

**RSTP**  
**Screened, separable connection system**  
**400 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 400 A bushings (Interface "B") 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 mm<sup>2</sup>.
- 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.



## RSTP

## Screened, separable connection system 400 A up to 36 (42) kV

Raychem RSTP 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 400 A up to 36 kV.

Made of a highly modified silicone rubber and protected by a thin walled outer conductive screen connected to earth, RSTP 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 mm<sup>2</sup>. The overall and cut back dimensions are designed to take up minimum space in the terminal box. RSTP connectors are equipped with a capacitive test point for determining whether the circuit is energised. A conductive cap protects this test point.

### RSTP Accessories

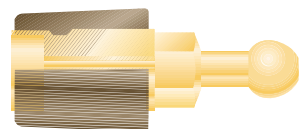
#### Test rod

Ref. no.: RSTI-56TR; Length: 310 mm  
RSTI-56TRL; Length: 460 mm  
RSTI-56TRA; Kit includes  
2 short and 1 long testrod



#### Earthing adapter

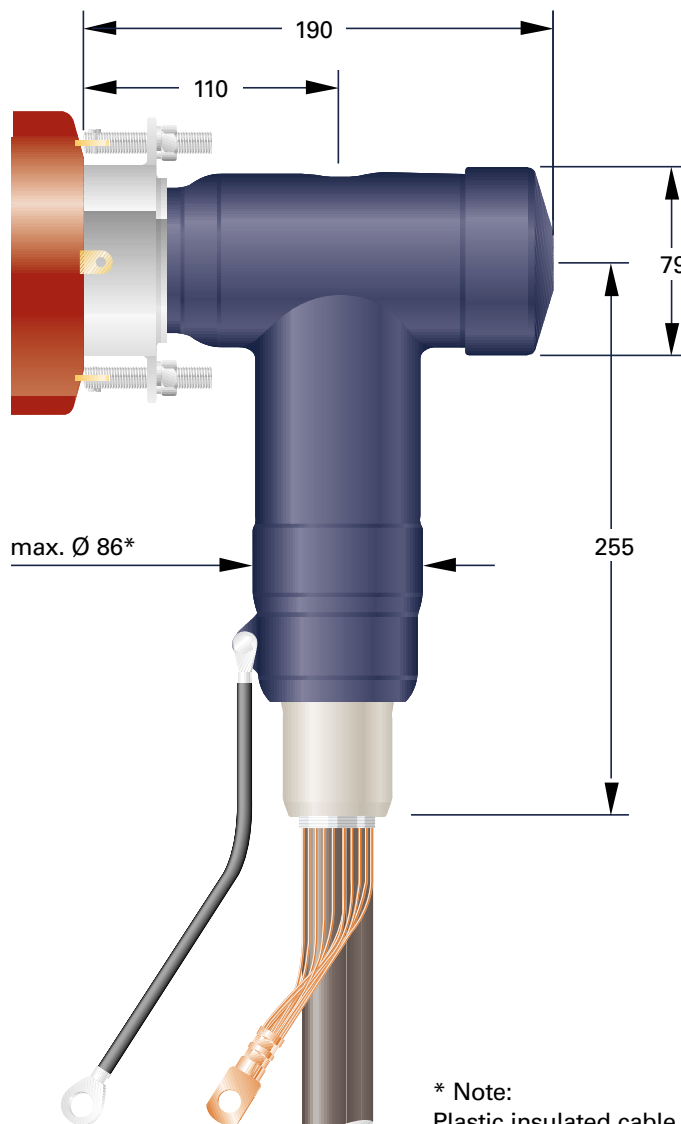
Ref. no.: RSTI-56EA20;  
Ball diameter: 20 mm  
RSTI-56EA25;  
Ball diameter: 25 mm



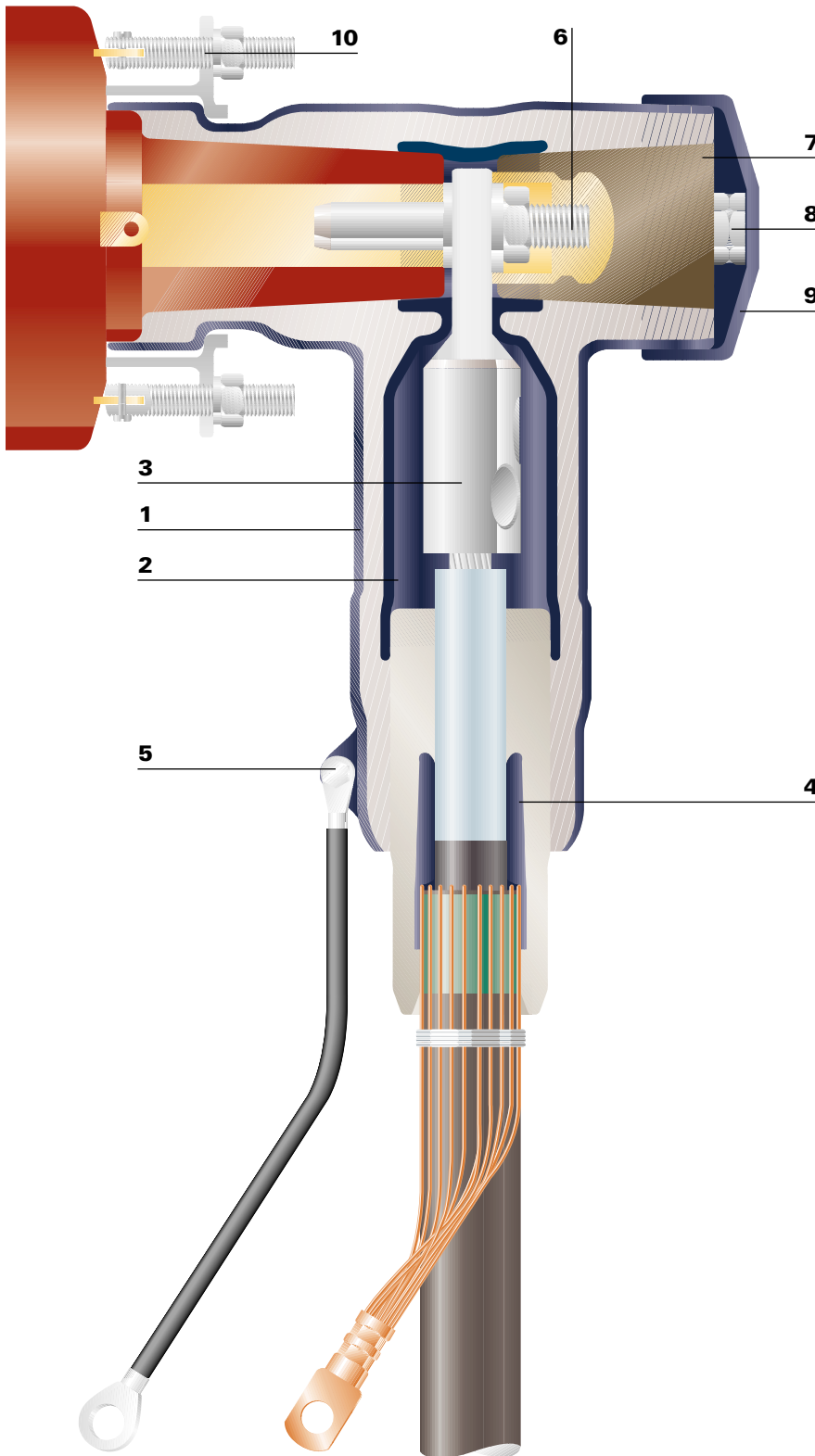
### RSTP Applications

#### Single connection

Material requested for 3 phases:  
1 x RSTP-64xx (kit)



\* Note:  
Plastic insulated cable, 36 kV, 300 mm<sup>2</sup>



**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 Contact pin**

A contact pin together with a spring washer (wave type) and hex nut ensure a high performance electrical and mechanical contact with lug and 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.

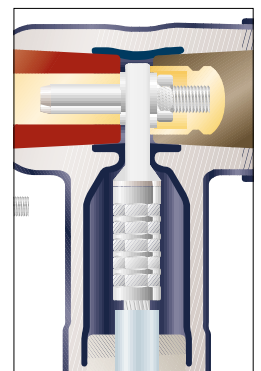
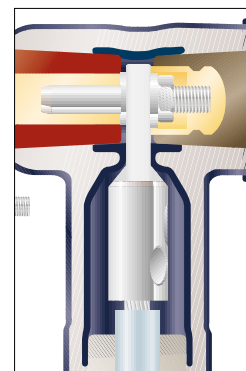
**10 Clamping assembly**

A pre-assembled metal ring at the front end ensures together with two securing screws a permanent location of the screened 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



**Technical data**

Cable insulation diameter range	22.4 - 40.0 mm
Connector cross-section range	35 - 300 mm <sup>2</sup>
Maximum system voltage	36 (42) kV
Continuous current rating	400 A
Basic impulse level	170 (200) kV
Partial discharge at 2 U <sub>0</sub>	< 5 pC
AC voltage withstand, 5 min	81 (93.5) kV
DC voltage withstand, 15 min	108 (125) kV
Thermal short circuit, 1 s	18.1 kA
Dynamic short circuit	48.5 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 <sup>2</sup>	Diameter Core insulation		Reference number Conductor material	
	min mm	max mm	Al	Cu
50	22.4 -	33.6	RSTP-6411	RSTP-6421
70	22.4 -	33.6	RSTP-6412	RSTP-6422
95	22.4 -	33.6	RSTP-6413	RSTP-6423
120	22.4 -	33.6	RSTP-6414	RSTP-6424
150	28.9 -	40.0	RSTP-6415	RSTP-6425
185	28.9 -	40.0	RSTP-6416	RSTP-6426
240	28.9 -	40.0	RSTP-6417	RSTP-6427
300	28.9 -	40.0	RSTP-6418	RSTP-6428

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 <sup>2</sup>	Diameter Core insulation		Reference number Conductor material Al or Cu
	min mm	max mm	
35 - 95	22.4 -	33.6	RSTP-6451
95 - 120	22.4 -	33.6	RSTP-6452
150 - 240	28.9 -	40.0	RSTP-6453
300	28.9 -	40.0	RSTP-6455

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. ALR, AMP, AXICOM, B&H, BOWTHORPE EMP, CROMPTON INSTRUMENTS, DORMAN SMITH, DULMISON, GURO, HELLSTERN, LA PRAIRIE, MORLYNN, RAYCHEM, and SIMEL are trademarks.



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<http://energy.tycoelectronics.com>



Tyco Electronics Raychem GmbH, Energy Division  
Finsinger Feld 1, 85521 Ottobrunn/Munich, Germany  
Phone: +49-89-6089-0, Fax: +49-89-6096345