



73 - 1 - 5832
22013

ABB i-bus[®] EIB

Actuator 6153 EB-500

for lamp installation with
control output (0 - 10 V)
for electronic ballasts

Operating instructions

only for authorized, skilled electricians with
EIB training

Important instructions

Attention

It is absolutely essential that the EIB bus is installed by an authorized electrician. Laying and connection of bus line and applications devices must be effected in conformity with valid regulations according to DIN - VDE and the EIB manual of the ZVEI / ZVEH.

Connect the touch contact input to the same phase as the device's power supply.

For wiring of the actuator 6153 EB, the specifications of the lamp / EVG manufacturer with regard to current at make and power factor have to be observed. In some cases it may be necessary to install a making current limiter (e. g. 6515).

Notes

If the physical address has not yet been assigned, the programming key (Fig.1, pos.5) should still be accessible. If necessary, please install the lamp cover lateron. The manufacturer database of Busch-Jaeger is continuously updated. It stores the latest types of applications and their related descriptions. If this database is not available to you, please send for a copy.

Technical data / Connection

EIB connection

Nominal voltage: 24 V
Current consumption: < 10 mA

Switching connection

Nominal voltage: 230V - 50 Hz
Switching current: 10 A, $\cos \varphi$ 0.6
Touch contact input: 230 V, 50 Hz
Line length of the touch contact input: max. 100 m (unlighted)
Control voltage: 0 - 10 V
Control current: up to 50 mA
Operating temperature: -5 to +45 °C
Protection type: IP 20

←	○	switched phase (lamp)
→	○	phase (lamp)
L	○	phase (voltage supply)
N	○	neutral conductor
1	○	touch contact input
+	○	control voltage 0-10 V (EVG)
-	○	control voltage 0-10 V (EVG)

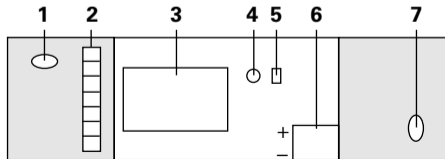
Installation / Fig. 1

Switch off supply voltage !

Remove both outer caps from the device. The device is fixed in the lamps by means of screws put through the long holes (cf. Fig. 1 below, positions 1; 7).

The connection of supply voltage and control line is effected at the 7-pin terminal block (pos. 2). Please observe the connection information given in the „technical data“ section. **When the bus voltage is missing, and a 230 V voltage supplied, the actuator 6153 EB will automatically switch on (working illumination).**

The connection to the EIB bus is made by means of a 2-pin bus terminal (item no. 6183) which is plugged into the entrance (pos. 6). Please make sure that the polarity of terminals is correct (red = +, grey = -).



Adapt bus coupling process

Assign physical address

- Connect a PC equipped with the EIBA software (ETS) to the EIB bus line via an EIB-RS 232 interface.
- Press the programming key (pos. 5) at the actuator: the red programming LED (pos. 4) will become illuminated.
- After the physical address has been programmed, the red LED will go out.
- Write the number of the physical address on the device using a smudge-proof pencil (df. Fig. 1, pos. 3).

Assign group address(es)

- Group addresses are assigned via a PC in connection with the ETS software.

Select application

Open the device window and choose the desired application version. At present, there are two versions available.

Adapt bus coupling process

Alternative application

Version 1

This device offers the following functions:

- Switching of lamps on-site via several conventional touch contacts (e. g. 2020 US without lighting).
- Dimming of lamps with electronic ballasts (0-10 V control input) via EIB sensors (e. g. 6118xx).
- Calling of two freely definable brightness values (presets) for lamps with electronic ballasts (0 - 10 V control input)
 - via EIB sensors (e. g. 6117xx).

You may differentiate this version of the actuator 6153 EB by using the „parameters“ option of your ETS software:

- ON:
 - last brightness setting (memory) or
 - minimum brightness (basic brightness) or
 - maximum brightness
- Dimming speed
 - time for one run of the light (0 -100 %) in seconds.
- Preset 1 or 2, resp.
 - these values are freely selectable via percentage inputs.

Adapt bus coupling process

Version 2

This device may be used as a pure switching actuator. Then, its contact time behavior may be adjusted via the „parameters“ option (e. g. staircase lighting time-switch).