LHS™
Intrinsic Safety Barriers for Intelligent LHS™ Systems

FEATURES

• Compatible with PEGAsys™ Addressable Contact Input Devices (AI)
• Permits LHS installation in Classified Hazardous Areas
• 1-Channel Operation
• Shunt-Diode Type
• Limits Energy
• Slim Packaging
• UL Listed
• FM Approved

DESCRIPTION

Linear Heat Sensor (LHS™) applications, in classified hazardous areas with potentially explosive vapors, dust or fibers, require the use of Intrinsic Safety Barriers so as to limit the total energy entering the hazard via the sensor wiring conductors.

Kidde P/N 73-117068-201 shunt-diode Safety Barriers are 1-channel devices that use intrinsically safe techniques to allow electrical signals to be conveyed between non-hazardous (safe) and hazardous areas. The Safety Barriers achieve this by limiting the transfer of energy in one direction to a level that cannot cause ignition of explosive atmospheres.

WIRING

As shown in Figure 1, the Intrinsic Safety Barrier (P/N 73-117068-201) is used in Intelligent LHS applications where SmartOne® Addressable Contact Input Devices (AI) interface one circuit of the LHS cable to the PEGAsys™ Control Panel. Each Intrinsic Safety Barrier handles two conductors and hence only one Safety Barrier is required for each LHS circuit.

INSTALLATION

Intrinsic Safety Barriers—with dimensions as shown in Figure 2 and Figure 3—must be enclosed in a separate weather-tight enclosure. Kidde offers multi-barrier enclosures suitable for 2, 5, 12, 24 and 32 barriers (see Ordering Information for part numbers).

To determine if the need for an intrinsically safe circuit exists on a specific application, consult the National Electric Code and the local Authority Having Jurisdiction (AHJ).

REFERENCE DOCUMENTATION

• Kidde® Linear Heat Detection Color Brochure: KF-0070
• Kidde LHS™ Data Sheet: 73-06
• Kidde LHS™ Installation Instructions: 73-202
• Kidde Application Guide–Intelligent LHS™ Systems: 73-100
• Kidde PEGAsys™ Color Brochure: KF-0045
• Kidde PEGAsys™ Data Sheet: 76-000
• SmartOne® Addressable Input Module Data Sheet: 74-214

Figure 1. Typical Schematic Wiring Diagram
DIMENSIONS

Figure 2. Intrinsic Safety Barrier Dimensions (Inches)

Figure 3. Intrinsic Safety Barrier Dimensions (Metric)

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>73-117068-201</td>
<td>Intrinsic Safety Barrier for Intelligent LHS</td>
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<tr>
<td>73-117068-032</td>
<td>Intrinsic Safety Barrier Weatherlight Enclosure.</td>
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<tr>
<td>73-117068-033</td>
<td>Holds 2 Barriers.</td>
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<tr>
<td>73-117068-034</td>
<td>Holds up to 5 Barriers.</td>
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<tr>
<td>73-117068-035</td>
<td>Holds up to 12 Barriers.</td>
</tr>
<tr>
<td>73-117068-036</td>
<td>Holds up to 24 Barriers.</td>
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