

DALI PS2 30mA DALI PS2 80mA



Datasheet

DALI Bus Power Supply Unit

DALI-line power supply

Art. Nr. 24033444-30

Art. Nr. 24033444-80

DALI PS2 30mA, DALI PS2 80mA Bus Power Supply

Overview

- DALI bus power supply unit
- guaranteed Supply Current 30mA for Version 24033444-30, and. 80mA for Version 24033444-80
- maximum supply current allowed on a DALI line in total: 250mA
- Version 24033444-30 is suitable to power a DALI-line with up to 15 standard DALI ballasts
- Version 24033444-80 is suitable to power a DALI-line with up to 40 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



DALI PS2 30mA 24033444-30



DALI PS2 80mA 24033444-80



Specification, Characteristics

| type | DALI PS2 30mA | DALI PS2 80mA |
|---|--------------------|---------------|
| article number | 24033444-30 | 24033444-80 |
| input: L, N | | |
| input type | mains power supply | |
| marking input terminals | L, N | |
| input voltage range | 110Vac ... 240Vac | |
| max. input supply current | 5-10mA | 12-24mA |
| input supply frequency | 50Hz / 60Hz | |
| power consumption max. | 1W | 2W |
| startup time | 250ms | |
| output: DA+, DA- | | |
| output type | DALI Supply | |
| marking output terminals | DA+, DA- | |
| output voltage range | 12Vdc ... 20,5Vdc | |
| guaranteed DALI supply current (at 15V) | 30mA | 80mA |
| max. DALI supply current | 50mA | 120mA |
| open circuit proof | yes | |
| short circuit proof | yes | |

insulation data:

| | |
|--------------------------------------|----------------------|
| 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. |

enviromental conditions:

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

general data:

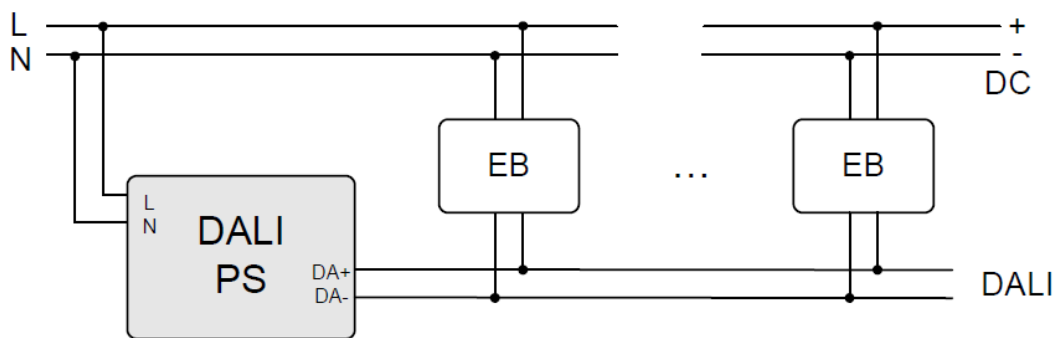
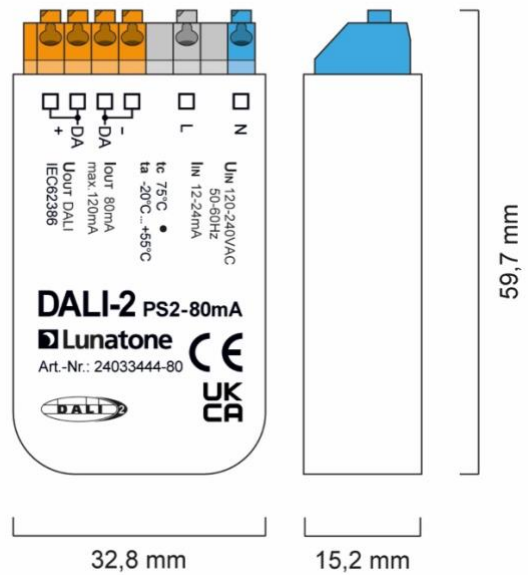
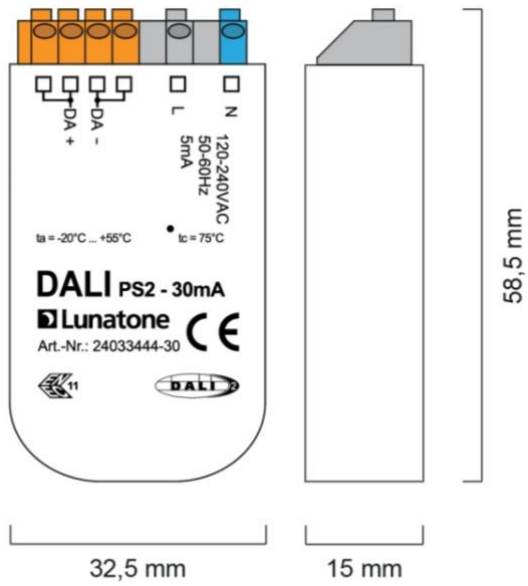
| | |
|------------------------------|--|
| dimensions (l x w x h) | 59mm x 33mm x 15mm |
| mounting | back box installation integration in protection class II device |
| rated maximum temperature tc | 75°C |
| expected life time @tc | 50.000 h |
| protection class | II in intended use |
| protection 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 EN50015 / IEC CISPR15 | |
| safety | EN 61347-2-11 EN 61347-1 | |
| markings | DALI-2, ENEC-11, CE | DALI-2, CE, UKCA |



Installation

- The DALI PS2 30mA and DALI PS2 80mA are 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



The voltage drop on the DALI-line must not exceed 2V. **Tip:** for long bus expansion, attach a DALI PS 80mA on both ends of the bus.

- Do not use standard DC power supplies as DALI bus power supply, they do not meet the requirements for DALI communication.



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



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

Commissioning

- After connection, the DALI power supply is ready for use
- Ensure that the guaranteed supply current is higher than the sum of the current consumption of all bus devices.
- Ensure that the sum of the maximum supply currents on a DALI line does not exceed 250mA.

Purchase Order Information

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

Art.Nr. 24033444-80: DALI PS2 80mA, guaranteed DALI supply current 80mA, back box installation

Other DALI bus power supplies:

<https://www.lunatone.com/en/product-category/dali-bus-system/bus-power-supply/>

Additional Information and Equipment

Lunatone DALI Cockpit

<https://www.lunatone.com/en/product/dali-cockpit/>

Lunatone datasheets and manuals

<https://www.lunatone.com/en/downloads-a-z/>

Lunatone DALI products

<https://www.lunatone.com/en/>

Contact

Technical Support: support@lunatone.com

Requests: sales@lunatone.com

www.lunatone.com



Disclaimer

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

The compatibility with other devices must be tested in advance to the installation.