

# RXS50 - 50VA

# RXS500 - 500VA



- ❑ Dielectric strength tester from 0 to 5 kVAC and 0 to 6 kVDC (RXS56, RXS506 models)
- ❑ 8 test step sequences
- ❑ 50 parameter sets storage
- ❑ Built in RS232C interface
- ❑ ETHERNET, PLC or IEEE488-2 interfaces on option

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

The RXS is a dielectric strength tester with AC only and DC for the RXS56 and RXS506 versions.

Together with the FMG rack, the RXS 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 60065, EN 60335-1, EN 60950, EN 60598-1, EN 60601-1 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 (RXS56, RXS506)
- Accuracy:  $\pm (2\%+50 \text{ V})$  (RXS50) and  $\pm (3\%+50 \text{ V})$  (RXS500) of the preset value between 100 to 5000 V and for a current  $< 100 \mu\text{A}$  (RXS50) and  $< 1 \text{ mA}$  (RXS500) with the detection modes:  $\Delta I$ , IMAX or  $\Delta I+IMAX$

#### 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  $\pm 10\%$  (RXS50)
- Less than 3% for a mains variation of  $\pm 10\%$  (RXS500)

#### Current

- Short circuit  $< 13 \text{ mA AC}$  (RXS50/56) and  $< 9 \text{ mA DC}$  (RXS56) for the max. voltage adjustment
- Short circuit  $> 200 \text{ mA AC}$  (RXS500/506) and  $> 20 \text{ mA DC}$  (RXS506) for the max. voltage adjustment
- Short circuit duration limited to 5 seconds
- Nominal current :  $10 \text{ mA AC}$  (RXS50/56) and  $4 \text{ mA DC}$  (RXS56)
- Nominal current :  $10 \text{ mA DC}$  (RXS506) and  $110 \text{ mA AC}$  (RXS500/506)

#### Current reading

- On a shunt resistor inserted in the test circuit
- Accuracy:  $\pm (2.5\% + 2U)$   
 $1U = 0.01 \text{ mA}$  (RXS50)  
 $1U = 0.1 \text{ mA}$  (RXS500)
- Display: 1000 digits

#### Breakdown detection

- "DELTA TEST" detector adjusted for  $\Delta I = 1 \text{ mA} \pm 10\%$  (RXS50) and  $\Delta I = 10 \text{ mA} \pm 10\%$  (RXS500) 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 (RXS50) and from 0.1 to 110 mA by 0.1 mA steps (RXS500)
- 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 (RXS50) and from 0.1 to 110 mA (RXS500)

#### DC voltage (RXS56, RXS506 models)

- Positive pole grounded
- Ripple  $< 1\%$  for  $I < 100 \mu\text{A}$  (RXS56) and  $I < 1 \text{ mA}$  (RXS506)

#### 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



## 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
- FAULT contact
- PASS / FAIL contacts
- 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

### XS27

Addition of insulation function

## 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 (RXS50/56) - TE65 (RXS500/506)**  
Test probe for hipot



**CO175**  
black ground return lead



**CO160-xx**  
Red-Green lamp for HV indication



**TE58-XS (RXS50/56)**  
Test probe with remote control for hipot



**CO193 (RXS50/56) - CO192 (RXS500/506)**  
Test box with 6 international female sockets



**AO10-XS**  
Two user hands occupied with safety user buttons



**TE86 (RXS50/56) - TE83 (RXS500/506)**  
Test pistol with remote control for hipot



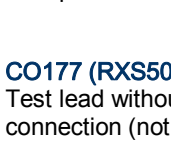
**CO200 (RXS50/56) - CO201 (RXS500/506)**  
Test box equipped with 1 schücco female socket



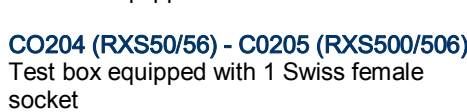
**AO11-XS**  
Remote control foot switch



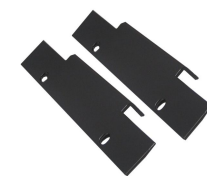
**TE84 (RXS50/56)**  
Test pistol without remote control for hipot



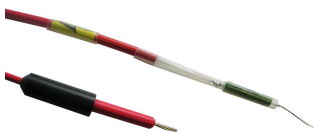
**CO202 (RXS50/56) - CO203 (RXS500/506)**  
Test box equipped with 1 UK female socket



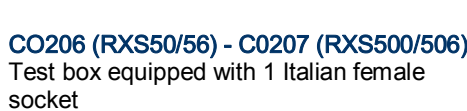
**KRXS**  
19" rack mount kit



**CO177 (RXS50/56) - CO180 (RXS500/506)**  
Test lead without probe for test system connection (not removable)



**CO204 (RXS50/56) - CO205 (RXS500/506)**  
Test box equipped with 1 Swiss female socket



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



**CO210**  
Pistol for return earth for hipot



**CO206 (RXS50/56) - CO207 (RXS500/506)**  
Test box equipped with 1 Italian female socket

