

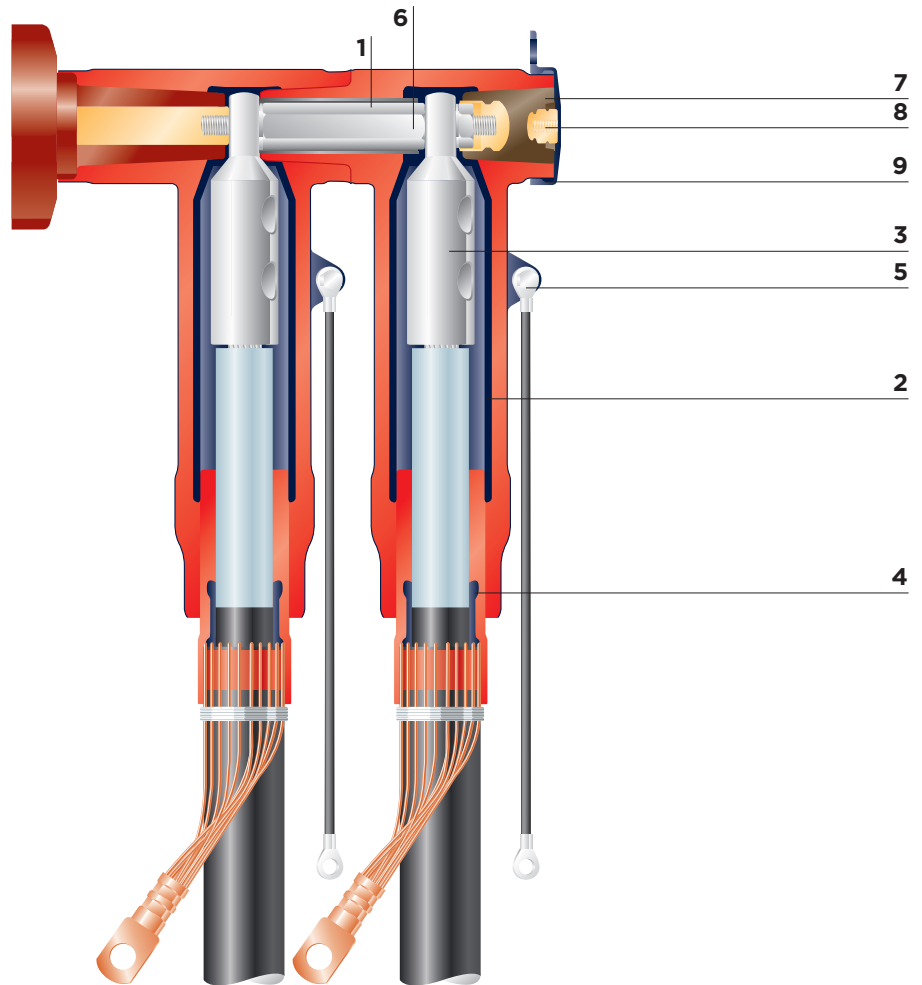
# TE'S RAYCHEM SCREENED COUPLING CONNECTORS RSTI-CC-X9

Large Cross Sections, 1250A up to 42 kV

## Product Features:

- The screened coupling connector is designed to mate with the rear end of the RSTI base screened connector system designed for 42 kV
- The insulation of the coupling connector is made of a highly modified silicone rubber characterised by high tracking resistance, elongation at break and non-flammability
- A thin-walled screen is permanently bonded onto the insulation and protects the connection system against accidental contact
- The screened coupling connector need not be removed for oversheath testing
- The combination of screened connector and coupling connector exceeds CENELEC HD 629.1 S1 requirements, which include BS, VDE and other international specifications
- Design of combination fits 630A and 1250A bushings (Interface "C1" and "C2") as specified by EN 50180 and EN 50181
- The compact design supports the use of double «T» connections inside standard terminal boxes
- The wide application range covers cable cross-sections from 400 mm<sup>2</sup> to 1000 mm<sup>2</sup>
- Conductor connection with mechanical lugs
- Easily accessible rear plug with capacitive test point
- Few accessories required for system test and earth connection
- Complete kit including lugs for easier installation and storage

## Design and construction:



### 1. Screened body

A thin walled conductive outer screen is permanently bonded to the silicone rubber insulating material of the body.

### 2. Inner screen

A conductive inner layer, as a Faraday cage around the mechanical lug, prevents corona at rated voltage.

### 3. Mechanical lug

Specially designed mechanical lugs for connecting either aluminium or copper conductor cables.

### 4. Stress cone adapter

Relieves electrical stress at the point where the cable screen is cut. The insulated section, extending beyond the wire shielding, provides a convenient point for over sheath testing.

### 5. Earthing eye and ground lead

Provides a connection point for earthing the screen.

### 6. Threaded pin assembly

A threaded pin assembly together with a spring washer and hex nut ensure high-performance electrical and mechanical contact with the bushing.

### 7. Rear plug with test point

Removable rear plug with capacitive test point.

### 8. Test point

The test point is used to determine whether the circuit is energised; alternatively it can be used for phasing.

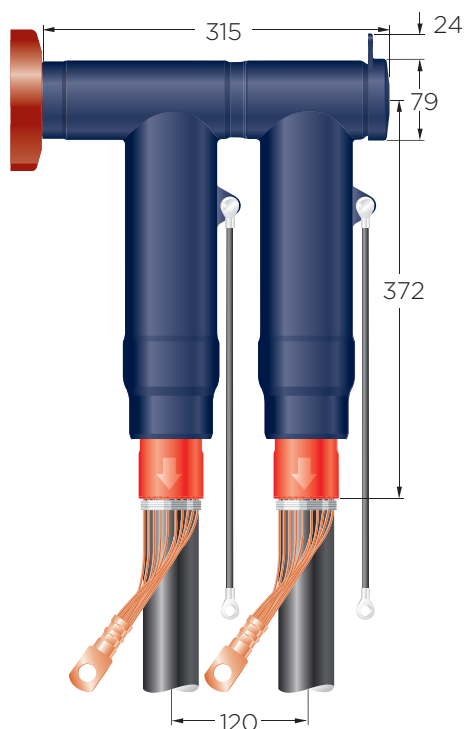
### 9. Conductive end cap

Electrical screen and protection of the rear end of the separable connector.

## Applications

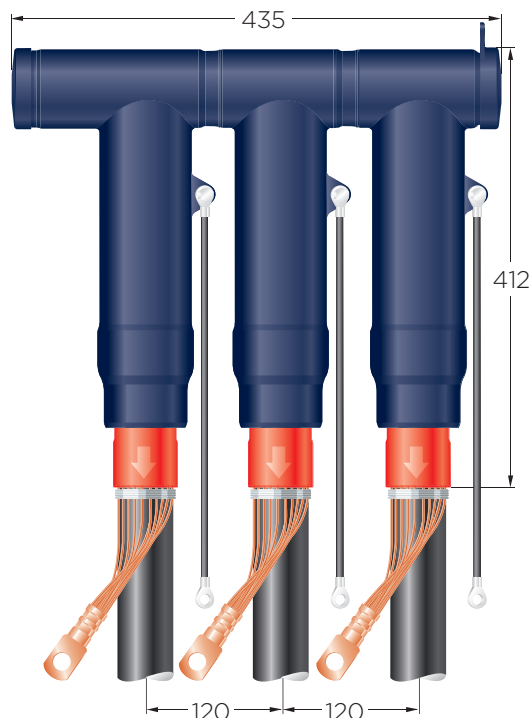
### DOUBLE CONNECTION

Material required for 3 phases:  
1 x RSTI-x95x (Basic kit)  
1 x RSTI-CC-x95x (Coupling connector kit)



### SINGLE CORE BRANCH OFF

Items required for 3 phases:  
1 x RSTI-x95x (Basic kit)  
1 x RSTI-68TP (Terminating plug kit)  
2 x RSTI-CC-x95x (Coupling connector kit)



## Accessories

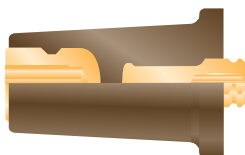
### TEST ROD

Ref. no.: RSTI-68TR; Length: 310 mm  
RSTI-68TRL; Length: 460 mm  
RSTI-68TRA; Kit includes  
2 short and 1 long test rod



### TERMINATING PLUG

Ref. no.: RSTI-68TP



### INSULATING CAP

Ref. no.: RSTI-68RC  
One piece per set



Cross Section (mm <sup>2</sup> )	OF CONNECTOR BODY MAX Ø		
	12 kV	24 kV	42 kV
630	90	94	99
800	94	98	103

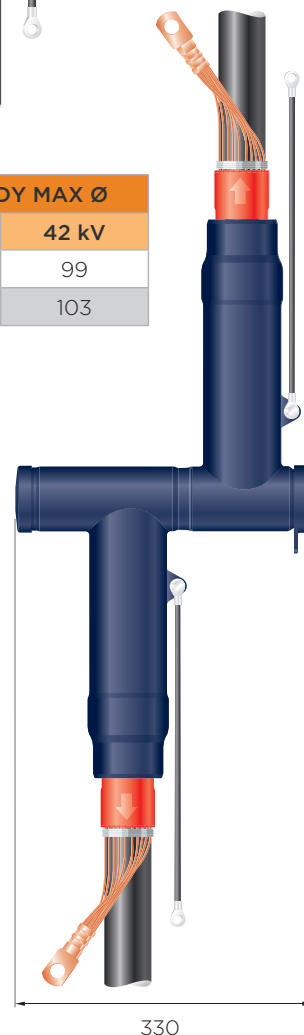
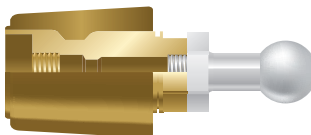
### DISCONNECTABLE INLINE JOINT

Items required for 3 phases:  
1 x RSTI-x95x (Basic kit)  
1 x RSTI-68TP (Terminating plug kit)  
1 x RSTI-CC-x95x (Coupling connector kit)

**Note:** All applications as shown in the brochure need to have a mechanical support, based on the requirements for dynamic short circuit.

### EARTHING ADAPTER

Ref. no.: RSTI-68EA20;  
Ball diameter: 20 mm  
RSTI-68EA25;  
Ball diameter: 25 mm



### TECHNICAL DATA FOR RSTI-CC-68

Cable insulation diameter range	28.9 mm - 59.0 mm
Connector cross-section range	400 mm <sup>2</sup> - 1000 mm <sup>2</sup>
Maximum system voltage	42 kV
Continuous current rating	1250A*
Basic impulse level	200 kV
Partial discharge at 2 U <sub>0</sub>	< 2 pC
AC voltage withstand, 5 min.	93.5 kV
DC voltage withstand, 15 min.	125 kV
Thermal short circuit, 1 s	74.5 kA
Thermal short circuit, 3 s	43 kA
Dynamic short circuit	125 kA

\* 1250 A is relevant for upgraded bushing C2 and cables with copper conductors

The adapters meet the international CENELEC HD 629.1 S2 specification.

### SELECTION TABLE

Cross Section (mm <sup>2</sup> )	Diameter Core Insulation (mm)		Reference Number Conductor Material
	min	max	AL or CU
<b>SCREENED SEPARABLE CONNECTION SYSTEM 12 kV WITH MECHANICAL LUGS</b>			
400	28.9	36.4	RSTI-CC-3951
500	28.9	36.4	RSTI-CC-3952
630	34.0	45.4	RSTI-CC-3953
800	34.0	45.4	RSTI-CC-3954
1000	39.1	59.0	RSTI-CC-3955
<b>SCREENED SEPARABLE CONNECTION SYSTEM 24 kV WITH MECHANICAL LUGS</b>			
400	34.0	45.4	RSTI-CC-5951
500 - 630	34.0	45.4	RSTI-CC-5952
630	39.1	59.0	RSTI-CC-5953
800	39.1	59.0	RSTI-CC-5954
1000	39.1	59.0	RSTI-CC-5955
<b>SCREENED SEPARABLE CONNECTION SYSTEM 36 kV WITH MECHANICAL LUGS</b>			
400	34.0	45.4	RSTI-CC-6951
500 - 630	39.1	59.0	RSTI-CC-6952
800	39.1	59.0	RSTI-CC-6953

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