Lunatone

DALI LS

Datasheet

Light Sensor

Sensor unit for the measurement of light intensity with integrated brightness control algorithm for DALI-systems

Art. Nr. 86458674
Art. Nr. 86458674-W16
Art. Nr. 86458674-W16-AP
Art. Nr. 86458674-W16-ZD

DALI LS   Light Sensor Module

Overview

- Sensor unit for measuring lighting intensity levels in DALI-systems

- The module can either act as lighting control unit or be used for monitoring purposes only.

- For lighting control two modes are available: a digital threshold-based control or an ambient light dependent control

- When used as threshold based control the DALI LS can transmit various DALI commands (like OFF, RECALL MIN/MAX, GO TO SCENE X, …) to destination addresses.

- When used as ambient light dependent control the reference light level and the destination address can be defined.

- Sensor properties are set easily by the DALI-Cockpit software tool via a DALI USB interface.

- For the destination address single addresses, group addresses and broadcast can be used.

- For simple applications the default configuration may be sufficient. With the help of the rotary switch on the backside the reference value of lighting intensity can be defined. Default destination address is broadcast.

- Several DALI LS modules can be used within one DALI-line.

- The compact module can easily be installed in recessed conduit boxes or directly on cavity walls.

- The DALI LS must not be connected to the mains. It is directly supplied by the DALI-line.

- Simple installation due to DALI double clamp connector

Specification, Characteristics

Type	DALI LS			
article number	86458674	86458674-W16	86458674-W16-AP	86458674-W16-ZD

elctrical data:

supply	via DALI-line
typical current consumption	3.5 mA
control	DALI

Type	DALI LS			
article number	86458674	86458674-W16	86458674-W16-AP	86458674-W16-ZD

technical data:

|				
light sensor	range: 0-2500lux resolution: 1lux			
function	programmable, ref. lightlevel selection via rotary switch			
storing/transportation temperature	-20°C … +75°C			
operational ambient temperature	-20°C … +70°C			
protection class	IP20			
connecting wire cross section	0.5-1.5 mm^2			
colour	RAL9010	RAL9016	RAL9016	RAL9016
mounting	back box	back box	surface mounting	suspended ceiling
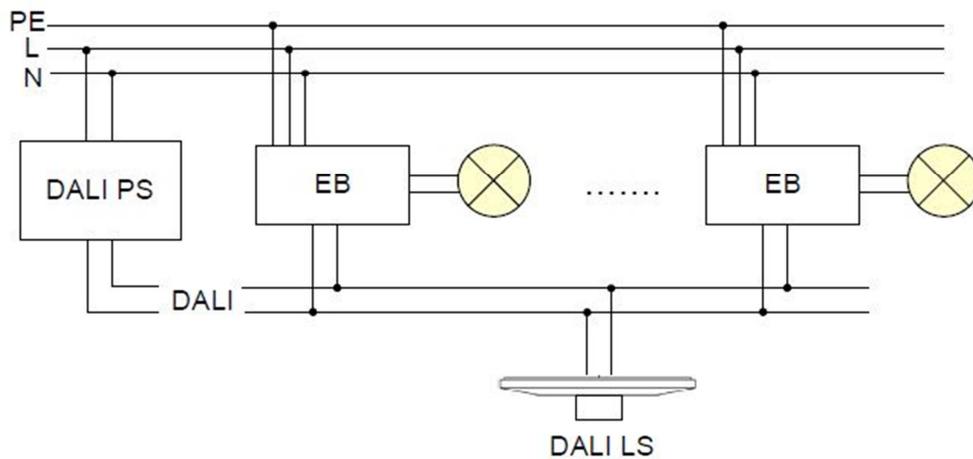
typical installation

dimensions

60 mm

75 mm
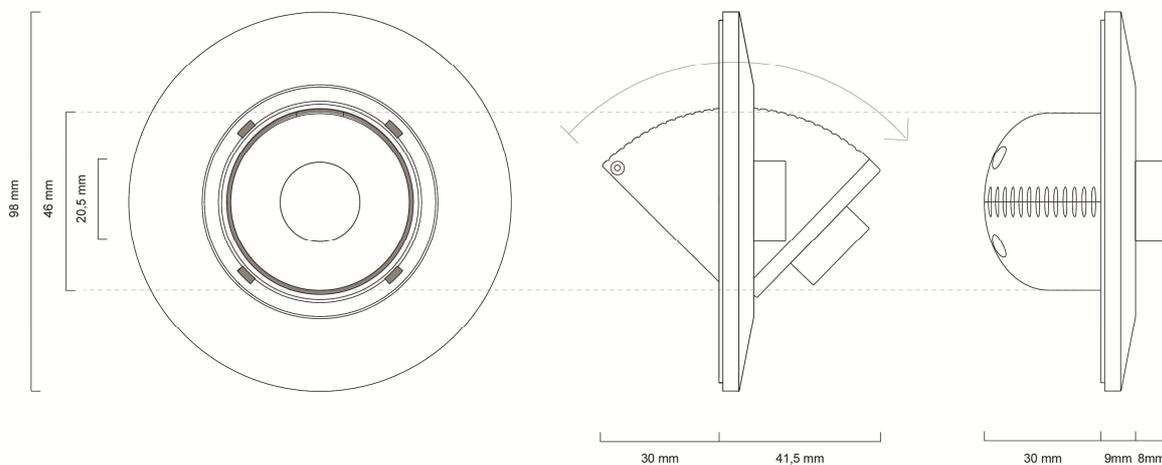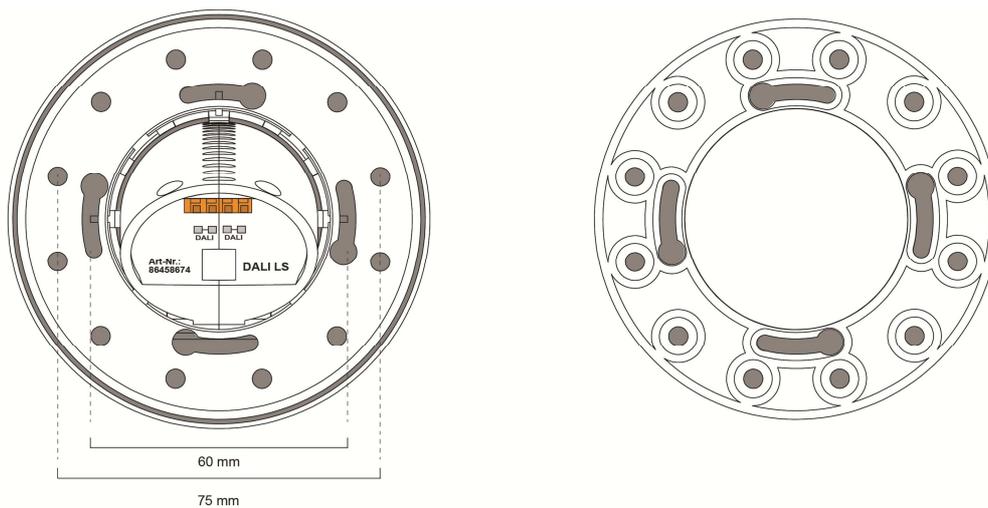
mounting: dimensions mounting ring

98 mm

104 mm

78 mm

33 mm
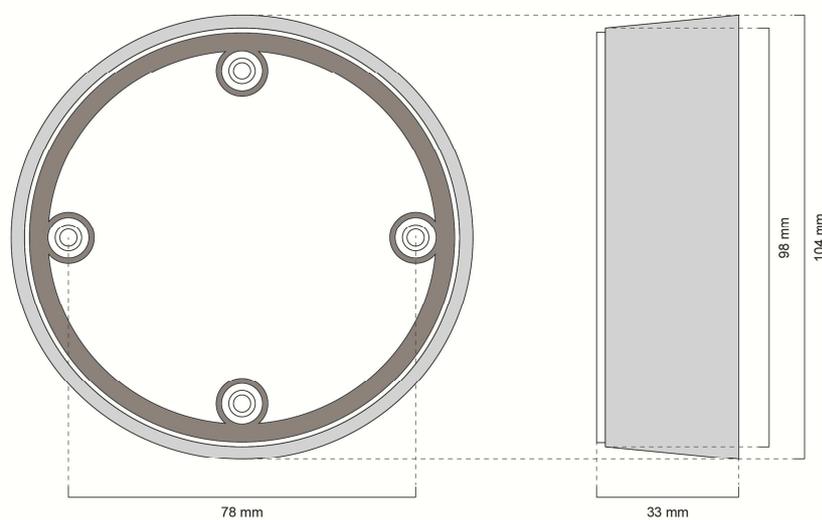
mounting: dimensions surface mounting assessory (-AP)

> 72 mm
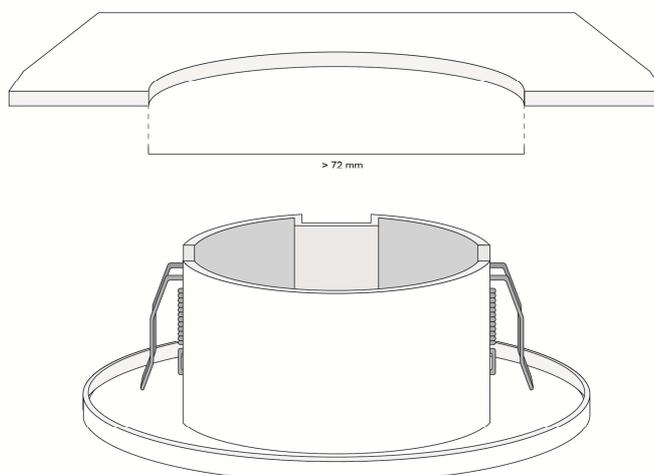
Mounting : dimensions suspending ceiling assessory (-AP)

Installation

- the DALI LS is supplied directly by the DALI-line (typical current consumption 3.5mA)
- the connection to the DALI-line is polarity free
- suitable connecting wire cross sections are in the range from $0.5mm^2$ to $1.5mm^2$
- back box mounting: the mounting ring is mounted directly on the back box. The housing can be attached to the mounting ring and will have sufficient space for fully flat installation.
- For mounting the sensor on cavity walls or suspended ceilings a special type is available (article number extension "-ZD"). This type includes additional fixtures with spring-clips.
- For surface mounting a special type is available as well (article number extension "-AP").
- Sensor adjustment to optimize detection area by variation of the declination (up to 40°)

Light Sensor

Light measurement

All DALI CS types have also a light sensor included. The light sensor measures illuminance in a range from 0 to 2500 lux. The resolution is 1 lux (note: in fact, the sensor measures the reflected light).

The incident light is rated by the spectral sensitivity of the human eye and thus comparable to the subjective visual perception of brightness.

Werkseinstellung und Konfiguration

Factory Setting and Manual Configuration

For simple applications the factory settings are sufficient, the reference value can be set with the rotary switch on the backside:

- n=0 .. .control inactive
- n=1...14 reference value = n*100lux
- n=15 adaptive reference value (can be set with dimming commands), default=500lux (FW4.14 and higher)

Detailed settings can be done with the DALI-Cockpit.

Purchase Order Information

Art.Nr. 86458674: DALI LS, sensor module (light), pure white (RAL9010), back box

Art.Nr. 86458674-W16: DALI LS, sensor module (light), traffic white (RAL9016), back box

Art.Nr. 86458674-W16-AP: DALI LS, sensor module (light), traffic white (RAL9016), surface mouting

Art.Nr. 86458674-W16-ZD: DALI LS, sensor module (light), traffic white (RAL9016), suspended ceiling

Additional Information and Equipment

DALI-Cockpit – free configuration tool from Lunatone for DALI systems
http://lunatone.at/en/downloads/Lunatone_DALI-Cockpit.zip

Lunatone DALI products
http://www.lunatone.at/en/

Lunatone datasheets and manuals
http://lunatone.at/en/downloads/

Contact

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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.