

# Current Transformer (KES Plus accessory) ZN1AC-CST120

#### **Technical Documentation**

#### **FEATURES**

- The transformer allows measuring the power to calculate data about energy consumption.
- Please refer to the KES Plus datasheet for connection.
- Dimensions 46 x 30.8 x 29.5mm
- Conformity with the CE directives.

TRANSFORMER SPECIFICATIONS AND CONNECTIONS	
CONCEPT	CONCEPT
Current range	0.01 to 120A
Current Ratio	120A/40mA
Operation temperature	-25°C to +60°C
Storage temperature	-30°C to +90°C
Accuracy @R <sub>L</sub> ≤ 10Ω	1%
Linearity @R <sub>L</sub> ≤ 10Ω	≤0.2%
Phase error at rated current range	20
Dielectric strength	3.5KV
Secondary side cable section	0.33mm <sup>2</sup> (22 AWG)
Secondary side cable length(1)	50cm
Weight	70g
Maximal diameter of primary side cable	Ø16mm
Transformer ratio (loops number)	Np:Ns=1:3000

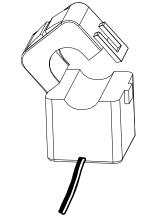
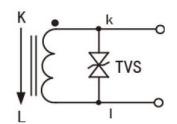
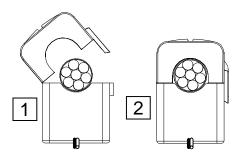


Figure 1. Current Transformer



**Figure 2.** Schematic of the Current Transformer

### TRANSFORMER INSTALLATION



▲ Important: Secondary side cables must be connected to KES Plus (keeping polarity) before closing the clamp to the primary side cable.

- 1. Open the transformer clamp and put the phase cable inside it respecting the orientation.
- 2. Close the clamp around the cable fixing the lateral clip

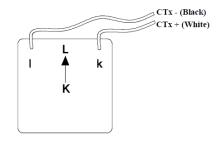


Figure 3. Connection of the current transformer to the KES Plus



## **SAFETY INSTRUCTIONS**

- Installation should only be performed by qualified professionals according to the laws and regulations applicable in each country.
- Do not connect the mains voltage nor any other external voltage to any point of the signal wiring; it would represent a risk for the entire system. The facility must have enough insulation between the mains (or auxiliary) voltage and the signal wiring or the wires of other accessories, in case of being installed.
- Keep the device away from water and do not cover it with clothes, paper or any other material while in use.
- The WEEE logo means that this device contains electronic parts and it must be properly disposed of by following the instructions at http://zennio.com/weee-regulation.

<sup>(1)</sup> It is not allowed to modify the cable length of the current transformer (Neither cutting nor splicing are allowed)