Dimmer, 2 Outputs, 1 to 10 V

BH4-D10V2-230

- ***Switching and dimming of adjustable ballasts 1 to 10 V***
- ***8 control-channel receiver***
- ***For DIN-rail mounting***
- ***LED-indications for alarm, smart-house carrier and output***
- ***Bulb-conserving soft-start function***
- ***Channel coding by BGP-COD-BAT***
- ***4 lighting scenes***
- ***Transmits the status of the dimming outputs***

OUTPUT SPECIFICATIONS

Ballast outputs		2
Dimming capacity		2 x 1 to 10 V
Max. load capacity		50 mA on each output
Dimming speed		3.6 s (10% - 100%)
Relay outputs		2
Max. switching voltage		250 VAC
Resistive loads	AC1	16A
Response time		1 cycle: ≤ 272 ms @ 128 channels)

SUPPLY SPECIFICATIONS

Power Supply	
Rated operational voltage	230 VAC ±10%
Power consumption	2 VA
Power dissipation	Max. 4.5 W
Frequency	50/60 Hz

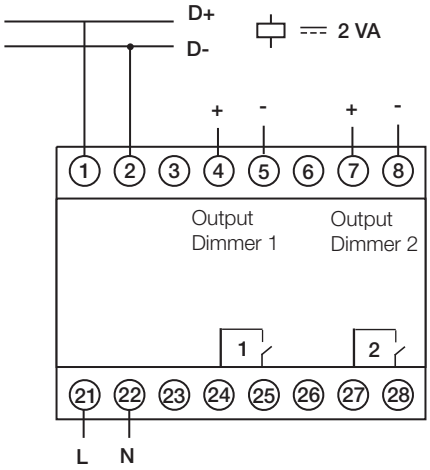
TYPE SELECTION

Supply	***Ordering no.***
230 VAC	BH4-D10V2-230

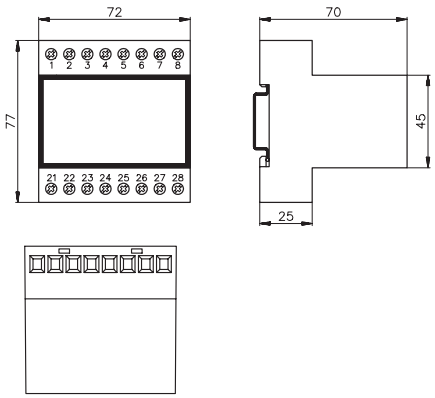
GENERAL SPECIFICATIONS

Power ON delay	1 s
Indication for	
Power On	LED, Green
smart-house carrier	LED, Yellow
Output On	LED, Red (one per output)
Environment	
Operating temperature	0° to +50°C/32° to +122°F
Humidity (non-condensing)	Max. 85%
Housing	H4-housing
Standards	IEC 60669, EN 55022/ EN 50081-1 and EN 55024/ EN 50082-1

WIRING DIAGRAM



DIMENSIONS (mm)



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MODE OF OPERATION

Coding

With the BGP-COD-BAT programming unit, each switching channel can be assigned any address between A1 and P8 via the modular socket on the front of the dimmer. The allocation of the channels is as follows:

Description	Channel	
DIMMER 1	1	ON / OFF / Dimming
	2	Lighting scene 1 (3)
	3	Lighting scene 2 (4)
	4	Dimmer 1 output status
DIMMER 2	5	ON / OFF Dimming
	6	Lighting scene 1 (3)
	7	Lighting scene 2 (4)
	8	Dimmer 2 output status

Functions which are not required should remain uncoded. The coding of the dimmer can be carried out without either supply voltage or smart-house signal. It is retained permanently, but may be overwritten at any time. The Dimmer output are configured in such a way at the factory that it will be switched off in the event of a fault. This configuration, too, can be changed with the BGP-COD-BAT. Setting "1" results in switching on the lighting to 100% in case of a fault, while setting "0" switches off the Dimmer output (factory setting).

Putting into service

Commissioning may only be carried out by an authorised, trained technician. Observe the connection diagram when installing. All lines to be connected must be dead.

The following table shows the allocation of terminals:

Terminal	Description
1	smart-house signal conductor + (D +)
2	smart-house signal conductor - (D -)
4	Dimmer 1, 1 to 10 V +
5	Dimmer 1, 1 to 10 V -
7	Dimmer 2, 1 to 10 V +
8	Dimmer 2, 1 to 10 V +
21	Line in
22	N-conductor
24	Dimmer 1, Relay, L_{in}
25	Dimmer 1, Relay, L_{out}
27	Dimmer 2, Relay, L_{in}
28	Dimmer 2, Relay, L_{out}

Connections between the smart-house signal and to earth potential will cause malfunctions and are not permissible. Attention should be paid to the correct polarity of the supply voltage and the smart-house signal. In order to meet the requirements for protective low voltage, VDE 0100, part 410, should be observed and applied during installation.

LED indicators

Front-mounted LEDs indicate the status of the device:

LED	Description
GREEN	Supply ON
YEL-LOW "Bus OK"	smart-house carrier: OFF: Bus fault ON: Bus is OK
RED Output 1	Dimmer 1: OFF: Dimmer output off ON: Dimmer output on
RED Output 2	Dimmer 2: OFF: Dimmer output off ON: Dimmer output on

OUTPUT SPECIFICATIONS, RELAY DATA

Load	Test conditions	Typical number of operations
250 V, 12 A, cos φ =1	1800/h, 50% DC, +70°C	1.0×10^5
250 V, 8 A, cos φ =1	1800/h, 50% DC, +70°C	3.5×10^5
250 V, 4 A, cos φ =1	1800/h, 50% DC, +70°C	5.0×10^5
250 V, 3 A, cos φ=1	1800/h, 50% DC, +70°C	7.5×10^5
230 V, 550 W filament lamps I_{in} ≤ 40 Apeak I_{off} = 2.5 A	60/h, 8% DC, +22°C	2.0×10^5
230 V, 1000 W filament lamps I_{in} ≤ 71.5 Apeak I_{of} = 4.5 A	60/h, 8% DC, +25°C	7.0×10^4
230 V, 900 W fluorescent tubes (25 x 36 W) parallel compensated, 30 µF	360/h, 50% DC, +25°C	1.0×10^4
230 V, compressor I_{of} ≤ 21 Apeak I_{off} =3.5 A cos φ = 0.5	500/h, 20% DC, +25°C	1.7×10^5
250 V, 8 A, cos φ = 0.3	360/h, 50% DC, +25°C	1.0×10^5