

EAGLE SERIES - FIRE ALARM SYSTEMS

HEAT SENSOR

LE-ATG-EA



FEATURES

- Low Profile - Only 2.0" high, including base
- Simple and reliable device addressing method
- Uses the noise immune Digital Communication Protocol (DCP), which utilizes interrupts for fast response to fires
- Adjustable threshold temperature 135°F - 150°F (determined by panel)

APPLICATION

The Lifeco LE-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 presence of system or cooking fumes such as in a kitchen.

OPERATION

The LE-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.

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 secure installation. The base provides mounting slots, terminals for field wiring, and a third contact for a remote indicator/LED. The sensor incorporates dual LED's for easy viewing of sensor status.

ENGINEERING SPECIFICATIONS

Heat sensors are installed in accordance with NFPA (National Fire Protection Association) 72, the UL Listed Spacing Requirements and the rules and regulations set forth by the local authorities having jurisdiction. Automatic heat sensors shall be Underwriters Laboratories listed. The base shall permit direct interchange with the Lifeco LE-AIE-EA ionization type smoke sensor, and the LE-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 method shall simulate



UL S24977



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SPECIFICATIONS

Operating Voltage	17-41 VDC
Current Consumption Standby	Normal: 350µA (typical)
Average when Polled	2mA
Alarm	8mA
Transmission Method	DCP - Digital Communication Protocol
Maximum Humidity	95% RH Non-Condensing
UL Ambient Installation	32°F to 115° F
Temperature Range	(0° C to 47° C)
Operating Temperature Range	135°F to 150° F (57.2° C to 65.6° C)
Color & Case Material Weight	Bone PC / ABS blend 3.2oz (4.9 oz. with 4" base)
Bases	4" LE-YBN-NSA-4 6" LE- HSB-NSA-6

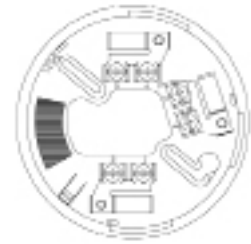
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BASES

The Lifeco LE-HSB-NSA-6 and the LE-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.

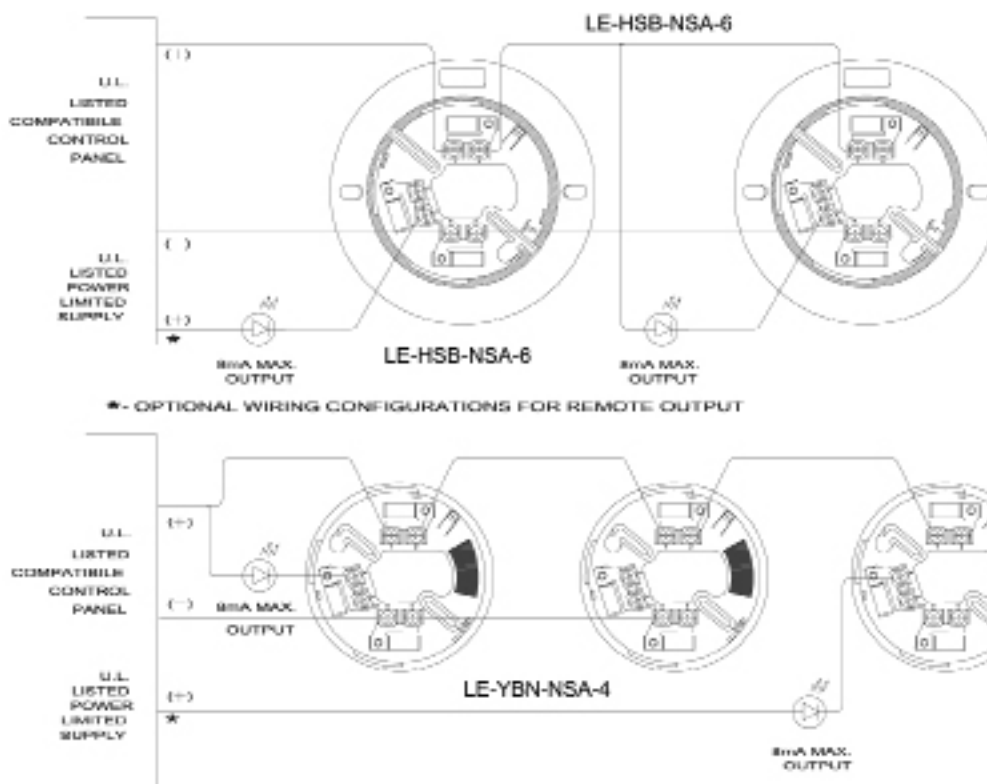


LE-YBN-NSA-4 BASE



LE-HSB-NSA-6 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 (LE-DCP sensors LE-LE-AIE-EA, LE-ALG-V and LE-ATG-EA, bases and modules), to be used concurrently in a system's signal conditioning loop.