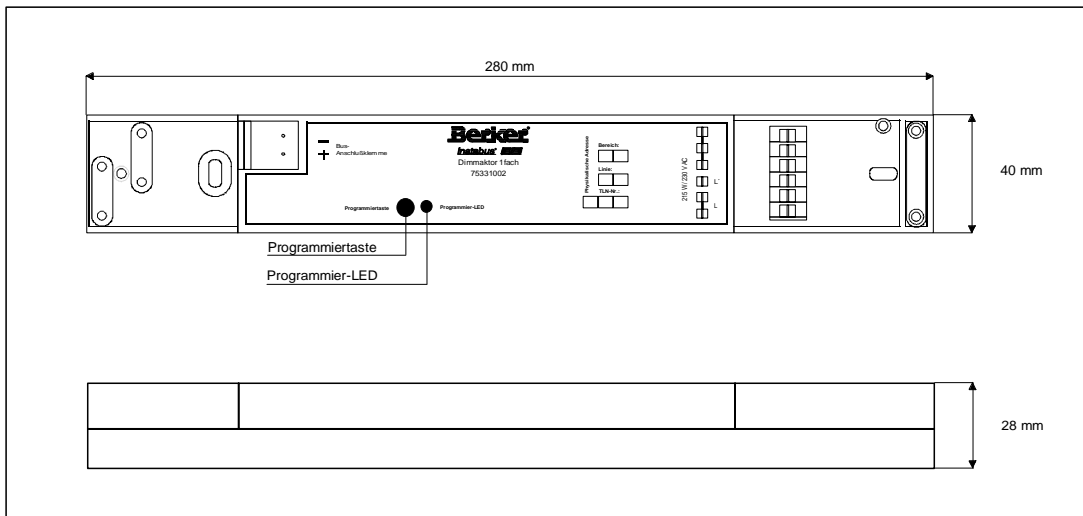


Tronic dim actuator 1gang 210W, Built-in (Eb) 75331002

Technical Documentation



Tronic dim
actuator
1gang 210 W

Art. no.:
75331002

The Tronic dim actuator 1gang receives instabus telegrams and transposes them for triggering general and LV halogen lamps (with Tronic transformers). Mixed loads up to 215 W can be connected. The actuator, which works on the phase gating control principle, is equipped with an electronic short-circuit and a temporary overload fuse.

Product family:	Illumination
Product type:	Dimmers
Distribution voltage EIB:	24V DC (+6/-4V)
Distribution voltage:	230 V AC
Load:	40 - 215 W
Protection class:	IP 20
Ambient temperature	-5 / +45°

Dimming 300712

From database 2.1

Database
search path

General
technical
data:

Application
overview:



General
information

Power
extension

Berker Tronic extra power units can be used for greater loads.

Application description:

The application "Dimmer actuator" (300712) enables lighting to be switched and dimmed through the *instabus*. Brightness values can be received which the system can dim to, or jump to, in accordance with the parameter settings. The dimming speed is variable.

No. of allocations : max. 9
No. of group addresses: max. 9
No. of objects: 1 switch object (1 bit)

1 dimmer object (4 bit)
1 value object (1 byte)

General	
Switch ON brightness: Switch onto	Basic brightness, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, max. brightness , last brightness value
Brightness at switching on after initialisation	Basic brightness, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, max. brightness ,
Behaviour after reception of a value	Dim on brightness value Jump on brightness value
Time between 2 of 255 dim steps, base	0.5 ms , 8.0 ms, 130 ms, 2.1 s, 33s,
Time between 2 of 255 dim steps, factor	3.. 33 ..255
Factor x Basis = Time	

If a switch command is received, the configured status is set.

In the parameter setting *Last brightness value* the value is saved to the RAM, updated where applicable and set on demand (switch-on process).

This parameter is only effective in conjunction with the setting *Switch-on behaviour to last brightness value!*

An initialising process is carried out when the system power is switched on, after a reset process by means of the choke slide switches, and after programming. All entries in the volatile memory components (RAM) are lost.

The switch-on behaviour is now determined through the parameter settings: if a switch command with a corresponding target address (group address) is received for the first time, the lighting takes the configured status. All other switch movements are carried out in the mode 'Last brightness value'.

In object 2 it is possible to link brightness values with a group address. If the actuator receives a telegram from a corresponding sensor, e.g. from the light scene push button or value transmitter, the value is set in accordance with the configuration. "Jump on" means that the value is set without a time lag.

The value dims down in the time set by the parameter.

**Tronic dim
actuator
1gang 210 W**



**Dimming
300712**

**Allocations,
group
addresses
and objects**

**Parameter
window:**

**Parameter
description:**

**Switch ON
brightness:
Switch onto**

**Brightness at
switching on
after
initialisation**

**Behaviour
after reception
of a value**

Parameter description:

The dimming range is divided into 255 stages. The dimming speed can be varied by setting the time between two dimming stages (basis x factor).

The basic brightness is used to differentiate the switching status (On/Off) of lighting (VDE regulation). It is the lowest brightness value that can be set. It is also the reason why a light cannot be switched off through the dimmer switch; the dimming process stops at the basic brightness.

Several Tronic dim actuators integrated individually and in a group. Different brightness values are set through individual triggering. If a joint dimming process is started, the lights will not follow it until the previously set value has been reached exactly. For this reason it is not possible to change a complete installation with different brightness values, e.g. by 10% per light. If this is required, a light scene push button (storage of brightness values) must be used.

If in a group of dimmer actuators only those lights are to be dimmed that are switched on at the moment, the installation must be extended with products from the product family **controllers in application transfer 4 bit** (from database 2.1).
The active transmitting switching status is used as the locking object of the function gate for each actuator.

If the *Transmission flag* is set in the object *Switching*, after switching on or dimming a telegram is sent to the system with the contents '*Switch object dimmer On/Off*'.
The **first** group address of the switch objects (transmitting) is active as the target address.
All bus devices with the appropriate address are switched on.
The actuator is therefore the source of the telegram. If other dimmer actuators are linked in the switch object with the corresponding group address, they are switched on in accordance with the configuration, e.g. to 30%.
Dimming OFF is not possible, because the basis brightness value limits the lowest range to which the light can be dimmed. Accordingly, switching other bus devices off in dimming mode is not possible either.

This status transmission function can be used actively e.g. for the status display of the equipment in visualisations (e.g. display unit).

Note: in a group the transmission flag may be set on one dimmer actuator only!

Dimming
300712
Basis/factor
dimming
speed

Information
of
configuring

Basic
brightness

Dimming
several dim
actuators /
installations

Dimming an
actuator
group

Setting the
transmission
flag (T):



Transmitting
group
address



Set one T-
flag only