

High Voltage High-power EFT/Burst Test System

EFT 500G & EFTN 15100T

Datasheet



In Compliance with

- > IEC/EN 61000-4-4
- > IEC 61000-6-1
- > IEC 61000-6-2
- > GB/T 17626.4

Introduction

The HV high-power EFT/burst immunity test system EFT/500G & EFTN 15100T is a high-end test device, which is specially designed to meet the requirement of new energy test system and EUT with high-power load. The system features high reliability, stable performance and convenience to use. Its built-in coupling/decoupling network can couple maximum 4.8 kV pulse voltage onto mains supply system with voltage up to DC 1500 V/AC 700 V (three-phase-five-line) and current 100 A. Higher voltage and current levels are available for customer's request.

Features

- > EUT DC load capacity: DC 1500 V 100 A;
- > EUT AC load capacity: AC 700 V 100 A, three -phase five-wire;
- > EUT power automatic switching over;
- > EUT voltage and current detection;
- > Overvoltage, over-current protection;
- > Setting test voltage, polarity and phase sync angle by scheduling and fully automatic network switching over;
- > Phase angle superposition for any line;

Application Areas

- > Communication
- > Information technology
- > Telecom
- > Military
- > Medical
- > Aviation
- > Broadcast and TV
- > New energy electrical power
- > Railway

Technical parameters	
Electrical Fast Transient/Burst simulator EFT 500G	
Test voltage range	0.25 kV ~ 4.8 kV (±10%)
Polarity	+/-/alternate
Source impedance	50 Ω
Pulse waveform	5/50 ns, 50 Ω , 1000 Ω load
Rise time	5 ns±30%, 50 Ω load, 1000 Ω load
Pulse duration	50 ns, ±30%, 50 Ω load, 50 ns, -15/+100 ns, 1000 Ω load
Pulse frequency	0.1 kHz ~ 1000 kHz
Burst duration	0.075 ms ~ 750 ms
Burst cycle	1 ms ~ 9999 ms
Test duration	1 s ~ 9999 s
Trigger mode	Auto, manual or external
Synchronization	0°~360°, resolution 1° step or random
Coupling/Decoupling Network EFTN 15100T	
Three-phase fully automatic CDN	Electrical Fast Transient/burst tests, voltage up to 4.2 kV
EUT load capacity	Max AC 700 V 100 A 50/60 Hz three-phase five-wire; Max DC 1500 V 100 A
Short-term Inrush Current	Peak value: 400 A
EUT switching over method	Auto switching over
Phase synchronization	Any combination of L1, L2, L3, N, PE with any phases and angles
Coupling paths	Any combination of L1, L2, L3, N, PE
Coupling switching over mode	Auto switching over
Coupling capacitance	33 nF
Coupling attenuation	<2 dB
Residual pulse voltage at the injection of EUT	Less than 15% of test pulse voltage

General Parameters	
Cabinet size	19"/22U
Weight	Approx.100 kg
Ambient Temperature	15 °C ~ 35 °C
Relative Humidity	45% ~ 75%
Atmospheric Pressure	86 kPa ~ 106 kPa

Accessories
User manual, Fuse, Three-core power cord, Test wire, Coaxial cable, Ground wire

Options
Calibration Kit for EFT/Burst Generators
TFB 50: input impedance 50 Ω, output impedance 50 Ω, attenuation 55 dB;
TFB 1000: input impedance 1000 Ω, output impedance 50 Ω, attenuation 60 dB;
Supplied with network adaptors and tool box.



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