

by Honeywell

Description

The SL-2000 Series Smoke Duct Detector is the latest innovation for early detection of smoke and products of combustion present in air moving through HVAC ducts in Commercial, Industrial, and Residential applications. The unit is designed to prevent the recirculation or spread of smoke by air handling systems, fans, and blowers. Complete systems may be shut down in the event of smoke detection. The SL-2000 is designed and built to meet all local code requirements, as well as the NFPA and ICC standards regarding HVAC supply and return duct smoke detectors. Output terminals are provided for a wide range of remote accessories such as horns, strobes, remote status indicators, and test/reset key switches or push buttons.

The SL-2000 includes many features that represent true innovations from current generation duct smoke detectors. Our traditional installer/service-friendly approach has been closely followed and expanded throughout the SL-2000. This philosophy provides a the installer/service and end-user. Our attention to detail has yielded a host of "No-Tools Required" features, as well as a multi-application performance level as yet unmatched in the industry. Innovative product combined with unsurpassed customer service equals the right combination for all of your projects. The key features below detail many of the customer-driven innovations incorporated in the SL-2000 Series.

Engineers & Architects Specifications

The following items list the Engineers and Architects specifications.

- Air duct smoke detectors shall be Air Products and Controls Inc. SL-2000 Series. For ionization detectors the model number is SL-2000-N.
- For photoelectric detectors the model number is SL-2000-P. The detectors shall be listed by Underwriters Laboratories per UL 268A.
- The detectors shall operate at air velocities from 100 feet per minute to 4,000 feet per minute and at temperatures of no greater than 140°F (60°C).
- Visual indication of alarm and power must be provided on the detector front.
- A manual reset switch shall be located on front of the device.
- Detector head shall not require additional filters or screens which must be maintained, and shall include both a standby and alarm visual indication.

Duct Smoke Detectors Hi-Temp, Low-Flow and No-Tools



SL-2000 Series

Features

- Low-Flow Technology: Both Ionization and Photoelectric models listed for velocities between 100-4000 ft./min
- Both models listed for high-temperature applications
- Operating voltages: 230VAC, 115VAC, 24VAC, 24VDC
- Interconnect up to 30 units for common functions
- Patent pending "No-Tools Required" front or rear loading and removing sampling/exhaust tubes
- Patent pending "Test Port Valve" allows for aerosol smoke testing without cover removal
- Provides a clear cover fitted with four captive "No-Tools Required" thumbscrews
- Instantaneous cover removal trouble indication
- Staggered terminal blocks for easier wiring
- Flashing LED on detector head indicates normal operation
- Magnet test capability (magnet included)
- More wiring space than competitive models
- Footprint allows easy retrofit in many applications without additional drilling
- Over 15 remote accessories available
- Duct wall gaskets on back of enclosure are pre-installed
- Compatible with the WP-2000 weatherproof enclosure



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Engineers & Architects Specifications

- The housing shall contain a detector base which will accept photoelectric or ionization detector heads.
- Terminal connections shall be of the screw type, a minimum of #6 screw (#12 to #22 AWG compatible). Terminals shall be provided for remote pilot, remote alarm indications, strobe/horn, and remote test/reset switch. All wiring must comply with local codes and regulations.
- A method of testing the alarm function with a magnet must be provided.
- A method of smoke testing the detector without removing the cover must be provided.
- All unit, remote accessory, and common function connection designations must be permanently affixed to the unit.
- Cover and sampling/exhaust tube installation or removal must not require the use of tools.
- Capability for interconnection of up to 30 units shall be provided for common functions.
- Sample and exhaust tubes shall be capable of removal/installation from the front and/or rear of the detector for inspection/maintenance.

Features (Continued)

- Reset switch is also an alarm test switch - competitive models require a magnet or cover removal to test at unit
- Unit includes green pilot and red alarm visual indicators
- External mounting tabs do not require cover removal to install
- Colored cover gasket indicates proper cover seal
- Compact, lightweight size means easy handling, lower shipping costs
- Two sets of 10A form "C" alarm contacts:
 - One set of 2A form "A" alarm contacts
 - One set of 10A form "C" trouble contacts
- Large terminal connection screws
- Standard interchangeable "plug-in" UL Standard 268 photoelectric or ionization heads
- Advance detector head design yields internal dust filtering
- No additional screens or filters to clean
- Compatible with building automation and fire alarm systems
- Ionization and photoelectric versions available
- Complete wiring details permanently attached to unit

Wiring

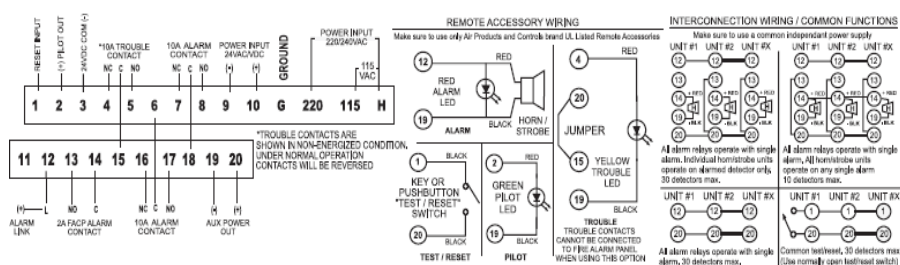


Figure 1 Wiring

Specifications

Power Requirements (without accessories)	Standby	Alarm
	230 VAC 8 mA	230 VAC 18 mA
	115 VAC 14 mA	115 VAC 32 mA
	24 VAC 55 mA	24 VAC 190 mA
	24 VDC 14 mA	24 VDC 68 mA

Relay Contact Rating: **Resistive Load**

Alarm Contacts: 2 sets form "C" rated at 10 Amps@115VAC
1 set form "A" rated at 2 Amps

Trouble Contacts: 1 set form "C" rated at 10 Amps @ 115 VAC

Air Velocity: 100 to 4,000 ft./min.

Ambient Temperature:

SL-2000-N: 32° F to 158° F (0° C to 70° C)

SL-2000-P: 32° F to 140° F (0° C to 60° C)

Humidity: 85 ±5% RH (@32 ±2° C; 86 ±3.6° F) (Non-Condensing/Non-Freezing)

Wiring: Solid or stranded: #12 to #22 AWG terminals

Radioactive Element: For SL-2000-N (Ionization) Americium 241; 0.9 Micro-Curie Do not expose to corrosive atmospheres

Hardware: 7" exhaust tube, sampling tube end cap, mounting template, test magnet, and mounting hardware included

Material: Grey plastic backbox, clear plastic cover (Makrolon 94V-0)

Ordering Information

Part Number	Description
SL-2000-N	Ionization: 230VAC, 115VAC, 24VAC, 24VDC
SL-2000-P	Photoelectric: 230VAC, 115VAC, 24VAC, 24VDC
Detector Model Number	
SL-2000-N	55000-225APO
SL-2000-P	55000-328APO
Sampling Tubes	
STN-1.0	Sampling tube for 12" or less duct width
STN-2.5	Sampling tube for 6" to 2.5' duct width
STN-5.0	Sampling tube for 2.5' to 5.0' duct width
STN-10.0	Sampling tube for 5.0' to 10.0' duct width
Dimensions:	
MAX. NET WT.	13 1/2" L x 4 1/2" W x 2 1/4" H
	2 1/2 lbs.

Accessories

MS- and MSR-Series remote accessories, WP-2000 weather-proof enclosure, TG-2000 aerosol test gas, and T-PB power supplies (All available from Air Products and Controls Inc.)

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