

RSTI **Screened, separable connection system** **630 A up to 36 (42) kV**

Features

- The insulation of the 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 connector need not be removed for over sheath testing.
- The screened cable connector exceeds CENELEC HD 629.1 S1 requirements, which includes BS; VDE and other international specifications.
- Design fits 630 A bushings (Interface "C") as specified by CENELEC HD 506 S1, EN 50180, EN 50181 and DIN 47636.
- The compact design supports the use of double "T" connections inside standard terminal boxes.
- The wide application range covers cable cross sections from 35 to 300 mm².
- Conductor connection with mechanical, DIN or deep indent lugs.
- Easily accessible rear plug with capacitive test point.
- Few accessories required for system test, double "T" and earth connection.
- Complete kit including lugs facilitates installation and storage.



RSTI

Screened, separable connection system 630 A up to 36 (42) kV

Raychem RSTI screened separable connectors are designed to connect single- and three-core polymeric cables to medium-voltage gas insulated switchgear and other equipment using CENELEC bushings specified for 630 A up to 36 kV.

Made of a highly modified silicone rubber and protected by a thin walled outer conductive screen connected to earth, RSTI connectors are equally suited for indoor and outdoor installation.

Supporting a wide application range, the design incorporates one body and two stress cone adapters to cover all cross-sections from 35 to 300 mm². The overall and cut back dimensions are designed to take up minimum space in the terminal box. RSTI connectors are equipped with a capacitive test point for determining whether the circuit is energised. A conductive cap protects this test point.

RSTI Accessories

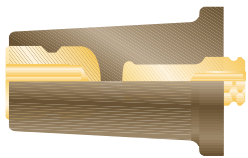
Test rod

Ref. no.: RSTI-56TR; Length: 310 mm
RSTI-56TRL; Length: 460 mm



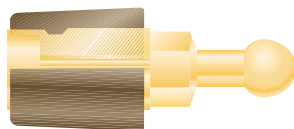
Terminating plug

Ref. no.: RSTI-56TP



Earthing adapter

Ref. no.: RSTI-56EA20;
Ball diameter: 20 mm
RSTI-56EA25;
Ball diameter: 25 mm



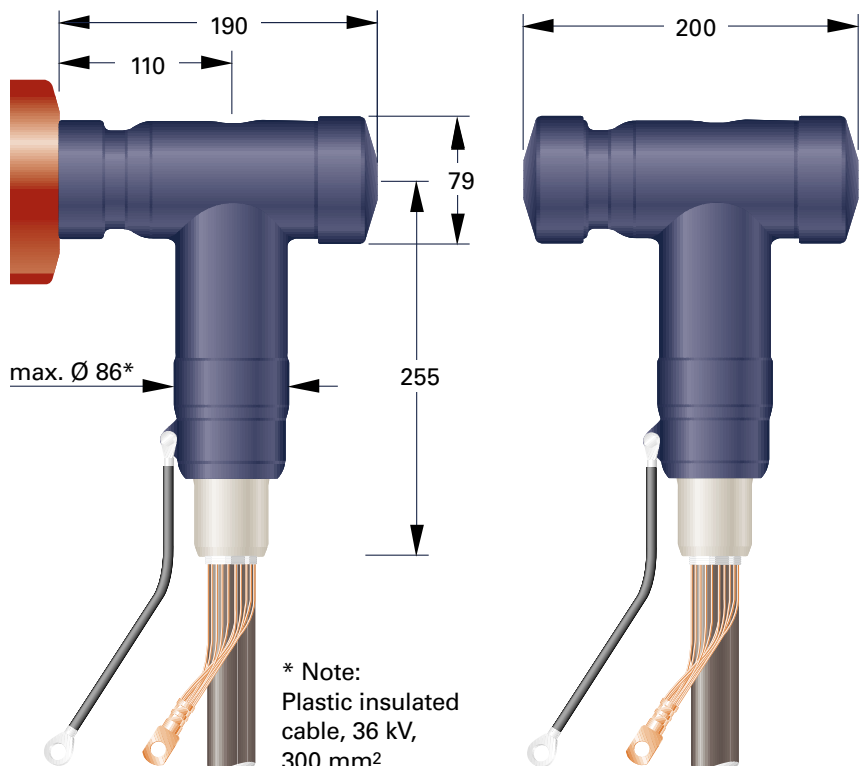
RSTI Applications

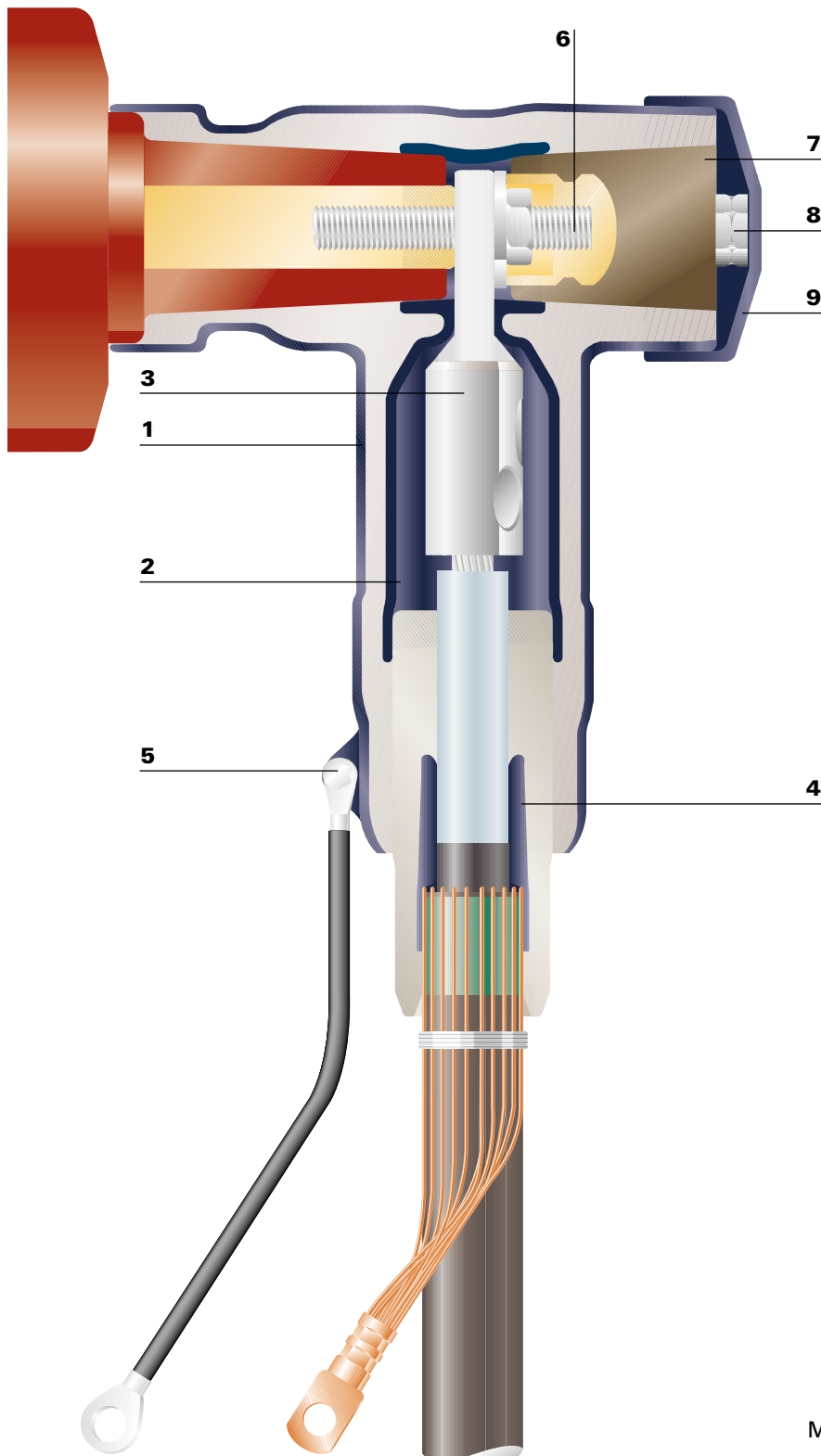
Single connection

Material requested for 3 phases:
1 x RSTI-66xx (kit)

Live end seal

Material requested for 3 phases:
1 x RSTI-66xx (kit)
1 x RSTI-56TP (Terminating plug kit)



**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 and deep indent 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 over sheath testing.

5 Earthing eye and ground lead

Provides a connection point for earthing the screen.

6 Threaded pin

A threaded pin together with a spring washer (wave type) and hex nut ensure a 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.

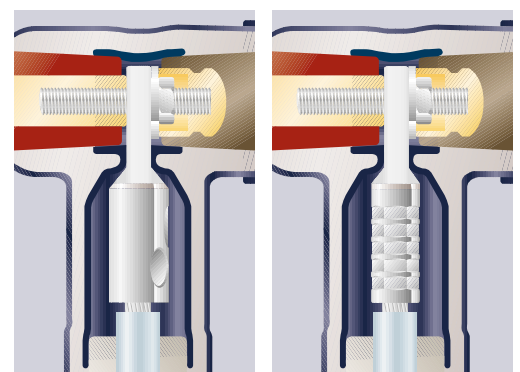
9 Conductive end cap

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

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

Mechanical lug

Compression lug



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Technical data	Cable insulation diameter range	22.4 - 40.0 mm
	Connector cross-section range	35 - 300 mm ²
	Maximum system voltage	36 (42) kV
	Continuous current rating	630 A
	Basic impulse level	170 (200) kV
	Partial discharge at 2 U ₀	< 5 pC
	AC voltage withstand, 5 min	81 (93.5) kV
	DC voltage withstand, 15 min	108 (125) kV
	Thermal short circuit, 1 s	33 kA
	Dynamic short circuit	84 kA

The adapters meet the international CENELEC HD 629.1 S1 specification

Selection table

Screened separable connection system 36 kV with DIN compression lugs

Cross Section mm ²	Diameter Core insulation		Reference number	
	min mm	max mm	Conductor material Al	Cu
50	22.4 -	33.6	RSTI-6611	RSTI-6621
70	22.4 -	33.6	RSTI-6612	RSTI-6622
95	22.4 -	33.6	RSTI-6613	RSTI-6623
120	22.4 -	33.6	RSTI-6614	RSTI-6624
150	28.9 -	40.0	RSTI-6615	RSTI-6625
185	28.9 -	40.0	RSTI-6616	RSTI-6626
240	28.9 -	40.0	RSTI-6617	RSTI-6627
300	28.9 -	40.0	RSTI-6618	RSTI-6628

Kits with deep indent compression lugs on request. Contact your local sales representative.

Screened separable connection system 36 kV with mechanical lugs and shear bolts

Cross Section mm ²	Diameter Core insulation		Reference number
	min mm	max mm	Conductor material Al or Cu
35 - 95	22.4 -	33.6	RSTI-6651
95 - 120	22.4 -	33.6	RSTI-6652
150 - 240	28.9 -	40.0	RSTI-6653
300	28.9 -	40.0	RSTI-6655

Kits for 3-core applications on request. Contact your local sales representative



All of the above information, including drawings, illustrations and graphic designs, reflects our present understanding and is to the best of our knowledge and belief correct and reliable. Users, however, should independently evaluate the suitability of each product for the desired application. Under no circumstances does this constitute an assurance of any particular quality or performance. Such an assurance is only provided in the context of our product specifications or explicit contractual arrangements. Our liability for these products is set forth in our standard terms and conditions of sale. RAYCHEM is a trademark.