# DALI-2 PS12 100mA

## Datasheet

**DALI Bus Power Supply Unit**

DALI-line power supply

Art. Nr. 24033444-12VDO

# DALI-2 PS12 100mA  Bus Power Supply

## Overview

- DALI bus power supply unit.

- guaranteed supply current 100mA.

- maximum supply current 130mA.

- suitable to power a DALI line with up to 50 standard DALI ballasts.

- suitable for back box installation and integration in protection class II devices.

- power supply range 9Vdc … 16Vdc.

## Specification, Characteristics

| type | DALI-2 PS12 100mA |
|---|---|
| article number | 24033444-12VDO |

| input: +, - | |
|---|---|
| input type | supply, dc voltage |
| marking input terminals | +, - |
| input voltage range | 9Vdc … 16Vdc |
| max. input supply current | 220mA (depending on bus load) |
| power consumption max. | 2W |
| startup time | 250ms |

| output: DA+, DA- | |
|---|---|
| output type | DALI supply |
| marking output terminals | DA+, DA- |
| output voltage range | 12Vdc … 20,5Vdc |
| DALI supply current | 100mA |
| guaranteed DALI supply current | 100mA |
| max. DALI supply current | 130mA |
| open circuit proof | yes |
| short circuit proof | yes |

| insulation data: | |
|---|---|
| insulation DALI / mains | reinforced isolation |

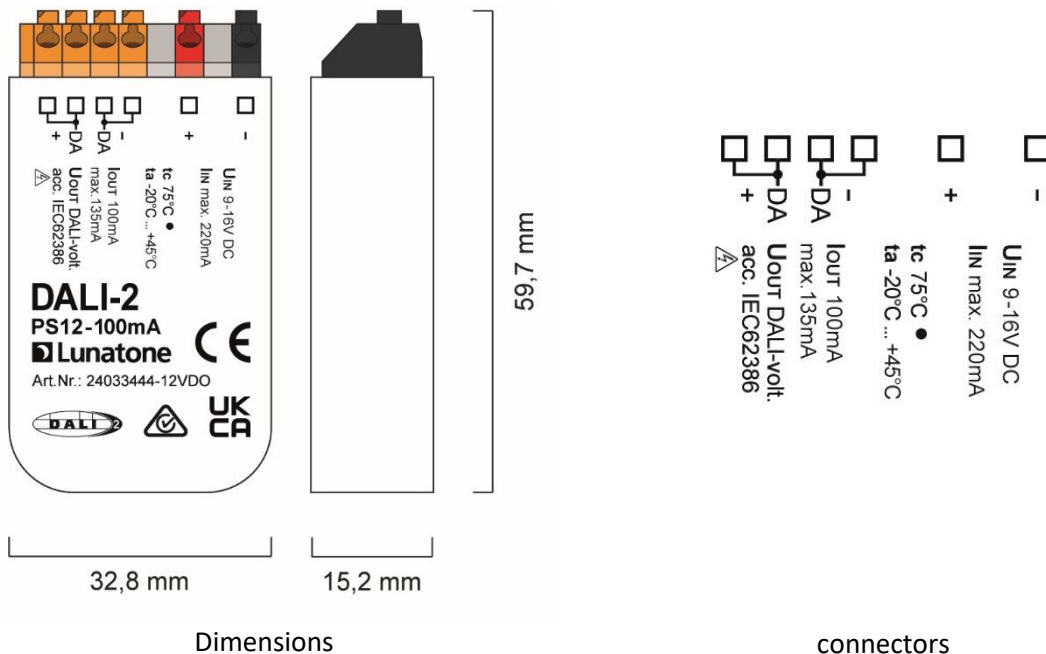| environmental conditions: | |
|---|---|
| storing and transportation temperature | -20°C … +75°C |
| operational ambient temperature | -20°C … +55°C |
| rel. humidity, none condensing | 15% … 90% |

**general data:**

| dimensions (l x w x h) | 59mm x 33mm x 15mm |
|---|---|
| mounting | back box installation<br>integration in protection class II device |
| rated maximum temperature tc | 75°C |
| expected life time @tc | 50.000 h |
| protection class | II in intended use |
| protection degree housing | IP40 |
| protection degree terminals | IP20 |

**terminals:**

| connection type | spring terminal connector |
|---|---|
| wire size solid core | 0,5 … 1,5 mm$^2$ (AWG20 … AWG16) |
| wire size fine wired | 0,5 … 1,5 mm$^2$ (AWG20 … AWG16) |
| wire size using wire end ferrule | 0,25 … 1 mm$^2$ |
| stripping length | 8,5 … 9,5 mm / 0,33 … 0,37 inch |

**standards:**

| DALI | EN 62386-101:2014 |
|---|---|
| EMC | EN 61547<br>EN50015 / IEC CISPR15 |
| safety | EN 61347-2-11<br>EN 61347-1 |
| markings | DALI-2, CE |



Dimensions



connectors

## Installation

- The DALI-2 PS12 100mA is intended for back box installation or in an enclosure.

- Ensure proper working cable relief for installation in protection class II equipment.

- Connect dc supply voltage to terminals + and - with respect to the polarity.

- The polarity of the output voltage is marked on the housing (DA+, DA-).

- The wiring should be carried out as a permanent installation in a dry and clean environment.

- Installation may only be carried out in a voltage-free state of the system and by qualified specialists.

- National regulations for setting up electrical systems must be followed.

- The DALI line may be routed together with the mains voltage in one cable or as single wires in a tube.

- The DALI-line must not be connected to the mains or extra low voltage systems.

- The DALI wiring can be realised with standard low-voltage installation material. No special cables are required.

- Wiring topology of the DALI-line: Line, Tree, Star.

☞ **Attention:** The DALI-signal is not classified as SELV circuit (Safety Extra Low Voltage). Therefore, the installation regulations for low voltage apply
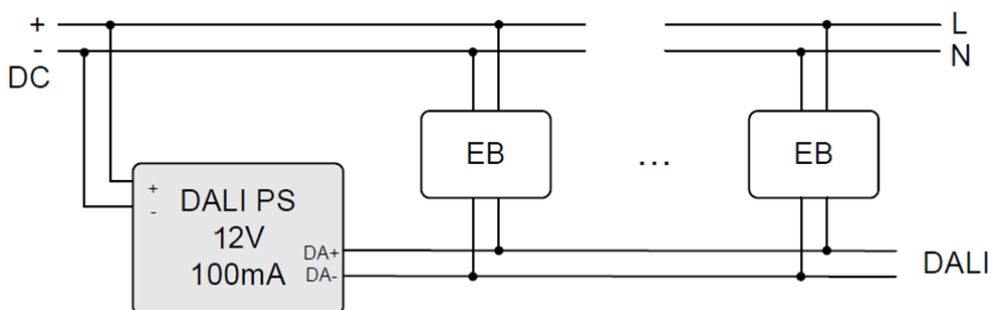
☞ The voltage drop on the DALI line must not exceed 2V at maximum length (300m) and maximum bus load (250mA).
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- Do not use standard DC power supplies on the DALI-line, they do not meet the requirements for DALI communication.

☞ **HINT**: an improper DALI power supply can cause damage to DALI devices!



wiring diagram

## Commissioning

- After installation, the DALI-2 power supply is ready for use.

- Make sure that current consumption of all bus devices does not exceeds the guaranteed supply current of the DALI-2 PS12.

## Purchase Order Information

**Art.Nr. 24033444-12VDO**: DALI-2 PS12 100mA, guaranteed DALI supply current 100mA, back box installation

## Additional Information and Equipment

DALI Cockpit - free configuration software for DALI systems
https://www.lunatone.com/en/product/dali-cockpit/

Lunatone DALI products
https://www.lunatone.com/en

Lunatone Datasheets and Manuals
https://www.lunatone.com/en/downloads-a-z/

## Contact

Technical Support: support@lunatone.com

Requests: sales@lunatone.com

### Disclaimer

Subject to change. Information provided without guarantee. The datasheet refers to the current delivery.

The function in installations with other devices must be tested for compatibility in advance.