

# SL-2000 SERIES DUCT SMOKE DETECTORS

Hi-Temp, Low-Flow & No-Tools

# **PRODUCT APPLICATION**

The SL-2000 Series Conventional 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.

## PRODUCT DESCRIPTION

The SL-2000 includes many features that represent true innovations from current generation duct smoke detectors. Our traditional installer/servicer-friendly approach has been closely followed and expanded throughout the SL-2000. This philosophy provides a new level of efficiency in after-purchase value to both the installer/servicer 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







**MEA** ACCEPTED

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.

#### **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
- Patented "No-Tools Required" front or rear loading and removing sampling/exhaust tubes
- Patented "Test Port Valve" allows for aerosol smoke testing without cover removal
- 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

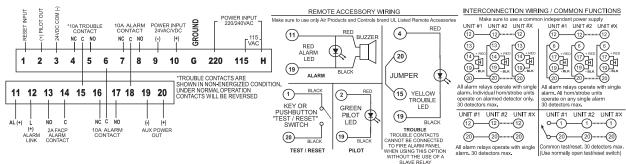
Air Products and Controls is a Brand of Apollo America 25 Corporate Drive Auburn Hills, MI 48326 (248) 332-3900 Phone (888) 332-2241 Toll free (248) 332-8807 Fax www.ap-c.com



- ❖ Compatible with the WP-2000 weatherproof enclosure
- 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
- UL, CUL, CSFM, and MEA Listed
- Compact, lightweight size means easy handling, lower shipping costs
- Two sets of IOA form "C" alarm contacts
- One set of 2A form "A" alarm contacts
- One set of IOA form "C" trouble contacts
- Large terminal connection screws
- Standard interchangeable "plug-in" UL268 photoelectric or ionization heads
- Advanced 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

Distributed By:

#### WIRING



PRODUCT SPECIFICATIONS

PRODUCT SPECIFICATIONS		
MODEL NUMBER:	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:	FAST Tube	Sectional sampling tube, kit fits up to 90" duct width
	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
ACCESSORIES:	MS- and MSF	R-Series remote accessories, WP-2000 weatherproof
	enclosure, TO	G-2000 aerosol test gas, and T-PB power supplies
	(All available from Apollo America)	
POWER REQUIREMENTS: (without accessories)	230VAC	12 mA
Standby:	115VAC	22 mA
	24VAC	55 mA
	24VDC	14 mA
Alarm:	230VAC	18 mA
	115VAC	32 mA
	24VAC	190 mA
	24VDC	68 mA
RELAY CONTACT RATING:		
Alarm Contacts:	Resistive load: 2 sets form "C" rated at 10 Amps @ 115VAC	
	Resistive load	d: 1 set form "A" rated at 2 Amps
Trouble Contacts:	Resistive load: 1 set form "C" rated at 10 Amps @ 115VAC	
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	
APPROVALS:	UL & CUL Lis	sted (UL268A, UROX, UROX7) File # S2829
	CSFM Listed (3240-1004:105)	
	MEA Accepted (73-92-E; VOL. 27)	
MATERIAL:	Grey plastic backbox, clear plastic cover (Makrolon 94V-0)	
DIMENSIONS:	13 ½" L x 4 ½" W x 2 ¼" H	
MAX. NET WT.:	2 ½ lbs.	
RADIOACTIVE ELEMENT:	For <b>SL-2000</b> -	-N (Ionization) Americium 241; 0.9 Micro-Curie
	Do not expos	e to corrosive atmospheres
HARDWARE:		be, sampling tube end cap, mounting template, test
	magnet, and	mounting hardware included

## **ENGINEERS & ARCHITECTS SPECIFICATIONS**

- Air duct smoke detectors shall be Air Products and Controls 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.
- 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.

**NOTICE:** The information contained in this document is intended only as a summary and is subject to change without notice. The products described have specific instructional/installation documentation, which covers various technical, approval, code, limitation and liability information. Copies of this documentation along with any general product warning and limitation documents, which also contain important information, are provided with the product and are also available from Apollo America. The information contained in all of these documents should be considered before specifying or using the products. Any example applications shown are subject to the most current enforced local/national codes, standards, approvals, certifications, and/or the authority having jurisdiction. All of these resources, as well as the specific manufacturer of any shown or mentioned related equipment, should be consulted prior to any implementation. For further information or assistance concerning the products, contact Apollo America. Apollo America reserves the right to change any and all documentation without notice.