MEDIUM VOLTAGE PRODUCT

TJP 4.3, TJP 5.3, TJP 6.3

Indoor voltage transformers
TJP 4.3, TJP 5.3, TJP 6.3 INDOOR VOLTAGE TRANSFORMERS

### Parameters

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest voltage for equipment</td>
<td>3.6 - 24(25) kV</td>
</tr>
<tr>
<td>Power frequency test voltage, 1 min.</td>
<td>10 - 50 kV</td>
</tr>
<tr>
<td>Lightning impulse test voltage</td>
<td>40 - 125 kV</td>
</tr>
<tr>
<td>Fuses</td>
<td>2 or 6.3 A (IEC)</td>
</tr>
<tr>
<td>Max. rated burden, classes</td>
<td>up to 50/0.2 - 150/0.5 - 200/1 VA/cl</td>
</tr>
<tr>
<td>Residual winding</td>
<td>50 - 200/6P VA/cl</td>
</tr>
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</table>

### Description

TJP 4.3, TJP 5.3, TJP 6.3 epoxy insulated voltage transformers are cast in epoxy resin and designed mostly for insulation voltages of

- 3.6 kV to 12 kV  
- 17.5 kV  
- 24 (25)kV

TJP 4.3 type  
TJP 5.3 type  
TJP 6.3 type

Transformers are suitable for ABB UNISAFE panel or PowerCube type PB.

If no a different value is required, the transformers are manufactured with a overvoltage factor of 1.9 x Un/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.

Other outlet of primary winding with its 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, 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 secondary windings are lead out into a cast-type secondary terminal board. The transformer can be mounted in any position.

Transformer body is fixed by four screws, the bolted M8 earthing clamp is located on the transformer base plate.

The TJP 4.3; TJP 5.3; TJP 6.3 transformers are equipped with a fuses conformably to IEC standard.

### Rated primary voltages

- 3/√3 kV; 3.3/√3 kV; 6/√3 kV; 6.6/√3 kV; 10/√3 kV; 11/√3 kV; 13.8/√3 kV; 15/√3 kV; 20/√3 kV; 22/√3 kV

Other primary voltages can also be supplied on request.

### Rated secondary voltages

100/√3 V; 110/√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 provided with primary winding designed for two different primary voltages (with secondary side changeover).

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

**TJP 4.3**
- Weight: appr. 28 kg
- Creepage Distance: 385 mm

**TJP 5.3**

**TJP 6.3**
- Weight: appr. 42 kg
- Creepage Distance: 547 mm

Marking of the voltage transformer 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.