



12 channels high voltage tester

Hipot 6000 V_{DC}

Insulation 2 TΩ

Engineering Dpt
SEFELEC SAS Lognes
Eaton Electrical

Customer requirements:

A cable manufacturer asked SEFELEC for a complete solution to perform dielectric strength and insulation tests on cable drums stacked on trolleys.

You can find several lengths on a reel, several reels in a group, several groups on a trolley, a single cable reference per trolley (parallel and/or series cabling of lengths, reels or groups)

EATON - SEFELEC solution:

The complete response of our engineering department includes:

- Hipot tester 6000V_{DC}
- Insulation measurement up to 2TΩ
- 12 test channels HV scanner
- Tailored safety enclosure
- Test interfaces
- Safety devices

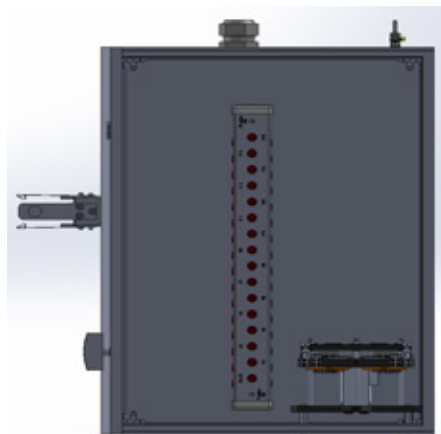
The harness on the bracket (or not) is connected by alligator clips to the coils. The trolley enters the safety enclosure and is connected to the tester via the interface.

This interface is equipped with a relay of our design to discharge the cable spools for a period of time.



Connection harness installed on a bracket

Indeed, the test being performed under a direct current (DC), the coils tend to recharge themselves. The discharge is therefore maintained for at least 5 minutes, independently of the switching channels of the EXS scanner (at the end of the test, the channels are open and therefore no longer maintain the DUT in discharge mode).



Connection interface including safety relay

entrée et d'une porte sortie pour respecter un flux de production en sens unique.

In this case, the customer is primarily looking for operator safety and the traceability of the tests made with our device.

Besides, automation with Winpass MX software reduces test duration.

A Winpass MX program is also offering:

- Tests automation
- Defaults research
- Custom test reports with color coding.

The test bench is compliant to EN61010 standard, the safety enclosure to EN50191, the whole solution is controlled by the Bureau Veritas.



Control and measurement bench



View of the "Go Through" safety enclosure



Connection interface and safety grounding stick

Devices included in the global solution:

The solution offered to our customer includes the following SEFELEC devices:

Model	Type	Specification	Measurement range
DXS 506	Megohmmeter	20 Vdc - 1000 Vdc	1 kΩ - 200 GΩ (with 2 TΩ option)
RACK PC3	Industrial computer		
EXS3200	Scanner	12 Voies	

The safety enclosure is also equipped with:

- Emergency stop punch breakers
- Discharge sticks
- 3 colors safety lights

Our sales department will be pleased to provide you with more information about our engineering solutions.

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