

JUMITECH

DALI PS

Datasheet

DALI Bus Power Supply Unit



DALI-line power supply

Art. Nr. 24033444

DALI PS Bus Power Supply

Overview

- DALI bus power supply unit
- guaranteed Supply Current 220mA
- maximum Supply Current 250mA
- suitable to power an entire DALI-line with 64 standard DALI ballasts
- suitable for dinrail mounting
- power supply range 120Vac ... 240Vac for worldwide use
- surge immunity up to 400V
- load indicator
- integrated test button for function check
- system status queries (DALI current, bus load, runtime etc.) with DALI-Cockpit Software



Specification, Characteristics

| type | DALI PS |
|------------------------------------|--------------------------------|
| article number | 24033444 |
| input: L, N | |
| input type | mains power supply |
| marking input terminals | L, N |
| input voltage range | 120Vac ... 240Vac |
| max. input supply current | 40mA (@120Vac), 20mA (@240Vac) |
| input supply frequency | 50Hz / 60Hz |
| power consumption max. | 5,3W |
| startup time | 250ms |
| output: DA+, DA- | |
| output type | DALI Supply |
| marking output terminals | DA+, DA- |
| output voltage range | 12Vdc ... 20,5Vdc |
| DALI supply current | 250mA |
| guaranteed DALI supply current | 220mA |
| max. DALI supply current | 250mA |
| open circuit proof | yes |
| short circuit proof | yes |
| shut down on short circuit | 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:

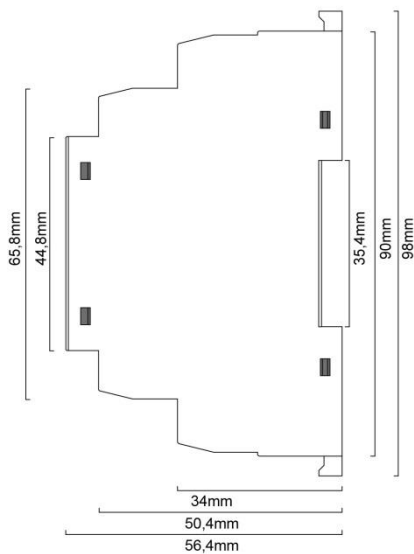
| | |
|------------------------------|----------------------|
| dimensions (l x w x h) | 98mm x 17,5mm x 56mm |
| mounting | dinrail |
| rated maximum temperature tc | 75°C |
| expected life time @tc | 50.000 h |
| protection class | II in intended use |
| protection degree housing | IP40 |
| protection degree terminals | IP20 |

terminals:

| | |
|----------------------------------|---|
| connection type | screw connector |
| wire size solid core | 0,5 ... 2,5 mm ² (AWG 20 ... AWG 14) |
| wire size fine wired | 0,5 ... 2,5 mm ² (AWG 20 ...AWG 14) |
| wire size using wire end ferrule | 0,25 ... 1,5 mm ² |
| stripping length | 7 mm / 0,27 inch |
| locking torque | 0,5 Nm |

standards:

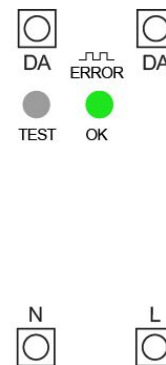
| | |
|----------------|-----------------------------------|
| DALI | EN 62386-101:2014 |
| EMC | EN 61547 EN50015 / IEC CISPR15 |
| safety | EN 61347-2-11 EN 61347-1 |
| markings | DALI-2, CE, ENEC, cURus |
| UL file number | E495951 |



dimensions



17,5mm



connectors

Installation

- The DALI PS is intended for dinrail mounting
- Ensure protection against electric shock by an appropriate enclosure
- 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
- Wiring check by pressing the test button: the green led is flashing and all luminaires connected to the DALI system will be controlled by a test sequence (on, off, dimming). To quit the test mode press the test button again.



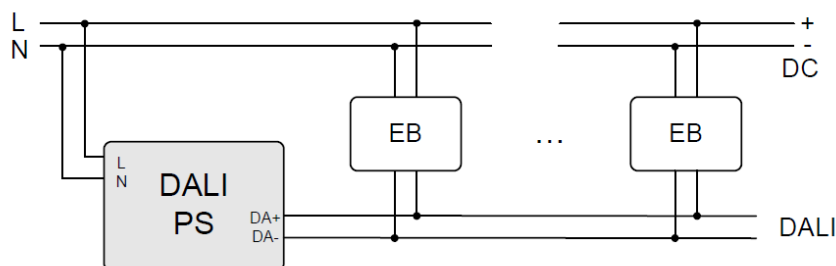
HINT: The DALI-signal is not classified as SELV circuit. Therefore the standards for installation in low voltage system apply.



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



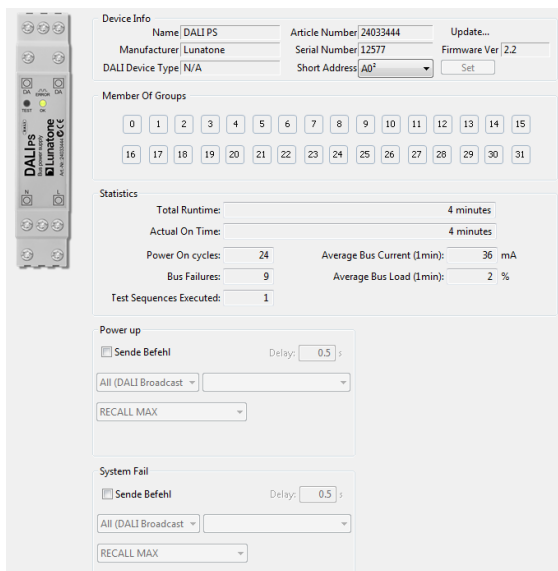
HINT: an improper DALI power supply can cause damage on DALI devices!



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
- Status-LED:
 - green: normal operation
 - green flashing: overload/short circuit
- The DALI PS is recognized during the addressing procedure and is shown in the DALI Cockpit. System parameters (bus load, DALI current, runtime etc.) can be read out and the behaviour on system events (power on, return of DALI voltage after a system failure) can be configured.



Purchase Order Information

Art.Nr. 24033444: DALI PS, guaranteed DALI supply current 220mA, din rail

Additional Information

Datasheets and manuals

<https://jumitech/produkter>

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

http://lunatone.at/en/downloads/Lunatone_DALI-Cockpit.zip

Contact

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www.jumitech.dk

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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.