

BURST NX8

ELECTRICAL FAST TRANSIENT GENERATOR



FOR TESTS ACCORDING TO ...

- > EN 61000-4-4
- > EN 61000-6-1
- > EN 61000-6-2
- > IEC 61000-4-4
- > IEC 61326
- > IEC 61850-3

BURST NX8 - EFT/BURST TESTER







The burst NX8 is the state-of-the-art EFT/Burst tester with a built-in coupling/decoupling network for single phase or three-phase mains supply lines and a HV terminal to connect a capacitive coupling clamp. The spike frequency can be varied from as low as 100Hz to 1,000kHz. The burst NX8 is capable to generate up to 1,000 spikes per second.

Its performance complies with IEC 61000-4-4:2004, IEC 61000-4-4 Amd.1 Ed.2:01/2010 and IEC 61000-4-4 Ed.3: 03/2012. Pre-programmed Standard Test routines and a number of selected User Test routines make the burst NX8 an optimum standalone solution for both testing during development and final testing of products and sub-assemblies.

HIGHLIGHTS

- > **Standalone Tester**
- > **8,000V Burst voltage**
- > **Spike frequency 1MHz**
- > **Built-in 1ph or 3ph coupler**
- > **Up to 690 V AC / 1,000 V DC (optional)**
- > **USB (optical link) and LAN interface**

APPLICATION AREAS

- | | |
|---|--|
|  INDUSTRY |  TELECOM |
|  MEDICAL |  COMPONENTS |
|  BROADCAST | |
|  RESIDENTIAL | |

TECHNICAL DETAILS

BURST NX8 MODELS

burst NX8-1-400-16	With 1-phase coupler; 400 V / 16 A AC
burst NX8-1-400-32	With 1-phase coupler; 400 V / 32 A AC
burst NX8-3-690-16	With 3-phase coupler; 3 * 690 V / 16 A AC
burst NX8-3-690-32	With 3-phase coupler; 3 * 690 V / 32 A AC
burst NX8-1-400-16.1	With 1-phase coupler; 400 V / 16 A AC 1,000 V / 16 A DC
burst NX8-1-400-32.1	With 1-phase coupler; 400 V / 32 A AC 1,000 V / 32 A DC
burst NX8-3-690-16.1	With 3-phase coupler; 3 * 690 V / 16 A AC 1,000 V / 16 A DC
burst NX8-3-690-32.1	With 3-phase coupler; 3 * 690 V / 32 A AC 1,000 V / 32 A DC

TEST LEVEL

Voltage range	500 V - 8,000 V
Into 50 ohm	250 V - 4,000 V
Pulse shape	5/50 into 50 ohm load
Rise time tr	5 ns ± 30 %
Pulse width td	50 ns ± 30 %
Pulse shape	5/50 ns into 1,000 ohm load
Rise time tr	5 ns ± 30 %
Pulse width td	35 ns to 150 ns
Source impedance	50 ohm ± 20 %
Polarity	Positive/negative

TRIGGER

Automatic	Automatic release of the bursts
Manual	Manual release of a single pulse
External	External release of a single pulse
Burst duration	Td = 0.10ms - 999.9ms
Burst repetition rate	Tr = 10 ms - 9,999 ms/man Tr ≤ 9,999 ms ⇒ Auto Trigger Tr > 9,999 ms ⇒ Man Trigger
Spike frequency	f = 0.1 kHz - 1,000 kHz
Test duration	T = 0:01 min - 99:59 min T > 99:59 min - endless

OUTPUT

Direct	Via HV coax connector
Coupler	1 phase: L, N and PE, all combinations 3 phase: L1, L2, L3, N and PE, all combinations
DUT supply AC	1 phase: 400 V / 16 or 32 A AC, 50/60 Hz 3 phase: 3 * 690 V / 16 or 32 A AC, 50/60 Hz
DUT supply DC (.1-models only)	1,000 V DC
DUT supply	Other DUT supply voltages on request
CRO Trigger	5V trigger signal for oscilloscope; burst duration and pulse frequency can be checked

TEST ROUTINES

Quick Start	Immediate start; easy-to-use and fast
User Test routines	1. Custom made test routines 2. Change voltage after T 3. Change frequency after T 4. Frequency sweep within a burst 5. Change burst duration after T 6. Randomly released bursts 7. Synchronous burst mode 8. Change polarity after T
Standard Test routines	1. As per IEC 61000-4-4, Level 1-5 2. Automatic test Level X to level Y
Service	Service, set-up, self test

INTERFACES

Serial interface	2 x USB A for memory stick, 1 x USB B for service only, Opto - Link to USB for remote
LAN	Ethernet for remote
Sys.link	26 pin high density connector
Fail inputs	EUT monitoring via input (one each) EUT Monitor 1 EUT Monitor 2

SAFETY

Safety standard	IEC/EN 61010
Security circuit	Control input (24 VDC)
Warning lamp	Floating contact (max. 60 V/2 A)

TECHNICAL DETAILS

GENERAL DATA

Dimensions, weight	19"/6 HU, 448 mm x 289 mm x 550 mm, approx. 20 kg
Supply voltage	85 V - 264 VAC
Fuses	115 V: 2 x 4 A slow blow, 230 V: 2 x 2 A slow blow
Power	max. 95 W, 0.42 A, avg. 35 W, 0.15 A

ENVIRONMENT

Temperature	10 °C to 35 °C
Humidity	30 % to 75 %, non condensing
Atmospheric pressure	86 kPa (860 mbar) to 106 kPa (1,060 mbar)

OPTIONS

CCI	Coupling clamp as per IEC 61000-4-4
CCI PVKIT 1	Calibration set for the CCI as per IEC 61000-4-4 Ed.3 including PVF AD 3. Requires additionally PVF 50.
PVF 50	50 ohm matching resistor for verification
PVF 1000	1,000 ohm matching resistor for verification
PVF BKIT 1	Pulse Verification Kit Fast Burst consisting of: PVF 50, PVF 1000, PVF AD 1 - Adapter - MC to SHV (m)
Safety Circuit Adapter	SSC AD (Sys Link), Interlock for external safety loop Replaces: SCT Safety Circuit Terminator
iec.control 1-NX	Software to control the test, including standard library, test report facility and data conversion generator

COMPETENCE WHEREVER YOU ARE



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Information about scope of delivery, visual design and technical data correspond with the state of development at time of release. Subject to change without further notice.