

# L3-64 L3-64/690V

Three phase plus neutral V-Network

9 kHz to 30 MHz, 60/63 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 60/63 A continuous rated output current
- 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**

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.

L3-64 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.

# L3-64, L3-64/690V

Three phase plus neutral V-Network

9 kHz to 30 MHz, 60/63 A for AC and DC powered EUT

SPECIFICATIONS	L3-64	L3-64/690V	
Frequency range	9 kHz to 30 MHz	9 kHz to 30 MHz	
Max. continuous rated output current	63 A	IEC60309 63 A	UL1682 UL1686 60 A
Max. operating voltage (L/PE) (N/PE) (L/L) (L/N)	230 VAC; 325 VDC 400 VAC; 565 VDC	400 VAC; 565 VDC 690 VAC; 975 VDC	347 VAC; 490 VDC 600 VAC; 850 VDC
Input mains frequency range	DC to 60 Hz	DC to 60 Hz	
Equivalent circuit	50 Ω // [5 Ω + 50 μH] with 250 μH choke	50 Ω // [5 Ω + 50 μH] with 250 μH choke	
RF output	BNC female	BNC female	
Test item	63 A IEC connector	4P5W connector	
Rated temperature	-10 °C to +40 °C	-10 °C to +40 °C	
Storage temperature	-25 °C to +75 °C	-25 °C to +75 °C	
Overall Dimensions mm (W x H x D)	465 x 450 x 740 mm	465 x 450 x 730 mm	
Weight	50 kg	50 kg	

## Ordering Information:

L3-64 3-phase Artificial Mains Network

L3-64/690V 3-phase Artificial Mains Network with CSA-listed connectors (Canada)

**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.



L3-64 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
- 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

### LISN

- L2-16B: single phase AMN, 16 A
- L3-32: 4 lines, 3-phase AMN, 32 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 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