



# Voltage transformers

Three phase voltage transformers  
outdoor and indoor version

Delivery substations



Indoor version



Outdoor version

## The solution for

- > Inside use
- > Outside use
- > Industrial metering system for HVA delivery stations

## Strong points

- > Compact and robust design
- > Metal fasteners
- > Outside version IP66

## Homologations and certifications

- > Enedis certification

## Conformity to standards

- > EN 60439-1
- > EN 60529
- > EN 62262
- > EN 61869-1
- > EN 61869-3



## Function

SOCOMECC-TCT designs, manufactures and sells tailor-made or standard voltage transformers type 400 V/100 V or 220 V/400 V, class 0,5 for the equipment of industrial metering systems for HVA delivery stations.

The voltage transformers are available in indoor and outdoor versions for the low voltage metering with a primary rated voltage of 230 V or 127 V and a secondary rated voltage of 57.7 V or 220 V. Those transformers are mainly used by energy producers and energy transport companies.

## Advantages

### Compact and robust design

The voltage transformers have a compact and robust design. It can be used inside and outside.

### Metal fasteners

The indoor version of the voltage transformer has metal fixations with handgrip system to allow a quick and easy installation. The adjustable metal fixation fits all installations.

### Outside version IP66

The outdoor version of the voltage transformer is integrated into a sealed box. It is designed to withstand a humidity rate of 95 %, thanks to the IP66 design. The boxes are delivered ready to install for a greater reactivity.

## Specific realisations

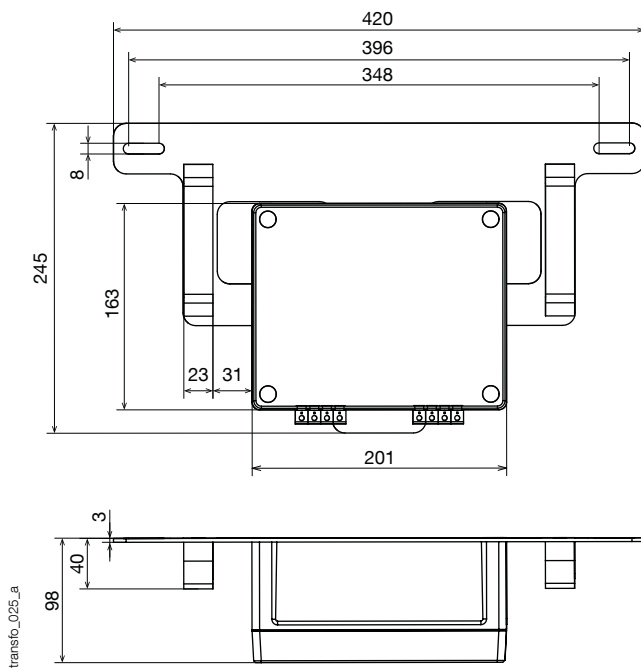
SOCOMECC-TCT realises as well tailor-made voltage transformers and adapt the mechanical presentation and fasteners matching your environment and special needs. For any question, please contact us.

## Technical characteristics

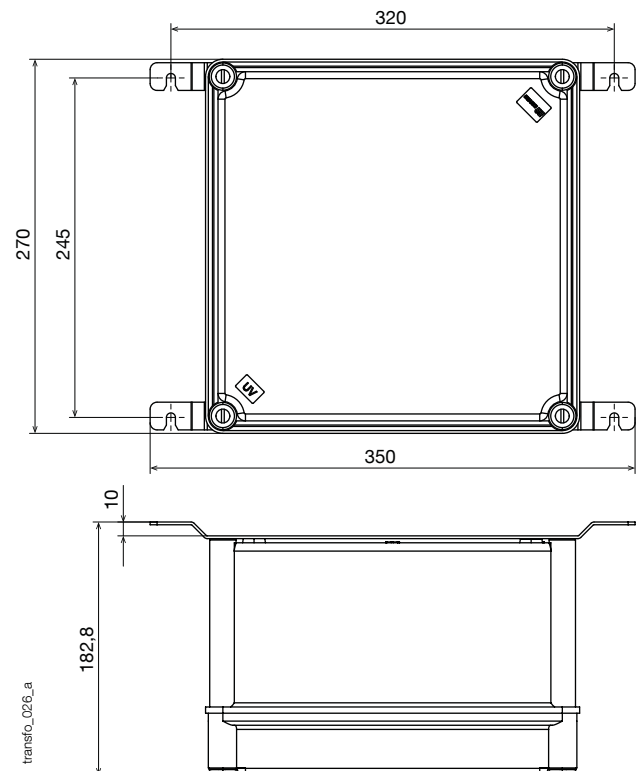
	Indoor	Outdoor
Type	three-phase	three-phase
Three-phase operating voltage	400 V between phases	200 V between phases
Single-phase operating voltage	230 V between phase and neutral	127 V between phase and neutral
Max. isolation voltage	0.72 kV	0.72 kV
Primary voltage	400 V/ $\sqrt{3}$ V between phase and neutral, i.e. 230 Vrms	220 V/ $\sqrt{3}$ V between phase and neutral; i.e. 127 Vrms
Secondary voltage	100 V/ $\sqrt{3}$ V between phase and neutral, i.e. 57.7 Vrms	400/ $\sqrt{3}$ V between phase and neutral; i.e. 220 Vrms
Precision class	0.5	0.5
Precision power	15 VA	7.5 VA
Power in thermal held	$\geq 100$ VA	$\geq 100$ VA
Heating voltage	1.2 U <sub>n</sub>	1.2 U <sub>n</sub>
Isolation class	A	A
Frequency	50 Hz	50 Hz
Working temperature	-25 ... +40 °C	-25 ... +40 °C
Pollution degree	level 3	level 3
Weight – indoor version	11.5 kg (TRAMES160)	
Weight – outdoor version	12.5 kg (TRAMES183)	12.5 kg (TRAMES197)

## Dimensions (mm)

### Indoor version



### Outdoor version



## References

Model	Version	Reference
Voltage transformer	indoor	TRAMES160
Voltage transformer	outdoor	TRAMES183
Voltage transformer	outdoor	TRAMES197