

HVTS-70/50

PORTABLE HIGH-VOLTAGE TEST SYSTEM



- **DC & AC test modes**
- **Safe two-module composition**
- **Portable design**
- **Graphic display and digital control**
- **Manual & automatic test cycles**
- **Internal memory for test results storage**
- **Built-in automatic grounding bar**
- **Overcurrent and overvoltage protection**

Portable high-voltage test system HVTS-70/50 is an effective and cost efficient solution for high-voltage testing of solid dielectrics with low and medium electric capacitance (power cables, switchgear, surge arresters, busbars, insulators, etc.) with DC (rectified) voltage up to 70 kV and high-voltage testing of other objects with AC voltage up to 50 kV_{RMS} at industrial frequency ($f = 50$ Hz).

Output voltage type is selected by a simple push of a button on the control unit – no additional equipment installation (e.g. rectifier) is required.

The system comprises of two separate modules – a control unit and a high-voltage unit. The control unit is powered from industrial mains and used to control the high-voltage unit from a safe distance. The high-voltage unit contains a step-up transformer with oil insulation.

HVTS-70/50 benefits from a graphic display and digital control, which allows to run tests in manual and automatic cycles, as well as store test results in internal memory of the system.

The system features an overcurrent and overvoltage protection and is equipped with a built-in automatic grounding bar.

DC testing parameters	Voltage	Output level	up to 70 kV
		Relative measurement error	$\pm [3 \% + 2 \text{ dgt}^*]$
	Current	Output level	up to 15 mA**
		Relative measurement error	$\pm [3 \% + 2 \text{ dgt}]$
AC testing parameters	Voltage	Output level	up to 50 kV _{RMS}
		Relative measurement error	$\pm [3 \% + 2 \text{ dgt}]$
	Current	Output level	up to 40 mA _{RMS} **
		Relative measurement error	$\pm [3 \% + 2 \text{ dgt}]$
	Load capacitance in AC mode @ rated output voltage		up to 1.6 nF
System parameters	Test modes		<ul style="list-style-type: none"> Manual Auto
	Voltage ramp rate		0.5 ... 4.0 kV/s, step 0.5 kV/s
	Internal memory		32 test reports
Interface	Monochrome graphic display		128 × 64 px
	Menu languages		<ul style="list-style-type: none"> RU, EN TR, PL, FR, etc. (option)
Safety	Protection		<ul style="list-style-type: none"> Over-voltage tripping Over-current tripping Automatic grounding bar
Power supply and consumption	Supply voltage		230 V \pm 10 %, AC (110 V option)
	Supply frequency		50 Hz (60 Hz option)
	Power consumption		up to 2.5 kVA
	Current consumption		up to 11 A @ 230 V (up to 22 A @ 110 V)
Physical	CU dimensions, H × W × D		265 × 349 × 240 mm
	CU weight		13 kg
	HVV dimensions, H × W × D		500 × 360 × 310 mm
	HVV weight		35 kg

* dgt – least significant digit.

** If the output current exceeds 50 % of the total possible current output, do not operate the system in the continuous duty cycle for longer than 10 minutes; if the output current exceeds 75 % – 1 minute.

Specifications are subject to change without notice. Pictures for are for illustration purposes only.



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