

TE'S RAYCHEM SCREENED COUPLING CONNECTORS RSTI-CC-58

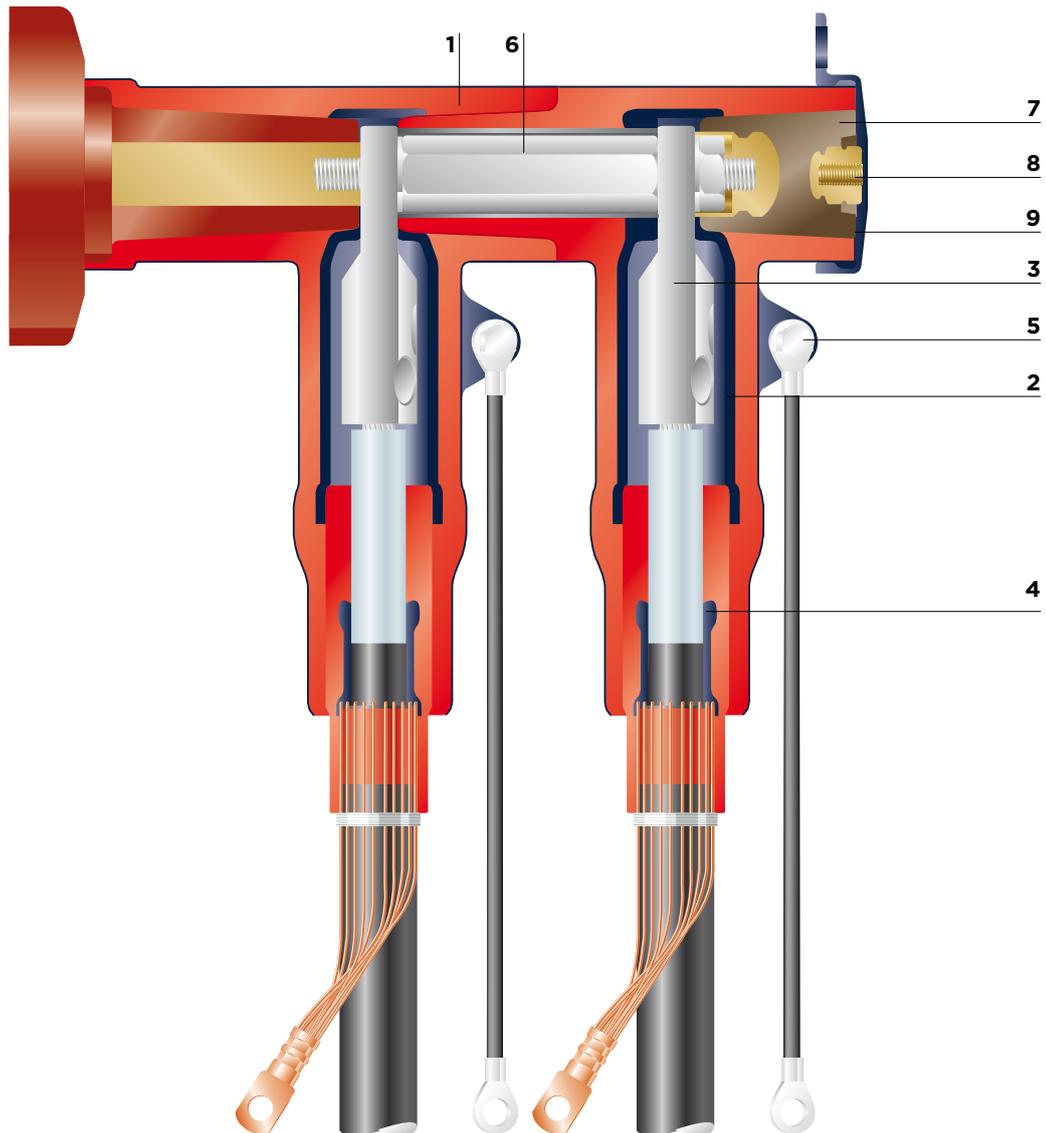
800A up to 24 kV

Product Features:

- The screened coupling connectors are designed to mate with the rear end of the TE's Raychem RSTI-58 base screened connector system designed up to 24 kV
- The insulation of the coupling connectors are 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 S2 requirements, which include BS, VDE and other international specifications
- The combination of screened connector and coupling connector fits 630/1250A bushings type "C" as specified by EN50180 and EN50181
- The compact design supports the use of double "T" connections inside standard terminal boxes
- The wide application range covers cable cross-sections from 25 mm² to 400 mm²
- Conductor connection with mechanical or DIN 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 compression or mechanical lug, prevents corona at rated voltage.

3 Compression or mechanical lugs

Specially designed DIN compression lugs, as well as tinned, mechanical lugs with shear bolts 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 overshield 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 washer, spring washer and hex nut ensure high-performance electrical and mechanical contact with the previous installed connector.

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 energized; alternatively it can be used for phasing.

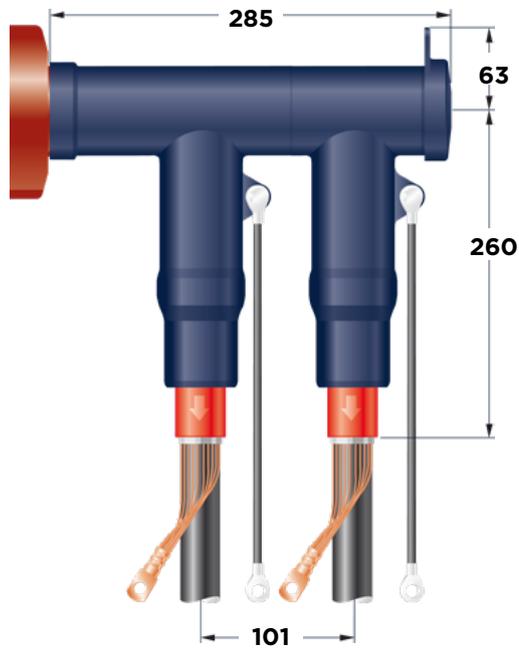
9 Conductive end cap

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

Applications

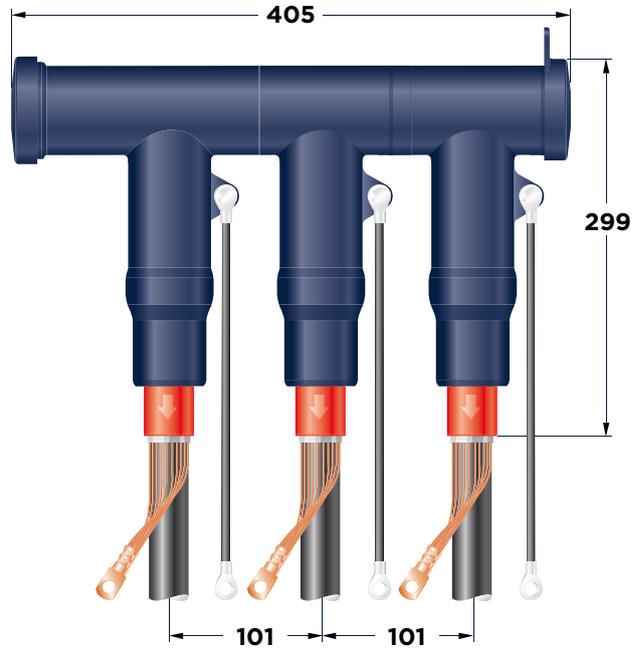
Double connection

Material required for 3 phases:
1 x RSTI-58xx (kits)
1 x RSTI-CC-58xx (coupling connector kit)



Single core branch off

Material required for 3 phases:
1 x RSTI-58xx (kits)
2 x RSTI-CC-58xx (coupling connector kit)
1 x RSTI-68TP (terminating plug kit)



Note: All applications shown in the brochure need to have a mechanical support meeting the requirements for dynamic short circuit.

Accessories

Test Rod

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



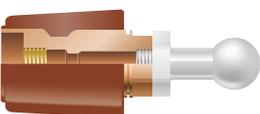
Terminating plug

Ref. no.:
RSTI-68TP



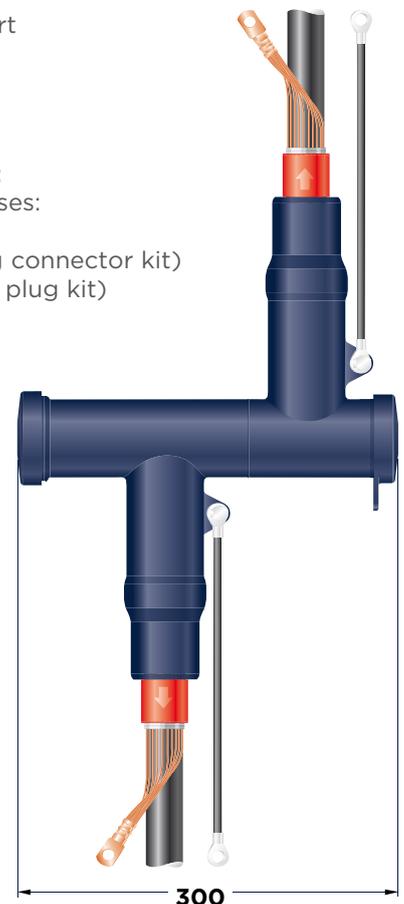
Earthing adapter

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



Disconnectable inline joint

Material required for 3 phases:
1 x RSTI-58xx (kits)
1 x RSTI-CC-58xx (coupling connector kit)
1 x RSTI-68TP (terminating plug kit)



TECHNICAL DATA FOR RSTI-CC-58

Cable insulation diameter range	12.7 mm - 34.6 mm
Connector cross-section range	25 mm ² - 400 mm ²
Maximum system voltage	24 kV
Continuous current rating	800A
Basic impulse level	150 kV
Partial discharge at 2 U ₀	< 2 pC
AC voltage withstand, 1 min	57 kV
DC voltage withstand, 15 min	76 kV
Thermal short circuit, 1 s	54 kA
Dynamic short circuit	125 kA

The adapters meet the international CENELEC HD 629.1 S2 specification.

SELECTION TABLE

SCREENED SEPARABLE COUPLING CONNECTION SYSTEM WITH DIN COMPRESSION LUGS 12 kV

Cross Section (mm ²)	Diameter Core Insulation (mm)		Reference Number Conductor Material	
	min	max	AL	CU
25	12.7	23.4	RSTI-CC-5810	RSTI-CC-5830
35	12.7	23.4	RSTI-CC-5811	RSTI-CC-5831
50	12.7	23.4	RSTI-CC-5812	RSTI-CC-5832
70	12.7	23.4	RSTI-CC-5813	RSTI-CC-5833
95	12.7	23.4	RSTI-CC-5814	RSTI-CC-5834
120	12.7	23.4	RSTI-CC-5815	RSTI-CC-5835
150	21.2	34.6	RSTI-CC-5826	RSTI-CC-5846
185	21.2	34.6	RSTI-CC-5827	RSTI-CC-5847
240	21.2	34.6	RSTI-CC-5828	RSTI-CC-5848
300	21.2	34.6	RSTI-CC-5829	RSTI-CC-5849

SCREENED SEPARABLE COUPLING CONNECTION SYSTEM WITH DIN COMPRESSION LUGS 24 kV

Cross Section (mm ²)	Diameter Core Insulation (mm)		Reference Number Conductor Material	
	min	max	AL	CU
25	12.7	23.4	RSTI-CC-5810	RSTI-CC-5830
35	12.7	23.4	RSTI-CC-5811	RSTI-CC-5831
50	12.7	23.4	RSTI-CC-5812	RSTI-CC-5832
70	12.7	23.4	RSTI-CC-5813	RSTI-CC-5833
95	21.2	34.6	RSTI-CC-5824	RSTI-CC-5844
120	21.2	34.6	RSTI-CC-5825	RSTI-CC-5845
150	21.2	34.6	RSTI-CC-5826	RSTI-CC-5846
185	21.2	34.6	RSTI-CC-5827	RSTI-CC-5847
240	21.2	34.6	RSTI-CC-5828	RSTI-CC-5848
300	21.2	34.6	RSTI-CC-5829	RSTI-CC-5849

NOTE Kits including deep indent lugs are on request.

SELECTION TABLE

SCREENED SEPARABLE COUPLING CONNECTION SYSTEM WITH MECHANICAL LUGS AND SHEAR BOLTS 12 kV

Cross Section (mm ²)	Diameter Core Insulation (mm)		Reference Number Conductor Material
	min	max	AL or CU
25 - 95	12.7	23.4	RSTI-CC-5851
95 - 120	12.7	23.4	RSTI-CC-5852
95 - 240	17.0	30.1	RSTI-CC-5853
150 - 240	21.2	34.6	RSTI-CC-5854
185 - 300	21.2	34.6	RSTI-CC-5855
240 - 400	21.2	34.6	RSTI-CC-5856

SCREENED SEPARABLE COUPLING CONNECTION SYSTEM WITH MECHANICAL LUGS AND SHEAR BOLTS 24 kV

Cross Section (mm ²)	Diameter Core Insulation (mm)		Reference Number Conductor Material
	min	max	AL or CU
25 - 70	12.7	23.4	RSTI-CC-5851
95 - 185	17.0	30.1	RSTI-CC-5853
95 - 240	21.2	34.6	RSTI-CC-5854
185 - 300	21.2	34.6	RSTI-CC-5855

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**FOR MORE INFORMATION:
TE Technical Support Centers**

USA: + 1 800 327 6996
 Canada: + 1 (905) 475-6222
 Mexico: + 52 (0) 55-1106-0800
 Latin/S. America: + 54 (0) 11-4733-2200
 France: + 33 380 583 200
 UK: + 44 0870 870 7500
 Germany: + 49 896 089 903
 Spain: + 34 916 630 400
 Italy: + 39 333 250 0915
 Benelux: + 32 16 508 695
 Russia: + 7 495-790 790 2-200
 China: + 86 (0) 400-820-6015