

L3-100

Three phase plus neutral V-Network 9 kHz - 30 MHz, 125 A for AC and DC powered EUT



Provided Features

- Powering the EUT
- EUT termination to a standardized impedance respect to the reference ground
- Coupling the measuring receiver to the disturbance generated by the EUT
- Decoupling the measuring receiver from unwanted RF signals from the power line

Main Features

- 9 kHz to 30 MHz frequency range
- Up to 100A continuous rated output current
- Local and remote control from PMM EMI receivers
- Suitable for DC to 60 Hz power lines
- Meets the requirements of several standards including **CISPR 16-1-2, VDE 0876, FCC part 15, MIL-STD 461F**

The AMN - Artificial Mains Network, also known as LISN - Line Impedance Stabilization Network - is the ancillary device intended for repeatable and accurate measurement of the disturbance voltage that an EUT (Equipment Under Test) may inject into the power line or mains.

This is obtained by providing well known impedance value and phase response across the frequency range of the test.

L3-100 is suitable for measurement on AC 3-phase power circuits from DC to 60 Hz.

The equivalent V-Network circuit of $50 \Omega // (5 \Omega + 50 \mu\text{H})$ with $250 \mu\text{H}$ choke is fully compliant with the reference standards.

PMM Artificial Mains Networks provide robust and stable mechanical construction, high quality electric components, easy and perfect grounding, solid input-output power connections. They can be used in conjunction with any EMI receiver or spectrum analyzer and offer features required for safe, repeatable and accurate measurements.

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125 A for AC and DC powered EUT

SPECIFICATIONS

Frequency range	9 kHz - 30 MHz
Max. continuous rated output current	100 A continuous
Overload current	125 A for 5 minutes
Max. operating voltage (L/PE) (N/PE) (L/L) (L/N)	230 VAC; 325 VDC 400 VAC; 565 VDC
Input mains frequency range	DC - 60 Hz
Equivalent circuit	50 Ω // [5 Ω + 50 μ H] with 250 μ H choke
RF output connector	BNC female
EUT connection	125 A plug and socket outlet according to IEC309 standard
Operating temperature	-10 °C to +40 °C
Storage temperature	-25 °C to +75 °C
Overall Dimensions mm (W x H x D)	465 x 450 x 740 mm
Weight	70 kg
Gross weight	100 kg

Ordering Information:

L3-100 3-phase Artificial Mains Network

Includes: IEC mains plug, RF cable, LISN remote control cable, user's manual, calibration certificate.

Optional accessories:

LISN service kit

(AC-BNC adapter for LISN verification and calibration)



- Electrical safety and presence of ground protection relays do require the installation of properly rated insulating transformer(s) between mains power line and AMN line inputs.
- High mains noise may require the installation of properly rated mains filters to reduce the level of unwanted signals.



L3-100 equivalent circuit

Related Products

Receivers

- 7010: EMI receiver 150 kHz - 1 GHz
- 9010: EMI receiver 10 Hz - 30 MHz
- 9010F: EMI receiver 10 Hz - 30 MHz
- 9010/03P: EMI receiver 10 Hz - 300 MHz
- 9010/30P: EMI receiver 10 Hz - 3 GHz
- 9010/60P: EMI receiver 10 Hz - 6 GHz

LISN

- L2-16B: single phase AMN, 16 A
- L3-32: 4 lines, 3-phase AMN, 32 A
- L3-64: 4 lines, 3-phase AMN, 64 A
- L3-64/690 4 lines, 3-phase AMN, 64A/690V
- L3-500: 4 lines, 3-phase AMN, 350 A
- L1-150M: single-path, 50 Ohm etc AMN 150 A
- L1-500 Single phase AMN, 500A
- L2-D: Delta LISN for telecom, 2 A, 150 Ω

RFI Filters

- FIL-L2-16F: single phase RFI filter, 16 A
- FIL-L2-24M: single phase RFI filter, 24 A
- FIL-L3-32M: 3-phase+neutral RFI filter, 32 A
- FIL-L3-70M: 3-phase+neutral RFI filter, 70 A



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