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MEDIUM VOLTAGE PRODUCT

## **TPE 6x.xx**

Indoor supporting current transformers



Parameters	Values	
Type	TPE 60.xx	TPE 63.xx
Highest voltage for equipment	25 kV	
Rated primary current	50 – 630 A	630 – 1 250 A
Rated short-time thermal current	25 (1s) kA	
Rated dynamic current	63 kA	
Reconnectable	secondary	

### Description

The indoor current transformer type TPE is cast in epoxy resin and designed for installation up to 25 kV in two design sizes.

The TPE current transformers are designed as single-turn or multi-turn versions, with one transformer ratio or with double ratio having the possibility of reconnection on secondary side

When agreed between the manufacturer and the customer the TPE transformers can be provided with the voltage indication system in accordance to IEC 61243-5 standard (for TPE with 2 secondaries with reconnection no possibility for voltage indication option).

The maximum number of secondary windings is 2 with maximum 6 secondary terminals without possibility of direct grounding thus the connection of each secondary to ground requires separate leads (not part of delivery). There are more details on TPE current transformer installation in separate manual available upon request.

The secondary windings are designed for metering or protection purposes, or if agreed for special use (PX or 'X' class). One terminal of each secondary winding used and one terminal of short-circuited and not used winding have to be earth during the transformer operation. The secondary terminals are cast on the front side, allowing M5 connection, covered by terminal cover, which can be sealed. The secondary terminal cover meets IP 40 requirement.

The transformer can be mounted in any position and it is fixed by four M10 bolts. An earth terminal of M8 is located on the base plate close to secondary terminals. Primary connection is made by

M12 terminal. The transformers are manufactured in conformity with dimensions suitable for secondary distribution.

### Technical data

- Highest voltage for equipment, Um: 12 - 25 kV
- Rated power-frequency withstand voltage: 28 - 50 kV
- Rated lightning impulse withstand voltage: 75 - 125 kV
- Rated frequency, fr: 50/60 Hz
- Rated primary current, Ipn:
  - TPE 60.xx 630 A
  - TPE 63.xx 1 250 A
- Rated continuous thermal current, Icth: 120 %
- Rated secondary current, Isn: 1 or 5 A
- Operation: -5°C/+40
- Transport and storage: -40°C/+70C
- Ratings (accuracy, VA): as per IEC

The transformers are designed and manufactured in conformity with the following standards and recommendations: IEC, VDE, IEEE, BS, GOST and CSN, others on request.

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01 1 secondary outlet

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02 2 secondary outlets

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03 2 secondary outlets  
+ voltage indication

### Code designation - TPU current transformers

TPE 60.11 – single core design with 150 mm wide body up to 630 A

TPE 60.31 – single or double core design with 175 mm wide body up to 630 A

TPE 63.31 – single or double core design with 175 mm wide body up to 1 250 A

TPE	x	x	-	x	x
	voltage	primary current		dimension	design
	6...up to 24 kV	0...up to 630 A 3...up to 1 250 A		1...body width 150 mm, single core 3...body width 175 mm, single or double core	1

### Example of available ratings

ID	Type	Ith/Idyn	Ratio	Secondary 1		Secondary 2		Voltage indication
				Burden [VA]	Accuracy	Burden [VA]	Accuracy	
E43911149	TPE 60.11	16/40	50/5	10	5P10	-	-	no
E43911150	TPE 60.11	25/63	100/5	10	5P10	-	-	no
E43911151	TPE 60.11	25/63	200/5	10	5P10	-	-	no
E43911152	TPE 60.11	25/63	300/5	10	5P10	-	-	no
E43911153	TPE 60.11	16/40	300/5	10	0.5 FS10	-	-	no
E43911154	TPE 60.11	16/40	300/5	10	0.5 FS10	-	-	yes
E43911155	TPE 60.31	25/63	50/5/5	5	5P(0.5)10	5	5P10	no
E43911156	TPE 60.31	25/63	100/5/5	10	5P(0.5)10	10	5P10	no
E43911157	TPE 60.31	25/63	200/5/5	10	5P(0.5)10	10	5P10	no
E43911158	TPE 60.31	25/63	300/5/5	10	5P(0.5)10	10	5P10	no
E43911159	TPE 63.31	25/63	800/5/5	10	0.5 FS 5	10	5P10	no
E43911160	TPE 63.31	25/63	800/5/5	10	0.5 FS 5	10	5P10	yes
E43911161	TPE 63.31	25/63	1 000/5/5	10	0.5 FS 5	10	5P10	no
E43911162	TPE 63.31	25/63	1 000/5/5	10	0.5 FS 5	10	5P10	yes
E43911163	TPE 63.31	25/63	1 250/5/5	10	0.5 FS 5	10	5P10	no
E43911164	TPE 63.31	25/63	1 250/5/5	10	0.5 FS 5	10	5P10	yes
E43911165	TPE 60.11	16/40	300/5	10	5P30	-	-	no
E43911166	TPE 60.11	16/40	300/5	10	5P30	-	-	yes
E43911167	TPE 60.31	16/40	300/5/5	15	0.5 FS10	10	5P30	no
E43911168	TPE 60.31	16/40	300/5/5	15	0.5 FS10	10	5P30	yes

### Marking of current transformer outlets



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01



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02

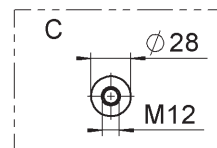
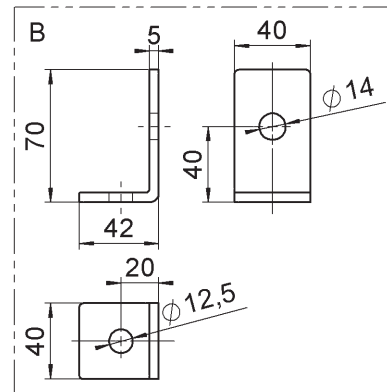
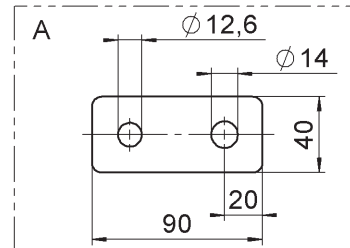
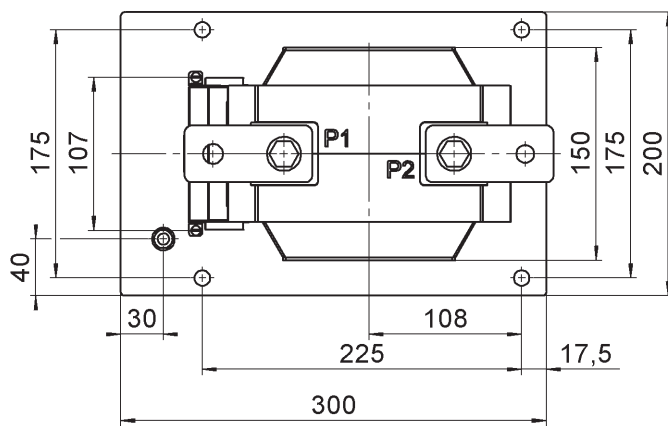
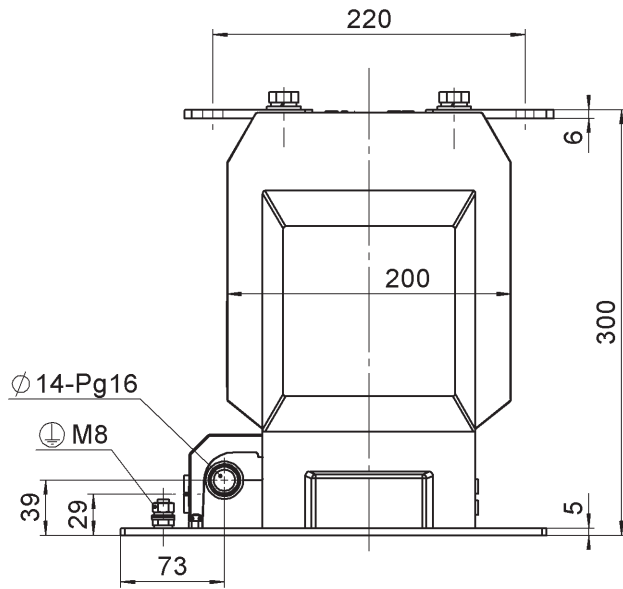
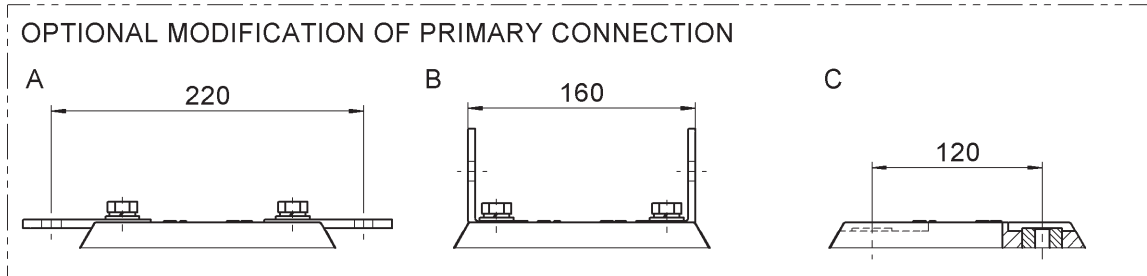


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03

# Dimensional Drawing

## TPE 60.11

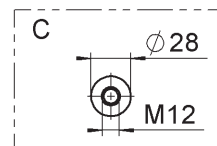
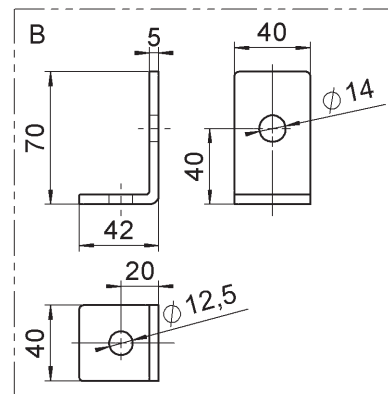
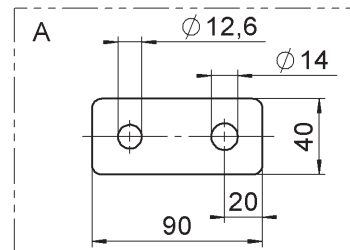
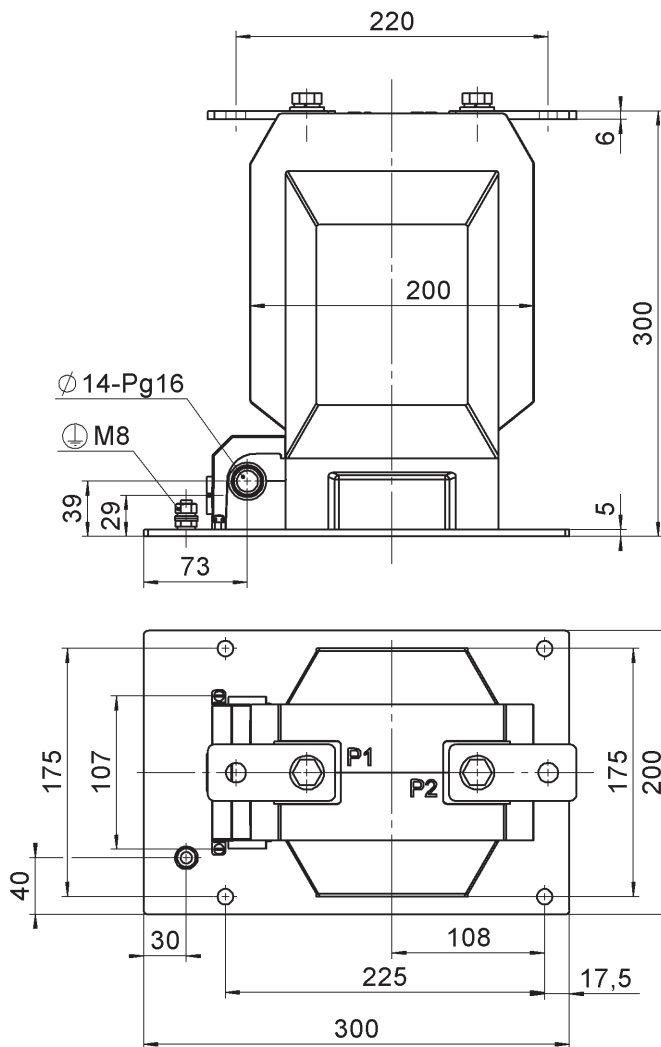
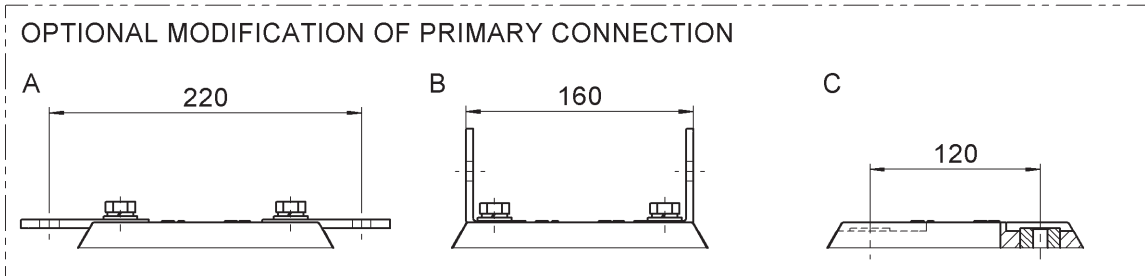
Weight: 16 kg  
Creepage Distance: 280 mm



Drawing n.	Polarity
1VL4600663R0101	P1 to secondary terminal
1VL4600663R0201	P2 to secondary terminal

**TPE 60.31**

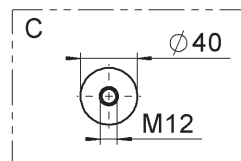
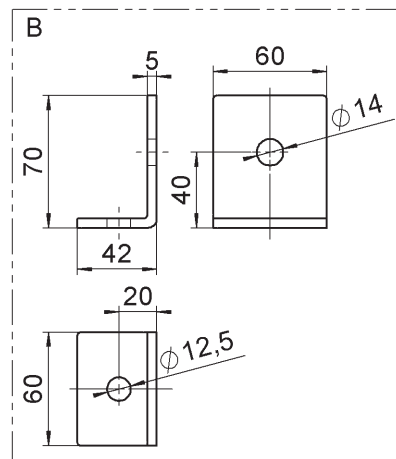
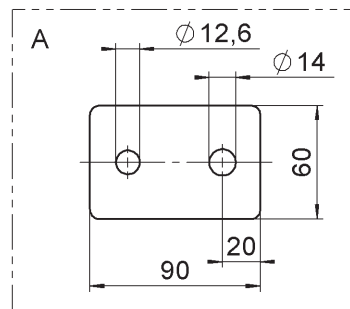
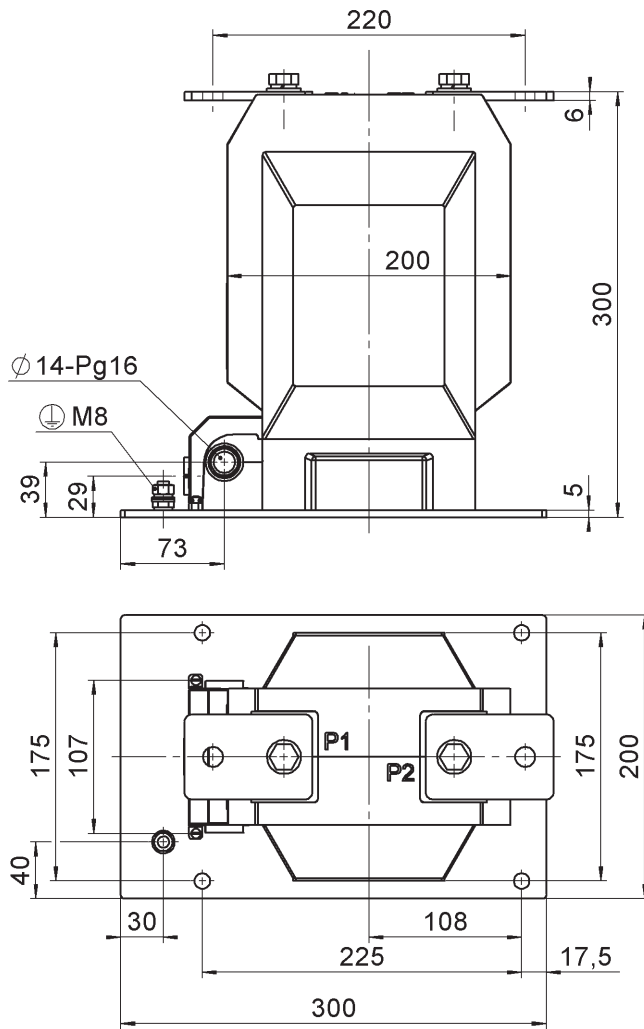
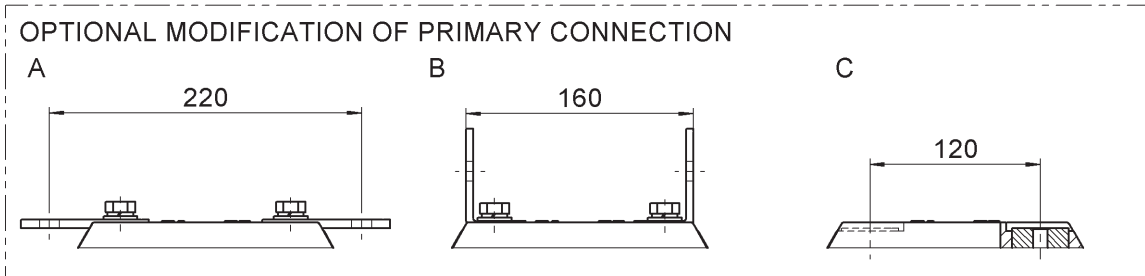
Weight: 18-20 kg  
Creepage Distance: 280 mm



Drawing n.	Polarity
1VL4600666R0101	P1 to secondary terminal
1VL4600666R0201	P2 to secondary terminal

**TPE 63.31**

Weight: 16-20 kg  
Creepage Distance: 280 mm



Drawing n.	Polarity
1VL4600666R0102	P1 to secondary terminal
1VL4600666R0202	P2 to secondary terminal

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**CONTACT US**

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