

# **Four-Wire Addressable Duct Detectors/Relay** SL-DA4R-P, N

Detector

# **Description**

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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 building systems may be controlled by the SL-DA4R built in relay and/or via the Harding network fire control panel in the event of smoke detection

The SL-DA4R connects to the SLC loop monitored and controlled by the Harding Analog Loop Module (ALM3-IP). The SL-DA4R is addressed through the use of the patented XPERT<sup>TM</sup> programming card. The ALM monitors the SLC for faults and troubles and reports the SL-DA4R status to the IPF fire control unit. In addition to energizing the built-in relay.

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 remote alarm indicator accessory.

The SL-DA4R is shipped complete with a 7" exhaust tube, sampling tube end cap, a mounting template and mounting hardware. Also offered are a number of accessory products including the MSR-50 and MSR-100 remote indicator/controls, a weatherproof enclosure and TG-2000 test gas.

- Models: Photo DXP-AD4R-P, (Model SL-DA4R-P) Ion DXP-AD4R-I, (Model SL-DA4R-N)
- Input Power: 24VAC/24VDC
- Alarm Contacts:
- Resistive Load: 1 set Form "C" contacts
  - 15A@125VAC
  - 10A@277VAC
  - 7A@30VDC
- Inductive Load:
  - 1/4 HP@125/250VAC (NC)
  - 1/3HP@125/250VAC (NO)
- Sampling Tubes: STN:-1.0 12" or less STN:-2.5 6" to 2.5'

STN:-5.0 2.5' to 5" STN:-10.0 5.0' to 10'

- Air Velocity: 100-4000'/min.
- Humidity:10-95% RH Non-Condensing/Non-Freezing
- Wiring: Solid or Stranded #12 to #22 AWG terminals
- Dimensions: 13.5 L x 4.5 W x2.25 H
- Max. Net Weight: 2 lbs.



### **Features**

- High Rating, Built-in Relay
- Listed for velocities between 100-4000 ft./min
- Listed for high- temperature applications
- 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
- Vertical terminal block for easier wiring
- External mounting tabs do not require cover removal to install
- Duct wall gaskets on back of enclosure are pre-installed
- Large terminal connection screws
- Compatible with the WP-2000 weatherproof enclosure

# **Listing**

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All Specifications are subject to change without notice

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Represented by:



# Four-Wire Addressable Duct Detectors/Relay SL-DA4R-P, N

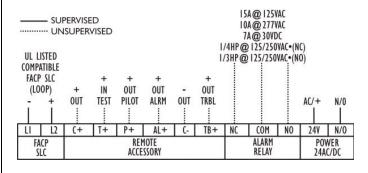
Detector

### **Engineer Specification**

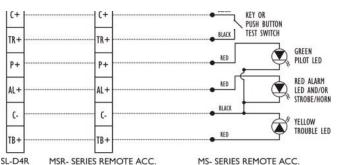
The contractor shall furnish and install, where indicated on the plans, ionization or photoelectric type duct detectors or the control of air handling units by the automatic energizing of built in relay and/or Fire Alarm control. The addressable analog duct detector will contain the patented XPERT programming card for ease of addressing. The addressable analog doctor shall also be capable of handling air velocities of 100 to 4000 feet per second, the detector head shall contain no additional screens or filters, a method of smoke testing the detector without removing the duct detector cover must be provided, cover and sampling tube or installation shall not require the use of tubes and sampling tubes must be capable of installation or removal from the front and rear of the detector for inspection and testing. The addressable analog duct detector shall be UL/ULC listed and UL/ULC listed as compatible with Harding network fire controls. The analog addressable duct detector shall be the Harding model SL-DA4R-P (photo) and SL-DA4R-N (ion).

#### Wiring Detail

#### **Terminal Connections**



## Remote Accessory Wiring



#### **Ordering Information**

Model	Data Sheet	Description
SL-DA4R-P	DS-SLDA4R-1.0	Addressable 4 Wire Photoelectric Duct Detector
SL-DA4R-N	DS-SLDA4R-1.0	Addressable 4 Wire Ionization Duct Detector

## Related Modules

SL-DAA-P	DS-SLDAA-1.0	Addressable 2 Wire Photoelectric Duct Detector
SL-DAA-N	DS-SLDAA-1.0	Addressable 2 Wire Ionization Duct Detector
MSR-50		MSR 50 Series Remote Accessories
MSR-100		MSR 100 Series Remote Accessories
WP2000		Weatherproof Enclosure
TG2000		Test Gas

#### Related Data Sheets

Series 21 Detectors: PHOTO (DET2104), DS2104; ION (DET2102), DS2102; HEAT (DET2101), DS2101; MULTI (DET2105), DS2105;

Series 22 Detectors: PHOTO (DET2204), DS2204; ION (DET2202), DS2202; HEAT (DET2201), DS2201; MULTI (DET2205), DS2205;

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