TECHNICAL DATA SHEET

Outdoor – Line Sensors

Voltage sensor
K240F-xx

Non-conventional -
instrument combined transformer
For outdoor application

Description

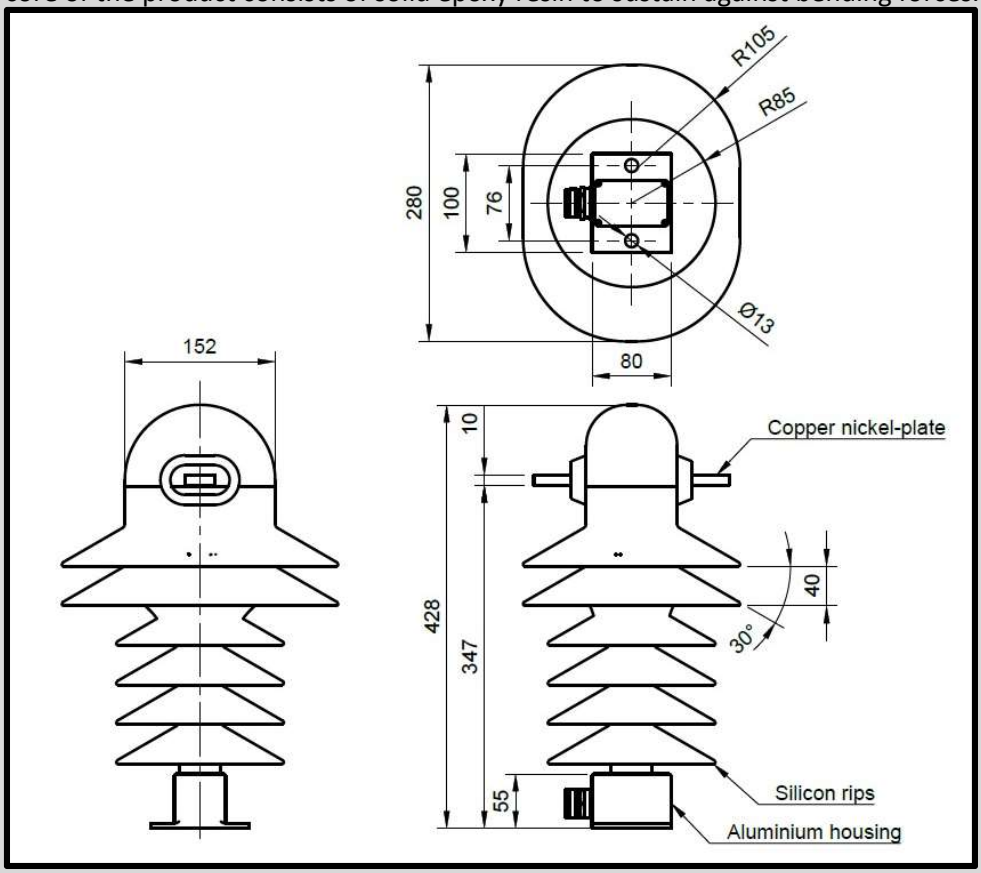
The combined voltage- and current sensor for outdoor installation, is designed according the IEC-standard to meet maximum combability on the market. This product is designed for use in conjunction with devices, which are build according the standard. The outer shape of the voltage sensor consists of silicon material to withstand all environmental conditions and sustain long term stability.

Features

- No calibration on Site is needed
- Voltage sensor accuracy class according IEC61869-11: 0,2/0,5/1/3 & 3P/6P
- Current sensor accuracy class according IEC61869-10: 0,2S/0,2/0,5S/0,5/1/3 and max. 5P20
- Hybrid casting technology
- Combined innovative sensor solution
- Internal screening for neighbour phase electric field immunity
- Accuracy over complete lifetime

Dimensions

The base of this sensor is designed for a fixation with two M12-screws on a rail system on a pole.
The dimension is typically designed according design rules for 24kV under strictly consideration of creepage distances for outdoor type products.
The inner core of the product consists of solid epoxy resin to sustain against bending forces.

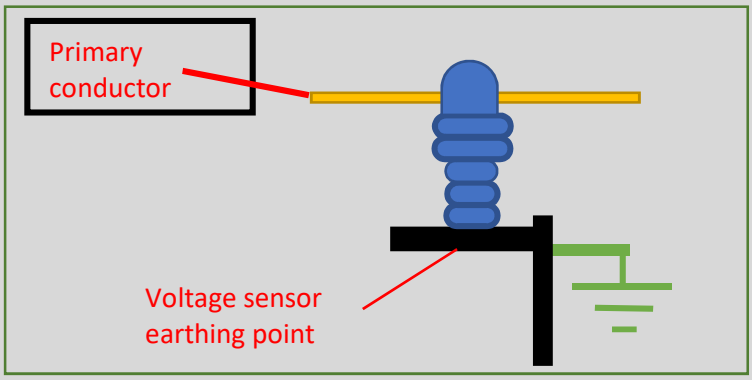


Installation

The combined voltage- and current sensor is mounted on the top of a pole. The primary conductor has to be fixed on both sides of the integrated primary conductor of the sensor.

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

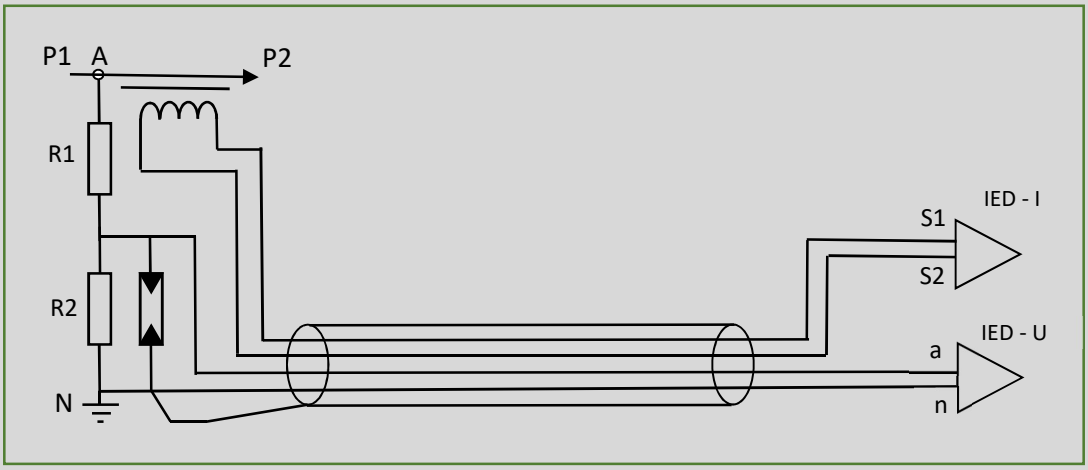
- Always power down before installation
- Due to the design of this product, there is no danger of product damage, if the sensor is short circuited and the sensor is connected to earth



The support rail, where the sensor is mounted must be earthed adequately!

Connection

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



Specification

Applied Standards:	IEC61869-1, IEC61869-6, IEC61869-10, IEC61869-11
VS: Primary voltage:	20000/√3V*
VS: Voltage factor	1,9*Un for 8h
VS: Secondary output:	3,25/√3V*
CS: Primary current:	300A Ext. 200%*
CS: Secondary output:	225mV*
Burden:	200kΩ ±1%, <1nF*
Insulation level:	24/50/125kV
VS: Accuracy classes:	0,2/0,5/1/3 & 3P/6P according IEC61869-11
CS: Accuracy classes:	0,2/0,2S/0,5S/0,5/1/3 max. 5P20 according IEC61869-10
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:	4-pole, shielded twisted pair, 8m with open ends*
Arc distance:	380mm
Creepage distance:	1150mm

* or customer defined

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