compatibility is required for DCP products.
State-of-the-art communications protocol, DCP, allows system components (DCP sensors AIE-EA, ALG-V and ATG-EA, bases and modules), to be used concurrently in a system's signal conditioning loop.