HIGH CURRENT SWITCHING MATRIX

High Current switching matrix EXS3200-HC

- Modular high current switching matrix from 4 to 16 channels (modulo 4)
- 40A max.
- Compatible with Continuity testers and Microhmmeters from XS series and MG series
- RS232 as standard interface, USB (option), dry contacts (option)
- sXSpro_EXS software
- Possible extension >16 channels with additional racks (option)

When you need to do a low resistance test (also called ground bond test, ground continuity test, or using microhmmeter) on several points (with or without the Kelvin method) of a device under test in production, automatically, THEN our switching matrix IS the solution to improve traceability, to save time, to secure the user operation and optimize the test process.
The EXS3200-HC high current switching matrix from XS series can be organised up to 16 channels per rack (modulo 4), and is generally coupled with a microhmmeter or continuity tester from the XS or MG series, and can be driven by our SXSpro-EXS software

Technical Characteristics

Number of channels
- from 4 to 16 channels max. on a basic rack (EXS3200-HC) per modules of 4 channels each
- possible extension to more than 16 channels, by adding other EXS racks (see ref. EXS3200-EHC)

Channels organisation
- Each channel can be independently driven and switched to one or several other points
- three states are available : high current, ground, or floating

Connections
- Ground connection made from XS series or MG series equipment
- Outputs made on high current SUB-D connectors

Switching specifications
- current : 40AC/DC max.

Relay life
$1x10^6$ operations at maximum voltage

Switching times
- 15 ms typical for the closing of 1 channel
- 20 ms max. for the closing of all the channels together
- 15 ms typical for the opening of 1 channel
- < 20 ms max. for the opening of all the channels

RS232 interface
- Speed transmision :
  - 9600 Bauds (fix)
  - Protocol : Full duplex

Protections
Switching matrix through temporised fuse

Disconnectable rear panel inputs
- Through Jaeger connector

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General Characteristics

Presentation
- Table top metal case fitted with retractable feet

Dimensions
- Height : 131 mm
- Width : 440.5 mm
- Depth : 450.5 mm

Weight
- Approx. 10 kg

Power
- 230V or 115V +/-15% single phase, 47/63 Hz
- Consumption : 10 VA

Operating temperature
- 0°C to +45°C

Storage temperature
- -10°C to +60° C

Pollution Degree
- Pollution 2

Overload category
- CAT II

Safety Class
- Class I (earth connection)

Options

MOD-HC4

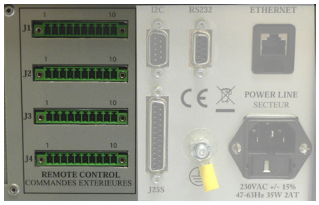
Module with 4 high current channels. 4 modules can be added in one rack

EXS3200-KIT-D

control module that has to be ordered if more than 2 MOD-HC4 are included in 1 basic or extension rack

EXS3200-01

Channels direct control through external dry contacts

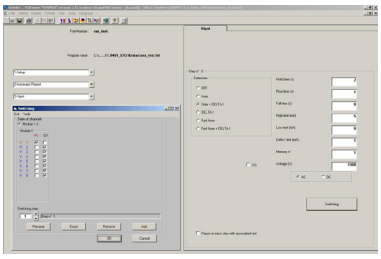


EXS3200-EHC

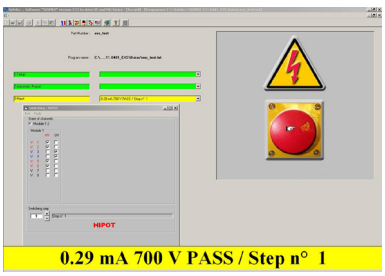
extension 19 inches rack with 4 available modules slots, for maximum 16 channels (the modules have to be ordered apart)

SOFTWARE XS-96-EXS

- Control software for EXS series and the connected continuity tester



Example of edit windows



Example of test windows

- SXSPRO-EXS is a powerful software controlling the XS series according to your application (Access & Excel results, bar code management, customized test reports, customized user guidance through the test, user level management, production line oriented features, . . .)

- SXSPRO-EXS is available in 4 languages (English, French German, Spanish, and can be partly and easily customized to additional languages for user operation)

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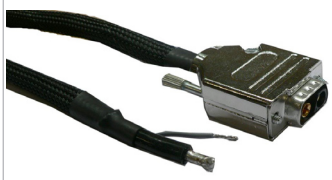
Available accessories

C0297

High current cable :

- Starting : high current SUB-D
- Ending : high current cable without probe for fixed connexion ;
- Length : 2 meters



C0298

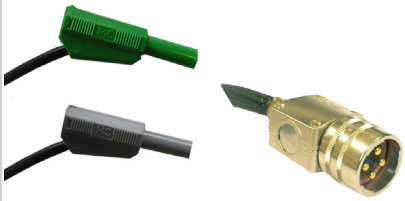
Link cable between basic and extension rack: has to be ordered when a high current extension rack EXS3200-EHC is needed.

C0306

2 wires Jaeger/Jaeger cable for interconnecting between 2 racks, from the rear output of the EXS to the rear output of the EXS equipment

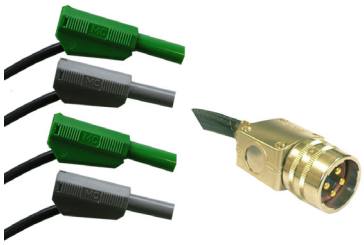
C0307

2 wires Jaeger/4 x 4mm banana plugs cable for interconnecting between 2 racks, from the rear output of the EXS to the front output of the XS equipment



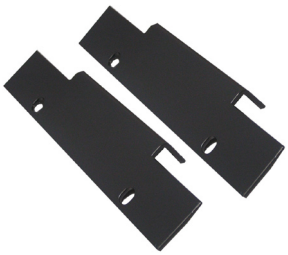
C0308

4 wires Jaeger/4 x 4mm banana plugs cable for interconnecting between 2 racks, from the rear output of the EXS to the front output of the XS equipment



KRXS

19'' rack mounting adaptation



RCP-21

USB / RS232 adapter for software communication

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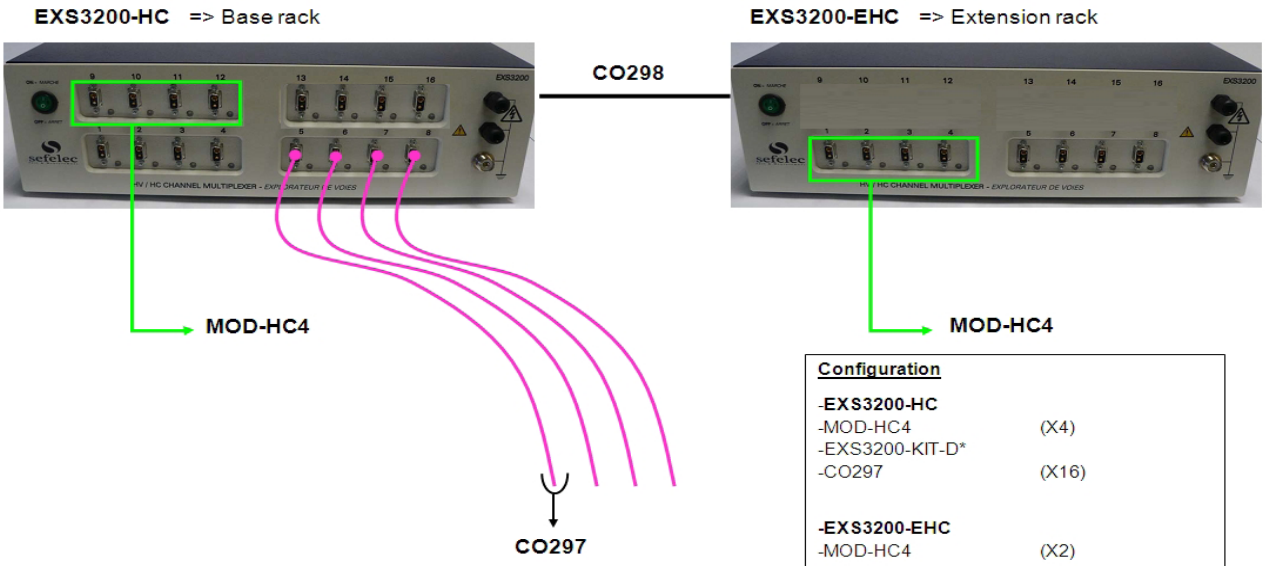
Guide for quotation

- How many switching points ?

- What is the device under test + application (test lab., production line) + drawing of the connection points + test procedure (step 1, step 2, ...), test times ?
  Example of configuration with 24 high voltage channels made of one basic rack, one extension rack with 6 modules.

- Which tests are necessary (continuity and/or insulation and/or Hipot) ? if ground continuity required : at which current, how many points in continuity?

High current switching matrix with 24 test points



Configuration

-EXS3200-HC

-MOD-HC4	(X4)
-EXS3200-KIT-D*	
-CO297	(X16)

-EXS3200-EHC

-MOD-HC4	(X2)
-CO297	(X8)
-CO298	

*Has to be ordered because more than 2 MOD-HC4 modules are included in the same rack.

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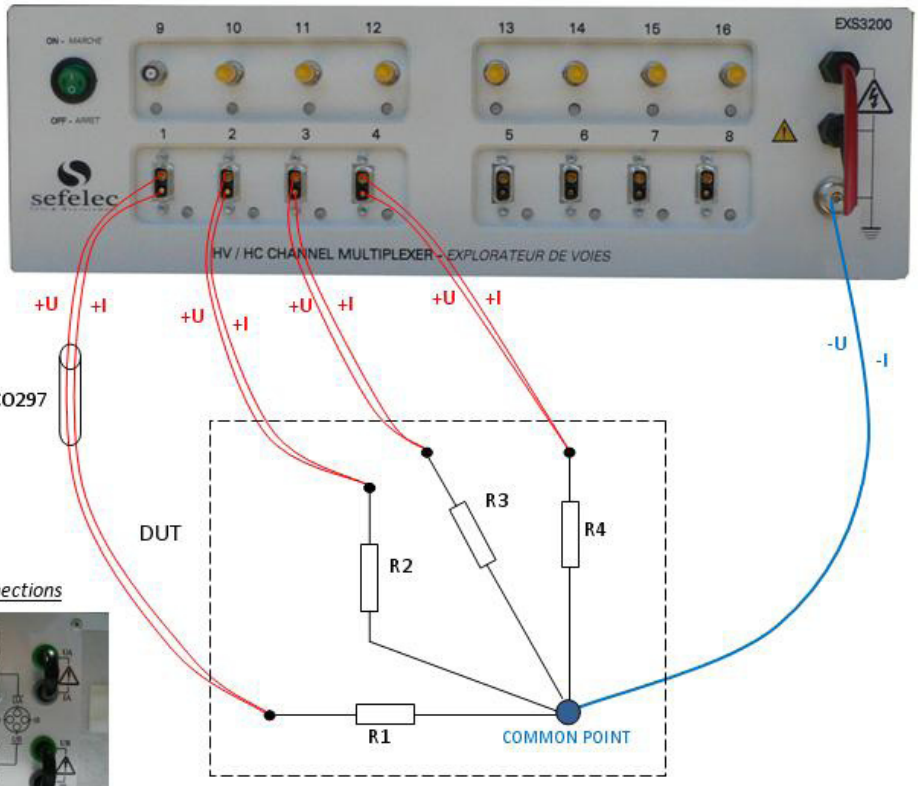
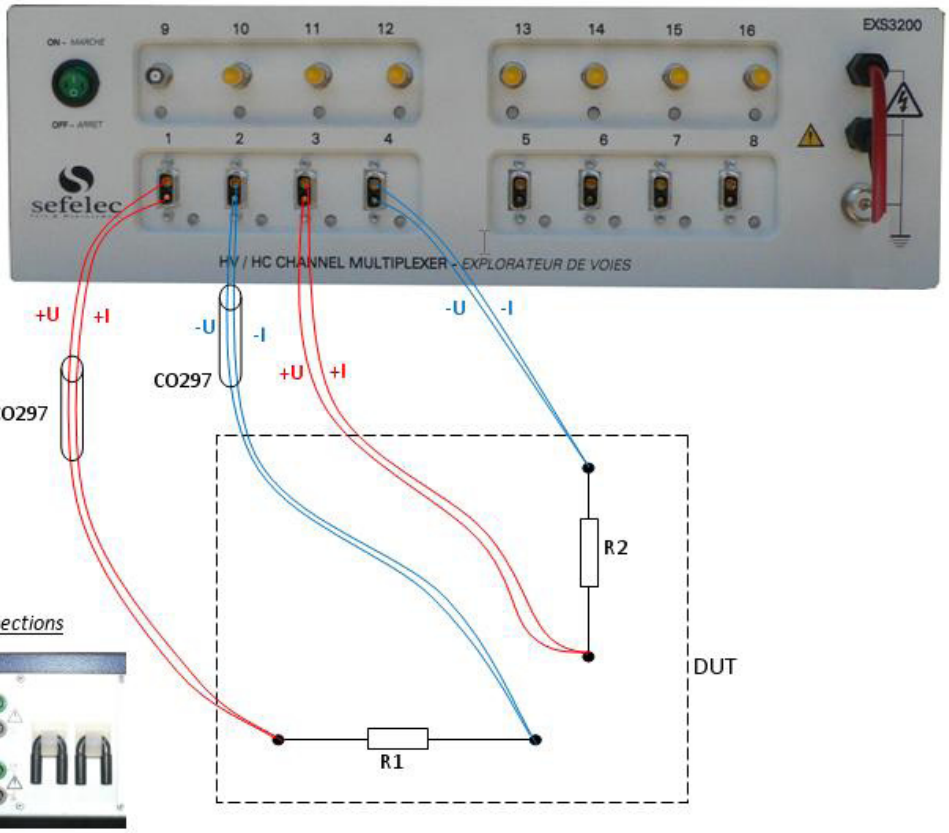
In order to define the number of ground continuity points you need, it is important to know whether you will test with a common ground point or not. Indeed, our switching matrix is highly flexible and offers the possibility to test both configurations.

Resistance measurement in 2 wires mode (jumpers connected)



Rear panel connections

Resistance measurement in 4 wires mode (jumpers not connected)



Rear panel connections

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