



Test transformer IOG-250 (single-phase gas-filled) is designed for application as a part of a mobile test laboratory for testing high-voltage electrical equipment (current and voltage transformers, power transformers, disconnectors, bushings, etc.) with 50 Hz short-term voltage, including testing with measurement of capacitance of insulation (C_X), loss-angle tangent ($\text{tg } \delta_M$) and partial discharges (PD).

The transformer is featured with fire- and explosion safety, relatively small overall dimensions and mass. It practically has no any harmful environmental effect, is resistant to repeated impacts of mechanical and climatic factors during transportation.

The transformer is practically maintenance-free.

Line terminal of the high-voltage winding is led outwards through silicone insulator. Construction of the transformer comprises built-in high-voltage SF₆- gas capacitor, which allows to perform testing with measurement of C_X , $\text{tg } \delta_M$ or PD after connection of appropriate devices.

The transformer also has an induction voltage divider on the base of high-voltage winding, which, after connection of a voltmeter with high input resistance, allows to measure high voltage, supplied by transformer to the test object.

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

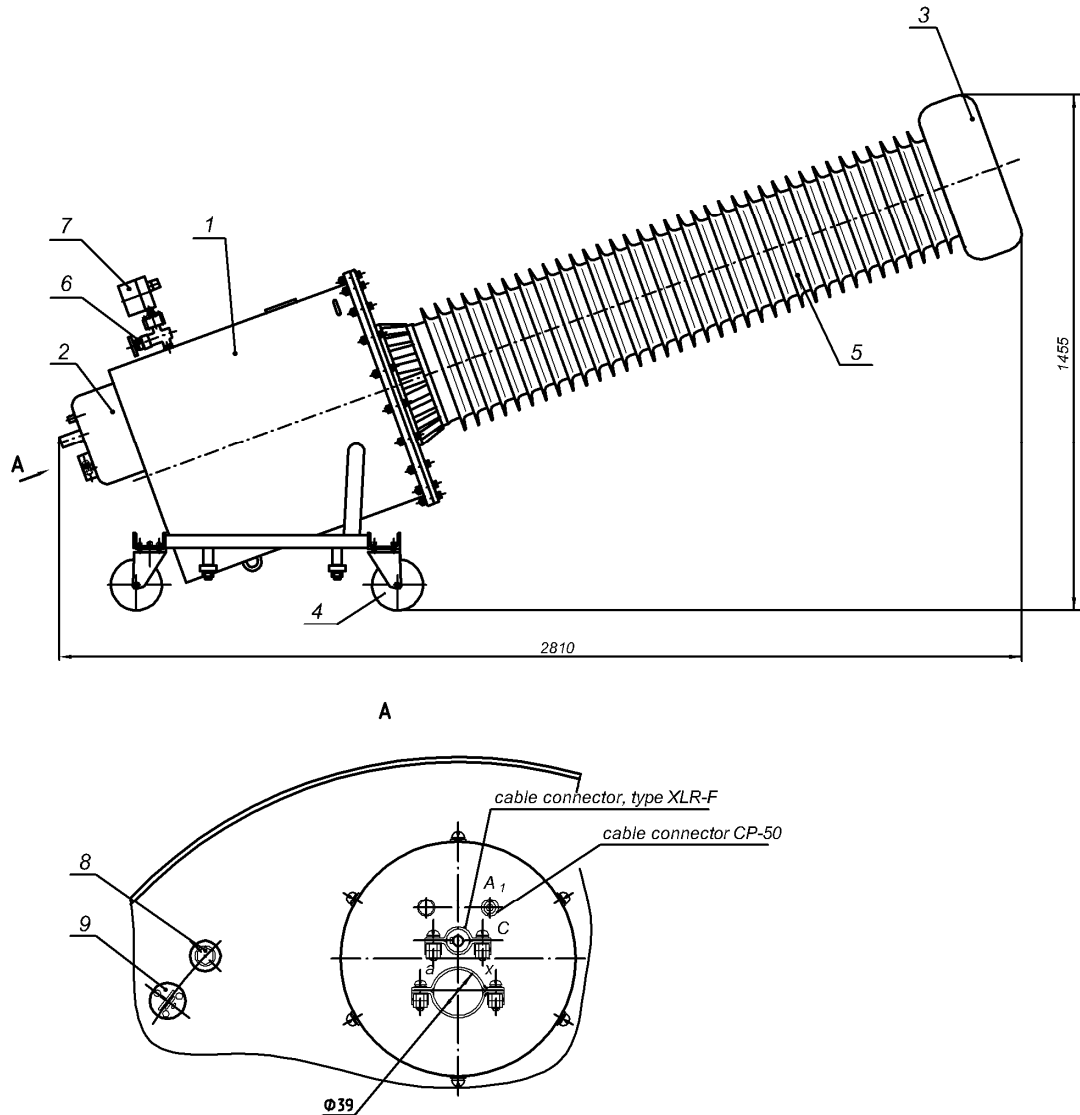
TECHNICAL CHARACTERISTICS

Name of parameter, characteristic	Value
Rated input voltage, V	220
Range of output voltages, kV	from 10 to 250
Maximum load capacity (test object), kVA	30
PD extinction voltage, kV, min	200
PD level at voltage of their extinction, pC, max	5
Maximum time of continuous work, at maximum capacity, min	5
SF ₆ -gas operating pressure (excessive) at $t=20$ °C, MPa	0.11
Power frequency test voltage, kV:	
- of low voltage winding, neutral of high voltage winding and terminal of built-in capacitor	2
- terminal A of high voltage winding	290
Mass, kg	650

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, line filters, measuring instruments, connection wires and cables, vehicles, which provide performance of power frequency voltage tests, including measurement of HV applied to the test object, its capacitance, loss-angle tangent and partial discharges at the site of test object.



- 1 – casing; 2 – cover; 3 – shield; 4 – roll; 5 – insulator; 6 – bellows valve; 7 – vacuum manometer;
8 – earthing bolt; 9 – mark of earthing

Figure – Construction, overall and interface dimensions of IOG-250 transformer