



## **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 crosssections from 25 mm<sup>2</sup> to 400 mm<sup>2</sup>
- 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 oversheath 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)



## 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



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



## 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)



## 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)

**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



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| TECHNICAL DATA FOR RSTI-CC-58         |  |
|---------------------------------------|--|
| Cable insulation diameter range       | 12.7 mm - 34.6 mm                        |
| Connector cross-section range         | 25 mm <sup>2</sup> - 400 mm <sup>2</sup> |
| Maximum system voltage                | 24 kV                                    |
| Continuous current rating             | 800A                                     |
| Basic impulse level                   | 150 kV                                   |
| Partial discharge at 2 U <sub>O</sub> | < 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   | Diameter Core Insulation (mm) |      | Reference Number Conductor Material |              |
| (mm²)   | 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 |

| COREENED SERVICE COURTING CONNECTION SYSTEM WITH DIN COMPRESSION   |            |
|--|------------|
| SCREENED SEPARABLE COUPLING CONNECTION SYSTEM WITH DIN COMPRESSION | LUGS 24 KV |

| Cross Section | Diameter Core Insulation (mm) |      | Reference Number Conductor Material |              |
|---------------|-------------------------------|------|-------------------------------------|--------------|
| (mm²)         | 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 | Diameter Core | Reference Number Conductor<br>Material |              |
|---------------|---------------|--|--------------|
| (mm²)         | 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  | Diameter Core | Reference Number Conductor<br>Material |              |
| (mm²)  | 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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