



Energy Division

Raychem screened, separable
surge arrester RSTI-SA-10
up to 41 kV

Raychem screened, separable surge arrester RSTI-SA-10 up to 41 kV

Product Features:

- Tested in accordance with IEC60099-4 (May 2004)
- State of art - gapless design
- Excellent protection margins
- Low residual voltages
- Excellent short circuit performance
- Excellent TOV performance
- Maintenance free

The screened gapless surge arrester is a "T"-shaped product. It is designed for direct connection onto outer cone bushings in accordance to EN50180 or EN50181 with interface type "C" or for parallel connection mating to the rear entry of the base screened connector system RSTI designed for system voltage up to 41 kV.

The insulation of the screened surge arrester 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 unintentional contact.

The active part is a metal oxide arrester which meets the requirements of IEC-60099-4 for separable and dead-front arresters.

The combination of screened connector and surge arrester exceeds CENELEC HD 629.1 S2 requirements, which includes BS, VDE and other international specifications.

Easily accessible rear plug with capacitive test point.

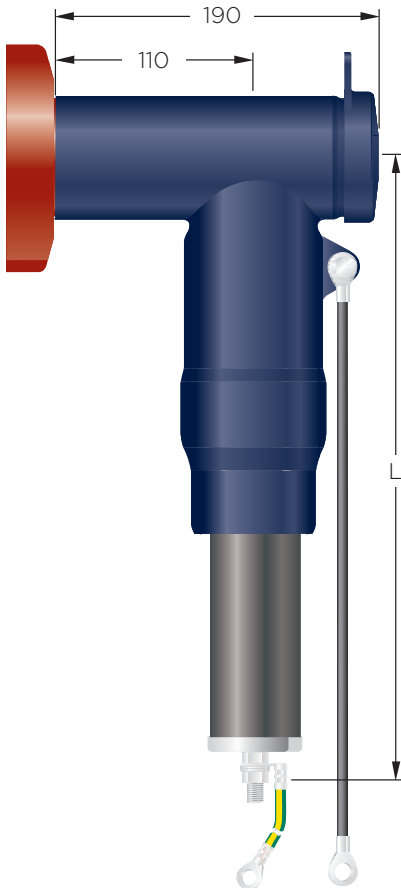
Few accessories required for system test and earth connection.

Complete kit including screened surge arrester, threaded pin and ground lead for three phases facilitates installation and storage.

Applications

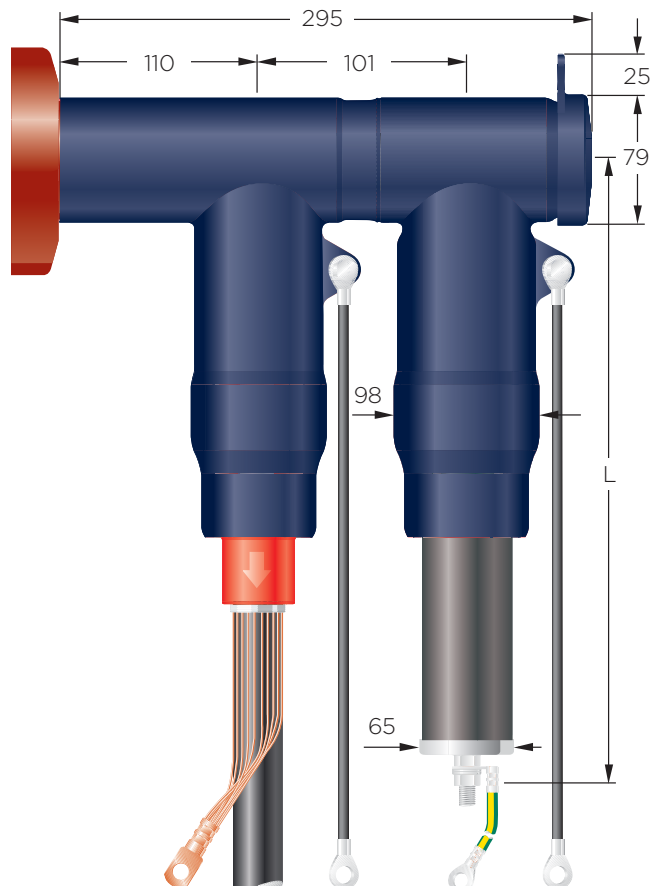
Single connection

Material requested for 3 phases:
1 x RSTI-68SAxx10
(Screened surge arrester kit for direct bushing connection)



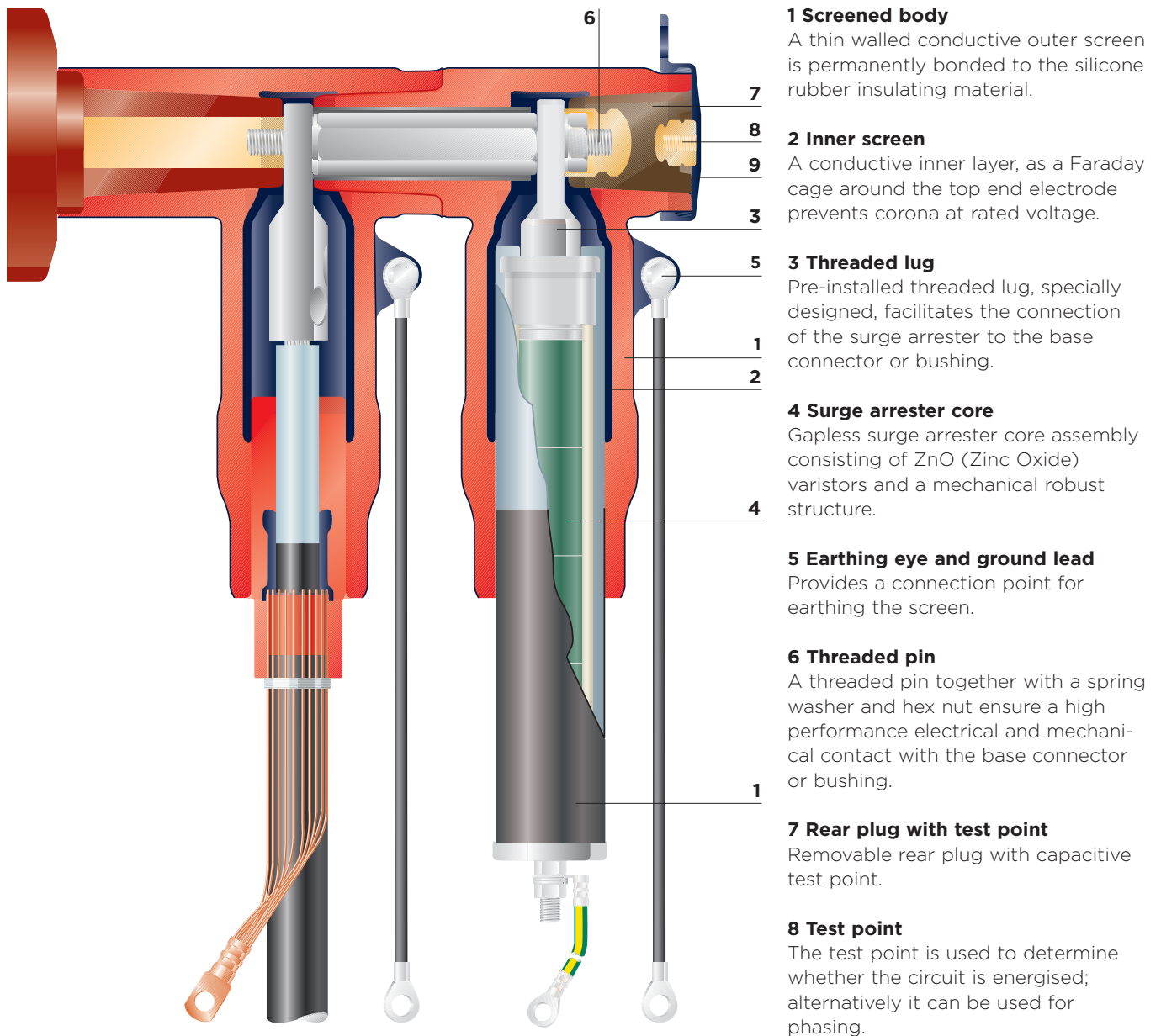
Parallel connection

Material requested for 3 phases:
1 x RSTI-L58xx or RSTI-68xx (Base connector kit)
1 x RSTI-CC-68SAxx10
(Screened surge arrester kit with coupling connection)



Dimensions in mm

Design and construction



Accessories

Test rod

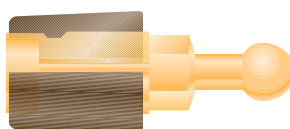
Ref. no.: RSTI-68TR; Length: 310 mm
RSTI-68TRL; Length: 460 mm
RSTI-68TRA; Kit includes
2 short and 1 long testrod



Note: When test rod is in use, surge arrester assembly must be removed.

Earthing adapter

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



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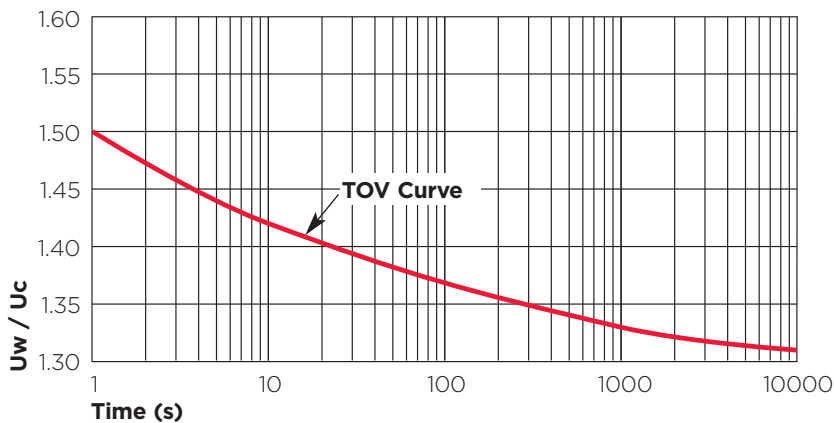
Technical data and ordering information

Technical data for single and parallel connection

Rated Discharge Current I_N	10 kA
Operating duty	
High current impulse 4/10 μ s	100 kA
Short Circuit Current I_S	20 kA
Long duration current impulse (2ms)	212 A

	Residual Voltages (kV)							
Continuous operating voltage U_C	12.0	18.0	24.0	30.0	33.0	36.0	39.0	41.0
Rated voltage U_R	15.0	22.5	30.0	37.5	41.3	45.0	48.8	51.3
Lightning Current Impulse 8/20 μs								
5 kA	39.1	58.6	78.2	97.7	107.5	117.3	127.1	133.6
10 kA	41.5	62.2	83.0	103.7	114.0	124.5	134.9	141.8
20 kA	45.7	68.5	91.4	114.2	125.6	137.1	148.5	156.1
Steep lightning current impulse 1/20 μs								
10 kA	43.9	65.8	87.8	109.8	120.8	131.7	142.7	150.0
Switching impulse 30/60 μs								
125 A	31.5	47.3	63.1	78.9	86.8	94.7	102.5	107.8
500 A	32.4	48.7	64.9	81.1	89.2	97.4	105.5	110.9

TOV with 100kA single shot high current prior energy



Temperature of samples (pre-heated): 60° C according to IEC 60099-4, Ed 2.0 2004. TOV Curve applies to an arrester which has a pre-stress applied prior to TOV verification. This pre-stress is equivalent to one high current impulse of 100kA, 4/10 as per the switching surge operating duty test.

U_w = TOV withstand voltage
 U_c = continuous operating voltage

Ordering information

Voltage Class (kV)	12.0	18.0	24.0	30.0	33.0	36.0	39.0	41.0
Reference Number Single connection	RSTI-68SA1210	RSTI-68SA1810	RSTI-68SA2410	RSTI-68SA3010	RSTI-68SA3310	RSTI-68SA3610	RSTI-68SA3910	RSTI-68SA4110
Reference Number Parallel connection	RSTI-CC-68SA1210	RSTI-CC-68SA1810	RSTI-CC-68SA2410	RSTI-CC-68SA3010	RSTI-CC-68SA3310	RSTI-CC-68SA3610	RSTI-CC-68SA3910	RSTI-CC-68SA4110

Dimension and Weight

Length L* (mm)	285.0	400.0	400.0	520.0	520.0	520.0	530.0	530.0
Weight (kg/pc)								
(68SA)	3.5	3.7	3.9	4.1	4.2	4.2	4.3	4.4
(-CC-68SA)	4.4	4.6	4.8	5.0	5.1	5.1	5.2	5.3

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