# $SF_6$ - INSULATED TEST TRANSFORMER IOG-350



Single-phased gas-filled test transformer IOG-350-I (further on - transformer) is designed for testing high-voltage electrical equipment with short-term voltage of 50 Hz frequency, including tests with measuring insulation capacitance ($C_X$), loss-angle tangent (tg $\delta_И$) and partial discharges (PD).

The transformer is featured with fire- and explosion safety, minimum time and capital expenditures for its technical maintenance and preparation for work, capability of changing inclination easily, adjusting it to the test object height. It practically has no any harmful environmental effect and is resistant to repeated impacts of mechanical and climatic factors during transportation.

There are two embedded high-voltage SF6-insulated capacitors in the transformer construction, which after connection of appropriate devices allow conducting high-voltage tests of insulation with variation of this voltage, $C_X$, tg $\delta_И$ or PD.

Exterior of the transformer is shown on photo and in Figure.

## TECHNICAL CHARACTERISTICS

| Designation of parameter, characteristic | Value |
|---|---|
| Rated input voltage, V | 380 |
| Range of output voltages, kV | from 30 to 350 |
| Partial discharges (PD) extinction voltage, kV, min. | 320 |
| PD level at their extinction voltage, pC, max. | 5 |
| Range of operating values of capacitance of voltage, pF | up to 3700 |
| Maximum time of continuous work, at load current, min.:<br>0,41 A<br>0,18 A | <br>1<br>15 |
| SF6-gas operating pressure (excessive) at t=20 $^0$C, MPa | 0,3 |
| Power frequency test voltage, kV:<br>- of input winding (LV), output winding neutral (HV) and terminal of embedded capacitor<br>- terminal A of HV winding | <br>2<br>395 |
| Short-circuit current in HV winding, A, min. | 1 |
| Mass, kg | 1280 |

On agreement between the Manufacturer and the Customer the above parameters and characteristics can be changed.

## TEST INSTALLATIONS

At the Customer's request test transformers can be completed with regulating transformers, switching equipment, power supply filters, measuring instruments, connection wires and cables, vehicles, which provide tests conductance at the site of test object .

VIT

ISO 9001 BUREAU VERITAS Certification № UA227992

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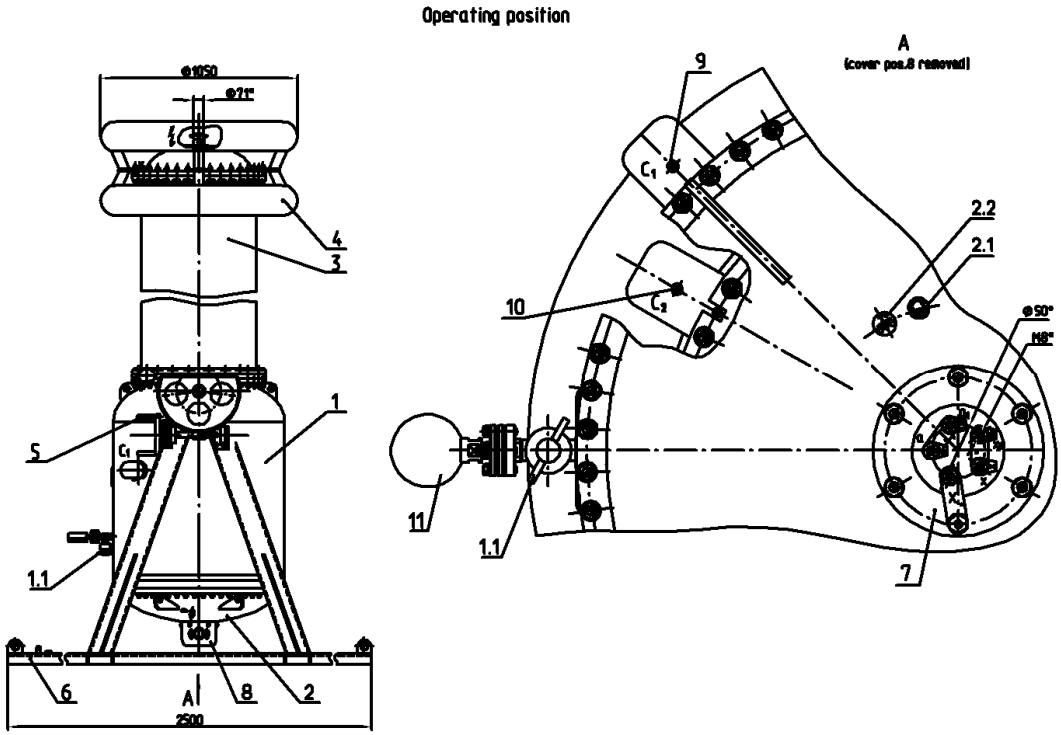


1 - casing; 1.1 – bellows valve;
2 - bottom; 2.1 – earthing bolt;
2.2 – earthing label; 3 – high-voltage bushing; 4 - shield; 5 – mechanism of change-over from transporting position in working one and backwards; 6 - support;
7 – low-voltage terminals unit;
8 - cover; 9 – connector for connection of voltmeter ($C_1$); 10 – connector for connection partial discharge measurement or alternative current bridge ($C_2$); 11 – vacuum manometer;
12 – belts for loads fixing; 13 - case.

**Figure – Construction, overall and interface dimensions of IOG-350-I transformer**

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