

BH2-SEP-230



Separates primary and secondary side of smart-house, if a short circuit is detected

Uses 2 channels

Channel coding by BGP-COD-BAT

H2 Housing

For mounting on DIN-rail in accordance with EN 50 022

OUTPUT SPECIFICATIONS

1 output

smart-house out	smart-house
Load	50 mA

TYPE SELECTION

Supply	Ordering no.
230 V	BH2-SEP-230

SUPPLY SPECIFICATIONS

Supply	230 VAC
Power Consumption	Typ. 2.5 W

Note: The separator has distance limitations. Please refer to "Mode of Operation".

GENERAL SPECIFICATIONS

Power supply	230 VAC \pm 15%
	Galvanic separation from Smart-house Bus

Power consumption	2.2 VA
smart-house	smart-house

Dimensions	36 x 77 x 70
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Housing	H2-housing
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Output settling time / total delay	< 2 sec.
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Indication

smart-house on short (secondary side)	Red
Supply ON LED	Green
smart-house carrier LED (primary side)	Yellow

Relay data

Contact maximum switching

current	3 A
Contact resistance	< 100 m Ω (measuring conditions 10 mA/20mV)
Max. Switching voltage	250 VAC
Contact material	Silver, nickel, gold-covered

Addressing	BGP-COD-BAT
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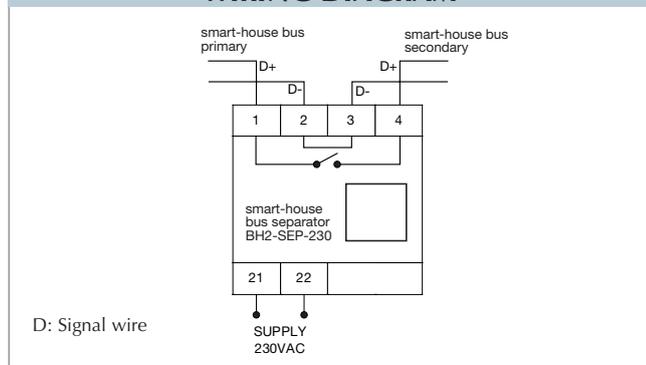
Environment

Degree of protection	IP 20
Pollution degree	3 (IEC 60664)
Operating temperature	0° to +50°C
Storage temperature	-20° to +85°C

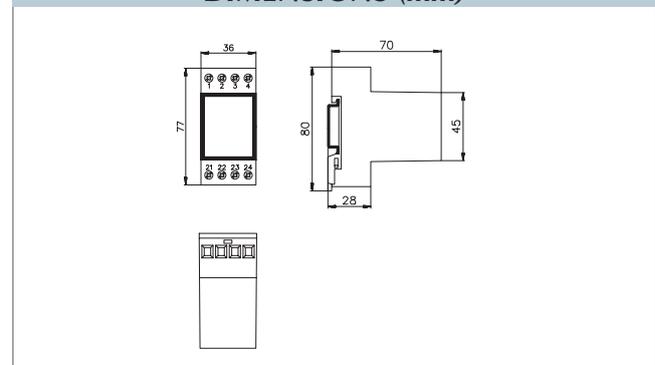
Humidity (non-condensing)	20 to 80% RH
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Weight	200 g
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WIRING DIAGRAM



DIMENSIONS (mm)





MODE OF OPERATION

BH2-SEP-230 is a smart-house bus separator for short circuit detection and signal disabling.

The primary side of the system is connected to the main smart-house signal.

The smart-house net which has to be monitored for short circuit detection, is connected to the secondary side of the system.

The system will disable the secondary side if the smart-house bus is short-circuited. When the short circuit is located and

removed the BH2-SEP-230 will automatically close the relay and go to normal position.

When the system detects a short circuit on the secondary side it will transmit on the channel programmed for I/O 1, on the primary side.

I/O 5 is the monitored channel on the secondary side and has to be programmed to a legal channel that is never used in the smart-house installation. This is part of the short circuit detection.

If the system is used with a master generator, the address programmed for I/O 5 has to be set as a push-button. If more than one smart-house bus separator is used on the same smart-house bus, each of the separations must have its own unique I/O 1 address. I/O 5 can use a common smart-house address, but must be assigned.

The max detection distance of a short circuit on the secondary side depends on the distance between the channel generator and the separator as defined in the below table.

Note: If a Gap is connected to the BH2-SEP-230 it will disable the smart-house out signal.

Operation information:

If the primary smart-house bus is disconnected, the relay is in a undefined position for approx. 2 sec. The relay will open and close with 1 kHz.

Distance limitations

Separator distance to channel generator	Max distance to detect short circuit
100m	100m
500m	300m
1000m	600m
1500m	1000m
2000m	1400m
2500m	1800m
3000m	2100m

smart-house I/O

I/O1 is an input, which will transmit on the primary side when a short circuit occurs on the secondary side of the separator.

I/O5 is an output on the secondary side of the separator. If the load on the smart-house bus is too high, the smart-house address on I/O5 is activated and the relay opens.