

DXS50 - 50VA

DXS500 - 500VA



- ❑ Dielectric strength tester from 0 to 5 kVAC and 0 to 6 kVDC (DXS56, DXS506 models)
- ❑ Insulation resistance from 50 kΩ up to 200 GΩ (2 TΩ option)
- ❑ 8 test step sequences
- ❑ 50 parameter sets storage
- ❑ Built in RS232C interface
- ❑ ETHERNET, PLC or IEEE488-2 interfaces on option

The DXS series dielectrimers perform easily and simply hipot test and insulation test according to the VDE, UL, CSA standards and to the main EN European standards involved in the LOW VOLTAGE DIRECTIVE (LVD).

The DXS is a combination of a dielectric strength tester and a megohmmeter.

Together with the FMG rack, the DXS performs also leakage current measurement under nominal voltage, and power measurement, for single phase equipment as well as three phases equipment.

EN 61010-1, EN 60335-1, EN 60950, EN 60598-1, EN 60601-1, EN 60204-1 standards

TECHNICAL CHARACTERISTICS

DIELECTRIC STRENGTH TEST FUNCTION

Output voltage

- 0 to 5 kV AC (50 or 60 Hz). Limited to 4.2 kV AC with FMG501
- 0 to 6 kV DC (DXS56, DXS506)
- Accuracy: $\pm (2\%+50 \text{ V})$ (DXS50) and $\pm (3\%+50 \text{ V})$ (DXS500) of the preset value between 100 to 5000 V and for a current $< 100 \mu\text{A}$ (DXS50) and $< 1 \text{ mA}$ (DXS500) with the detection modes: ΔI , IMAX or ΔI +IMAX

Voltage reading

- On a digital kilovoltmeter connected on the output terminals
- Accuracy: $\pm (1.5\% + 20 \text{ V})$
- Display: 600 digits

Stability

- Less than 1% for a mains variation of $\pm 10\%$ (DXS50)
- Less than 3% for a mains variation of $\pm 10\%$ (DXS500)

Current

- Short circuit $< 13 \text{ mA AC}$ (DXS50/56) and $< 9 \text{ mA DC}$ (DXS56) for the max. voltage adjustment
- Short circuit $> 200 \text{ mA AC}$ (DXS500/506) and $> 20 \text{ mA DC}$ (DXS506) for the max. voltage adjustment
- Short circuit duration limited to 5 seconds
- Nominal current : 10 mA AC (DXS50/56) and 4 mA DC (DXS56)
- Nominal current : 10 mA DC (DXS506) and 110 mA AC (DXS500/506)

Current reading

- On a shunt resistor inserted in the test circuit
- Accuracy: $\pm (2.5\% + 2U)$
 $1U = 0.01 \text{ mA}$ (DXS50)
 $1U = 0.1 \text{ mA}$ (DXS500)
- Display: 1000 digits

Breakdown detection

- "DELTA TEST" detector adjusted for $\Delta I = 1 \text{ mA} \pm 10\%$ (DXS50) and $\Delta I = 10 \text{ mA} \pm 10\%$ (DXS500) with $10 \mu\text{sec.} \pm 20\%$. Total insensitivity to current due to the resistance and the capacitance of the device under test
- "IMAX" detection by maximum current adjustable from 0.01 to 10 mA, by 0.01 mA steps (DXS50) and from 0.1 to 110 mA by 0.1 mA steps (DXS500)
- DELTA TEST and IMAX mode combination

IMIN threshold function

- Detects whether the probe is properly connected to the specimen under test
- Adjustable from 0.01 to 10 mA (DXS50) and from 0.1 to 110 mA (DXS500)

DC voltage (DXS56, DXS506 models)

- Positive pole grounded
- Ripple $< 1\%$ for $I < 100 \mu\text{A}$ (DXS56) and $I < 1 \text{ mA}$ (DXS506)

Breakdown indication

- By visual (LCD screen and LED) and sound signal
- Breakdown voltage and current are stored on the LCD display
- HV primary transformer shorted when the output voltage is switched off

Timer

- Rise, hold and fall time adjustment between 0 and 999 sec.
- Fast mode : (rise + hold) $< 900 \text{ msec.}$

Storage

- 10 test parameter (voltage, threshold, time,...) sets can be stored

MEGOHMMETER FUNCTION

Measurement range

- 50 k Ω to 200 G Ω (2 T Ω option XS20)
- The maximum insulation resistance is given by : $(U_{TEST}/U_{max}) \times 200 \text{ G}\Omega$

Accuracy

- $\pm (1.5\% + 1U)$
- Display: 2000 digits

Threshold

- A High limit (making specimen under test detection possible) and a Low limit adjustable from 50 k Ω to 200 G Ω (2 T Ω option XS20)

Measurement voltage

Adjustable by 1 V DC step from :

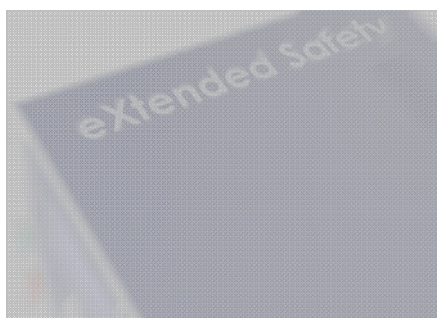
- 10 to 500 V DC
- 20 to 1000 V DC (XS26 option)
- Accuracy: $\pm (1\% + 2 \text{ V})$
- Short circuit $\leq 2 \text{ mA DC}$

Measurement time

- Adjustable from 0 to 999 sec. or permanent
- Rise time adjustable in Volt/sec.

Storage

- 10 test parameter (voltage, time, threshold,...) sets can be stored



GENERAL CHARACTERISTICS

Presentation

- Table top unit
- Metal case

Dimensions

Height : 131 mm
Width : 440 mm
Depth : 450 mm

Weight

27 kg

Power

- 230 V or 115 V \pm 15% single phase, 47-63 Hz
- Consumption: 70 to 600 VA depending on test

Operating temperature

0°C to +45°C

Storage temperature

-10°C to +60°C

Over-voltage category

CATII

Pollution degree

2

Safety class

Class I (earth connection)

OPTIONS

XS02

PLC interface :

- START contact
- PASS / FAIL contacts
- FAULT contact
- END OF TEST contact

XS03

0-10 Volts input/output :

- 0-10 Volts inputs to control the High Voltage
- 0-10 Volts outputs for voltage and current

XS05

Rear panel outputs

XS06

IEEE488-2 (Talker - Listener) interface

XS80

Ethernet interface

XS08

Option 02 + 03

XS10

Hipot – 6kV DC voltage for 50VA

XS13

Hipot – 6kV DC voltage for 500V

XS14

3 mA hardware limitation for 50 VA

XS20

Insulation resistance measurement up to 2 T Ω

XS22

Resistance display in M Ω x km

XS26

Insulation resistance measurement from 20 up to 1000 V DC

XS93

Remote control box (option XS02) is requested

SOFTWARES

XS95

EasyScan software for driving XS Series equipped with Switching matrix

XS96

SXSPPro software for driving XS Series instruments

XS99

Delphi & C++ program examples

OPTIONNAL ACCESSORIES

TE54 (DXS50/56) - TE65 (DXS500/506)
Test probe (hipot + insulation)



CO175
black ground return lead



CO160-xx
Red-Green lamp for HV indication



TE58-XS (RXS50/56)
Test probe with remote control (hipot + insulation)



CO193 (DXS50/56) - C0192 (DXS500/506)
Test box with 6 international female sockets



AO10-XS
Two user hands occupied with safety user buttons



TE86 (DXS50/56) - TE83 (DXS500/506)
Test pistol with remote control (hipot + max. insulation 2 GΩ)



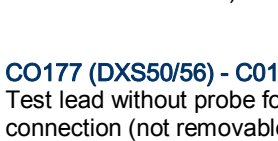
CO200 (DXS50/56) - C0201 (DXS500/506)
Test box equipped with 1 schücko female socket



AO11-XS
Remote control foot switch



TE84 (DXS50/56)
Test pistol without remote control (hipot + max. insulation 2 GΩ)



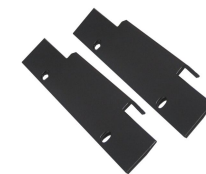
CO202 (DXS50/56) - C0203 (DXS500/506)
Test box equipped with 1 UK female socket

CO204 (DXS50/56) - C0205 (DXS500/506)
Test box equipped with 1 Swiss female socket

CO206 (DXS50/56) - C0207 (DXS500/506)
Test box equipped with 1 Italian female socket

CO208 (DXS50/56) - C0209 (DXS500/506)
Test box equipped with 1 US female socket

KRXS
19" rack mount kit



REMA0 to REMA8
High value Standard resistors (from 1 MΩ up to 1 TΩ)



CO210
Pistol for return earth (hipot + insulation)



Specifications subject to change without notice

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