DALI PS/PS2

Datasheet

Power Supply

DALI-line power supply

DALI PS Art. Nr. 24033444
DALI PS2 Art. Nr. 24033444-2
DALI PS2 30mA Art. Nr. 24033444-30

DALI PS24 100mA Art.Nr. 24033444-24VDO

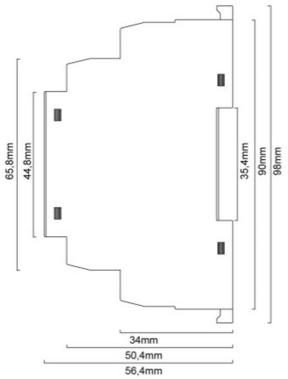
DALI PS/PS2 Power Supply

Overview

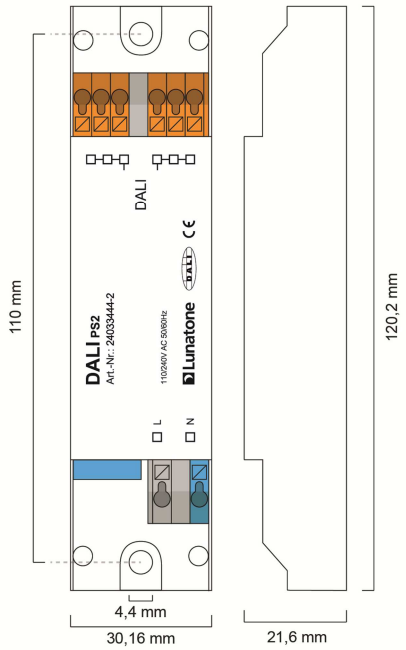
- Central DALI power supply unit
- Output-current type depend up to 250mA, 220mA, 100mA or 30mA
- PS and PS2 are suitable to power an entire DALI-line with 64 standard DALI ballasts
- Applicable for remote ceiling, DIN-Rail mounting and back box installation
- DALI signals are not SELV. Therefore the same procedures should be applied as working with main voltage.

Specification, Characteristics

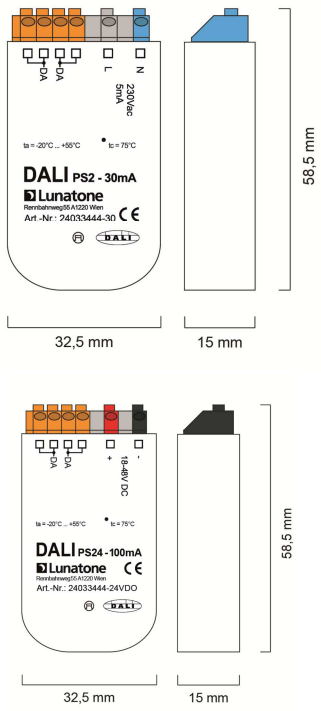
Type	DALI PS	DALI PS2	DALI PS2 30mA	DALI PS24 100mA
article number	24033444	24033444-2	24033444-30	24033444-24VDO
supply	mains: 120/240VAC 50/60Hz			18V-48V DC
nominal power	4W	4W	1W	2W
output	DALI			
maximum output current	250 mA	220 mA	30mA	100mA
permitted ambient temperature	-20°C to +55°C			
protection class	IP20			
connecting wire cross section	max. 2.5 mm^2	max. 1.5 mm^2		
Dimensions in mm	98x17x56	120x33x22	59x33x15	
mounting	Din rail	Remote ceiling	Back box	



Geometry din rail

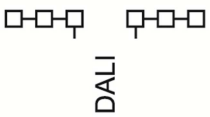


Geometry remote ceiling

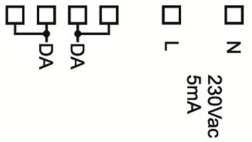


Geometry back box

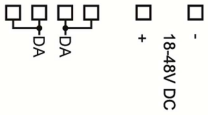
Connectors din rail



Connectors remote ceiling



Connectos back box 30mA



Connectos back box 100mA

Installation

The DALI PS is suitable to supply an entire DALI-line. It is connected to the DALI-line directly. The connection to the DALI-line is polarity-free and the output is protected against overvoltage. Internally the DALI-terminals are connected through as visualized on the housing.

The mains-operated DALI PS/PS2 can be supplied with voltages of 240Vac as well as 120Vac. The mains load is limited at a maximum of 4W or 1W at the 30mA type.

The type for low voltage supply (18V-48V DC) provides an output current of up to 100mA

The maximum cross section of the connecting wires on the din rail module is 2.5mm^2, for all other types it is 1.5mm^2.

The DALI PS is suitable for DIN-Rail mounting, the PS2 is for remote ceiling applications whereas the small 30mA version can be mounted in a back-box easily.

The DALI-line must not be connected to mains or to safety extra low voltage (e.g. like LED-supplies). The DALI–line may be installed within the same cable or as single conductors within the same tube as mains supply.

Function

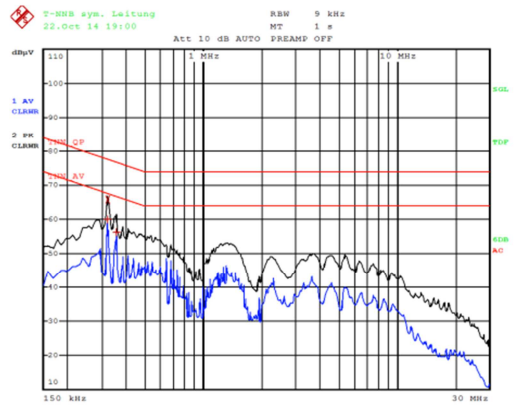
All DALI modules are supplied by a central power supply, because for each interface of a DALI device a supply current of up to 2mA is needed. Due the limitation of 64 individual addresses on a DALI-line, the types with 220mA or250mA supply even more devices like DALI control modules (DALI MC, DALI GC, …) or bus powered interfaces with an increased current consumption (DALI 0-10V, RM, …). When using the 30mA or 100mA type take care that the required current of the connected DALI loads does not exceed the maximum.

A DALI bus power supply is different to a conventional power supply, since it must meet the requirements for communication:

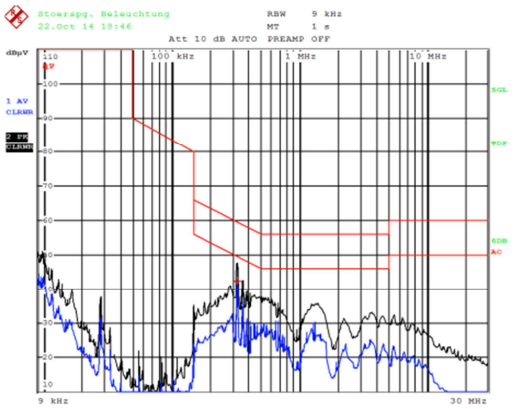
- No output capacitor
- Fast current limiter for communication
- Immunity to surges, at its best of up to 400V like the Lunatone DALI PS

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

In order to ensure interference-free communication the DALI PS has been developed with focus on very low interference voltage on the DALI output.



Interference Measurement DALI-line



Interference Measurement Mains

Purchase Information

Art.Nr. 24033444, DALI PS, 250mA, din rail

Art.Nr. 24033444-2, DALI PS2, 220mA, remote ceiling

Art.Nr. 24033444-30, DALI PS2 30mA, 30mA, back box

Art.Nr. 24033444-24VDO, DALI PS24 100mA, supply: 18V-48V DC, 100mA, back box

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

Requests: sales@lunatone.com

www.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.