



Scanner Option SEFELEC 5x

High Voltage & High Current Scanner by EATON

SEFELEC internal scanner advantages:

4 or 8 Channels installed in the SEFELEC 5x tester chassis

4 or 8 channels high voltage

Maximum voltage 5kVAC 500VA and 6kVDC

Insulation up to 200GΩ under 1000 VDC

Independant Channels can be tied to high potential or grounded or isolated.

4 or 8 channels high current.

Earth Bond Tests under 32A AC max.

Programmation & control directly through the SEFELEC 5x or WINPASS MX software

7" TFT Touchscreen 16 millions colors to set configuration through SEFELEC 5x, tests & results display

DSP emboarded for high speed tests

Switching Relays with high performances

IEC 61010-2-034 full compliance, specific safety standard for insulation and dielectric strength meters

The **Scanner option** of the SEFELEC 5x testers is EATON's next-generation solution, designed for use with dielectric strength test stations, dielectric meters, safety testers and megohmmeters within the range, in all applications requiring the automatic switching of high voltage and/or high current test points.

Its compactness and high performance make the **SEFELEC Internal Scanner** an ideal solution for integration into a production line or a control bench.

Programmable via the 7" touch screen of the SEFELEC 5x range, operating the scanner is simple and intuitive.

Supervision by the Winpass MX software also offers the generation of customizable test reports.

- Modularity: 4 channels
- Driven by SEFELEC 5x
- Safety interlock on output connector
- Pre-wired patch cords

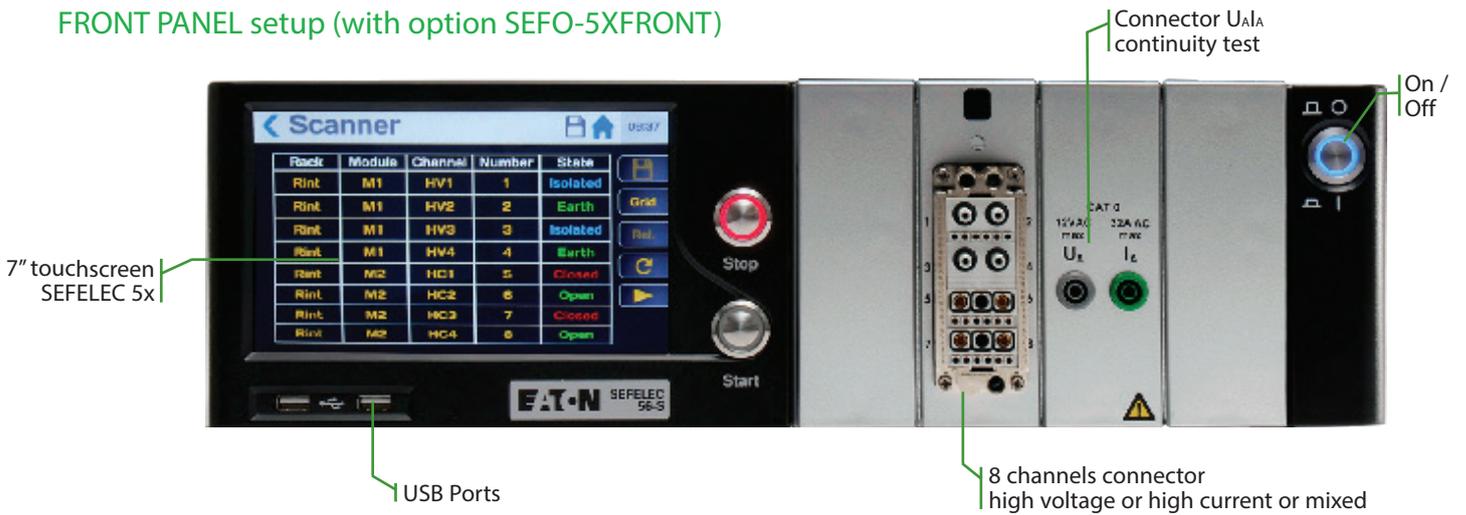


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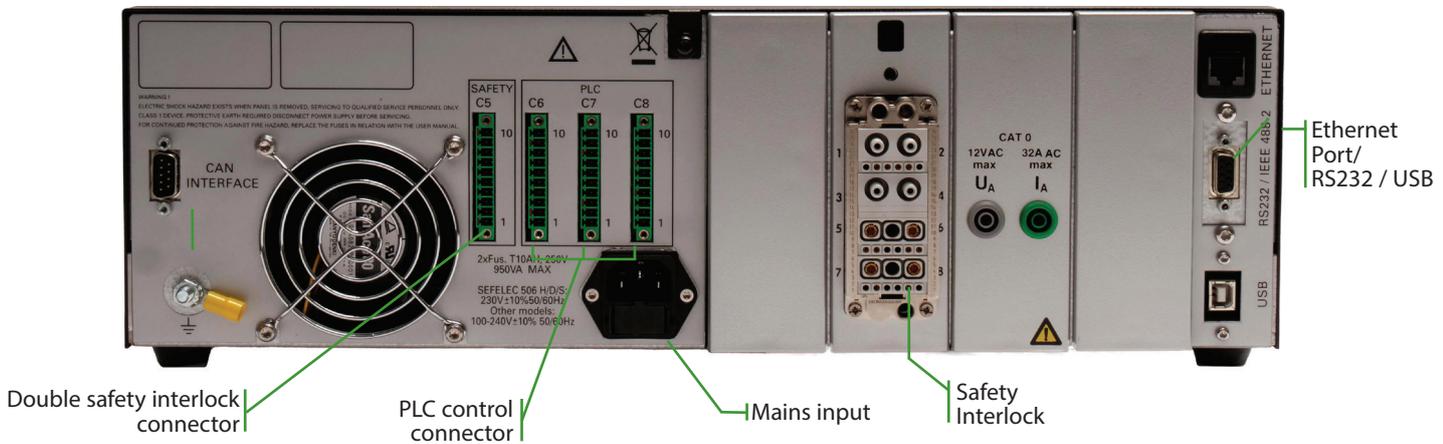
Powering Business Worldwide

Internal Scanner for SEFELEC 5x : Scanner 4 or 8 channels - Overview

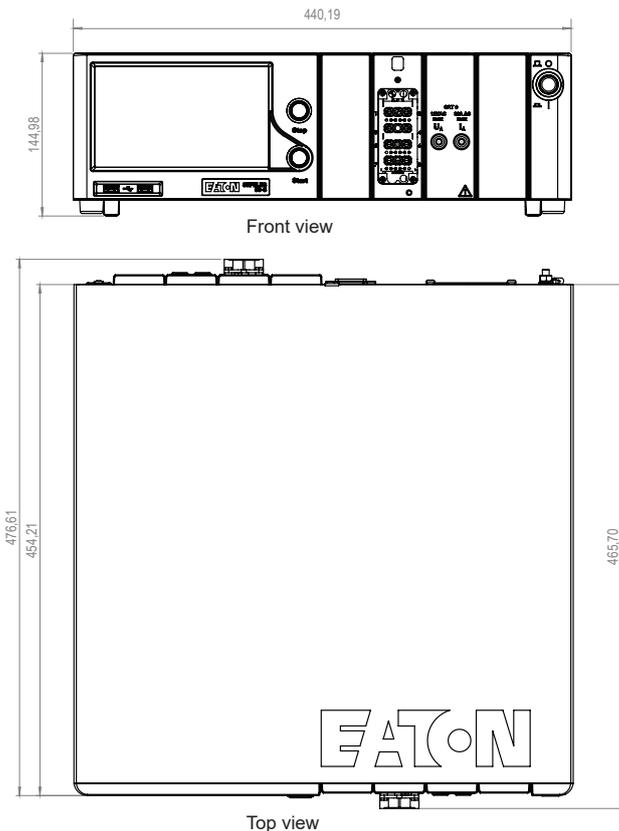
FRONT PANEL setup (with option SEFO-5XFRONT)



REAR PANEL setup (standard version)



OUTLINE DRAWING



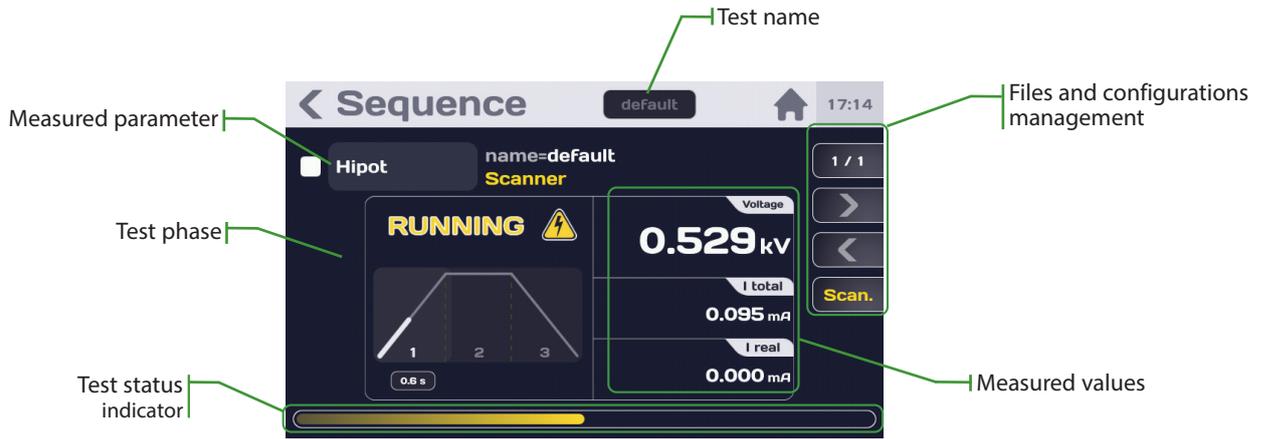
Rack mounting requires the SEFA-KR adapter. As standard, the internal scanner option is installed at the rear of the SEFELEC 5x.

For front panel installation, please order the SEFO-5XFRONT option.

Please consider the depth of the leads connectors in addition to overall dimensions.



Internal Scanner SEFELEC 5x : Touchscreen - Programming and Supervision



Sequence display



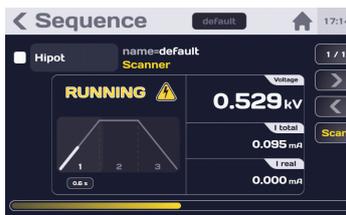
Sequence parameters programming

Rack	Module	Channel	Number	State
Rint	M1	HC1	1	Open
Rint	M1	HC2	2	Open
Rint	M1	HC3	3	Open
Rint	M1	HC4	4	Open
Rint	M2	HV1	5	High
Rint	M2	HV2	6	High
Rint	M2	HV3	7	Earth
Rint	M2	HV4	8	High

Channels state programming

Rack	Module	Channel	Number	State
Rint	M1	HC1	1	Open
Rint	M1	HC2	2	Open
Rint	M1	HC3	3	Open
Rint	M1	HC4	4	Open
Rint	M2	HV1	5	Earth
Rint	M2	HV2	6	Earth
Rint	M2	HV3	7	Earth
Rint	M2	HV4	8	Earth

High voltage module summary table

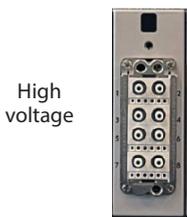


On going test

Rack	Module	Channel	Number	State
Rint	M1	HC1	1	Open
Rint	M1	HC2	2	Open
Rint	M1	HC3	3	Open
Rint	M1	HC4	4	Open
Rint	M2	HV1	5	High
Rint	M2	HV2	6	High
Rint	M2	HV3	7	Earth
Rint	M2	HV4	8	High

Connected racks summary table

Internal Scanner SEFELEC 5x Modules and leads



High voltage

SEFM-8IHV or SEFM-4IHV



High current

SEFM-8IHC or SEFM-4IHC



Mixed

SEFM-4IHVHC



SEFA-SCHV4-02



SEFA-SCHC8-05

Switching Modules

- SEFM-4IHV 4 channels Hipot/Insulation module
- SEFM-4IHC 4 channels Earth Bond test module
- SEFM-4IHVHC 2x4 mixed channels module
- SEFM-8IHV 8 channels Hipot/Insulation module
- SEFM-8IHC 8 channels Earth Bond test module

Leads

- SEFA-SCHV4-02 4 channels lead Hipot/Insulation, length. 2m
- SEFA-SCHV4-05 4 channels lead Hipot/Insulation, length 5m
- SEFA-SCHV8-02 8 channels lead Hipot/Insulation, length 2m
- SEFA-SCHV8-05 8 channels lead Hipot/Insulation, length 5m
- SEFA-SCHC4-02 4 channels lead Earth Bond test, length. 2m
- SEFA-SCHC4-05 4 channels lead Earth Bond test, length 5m
- SEFA-SCHC8-02 8 channels lead Earth Bond test, length 2m
- SEFA-SCHC8-05 8 channels lead Earth Bond test, length 5m
- SEFA-SCHVHC4-02 Mixed 4+4 channels leads, length 2m
- SEFA-SCHVHC4-05 Mixed 4+4 channels leads, length 5m

The terminations of all the leads are bare wires facilitating connection to the terminals of your interfaces/toolings

Accessories & Options

- SYWINPASS-MX Control and supervision WINPASS software
- SEFA-KR 19" rackmount kit
- SEFA-5XFRONT Front output for internal Scanner option

General Specifications		
Temperature range	Storage	Operating
	-10°C to +60°C	0°C to +45°C
Specified accuracy after 1/2 hour warm-up and RH<50 %		
Altitude	up to 2 000 m	
Relative Humidity / Acoustic noise	80 % max. @ 31°C / 80 dBA max. @ 1m	
Weight	modules HV 4 HV channels : 1,2 kg - HC: 0,6kg	
Hipot & Insulation Switching Function (SEFM-4IHV, SEFM-8IHV & SEFM-4IHVHC modules)		
Hipot tests	Max. voltage AC	5 000 VAC 50Hz ou 60Hz
	Max. voltage DC	6 000 VDC, positive pole grounded in DC
	Max. switching current	2A AC or DC, with no voltage
Insulation Resistance measurement	Max. resistance (8 channel)	10 GΩ under 500VDC or 1000VDC sans derating
	Leverage if several channels	< 1%
Protection resistor	120Ω ±5% on commun high level point and at the termination of the leads	
Channels setting	High bus (high voltage)	1 relay Normaly Open (NO)
	Cold bus (ground)	1 relay Normaly Closed (NC)
Switching duration	1 channel switching	5 ms typical
	All channels switching	20 ms max.
Channels connectors	via ODU Mac Blue Line Connectors 4 or 8 HV channels or 4 HC channels + 4 HV channels	
Safety interlock	When the male connector is not installed, the relays cannot be controlled	
Moves capacity (unloaded)	> 1 x 10 ⁶	
Earth Bond Test Switching Function (SEFM-4IHV, SEFM-8IHC & SEFM-4IHVHC modules)		
Current switching		
Max. voltage	30 VAC	
Max. current (voltage free)	32A AC or DC	
Contact resistance	<10 mΩ	
Coil voltage	24 VDC nominal	
Coil resistance	480 Ω ± 10%	
Channels setting	Current bus	1 relay Normaly Open (NO)
	1 channel switching	15 ms typical
Switching duration	All channels switching	20 ms max.
	Moves capacity (unloaded)	> 3 x 10 ⁴
Voltage switching		
Max. voltage	30 VAC	
Max. current (voltage free)	2A AC or DC	
Contact resistance	<50 mΩ	
Coil voltage	24 VDC nominal	
Coil resistance	2880 Ω ± 10%	
Switching duration	Voltage bus	1 relay Normaly Open (NO)
	1 channel switching	5 ms typical
	All channels switching	20 ms max.
Moves capacity - unloaded	> 5 x 10 ⁵	
Connection to D.U.T.	via ODU Mac Blue Line Connectors 8 HC channels and 8 low level channels (voltage sense)	
2 wires mode (external straps)	8 channels max.	
4 wires mode	4 channels max.	

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Please learn more about SEFELEC 5x series
 on : **Sefelec.com**