

AXOS⁵

Expandable test systems

Datasheet



HAEFELY

Current and voltage – our passion

General Description

The new AXOS⁵ - Compact integrates all of the best features of our stand alone test systems into one single economic solution.

Combination Wave, 5 kV EFT/Burst, Dips & Interrupts, along with an integrated single-phase coupling / decoupling network. This allows quick and completely automated testing to the most common IEC, EN, ANSI, IEEE and UL standards.

The AXOS⁵ can either be operated via front panel by large colour graphic interface or remotely from the PC. The easy to use menu together with the availability of predefined test routines for different standards makes testing easy and reliable, even for less frequently users. Numerous additional functions such as external

start/stop function allows easy integration of the test system also in customer specific test environments.

All the test parameters can be varied in a broad range wide above the requirements of the standards. Together with the ability of changing test parameters during test, AXOS⁵ is not only the ideal product for compliance and pre-compliance testing, it is useful for monitoring & debugging function during design phase as well.

A wide range of costefficient and user friendly coupling/decoupling networks for power lines as well as for symmetrical and asymmetrical data- and signal lines are available as options.

Features & Benefits

- Easy to operate with manual and automated test modes, software assisted test preparation, pre-defined test routines and visual aided test setups
- Economic & Efficient
- Touch screen guarantees reduction of time and effort - Experience and know-how at a reasonable price
- Safe and reliable operation by using safety interlock, warning lamp and emergency stop functions
- Voltage and current monitoring of surge impulses and EUT power provides valuable feedback to the test engineer
- Automatic generation of test report, including test parameters, test setup and test result

Applications

- Compliance & pre-compliance testing of electrical products
- CE marking
- Product development and debugging
- Compliance testing of telecom and wireless devices
- Overtesting

Scope of Supply

AXOS ⁵	Compact Immunity	No. 2490400
AXOS ⁵	Surge	No. 2490401
AXOS ⁵	EFT/Burst	No. 2490402
AXOS ⁵	Voltage Dips	No. 2490403

- Included accessories
- Mains Cable
 - User Manual
 - Calibration certificate

Technical Data

General Data			
Control power	85 V - 264 V 50/60 Hz	Dimensions	19" / 4U (45 x 18 x 49 cm)
User test storage	Unlimited	Weight	25 kg
Remote interface	Ethernet, RJ45	USB	for USB memory stick
Display	7" / 800x480 / 24 bit with touchscreen	AUX. interface	D-sub 37p for external CDN, external transformer etc.
External trigger input	5 V TTL	Synch input	BNC, 10 V – 264 V AC
Trigger output	5 V TTL	External start / stop input	5 V TTL, starts / stops predefined test sequence
EUT failed input	5 V TTL	Analog output	0 – 10 V, for use with external options
Warning lamp output	2 x 24 V / 1 A DC	Safety circuit	stops the test when unlocked

IEC / EN 61000-4-4 EDITION 2 & 3 EFT / Burst			
Output voltage	0.2 – 5.0 kV $\pm 10\%$ at coaxial output	Spike frequency	1 Hz – 1 MHz
Polarity	pos / neg / alternate	Burst duration	10 μ s – 1 s
Output impedance	50 Ohm	Burst period	1 ms – 10 s
Rise time	5 ns $\pm 30\%$	Test time	1 s – 1'000 minutes, infinite
Impulse duration	50 ns $\pm 30\%$ at 50 Ohm 50 ns –15 +100 ns at 1'000 Ohm	Trigger	automatic, manual, external trigger input
Burst mode	normal, continuous, real, random	Integrated single phase coupling / decoupling network	264 V AC / 16 A up to 220 V DC / 10 A

IEC / EN 61000-4-5 EDITION 2 & 3 Surge combination wave			
Output voltage	0.2 – 5.0 kV $\pm 10\%$	Output current	0.1 – 2.5 kA $\pm 10\%$
Voltage rise time	1.2 μ s $\pm 30\%$	Current rise time	8 μ s $\pm 20\%$
Voltage duration	50 μ s $\pm 20\%$	Current duration	20 μ s $\pm 20\%$
Polarity	positive / negative / alternate	Integrated single phase CDN	264 V AC / 16 A up to 220 V DC / 10 A
Output impedance	2 Ohm	Impulse trigger	automatic 2 s – 100 min manual external trigger input
Phase sync	0 – 359° with 1° steps or asynchronous mode		
Counter preselect	1 – 1'000 / infinite	Peak current monitor	BNC output: 1 kA/V display: 3 digits
Counter	100'000		
Peak voltage monitor	BNC output: 1000:1 display: 3 digits		

IEC / EN 61000-4-11 EDITION 2 & 3 AND IEC / EN 61000-4-29 DIPS & INTERRUPTS			
Max. voltage	264 V AC/DC	Interrupt time	0.5 period – 800 periods 100 μ s – 1000 minutes
Max. current	16 A AC/DC continuous 20 A for 5 s 23 A for 3 s 40 A for 3 s > 500 A inrush current	Interval time	1 period – 800 periods 1 ms – 1000 minutes
Trigger	Automatic, manual, external	Test time	1 s – 1000 minutes, infinite
Interrupt Dip level	0% 0% – 99% (ext. voltage source)	Phase sync	0 – 359°, 50 / 60 Hz, external, asynchronous mode
RMS voltage monitor	BNC output: 100:1 display: 3 digits	RMS current monitor	BNC output: 10 A/V display: 3 digits

Global Presence

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HIGH VOLTAGE



INSTRUMENTS



EMC

precision.

swiss made.