

# ALTENBURGER ELECTRONIC GMBH

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## Operating instructions

### EIB Phase-controlled push dimmer ALTODIM 2000

Type : IBDA2000

Order-no.: 80.13.063

#### Applications and functions

The EIB-phase-controlled dimmer is suitable for incandescent lamps, low-voltage halogen lamps with wire-wound transformers as well as for the speed control of motors for ventilators, fans etc. It controls the brightness or the rotational speed in dependence of the received switch – or dim commands.

The dimmer can be controlled by EIB sensors as well as by pushbuttons (customary pushbutton) connected to the pushbutton input.

#### Pushbutton input

The pushbutton input can be parametrised with the ETS-software to control its own dimmer output or other EIB devices (see application note).

Several pushbuttons can be operated in parallel. They must be approved for power supply voltage.

#### ON/OFF-Switching

On the OFF command the dimmer controls the connected load to 0V. The load is not disconnected from the power supply.

#### Loads

The dimmer controls loads between 60 and 2000 W/VA. The total load of the connected lamps or motors may not exceed the nominal load of the dimmer. The power dissipation of transformers (approx.15–25%) and of motors as well the power factor have to be considered. The nominal current of the dimmer also may not be exceeded. The connection of dimmed outlets of several dimmers is not permitted.

#### Transformers:

Transformers must be connected only on the supply side to the dimmer (on the primary side) they have to be loaded according to the supplier's manual. Each transformer gets its fusing on the primary side. A no-load operation is not permitted. Electronic transformers may be connected only if they are suitable for an operation in the phase-control mode. Generally a control of electronic transformers is not allowed. This could damage the dimmer as well as the transformer.

#### Load exit

- Voltage-drop when exceeding the max. permissible temperature.

## Safety and Installation instructions

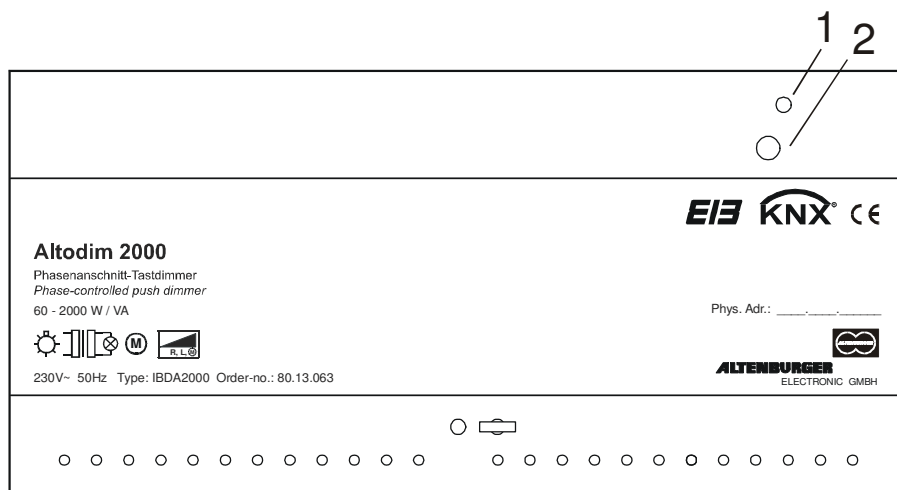
- The dimmer should be installed and tested only by a qualified electrician.
- Power to the dimmer must be switched off before any work is undertaken.
- The dimmer may not be opened and operated outside its housing.
- The relevant safety and accident prevention regulations and installation instructions to be observed.
- The dimmer produces heat and must sufficiently be cooled by air convection.
- The dimmer may be installed only in a vertical mode (terminals on bottom).
- Wiring shall be made strictly according to the wiring diagram at the designated terminal
- The dimmer must reliable be snapped on the DIN-rail.

## Delivery status

In the delivery status the dimmer can be handled in a 1-push-function:

short pressing – on/off / long pressing – brightness adjustment

After the switch ON operation or voltage drop the dimmer returns with the status prior.  
(EIB-power supply must be connected)



1 = Programmier-LED *Programming LED*

2 = Programmier-Taste *Programming pushbutton*

## Technical data

Designation	: ALTODIM 2000
Type	: IBDA2000
Order-no.	: 80.13.063
Power supply	: 230V~ 50Hz ; <b>DC not permitted</b>
Fusing	: external 10A
Operation temperature	: 0°C ... +45°C airconvection at a vertical mounting mode of the dimmer
Max. load capacity	: 2000W/VA
Min. load capacity	: 60W/VA
Output current	: max. 8,7A~
Protection class	: II (total insulation)
Type of protection	: IP 20
Contamination grade	: 2 (dry non-conducting)
Own consumption	: < 1,5% of the connected load
Noise level	: < 30dB(A) under nominal load in distance of 1m
Pushbutton input T	: max. 250V~ (pushbutton for power supply)
Load exit	: voltage-drop when exceeding the max. permissible temperature
Terminals	: screw terminals 0,5mm <sup>2</sup> - 2,5mm <sup>2</sup> , for solid wires or litz wires with sleeve
Wire lengths	: max. 100m, min. 1,5mm <sup>2</sup> (terminals 1, 3, 5, 6)
Mounting	: housing with catch spring for DIN rails
Dimensions	: WxHxD=175x83,5x58mm (10 divisions)
Weight	: approximately 500gr
EIB	: EIB-cable (terminals 21, 22)
Power supply EIB	: 24VDC (+6V/-4V) EIB-power supply
Power consumption	: max. 230mW at 29VDC
Labelling	: EIB, KNX, CE
Wiring	: according to wiring diagrams and imprint on the controls

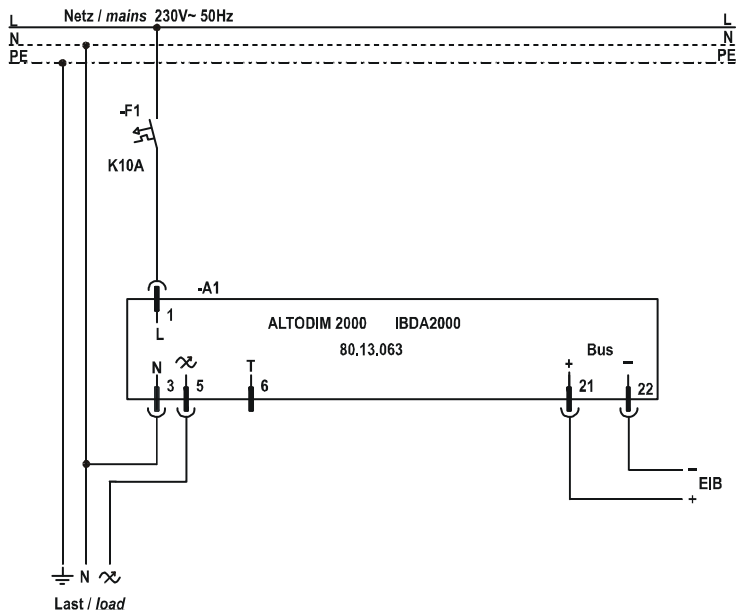
**Attention ! If incorrectly connected there is a risk of failure, malfunction or destruction**

**Software:** details see application note

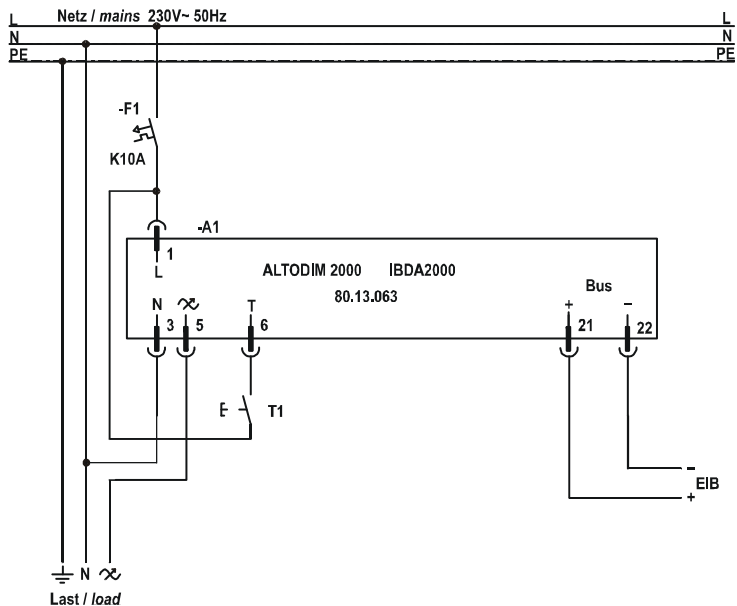
The technical data refer to the nominal loads and the indicated power supply.

## Wiring diagram:

### ALTODIM 2000



### ALTODIM 2000 with additional pushbutton



Subject to changings without note. Error and technical alterations reserved.  
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