Type HL-S Hazardous Location Splice Kit for Self-Regulating Heating Cables

The HL-S hazardous location splice kit is used to make splices for self-regulating cables in hazardous Division 1 areas. Each kit contains the terminations and explosion proof seal parts needed to make all electrical connections. Panduit CT-100 crimping tool or equivalent required.

**HL-S Kit Parts:**

<table>
<thead>
<tr>
<th>Qty</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>3/4” Box</td>
</tr>
<tr>
<td>1</td>
<td>Cable entry fitting</td>
</tr>
<tr>
<td>2</td>
<td>3/4” Seal fitting with nipple</td>
</tr>
<tr>
<td>1</td>
<td>Sealing compound &amp; fiber</td>
</tr>
<tr>
<td>2</td>
<td>4” 12 AWG leadwires green</td>
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<tr>
<td>1</td>
<td>Small RTV tube</td>
</tr>
<tr>
<td>2</td>
<td>Butt splice</td>
</tr>
<tr>
<td>2</td>
<td>Ring terminal</td>
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<tr>
<td>1</td>
<td>Pipe standoff</td>
</tr>
<tr>
<td>1</td>
<td>Sealing grommet</td>
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<tr>
<td>1</td>
<td>Stainless steel label</td>
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<tr>
<td>1</td>
<td>Conduit plug</td>
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<tr>
<td>1</td>
<td>Extra grounding screw</td>
</tr>
<tr>
<td>2</td>
<td>Wire nuts</td>
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<tr>
<td>2</td>
<td>Power termination seal</td>
</tr>
<tr>
<td>1</td>
<td>3/4” to 1/2” reducing bushing</td>
</tr>
</tbody>
</table>
HAZARD OF ELECTRIC SHOCK. Disconnect all power before starting. All installations must be effectively grounded in accordance with the National Electrical Code to eliminate shock hazard.

The system designer is responsible for the safety of this equipment and should install adequate back-up controls and safety devices with their electric heating equipment. Where the consequences of failure could result in personal injury or property damage, back-up controls are essential.

Explosion Hazard. Turn off power before removing junction box cover at all times.

1. Allow 36 inches of heating cable for the horizontal seal fitting run. 12 inches are needed on pipe near the standoff to compensate for the heat loss of the tee kit. 24 inches are required to reach side seal fitting. For run entering through the pipe standoff allow enough cable to leave 8 inches past end of standoff.

2. Attach pipe standoff and sealing grommet with pipe straps. Check for allowances of additional cable for the kit as shown.

3. Strip and prepare for termination the cable running through pipe standoff according to overjacket stripping procedure (see #4).

4. Score the outer insulation 7 inches from the end of the cable. Lightly cut the outer jacket up the center to the end of heating cable and remove the outer jacket from the cable.

5. Move braid back toward the overjacket, creating a bulge.

6. At the bulge, separate the braid to make an opening.

7. While bending the heating cable, work the cable through the braid opening. Pull the braid tight.
8. Score the inner insulation 3½ inches from the end. Lightly cut the inner jacket up the center to end of heating cable and remove the inner jacket from the cable.

10. Starting at the end of the heating cable, pull each bus wire away from the core material.

11. Remove the exposed core material and cut ¼” off the end of each bus wire.

12. Liberally apply RTV over the exposed matrix and leads. Push the rubber boot over the heating cable. Trim lead ends as needed.

13. Slide on first seal fitting and tighten to a minimum of 5 full threads of engagement. Slide on junction box; also tighten to a minimum of 5 full threads of engagement.
14. Attach 2nd seal fitting. Tighten to a minimum of 5 full threads of engagement.  
Note: The heating cable must be positioned in the seal fittings so the braid transition point is visible through the seal fitting opening. See page 5.

15. Remove the metal end cap, compression ring, and sealing grommet from the cable entry seal and thread the cable entry seal to the reducer bushing. Thread the reducer bushing to the seal fitting. Tighten both to a minimum of 5 full threads of engagement.

16. For the horizontal seal fitting slide the metal end cap, compression ring, and sealing grommet over the heating cable. Position the sealing grommet 7 1/2 inches from the end of the heating cable.

17. Strip and prepare for termination the cable for the horizontal seal fitting according to overjacket stripping procedure.

18. Remove box cover and box cover gasket from the junction box, place the silicone rubber boot through the seal fitting. Slide forward until the sealing grommet is flush with the entry seal. Slide the compression ring and metal end cap forward and thread onto the cable entry seal. Tighten until metal cap bottoms out on cable entry fitting.

19. Wire nut the bus wires together accordingly. Connect the grounding braids to the green grounding leads provided with the butt splices. Crimp the ring tongue to the grounding lead and fasten the terminals to the junction box. Attach two ring terminals to box with supplied extra grounding screw.

20. Center the heating cable in the conduit opening. See page 5. Using the fiber included, pack around the heating cable forming a dam to hold the sealing compound.

21. Mix the sealing compound according to the instructions of the pouch. Fill the seal fittings.

22. Attach stainless steel label with wire ties wrapping around kit between seal fitting and junction box.
INSTALLATION

SEE DETAIL "A" BELOW

HEATING CABLE OUTER JACKET
SEALING GROMMET
SEALING COMPOUND
HEATER CABLE
BUTT SPLICE
GREEN LEAD
RING TERMINAL
POWER TERMINATION
BRAID (MUST BE SEPARATED INSIDE SEAL FITTING)
SEAL FITTING
STANDOFF OR CABLE ENTRY

DETAIL "A"
Limited Warranty:
Please refer to the Chromalox limited warranty applicable to this product at http://www.chromalox.com/customer-service/policies/termsofsale.aspx.