Using an Auxiliary Power Supply to Power Lutron® Clear Connect® RF Keypads

Lutron® Clear Connect® RF Keypads can be powered through IEC/PELV NEC® Class 2 wiring. This is useful in applications where there is existing IEC/PELV NEC® Class 2 wiring in the wallbox, but no high voltage wire.

Requirements

- Sola/Hevi-Duty power supply SDP 1-48-100T (see Contact Information on page 2)
- Lutron® Clear Connect® RF Keypads

Specifications

Lutron® Clear Connect® RF Keypad limitations per wire gauge and distance using one (1) SDP 1-48-100T power supply:

<table>
<thead>
<tr>
<th>Wire Gauge AWG (mm²)</th>
<th>Wire Run Length ft (m)</th>
<th>Maximum Number of Lutron® Clear Connect® RF Keypads</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 to 18 (2.5 to 0.75)</td>
<td>0 to 900 (0 to 274)</td>
<td>20</td>
</tr>
<tr>
<td>20 (0.50)</td>
<td>0 to 600 (0 to 183)</td>
<td>20</td>
</tr>
<tr>
<td>20 (0.50)</td>
<td>601 to 900 (183 to 274)</td>
<td>16</td>
</tr>
<tr>
<td>22 (0.50)</td>
<td>0 to 300 (0 to 91)</td>
<td>20</td>
</tr>
<tr>
<td>22 (0.50)</td>
<td>301 to 600 (92 to 183)</td>
<td>15</td>
</tr>
<tr>
<td>22 (0.50)</td>
<td>601 to 900 (183 to 274)</td>
<td>10</td>
</tr>
<tr>
<td>24 (0.25)</td>
<td>0 to 300 (0 to 91)</td>
<td>19</td>
</tr>
<tr>
<td>24 (0.25)</td>
<td>301 to 600 (92 to 183)</td>
<td>9</td>
</tr>
<tr>
<td>24 (0.25)</td>
<td>601 to 900 (183 to 274)</td>
<td>6</td>
</tr>
</tbody>
</table>

Wiring Diagram

[Diagram showing wiring connections for Sola/Hevi-Duty SDP 1-48-100T Power Supply, Lutron® Clear Connect® RF Keypad, and other Lutron® Clear Connect® RF Keypads.]
Installation

**WARNING – Shock Hazard** – To avoid the risk of electric shock, locate and remove the fuse or lock the circuit breaker in the OFF position before proceeding. Wiring with power ON could result in serious injury or death.

1. Remove the fuse or lock the circuit breaker in the OFF position.
2. Install the SDP 1-48-100T power supply in accordance with the manufacturer’s instructions.
3. Wire the **black** wires of the Lutron® Clear Connect® Keypads to the “+” terminal of the SDP 1-48-100T power supply.
4. Wire the **white** wires of the Lutron® Clear Connect® Keypads to the “–” terminal of the SDP 1-48-100T power supply.
5. Turn on the breaker to the SDP 1-48-100T power supply.
6. Ensure that the “OK” LED is lit on the SDP 1-48-100T power supply.
7. On the SDP 1-48-100T power supply, turn the 48–56 V ADJ screw clockwise to the maximum output voltage.
8. Check all attached keypads to ensure that they are powered.

Contact Information

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