



Gas-filled stationary test installation UISG-100-I is designed for 3,3 - 110 kV surge arresters testing under partial discharges level index

The installation can also be used for testing other electrical equipment, having output resistance at least 3 MOhm, with short-term high voltage of 50 Hz frequency.

The installation UISG-100-I is featured with compactness, relatively small overall dimensions and mass.

Exterior and make-up of the installation are shown on photo and in Figure.

UISG-100-I consists of HV block, control desk and a set of cables.

HV block consists of step-up transformer with built-in capacitor.

The control desk provides a fluent regulation of test voltages through the whole range.

Electric drive of the surge arrester has three speeds of voltage variation (raising/dropping).

High voltage measuring is performed by voltage-dividing capacitor built-in the test transformer and voltmeter of the control desk. At that voltmeter indicators reflect current value of test voltage directly in kilovolts.

The voltmeter allows measuring peak and actual values of alternative voltage simultaneously and also (being equipped with transducer) values of rectified high voltage and leakage current in test object insulation. The control desk has a set of protections (thermal, maximum current, short-circuit) and blockings, required for safe tests conductance. There are connectors for connection of visible and audible alarm of test stand, and also for connection of electromechanical blockings of fence doors of test field.

When choosing (flashovering) the test object insulation the control desk automatically deenergizes test voltage, fixing breakdown voltage value.

The installation is delivered with a set of cables (power, measuring and control) and with following technical documentation: passport; operating manual; passport on a vessel operating under pressure; outline drawing; quality certificate; certificate; certificates of metrological certification.

TECHNICAL CHARACTERISTICS

| Designation of indices | Units of measurement | Value |
|---|----------------------|---------------|
| Rated primary voltage (at the product input), U_{HH} | V | 220 |
| Rated secondary voltage (at the product output), U_{BH} | kV | 100 |
| Range of operating secondary voltages of the product, U_{BH} | kV | from 3 to 100 |
| Rated frequency, f | Hz | 50 |
| Maximum permissible current of HV winding at continuous work duration of 20 min. | mA | 31 |
| PD extinction voltage, min. | kV | 80 |
| PD intensity at extinction voltage, max. | pC | 5 |
| Limits of permissible relative measurement error of high voltage measuring system, max. | % | ±3 |

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



UKRAINIAN TRANSFORMER INSTITUTE

11, Dniprovske shose, Zaporizhzhya, Ukraine

Phone: 38/061/284-52-01, 284-52-51

Fax: 38/061/284-54-55, 284-54-00

E-mail: postmaster@vit.zp.ua, ogki@vit.zp.ua <http://www.vit.zp.ua>

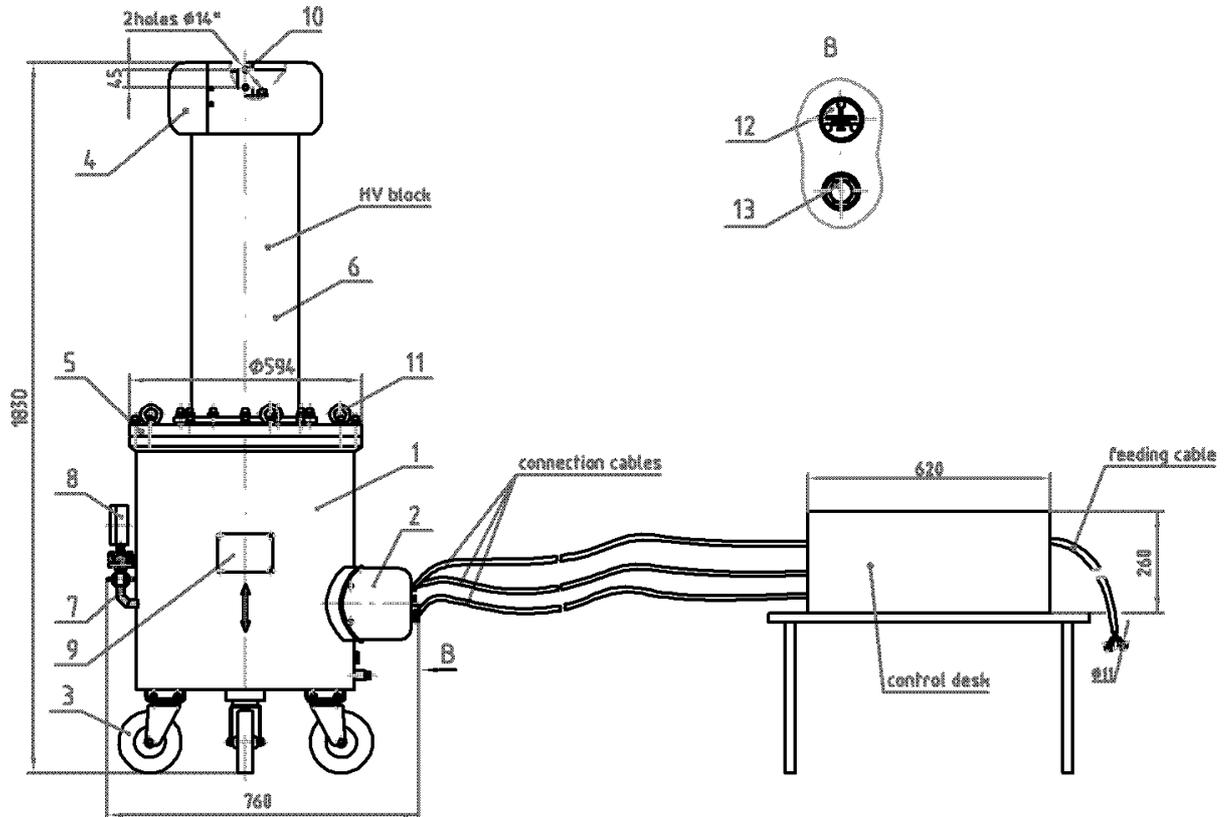
GAS-FILLED STATIONARY TEST INSTALLATION UISG-100-I

Figure – Gas-filled stationary test installation UISG–100–I

1 – casing; 2 – cover; 3 – wheel; 4 – shield; 5 – flange; 6 – cylinder; 7 – bellows valve; 8 – vacuum manometer; 9 – plate; 10 – terminal «A»; 11 – loading bolt; 12 – earthing label; 13 – earthing bolt.