



*You in Control*

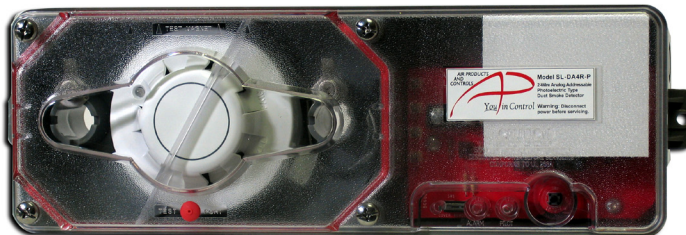
# SL-DA4R SERIES

## ANALOG ADDRESSABLE DUCT SMOKE DETECTORS

*Hi-Temp, Low-Flow & No-Tools*

### **PRODUCT APPLICATION**

The SL-DA4R Series Smoke Duct Detector is the latest analog addressable 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 via the unit's on-board alarm contact in the event of smoke detection. The SL-DA4R 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 key switches or push buttons.



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### **PRODUCT DESCRIPTION**

The SL-DA4R 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-DA4R. 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. The key features below detail many of the customer-driven innovations incorporated in the SL-DA4R Series. Innovative product combined with unsurpassed customer service equals the right combination for all of your projects.

### **FEATURES**

- ❖ Low-Flow Technology: Both Ionization and Photoelectric models listed for velocities between 100-4000 ft./min
- ❖ Both Ionization and Photoelectric models listed for high-temperature applications
- ❖ Operating voltages: 24VAC or 24VDC
- ❖ Units supplied with slide-in XPERT Card for easy device addressing
- ❖ 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
- ❖ Clear cover fitted with four captive "No-Tools Required" thumbscrews
- ❖ Instantaneous cover removal trouble indication
- ❖ In-line terminal block for easier wiring
- ❖ Steady red LED on detector head indicates alarm operation
- ❖ 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
- ❖ Built-in alarm relay test switch
- ❖ 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 Listed; CSFM, MEA pending
- ❖ Compact, lightweight size means easy handling, lower shipping costs
- ❖ One set of 15A form "C" alarm contacts
- ❖ Large terminal connection screws
- ❖ XP95A 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 fire alarm systems utilizing Apollo XP95 and/or Discovery protocol
- ❖ Ionization and Photoelectric versions available
- ❖ Complete wiring details permanently attached to unit



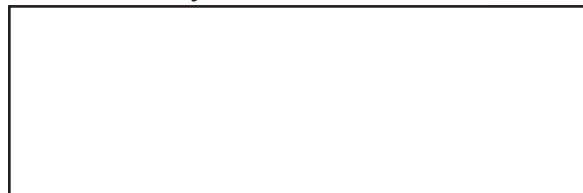
**CSFM LISTED**

**MEA ACCEPTED**

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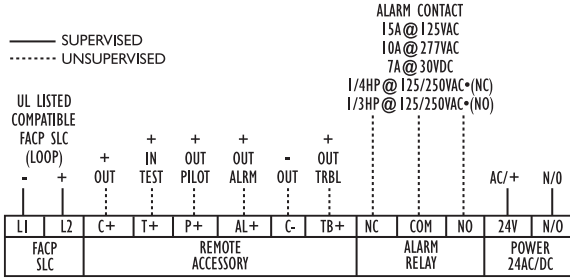
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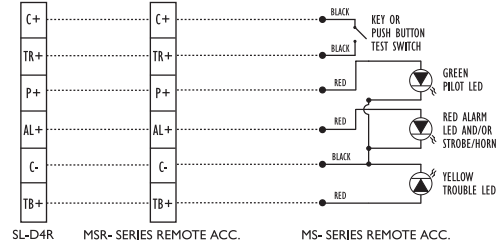


# WIRING

## Terminal Connections



## Remote Accessory Wiring



## PRODUCT SPECIFICATIONS

MODEL NUMBER:	<b>SL-DA4R-N</b>	Ionization: 24VAC or 24VDC
	<b>SL-DA4R-P</b>	Photoelectric: 24VAC or 24VDC
XP95A DETECTOR MODEL NUMBER:	<b>SL-DA4R-N</b>	55000-550APO
	<b>SL-DA4R-P</b>	55000-650APO
DETECTOR COMPATIBILITY:	FACP utilizing Apollo XP95 and/or Discovery protocols	
SAMPLING TUBES:	<b>STN-1.0</b>	Sampling tube for 12" or less duct width
	<b>STN-2.5</b>	Sampling tube for 6" to 2.5' duct width
	<b>STN-5.0</b>	Sampling tube for 2.5' to 5.0' duct width
	<b>STN-10.0</b>	Sampling tube for 5.0' to 10.0' duct width
ACCESSORIES:	MS- and MSR- Series remote accessories, WP-2000 weatherproof enclosure and TG-2000 aerosol test gas and T-PB power supplies (All available from Apollo America)	
CONTROL BOARD POWER REQUIREMENTS:	(without accessories)	
	Standby:	24VAC 105 mA 24VDC 26 mA
	Alarm:	24VAC 195 mA 24VDC 54 mA
RELAY CONTACT RATING:	Alarm Contacts: Resistive load: 1 set form "C" rated at 15 Amps @125VAC 10 Amps @ 277VAC 7 Amps @ 30VDC	
	Inductive load: 1/4 HP @ 125/250VAC (NC) 1/2 HP @ 125/250VAC (NO)	
AIR VELOCITY:	100 to 4,000 ft./min.	
AMBIENT TEMPERATURE:	<b>SL-DA4R-N</b>	32°F to 150°F (0°C to 66°C)
	<b>SL-DA4R-P</b>	32°F to 140°F (0°C to 60°C)
HUMIDITY:	10 - 95% RH Non-Condensing / Non-Freezing	
WIRING:	Solid or stranded: #12 to #22 AWG terminals	
APPROVALS:	UL & CUL Listed (UL268A, UROX, UROX7) File # S2829 CSFM Listed (3240-1004:116) MEA Accepted (73-92-E Vol. 36)	
MATERIAL:	Grey plastic backbox, clear plastic cover (Makrolon 94V-0)	
DIMENSIONS:	13 1/2" L x 4 1/2" W x 2 1/4" H	
MAX. NET WT.:	2.25 lbs.	
RADIOACTIVE ELEMENT:	For <b>SL-DA4R-N</b> (Ionization) Americium 241; 0.9 Micro-Curie Do not expose to corrosive atmospheres	
HARDWARE:	7" exhaust tube, sampling tube end cap, mounting template and mounting hardware included	

## ENGINEERS & ARCHITECTS SPECIFICATIONS

- Air duct smoke detectors shall be Air Products and Controls Inc. SL-DA4R Series. For ionization detectors the model number is **SL-DA4R-N**.
- For photoelectric detectors the model number is **SL-DA4R-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 must be provided on the detector front.
- A manual alarm relay/test switch located on the front of the device shall be provided.
- Detector head shall not require additional filters or screens which must be maintained, and control board shall include both a standby and alarm visual indications.
- The housing shall contain a detector base which will accept photoelectric or ionization detector heads as well as a means of detector addressing.
- 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 switch. All wiring must comply with local codes and regulations.
- A method of smoke testing the detector without removing the cover must be provided.
- All unit and remote accessory connection designations must be permanently affixed to the unit.
- Cover and sampling/exhaust tube installation or removal must not require the use of tools.
- 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.