

# TJO 7

## Outdoor voltage transformers



The TJO 7 single-pole insulated voltage transformers are cast in outdoor epoxy resin and are designed mainly for insulation voltages up to 40.5 kV. Insulation voltages different from the above are to be the subject of an agreement between the manufacturer and the customer. Alternative insulation voltages are available to special order. Standard transformers incorporate an overvoltage factor of 1.9  $U_n/8$  hrs.

### Description

One outlet of the primary winding, including its terminal, is insulated from earth at the rated insulation value. The other outlet of the primary winding, together with its terminal, is earthed during operation. Most transformers are equipped with two secondary windings, the first is either for measurement or protection purposes, the other is for connection into an open-delta configuration in a three-phase system. One terminal of each secondary winding and one of the open-delta connected terminals must be earthed during the transformer operation. The secondary windings are led out into a cast-type secondary terminal board covered with a sealed plastic cover.

The transformer body is fixed by four screws, the bolted earthing clamp is located on the transformer base plate. For ease of handling and assembly the transformer is supplied with four suspension lugs fixed to the base plate.

By special order, the transformer can also be supplied with a primary winding designed for two different primary voltages (with reconnectable secondary winding).

The transformers are designed and manufactured to conform with the requirements and recommendations of the following standards: IEC, EN, VDE, ANSI, BS, GOST, ČSN and PN-EN.

### Parameters

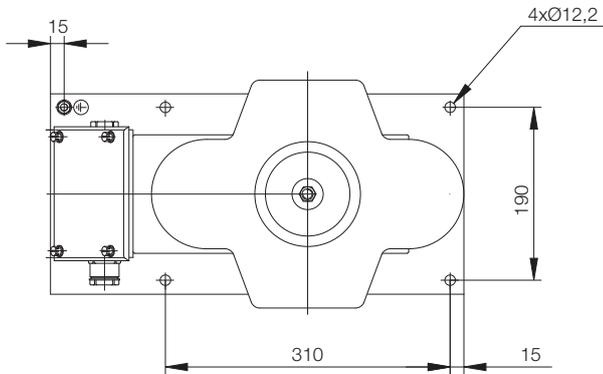
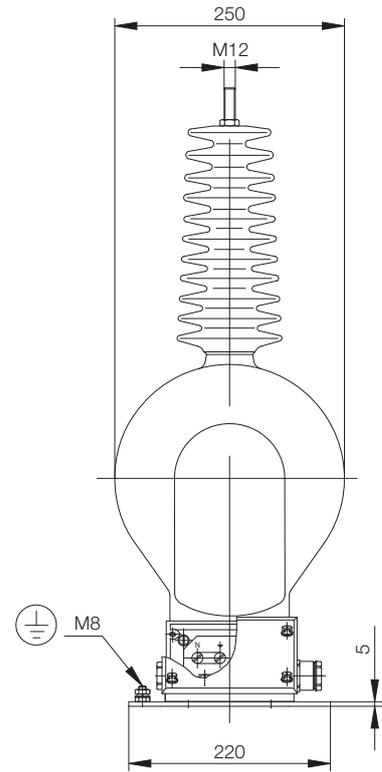
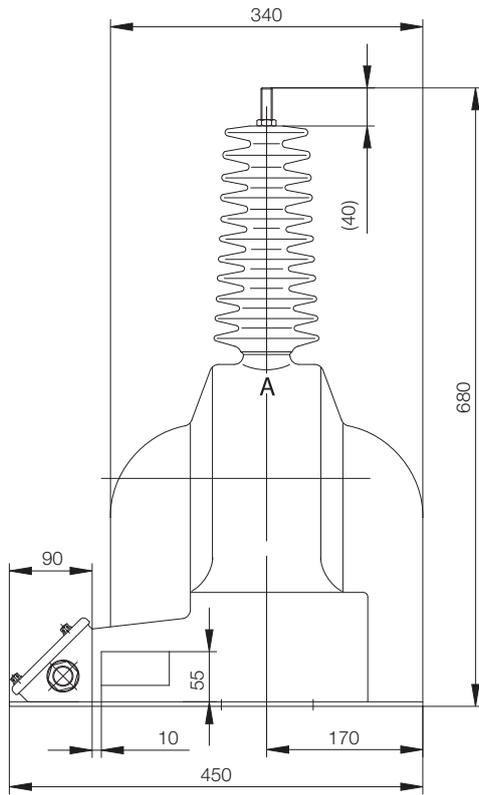
Rated primary voltages <sup>1)</sup>	[kV]	20:√3; 22:√3; 27:√3; 30:√3; 33:√3; 35:√3
Rated secondary voltages <sup>1) 2)</sup>	[V]	100:√3; 110:√3
Rated voltages for open-delta connection <sup>1)</sup>	[V]	100:3; 110:3
Rated frequency	[Hz]	50; 60
Highest voltage for equipment	[kV]	up to 40.5
Rated power-frequency withstand voltage (r.m.s.), 1 min.	[kV]	up to 95
Rated lightning impulse withstand voltage (peak)	[kV]	up to 200
Max. rated burden/classes – measurement winding	[VA/cl]	50/0.2; 150/0.5; 250/1
Max. rated burden/classes – residual winding	[VA/cl]	up to 200/3P or 6P
Rated thermal limiting output	[VA]	1000

<sup>1)</sup> Other voltages can also be supplied on request.

<sup>2)</sup> Accuracy classes 0.2; 0.5; 1 (measurement winding) or 3P; 6P (protection winding).

**Dimension drawing**

weight: 52-55 kg  
creepage distance: 1120 mm



**CONTACT US**  
ABB s.r.o.  
EPDS Brno  
Videnska 117, 619 00 Brno,  
Czech Republic  
Tel.: +420 547 152 082  
+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© 2019 ABB  
All rights reserved