AXOS^{8}

Expandable test systems

Datasheet

HAEFELY

Current and voltage – our passion

General Description

The new AXOS[8] expandable test system integrates all of the best features of several stand alone test systems into one single economic solution.

It can be individually combined either with 7 kV Surge Combination Wave, 7 kV Ring Wave, 7 kV Telecom Wave*, 5 kV EFT/Burst or 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, ITU, IEEE and UL standards.

The AXOS[8] 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.

(*) with external TW 8

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[8]	Compact Immunity	No. 2490800
AXOS[8]	Surge	No. 2490810
AXOS[8]	EFT/Burst	No. 2490830
AXOS[8]	Voltage Dips	No. 2490840
AXOS[8]	Ring Wave	No. 2490820
AXOS[8]	Telecom Wave	No. 2490850

Included accesories

- Mains Cable
- User Manual
- Calibration certificate
- Telecom Wave Modul "TW 8" 10/700µs (only with AXOS[8] Telecom Wave Test System, No. 2490850)

Technical Data

General Data			
Control power	85 V - 264 V 50/60 Hz	Dimensions	22“ / 6U (45 x 27 x 50 cm)
User test storage	Unlimited	Weight	30 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 ±10% at coaxial output	Spike frequency	1 Hz – 1 MHz
Polarity	pos / neg / alternate	Burst duration	10 µs – 1 s
Output impedance	50 Ohm	Burst period	1 ms – 10 s
Rise time	5 ns ±30%	Test time	1 s – 1'000 minutes, infinite
Impulse duration	50 ns ±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 CDN	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 – 7.0 kV ±10%	Output current	0.1 – 3.5 kA ±10%
Voltage rise time	1.2 µs ±30%	Current rise time	8 µs ±20%
Voltage duration	50 µs ±20%	Current duration	20 µs ±20%
Polarity	Postive / negative / alternate	Integrated single phase CDN	264 V AC / 16 A
Output impedance	2 Ohm		up to 220 V DC / 10 A
Phase sync	0 – 359° with 1° steps or asynchronous mode	Impulse trigger	automatic 2 s – 100 min manual external trigger input
Counter preselect	1 – 1'000 / infinite		
Counter	100'000	Peak current monitor	BNC output: 1 kA/V
Peak voltage monitor	BNC output: 1000:1 Display: 3 digits		Display: 3 digits

IEC / EN 61000-4-5 EDITION 2 & 3 Telecom Wave AND ITU K.20, K.21, K.44, K.45 (external TW 8 module)			
Output voltage	0.2 - 7.0 kV ± 10%	Source impedance / coupling	15 Ohm x 1 40 Ohm x 4 40 Ohm gas arresters x 4
Front time OCV	10 µs ± 30%	Front time SCC	5 µs ± 20%
Decay time OCV	700 µs ± 20%	Decay time SCC	320 µs ± 20%
Polarity	Positive / negative / alternate	Weight	10 kg
Outputs	4 mm banana socket	Dimensions	19" / 4U, (45 x 18 x 49 cm)

IEC / EN 61000-4-11 EDITION 2 & 3 IEC AND IEC / EN 61000-4-29 DIPS & Interrupts			
Max. voltage	264 V AC/DC	Interrupt time	0.5 period – 800 periods 100 µs – 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

IEC / EN 61000-4-12 EDITION 2 & 3 AND ANSI / IEEE C62.41 Ring Wave			
Output voltage	0.2 - 7.0 kV ± 10%	Impulse trigger	up to 30 pulses / minute
Voltage oscillation frequency	100 kHz	Polarity	Positive / negative / alternate
Rise time OCV	0.5 µs ± 30%	Floating output	Max. 460 V / AC
Rise time SCC	0.2-1.0 µs	Phase sync accuracy	± 1°
Impedance	12 Ohm, 30 Ohm	Damping rate	$0.4 \leq peak_2/peak_1 \leq 1.1$ $0.4 \leq peak_3/peak_2 \leq 0.8$ $0.4 \leq peak_4/peak_3 \leq 0.8$
Peak voltage monitor	BNC output: 1000:1 Display: 3 digits	Peak current monitor	BNC output: 1 kA/V Display: 3 digits

Global Presence

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HAEFELY
Current and voltage – our passion

H HIGH VOLTAGE
I INSTRUMENTS
E EMC

precision. swiss made.