

D100

Insulation Diagnostic System



FEATURES

- › Dissipation/power factor and capacitance testing.
- › Test voltage up to 12 kV.
- › Output power – 2400 V·A.
- › Frequency 15...400 Hz.
- › High accuracy of field measurements with high-interference environments.
- › Temperature correction of dissipation/power factor.
- › Fast measurements with adaptive filtering of the interference currents.
- › Safe operation with safety switch, emergency stop, grounding control.
- › Small size and low weight.

DESCRIPTION

D100 measures the capacitance and dissipation/power factor, excitation current, transformer turns ratio with the test voltage up to 12 kV.

For a more detailed analysis, the device makes it possible to obtain the dependence dissipation/power factor on frequency (frequency sweep) and voltage (tip-up).

APPLICATIONS

Dissipation/power factor and capacitance testing of:

- › power transformers;
- › reactors;
- › instrument transformers;
- › bushings;
- › switches;
- › surge arresters;
- › capacitors.

TECHNICAL SPECIFICATIONS

	Range	Resolution	Accuracy
Dissipation factor	0...10 000 %	0.001 %	$\pm (0.5 \% \text{ rdg} + 0.01 \%)*$
Power factor	0...100 %	0.001 %	$\pm (0.5 \% \text{ rdg} + 0.01 \%)*$
Capacitance	6 pF...6 μ F	0.01 pF	$\pm (0.1 \% \text{ rdg} + 0.1 \text{ pF})$
Inductance	2 H...2 MH	0.1 mH	$\pm (0.5 \% \text{ rdg} + 1 \text{ mH})$
Test voltage	100...12000 V	1 V	$\pm (0.3 \% \text{ rdg} + 1 \text{ V})$
Test current	20 μ A...200 mA	0.1 μ A	$\pm (0.3 \% \text{ rdg} + 1 \mu\text{A})$
Real power	0...400 W	0.1 mW	$\pm (0.8 \% \text{ rdg} + 1 \text{ mW})$
Test frequency	15...400 Hz	0.01 Hz	$\pm (0.1 \% \text{ rdg} + 0.1 \text{ Hz})$

General

Output power	2400 VA
Output voltage	100...12000 V (45...70 Hz) 100...4000 V (15...400 Hz)
Output current	<100 mA (continuously) <200 mA (2 min ON, 8 min OFF)
Rated voltage	110...240 V
Rated frequency	50/60 Hz
Dimensions (main unit)	546×347×247 mm
Weight (main unit)	27 kg

Operating conditions

Operating temperature	-20...+50 °C
Relative humidity	up to 95 % non-condensing
Standards	Safety: EN 61010-1:2010 EMC: EN 61326-1:2013

* Tolerances are determined for 45...70 Hz frequency range of the test voltage

ORDERING INFORMATION

	Item name
	D100 Main Unit
	HV Cable, 20 m
	Measuring Cable (blue), 20 m
	Measuring Cable (yellow), 20 m
	Grounding Cable, 10 m
	Safety Switch, 10 m
	Mains Cable 10 A EU (CEE 7/XVII - C13)
	HV Cable Hook
	HV Cable Clamp
	Measuring Cable Clamp (range up to 32 mm) (2 pcs.)
	Measuring Cable Clamp (range up to 9.5 mm) (2 pcs.)
	Measuring Cable Bushing Tap Adapter
	HV Cable Bushing Tap Adapter
	Extension Clamp (range up to 120 mm) (2 pcs.)
	USB Flash Drive
	Bag for cables and accessories
	Operating manual
	Passport
	Applications Guide

ADDITIONAL ORDER

Item name



Safety Strobe Light (cable length 10 m)



Reference Capacitor 12 kV



TTR Test Capacitor