

## DALI PS2 30mA



### Datasheet

### DALI Bus Power Supply Unit

DALI-line power supply

Art. Nr. 24033444-30

# DALI PS2 30mA Bus Power Supply

## Overview

- DALI bus power supply unit
- guaranteed Supply Current 30mA
- maximum Supply Current 250mA
- suitable to power an DALI-line with up to 15 standard DALI ballasts
- suitable for back box installation and integration in protection class II devices
- power supply range 110Vac ... 240Vac for worldwide use
- surge immunity up to 400V



## Specification, Characteristics

|                                      |                      |
|--------------------------------------|----------------------|
| <b>type</b>                          | <b>DALI PS2 30mA</b> |
| article number                       | 24033444-30          |
| <b>input: L, N</b>                   |                      |
| input type                           | mains power supply   |
| marking input terminals              | L, N                 |
| input voltage range                  | 110Vac ... 240Vac    |
| max. input supply current            | 5mA                  |
| input supply frequency               | 50Hz / 60Hz          |
| power consumption max.               | 1W                   |
| startup time                         | 250ms                |
| <b>output: DA+, DA-</b>              |                      |
| output type                          | DALI Supply          |
| marking output terminals             | DA+, DA-             |
| output voltage range                 | 12Vdc ... 20,5Vdc    |
| DALI supply current                  | 40mA                 |
| guaranteed DALI supply current       | 30mA                 |
| max. DALI supply current             | 250mA                |
| open circuit proof                   | yes                  |
| short circuit proof                  | yes                  |
| <b>insulation data:</b>              |                      |
| impulse voltage category             | II                   |
| pollution degree                     | 2                    |
| rated insulation voltage             | 250V                 |
| rated impulse withstanding voltage   | 4kV                  |
| insulation DALI / mains              | reinforced isolation |
| Insulation test voltage DALI / mains | 3000V a.c.           |
| <b>enviromental conditions:</b>      |                      |

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

**general data:**

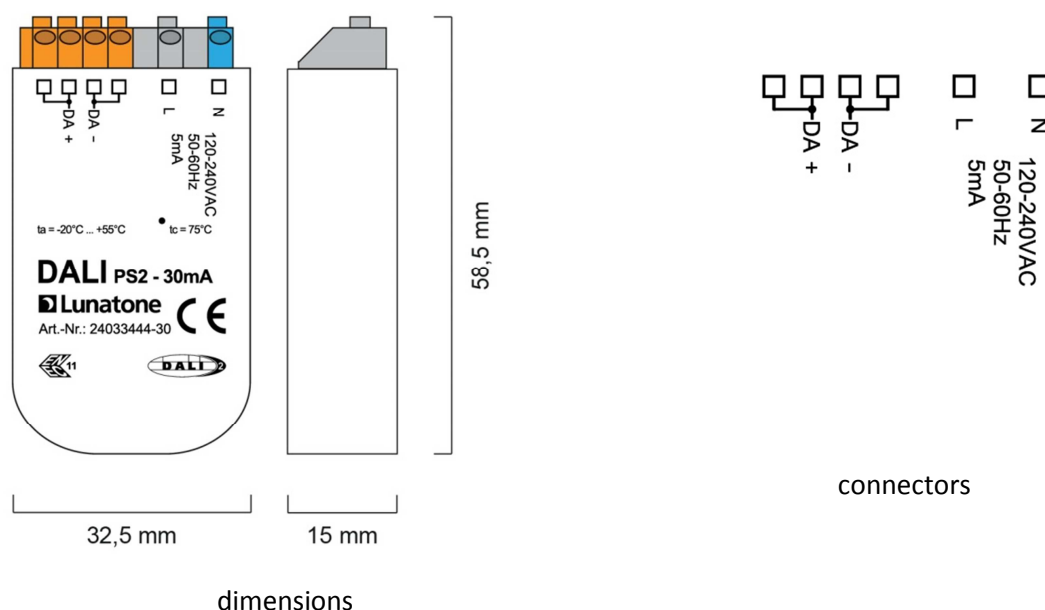
|                                 |  |
|---------------------------------|--|
| dimensions (l x w x h)          | 59mm x 33mm x 15mm   |
| mounting                        | back box installation<br>integration in protection class II device |
| rated maximum temperature $t_c$ | 75°C   |
| expected life time @ $t_c$      | 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 <sup>2</sup> (AWG20 ... AWG16) |
| wire size fine wired             | 0,5 ... 1,5 mm <sup>2</sup> (AWG20 ... AWG16) |
| wire size using wire end ferrule | 0,25 ... 1 mm <sup>2</sup>                    |
| 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, ENEC-11, CE               |



## Installation

- The DALI PS2 30mA is intended for back box installation
- Ensure proper working cable relief for installation in protection class II equipment
- Wiring as fixed installation in a dry and clean environment
- Installation only by qualified person when no voltage is applied
- Attend regulations regarding electrical installations of national authorities
- connect power supply terminals L and N to mains voltage
- the polarity of the output voltage is marked on the housing (DA+, DA-)
- The DALI-line may be installed within the same cable or as single conductors within the same tube as mains supply

- The DALI-line must not be connected to the mains or other extra low voltage systems
- DALI-line wiring with standard low voltage installation material
- Wiring topology of the DALI-line: Line, Tree, Star



**HINT:** The DALI-signal is not classified as SELV circuit. Therefore the standards for installation in low voltage system apply.

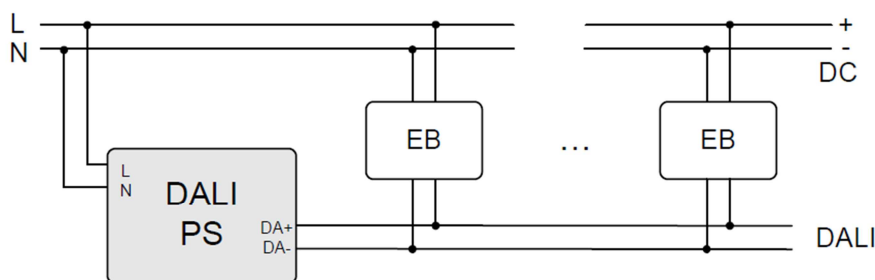


The voltage drop on the DALI-line shall not exceed 2V.

- Don't use standard DC power supplies on the DALI-line, since they do not meet the requirements for DALI communication



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



wiring diagram

## Commissioning

- The DALI power supply is ready for use
- Make sure that the guaranteed supply current exceeds the current consumption of all bus devices

## Purchase Order Information

**Art.Nr. 24033444-30:** DALI PS2 30mA, guaranteed DALI supply current 30mA, back box installation

## Additional Information and Equipment

DALI-Cockpit – free configuration tool from Lunatone for DALI systems

<http://lunatone.at/de/dali-systeme/software/>

Lunatone DALI products

<http://www.lunatone.at/de/>

Lunatone datasheets and manuals

<http://lunatone.at/de/downloads/>

## Contact

Technical Support: [support@lunatone.com](mailto:support@lunatone.com)

Requests: [sales@lunatone.com](mailto: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.