

TECHNICAL DATA SHEET

Standard – Line Sensors

Voltage sensor
TxxxK-xx

**Non-conventional -
instrument voltage transformer**



Description

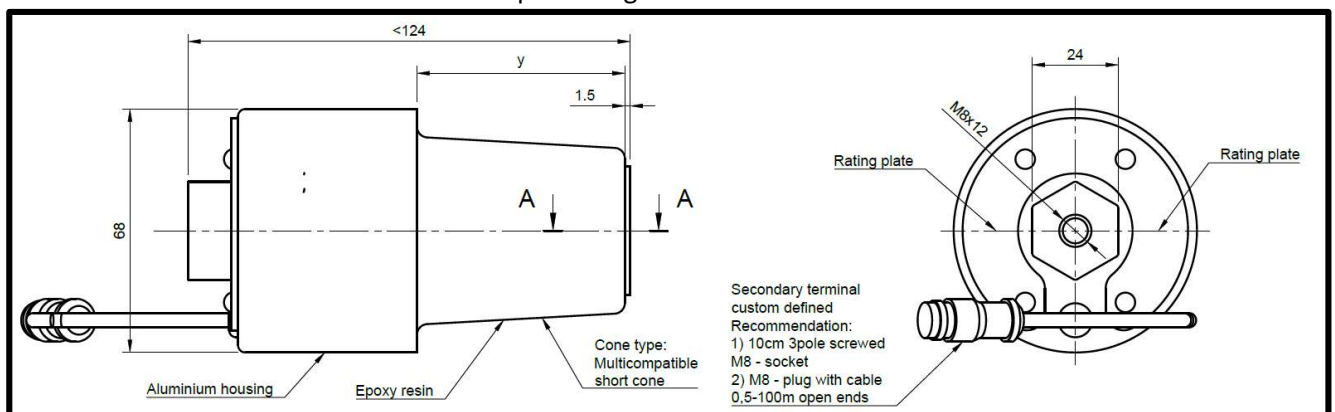
The voltage sensor range is designed according the IEC-standard to meet maximum compatibility on the market. This product is designed for use in conjunction with devices, which are build according the standard. The voltage sensor cone shape compatible to different manufacturers of T-cable connectors like Cellpack, Nexans, Südkabel, nkt, Tyco

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.

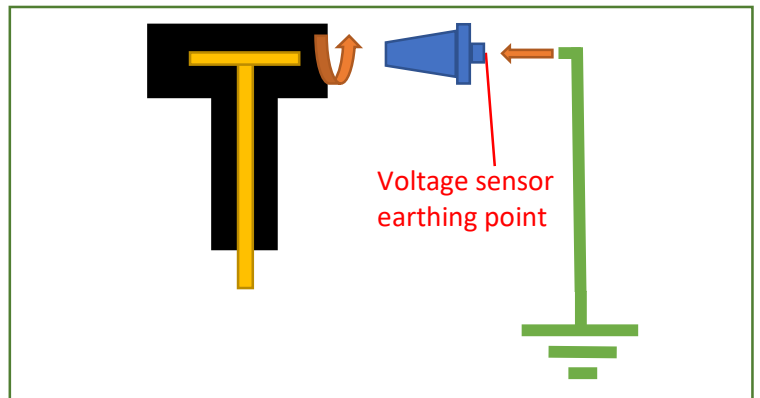


Installation

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



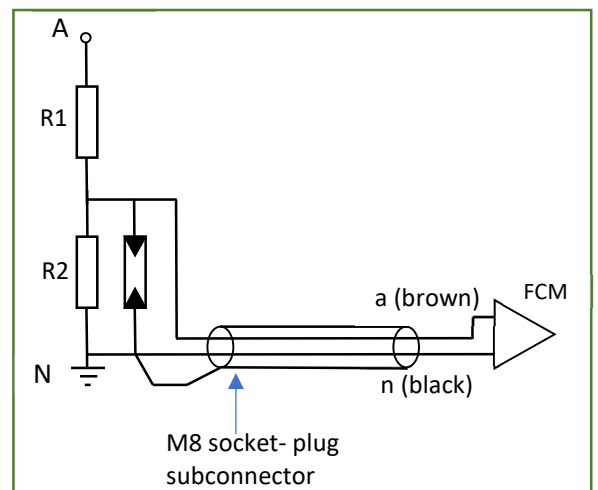
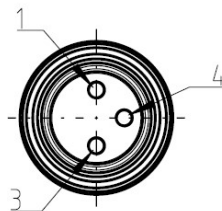
The voltage sensor earthing point must be connected with $\geq 6\text{mm}^2$ wire to the switch gear ground

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

Manufacturer	Connection	T240K-xx	Accessory
Nexans	T-connector	(K)430TB	
	Surge arrestor	300SA (max 10-24N)	
	Coupling connector	(K)300PBM	
		-	
Südkabel	T-connector	SET24, SAT24	
	Surge arrestor	MUT 23, MUT 23.1	
	Coupling connector	SEHDK 23.1	
Cellpack*	T-connector	CTS 630 A 24kV	
	Surge arrestor	CTKSA	
	Coupling connector	CTKS 630A 24kV	
Tyco*	T-connector	RSTI-58xx	Extended M16 bolt
	Surge arrestor	RSTI-58SA	Extended M16 bolt
	Coupling connector	RSTI-CC-58xx	Extended M16 bolt
NKT	T-connector	CB24-xxx	M12-M16 adapter
	Surge arrestor	CSA Mxx	M12-M16 adapter
	Coupling connector	CC24-xxx	M12-M16 adapter

* Components successfully tested with GWP product at GWP

Specification

Applied Standards:	IEC61869-1, IEC61869-6, IEC61869-11
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 level:	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/3,7m/5m/8m/10m, open ends (brown-a, black-n)*
	* or customer defined

01.01.2020 by Greenwood-Power Rev5