SD505-6IB (6” Isolator Base) Installation Instructions

The SD505-6IB is a 6 inch isolator base that fits underneath the 6 inch detector base.

Class A (Style 7) Configuration

An isolator base is used to isolate a short circuit wiring fault on a Class A (Style 7) SLC loop. Normally if the control panel detects a short on the SLC loop the entire loop is disabled. When isolator modules are used (as shown in Figure 1) and a short, open or ground fault occurs on the SLC loop, it will be detected as a trouble but all the SLC devices will continue to operate.

Class B (Style 4) Configuration

Class B (Style 4) Configuration

1. If a short occurs at point A (Figure 2), isolator base 1 will activate, isolating SLC devices 2 and 3 from the rest of the loop.
2. If a short occurs at point B (Figure 2), isolator base 2 will activate, isolating SLC devices 5 and 6 from the rest of the loop.
3. If a short occurs at point C (Figure 2), isolator base 3 will activate, isolating SLC devices 8 and 9 from the rest of the loop.

SD505-6IB Specifications

<table>
<thead>
<tr>
<th>Specification Parameter</th>
<th>Rating</th>
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</thead>
<tbody>
<tr>
<td>Operating Temperature:</td>
<td>32° - 120° F (0° - 49° C)</td>
</tr>
<tr>
<td>Dimensions:</td>
<td></td>
</tr>
<tr>
<td>Length:</td>
<td>4-7/8”</td>
</tr>
<tr>
<td>Width:</td>
<td>4-7/8”</td>
</tr>
<tr>
<td>Depth:</td>
<td>7/8”</td>
</tr>
<tr>
<td>Operating Voltage:</td>
<td>32 VDC</td>
</tr>
<tr>
<td>Battery Current Draw during AC loss:</td>
<td>Alarm/Standby: 92 uA</td>
</tr>
<tr>
<td>SLC Current:</td>
<td>50 uA</td>
</tr>
<tr>
<td>Max. SLC Loop Resistance:</td>
<td>50Ω</td>
</tr>
</tbody>
</table>

For indoor use only
Wiring the SD505-6IB

Note: Installation and wiring of this device must be done in accordance with NFPA 72 and local ordinances.

Important!: All wiring is supervised and power limited.

Important!: No more than 256 isolator devices (SD505-LIM or SD505-6IB) can be used on a SLC loop.

Wiring the SD505-6IB to the SLC Terminals

The SD505-6IB connections for the SLC loop internal and external are the same. Wire as shown in Figure 3 or Figure 4. Notice that “Out Terminals” wire to “In Terminals”.

Mounting the SD505-6IB

The SD505-6IB mounts on a standard single or double gang electrical switch box.

Follow these steps to mount the SD505-6IB:

1. Mount the extension base using the #8 1-1/2 screws through the extension base mounting holes. (See Figure 5.)
2. Wire the SLC loop as shown in Figure 3 or Figure 4.
3. Connect wiring harness to the smoke base as shown in Figure 5.
4. Plug wiring harness into harness connector. Refer to Figure 3 and Figure 5.
5. Attach the smoke base (P/N SD505-6AB) to extension base (P/N 120505) using the #8 1/2”. (See Figure 5.)

Note: Do Not over tighten screws.