

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

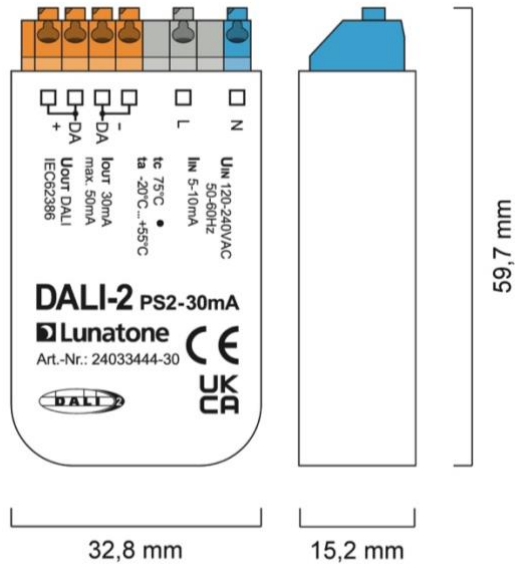
- DALI bus power supply unit
- guaranteed Supply Current 30mA for Version 24033444-30, and. 80mA for Version 24033444-80
- maximum supply current allowed on a DALI line in total: 250mA
- Version 24033444-30 is suitable to power a DALI-line with up to 15 standard DALI ballasts
- Version 24033444-80 is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



Specification, Characteristics

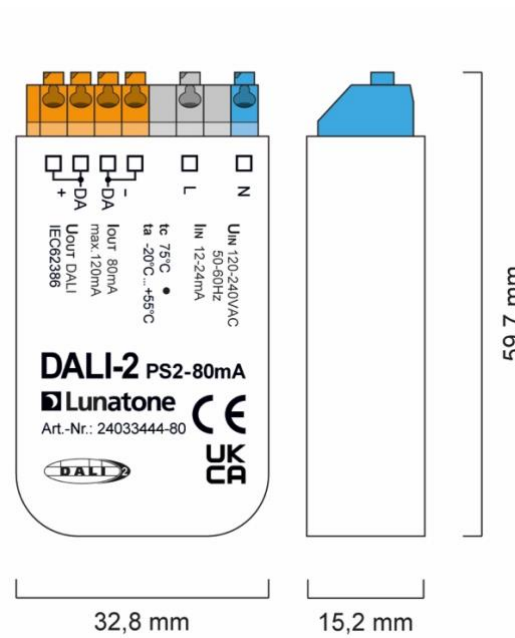
type	DALI PS2 30mA	DALI PS2 80mA
article number	24033444-30	24033444-80
input: L, N		
input type	mains power supply	
marking input terminals	L, N	
input voltage range	110Vac ... 240Vac	
max. input supply current	5-10mA	12-24mA
input supply frequency	50Hz / 60Hz	
power consumption max.	1W	2W
startup time	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 transpotation 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, CE, UKCA



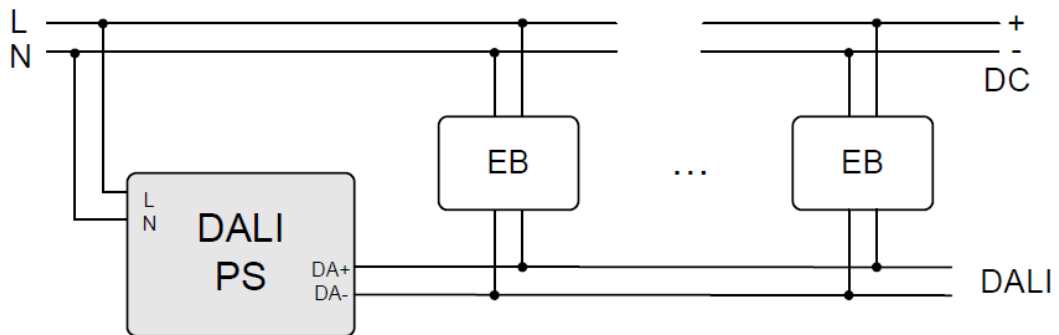
Dimensions (Art.Nr.: 24033444-30)

connectors (Art.Nr.: 24033444-30)



Dimensions (Art.Nr.: 24033444-80)

connectors (Art.Nr.: 24033444-80)



wiring diagram

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!

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.



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

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.