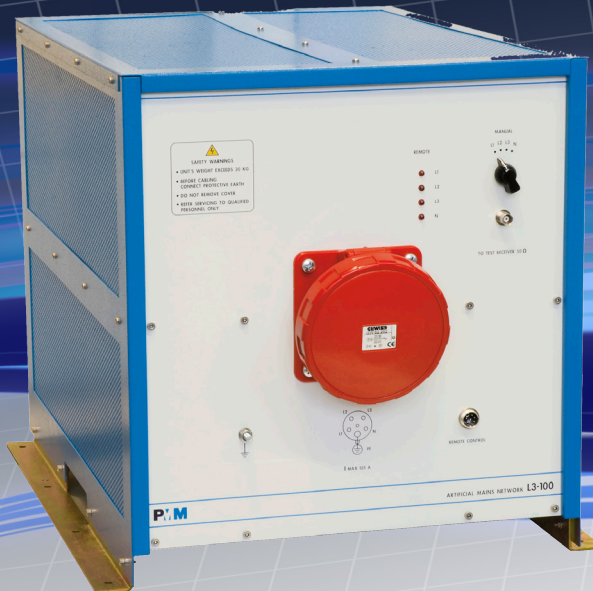


# L3-100

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



## 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**
- Powering the EUT
- EUT termination to a standardized impedance with respect to ground
- Couples the measuring receiver to the disturbance generated by the EUT
- Decouples the measuring receiver from unwanted RF signals from the power line

Artificial networks or Line Impedance Stabilization Networks (LISNs) are ancillary devices for the repeatable, accurate measurement of the disturbance voltage that EUT (equipment under test) may inject into the power mains.

This is accomplished through the use of reference impedance values and phase responses 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 common standards.

PMM LISNs feature robust and stable mechanical construction, high quality electric components, easy and perfect grounding and solid input-output power connections. They can be used in conjunction with any EMI receiver or spectrum analyzer and are built to provide safe, repeatable and accurate measurements.

# L3-100

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

## SPECIFICATIONS

Frequency range	9 kHz to 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 to 60 Hz
Equivalent circuit	50 Ω // [5 Ω + 50 μH] with 250 μH 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
Dimensions (W x H x D)	465 x 450 x 740 mm
Weight	70 kg
Gross weight	100 kg



- As a safety precaution, due to the ground protection relays, properly rated insulating transformers must be installed between the power mains and the LISN inputs.
- Noise levels may require the installation of properly rated mains filters to reduce unwanted signals.

## 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)



L3-100 equivalent circuit

## Related products

### Receivers

- 7010/00: EMI Receiver 150 kHz to 1 GHz
- 7010/01: EMI Receiver 9 kHz to 1 GHz
- 7010/02: EMI Receiver 9 kHz to 30 MHz
- 7010/03: EMI Receiver 9 kHz to 3 GHz
- 9010: EMI Receiver 10 Hz to 30 MHz
- 9010F: EMI Receiver 10 Hz to 30 MHz
- 9010/03P: EMI Receiver 10 Hz to 300 MHz
- 9010/30P: EMI Receiver 10 Hz to 3 GHz
- 9010/60P: EMI Receiver 10 Hz to 6 GHz

### LISNs

- L2-16B: single phase AMN, 16 A
- L3-32: 4 lines, 3-phase AMN, 32 A
- L3-64: 4 lines, 3-phase AMN, 63 A
- L3-64/690 :4 lines, 3-phase AMN, 63 A
- L1-150M: single-path, 50 Ohm AMN, 150 A
- L1-150M1: single-path, 50 Ohm AMN, 150 A
- L1-500: single phase AMN, 500 A
- L3-500: 4 lines, 3-phase AMN, 500 A
- 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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