

## TDO 6

# Outdoor voltage transformers



### Description

All parts of the transformer primary winding are insulated from earth, including the terminals at the rated insulation value, to an insulation level identical with the rated insulation level. When operating in a three-phase system, the primary transformer inlets are connected across the respective lines, to the phase-to-phase voltage, usually in the 'V' type of connection. The majority of the transformers are equipped with a single secondary winding, for use either for measurement or protection purposes. One of the terminals of each secondary winding must be earthed during the transformer operation. The secondary windings are led out into a cast-type secondary terminal board covered with a sealed 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 frame.

By special order the transformer can also be provided with primary windings designed for two different primary voltages (with secondary side changeover switch).

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

The TDO 6 double-pole insulated voltage transformers are cast in outdoor epoxy resin and are designed mainly for insulation voltages up to 25 kV. Alternative insulation voltages are available to special order. Standard transformers incorporate an overvoltage factor of  $1.2 \times U_n$ .

### Parameters

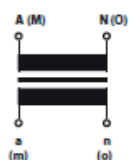
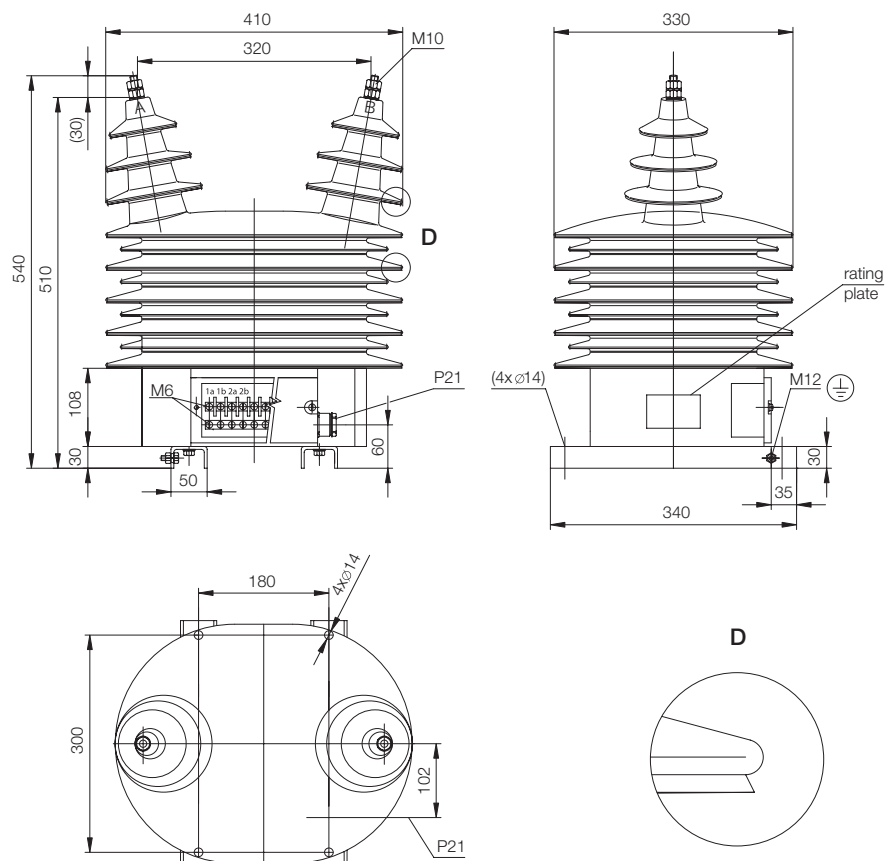
Rated primary voltages <sup>1)</sup>	[kV]	10; 15; 20; 22
Rated secondary voltages <sup>1) 2)</sup>	[V]	100; 110
Rated frequency	[Hz]	50; 60
Highest voltage for equipment	[kV]	up to 25
Rated power-frequency withstand voltage (r.m.s.), 1 min.	[kV]	up to 50
Rated lightning impulse withstand voltage (peak)	[kV]	up to 125
Max. rated burden/classes – measurement winding	[VA/cl]	50/0.2; 100/0.5; 150/1

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

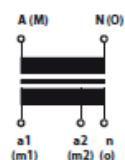
<sup>2)</sup> Accuracy classes 0.2; 0.5; 1 (measurement winding) or 3P; 6P (protection winding).

## Dimension drawing

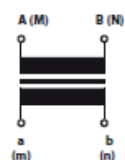
creepage distance: 1120 mm



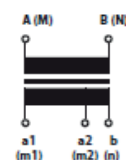
a) Single-pole insulated transformer



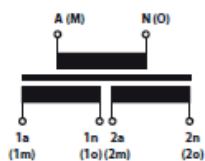
b) Single-pole insulated transformer with a tap



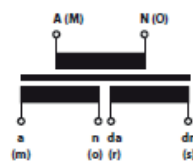
c) Double-pole insulated transformer



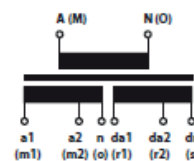
d) Double-pole insulated transformer with a tap



e) Single-pole insulated transformer with two secondary windings



f) Single-pole insulated transformer with two secondary windings, with one being the auxiliary (residual) winding



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

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