


MEDIUM VOLTAGE PRODUCT

TJC 7

Indoor voltage transformers



Parameters	Values
Highest voltage for equipment	36 - 40.5 kV
Power frequency test voltage, 1 min.	70 - 95 kV
Lightning impulse test voltage	170 - 200 kV
Max. rated burden, classes	75/0.2 - 200/0.5 - 300/1 VA/cl
Residual winding	50 - 200/6P VA/cl

Description

The TJC 7 single-pole insulated voltage transformers are casted in epoxy resin and designed mostly for insulation voltages of 36 kV to 40.5 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 a 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. Most of the transformers are equipped with two secondary windings, the first one for either measuring or protection purposes, the other for being connected into an open-delta connection in a three-phase system. One terminal of each secondary winding and one of the open-delta connected terminals 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 – 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

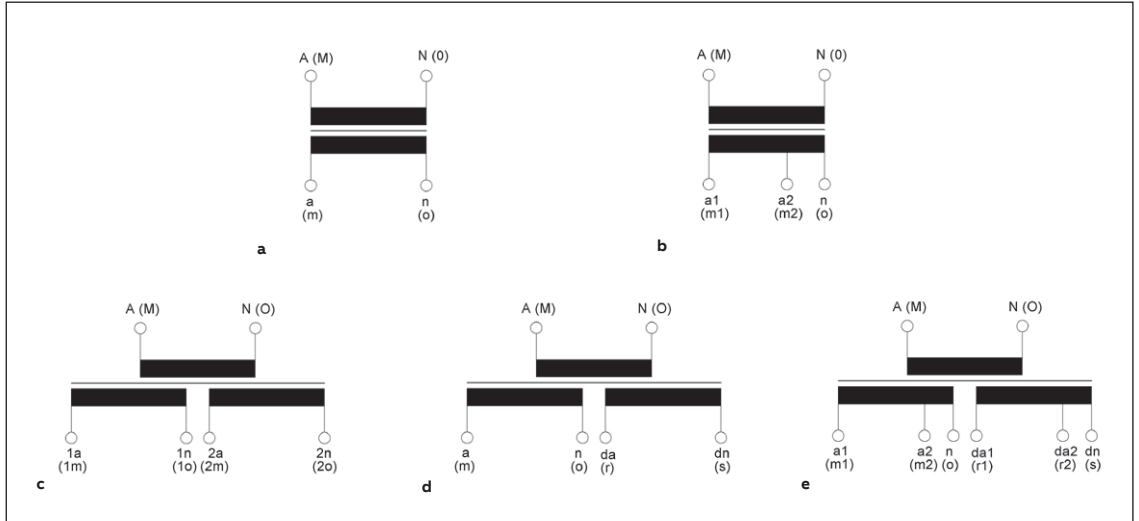
50 Hz; 60 Hz.

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 windings, tapped windings, with one which being the auxiliary (residual) winding



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01

Standard execution of the transformers

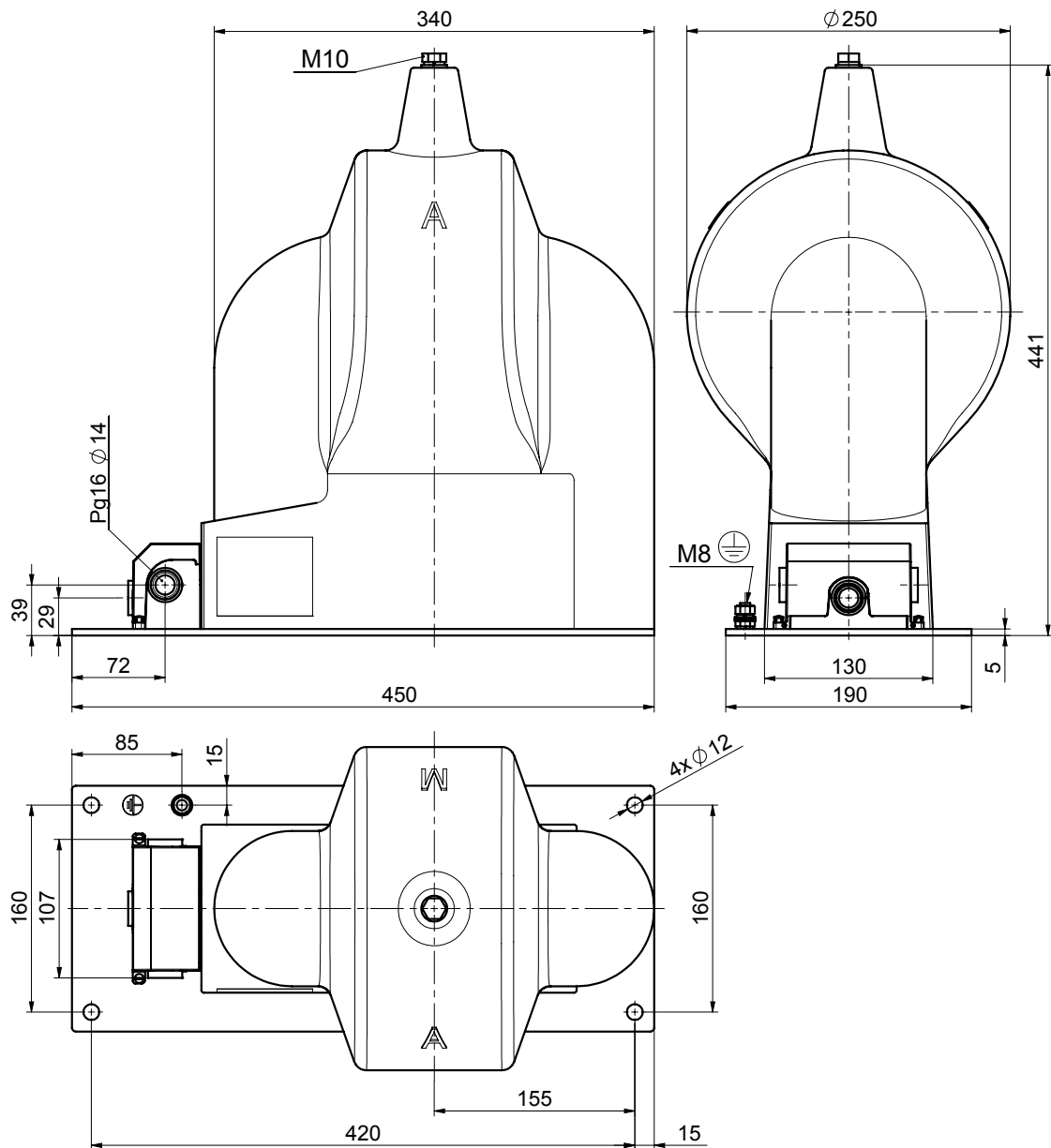
Primary voltage, [V]	Secondary voltage			Residual winding		
	voltage, [V]	accuracy	burden, [VA]	voltage, [V]	accuracy	burden, [VA]
30 000/√3	100/√3	0.2	15;25;50			
30 000/√3	100/√3	0.2	15;25;50	100/3	6P	50
30 000/√3	100/√3	0.2	15;25;50	100/3	6P	100
30 000/√3	100/√3	0.2	15;25;50			
30 000/√3	100/√3	0.2	15;25;50	100/3	6P	50
30 000/√3	100/√3	0.2	15;25;50	100/3	6P	100
30 000/√3	100/√3	0.5	50;100;150			
30 000/√3	100/√3	0.5	50;100;150	100/3	6P	50
30 000/√3	100/√3	0.5	50;100;150	100/3	6P	100
33 000/√3	110/√3	0.5	10;100;150			
33 000/√3	110/√3	0.5	10;100;150	110/3	6P	50
33 000/√3	110/√3	0.5	10;100;150	110/3	6P	100
33 000/√3	110/√3	1	100;150;200			
33 000/√3	110/√3	1	100;150;200	110/3	6P	50
33 000/√3	110/√3	1	100;150;200	110/3	6P	100
33 000/√3	110/√3	1	100;150;200			
33 000/√3	110/√3	1	100;150;200	110/3	6P	50
33 000/√3	110/√3	1	100;150;200	110/3	6P	100
30 000/√3	100/√3	0.2	15;25;50			
30 000/√3	100/√3	0.2	15;25;50	100/3	6P	50
30 000/√3	100/√3	0.2	15;25;50	100/3	6P	100
30 000/√3	100/√3	0.2	15;25;50			
30 000/√3	100/√3	0.2	15;25;50	100/3	6P	50
30 000/√3	100/√3	0.2	15;25;50	100/3	6P	100
30 000/√3	100/√3	0.5	50;100;150			
30 000/√3	100/√3	0.5	50;100;150	100/3	6P	50
30 000/√3	100/√3	0.5	50;100;150	100/3	6P	100
33 000/√3	110/√3	0.5	10;100;150			
33 000/√3	110/√3	0.5	10;100;150	110/3	6P	50
33 000/√3	110/√3	0.5	10;100;150	110/3	6P	100
33 000/√3	110/√3	1	100;150;200			
33 000/√3	110/√3	1	100;150;200	110/3	6P	50
33 000/√3	110/√3	1	100;150;200	110/3	6P	100
33 000/√3	110/√3	1	100;150;200			

Primary voltage, [V]	Secondary voltage			Residual winding		
	voltage, [V]	accuracy	burden, [VA]	voltage, [V]	accuracy	burden, [VA]
33 000/ $\sqrt{3}$	110/ $\sqrt{3}$	1	100;150;200	110/3	6P	50
33 000/ $\sqrt{3}$	110/ $\sqrt{3}$	1	100;150;200	110/3	6P	100
30 000/ $\sqrt{3}$	100/ $\sqrt{3}$	0.2	15;25;50			
30 000/ $\sqrt{3}$	100/ $\sqrt{3}$	0.2	15;25;50	100/3	6P	50
30 000/ $\sqrt{3}$	100/ $\sqrt{3}$	0.2	15;25;50	100/3	6P	100
30 000/ $\sqrt{3}$	100/ $\sqrt{3}$	0.2	15;25;50			
30 000/ $\sqrt{3}$	100/ $\sqrt{3}$	0.2	15;25;50	100/3	6P	50
30 000/ $\sqrt{3}$	100/ $\sqrt{3}$	0.2	15;25;50	100/3	6P	100
30 000/ $\sqrt{3}$	100/ $\sqrt{3}$	0.5	50;100;150			
30 000/ $\sqrt{3}$	100/ $\sqrt{3}$	0.5	50;100;150	100/3	6P	50
30 000/ $\sqrt{3}$	100/ $\sqrt{3}$	0.5	50;100;150	100/3	6P	100
33 000/ $\sqrt{3}$	110/ $\sqrt{3}$	0.5	10;100;150			
33 000/ $\sqrt{3}$	110/ $\sqrt{3}$	0.5	10;100;150	110/3	6P	50
33 000/ $\sqrt{3}$	110/ $\sqrt{3}$	0.5	10;100;150	110/3	6P	100
33 000/ $\sqrt{3}$	110/ $\sqrt{3}$	1	100;150;200			
33 000/ $\sqrt{3}$	110/ $\sqrt{3}$	1	100;150;200	110/3	6P	50
33 000/ $\sqrt{3}$	110/ $\sqrt{3}$	1	100;150;200	110/3	6P	100
33 000/ $\sqrt{3}$	110/ $\sqrt{3}$	1	100;150;200			
33 000/ $\sqrt{3}$	110/ $\sqrt{3}$	1	100;150;200	110/3	6P	50
33 000/ $\sqrt{3}$	110/ $\sqrt{3}$	1	100;150;200	110/3	6P	100

Dimensional Drawing

TJC 7

Weight: appr. 50 kg
Creepage Distance: 480 mm



Drawing n.
44203800

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