

# L3-32

Three-phase plus neutral V-Network  
9 kHz to 30 MHz, 32 A for AC and DC powered EUT



## Main Features

- 9 kHz to 30 MHz frequency range
- Up to 32A continuous rated output current
- Built-in, selectable 150 kHz high pass filter
- Artificial Hand circuit
- Suitable for DC to 60 Hz power lines
- Local and remote control from PMM EMI receivers
- 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.

L3-32 is suitable for measurement on AC 3-phase power circuits from DC to 60 Hz.

The equivalent V-Network circuit of  $50 \Omega \parallel (5 \Omega + 50 \mu\text{H})$  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.

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### SPECIFICATIONS

Frequency range	9 kHz to 30 MHz
Max. continuous rated output current	IEC plug 32 A Schuko plug 16 A
Max. operating voltage	
Single-phase (L/N) (L/PE) (N/PE)	230 Vac; 325 Vdc
Three-phase (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 $\Omega$ // [5 $\Omega$ + 50 $\mu$ H] with 250 $\mu$ H choke
RF output	BNC female
Test item	32 A IEC connector 16 A SCHUKO connector
Operating temperature	-10 °C to +40 °C
Storage temperature	-25 °C to +75 °C
Dimensions (W x H x D)	342 x 254 x 510 mm
Weight	16,5 kg



### Ordering information:

**L3-32** 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)

- 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.



L3-32 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
- L3-64: 4 lines, 3-phase AMN, 63 A
- L3-64/690V: 4 lines, 3-phase AMN, 63 A
- L3-100: 4 lines, 3-phase AMN, 100 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  $\Omega$

### 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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