

FP-EFT 100M2

3-phase Coupling / Decoupling Network (CDN)

IEC/EN 61000-4-4, ANSI C62.41 & C.37.90.1

- 5/50 ns impulse shape
- 8 kV Burst max. impulse voltage
- Max. AC voltage:
690 V AC (phase – phase),
400 V AC (phase – neutral)
- 100 A per phase EUT current



 HAEFELY

**For AXOS devices
from HAEFELY.**

Overview

The FP-EFT 100M2 coupling/decoupling network is fully compliant with the requirements of IEC/EN 61000-4-4, as well as tests according to ANSI/IEEE C62.41 and C.37.90.1 power lines.

IEC / EN and ANSI standards cover burst testing of single and three phase AC and DC power ports. They include recommendations for the test equipment, the test set-ups and the test procedures. The IEC 61000-4-4 Edition 3: 2015 now defines the impulse shape not only at the generator output but also at the CDN output. This Edition 3 requires a pure common mode coupling only. This means that the burst signals are coupled simultaneously into all paths at the same time. Because of this no coupling path selection during testing is necessary. This speeds up the test time.

The FP-EFT 100M2 couples the burst into an EUT while preventing the impulses from polluting the three phase power supply. The FP-EFT 100M2 has manual coupling path selection to verify the functionality of each path as recommended in the IEC 61000-4-4 Edition 3: 2015.

This can also be used to select different coupling paths according to ANSI standards which requires a path burst test. Used together with the AXOS5/AXOS8, the FP-EFT 100M2 can be used to inject EFT/burst impulses on the three phase supply.

Key facts

- Manual coupling path selection
- Phase angle synchronization possible
- **Maximum Mains voltage** – FP-EFT 100M2 is designed to operate at the maximum power supply voltages available anywhere in the world.
- Mains switch – This switch allows the disconnection of all phases and neutral so that no mains voltage is present at the CDN output.
- Sturdy and reliable – Careful component selection ensures that the FP-EFT 100M2 will continue to operate under the most strenuous testing regime.
- **Faster completion of testing program** – Since the IEC 61000-4-4 Edition 3: 2015 requires a pure common mode test only the test time is sped up.



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Technical data

FP-EFT 100M2			
Max. impulse voltage	8 kV Burst	Mains connections	4 mm safety banana sockets
Waveforms		EUT connections	4 mm safety banana sockets
Burst	IEC / EN 61000-4-4 Ed. 3	Phasen sync. source	fixed between L3 and PE
Max. voltage AC	690 V (Phase-Phase) 400 V (Phase-Neutral)	Coupling paths	manual selection
Max. voltage DC	110 V	Residual pulse voltage at line input	max. 10% of the applied impulse amplitude
Max. current DC	100 A	General data	
Max. current AC	100 A	Dimensions (W x D x H)	300 x 160 x 200 mm (11.8 x 6.3 x 7.9 in)
		Weight	6 kg net. (13.2 lb)

Options – 3-Phase CDNs

No. 2490170	FP-EFT 32M	Man. 3-Phase CDN for EFT/Burst 32 A / 690 V AC / 110 V DC
No. 2490700	FP-SURGE 32A	Auto. 3-Phase CDN for Surge 32 A / 690 V AC/DC
No. 2490180	FP-SURGE 100M2	Man. 3-Phase CDN for Surge, 100 A / 690 V AC / 110 V DC
No. 2490430	FP-COMB 32	Auto. 3-Phase CDN for Surge, Ring wave, EFT/Burst 32 A / 480 V AC/DC
No. 2499990	FP-COMB 63/690-1	Auto. 3-Phase CDN for Surge, Ring Wave, EFT/Burst, 63 A / 690 V AC/DC
No. 4700604	Verification Adapter	Verification Adapter for FP-EFT 100M2

Scope of delivery

FP-EFT 100M2 (No. 2495860)	Coaxial HV cable 0,33 m with SHV plugs
Cable set	Copper foil for ground connection
User Manual	Calibration certificate

All information regarding appearance and technical data correspond to the current state of development at the time of release of this data sheet. We reserve the right to make technical changes. 122309

