



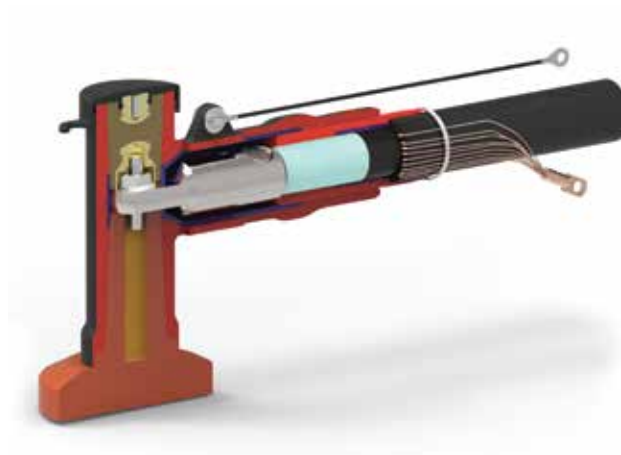
RAYCHEM SCREENED SEPARABLE CONNECTORS

FOR SWITCHGEARS AND TRANSFORMERS IN
MEDIUM VOLTAGE DISTRIBUTION NETWORKS

ADVANCED SWITCHGEAR CONNECT TECHNOLOGY FOR MEDIUM VOLTAGE NETWORKS

For more than 60 years, TE Connectivity (TE) has supported the delivery of power through well-known product lines like Raychem in a wide of array of industries, applications and environments. TE has a proven track record of advanced materials, technical innovation, reliable performance, ease of installation, technical support and has recently added new sensor capabilities. TE provides Raychem screened separable connectors RSTI products for applications including:

- Substations
- Wind farms
- Solar farms
- Industrial Applications
- Railways
- Oil and Gas





TE'S RAYCHEM SCREENED ELBOW/STRAIGHT SEPARABLE CONNECTORS RSES/RSSS FOR INTERFACE A (EN 50180/EN 50181): 250 A, UP TO 24 kV WITH INTEGRATED SEALING

KEY FEATURES

- Range taking mechanical shear bolt cable lugs
- Hybrid material design for outstanding mechanical and electrical performance
- Reliable operation even under harsh environmental conditions
- Screened connector body for improved safety
- Molded cable adapter with integrated sealing for easier installation
- Optional Voltage Detection (VD) point
- Optional Metal Housing (MH)

TE Connectivity (TE) further extends its comprehensive portfolio of separable connectors with the new generation of TE's Raychem Screened Elbow and Straight Separable connectors RSES/RSSS.

TE's Raychem Screened Elbow and Straight Separable connectors RSES/RSSS are designed to connect single-core polymeric cables to medium voltage gas insulated switchgears and other equipments using bushings type "A" (according to EN 50180/EN 50181) specified for 250A continuous current. The RSES and RSSS connectors are compliant with CENELEC HD 629.1 S2 02/2006+A1:2008, and tested for a system voltage up to 24 kV.

Made of a combination of durable EPDM rubber for the outer body and highly modified silicone rubber for the inner insulation, RSES and RSSS are equally suited for indoor and outdoor installations even in harshest environments while offering outstanding electrical performance. The separable connectors are screened by an earthed outer conductive layer that ensures a safe and reliable operation. Furthermore the improved cable adapter with integrated sealing enables a fast and easy installation.

Using mechanical shear bolt cable lugs, RSES and RSSS are easy and quick to install while supporting a wide range of different cable cross sections (16-150 mm²). TE's RSES and RSSS connectors can be equipped with a capacitive Voltage Detection (VD) point to determine the presence of voltage in the cable network or with a Metal Housing (MH) for an extra level of safety to protect against electric shock.

Customers can count on consistent, high quality products, driven by TE's proven innovation and backed by our extraordinary customer support.

TE's Raychem Screened Separable Connectors RSES/RSSS

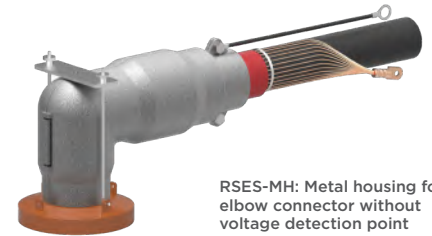
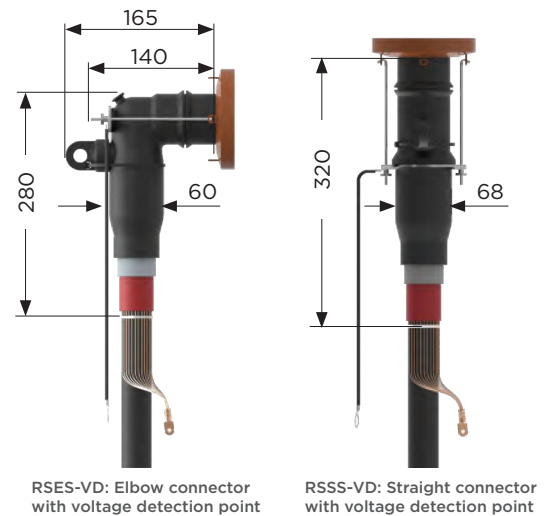


TE's RSES and RSSS separable connectors have been tested in accordance with the international specifications (e.g. CENELEC HD 629.1 S2 02/2006+A1:2008) based on the ratings given below. The cable lugs supplied with the separable connectors have been tested in accordance with IEC 61238-1 on aluminium and copper conductors in the given ranges.

TECHNICAL DATA

| | |
|---|--------------------------|
| Conductor Cross section Range | 16 - 150 mm ² |
| Diameter over conductor (round, stranded) | 4,6 - 15,0 mm |
| Diameter over conductor (round, solid) | 3,5 - 13,8 mm |
| Cable Insulation Diameter Range | 12,7 - 28,5 mm |
| Maximum System Voltage | 24 kV |
| Continuous Current Rating | 250 A |
| Basic Impulse Level | 125 kV |
| Partial Discharge at 2 U ₀ | < 3 pc |
| AC Voltage Withstand, 5 min | 57 kV |
| DC Voltage Withstand, 15 min | 76 kV |

TE's RSES and RSSS separable connectors pass a 100% routine test procedure including: AC Voltage Withstand and Partial Discharge Test.



PRODUCT SELECTION TABLE

| Kit Designation ('Type' - 'Size') | Connector Type | Conductor cross-section (mm ²) * | | | Diameter over Insulation (mm) |
|-----------------------------------|----------------|--|-----------|----------|-------------------------------|
| | | 12 kV | 17,5 kV | 24 kV | |
| RSSS-525A | Straight | 16** - 70 | 16** - 50 | 16** | 12,7 - 19,2 |
| RSSS-525B | Straight | 95 | 50 - 95 | 25 - 95 | 17,9 - 25,0 |
| RSSS-525C | Straight | 95 - 150 | 70 - 120 | 70 - 95 | 17,9 - 25,0 |
| RSSS-525D | Straight | - | 120 - 150 | 70 - 150 | 21,9 - 28,5 |
| RSES-525A | Elbow | 16** - 70 | 16** - 50 | 16** | 12,7 - 19,2 |
| RSES-525B | Elbow | 95 | 50 - 95 | 25 - 95 | 17,9 - 25,0 |
| RSES-525C | Elbow | 95 - 150 | 70 - 120 | 70 - 95 | 17,9 - 25,0 |
| RSES-525D | Elbow | - | 120 - 150 | 70 - 150 | 21,9 - 28,5 |

Default kits come without voltage detection point and metal housing, are designed for cables with wire shield and don't include accessories for earthing.

To add accessories to the kit's contents, please use the following kit modification codes:

- Add "-VD" to the type designation (RSES/RSSS) for a kit with voltage detection point (e.g. RSES-VD-525A)
- Add "-MH" to the type designation (RSES) for a kit with metal housing (e.g. RSES-MH-525A) [only compatible with elbows without voltage detection point.]
- Add "-FL" to the size designation (525x) for compatibility to cables with cold-strippable semi-conductive layer (e.g. RSES-525A-FL)
- Add "-E" to the end of the kit designation for a kit that includes wire shield earthing accessories (e.g. RSES-525A-E)
- Add "-O1" to the end of the kit designation for a kit that includes Cu tape shield earthing accessories (e.g. RSES-525A-O1)
- Add "-O2" to the end of the kit designation for a kit that includes Al foil shield earthing accessories (e.g. RSES-525A-O2)

*Applicable for conductors acc. to IEC 60228 class 1, class 2 compacted and class 5 compacted. *

** For Al class 1 & Cu class 5: 25mm²; For Cu class 1: 10mm²

te.com/energy

©2018 TE Connectivity. All Rights Reserved. EPP-2856-04/18-EN

Raychem, TE, TE Connectivity and TE connectivity (logo) are trademarks. Other logos, product and/or company names might be trademarks of their respective owners. While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

FOR MORE INFORMATION: TE Technical Support Centers

| | |
|-------------------|-----------------------|
| USA: | + 1 800 327 6996 |
| 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 |
| Canada: | + 1 (905) 475-6222 |
| Mexico: | + 52 (0) 55-1106-0800 |
| Latin/S. America: | + 54 (0) 11-4733-2200 |
| China: | + 86 (0) 400-820-6015 |

RSES 52xx

Raychem Screened Adapter System for CENELEC A Bushing 250 A up to 24 kV

FEATURES

- Straight or angled prefabricated shielded adapter made of EPDM rubber, which does not require heat during installation
- Integrated stress control. Separate termination not required
- The kit contains materials for the screening of 3-core cables. Up to 2000 mm tail length
- Test point for capacitive voltage measurement

APPLICATION

- For round polymeric insulated single and 3-core cables
- For connection to insulator bushing type A (250 A) in accordance with EN 50181
- Disconnection of the body is only permitted when power has been turned off

CONFORMS TO

- Tested in accordance to ANSI/IEEE 386, IEC 540, VDE 0278

RSES for angled connection of single and 3-core incl. mechanical lug and core screening kit



| Product name | Rated voltage kV | Cross-section mm ² | Insul. diam mm | Tail length mm | Part number |
|--------------|------------------|-------------------------------|----------------|----------------|-------------|
| RSES-5202 | 12 | 25 | 13.5 – 17.4 | 2000 | 973329-011 |
| RSES-5205 | 12 | 50 | 13.5 – 17.4 | 2000 | 653311-011 |
| RSES-5219 | 12 | 95 | 16.5 – 20.8 | 2000 | 665773-011 |
| RSES-5212 | 24 | 25 | 16.3 – 20.8 | 2000 | 472227-000 |
| RSES-5215 | 24 | 50 | 16.3 – 20.8 | 2000 | 600683-000 |
| RSES-5229 | 24 | 95 | 19.6 – 24.1 | 2000 | 481257-011 |

RSSS for straight connection of single and 3-core, incl. compression lug

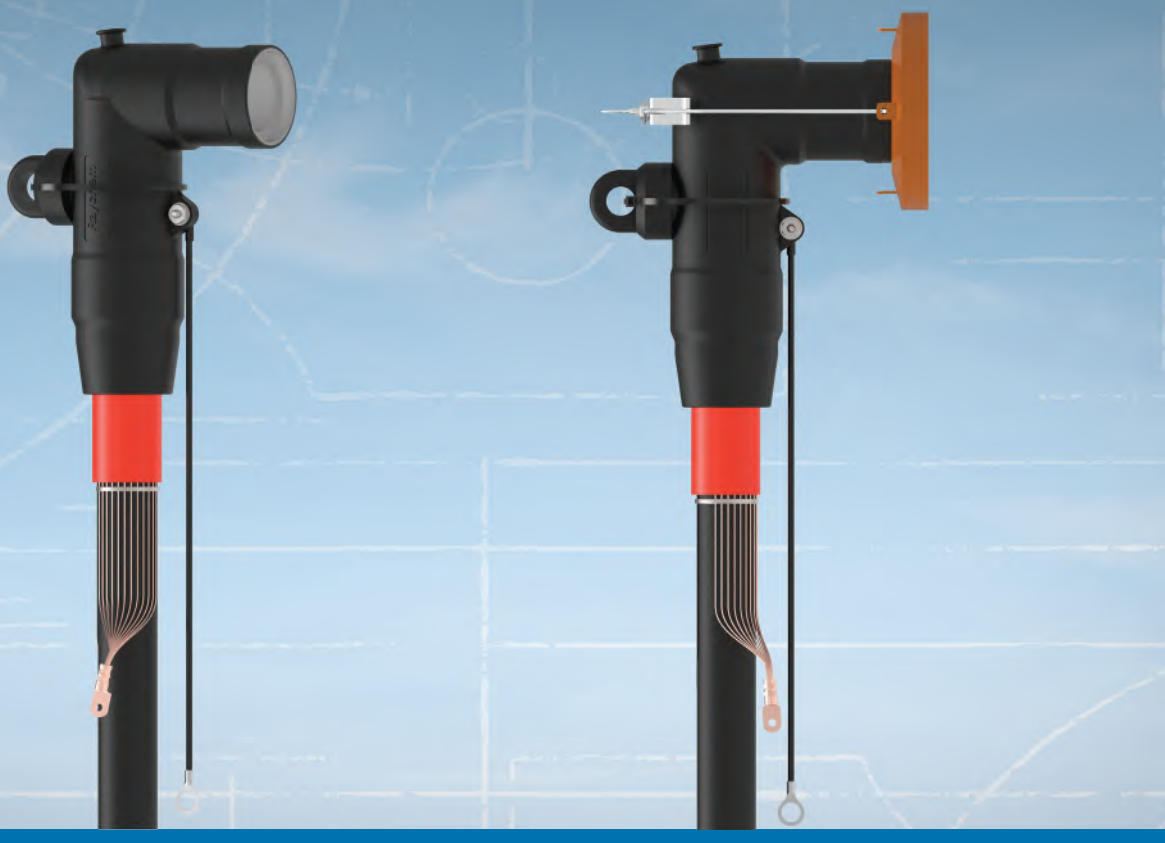


| Product name | Rated voltage kV | Cross-section mm ² | Insul. diam mm | Tail length mm | Part number |
|--------------|------------------|-------------------------------|----------------|----------------|-------------|
| RSSS-5205 | 12 | 50 | 13.5 – 17.4 | 2000 | 242591-000 |
| RSSS-5219 | 12 | 95 | 16.3 – 20.8 | 2000 | 202919-011 |
| RSSS-5215 | 24 | 50 | 16.3 – 20.8 | 2000 | 209543-011 |
| RSSS-5229 | 24 | 95 | 19.6 – 24.1 | 2000 | 129305-000 |

Protective cap for bushing type A

| Product name | Description | Part number |
|--------------|--------------------------------|-------------|
| SMOE-63917 | Shielded connection protection | CN6629-010 |

NOTE For temporary protection of the switchgear bushing. Sold in kits of 3, including installation instructions.



RAYCHEM SCREENED SEPARABLE ELBOW CONNECTION SYSTEM RSES

FOR INTERFACE B (EN 50180/EN 50181): 400 A, UP TO 36 kV

KEY FEATURES

- **Hybrid material design:**
Flexible silicone cable adapter and rugged EPDM body
- **Reliable operation even under harsh environmental conditions**
- **Easy installation due to flexible silicone cable adapter**
- **Screened connector body for improved safety and protection against accidental contact**
- **Easily accessible capacitive test point for Voltage Detection System (VDS)**
- **Shield-break design for cable outer sheath testing without disconnection of RSES**

TE Connectivity's (TE) Raychem Screened Separable Elbow connection system, RSES are the latest addition to our comprehensive portfolio of separable connectors. TE's RSES are designed to connect polymeric cables to medium voltage gas insulated switchgears, transformers or motors which are using bushings type "B" according to EN 50180/EN 50181 specified for 400 A continuous current. The RSES connectors are compliant with CENELEC HD 629.1 S2 02/2006+A1:2008.

The NEW Hybrid RSES combines all the benefits of EPDM's long service life with silicone rubber's ease of installation characteristics for an overall superior product solution. The durable EPDM insulation body provides reliable performance indoors and outdoors, especially in harsh environmental conditions. Plus, its rugged, high performance capabilities enable easy handling during push-on and connection procedures. In addition, the flexible silicone stress cone adapter ensures fast and easy installations even on larger cable cross sections.

A capacitive Voltage Detection (VD) point is built into every connector, which detects the presence of voltage in a cable network and thus helps avoid possible injury during operation and maintenance.

Customers can count on consistent, high quality products, driven by TE's proven innovation and backed by our extraordinary customer support.

Separable Elbow Connection System RSES



TE's RSES separable connectors meet CENELEC HD 629.1 S2 requirements and pass a 100% routine test procedure including: AC Voltage Withstand and Partial Discharge Test.

TECHNICAL DATA

| | |
|---------------------------------------|--------------------------|
| Diameter over insulation | 24,5 - 39,6 mm |
| Conductor cross section Range | 50 - 300 mm ² |
| Maximum system voltage | 36 kV |
| Continuous current rating | 400 A |
| Basic impulse level | 194 kV |
| Partial Discharge at 2 U ₀ | < 2 pC |
| AC Voltage Withstand (5 min) | 85,5 kV |
| DC voltage withstand (15 min) | 114 kV |
| Thermal short circuit (1 sec) | 18 kA |

PRODUCT SELECTION INFORMATION

| Product designation* | Conductor cross section (mm ²) at cable rated voltage | | Diameter over insulation (mm) |
|----------------------|---|-----------|-------------------------------|
| | 24 kV | 36 kV | |
| RSES-645A | - | 50 - 95 | 24,5 - 32 |
| RSES-645B | 120 - 240 | 95 - 120 | 24,5 - 32 |
| RSES-645C | - | 150 - 240 | 30,8 - 39,6 |
| RSES-645D | 185 - 300 | 185 - 300 | 30,8 - 39,6 |

* For use with cables, other than copper wire screened cable, please contact us.



te.com/energy

© 2020 TE Connectivity. All Rights Reserved. EPP-3388-DDS-6/20-RAYCHEM-ELBOW-CONNECTOR-TE

TE Connectivity, TE connectivity (logo), EVERY CONNECTION COUNTS, AMP, AMPACT, Axicom, Bowthorpe EMP, Crompton Instruments, Raychem, SIMEL, UTILUX are trademarks. Other logos, product and Company names mentioned herein may be trademarks of their respective owners. While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this brochure are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

FOR MORE INFORMATION: TE Technical Support Centers

| | |
|----------------------|----------------------|
| USA/Canada: | +1 800-327-6996 |
| Brazil: | +55 11-2103-6023 |
| Mexico: | +52 55-1106-0800 |
| South America: | +57 1-319-8962 |
| Benelux: | +32 16-508-695 |
| France: | +33 (0) 38-058-3210 |
| Germany/Switzerland: | +49 (0) 89-608-9903 |
| Italy: | +39 335-834-3453 |
| Middle East/Africa: | +971 4-211-7020 |
| Russia: | +7 495-790-790-2-200 |
| Spain/Portugal: | +34 912-681-885 |
| UK: | +44 08708-707-500 |
| China: | +86 400-820-6015 |

RSES 64xx

Raychem Screened Adapter System for CENELEC B Bushing 400 A for 24 and 36 kV

FEATURES

- Mechanical lugs suitable for copper and aluminium conductors
- Capacitive test point
- Complete kit including lugs facilitates installation and storage

APPLICATION

- Design fits 400 A bushings (interface "B") as specified by EN 50180 and EN 50181
- Cable cross-sections from 50 to 300mm²

CONFORMS TO

- The screened cable connector exceeds CENELEC HD 629:1 S2 requirements, which includes BS, VDE and other international specifications

RSES 6400 for single and three core cables including mechanical lugs



| Product name | Rated voltage kV | Cross-section (mm) ² | Insul. diam (mm) | Part number |
|--------------|------------------|---------------------------------|------------------|-------------|
| RSES-6451 | 24 | 70 – 95 | 22.4 – 35.5 | CX5399-011 |
| RSES-6452 | 24 | 95 – 240 | 22.4 – 35.5 | CX5398-011 |
| RSES-6454 | 24 | 185 – 300 | 22.4 – 35.5 | CX5404-011 |
| RSES-6451 | 36 | 50 – 95 | 22.4 – 35.5 | CX5399-011 |
| RSES-6452 | 36 | 95 – 150 | 22.4 – 35.5 | CX5398-011 |
| RSES-6453 | 36 | 120 – 240 | 28.9 – 42.0 | CX5401-011 |
| RSES-6455 | 36 | 185 – 300 | 28.9 – 42.0 | CX5402-011 |



TE'S RAYCHEM SCREENED SEPARABLE ELBOW CONNECTION SYSTEM ELBC

FOR INTERFACE C (EN 50180/EN 50181) 630 A, UP TO 24 KV

RAYCHEM SCREENED SEPARABLE ELBOW CONNECTION SYSTEM ELBC FOR INTERFACE C (EN 50180/EN 50181): 630 A, UP TO 24 KV

TE Connectivity's (TE) Raychem Screened Separable Elbow Connection System ELBC are designed to connect polymeric cables to medium voltage gas insulated switchgears, transformers, motors which are using bushings type "C" according to EN 50180/EN 50181 specified for 630 A continuous current.

The ELBC connectors are compliant with CENELEC HD 629.1 S3 and tested for a maximum system voltage up to 24 kV. The new hybrid ELBC combines the material advantages of both EPDM and silicone rubber materials and therefore, provides a long service life and easy installation. A durable EPDM insulation body provides a hard-wearing as well as weather-resistant performance, not only for indoor but also for outdoor applications in harsh environments. A silicone stress cone adapter ensures a fast and easy installation even on larger cable cross sections, and the hard body of ELBC eases the handling during push-on and connection procedure.

TE's ELBC connector provides a capacitive Voltage Detection (VD) point to determine the presence of voltage in the cable network and therefore, helps avoid possible injury during operation and maintenance.

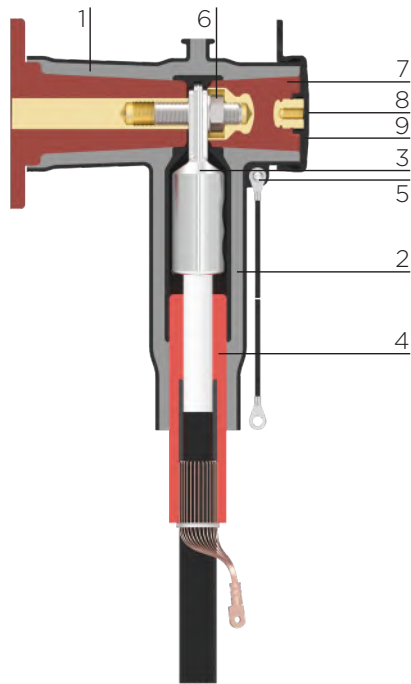


PRODUCT FEATURES

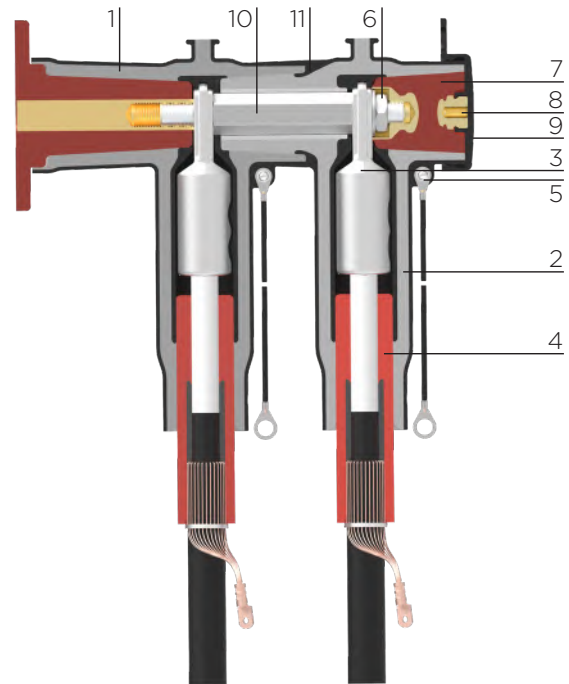
- Hybrid material design: Flexible silicone cable adapter and rugged EPDM body
- Reliable operation even under harsh environmental conditions
- Easy installation due to flexible silicone cable adapter
- Screened connector body for improved safety and protect the connection system against accidental contact
- Easily accessible capacitive test point for Voltage Detection System (VDS)
- Shield-break design (oversheath-testing without disconnection of connector)
- Wide application range covers from 35 to 300mm² with only two cable adaptors
- Mechanical lugs designed to accept aluminium and copper conductors.



DESIGN AND CONSTRUCTION:



Base Connector



Base Connector + Coupling Connector

1. Base connector

Sandwich-molded screened EPDM body is long lasting and weather-resistant for outdoor applications.

2. Inner screen

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

3. Mechanical lugs

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 set

A threaded pin together with a combinut 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.

10. Coupling bolt

Together with threaded pin, combi-nut ensure high electrical and mechanical performance with the previously installed base connector.

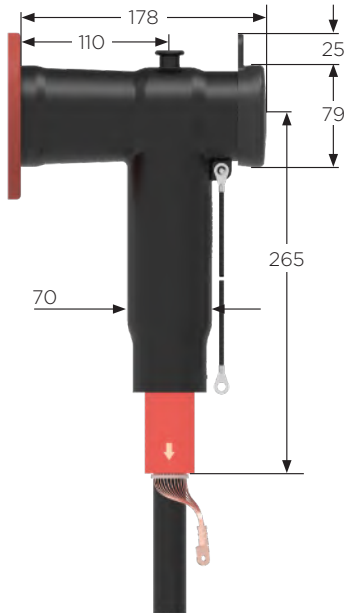
11. Coupling Connector

Sandwich-molded screened EPDM body is long lasting and weather-resistant for outdoor applications.

APPLICATIONS

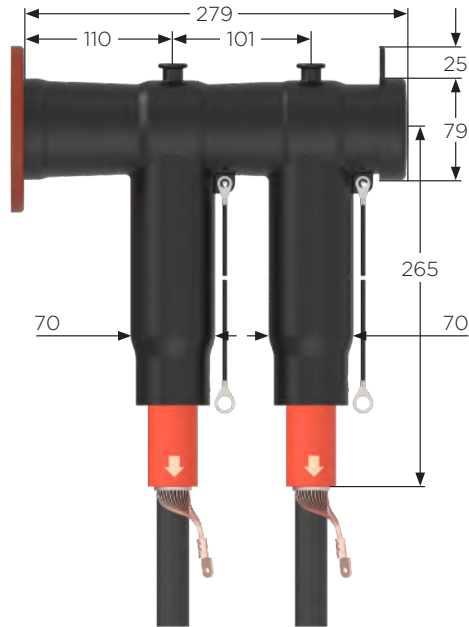
SINGLE CONNECTION

Items required for 3 phases:
1 x ELBC-58xx (Basic kit)



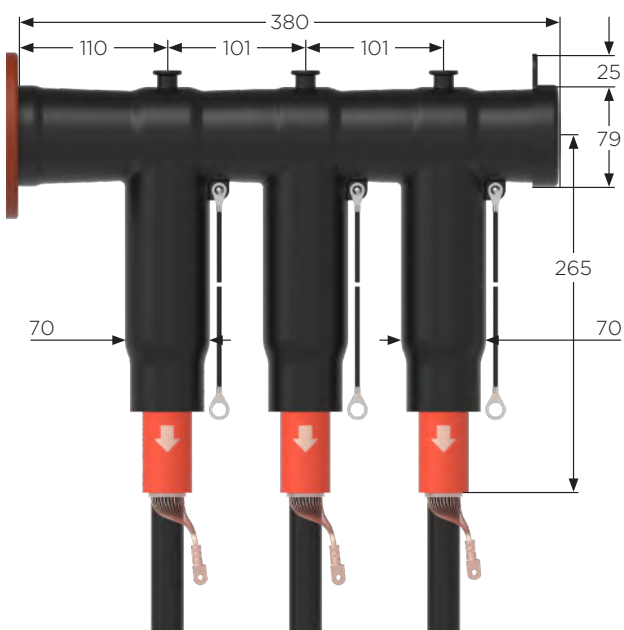
DOUBLE CONNECTION

Items required for 3 phases:
1 x ELBC-58xx (Basic kit)
1 x ELBC-CC-58xx (Coupling connector kit)



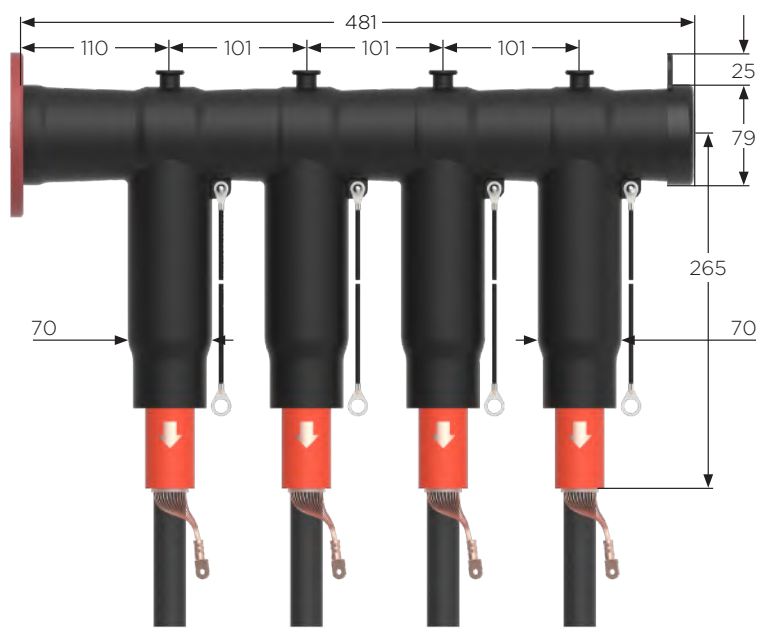
TRIPLE CONNECTION

Items required for 3 phases:
1 x ELBC - 58xx (Basic Kit)
2 x ELBC - CC - 58xx (Coupling Connector Kit)



QUADRUPLE CONNECTION

Items required for 3 Phases
1 x ELBC - 58xx (Basic Kit)
3 x ELBC - CC - 58xx (Coupling Connector Kit)



ELBC CONNECTION SYSTEM - TECHNICAL DATA

| Technical Data for ELBC | |
|---------------------------------------|--------------------------|
| Diameter over insulation | 16.2 - 34.6 mm |
| Conductor cross section Range | 35 - 300 mm ² |
| Maximum system voltage | 24 kV |
| Continuous current rating | 630 A |
| Basic impulse level | 125 kV |
| Partial Discharge at 2 U ₀ | < 2 pC |
| AC Voltage Withstand (5 min) | 57 kV |
| Thermal short circuit (1 sec) | 22.5 kA |

| Voltage Class (kV) | Cross Section (mm ²) | Diameter Over Insulation (mm) | ELBC Kit | ELBC-CC Kit |
|--------------------|----------------------------------|-------------------------------|-----------|--------------|
| 12 kV | 70 - 95 | 16.2 - 22.8 | ELBC-5851 | ELBC-CC-5851 |
| | 95 - 240 | 18.6 - 28.4 | ELBC-5853 | ELBC-CC-5853 |
| | 150 - 300 | 21.6 - 30.4 | ELBC-5855 | ELBC-CC-5855 |
| 17.5 kV | 35 - 95 | 17.0 - 23.1 | ELBC-5851 | ELBC-CC-5851 |
| | 95 - 185 | 21.6 - 27.8 | ELBC-5853 | ELBC-CC-5853 |
| | 120 - 300 | 23.0 - 32.3 | ELBC-5855 | ELBC-CC-5855 |
| 24 kV | 35 - 70 | 17.9 - 23.4 | ELBC-5851 | ELBC-CC-5851 |
| | 95 - 185 | 21.9 - 30.1 | ELBC-5853 | ELBC-CC-5853 |
| | 120 - 300 | 24.3 - 34.6 | ELBC-5855 | ELBC-CC-5855 |

TE's ELBC separable connectors meet CENELEC HD 629.1 S3 requirements and pass a 100% routine test procedure including: AC Voltage Withstand and Partial Discharge Test.

ACCESSORIES

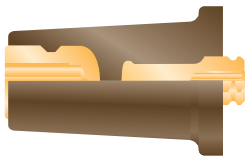
TEST ROD

Ref. no.:
 RSTI-68TR; Length: 310 mm (3 pcs)
 RSTI-68TRL; Length: 460 mm (3 pcs)
 RSTI-68TRA; Kit includes 2 short and 1 long test rods
 RSTI-68TRB; Kit includes 1 short and 2 long test rods



TERMINATING PLUG

Ref. no.: RSTI-68TP (3 pcs)



INSULATING CAP

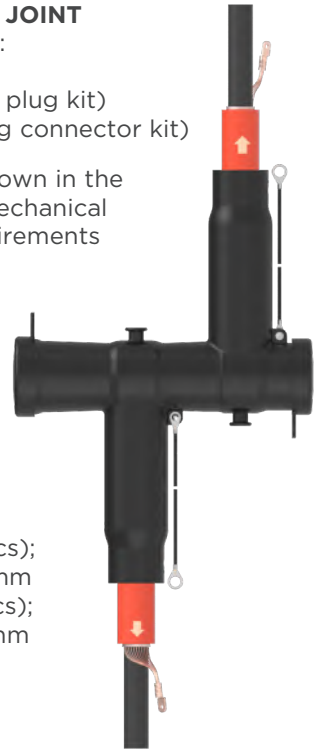
Ref. no.: RSTI-68RC (1 pc)
 One piece per set



DISCONNECTABLE INLINE JOINT

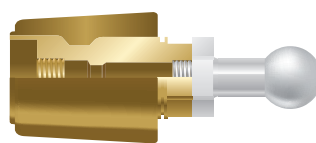
Items required for 3 phases:
 1 x ELBC-58xx (Basic kit)
 1 x RSTI-68TP (Terminating plug kit)
 1 x ELBC-CC-58xx (Coupling connector kit)

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 (3 pcs);
 Ball diameter: 20 mm
 RSTI-68EA25 (3 pcs);
 Ball diameter: 25 mm



VOLTAGE DETECTOR FOR ELBC

- Continuous monitoring of voltage presence, and indication of insulation problems
- Alarm indication of high partial discharge activities within switchgears and equipment (R5 version)
- Patented self-test function for max. safety, allowing to distinguish between voltage absence and defect device/connections
- Maintenance free; no battery or external power required
- Integrated 3-phase test point for phase comparison and sequence test
- Easy interface for communication and remote monitoring with dry relay contact
- Adjustable capacitance module to suit different applications and voltage levels



Assembly of CAPDIS to ELBC



Connections to CAPDIS

| Product | | Part Description | Part number |
|------------------|-----------------------------------|---------------------------|-------------|
| CAPDIS | CAPDIS S1 R4.5 | CAPDIS-S1+R4.5 + C2M-M | ER3563-000 |
| | CAPDIS S2 R4.5 | CAPDIS-S2+R4.5 + C2M-M | ER3564-000 |
| | CAPDIS S1 R5 | CAPDIS-S1_55 (R5) + C2M-M | ER3566-000 |
| | CAPDIS S2 R5 | CAPDIS-S2_55 (R5) + C2M-M | ER3567-000 |
| Connecting Cable | 3x phase 2,5-meter unscreened | EXRM-2101-CCS-01 | EN5240-000 |
| | 3x phase 3-meter screened (coax.) | EXRM-2101-CCS-COAX-01 | ER5246-000 |
| Adapter set | Adapter set ELBC | ADAPT-CAPDIS-ELBC | On request |

Learn more: [TE.com/energy](https://www.te.com/energy)

© 2022 TE Connectivity. All Rights Reserved. CA-BRO-19-ELBC SWITCHGEAR CONNECT-06-22-EN

TE, TE Connectivity, TE connectivity (logo), EVERY CONNECTION COUNTS, Raychem are trademarks owned or licensed by TE Connectivity. Other logos, product and company names mentioned herein may be trademarks of their respective owners. While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions, specifications, and/or information contained herein are for reference purposes only and are subject to change without notice. Consult TE for the latest dimensions, specifications, and/or information. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

Connect with us:

[TE.com/energy-contact](https://www.te.com/energy-contact)

RSTI

Raychem Switchgear Connection System for CENELEC C1 (630 A) and C2 (1250 A) for 12-36 kV

FEATURES

- Angled prefabricated shielded adapter made of silicone rubber, which does not require heat during installation
- Integrated stress control. Separate termination not required
- 3-core kits include materials for core screening. Up to 2000 mm tail length
- Test point for capacitive voltage measurement
- Mechanical lugs included. Compression lugs on request
- The kits include materials for 3 phases

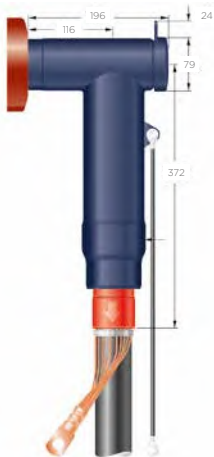
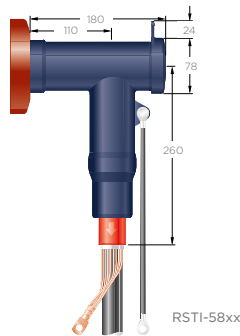
APPLICATION

- For round polymeric insulated single and 3-core cables
- For connection to insulator bushing type C1 (630 A) and C2 (1250A) in accordance with EN 50181
- Disconnection of the body is only permitted when power has been turned off

CONFORMS TO

- Tested in accordance to CENELEC HD 629.1 S2

RSTI Single connection single core



| Product name | 12 kV (mm) ² | 24 kV (mm) ² | 36 kV (mm) ² | Insul. diam (mm) | Part number |
|--------------|-------------------------|-------------------------|-------------------------|------------------|-------------|
| RSTI-5851 | 35 – 95 | 35 – 70 | – | 12.7 – 23.4 | CM0009-011 |
| RSTI-5852 | 95 – 120 | – | – | 12.7 – 23.4 | CM0010-011 |
| RSTI-5853 | 95 – 240 | 95 – 185 | – | 17.0 – 30.1 | CM0011-011 |
| RSTI-5854 | 150 – 240 | 95 – 240 | – | 21.2 – 34.6 | CM0012-011 |
| RSTI-5855 | 185 – 300 | 185 – 300 | – | 21.2 – 34.6 | CM0013-011 |
| RSTI-5856 | 240 – 400 | – | – | 21.2 – 34.6 | CR5244-011 |
| RSTI-3951 | 400 | – | – | 28.9 – 36.4 | CR6086-011 |
| RSTI-3952 | 500 | – | – | 28.9 – 36.4 | CR6085-011 |
| RSTI-3953 | 630 | – | – | 34.0 – 45.4 | CR6077-011 |
| RSTI-3954 | 800 | – | – | 34.0 – 45.4 | CR6081-011 |
| RSTI-5951 | – | 400 | – | 34.0 – 45.4 | CR6082-011 |
| RSTI-5952 | – | 500 | – | 34.0 – 45.4 | CR6083-011 |
| RSTI-5953 | – | 630 | – | 39.1 – 59.0 | CR6084-011 |
| RSTI-5954 | – | 800 | – | 39.1 – 59.0 | CR6080-011 |
| RSTI-6851 | – | – | 35 – 95 | 22.4 – 35.5 | CR4949-011 |
| RSTI-6852 | – | – | 95 – 150 | 22.4 – 35.5 | CR4990-011 |
| RSTI-6853 | – | – | 120 – 240 | 28.9 – 42.0 | CR5011-011 |
| RSTI-6855 | – | – | 185 – 300 | 28.9 – 42.0 | CR5012-011 |
| RSTI-6951 | – | – | 400 | 34.0 – 45.4 | CR6079-011 |
| RSTI-6952 | – | – | 500 – 630 | 39.1 – 59.0 | CR6078-011 |
| RSTI-6953 | – | – | 800 | 39.1 – 59.0 | CR6087-011 |

NOTE Mechanical lugs included. Compression lugs are available on request.
Core screen kits for copper tape screens available on request (add suffix 01 to part number).
Pins are required to couple RSTI-CC-58xx and RSTI-CC-68xx to RSTI-x95x, RSTI-SA.

RSTI-CC

Raychem Switchgear Connection System for CENELEC C1 (630 A) and C2 (1250 A) for 12-36 kV

FEATURES

- Angled prefabricated shielded parallel adapter made of silicone rubber, which does not require heat during installation
- Integrated stress control. Separate termination not required
- 3-core kits include materials for core screening. Up to 2000 mm tail length
- Test point for capacitive voltage measurement
- Mechanical lugs included. Compression lugs on request
- The kits include materials for 3 phases

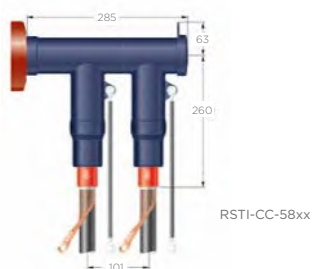
APPLICATION

- For parallel connection to adapter type RSTI-58xx
- For round polymeric insulated single and 3-core cables
- Disconnection of the body is only permitted when power has been turned off

CONFORMS TO

- Tested in accordance to CENELEC HD 629.1 S2

RSTI Parallel connection single core



RSTI-CC-58xx



RSTI-CC-68xx

| Product name | 12 kV (mm) ² | 24 kV (mm) ² | 36 kV (mm) ² | Insul. diam (mm) | Part number |
|--------------|-------------------------|-------------------------|-------------------------|------------------|-------------|
| RSTI-CC-5851 | 35 – 95 | 35 – 70 | – | 12.7 – 23.4 | CM0094-011 |
| RSTI-CC-5852 | 95 – 120 | – | – | 12.7 – 23.4 | CM0095-011 |
| RSTI-CC-5853 | 95 – 240 | 95 – 185 | – | 17.0 – 30.1 | CM0096-011 |
| RSTI-CC-5854 | 150 – 240 | 95 – 240 | – | 21.2 – 34.6 | CM0097-011 |
| RSTI-CC-5855 | 185 – 300 | 185 – 300 | – | 21.2 – 34.6 | CM0099-011 |
| RSTI-CC-5856 | 240 – 400 | – | – | 21.2 – 34.6 | CR5240-011 |
| RSTI-CC-3951 | 400 | – | – | 28.9 – 36.4 | CS8877-011 |
| RSTI-CC-3952 | 500 | – | – | 28.9 – 36.4 | CS8875-011 |
| RSTI-CC-3953 | 630 | – | – | 34.0 – 45.4 | CS8874-011 |
| RSTI-CC-3954 | 800 | – | – | 34.0 – 45.4 | CS8884-011 |
| RSTI-CC-5951 | – | 400 | – | 34.0 – 45.4 | CS8880-011 |
| RSTI-CC-5952 | – | 500 | – | 34.0 – 45.4 | CS8879-011 |
| RSTI-CC-5953 | – | 630 | – | 39.1 – 59.0 | CS8872-011 |
| RSTI-CC-5954 | – | 800 | – | 39.1 – 59.0 | CS8882-011 |
| RSTI-CC-6851 | – | – | 35 – 95 | 22.4 – 35.5 | CR7869-011 |
| RSTI-CC-6852 | – | – | 95 – 150 | 22.4 – 35.5 | CR7867-011 |
| RSTI-CC-6853 | – | – | 120 – 240 | 28.9 – 42.0 | CR7866-011 |
| RSTI-CC-6855 | – | – | 185 – 300 | 28.9 – 42.0 | CR7868-011 |
| RSTI-CC-6951 | – | – | 400 | 34.0 – 45.4 | CS8881-011 |
| RSTI-CC-6952 | – | – | 500 – 630 | 39.1 – 59.0 | CS8873-011 |
| RSTI-CC-6953 | – | – | 800 | 39.1 – 59.0 | CS8876-011 |

NOTE

Mechanical lugs included. Compression lugs are available on request. Core screen kits for copper tape screens available on request (add suffix 01 to part number). Pins are required to couple RSTI-CC-58xx and RSTI-CC-68xx to RSTI-x95x, RSTI-SA.

Trifurcation kits for screened 3-core cables

| Product name Kit length 600 mm | Part number | Part number Kit length 1200 mm | Part number | Dimensions over insulation (min. - max. mm) | Overall diameter (min. - max. mm) |
|--------------------------------------|-------------|--------------------------------------|-------------|---|--------------------------------------|
| RSTI-TRF-02 | CF9506-011 | RSTI-TRF-02-1200 | CP7143-011 | 17.6 – 35.6 | 50.0 – 90.0 |

RSTI accessories



RSTI-CC-x9xx

| Product name | Accessory type | Part number |
|---|------------------|-------------|
| RSTI-68TR; Length: 310 mm | Test rod | CN9357-011 |
| RSTI-68TRL; Length: 460 mm | Test rod | CN9356-011 |
| RSTI-68TRA; Kit includes 2 short and 1 long testrod | Test rod | CN9358-011 |
| RSTI-68TP | Terminating plug | CS9958-000 |
| RSTI-68EA20; Ball diameter: 20 mm | Earthing adapter | CS8406-011 |
| RSTI-68EA25; Ball diameter: 25 mm | Earthing adapter | CS8405-011 |
| RSTI-SA-PIN | Coupling Pin | CU2787-011 |



Test rod



Terminating plug



Earthing adapter

RSTI-SA

Raychem Screened Surge Arrester System 630 A for 12-36 kV

FEATURES

- Angled screened surge arrester
- The conductive layer on the arrester and the insulating body protect against accidental contact
- Test point for capacitive voltage measurement
- The kits include materials for 3 phases

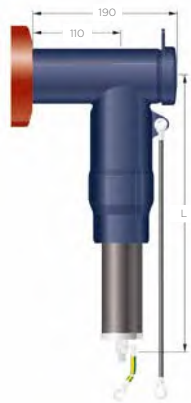
APPLICATION

- The single adapter is used to connect to type C bushings in accordance with EN 50181 in compact switchgear
- The parallel adapter is connected to RSTI-58xx type connectors

CONFORMS TO

- Tested in accordance with IEC 60099-4 (May 2004)

RSTI-SA



| Product name | Rated voltage kV | Part number |
|----------------------------|------------------|-------------|
| Single connection | | |
| RSTI-68SA1210 | 12 | CS8930-000 |
| RSTI-68SA2410 | 24 | CS8925-000 |
| RSTI-68SA3610 | 36 | CS8920-000 |
| Parallel connection | | |
| RSTI-CC-68SA1210 | 12 | CS3113-000 |
| RSTI-CC-68SA2410 | 24 | CS3114-069 |
| RSTI-CC-68SA3610 | 36 | CS3036-000 |

Technical data for single and parallel connection



| | |
|-------------------------------------|--------|
| Discharge current I_n | 10 kA |
| Current impulse 4/10 μ s | 100 kA |
| Short circuit current I_S | 20 kA |
| Long-duration current impulse (1ms) | 212 A |

| Residual voltages (kV) | | | |
|---|------|------|-------|
| Voltage class UC | 12 | 24 | 36 |
| Rated voltage U_R | 15 | 30 | 45 |
| Current impulse 8/20 μs | | | |
| 5 kA | 39.1 | 78.2 | 117.3 |
| 10 kA | 41.5 | 83.0 | 124.5 |
| 20 kA | 45.7 | 91.4 | 137.1 |
| Current impulse 1/20 μs | | | |
| 10 kA | 43.9 | 87.8 | 131.7 |
| Current impulse 1/20 μs | | | |
| 125 kA | 31.5 | 63.1 | 94.7 |
| 500 kA | 32.4 | 64.9 | 97.4 |