TRIDONIC



DALI PCD/S

DALI actuator

Leading-edge/trailing-edge phase dimmer

Product description

- Digital leading-edge and trailing edge phase dimmers
- Total connected load: 40 1000 VA
- DALI/DSI input
- Single (switchDim) or double switch input
- Preset function: storage and retrieval of any lighting value
- 1 dimmed phase (output)
- With automatic load detection
- For installation in switching cabinets
- Status LED for indicating the operating status
- Not suitable for operation with LED bulbs
- 5-year guarantee

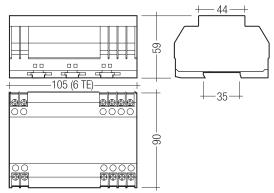
Technical data

| Rated supply voltage | 220 – 240 V |
|------------------------|-------------------------|
| Mains frequency | 50 / 60 Hz |
| Connected load | 40 – 1,000 VA |
| Power loss | 2 W (15 W at full load) |
| Ambient temperature ta | 0 +40 °C |
| Type of protection | IP20 |



Wiring diagrams and installation examples, page $2\,$





Ordering data

| Туре | Article number | Packaging, carton | ton Weight per pc. | | |
|------------|----------------|-------------------|--------------------|--|--|
| DALI-PCD/S | D/S 22154332 | | 0.41 kg | | |

Specific technical data

| Туре | Inputs | | | | | Outputs | | Terminals |
|------------|--------------------------------------|--------------------------------------|---------------------------|----------------|-----------------------------|--------------|--------------------------|----------------------------|
| | Switch input for preset retrieval | Single or twin push to make switches | DALI/DSI control input | Current draw | Number of DALI addresses | Dimmed phase | Control range, output | |
| DALI-PCD/S | 1 | 1 | 1 | 2 mA from DALI | 1 | 1 | 0; 1 – 100 % | 0.75 – 2.5 mm ² |

Glow-wire test

according to EN 60598-1 passed.

DALI standard

The DALI-PCD/S is designed to control control gear with DALI standard IEC 60929 (DALI VO).

Phase dimmer with automatic load detectionleading or falling edge. Control by means of a DALI or DSI signal or via momen-tary switch. Total connected load 40–1000 VA. Light value memory (Preset function)

Application

With the digital phase dimmer it is possible to dim LV halogen lamps in connection with electronic or magnetic transformers, as well as ohmic light sources (incandescent lamps and HV halogen lamps) with a total connected load of 40–1000 VA.

Control by means of a DALI or DSI signal or via directly connected momentary light switches. In addition, the DALI-PCD/S allows the storage and the recall of any desired light value (Preset function).

The digital phase dimmer is not compatible with LED retrofit lamps. LV halogen LED retrofit lamps that are operated by an electronic or magnetic transformer are also not compatible.

Functional description

The DALI-PCD/S can be controlled via a DALI or DSI signal.

This is the preferred option when several DALI-PCD/S should be controlled synchronously. In this case, operation takes place only via the device

from which the DALI-PCD/S receives the DALI or DSI signal.

DSI operation: e.g. modularDIM BASIC DALI operation:e.g. DALI GC, DALI SC, DALI Touchpanel

As an alternative to the operation by means of a DALI or DSI signal, the DALI-PCD/S can be operated via a locally connected momentary switch. The lighting can be switched or dimmed by means of the momentary switch inputs T^\uparrow or T^\downarrow .

Double momentary switch control:

ON/OFF: short key pressure on T↑ or T↓
UP: long key pressure on T↑
DOWN: long key pressure on T↓

Single momentary switch control:

ON/OFF: short key pressure
UP/DOWN: long key pressure
(alternating dimming direction at each key-press)

Preset function:

By connecting a commercially available

momentary switch to the "Preset" input, it is possible to save and call up again any light value. Saving and call up of a light value:
Adjust the light value by means of the momentary switch T↑ or T↓ and then hold the "Preset momentary switch" pressed (> 5 seconds).
Recall of the stored light values by a short pressure (< 5 seconds) of the "Preset momentary switch".

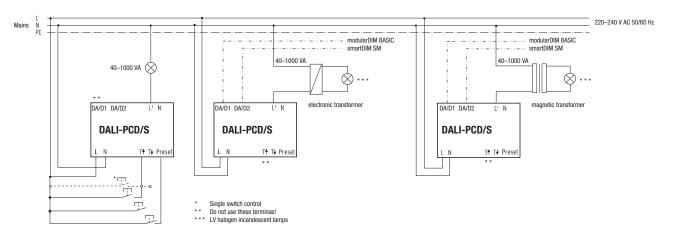
Notes

The DALI-PCD/S can be controlled either via a DALI signal or via directly connected momentary light switches.

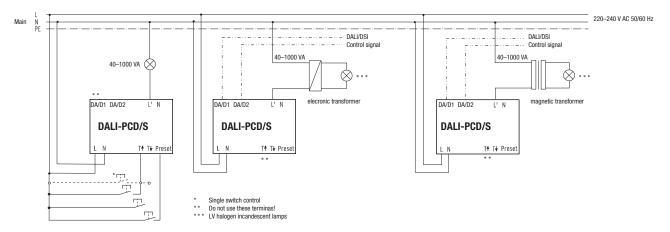
The automatic detection is performed after every power reset. If magnetic and electronic transformers are connected to an DALI-PCD/S at the same time, this will destroy the dimmer.

If the joint operation of several DALI-PCD/S is desired, the control must be accomplished via a DALI signal.

Please provide for sufficient heat dissipation within the switch cabinet, since the admissible ambient temperature of the DALI-PCD/S must not exceed 40 °C. The DALI-PCD/S must be mounted on the sides of the switch cabinet in horizontal position to ensure air-circulation through the housing slots.



Circuit diagram DALI-PCD/S in DSI- or momentary switch operation



Circuit diagram DALI-PCD/S in DALI- or momentary switch operation