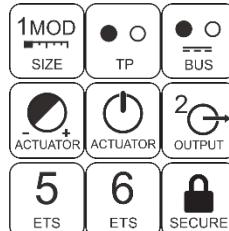


## Data sheet

**KNX IO 546.1 secure (1D1O)**

Dimming actuator 1..10 V with relay



(Art. #5337)

**Application area**

The KNX IO 546.1 secure (1D1O) is a compact combined dimming/switching actuator with 1 dimming output for active electronic ballasts with a 0/1-10V interface and 1 bi-stable relay output.

The dimming actuator can be used for several active electronic ballasts e.g. for LED panels or stripes. The configuration allows controlling the channel by switching, rel. dimming and dimming value. Several comfort functions are integrated as well, including scenes, slumber fading, staircase light and sequencer.

The switching actuator provides the function for universal outputs including scene control, timer, staircase lighting and heating valves (PWM for thermoelectric valve drives).

Two push buttons and three LEDs allow a local operation and a visualization of the device state. In addition to the output channels the device includes 16 independent functions for logic or timer control.

The device supports KNX Data Security.

**Technical Specification**

## Electrical safety

- Protection (acc. EN 60529): IP20

## CE marking according to

- Low voltage directive 2014 / 35 / EU
- EMC directive 2014 / 30 / EU
- RoHS directive 2011 / 65 / EU
- EN 63044-3: 2018
- EN 50491-5-1: 2010  
EN 50491-5-2: 2010  
EN 50491-5-3: 2010
- EN 61000-6-2: 2019  
EN 61000-6-3: 2007 + A1: 2011
- EN 63000: 2018
- EN 55015: 2013 + A1: 2015
- EN 61547: 2009

## Environmental requirements

- Ambient temp. operating: - 5 ... + 45 °C
- Ambient temp. non-op.: - 25 ... + 70 °C
- Rel. humidity (non-condensing): 5 ... 93 %

## Mechanical data

- Housing: plastic
- DIN rail mounted device, width: 1 units (18 mm)
- Weight: approx. 60 g

## Controls and indicators

- 2 buttons and 3 LEDs (multicolor)
- KNX programming button with LED (red)

## Power supply

- KNX bus approx. 5 mA

## Connectors

- Connector for KNX bus (red / black)
- Pluggable screw connector (3 poles) for dimming
- Pluggable screw connector (3 poles) for switching
- Cross-section of connectors: 1.5 ... 2.5 mm<sup>2</sup>

## Output (dimming actuator for active elec. ballasts)

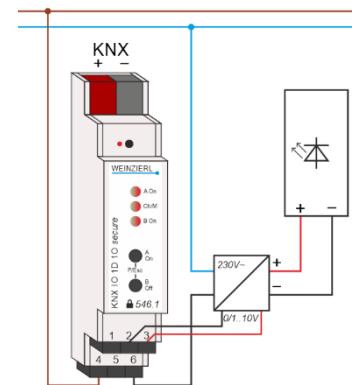
- Dimming voltage: 0...10 V<sub>dc</sub> / 1...10 V<sub>ac</sub>
- Max. current: 50 mA

## Output (switching actuator)

- Relay type: 230 V<sub>ac</sub> / 10 A, bi-stable
- Depending on load type (capacitive or inductive) the switching power can be reduced significantly.

**Installation Instructions**

- The device may be used for permanent interior installations in dry locations or within distribution boards with DIN rail.

**WARNING**

- The device must be mounted and commissioned by an authorized electrician.
- The prevailing safety rules must be heeded.
- The device must not be opened.
- For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.
- The device is a permanently connected equipment: A readily accessible disconnect device shall be incorporated external to the equipment.
- The installation requires a 16 A fuse for external overcurrent protection.
- The power rating is indicated on the side of the product.



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