SD505-6RB (6” Relay Base) Installation Instructions

This sheet is intended to be used to install the SD505-6RB to a Silent Knight Addressable control panel. Refer to the control panel installation manual for programming instructions (P/N 151139 or 151209).

The SD505-6RB adds a relay output function to a Silent Knight addressable detector. The Form C relay is rated at 8.0 amps for 240 VAC, 120 VAC and 30 VDC applications.

Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Rating</th>
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</thead>
<tbody>
<tr>
<td>Relay Contact Rating:</td>
<td>8.0 A @ 30 VDC</td>
</tr>
<tr>
<td></td>
<td>8.0 A @ 240/120 VAC</td>
</tr>
<tr>
<td>SLC Operating Voltage:</td>
<td>32 VDC</td>
</tr>
<tr>
<td>SLC Current for Battery Calculation:</td>
<td>0.082 mA (Alarm and Standby)</td>
</tr>
<tr>
<td>Operating Temperature:</td>
<td>32° - 120° F (0° - 49° C)</td>
</tr>
<tr>
<td>Humidity:</td>
<td>10-85% RH</td>
</tr>
<tr>
<td>Max. SLC Loop Resistance:</td>
<td>50 Ω</td>
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</table>

Wiring

This section contains information on how to wire the SD505-6RB to the SLC Loop of the control panel, how to wire the SD505-6RB to the 6” detector base, and wiring guidelines for each.

Figure 1 illustrates how to run the wiring for the SLC loop and relay through the extension base, and how wiring harness 140675 connects to the 6” detector base.

Note: Low and high voltage wiring must be run through separate openings on the extension base. See Figure 1. If you are connecting both power limited and non-power limited sources to the relay base, you must use one of the following types of wire, FPLP, FPLR, or FPL within the box in accordance to NEC 760.54.

SLC Wiring

The SD505-6RB can be configured for either Class A (Style 6) or Class B (Style 4) supervision.

Class A (Style 6)

Figure 2 illustrates how to wire the SD505-6RB to the SLC loop connectors for Class A (Style 6) supervision.
Class B (Style 4)
Figure 3 illustrates how to wire the SD505-6RB to the SLC loop connectors for Class B (Style 4) supervision.

Mounting the SD505-6RB

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

Follow these steps to mount the SD505-6RB:

1. Mount the extension base using the #8 1-1/2 screws through the extension base mounting holes. (See Figure 4.)
2. Wire the SLC loop as shown in Figure 2 or Figure 3.
3. Snap the SD505-6RB cover plate over the SD505-6RB circuit board. See Figure 1.
4. Connect wiring harness (P/N 140675) to the smoke base as shown in Figure 1.
5. Plug wiring harness (P/N 140675) into harness connector. Refer to Figure 1.
6. Attach the smoke base (P/N SD505-6AB) to extension base (P/N 120505) using the #8 1/2” screws. (See Figure 4.)

Do Not over tighten screws.