switchDIM

6.3. switchDIM (ECO)

6.3.1. Description

With the switchDIM function it is possible to use the mains voltage as a control signal.

The phase of a simple standard mains voltage push button is connected to the terminal marked DA/L and the neutral conductor is connected to the terminal marked DA/N.

Using the function is easy and convenient:

- _ A short press (50-600 ms) switches the device on or off
- _ A long press (> 600 ms) fades the connected operating device alternately up and down (between 1 and 100 %).

switchDIM is therefore a very simple form of lighting management. It also has a positive effect on material and labour costs.

The device has a switchDIM memory function. This is used, among other things, for storing the last dimming value in the event of interruptions in the power supply.

When power returns, the LED is automatically restored to its previous operating state and dimmed to the last value.

▲ CAUTION!

Glow switches are not approved for controlling switchDIM.

Glow switches may cause the LED Driver to spontaneously switch on or off or make sudden changes in the dimming value.

A CAUTION!

To ensure correct operation a sinusoidal mains voltage with a frequency of 50 Hz or 60 Hz is required at the terminal.

Special attention must be paid to achieving clear zero crossings. Serious mains faults may impair the operation of switchDIM and corridorFUNCTION.

A CAUTIONS!

A maximum number of 25 operating devices per switchDIM system should not be exceeded.

If you have more devices please use DALI or DSI.

6.3.2. Installation

Wiring variants

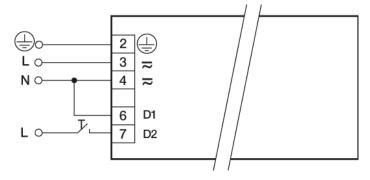
There are two options for installing switchDIM: four-pole and five-pole wiring.

TRIDONIC

switchDIM

Four-pole wiring

Configuration:



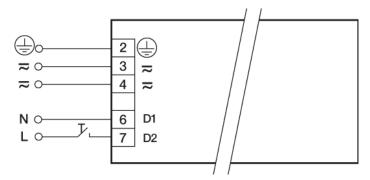
Phase (L), neutral (N), earth (PE), control line (L')

Benefits:

No need for a control line thanks to bridging terminal 6 and the N-connection of the luminaire

Five-pole wiring

Configuration:



Phase (L), neutral (N), earth (PE), control line (L), neutral (N)

Benefits:

Control can be changed at any time to a digital control signal (DSI or DALI) without having to change the luminaire or provide an additional control line



For five-pole wiring the neutral conductor must be connected to DA/N.

This prevents 400 V being applied between adjacent terminals if a different phase is used for the control input.

TRIDONIC

switchDIM

6.3.3. Commissioning



If the corridorFUNCTION is activated, the LED Driver is controlled only by motion. To operate the LED Driver via DALI, DSI or switchDIM the corridorFUNCTION must be deactivated.

Using the switchDIM function

switchDIM is operated by the mains voltage push button.

Procedure:

- _ Switch the device on/off by briefly actuating the push button -or-
- _ Dim the device by holding down the push button

Synchronizing devices

If the devices in a system do not operate synchronously, the devices must be synchronized, i.e. put in the same status (on/off).

Procedure:

- _ Hold down the push button for 10 seconds
 - → All devices will be synchronized to the same status
 - → LEDs will be set to a uniform light value (approx. 50 %)

Changing the fading time

The default value for the fading time is approx. 3 seconds. For devices of the types ECO and EXCEL this can be changed to approx. 6 seconds.

Procedure:

- _ Hold down the push button for 20 seconds
 - → After 10 seconds: all devices will be synchronized to the same status
 - \rightarrow After 20 seconds: a new fading time will be set
 - → LEDs will be set to a uniform light value (approx. 100 %)

Resetting the control gear to the factory defaults

Procedure:

_ Hold down the push button for 10 seconds four times in a row. Release the push button briefly between each 10 second hold

TRIDONIC

Product manual LCAI ECO / LCI TOP | 05-2017 | 1.13 | en

switchDIM

Switching the control gear to automatic mode

In automatic mode the device detects which control signal (DALI, DSI, switchDIM, etc.) is connected and automatically switches to the corresponding operating mode.

Procedure:

_ Press the push button 5 times within 3 seconds

TRIDONIC 45 / 64