

MEDIUM VOLTAGE PRODUCT

## **TDC 7**

# Indoor voltage transformers



01 Secondary terminals of TDC 7. The double pole models can have max. 4 sec. terminals

Parameters	Units
Highest voltage for equipment	36 kV
Power frequency test voltage, 1 min.	70 kV
Lightning impulse test voltage	170 kV
Max. rated burden, classes	50/0.2 - 150/0.5 - 250/1 VA/cl
Residual winding	50-200/6P VA/cl

#### Description

The TDC 7 double-pole insulated voltage transformers are casted in epoxy resin and designed mostly for insulation voltage 36 kV.

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

If no a different value is required the transformers are manufactured with a overvoltage factor of 1.2 x Un. Both outlets of the primary winding, including the respective terminal is insulated from the earth to a level which corresponds to the rated insulation value. Most of the transformers are equipped with one secondary windings. One terminal of each secondary winding has 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.

#### Secondary wiring

The terminal box is entirely metal and provided with two detachable threaded inserts, Pg 16. Degree of protection is IP 30. The terminals are provided with M5 screws for the termination of the secondary wiring and with throughgoing holes for direct earthing of the secondary circuit by M6 screws. The terminal cover is sealable.

#### System and test voltages

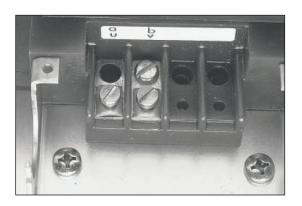
Primary winding					
Туре	Highest voltage kV	Alter- nating test voltage kV	Impulse test voltage 1.2/50 µs, kV	Rated frequency Hz	
TDC 7	36	70	170	50 (60)	

The test voltage of secondary winding is 3 kV (1 min)

#### **Standards**

The transformers are manufactured according to the requirements and recommendations of the following standards and regulations: IEC, ANSI, VDE, BS, GOST and ČSN.

#### Marking of the voltage transformer outlets



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#### Double pole insulated voltage transformers

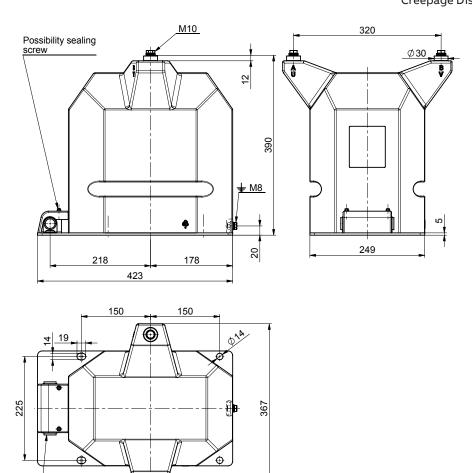
Туре	TDC 7	
Primary voltage	25 00036 000 V	
Terminal marking	A-B	
Max. number of secondary windings	2	
Secondary voltage	100 V 110 V	
Terminal marking	a-b	
Accuracy classes	0.2 0.5 1 3 3P	
Max. rated burden for accuracy class; 1)	60 150 300 500 300 VA	
Secondary thermal limiting current U = 1.2 x U <sub>n</sub>	max. 8 A	
Mechanical strength of primary terminal	5 kN	
Weight approx.	72 kg	
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Valid for single measuring winding only.
 Available outputs for double meas, wdgs are calculated on request.

## **Dimensional Drawing**

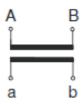
Weight: 72 kg Creepage Distance: 334 mm

**TDC 7** 



### Circuit diagram, standard

Pg16



Weight ca. 57 kg Creepage distance 334 mm Arcing distance 304 mm



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