

MEDIUM VOLTAGE PRODUCT

TPE 4x.xx

Indoor supporting current transformers



Parameters	Values	
Type	TPE 40.xx	TPE 43.xx
Highest voltage for equipment	3.6 - 12 kV	
Rated primary current	5 - 480 A	480 - 800 A
Rated short-time thermal current	1 - 60 (1s) kA	
Rated dynamic current	2.5 x I _{th}	
Reconnectable	secondary	

Description

The indoor current transformer type TPE is cast in epoxy resin and designed for installation up to 12 kV.

The TPE current transformers are designed as single-turn or multi-turn versions, with possibility of reconnection on secondary side.

The maximum number of secondary windings is 3 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 back side of current transformer. Primary connection is made by M12 terminal. The transformers are manufactured in conformity with dimensions according to DIN 42 600 teil 4 design.

Technical data

- Highest voltage for equipment, U_m: 3.6 - 12 kV
- Rated power-frequency withstand voltage: 10 - 28 kV
- Rated lightning impulse withstand voltage: 40 - 75 kV
- Rated frequency, fr: 50/60 Hz
- Rated primary current, I_{pn}:
 - TPE 40.xx 480 A
 - TPE 43.xx 800 A
- Rated continuous thermal current, I_{cth}: 120 %
- Rated secondary current, I_{sn}: 1 or 5 A
- Operation: -5°C/+40°C
- Transport and storage: -40°C/+70°C
- Ratings (accuracy, VA): as per IEC

The transformers are designed and manufactured in conformity with the IEC standard. Other standards on request.

- 01 Marking of current transformer outlets - example
- a Single-core design
- b Single-core design, reconnectable on the secondary side
- c Double-core design
- d Double-core design, reconnectable on the secondary side
- e Three-core design

— 02 Single-core design

— 03 Double-core design

Code designation - TPE current transformers

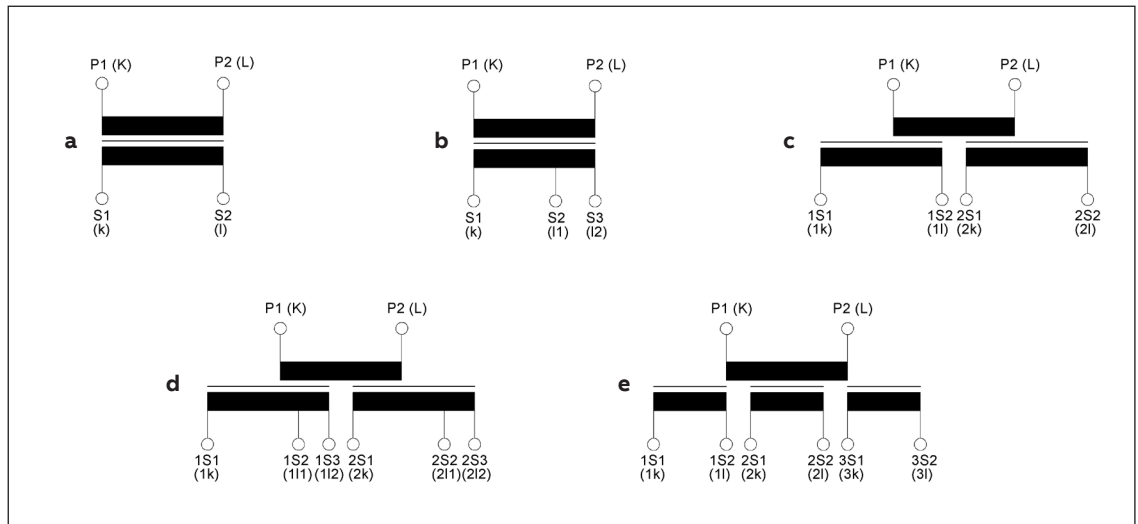
TPE 40.11 – DIN 42 600 teil 4 design up to 480 A

TPE 43.11 – DIN 42 600 teil 4 design up to 800 A

TPE	x	x	-	x	x
	voltage	primary current		dimension	design
	4...up to 12 kV	0...up to 480 A 3...up to 800 A		1...body size according to DIN 42 600 teil 4	1

Example of ratings

Type	Ith/Idyn [kA]	Ratio [A]	Secondary 1		Secondary 2	
			Burden [VA]	Accuracy	Burden [VA]	Accuracy
TPE 43.11	60/150	800/5	45	5P10	-	-
TPE 43.11	60/150	800/5	150	0.2 FS5	-	-
TPE 43.11	60/150	800/1	45	5P10	-	-
TPE 43.11	60/150	800/1	150	0.2 FS5	-	-
TPE 43.11	60/150	500/5/5	5	1 FS5	5	0.5 FS5
TPE 43.11	60/150	500/5/5	7.5	0.2 FS5	5	5P10



— 01

Marking of current transformer outlets



— 02

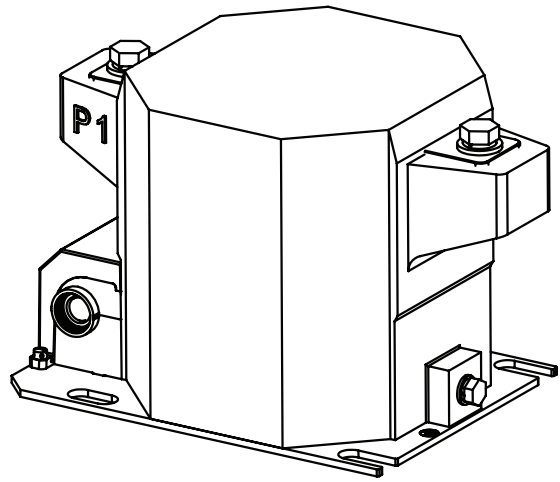
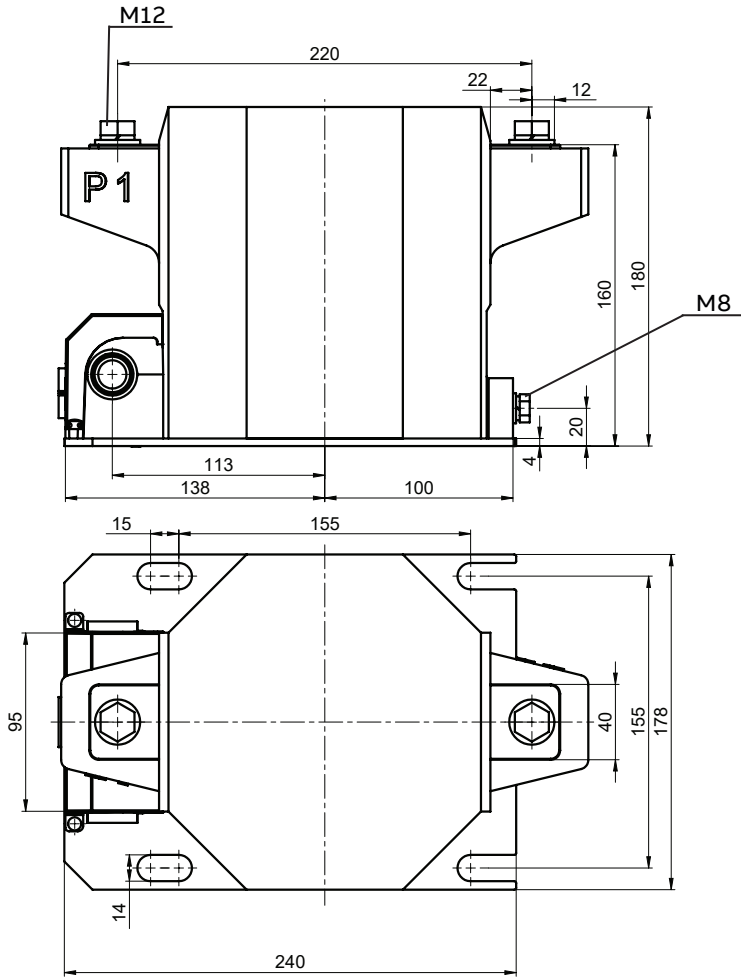


— 03

Dimensional Drawing

TPE 40.11
TPE 43.11

Weight: app. 13 kg
Creepage Distance: 155 mm



CONTACT US

ABB s.r.o.
ELDS Brno
Videnska 117, 619 00 Brno,
Czech Republic
Tel.: +420 547 152 021
+420 547 152 854
Fax: +420 547 152 626
E-mail: kontakt@cz.abb.com

NOTE

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents - in whole or in parts - is forbidden without prior written consent of ABB.

Copyright© 2021 ABB
All rights reserved