



TE's Raychem SCREENED SURGE ARRESTERS FOR INTERFACE F RSTF-SA

With gapless ZnO surge arrester modules for U_R up to 75 kV

TE Connectivity (TE) combines over 60 years experience and engineering excellence to offer reliable and innovative switchgear connection systems. As part of this commitment, we have developed the RSTF: an outer cone screened separable T-connector for 72.5 kV type F bushings including the Screened T-connector Surge Arresters RSTF-SA.

TE's Raychem Screened T-connector Surge Arrester RSTF-SA is an integral part of the RSTF product programme to support voltage stability and prevent negative effects on installed equipment due to overvoltages.

KEY FEATURES AND BENIFITS

TE's Raychem Screened T-connectors Surge Arresters RSTF-SA up to 72.5 kV

- Proven gapless ZnO surge arrester design
- Maintenance free and corrosion resistant
- Available integrated in base or coupling T-connector
- High performance and longevity in extreme conditions
- Meet EN 50673 standard
- Tested according to IEC 60840:2011 and IEC 60099-4:2014
- 100% routine tested
- End-to-end components traceability

AN OPTIMIZED DESIGN FOR HIGH RELIABILITY

1. Screened T-connector

A standard RSTF base or coupling connector with a thin-walled conductive outer screen and silicone rubber insulating body.

2. Inner screen

A conductive inner layer around surge arrester terminal that works as a Faraday cage to prevent corona at rated voltage.

3. Surge arrester insulation

Silicone insulation layer around the surge arrester module.

4. Surge Arrester ZnO stack

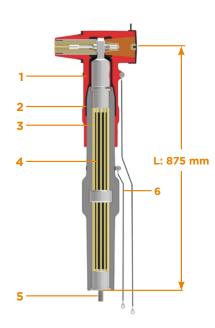
Gapless stack of Zinc-Oxide varieties.

5. Grounding terminal

Grounding terminal for the surge arrester module and connection point for mechanical support.

6. Ground lead

Insulated ground lead for earthing of the surge arrester's outer screen.



RESIDUAL VOLTAGES			
Lightning impulse 8/20 μs	5 kA	10 kA	20 kA
	185 kV	197 kV	217 kV
Steep lightning impulse 1/20 μs		10 kA	20 kA
	-	207 kV	227 kV
Switching impulse 30/60 μs	_	125 A	500 A
	-	148 kV	159 kV

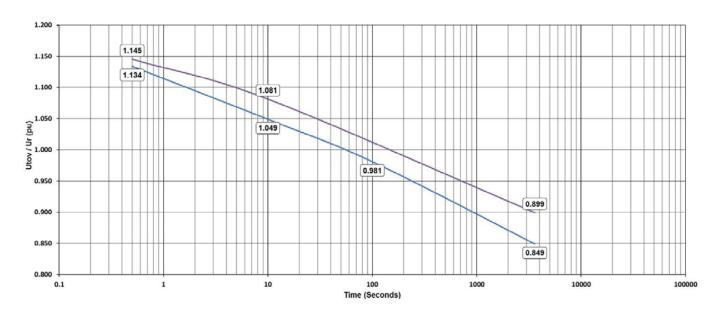
RATED DATA	
Rated voltage U _R	75 kV
Continous operating voltage U_c	60 kV
Nominal Discharge Current I _N	10 kA
Charge transfer rating Q _{rs}	1.6 C
Rated thermal energy W _{th}	412.5 kJ
Arrester Class	SL
Short circuit current I _s	31.5 kA
High current impulse 4/10 μs	100 kA
Long duration current impulse (2ms)	760 A

DIMENSIONS AND WEIGHT	
Length L (bushing to grounding terminal)	875 mm
Weight (pc)	25 kg

RSTF-SA SURGE ARRESTER TYPE TOV CAPABILITY (UP TO $U_R = 75 \text{ kV}$)

With prior energyWithout prior energyU_{tov} = TOV withstand voltage

U_r = Rated voltage



Samples preheated to 85°C per IEC 60099-4; Ed. 3.0, 2014 for screened separable surge arresters.

TOV Curves for RSTF-SA with and without being pre-stressed by energy prior to TOV verifications.

The pre-stress is its rated thermal energy Wth per the power-frequency voltage-versus-time test according to IEC 60099-4:2014.

TE Connectivity Ltd. is a \$13 billion global technology and manufacturing leader creating a safer, sustainable, productive, and connected future. For more than 75 years, our connectivity and sensor solutions, proven in the harshest environments, have enabled advancements in transportation, industrial applications, medical technology, energy, data communications, and the home. With 78,000 employees, including more than 7,000 engineers, working alongside customers in nearly 150 countries, TE ensures that EVERY CONNECTION COUNTS. Learn more at www.te.com

Generation

- Conventional Power
- Nuclear Power
- Wind/Solar
- Hydro-electric

Transmission & Distribution

- Substation
- Underground
- Overhead
- Street Lighting

Industry

- Mining
- · Petrochemical
- Railway
- · Shipbuilding

WHEREVER ELECTRICITY FLOWS, YOU'LL FIND TE CONNECTIVITY



te.com/energy

FOR MORE INFORMATION:

TE Technical Support Centers

AMERICAS

USA/Canada: +1 (800) 327-6996 Mexico: +52 0-55-1106-0800 Brazil: +55 11-2103-6023 South America: +57 1-319-8962

ASIA-PACIFIC

Australia: +61 29-554-2695 New Zealand: +64 9-634-4580 China: +86 (0) 400-820-6015

te.com/energy

© 2018 TE Connectivity. All Rights Reserved. EPP-3108-10/18

EUROPE-MIDDLE EAST-AFRICA

France: +33 (0) 38-058-3200 Germany/Switzerland: +49 (0) 89-608-9903 +44 08708-707-500 Spain/Portugal: +34 912-681-885 +39 335-834-3453 Italv: Benelux: +32 16-508-695 Russia: +7 495-790 790 2-200 Poland/Baltics: +48 224-576-753 Czech Republic: +42 (0) 272-011-105 +46 850 725 000 Sweden/Norway: Middle East: +971 4-211-7020

Raychem, TE Connectivity and the TE connectivity (logo) are trademarks of the TE Connectivity Ltd. family of companies. 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.

