



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

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

## Screened Surge Arresters For Interface F RSTF-SA

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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

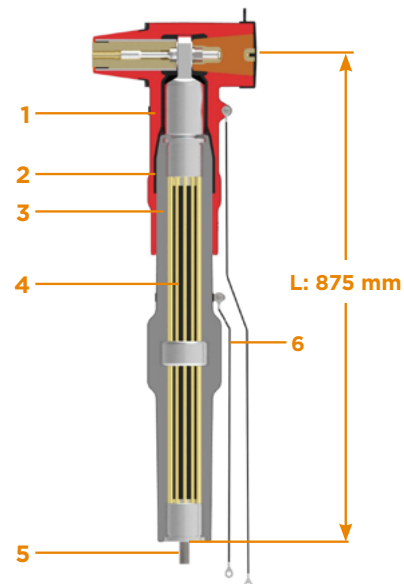
Gapless stack of Zinc-Oxide varieties.

#### 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.



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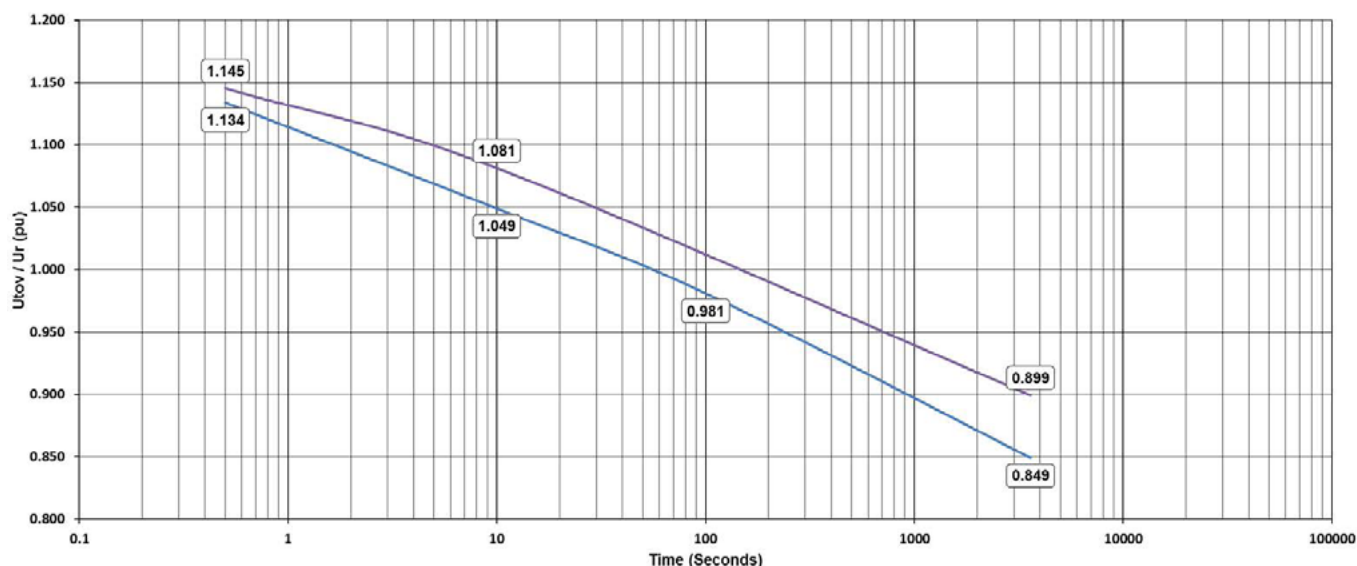
RESIDUAL VOLTAGES			
Lightning impulse 8/20 $\mu$ s	5 kA	10 kA	20 kA
	185 kV	197 kV	217 kV
Steep lightning impulse 1/20 $\mu$ s	-	10 kA	20 kA
	-	207 kV	227 kV
Switching impulse 30/60 $\mu$ s	-	125 A	500 A
	-	148 kV	159 kV

RATED DATA	
Rated voltage $U_R$	75 kV
Continuous 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 $\mu$ s	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 $U_R = 75$ kV)

- With prior energy
- Without prior energy
- $U_{tov}$  = 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  $W_{th}$  per the power-frequency voltage-versus-time test according to IEC 60099-4:2014.

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