

**DN-LISN160-32** is a Line impedance stabilisation network for the high voltage and high current application in accordance with DO160 Section 22

Revised: 14.December 2010

### 1 General Information



### Description

- The LISN can be used for one a.c. source and for one d.c. source simultaneously. Both decoupling circuit a.c. and d.c. are independently.
- On the left side is the a.c. LISN and on the right the d.c. LISN
- Both filter can be used up to 32 A continuously

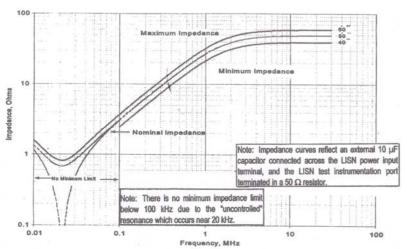
### 2 Technical data

Impulse voltage	SURGE	up to 4.3 kV			
Source protection	Varistor	275 V / 1000J			
EUT power a.c.					
Voltage rms max.	L to N 150 V at 400 Hz	L/N to PE 85V at 400 Hz			
Voltage rms max. L to N	L to N 480 V	50/60Hz			
Voltage rms max. L/N to PE	280 V	50/60Hz			
Current maximum	continuous	32 A			
EUT power d.c.					
Voltage d.c. maximum	+ to - or +/- to GRD	50 V			
Current maximum	continuous	32 A			
Standard	DO160D Section 22	Figure 22-9 LISN			
Usable with testers	MIG0600MS, MIG-OS-MB plus MIG-OS-MB-EXT, MIG0618SS				



For three phase a.c. power supplies two DN-LIS160-32 are required

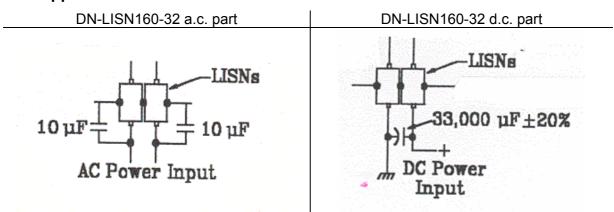
#### 2.1 LSIN Input Impedance Characteristic Figure 9-22



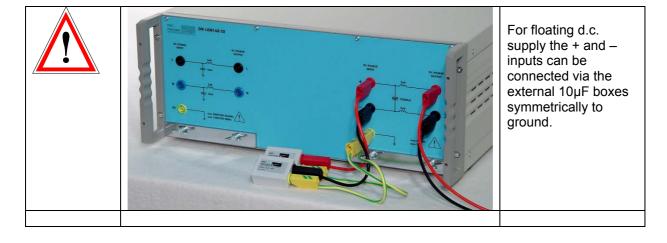
- The LSIN Impedance as in Figure 9-22 for the a.c. part.
- The d.c. part includes on the power input a 33 mF capacitor which influences the impedance below 100 kHz

For further information see "Verification Protocol".

### 2.2 Application



A LISN shall be inserted in each primary power input and return line. Power return lines locally grounded in the aircraft installation do not require a LISN. The LISN case shall not be bonded to the ground plane. When LISNs with self resonance above 10 kHz are used (such as standard 5  $\mu$ H LISN), capacitors shall be inserted at each LISN power input terminal as shown in different figures for the entire test.



# 3 Standard Accessories, dimension

### 3.1 Included articles, dimensions

DN-LISN160-32 (Article No. 103580)

Mechanical Dimensions						
Unit Height:	4					
Length:	57 cm					
Width:	45 cm					
Height:	19 cm					
Net Weight:	13 kg					

#### Included Articles

According to STL-Variante 20, STL-Version 1

Qty PN Description

1 103191 Standard accessories pack

1 104802 Standard calibration report
 1 103194 CD-UM-IN-ALL includes all User Manuals and Instruction sheets

of all EMC PARTNER AG sales products.

1 104834 Broschure Avionics Test System

#### 3.2 Standard accessories

Accessories to DN-LISN160-32 (Article No. 103580)

According to OP-Variante 1, OP-Version 1

Qty 1	<b>PN</b> 100261	Description Weig MC protected banana plug, yellow/green	ht (kg) 0	Length (cm)	Width (cm)	Height (cm)
1	100279	MC protected banana plug, blue	0	0	0	0
1	100281	MC protected banana plug, black	0	0	0	0
2	103065	MC safety cable with protected banana plug, yellow/gree	en 0	25	0	0
2	103069	MC safety cable with protected banana plug, red	0	50	0	0
2	103070	MC safety cable with protected banana plug, black	0	50	0	0
1	103073	MC safety cable with protected banana plug, blue	0	200	0	0
1	103074	MC safety cable with protected banana plug, yellow/gree	en 0	200	0	0
1	103077	MC safety cable with protected banana plug, black	0	200	0	0
1	103089	MC safety cable with protected banana plug, yellow/gree	en 0	50	0	0
1	103097	MC safety cable with protected banana plug, red	0	15	0	0
1	103171	MC safety cable with protected banana plug, black	0	15	0	0
1	103176	C-Box with MC sockets (1x black, 1x yellow-green) C-Box with MC sockets	0	5	3.6	2
1	103177	C-Box with MC sockets (1x red, 1x yellow-green)	0	0	0	0

## 4 Recycling / Disposal

#### 4.1 RoHS directive 2002/95/EG

The DN-LISN160-32 complies with the directive 2002/95/EG (RoHS - Restriction of certain Hazardous Substances).

From December 2005, all EMC Partner products either hand soldered or by machine are produced using lead-free solder.

### 4.2 WEEE directive 2002/96/EG

The EMC Partner DN-LISN160-32, is exempted from the directive 2002/96/EG (WEEE) under category 9.

The product should be recycled through a professional organisation with appropriate experience for the disposal and recycling of electronic products. EMC Partner are also available to help with questions relating to the recycling of this product.

### 4.3 Information for dismantling



Remove always power cord fist.

There is no special danger involved in dismantling the DN-LISN160-32.

#### 4.4 Parts which can be recycled

The DN-LISN160-32 contains parts made from steel, aluminium, PVC, two-component sealing compound. The impulse capacitors are filled with non-poisonous mineral oil. The various parts can be separated and recycled.

#### 4.5 Parts which can not be recycled

All parts in the DN-LISN160-32 can be recycled.

#### **5** Service Information

EMC PARTNER AG Baselstrasse 160 CH - 4242 Laufen Switzerland

Tel. ++41 61 775 20 50 Fax ++41 61 775 20 59 Email service@emc-partner.ch Web www.emc-partner.com