Lunatone

DALI PS128

Datasheet

DALI Bus Power Supply Unit

DALI-line power supply

Art. Nr. 24033444-128

DALI PS128 Bus Power Supply

Overview

- DALI bus power supply unit
- guaranteed Supply Current 128mA
- maximum Supply Current 250mA
- suitable to power an entire DALI-line with 64 standard DALI ballasts
- independent electronic device for remote ceiling and integration in protection class II devices

- power supply range 110Vac … 240Vac for worldwide use
- surge immunity up to 400V

Specification, Characteristics

type	DALI PS128
article number	24033444-128

input: L, N	
input type	mains power supply
marking input terminals	L, N
input voltage range	110Vac … 240Vac
max. input supply current	40mA (@110Vac), 20mA (@240Vac)
input supply frequency	50Hz / 60Hz
power consumption max.	4W
startup time	250ms

output: DA+, DA-	
output type	DALI Supply
marking output terminals	DA+, DA-
output voltage range	12Vdc … 20,5Vdc
DALI supply current	150mA
guaranteed DALI supply current	128mA
max. DALI supply current	250mA
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:

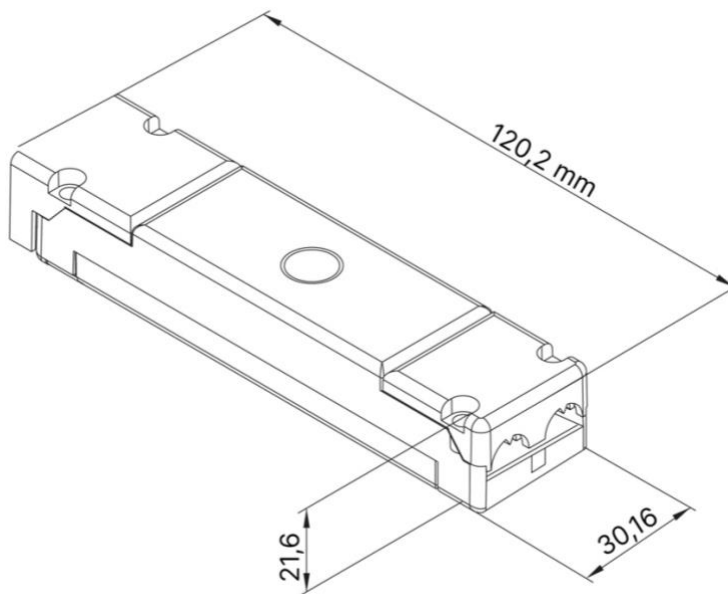|	
dimensions (l x w x h)	120mm x 30mm x 22mm
mounting	remote ceiling integration in protection class II device
rated maximum temperature tc	65°C
expected life time @tc	50.000 h
protection class	II in intended use
protection degree housing	IP40
protection degree terminals	IP20

terminals:

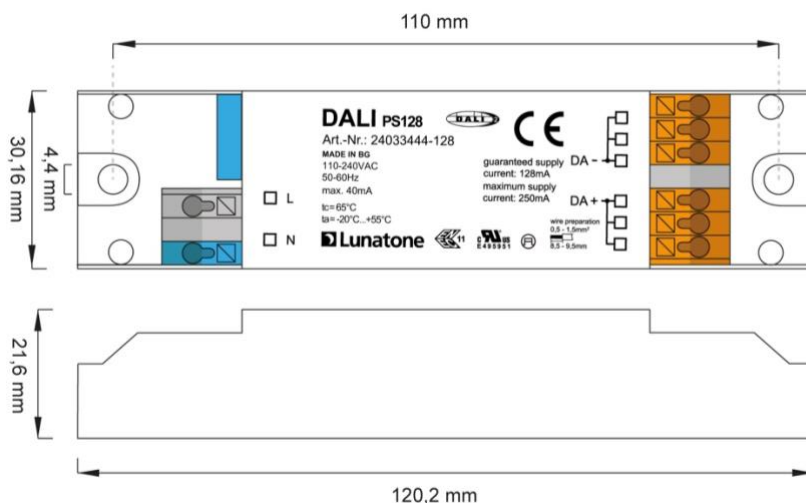|	
connection type	spring terminal connector
wire size solid core	0,5 … 1,5 mm^2 (AWG20 … AWG16)
wire size fine wired	0,5 … 1,5 mm^2 (AWG20 … AWG16)
wire size using wire end ferrule	0,25 … 1 mm^2
stripping length	8,5 … 9,5 mm / 0,33 … 0,37 inch
release of wire	push button

standards:

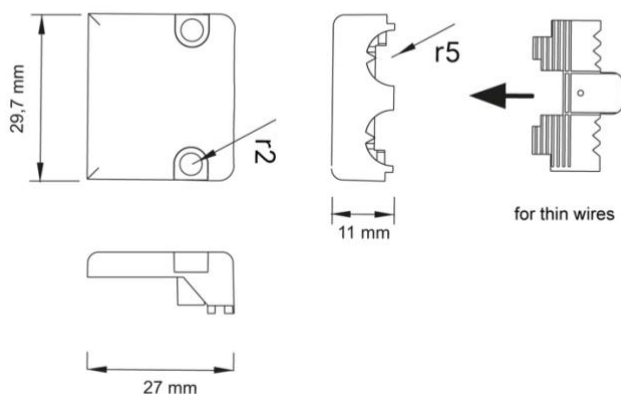|	
DALI	EN 62386-101:2014
EMC	EN 61547 EN50015 / IEC CISPR15
safety	EN 61347-2-11 EN 61347-1
markings	DALI-2, CE, ENEC-11, cURus
UL file number	E495951

Housing dimensions

120,2 mm

21,6

30,16

Housing dimensions

110 mm

30,16 mm

4,4 mm

DALI PS128

Art.-Nr.: 24033444-128

MADE IN BG
110-240VAC
50-60Hz
max. 40mA

tc=65°C
ta=-20°C...+55°C

☐ L

☐ N

⊡ Lunatone

CE

DA –

DA +

guaranteed supply
current: 128mA

maximum supply
current: 250mA

wire preparation
0,5 - 1,5mm²
8,5 - 9,5mm

21,6 mm

120,2 mm

Dimension lid

29,7 mm

r2

r5

11 mm

for thin wires

27 mm

connections

☐ L

☐ N

DA –

DA +

Installation

- The DALI PS128 is intended for remote installation in the ceiling or in an enclosure

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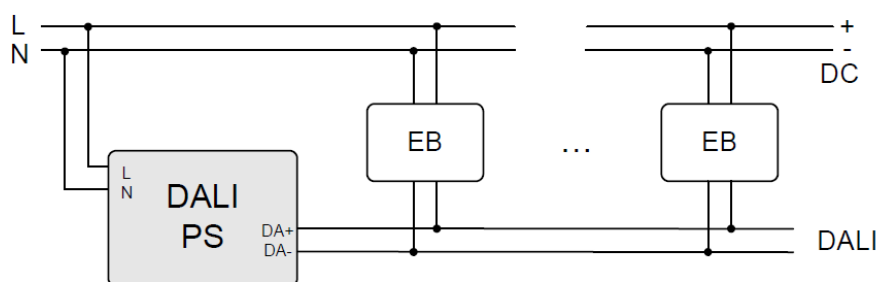
☞ The voltage drop on the DALI-line shall not exceed 2V.

- 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. 24033444-128: DALI PS128, guaranteed DALI supply current 128mA, remote ceiling

Additional Information and Equipment

DALI-Cockpit – free configuration tool from Lunatone 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.