



DALI PD

Datasheet

Phase Dimmer Module

Phase Dimmer with
DALI control input (DT4)



DALI PD:

Art. Nr. 86458618 (RL)

Art. Nr. 86458619 (RC)

Art. Nr. 86458619-25U (RLC)

DALI PD300:

Art. Nr. 86458618-300 (RL)

Art. Nr. 86458619-300 (RC)

Art. Nr. 86458619-300U (RLC)

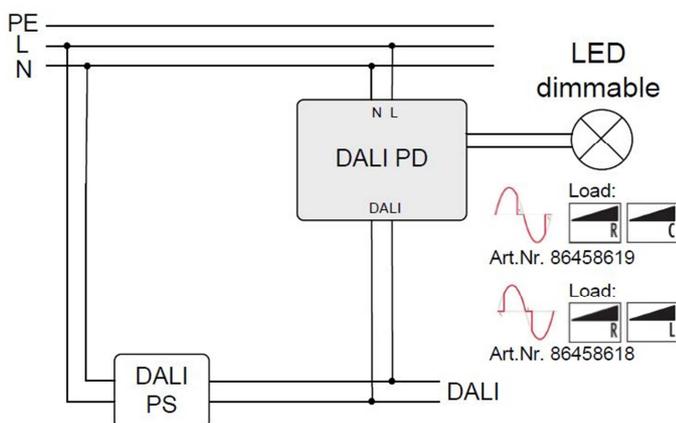
DALI PD Phase Dimmer Module

Overview

- Module to integrate “dimmable” 230V luminaires into a DALI-line
- E.g. for dimming 230V LED-Retrofit-bulbs via DALI (Device Type 4 from firmware 3.0 and higher)
- For loads from 3W to 25W (PD), variations for 10-300W (PD300)
- trailing edge phase cut dimmer (Art.Nr. 86458619) suitable for resistive and capacitive loads
- leading edge phase cut dimmer (Art.Nr. 86458618) suitable for resistive and inductive loads
- universal dimmer available (marked with article number suffix “U”)
- Conversion of the 8-Bit Arc-Power Level into a phase cut controlled voltage (trailing/leading edge)
- The minimum dim level can be set via DALI (MIN LEVEL)
- The module represents a DALI-line client and therefore it has its own DALI-address.
- Double DALI terminals - the DALI signal line is connected through.

Specification, Characteristics

type	DALI PD	DALI PD 300W
article number	86458618 (RL) 86458619 (RC) 86458619-25U (RLC)	86458618-300 (RL) 86458619-300 (RC) 86458619-300U (RLC)
power supply	via DALI-line	via DALI-line
typ. current consumption	6mA	6mA
input	DALI	DALI
number of DALI addresses	1	1
mains voltage	230Vac	230Vac
trailing edge phase angle	0°-180°	0°-180°
load range	3W-25W	10W-300W
temperature	0°C to 50°C	-20°C to +50°C
geometry (l x w x h)	59x33x15	120x30x20
connection wire cross section	0,5-1,5 mm ²	1,5-2,5 mm ²



typical structure

ATTENTION:
Do not apply any potential to the light bulb connector!
Switch off mains supply before replacing the light bulb.

Leading edge phase cut dimmer (Art.Nr. 86458618):

dimmer type	suitable loads	note
		Not suitable for capacitive loads!

Trailing edge phase cut dimmer (Art.Nr. 86458619):

dimmer type	suitable loads	note
		Not suitable for inductive loads!

Universal dimmer (Art.Nr 86458619-xxxU):

dimmer type	suitable loads

Type of dimmers:

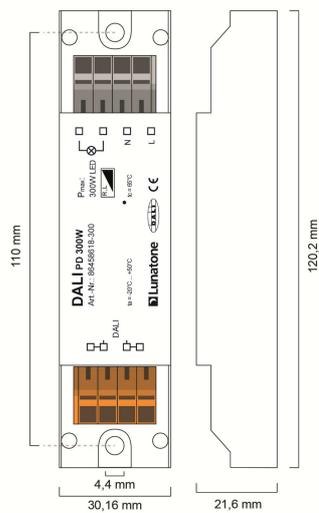
Leading edge
Trailing edge
Universal

load:

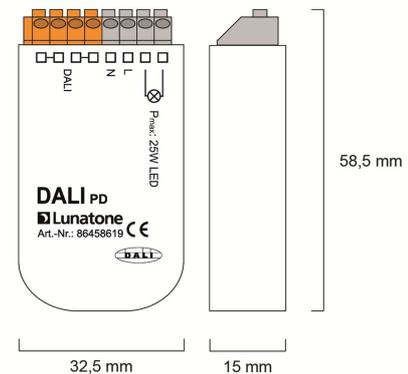
3-25W: compact housing for back box installation
10-300W: remote ceiling

Info universal dimmer:

universal dimmer, suitable for resistive, inductive and capacitive loads. The dimmer is configured as trailing edge dimmer. If an inductive load is connected, the dimmer will recognize this after mains is supplied and will transit to leading edge phase cut operation



geometry DALI PD300



geomtry DALI PD

Connection

The DALI PD is connected to the DALI-line. The phase cut control and the DALI-communication is supplied directly by the DALI line. A typical value of the current consumption is 6mA. In order to supply components on a DALI line the installation of a power supply (DALI PS) is required. The connection to the DALI-line is polarity free.

Internally the DALI-terminals are connected through as visualized on the housing.

The input of the phase dimmer (L-N) has to be connected to the mains. The DALI PD is suitable for loads from 3W to 25W or 10W-300W depending on the version.

The terminal-connectors are suitable for wire cross-sections from 0,5 to 1,5mm².

Function

The DALI PD interface converts the DALI dim level into a voltage signal. The phase cut control generates a sinusoidal voltage with leading/trailing edge phase cut (logarithmic dimming characteristic corresponding to DALI). The operation mode (trailing/leading edge) can be queried via DALI (DT4). The PHYSICAL MINLEVEL is 3%.

Purchase Order Information

article number: 864586xx – (extension)

86458618-25: leading edge dimmer (RL), 3-25W, back box

86458618-300: leading edge dimmer (RL), 10-300W, remote ceiling, din rail type on request

86458619-25: trailing edge dimmer (RC), 3-25W, back box

86458619-300 trailing edge dimmer (RC), 10-300W, remote ceiling, din rail type on request

86458619-25U: universal dimmer (RLC), 3-25W, back box

86458619-300U: universal dimmer (RLC), 10-300W, remote ceiling, din rail type on request

DALI Instruction Set

The DALI PD allows the integration of classical dimmable luminaires (phase cut) in DALI systems. It is based on the standard for DALI Control Gear (IEC 62386-102) and Device Type 4 (IEC 62386-205) components. With few exceptions the entire command set defined by the DALI standard is supported.

Commands and functions referring to the SYSTEM FAILURE LEVEL are not supported. In the case of a DALI-line outage 100% are supplied on the output when using the 25W

type, 0% are supplied when using the 300W type.

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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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.