

SSC Series

Cold Shrink Splice
2015 PRODUCT GUIDE



15/25/28kV 35kV

SSC Series

Introduction and Product Ratings

Built for durability in the toughest environments.

The SSC Series from Richards Manufacturing is a cold shrink splicing system for use on medium voltage power cables through 35kV. Equipped with numerous advantages and features, the SSC Series is an innovative, high-performance splicing solution.

The Splice is a hybrid design, incorporating the best features of cold shrink and push-on technologies. For example, our Splice provides the benefits of cold shrink—integral jacket seals, range taking capabilities—and yet it also can be furnished with a capacitive test point!

Molded entirely from Richards' cold shrink EPDM materials, the Splice is built for durability in the toughest environments. The SSC Series is fully qualified to IEEE Std 404™; the product ratings are listed below for your reference.

Product Ratings		
Voltage Class, Phase-to-Phase	15/25/28kV	35kV
Maximum Operating Line-to-Ground Voltage	8.7/14.4/15.6kV	20.2kV
Corona Voltage Level – (partial discharge extinction voltage)	24kV	30kV
AC Withstand, 1 minute	56V	69kV
Impulse-Withstand Voltage – (BIL)	160kV	200kV

Current Ratings	
Continuous Current	Cable Rated
Short-Time Current	

*Maximum 40kA for 10 cycles per IEEE Std 404™

FEATURES OVERVIEW



1. Connectors

The shear bolts on this connector are precision-machined to shear off at the proper torque and below the surface. This eliminates the need for filing down protruding sharp edges, which can introduce contamination and cause failure. Our Connector and Cold Shrink Splice were carefully engineered and tested to ensure they work together as a proven, solid system—no more guessing about whether a manufacturer's connector will perform adequately with another manufacturer's splice and vice versa.

2. EPDM Construction

All layers of our splice are composed of EPDM, a proven material in underground electrical applications. Our oil-resistant cold shrink material was formulated in-house and is produced by our rubber manufacturing division. The durable semi-conductive jacket of the splice provides outstanding mechanical impact/tear resistance. The splice body is fully-shielded and passes industry qualification testing without any mesh or sock.

3. Integral Jacket Seal

The SSC is equipped with integral jacket seals, making sealing the metallic shield and outer jacket incredibly easy. The jacket seals are deployed over supplied sealing mastic, forming a dependable barrier against water ingress.

4. Centering Groove

A common concern when installing a cold shrink splice is ensuring the splice is properly seated. Improper positioning of a splice can result in electrical failure. The centering groove on our splice prevents this issue by ensuring the splice body is properly seated. As it is pushed from the parked position to the center of the connector, the splice will reach a *positive stop* when correctly seated. The splice will stay in the center while the cable prep and removal of the cores is completed.

5. Capacitive Test Point

The center of the splice is unexpanded, allowing for an optional capacitive test point. In fact, the SSC Series is the only cold shrink splicing solution on the market equipped with this feature.

6. Easy-to-Remove Core

Other splices employ spiral holdouts or cores that rely on grease. Spiral holdouts can be difficult to remove and may prematurely collapse. Further, cores that rely on grease can become very difficult to remove if the grease hardens or migrates over time. Our greaseless cores rely on a simple yet effective design to provide extremely easy, consistent performance across a variety of installation environments.

7. Enhanced Testing

IEEE Std 404™ requires manufacturers to perform two out of three defined tests on all splices. Richards goes above and beyond this requirement by performing ALL THREE production tests on every splice we mold.

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Ordering Information

Character Number	1	2	3	4	5	6	7	8	9	10	11	12
Sample Part Number	6	3	S	S	C	N	P	2	3	B	2	3

CHARACTER #1 (connector material)

- 6 = Aluminum
- 9 = Copper

CHARACTER #2 (voltage class)

- 2 = 5kV-28kV
- 3 = 35kV

CHARACTER #3, #4 & #5 (product family)

SSC = Straight Splice Cold Shrink

CHARACTER #6 (test point)

- N = No Test Point
- T = Test point

CHARACTER #7 (splice size— use sizing chart on back)

Size 0-Q

CHARACTER #8 & #9 (connector sizes*)

“07” through “30”

CHARACTER #10 (shear bolt style)

- X = Compression Connector
- B = 1” Hex Head Shear Bolt
- H = 1” Hex Head Shear Bolt with internal broach

CHARACTER #11 & #12 (connector sizes*)

“07” through “30”

*For connector sizes, refer to chart on back page



Various neutral configuration options are available. Please contact the factory for more information.

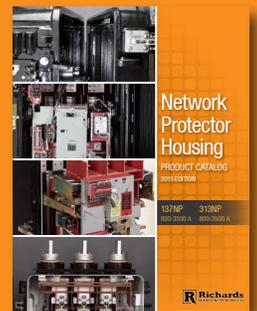
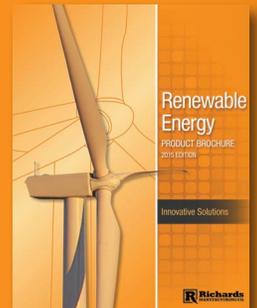
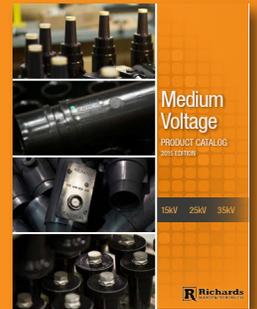


Connector Sizing Chart

Cable Size	Lug Sizing Chart	
	Stranded/Compressed Cable	Compact/Solid Cable
	"X"	"X"
#4	5	4
#3	6	5
#2	7	6
#1	8	7
1/0 AWG	9	8
2/0 AWG	10	9
3/0 AWG	11	10
4/0 AWG	12	11
250 kcmil	13	12
300 kcmil	14	13
350 kcmil	15	14
400 kcmil	16	15
450 kcmil	17	16
500 kcmil	18	17
550 kcmil	20	18
600 kcmil	20	18
650 kcmil	21	20
700 kcmil	22	20
750 kcmil	23	21
800 kcmil	24	22
900 kcmil	26	23
1000 kcmil	28	26
1100 kcmil	285	26
1250 kcmil	29	contact factory
1500 kcmil	30	contact factory

Character 7 Sizing Chart

Size	Min Cable Insulation Diameter	Max Cable Insulation Diameter
O	0.725"	1.096"
P	0.990"	1.286"
Q	1.268"	1.825"



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