

MEDIUM VOLTAGE PRODUCT

TJE 3; TJE 3.1

Indoor voltage transformers



Parameters	Values
	TJE 3 TJE 3.1
Highest voltage for equipment	3.6 – 7.2 kV
Power frequency test voltage, 1 min.	10 - 20 kV
Lightning impulse test voltage	40 - 60 kV
Rated burden/accuracy	15/0.2 VA/cl 30/0.5 VA/cl 75/1 VA/cl
Auxiliary winding	50 - 100/6P VA/cl

Description

Single-pole insulated voltage instrument transformers of TJE 3 and TJE 3.1 types are encasted in epoxy resin and designed for the above mentioned insulation voltages. Compared to the TJE 3 and TJE 3.1 transformers differ in the size of the transformer base plate used to provide for various modes of connection of the transformer in the switchboard.

If no other 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, i.e. including the corresponding terminal, is insulated from the earth to an insulation level which corresponds to the rated insulation value. The other primary outlet is connected to the terminal, with the latter being earthed during the operation. Most of the transformers are equipped with two secondary windings, with the first of them serving either for measuring or protection purposes, and the other connected in open-delta in a three-phase power system.

During the transformer operation one terminal of each of the secondary windings and also one of the open-delta connected terminals have to be earthed. The secondary windings are brought out onto a cast-type secondary terminal board, covered with a sealable cover made of plastic material.

The transformer may be mounted in any installation position in which the transformer body is fixed using four screws. The M8 earthing terminal finds itself on the transformer base plate.

Rated primary voltages

3/√3 kV; 3.3/√3 kV; 6/√3 kV; 6.6/√3 kV. Other primary voltages can also be supplied on request.

Rated secondary voltages

100/√3 V; 110/√3 V – with 0.2; 0.5 and 1 accuracy classes (measuring winding) or 3P class (protection winding). On request, transformers with other secondary voltages can also be made available.

Rated voltages of auxiliary winding 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.

It is possible to have the transformer designed for two voltage primary levels (with a changeover on the secondary side), on the basis of an agreement with the manufacturer.

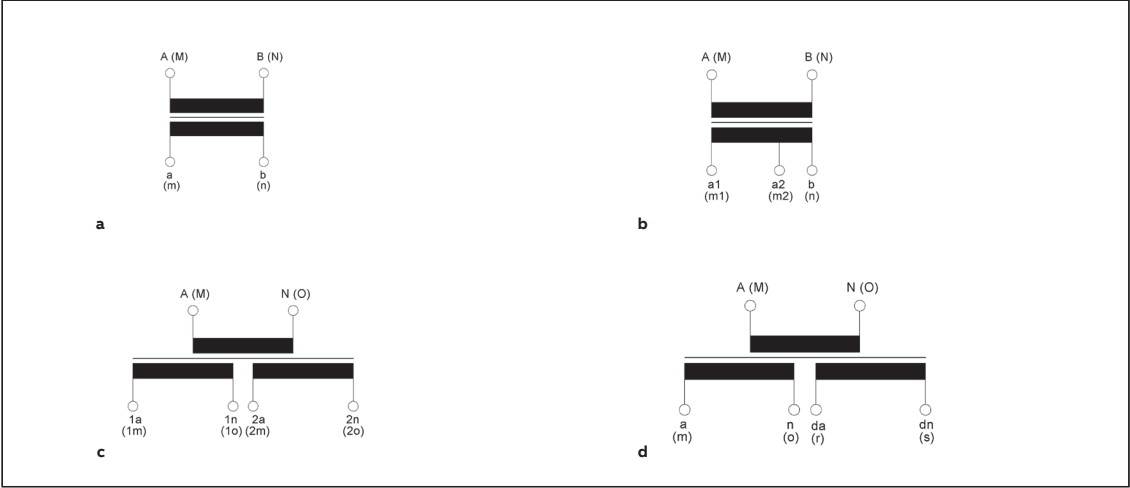
The transformers are manufactured in conformity with the requirements and regulations of the following standards and regulations: IEC, VDE, IEEE, BS, GOST and ČSN.

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

Optional accessory

The TJE 3 and TJE 3.1 can be delivered together with an external fuse holder as an option in case of interest. The fuse holder is equipped with JT6 fuse with tripping current 300 mA (recommended for system voltage above 6,6 kV) or 600 mA (recommended for system voltage up to 6,6 kV). It is delivered separately, not mounted, but together with all mounting accessories for easy installation. Fuse holder with fuse can be delivered fully separately as well.

01 Marking of the voltage trans-
former outlets
a secondary winding for mea-
suring or protective purposes
b secondary winding with a tap
c two secondary windings
d measuring and auxilliary
windings



01

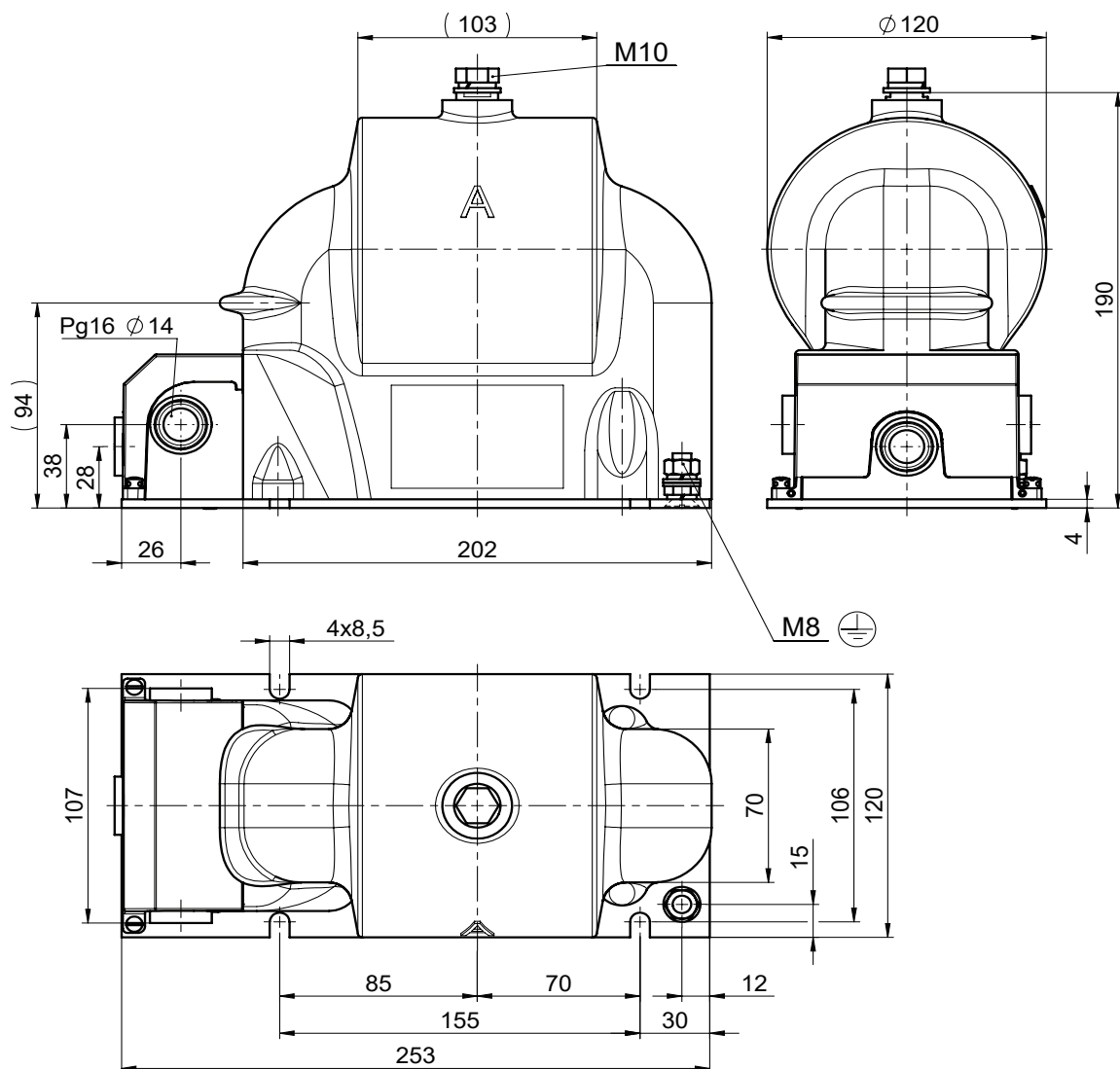
Standard execution of the transformers

Primary voltage, [V]	Secondary voltage		burden, [VA]	Residual winding		
	voltage, [V]	accuracy		voltage, [V]	accuracy	burden, [VA]
3 000/√3	100/√3	0.2	5;10;15;20			
3 000/√3	100/√3	0.2	5;10;15	100/3	6P	50;75;100
3 000/√3	100/√3	0.5	20;25;30;50			
3 000/√3	100/√3	0.5	20;25;30	100/3	6P	50;75;100
3 000/√3	100/√3	1	30;50;75;100			
3 000/√3	100/√3	1	30;50;75	100/3	6P	50;75;100
6 000/√3	100/√3	0.2	5;10;15;20			
6 000/√3	100/√3	0.2	5;10;15	100/3	6P	50;75;100
6 000/√3	100/√3	0.5	20;25;30;50			
6 000/√3	100/√3	0.5	20;25;30	100/3	6P	50;75;100
6 000/√3	100/√3	1	30;50;75;100			
6 000/√3	100/√3	1	30.50;75	100/3	6P	50;75;100

Dimensional Drawings

TJE 3

Weight: appr. 10 kg
Creepage Distance: 245 mm

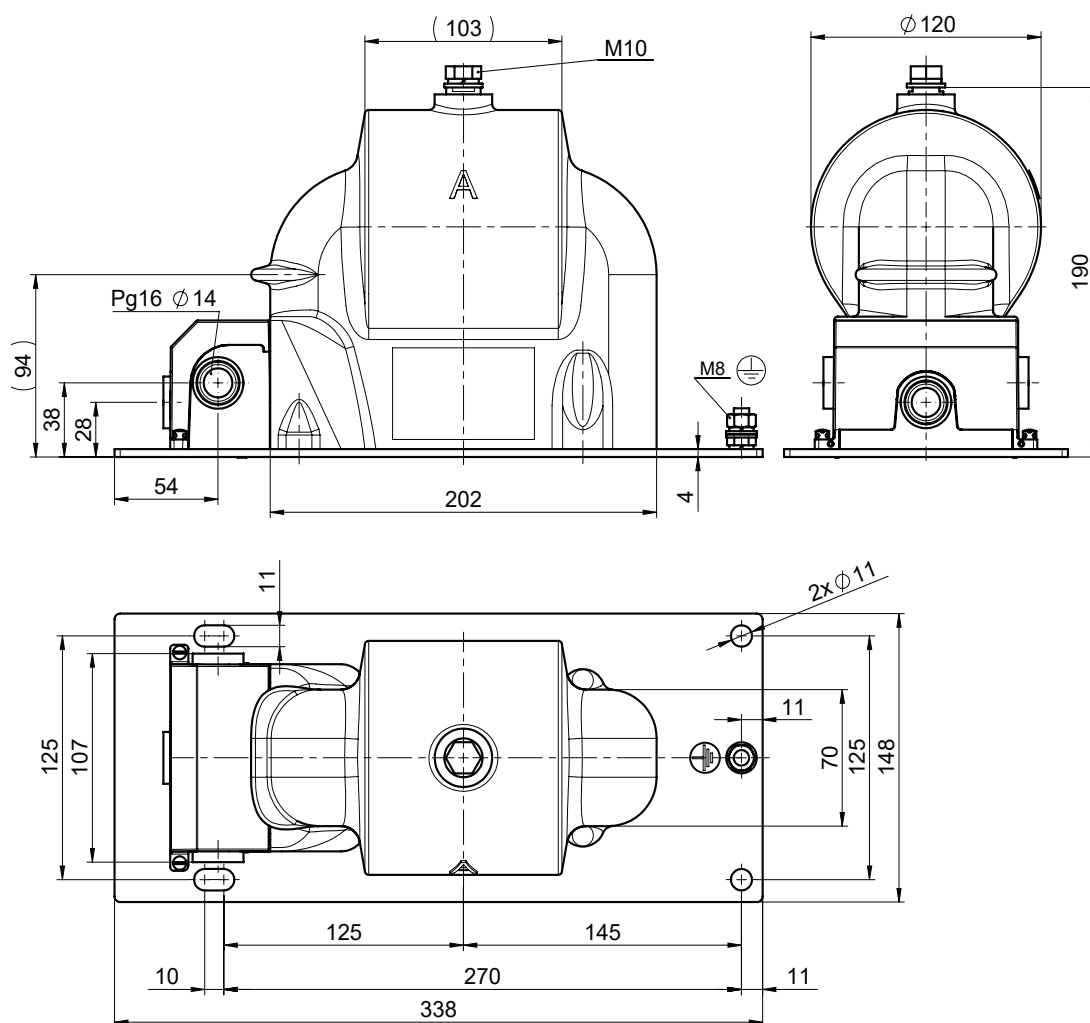


Drawing n.

1VL4200252R0101

TJE 3.1

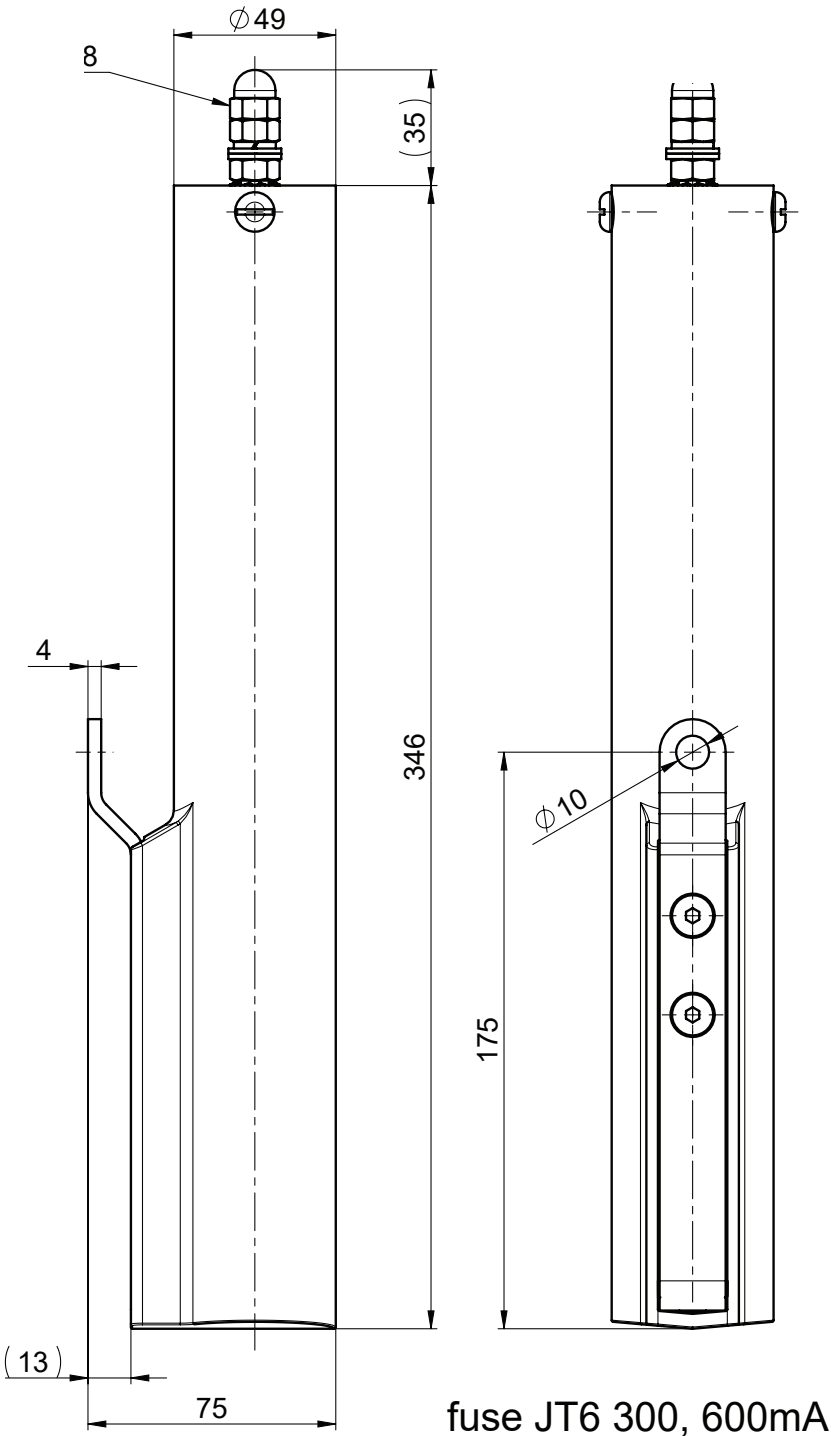
Weight: appr. 11 kg
Creepage Distance: 245 mm



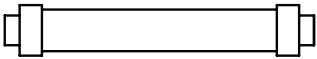
Drawing n.

1VL4200271R0101

External fuse holder



fuse JT6 300 mA	1VL4200499R0101
fuse JT6 600 mA	1VL4200499R0102



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