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



## 2 Technical data

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

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 $5 \mu \mathrm{H}$ 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 $\quad P N$ | Description |
| 1103191 | Standard accessories pack |
| 1104802 | Standard calibration report |
| 1103194 | CD-UM-IN-ALL includes all User Manuals and Instruction sheets of all EMC PARTNER AG sales products. |
| 1104834 | 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 | PN | Description Weight | Weight (kg) | Length (cm) | Width (cm) | Height (cm) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 100261 | MC protected banana plug, yellow/green | 0 | 0 | 0 | 0 |
| 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/green | 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/green | 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/green | 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, $1 \times$ yellow-green) | 0 | 5 | 3.6 | 2 |
|  |  | C-Box with MC sockets |  |  |  |  |
| 1 | 103177 | C-Box with MC sockets ( 1 x red, 1 x 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

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