Model FS10-R30 Flame Detector

Microprocessor-based, unitized flame detector with Nordson relay/indicator panel provides advanced, reliable fire detection, monitoring and process shutdown capability in powder coating operations.

Features and Benefits

Detector(s)
- Advanced multi-spectral infrared flame sensing technology
- Unitized microprocessor-based design with fault and fire relays
- One-half second shutdown response time
- Air shields prevent powder build-up on lens
- 90° field of view
- Automatic self-test and self-diagnostics
- No external test light source
- False alarm immunity
- Factory Mutual listed
- Optional hand-held test lamp available

Relay/Indicator Panel
- Provides 24VDC power to detector(s) – operates two detectors for most powder booth systems, and a single detector for selected, smaller booths
- Includes process shutdown relays for booth, conveyor and other interlocked equipment
- Long-life LED indicator light for power to detectors
- Long-life LED indicator lights for detector fault and fire conditions
- Audible alarm for detector fault and fire conditions
- Reset switch to reactivate detectors once fault or fire condition has been corrected
- Extra relay for additional alarm and/or beacon, or connection to plant fire panel
- UL labeled

*FS10-R30 is a trademark of Fire Sentry Corporation.

The Model FS10-R30* is a microprocessor-based, unitized flame detector that provides fast, reliable fire detection while virtually eliminating false alarms/shutdowns during powder spray booth operations.

Utilizing wide-band infrared, near-band infrared and visible sensors, and advanced signal processing, the FS10-R30 unit will detect a fire within one-half second in compliance with NFPA 33, and trigger automatic shutdown of a powder coating system.
The FS10-R30 flame detector performs an automatic self-test to assure reliable operation. The front LED blinks every 10 seconds to indicate normal operation. Fault and fire alarm relays provide signaling for detector status and process shutdown. For powder coating operations, air shields are required to help keep the FS10-R30 lens clean.

**Nordson Relay/Indicator Panel**

The Nordson relay/indicator panel is designed for use with the FS10-R30 flame detector and provides easy, convenient monitoring of detector status and complete process shutdown capability for powder booth, spray guns, conveyor and other interlocked equipment.

The panel provides power to the detectors, visual and audible indication of detector status, and process shutdown relays for the powder coating system should a fire be detected or if all detectors should go into fault. An additional relay is also provided for customer use, either for an additional alarm or beacon, or connection to the plant fire panel.

### Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>FS10-R30 Flame Detector</th>
<th>Nordson Relay Indicator Panel</th>
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</thead>
<tbody>
<tr>
<td><strong>Input Power</strong></td>
<td>24VDC nominal (18 min. – 28 max.)</td>
<td>100-240 VAC, 1 A, 50/60 Hz</td>
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<tr>
<td><strong>Power Consumption</strong></td>
<td>60mA typical</td>
<td></td>
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<tr>
<td><strong>Dimensions</strong></td>
<td>Height: 9 in. (229 mm)</td>
<td>Dimensions: Height: 12 in. (304.8 mm)</td>
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<tr>
<td></td>
<td>Length: 6 in. (152 mm)</td>
<td>Width: 10 in. (254 mm)</td>
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<tr>
<td></td>
<td>Width: 6 in. (152 mm)</td>
<td>Depth: 5 in. (127 mm)</td>
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<tr>
<td><strong>Electrical Classification</strong></td>
<td>Explosion-proof</td>
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<tr>
<td></td>
<td>Class I, Div. 1 &amp; 2, Groups B, C &amp; D</td>
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<tr>
<td></td>
<td>Class II, Div. 1 &amp; 2, Groups E, F &amp; G</td>
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For more information, speak with your Nordson representative or contact your Nordson regional office.

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