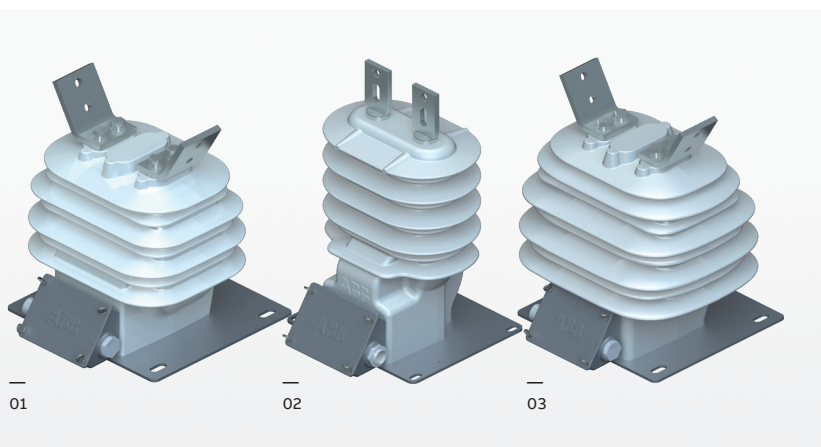


## MEDIUM VOLTAGE PRODUCTS

# Outdoor current transformers: KON-17 I2C, KON-24, KON-24 I2C

Rated voltages: 12, 17,5 and 24kV

Rated currents: 5 ÷ 1875A



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01  
KON-17 I2C

—  
02  
KON-24

—  
03  
KON-24 I2C

### Main features:

- Designed and type tested according to IEC 61869-2,
- High level breaking performance with current up to 63kA,
- Casted with HCEP mixture which gives hydrophobicity performance,
- Designed and tested for harsh conditions.

### Description

For insulation and protection, transformers are cast in hydrophobic cycloaliphatic epoxy resin (HCEP), capable of withstanding outdoor environmental conditions. The HCEP material offers superior arc track, ozone, and ultraviolet-resistive properties while maintaining physical strength.

The hydrophobic surface properties of HCEP ensure highly reliable performance in wet or humid environments.

The KON transformers are designed as single – or multiple turn transformers, with one transformer ratio, and, if necessary, with the possibility to be reconnectable on the primary (only KON-24 I2C and KON-17 I2C) or secondary side (all variants).

Number of secondary windings:

- 1 for KON-24
  - 2 for KON-17 I2C and KON 24-1 I2C,
- depending on parameters (such as the accuracy class, short-circuit current, overcurrent factor, burden....). The secondary windings are used for measurement or protection purposes, or for special use (testing winding, “PX” class).

The KON current transformers are cast in hydrophobic epoxy resin (HCEP), capable of withstanding outdoor environmental conditions and designed for insulation voltages up to:

- 17,5 kV for KON-17 I2C,
- 24 kV for KON-24 and KON-24 I2C,

One terminal of each secondary winding used and one terminal of the unused, short-circuited, windings must be earthed during transformer operation. The transformer body is fixed by using four screws. The secondary winding is led out into a cast secondary terminal board covered with a sealed cover. The transformers are designed and manufactured to confirm with the requirements and recommendations of IEC 61869-2 standard.

### Terminals

Primary terminals are electro-tin copper. Clamp-type secondary terminals accommodate up to 6 mm<sup>2</sup> wire. Polarity of primary terminals is displayed in dimensional drawing.

### Junction box

The metal junction box is equipped with PG21 cable gland. The box is anchored to the body of the transformer with screws and can be easily attached, simplifying installation and change-out procedures.

### Baseplate

The base is constructed of corrosion-resistant aluminium and is secured to the encapsulated base support.

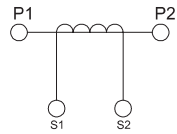
### Mounting

The KON can be mounted in either vertical or horizontal positions. Stress relief devices should be used to support cable connections.

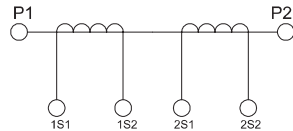
## Test reports

Test reports are stored electronically and can be e-mailed in various formats at the time of shipment.

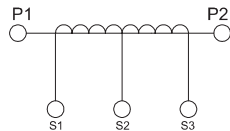
## Marking of the current transformer outlets



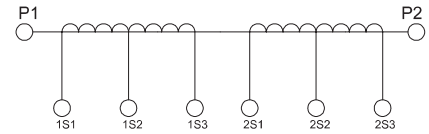
a) Single-core design



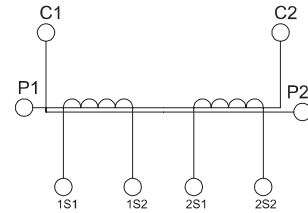
b) Double-core design



c) Single-core design, reconnectable on the secondary side



d) Double-core design, reconnectable on the secondary side



e) Double-core design, reconnectable on the primary side

Parameters		KON-17 I2C	KON-24	KON-24 I2C
Max. rated primary currents <sup>1)</sup>	[A]	1250 (ext. 150%), 1875 (ext. 100%)	1250 (ext. 120%)	1250 (ext. 150%), 1875 (ext. 100%)
Rated secondary currents <sup>2)</sup>	[A]	5; 1		
Rated frequency	[Hz]	50; 60		
Insulation levels	[kV]	12/28/75 17.5/38/95 17.5/42/110	12/28/75 17.5/38/95 24/50/125 24/60/150	12/28/75 17.5/38/95 24/50/125 24/60/150
Rated short - time thermal current [1s]	[kA]	up to 63	up to 31,5	up to 63
Max. rated burden/ classes <sup>3)</sup>	[VA/cl]	1 ÷ 60/ 0,2;0,2S;0,5;0,5S;1;3; 5P;10P, PX		
Insulating class		E		
Ambient temperature	[°C]	-60...+55		
Reconnectable		primary or secondary	secondary	primary or secondary
Weight	[kg]	30	24	43
Creepage distance	[mm]	600	800	800

1) Different primary currents can also be provided to special order.

2) It is possible to combine different values in one transformer.

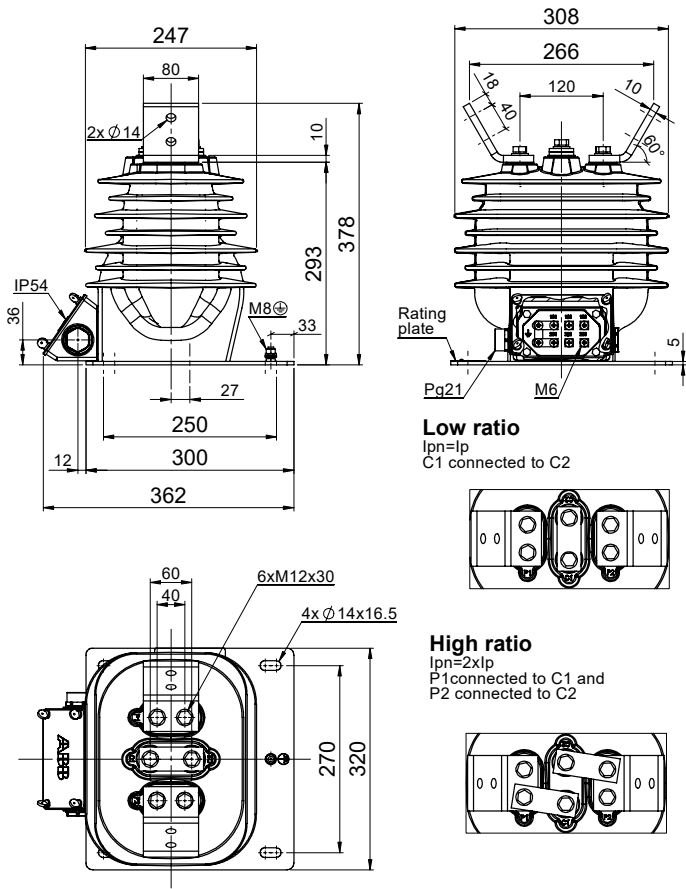
3) Other classes are available on request. Maximum output burden depends on other parameters.

4) It is possible to define high accuracy and stable performance with extended range design. Accuracy is guaranteed to be from 1% of nominal current through rating factor, up to 200% of  $I_n$ .

Dimension drawings

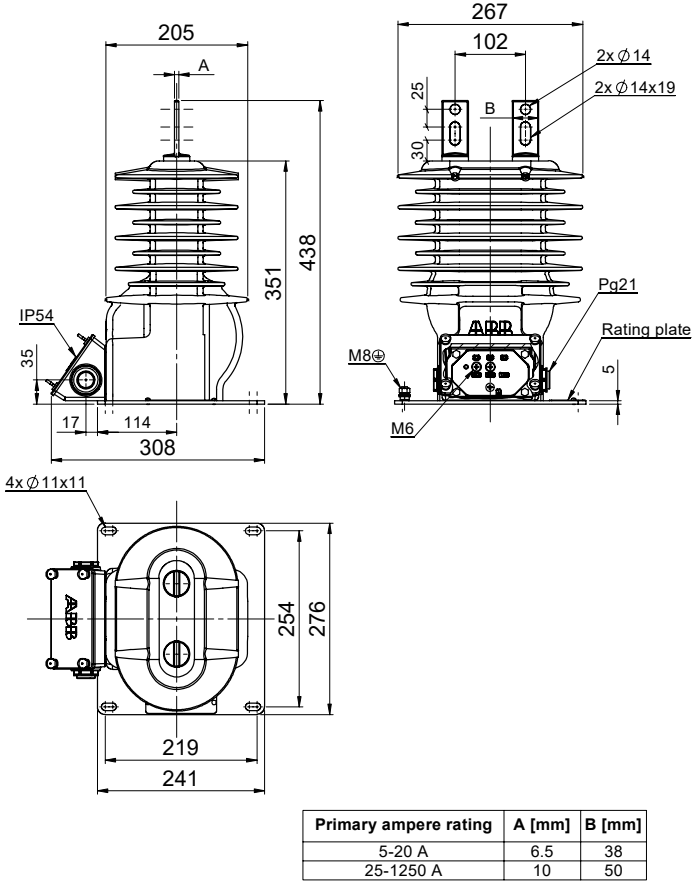
KON-17 I2C

Weight: 30 kg  
Creepage Distance: 600 mm



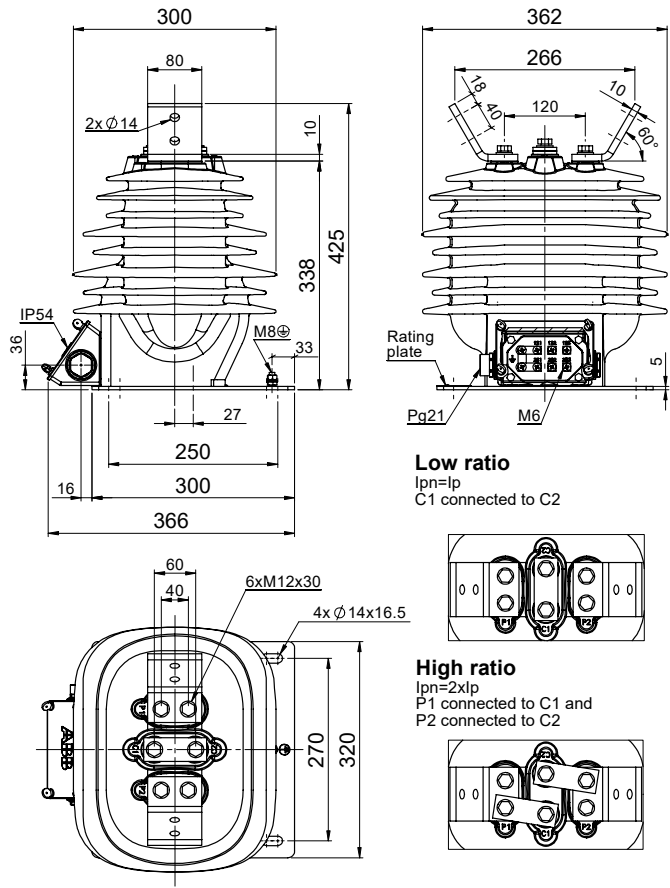
KON-24

Weight: 24 kg  
Creepage Distance: 800 mm

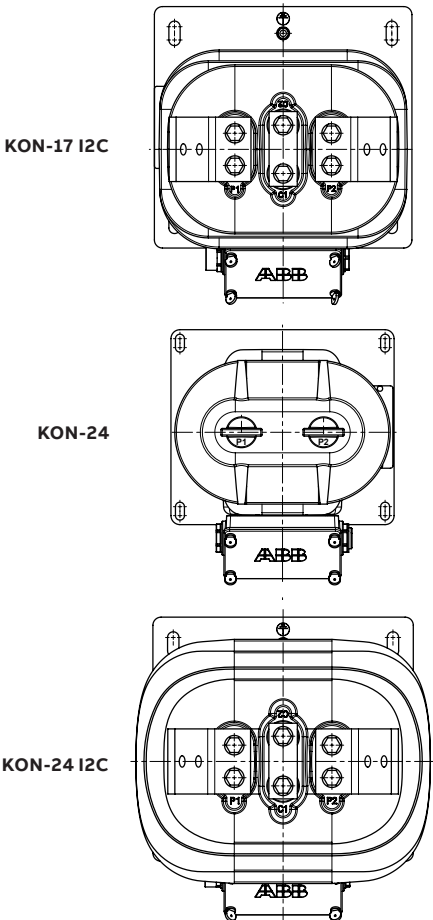


KON-24 I2C

Weight: 43 kg  
Creepage Distance: 800 mm



Primary terminals polarity



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