

TECHNICAL DATA SHEET

Standard – Line Sensors

Voltage sensor
TxxxC-xx

**Non-conventional -
instrument voltage transformer**



Description

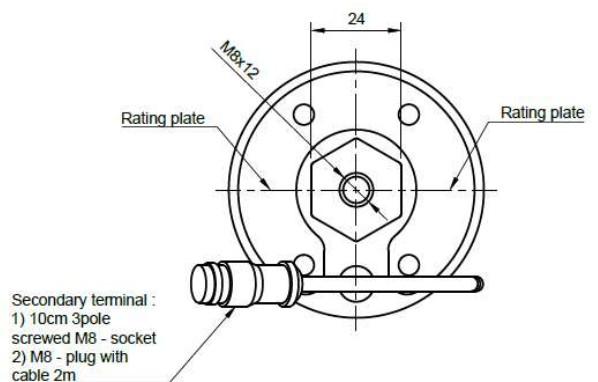
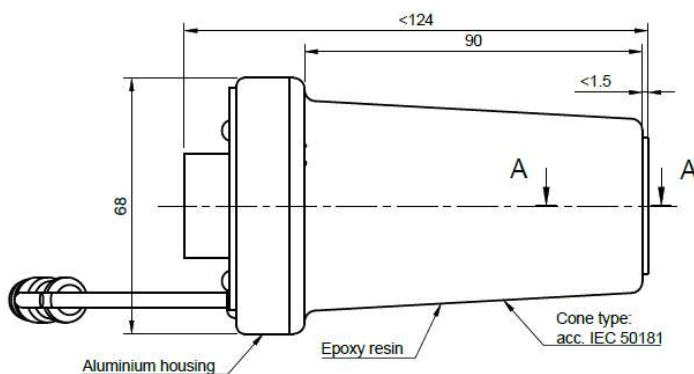
The voltage sensor range is designed according the IEC-standard to meet maximum compatibility on the market. This product is designed for use in conjunction with devices, which are build according the standard. The voltage sensor cone shape is according EN50181 type C and fits for all T-connectors using this standard.

Features

- No calibration on Site is needed
- Accuracy class according IEC61869-11: 0,2/0,5/1/3 & 3P/6P
- Cost efficient design
- Easy to install and robust design
- Short form factor, double T-cable extensions could be used.
- Accuracy over complete lifetime

Dimensions

The short form factor enables maximum compatibility to existing installations. The hexagonal nut is made of solid aluminium for maximum torque during the installation.

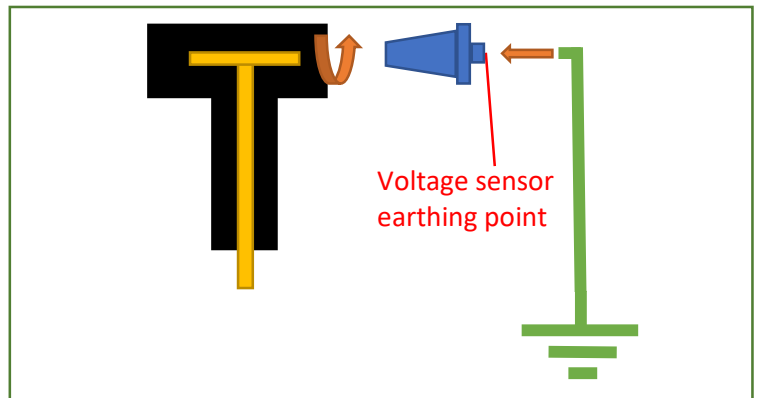


Installation

The voltage sensor is simple to install; the existing blind plug could be removed and the voltage sensor could be screwed in, without making calibration measurements in the switch gear.

There are some important points that must be considered during the installation process:

- Always power down before installation
- Due to the design of this product, there is no danger of product damage, if the sensor is short circuited and the sensor is connected to earth



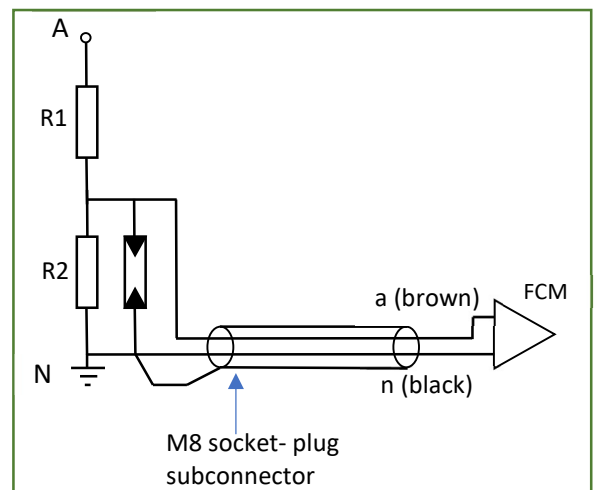
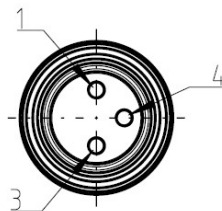
The voltage sensor earthing point must be connected with $\geq 6\text{mm}^2$ wire to the switch gear ground

Connection

The voltage sensor is directly connected to a measurement device. Contact Vendor for a list of compatible devices. 3 Voltage sensors should be used for each device.

M8-Subconnector

- 1... Connection a, brown wire
- 3... Connection n, black wire
- 4... Shield connection point



List of T-connectors, surge arrestors, adaptors and coupling connectors

	Connections	TxxxC-xx (Type C-cone)	Accessories
Nexans*	T-connector	(K)400TB/G, (K)440TB/G	
	Transformer adapter	KAA4	Adapter ring
	Surge arrestor	400PB-5SA, 400PB-10SA	
Südkabel	T-connector	SEHDT 13, SEHDT 23	
	Surge arrestor	MUT33 ¹	
Cellpack*	T-connector	CTS-S 630 A 24kV	
NKT	CB24 adapter	Sensor adapter	M12-M16 adapter

* Components successfully tested with GWP product at GWP

Specification

Applied Standards:	IEC61869-1, IEC61869-6, IEC61869-11, Type C cone acc. EN50181
Primary voltage:	Max. 20000/ $\sqrt{3}$ V*
Voltage factor	1,9*Un for 8h
Secondary output:	3,25/ $\sqrt{3}$ V*
Burden:	200k Ω \pm 1%, 350pF*
Insulation levels:	12/28/75kV or 17,5/38/95kV or 24/50/125kV
Accuracy classes:	0,2/0,5/1/3 & 3P/6P according IEC61869-11
Operating temperature range:	-25°C to +65°C
Storage temperature range:	-40°C to +80°C
Frequency:	50 or 60Hz*
Overvoltage protection:	Internal surge arrestor
Cable:	2pole, shielded, twisted pair, 2m, open ends (brown-a, black-n)*

* or customer defined

16.04.2019 by Greenwood-Power Rev4

¹ Only applicable to Um max. 24kV