

GAS-FILLED MOBILE METROLOGICAL INSTALLATION UMPG-330-I

9.7.5.6a 06.12.2016



Gas-filled mobile metrological installation UMPG-330-I is designed for determination of errors of 35, 110, 220, 330 kV general-purpose voltage transformers directly at the site of their use.

Distinctive features of the installation UMPG-330-I are its mobility, relatively small overall dimensions and mass, minimum time and capital expenditures for its technical maintenance and preparation for work, comfort conditions for maintenance staff while tests conducting by means of the installation.

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

All equipment of the installation is arranged on two vehicles – in a passenger car especially reequipped for the installation (pos.1) and in the trailer (pos.2).

Passenger cabin is divided with barrier on HV section and section of operators. Control unit is located in the section of operators. The control unit has a set of protection and blocking devices, switching equipment and indicating instruments for safe performance of tests.

TECHNICAL CHARACTERISTICS

Designation of parameter, characteristic	Value of parameter, characteristic
Rated input voltage of the installation, V	220
Rated output voltage of the installation (primary voltage of voltage transformers under test), kV	35: $\sqrt{3}$; 110: $\sqrt{3}$; 220: $\sqrt{3}$; 330: $\sqrt{3}$
Rated secondary voltage of voltage transformers under test (U_{2H}), V	100: $\sqrt{3}$
Rated turn ratios of the reference voltage transformer:	350; 1100; 2200; 3300
Rated frequency, Hz	50
Power frequency test voltage (actual value), kV: - of LV windings and terminals “X” of HV windings; - of terminals “A” of LV windings	3 270
Operating pressure of SF ₆ in transformers (excessive) min/max, at t=20 ⁰ C, MPa	0,11/0,13
Mass, kg	5300

Metrological characteristics of the reference voltage transformer meet requirements of DSTU 3864-99 to the first category working standards.

The abovementioned parameters and characteristics and also completeness of the installation may be altered under agreement between the Manufacturer and the Customer.



ISO 9001
BUREAU VERITAS
Certification

N° 205234



UKRAINIAN TRANSFORMER INSTITUTE

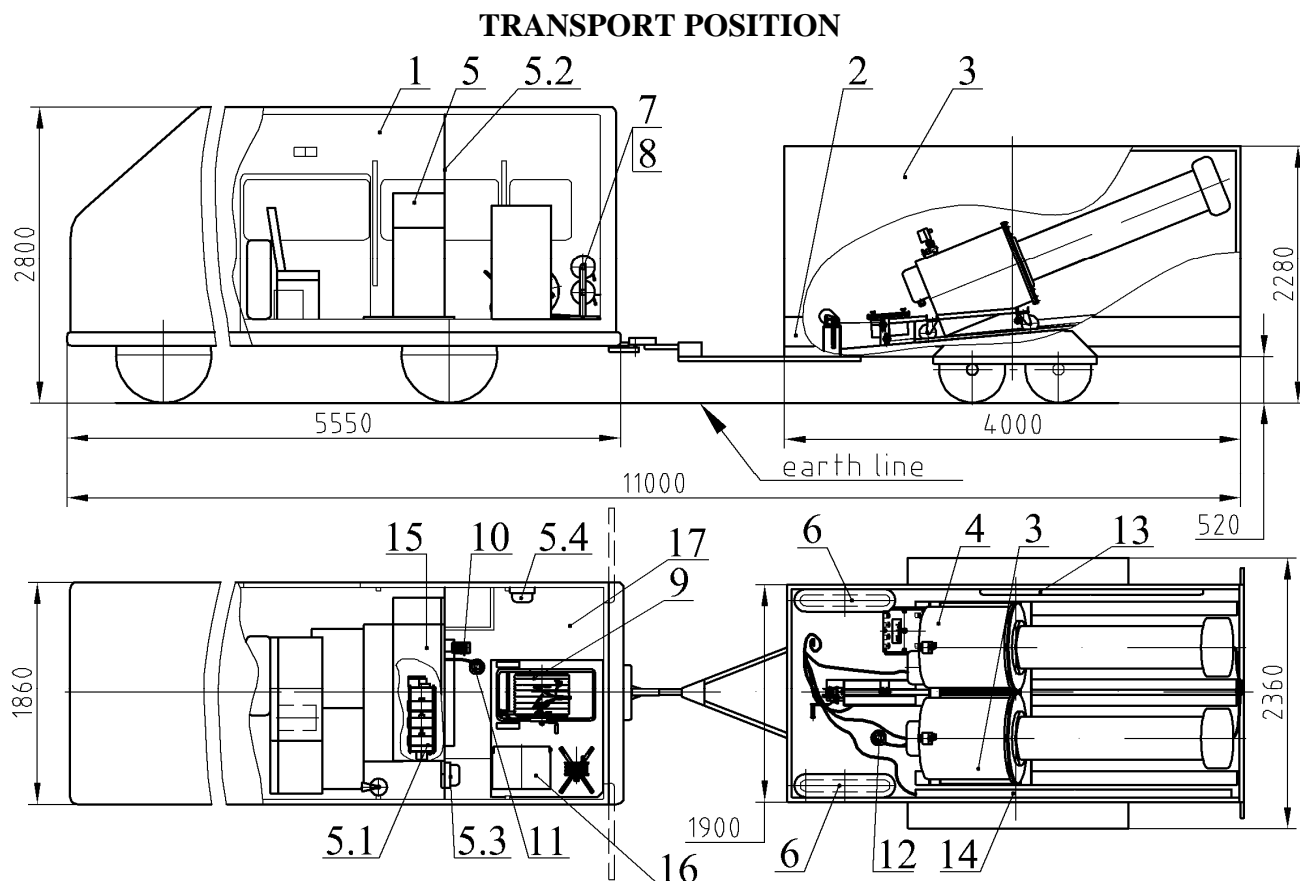
11, Dniprovske shose, Zaporizhzhya, Ukraine

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

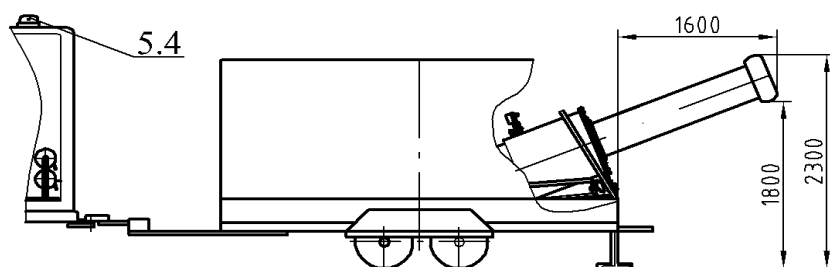
Fax: 38/061/284-54-55, 284-54-00

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

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OPERATING POSITION



- 1 – passenger car;
 2 – trailer; 3 – single-phased test transformer (IOG); 4 – single-phased multi-range reference voltage transformer (TNOOG); 5 – control unit (CU); 5.1 – voltage regulator; 5.2 – barrier; 5.3 – audible alarm; 5.4 – signal lantern;
 6 – spiral wrap hose for high voltage supply; 7 – protective earthing; 8 – operating earthing; 9 – drum with feeding cable; 10 – drum with cable for connection of comparing device to the test object; 11 – cable for connection of CU to TNOOG; 12 – IOG feeding cable; 13 – ladder; 14 – operating rod; 15 – place for locating the comparing device; 16 – shelf for arrangement of set of loads; 17 – reserve place for location of additional equipment.

Figure – Gas-filled mobile metrological installation UMPG-330-I.