

MEDIUM VOLTAGE PRODUCT

## **TJMC 7.1**

Indoor voltage transformers



Parameters	Values
Highest voltage for equipment	36 kV
Power frequency test voltage, 1 min.	70 kV
Lightning impulse test voltage	170 kV
Max. rated burden, classes	25/0.2 - 60/0.5 - 120/1 VA/cl
Residual winding	50 - 150/6P VA/cl

### Description

The TJMC 7.1 is fully enclosed, epoxy resin casted indoor voltage transformer, coated in zinc, reliable grounded, with plug-in connection for primary terminals, used for voltage measurement and protection in the applications up to 36 kV.

Insulation voltages different from the above are the subject of an agreement between the manufacturer and the customer.

If no a different value is required, the transformers are manufactured with an overvoltage factor of  $1.9 \times U_n/8$  hrs. One outlet of the primary winding, including the respective terminal, is insulated from the earth to a level which corresponds to the rated insulation value. The other outlet of primary winding with terminal is earthed during the operation. Transformer has 6 secondary terminals, which can support up to 3 secondary windings, which can be used for measuring and protection purpose or being connected into an open-delta connection in a three-phase system. One terminal of each secondary winding have to be earthed during the transformer operation. The transformer can be mounted in any position. The transformers are fixed by four screws. The secondary terminal board is covered with sealable cover made of plastic material.

### Rated primary voltages

30/ $\sqrt{3}$  kV; 33/ $\sqrt{3}$  kV; 35/ $\sqrt{3}$  kV

Other primary voltages can also be supplied on request.

### Rated secondary voltages

100/ $\sqrt{3}$  V; 110/ $\sqrt{3}$  V; 115/ $\sqrt{3}$  V; 120/ $\sqrt{3}$  V; 200/ $\sqrt{3}$  V; 230/ $\sqrt{3}$  V; 100 V; 110 V; 115 V; 120 V; 200 V; 230 V – accuracy classes 0.2; 0.5; 1 (measuring winding) or 3P; 6P (protection winding). Other secondary voltages can also be supplied on request.

### Rated voltages for open-delta connection

100/3 V; 110/3 V - class 6P.

Other voltages for open-delta connection can also be supplied based on customer requirement.

### Rated frequency

50 Hz; 60 Hz.

Based on a discussion with the manufacturer, the transformer can also be designed for two primary voltage levels (with change over secondary side).

The transformers are manufactured conformably to the requirements and recommendations of the following standards and regulations: IEC, VDE, IEEE, BS, GOST and CSN.

For marking of the voltage transformer outlets see picture 01 a-e.

—  
01 Marking of the  
voltage transformers  
outlets

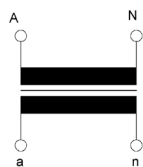
**a** Single-pole insulated  
transformer

**b** Single-pole insulated  
transformer with a tap

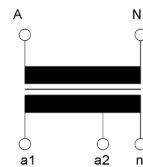
**c** Single-pole insulated  
transformer with two  
secondary windings

**d** Single-pole insulated  
transformer with two  
secondary windings,  
with one of which being  
the auxiliary (residual)  
winding

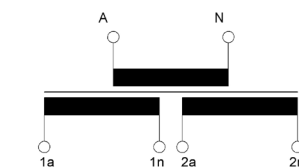
**e** Single-pole insulated  
transformer with two  
secondary, tapped  
windings, with one  
which being the auxiliary  
(residual) winding



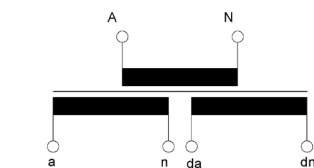
**a**



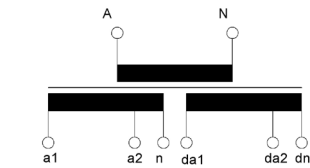
**b**



**c**



**d**

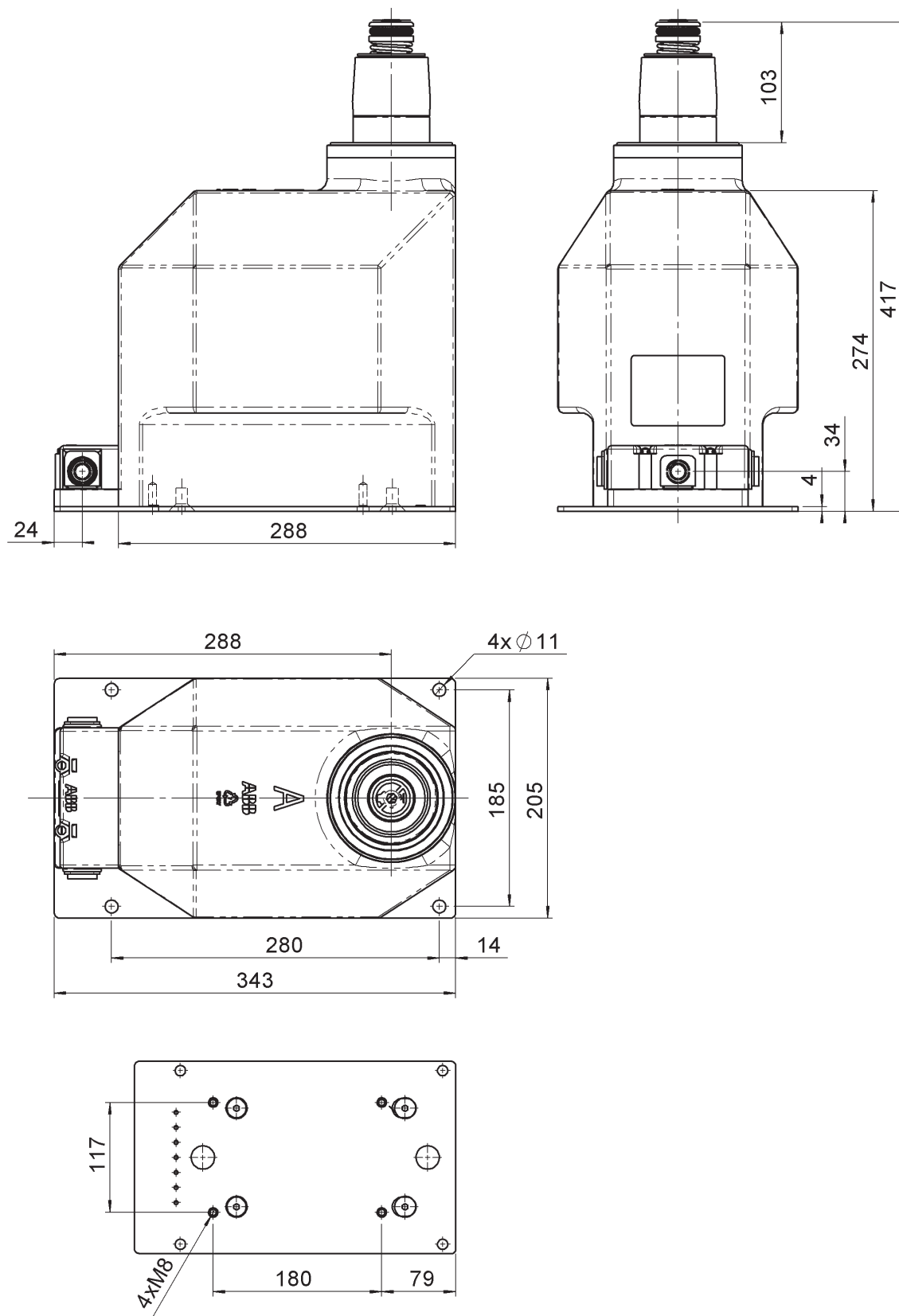


**e**

## Dimensional Drawing

TJMC 7.1

Weight: appr. 40 kg



---

#### 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© 2022 ABB  
All rights reserved