



2151 Duct Smoke Detector for Special Applications

The System Sensor 2151 low-profile photoelectric smoke detector with a B114LP or B114LPBT base is listed to Underwriters Laboratories 268A specifically for use in no-flow/low-flow air-handling systems.



Features for 2151/B114LP/B114LPBT

- Low-profile smoke detector design
- Low standby current
- Two LEDs blink in standby
- Detector head plugs easily into base
- Field sensitivity metering of detector to meet the requirements of NFPA 72 with the use of SENS-RDR
- Designed for mounting on a standard electrical box
- Removable cover and insect screen for field cleaning
- Accepts 24 or 120V supply voltage

The 2151 can be used as a pendant mount detector in no-flow/low-flow air-handling systems (0-3,000 FPM). The pendant/plenum mounted **2151** is to be installed into a **B114LP or B114LPBT** base. This is the perfect combination for installation in ducts where the air velocity is below 500fpm or for duct sizes as small as 8" in diameter.

Pendant mounted in a standard electrical box within the duct, the twist-in/twist-out head allows easy removal from the base for quick cleaning and maintenance. The 2151 heads can be combined with the System Sensor B114LP 120VAC base or the B114LPBT 24VAC/DC base.

Agency Listings



2151 Photoelectric Detector Specifications

Architectural/Engineering Specifications

The air duct smoke detector shall be a System Sensor model 2151 Series Smoke detector listed to UL 268A specifically for use in air handling systems when used in conjunction with the B114LP or B114LPBT base. The detector shall operate at air velocities up to 3,000 feet per minute. It shall be capable of local testing using a magnet test on the 2151 sensor head.

Physical Specifications

Size	1.66" (4.22cm) H
Weight	3.6 oz (104 g)
Operating Temperature Range	32°F to 120°F (0°C to 49°C)
Operating Humidity Range	10 to 93% relative humidity non-condensing

B114LP/B114LPBT Plug-In Detector Base

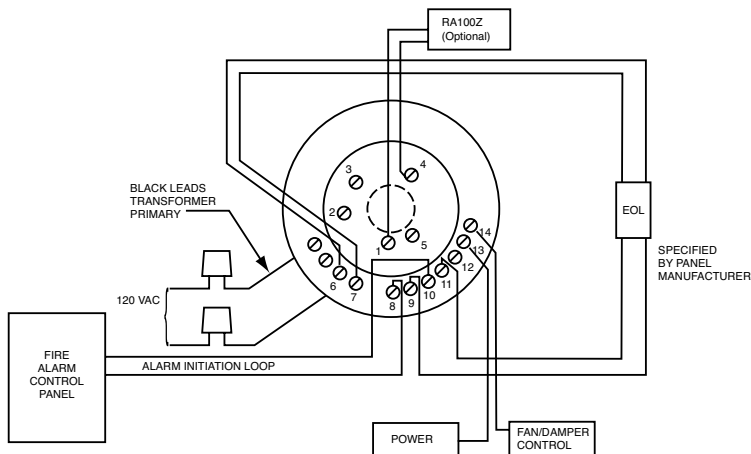
Physical Specifications

Diameter	6.1 inches (155mm)
Mounting	4-inch (102 mm) square box with or without plaster ring; Minimum Depth - 1.5 inches (38 mm) 4-inch Octagon Box; Minimum Depth - 1.5 inches (38 mm)
Operating Temperature Range	Refer to applicable sensor Operating Temperature Range using the Base/Sensor Cross Reference Chart at systemsensor.com

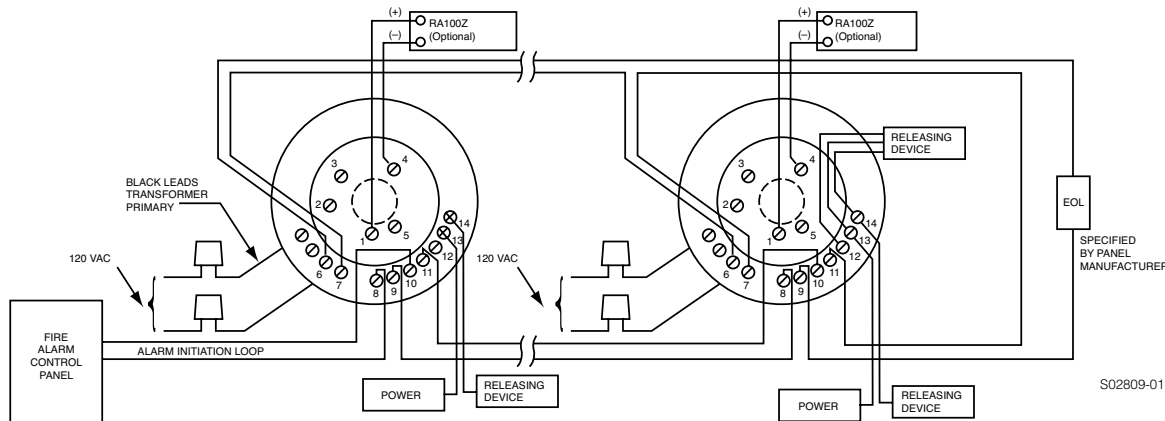
B114LP Typical Wiring Diagrams

B114LP Base Terminals

No.	Function
1	Remote Annunciator (+)
2	Not Used
3	Not Used
4	Remote Annunciator (-)
5	Not used
6	N.O. } Supervisory Relay
7	N.O. } Form A Contacts
8	N.O. } Alarm Relay
9	N.O. } Form A
10	C. } Initiation
11	C. } Contacts
12	N.O. } Alarm Relay
13	N.C. } Form C
14	C. } Auxiliary Contacts



S0279-01



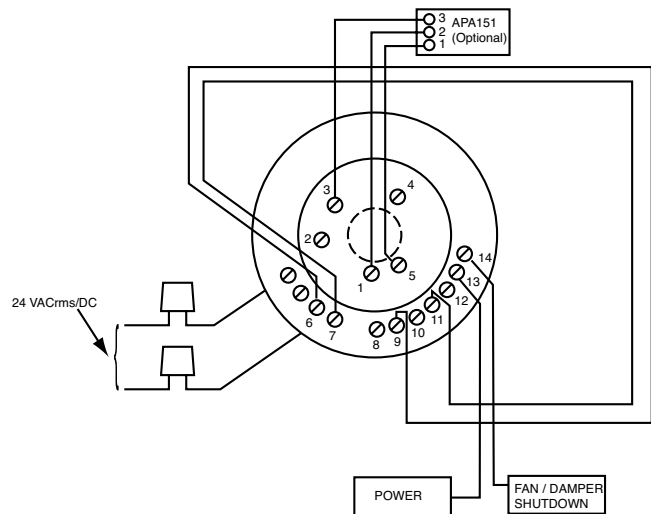
S02809-01

B114LPBT Typical Wiring Diagrams

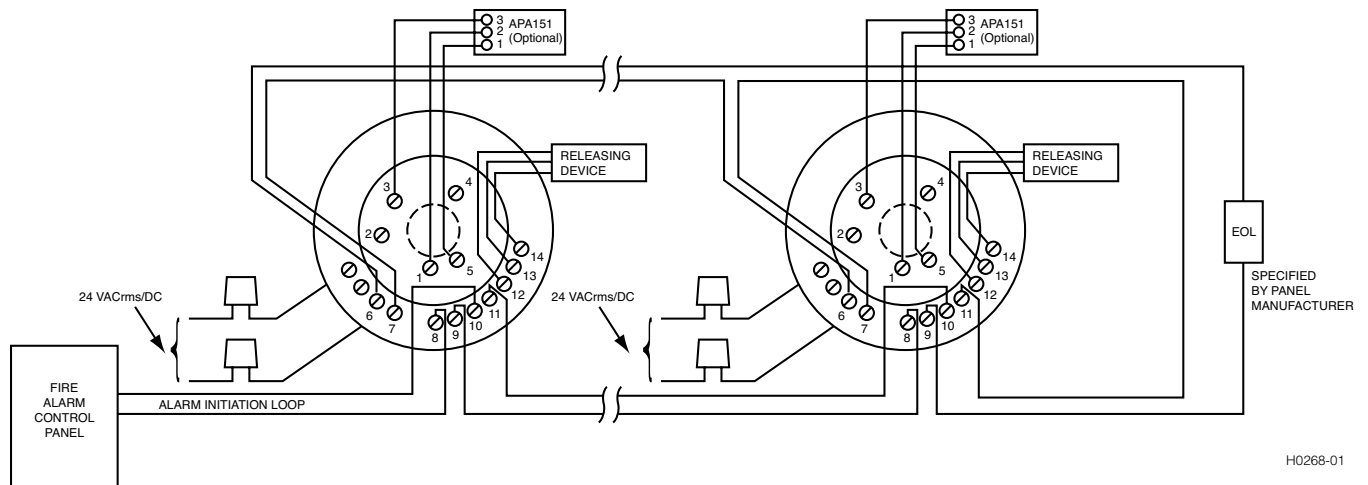
B114LPBT Base Terminals

No. Function

- | | |
|----|-------------------------|
| 1 | Remote Annunciator (+) |
| 2 | Test Coil (+) |
| 3 | Not Used |
| 4 | Remote Annunciator (-) |
| 5 | RTC (-) |
| 6 | C. } Supervisory Relay |
| 7 | N.O. } Form A Contacts |
| 8 | N.O. } Alarm Relay |
| 9 | N.O. } Form A |
| 10 | C. } Initiation |
| 11 | C. } Contacts |
| 12 | N.O. } Alarm Relay |
| 13 | N.C. } Form C |
| 14 | C. } Auxiliary Contacts |



H0269-01



H0268-01

Ordering Information

Part No.	Description
2151	Low-profile photoelectric plug-in detector (order the base listed below)
B114LP	120 VAC detector base
B114LPBT	24VAC/DC detector base



3825 Ohio Avenue • St. Charles, IL 60174
Phone: 800-SENSOR2 • Fax: 630-377-6495
www.systemsensor.com

©2012 System Sensor.
Product specifications subject to change without notice. Visit systemsensor.com
for current product information, including the latest version of this data sheet.
HVDS00700 • 1/12