SL-2000

Duct Smoke Detector

Product Application:
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/servicer-friendly approach has been closely followed and expanded throughout the SL-2000. Our attention to detail has yielded a host of “No-Tools Required” features. Innovative design combined with unsurpassed customer service equals the right combination for all of your projects. Our standard features detail many of the customer-driven innovations incorporated in the SL-2000 Series.

Standard Features:
- Low-Flow Technology: 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 w/ cover removal trouble indication
- Magnet test capability (magnet included)
- Unit includes green pilot and red alarm visual indicators
- Four sets of Form “C” alarm contacts
- Standard interchangeable “plug-in” UL268 photoelectric or ionization heads
- Detector head design acts as an internal dust filter
- SSU-FASTTUBE Equipped (see page 2)
Air duct smoke detectors shall be Space Age Electronics, Inc. SL-2000 Series. The detectors shall be listed by UL 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 shall not require additional filters or screens which must be maintained. Terminal connections shall be of the screw type, a minimum of #6 screw (#12 to #22 AWG compatible). A method of testing the alarm function with a magnet must be provided. 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 installation or removal from the front or rear of the detector for inspection and maintenance.

**Product Specs:**

<table>
<thead>
<tr>
<th>SAE PN#</th>
<th>DETECTOR MODEL NUMBER</th>
<th>SAMPLING TUBES:</th>
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<tbody>
<tr>
<td></td>
<td>SSU-SL-2000-N Ionization: 230VAC, 115VAC, 24VAC &amp; 24VDC</td>
<td>STN - 1 Sampling Tube for 12” or less duct width</td>
</tr>
<tr>
<td></td>
<td>SSU-SL-2000-P Photoelectric: 230VAC, 115VAC, 24VAC &amp; 24VDC</td>
<td>STN - 2.5 Sampling Tube for 2.5” to 6” duct width</td>
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<td></td>
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<td>STN - 5 Sampling Tube for 2.5” to 5” duct width</td>
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<td></td>
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<td>STN - 10 Sampling Tube for 5” to 10” duct width</td>
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<td></td>
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<td>SSU-FASTTUBE Sectional sampling tube, kit fits up to 8” duct width</td>
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</tbody>
</table>

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

**POWER REQUIREMENTS: (Without accessories)**

<table>
<thead>
<tr>
<th>Stand By:</th>
<th>Alarm Current:</th>
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<tbody>
<tr>
<td>8mA @ 230VAC</td>
<td>18mA @ 230VAC</td>
</tr>
<tr>
<td>14mA @ 115VAC</td>
<td>32mA @ 115VAC</td>
</tr>
<tr>
<td>55mA @ 24 VAC</td>
<td>190mA @ 24 VAC</td>
</tr>
<tr>
<td>14mA @ 24VDC</td>
<td>68mA @ 24VDC</td>
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</table>

**RELAY CONTACT RATING:**

<table>
<thead>
<tr>
<th>Alarm Contacts:</th>
<th>Resistive load: 2 sets Form “C” rated 10 A @ 115VAC</th>
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<tbody>
<tr>
<td></td>
<td>Resistive load: 1 set Form “A” rated 2 A</td>
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<tr>
<td>Trouble Contacts:</td>
<td>Resistive load: 1 set Form “C” rated 10A @ 115VAC</td>
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</tbody>
</table>

**AIR VELOCITY:**

100 to 4,000 Ft./min.

**AMBIENT TEMPERATURE:**

Model SSU-SL-2000-N 32°F to 155°F (0°C to 70°C)

Model SSU-SL-2000-P 32°F to 100°F (0°C to 38°C)

**HUMIDITY:**

85 + 5% RH (@ 32°F or 86 + 3.6°F) non-condensing/non-freezing

**WIRING:**

#14 to #22 AWG terminals

**APPROVALS:**

UL & CUL Listed (UL268A, UROX & UROX7) File # S2829

CSFM Listed (3240-1004:105)

MEA Accepted (73-92-E; VOL. 27)

**MATERIAL:**

Grey plastic back box, clear plastic cover (Makrolon 94V-0)

**DIMENSIONS:**

13.5” W x 4.5” H x 2.25” D

**MAX. NET WT.:**

2.5 lbs.

**RADIOACTIVE ELEMENT:**

For the SSU-SL-2000-N only (ionization) contains Americium 241; 0.9 micro-Curie. Do not expose to corrosive atmospheres!

**HARDWARE:**

7” exhaust tube end cap, mounting template, test magnet and mounting hardware included.