OIL-FILLED STATIONARY HIGH-VOLTAGE TEST INSTALLATION UVISM-12



Oil-filled stationary high-voltage test installation UVISM-12 is designed for testing dielectric strength of insulation of direct and pulsating current traction motors and also asynchronous motors with voltage of 50 Hz frequency. It can be also used for high-voltage tests of 50 Hz frequency of other objects with appropriate voltage and capacity parameters.

The installation UVISM-12 is featured with compactness and mobility.

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

UVISM-12 comprises step-up transformer, high-voltage measuring system, control block, regulating transformer, high-voltage cable and connection wires (cables).

Step-up transformer (ST) is single-phased and oil-filled.

HV measuring system consists of digital voltage meters, connected to secondary winding of voltage transformer with

epoxy insulation of accuracy class 0,2. Control block (CB) have switching, safety and signaling equipment, indicating instruments, a set of protection and blocking devices, required for provision of safe tests conductance. Signaling equipment and devices installed on the front panel of CB provide an operator with information of voltage availability and value at the installation input and output; of value of leakage current in the test object insulation. The test object is automatically short-circuited by means of high-voltage earth rod available in the installation and is earthed, when operator presses button "De-energizing of power circuits". The regulating transformer with solid insulation smoothly regulates output voltage, using electric motor. High-voltage cable of heightened flexibility (for high voltage supply from product ST to the test object) is at least 20 m long and has a quick-detachable "alligator" connector on the free end.

TECHNICAL CHARACTERISTICS

Designations of indices	Values
Rated primary voltage (at the installation input), V	380
Range of operating secondary voltages (at the installation output), kV	from 1 to 12
Rated frequency of feeding network, Hz	50
Number of feeding network linear voltages	1
Rated capacity, kVA	12
Power frequency test voltage, kV:	
- of LV circuits of ST;	3
- HV cable and terminal «A» of ST.	15

Limits of permissible measurement errors of high voltage is 1...12kV – not more than $\pm 1,6$ %.

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



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Figure 1 - Oil-filled stationary high-voltage test installation UVISM-12-I

1 – step-up transformer (T2); 2 – voltage transformer (T3); 3 – control block; 4 – regulating transformer (T1); 5 – high-voltage earth rod; 6 – high-voltage cable; 7 – light signal device; 8 – audible signal device; 9 – plate; 10 – earthing bolt.



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