

TEST APPARATUS AB-50/70



Test apparatus AB-50/70 is intended for testing of isolation of power cables and solid dielectrics by the rectified electric voltage, and also for testing of solid dielectrics by the sinusoidal electric voltage with 50 Hz frequency.

The device consists of the two portable units: the high voltage unit and the control unit, connected one to other by a cable.

The build-in measuring instruments, alarm lamps, the handle of a voltage regulator, the button of switching of measurement ranges of milliammeter, buttons of switching-on and switching-off of test voltage, the switch key of the type of test voltage, power network automatic switch and the switch with special key are located on the front panel of the control unit.

Apparatus is intended for usage under the shed or indoors at the working air temperature from minus 10°C to +40°C, at the relative humidity 80% at the temperature of 25°C; and the atmospheric pressure 84,0 – 106,7 kPa.

MAIN TECHNICAL CHARACTERISTICS:

Supplying voltage of single phase AC network, V	220±11
Apparatus parameters on rectified voltage during continuous mode under network voltage rating: Maximum working voltage, kV Maximum working current, mA	70 35
Apparatus parameters on AC voltage during continuous mode under network voltage rating: Maximum working voltage (RMS), kV Maximum working current (RMS), mA	50 20
Apparatus parameters on AC voltage during repeated short period time mode with duty cycle 17 % and 6 min duration of the cycle under network voltage rating: Maximum working voltage (RMS), kV Maximum working current (RMS), mA	50 45
Consuming power, kVA	No more, than 3
Reduced error of output voltage and currency measurement, %	No more, than 3
The weight , kg Control unit High-voltage unit	15 35
Average life expectancy, years	10
Overall dimensions: Control unit High-voltage unit	320x200x355 270x295x660

THREE MODIFICATIONS OF TEST APPARATUS AB-50/70:

Functions	AB-50/70-1	AB-50/70-2	AB-50/70-3
Testing of objects by the constant voltage 70 kV and AC voltage 50 kV with an accuracy 1%	+	+	+
Leakage current measurement with an accuracy 3%	+	+	+
Fixation of breakdown voltage and leakage current before 0,5 sec till breakdown	+	+	+
Definition of damage place in the cable bus at "swimming away" breakdown	+	+	+
Leakage current measuring on the "high side" on the constant current with an accuracy 0,5%	-	+	+
Definition of breakdown voltage of liquid dielectrics by the voltage up to 50 kV	-	+	+
Testing of probes and other equipment by AC voltage	-	+	+

up to 1000 V			
Testing of dielectric protection facilities (high galoshes and gloves), pieces/1 test	-	1	4
Definition of breakdown voltage of liquid dielectrics by the voltage up to 100 kV	-	-	+
Beam testing by the voltage up to 100 kV	-	-	+