



# SMART RSTI SEPARABLE CONNECTOR WITH VOLTAGE MEASURING FUNCTIONALITIES

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

## KEY FEATURES

- Very compact design to fit easily in compact switchgears
- High accuracy over a wide temperature range
- High accuracy on higher harmonics for reliable power quality applications
- Type-tested according to both IEC 61869-11 and CENELEC HD 629.1 S2
- Inherent safety thanks to total galvanic isolation from high voltage
- Simple connection as no auxiliary power supply is needed due to passive components
- Factory-calibrated, thus no need for on-site calibration

TE's Raychem Smart RSTI Connector is the new generation of screened separable connectors RSTI with voltage measurement and Partial Discharge (PD) detection functionalities. Equipped with our new low power voltage sensor, they are designed to increase network transparency and support the implementation of smart grids in the ever-changing distribution networks.

Our Smart RSTI Connector fits 630/1250A bushings type C as specified by EN 50180 and EN 50181 and is suitable for both new and retrofit installations.

In conjunction with the new generation of Intelligent Electronic Devices (IEDs), the voltage sensor provides measuring signal for grid management applications like monitoring, power quality, protection or metering, as well as asset management applications, like PD monitoring.

We utilize the capacitive voltage divider concept in our voltage sensor technology for passive medium voltage instrument transformers. This concept provides intrinsic safety and protection advantages for the operation of sensors in power networks due to the galvanic isolation from high voltage. It also provides appropriate signal for on-site PD monitoring.

In addition, the compact design provides complete integration within our Smart RSTI Connector, as well as full encapsulation through a grounded and conductive outer screen.

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

## Smart RSTI Separable Connector with Voltage Measuring Functionalities



### TECHNICAL DATA

#### Electrical Characteristics

Insulation Level	max. 24/50/125 kV
Maximum Voltage Um	24 kV
Rated Voltage Factor	1.2 x Upn and 1.9 x Upn/8h
Maximum PD Level	< 10 pC @ 24 kV < 50 pC @ 28.8 kV

#### Signal Characteristics

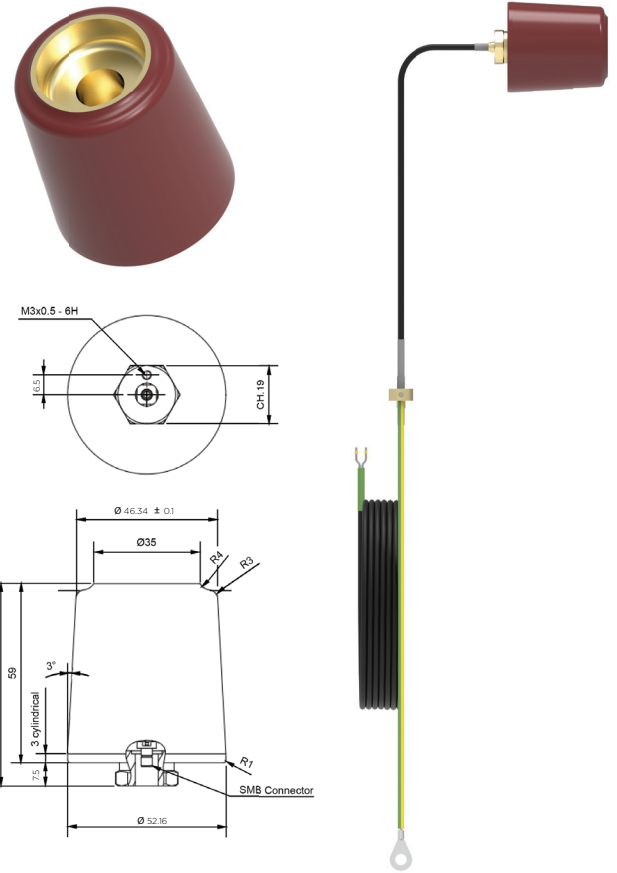
Accuracy Class (Via Adjusting Correction Factor in IED)	Measurement 0.5% Protection 3P
Accuracy on Harmonics	Special quality metering according to IEC 61869-11
Rated Primary Voltage, Upn*	20/√3 kV
Rated Secondary Voltage*	3.25 V/√3 V
Nominal Transformation Ratio, Kn1*	20 kV/3.25 V (or 10.000/ 1)*
Rated Burden, Rbr*	2 MΩ (or any value ≥ 1 MΩ)*, 50 pF
Nominal Frequency	50/60 Hz
Frequency Bandwidth (-3dB)	5 MHz

#### Other Characteristics

Applicable Standard	IEC 61869-11 CENELEC HD 629.1 S2
Operating Conditions	Temperature -40°C to +80°C
Cable Length*	3.5 / 5.0 / 7.0 m

\*Other values available on customer request for:

- Rated primary voltage
- Rated burden
- Rated secondary voltage
- Length of connection cable
- Terminal of connection cable



### ORDER INFORMATION

Product Description	Installation Type	Cable Length (m)
RSTI-VS-24-BP-3.5M	Retrofit on RSTI, RSTI-CC, RSTI-SA	3.5
RSTI-VS-24-BP-5.0M	Retrofit on RSTI, RSTI-CC, RSTI-SA	5.0
RSTI-VS-24-BP-7.0M	Retrofit on RSTI, RSTI-CC, RSTI-SA	7.0
RSTI58xx-VS-24-BP-3.5M <sup>1</sup>	New Installation	3.5
RSTI58xx-VS-24-BP-5M <sup>1</sup>	New Installation	5.0
RSTI58xx-VS-24-BP-7.0M <sup>1</sup>	New Installation	7.0

<sup>1</sup> To find the right kit number, please refer to the RSTI datasheet

[te.com/energy](http://te.com/energy)

© 2020 TE Connectivity. All Rights Reserved. EPP-3040-12/20-EN

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