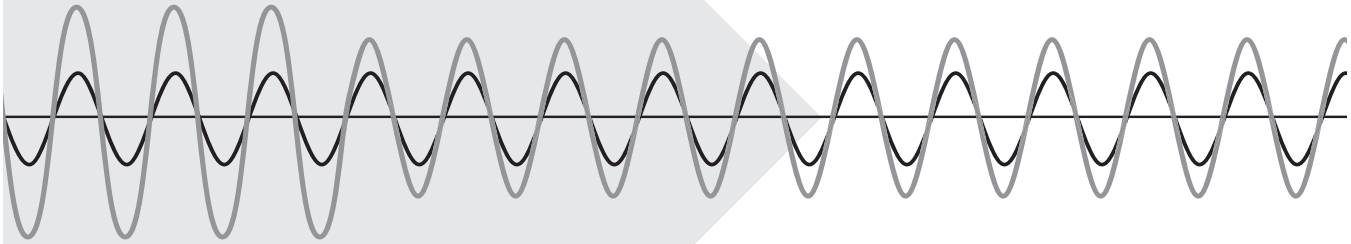
HPI™

SPD Connection System

Field Installation Manual
#6 AWG Cable

PN 750-0095-002 A00



Current Technology

STOP! and read this first

IMPORTANT!

Upon receiving the HPI cable, review the Field Termination Instructions to ensure proper field installation. Examine the contents of the Field Termination Kit to ensure that all parts have been received.

This Field Termination Kit Includes:

Ground Banding Split Ring – (PART A)
P/N 110-0039-001, Shell size 16 (1" ID) . . . . . Qty. 1

Neutral Banding Split Ring – (PART B)
P/N 110-0038-001, Shell size 14 (.88" ID) . . . . . Qty. 1

Conductor Clamp – (PART C)
P/N 110-0042-001, Size 11/16" to 1 1/4" diameter . . . . . Qty. 2

Shrink Tubing – (PARTS D & E)
P/N 128-0160-002, Size 1.5" diameter 2.5" length. . . . . Qty. 1
P/N 128-0160-002, Size 1.5" diameter 6" length . . . . . Qty. 1

Ground Conductor (color green) – (PART F)
P/N 224-0017-002, 2.5 ft.. . . . . Qty. 1

Neutral Conductor (color white) – (PART G)
P/N 224-0017-001, 2.5 ft.. . . . . Qty. 1

Field Installation Manual – (PART H)
P/N 750-0095-002 A00 (This Document) . . . . . Qty. 1

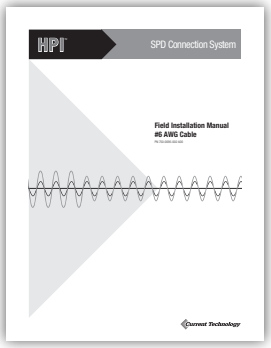
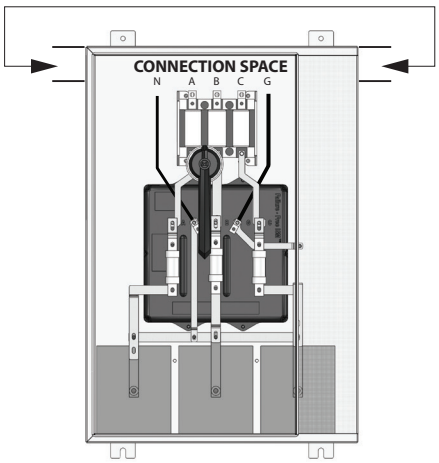


Table of Contents

CABLE ROUTING

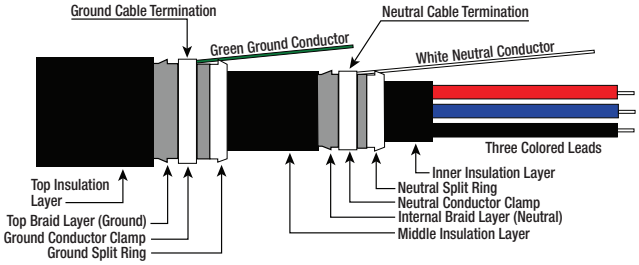
Current Technology
Recommended Cable Entry



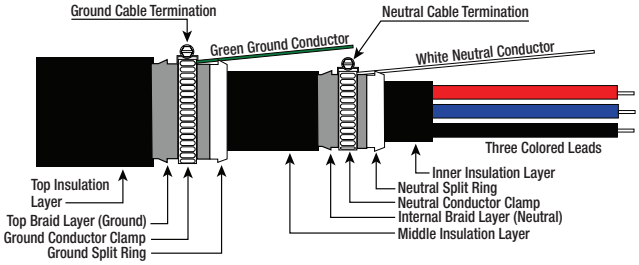
Top-Feed SL3 unit
with Disconnect shown

HPI™ – SPD Connection System *(WYE Configuration Shown)*

Factory Terminated Cable



Field Terminated *(Using unterminated cable)*



CAUTION: SPD's performance will be reduced if the conductors are (a) too long, (b) have too many bends or (c) have sharp bends.

Current Technology recommends the cable to enter from upper left or right side of the enclosure (see diagram). However, any safe entry locations meeting the requirements of the National Electric Codes are acceptable. The selected entry location should ensure short conductor runs providing a direct route with a minimum of bends. If bends are required they should be sweeping bends. Do not make sharp 90˚ bends for aesthetic purposes.

With its ground and neutral shield design, the HPI SPD Connection System can be installed with or without the use of steel or PVC conduit. If the cable is to be installed without conduit, then Current Technology requires that strain reliefs and/or grommets be used for the holes in the connected equipment, as well as the Current Technology SPD. To maintain the NEMA-4 rating of the Current Technology SPD, water tight fittings should be used.

△WARNING!
HAZARDOUS VOLTAGES PRESENT: Improper installation or misapplication may result in serious personal injury and/or damage to electrical system. Read the complete installation instructions before proceeding with installation. Remove all power to the electrical panel before installing the HPI™ SPD Connection System.

IMPORTANT SAFETY INSTRUCTIONS: All work must be performed by licensed and qualified personnel. The electrical system must be properly grounded in accordance with the U.S. National Electrical Code, state and local codes or other applicable codes for the HPI™ SPD Connection System to function properly. This device is suitable for installations rated at 600VAC or less.

WYE CONFIGURATION TERMINATION INSTRUCTIONS

1.

- Determine required length to make the connections inside the panel and add 5".
- Cut into the top insulation layer.
- Care should be taken not to damage the top braid layer.
- Cut around the outer layer and remove it from the end of the cable.

2.

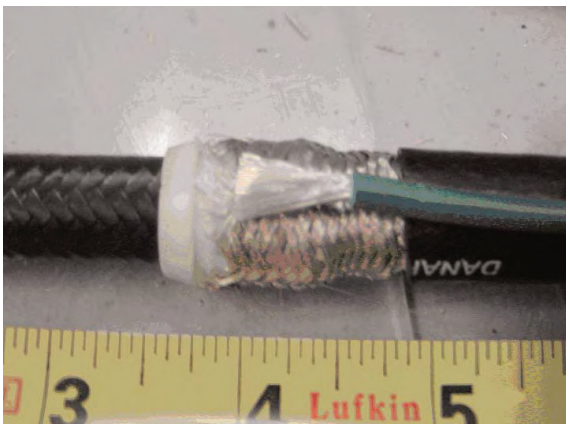
- Cut into the top braid layer approximately 1" and remove the excess top braid layer.

3.

- Take the ground banding split ring (PART A) and work it underneath the top braid layer.
- The braid layer should cover as much of the split ring as possible.
- It may be beneficial to use a tool as shown to open the braid layer making it easier to insert the split ring.

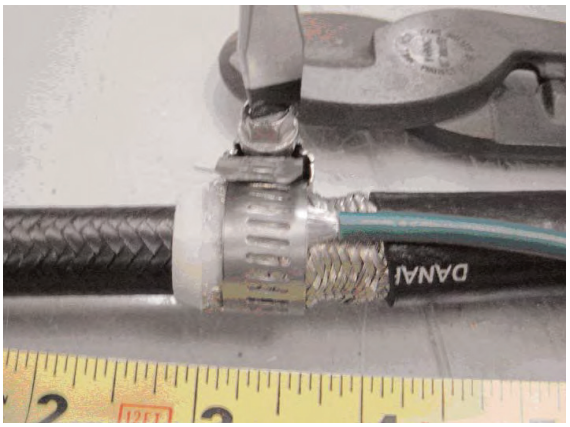
4.

- Strip the green ground conductor (PART F) approximately 1".
- Spread the leads out.
- Place it on the top braid layer as shown.
- Preform wire as shown.



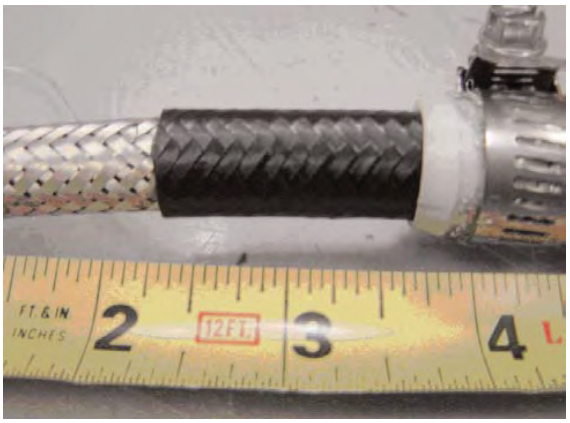
5.

- Using a conductor clamp (PART C) secure the green ground conductor to top braid layer.
- Make sure that the clamp is centered on the split ground banding ring, and tighten with a screwdriver.



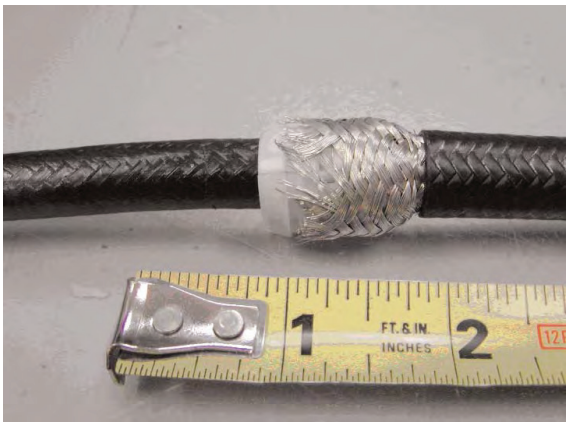
6.

- Moving down the cable a minimum of 1.5", cut and remove the next layer of insulation.
- Care should be taken not to damage the braiding underneath.



7.

- Leave approximately 1" of the internal layer of braid and remove the excess.
- Slide the neutral banding split ring (PART B) underneath the remaining braid layer.

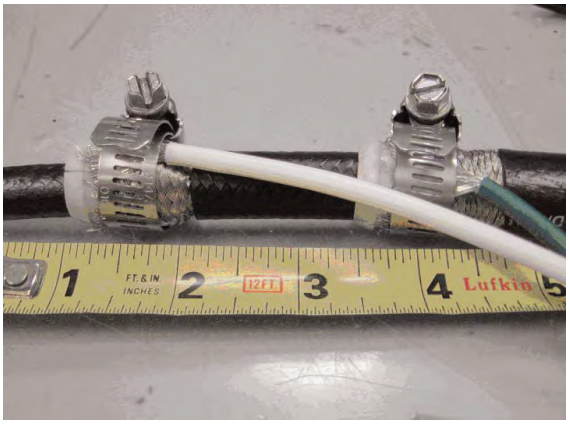


8.

- Strip the white neutral conductor (PART G) approximately 1".
- Spread the leads out and place it on the internal braid layer as shown.

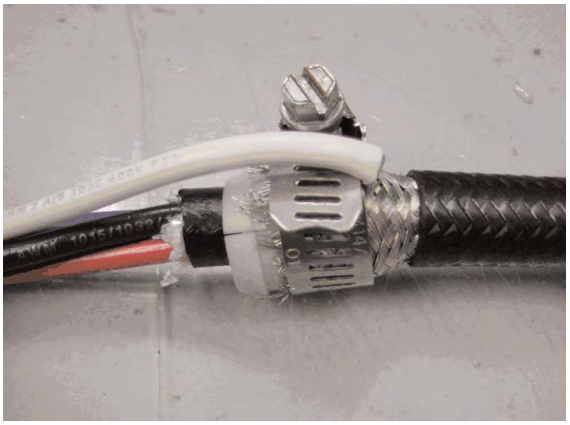
9.

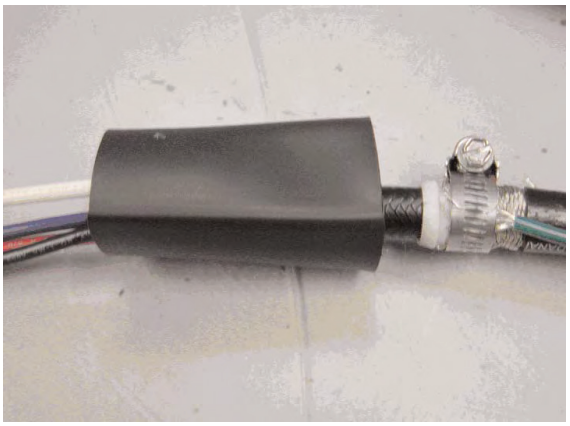
- Using a conductor clamp (PART C), secure the white neutral conductor to the internal braid layer.
- Make sure that the clamp is centered on the neutral banding split ring, and tighten with a screwdriver.



10.

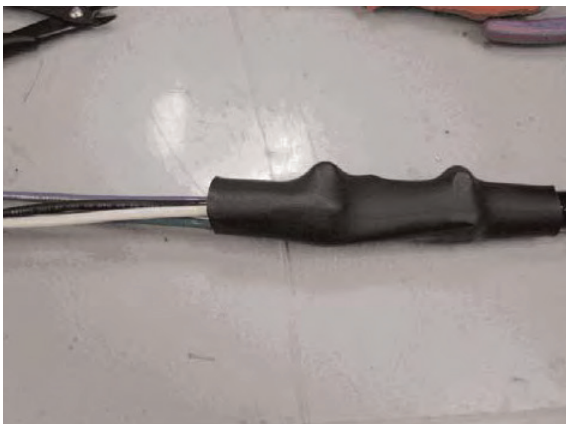
- Fold the white neutral wire over the clamp.
- Place a 2.5" heat-shrink tubing (PART D) over the neutral termination.
- Heat the heat-shrink over the neutral termination.





11.

- Fold the ground conductor back over the ground termination and cover both ground and neutral terminations with a 6" heat-shrink (PART E).
- Heat the heat-shrink.
- The finished product will resemble the picture shown.



DELTA CONFIGURATION TERMINATION INSTRUCTIONS

NOTE:

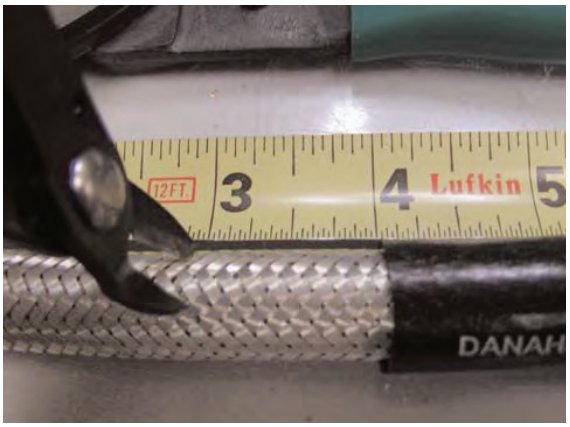
2.5" Shrink tubing (PART D) and white neutral conductor (PART G) are not required for Delta configuration.

1.

- Determine required length to make the connections inside the panel and add 4".
- Cut into the top insulation layer.
- Care should be taken not to damage the top braid layer.
- Cut around the outer layer and remove it from the end of the cable.

2.

- Cut into the top braid layer approximately 1" and remove the excess top braid layer.



3.

- Take the ground banding split ring (PART A) and work it underneath the top braid layer.
- The braid layer should cover as much of the split ring as possible.
- It may be beneficial to use a tool to open the braid layer making it easier to insert the split ring.

4.

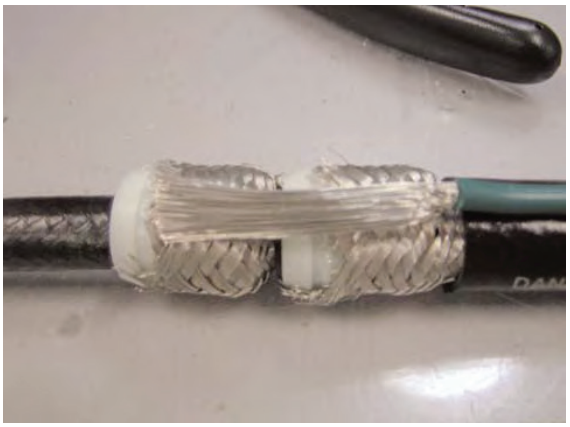
- Cut back the second layer of insulation as close to the top insulator as possible.
- Move down 1" and cut around the internal braid layer.
- Remove the excess.

5.

- Slide a neutral banding split ring (PART B) underneath the internal braid layer.

6.

- Strip a length of green ground conductor (PART F) sufficient to span the distance of both couplers (approximately 2" worth of stripped wire).



7.

- Using a conductor clamp (PART C) secure the green ground conductor to the top braid layer.

8.

- Using second conductor clamp (PART C) secure the other side of green ground conductor to the internal braid layer.

9.

- With both couplers securely tightened, the cable should resemble the picture shown.

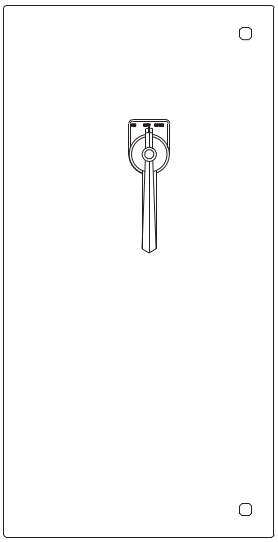
10.

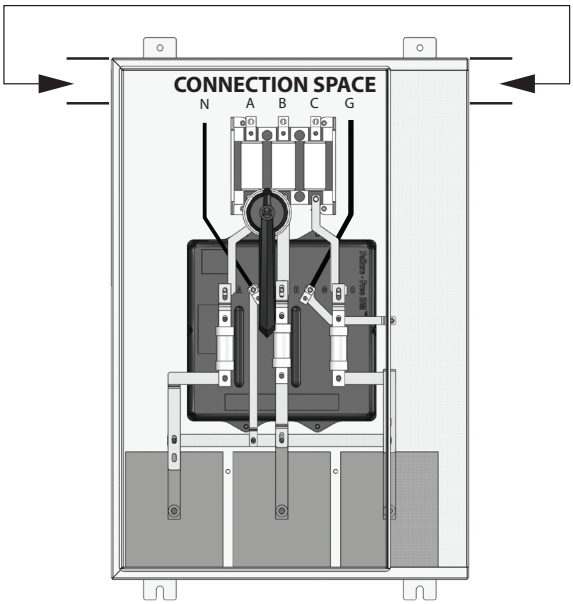
- Bend the ground conductor back over both couplers and cover both couplers with a 6" heat-shrink tubing (PART E).
- Heat the heat-shrink tubing.

11.

• The finished product should resemble the picture shown.

Current Technology
Recommended Cable Entry





Top-Feed SL3 unit
with Disconnect shown

Our staff is available to support you.
Monday through Friday, 8:00 a.m to 5:00 p.m. (EST):
800.238.5000 or 804.236.3300.
currenttechnology@tnbpowersolutions.com

Warranty Statement

Thomas & Betts Power Solutions, LLC, A Member of the ABB Group ("Seller") warrants that your Current Technology® Surge Protective Device (the "Product"), shall meet applicable industry standards and specifications and be free from defects in materials and/or workmanship. Should any failure of the Product to conform to this warranty appear within the standard warranty period, Seller shall either repair or replace the defective Product, or part thereof, upon return to Seller's manufacturing facility in Richmond, Virginia with transportation charges prepaid.

Seller shall have no liability under this warranty for any problems or defects directly or indirectly caused by misuse of the Product, alteration of the Product (including removal of any warning labels), accident, neglect or improper installation, application, operation, or repair of the Product.

THE WARRANTY STATED HEREIN IS THE SOLE AND EXCLUSIVE WARRANTY FOR CURRENT TECHNOLOGY PRODUCTS, AND IS IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES. SELLER SPECIFICALLY DISCLAIMS ALL OTHER EXPRESS AND IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Installation, operation, or use of the Product for which this warranty is issued shall constitute acceptance of the terms hereof. The liability of Seller under this warranty is expressly limited to the replacement or repair of the defective Product or the defective part thereof, at Seller's sole option.

IN NO EVENT SHALL SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND OR CHARACTER. IN NO EVENT WILL SELLER LIABILITY EVER EXCEED THE PURCHASE PRICE PAID FOR SUCH DEFECTIVE PRODUCT.

This warranty is not transferable and may only be enforced by the purchaser. Claims under this warranty must be submitted to Seller within thirty (30) days of discovery of any Product defect.

Model #

Date of Purchase

Date Installed

Installer

Warranty Period

HPI™ Standard – 15 Year MasterPlan – 20 Year

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