

Busch-free@home®

BI-F-2.0.x2

2-gang binary input, flush-mounted

BI-F-4.0.x2

4-gang binary input, flush-mounted



1 Product description

The devices are binary inputs for decentralized flush-mounted installation and installation on mounting rails. The devices have two or four channels and serve as interface for the convenient operation of Busch-free@home® systems via conventional push-buttons or for reading out technical binary signals.

- Two or four binary inputs in the one device
- Support of floating contacts

**Notice**

Basic information about system integration is contained in the system manual. It is available for downloading at www.busch-jaeger.de/en/smarter-home/systems/abb-freehome.

1.1 Dimensional drawings

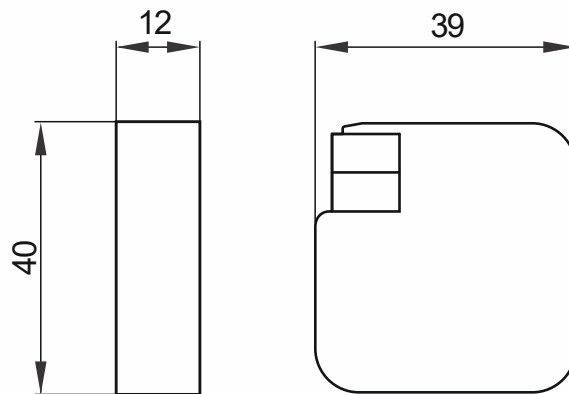


Fig. 1: Dimensions 2-gang binary input, flush-mounted/4-gang binary input, flush-mounted (specifications in mm)

1.2 Circuit diagrams



Danger - Electric shock due to short-circuit!

Risk of death due to electrical voltage of 100 to 240 V during short-circuit in the low-voltage line.

- Low-voltage and 100 - 240 V lines must not be installed together in a flush-mounted box!
- Observe the spatial division during installation (> 10 mm) of SELV electric circuits to other electric circuits.
- If the minimum distance is insufficient, use electronic boxes and insulating tubes.
- Observe the correct polarity.
- Observe the relevant standards.



Danger - Electric voltage!

Install the device only if you have the necessary electrical engineering knowledge and experience.

- Incorrect installation endangers your life and that of the users of the electrical system.
- Incorrect installation can cause serious damage to property, e.g. due to fire.

The minimum necessary expert knowledge and requirements for the installation are as follows:

- Apply the "five safety rules" (DIN VDE 0105, EN 50110):
 1. Disconnect
 2. Secure against being re-connected
 3. Ensure there is no voltage
 4. Connect to earth and short-circuit
 5. Cover or barricade adjacent live parts.
- Use suitable personal protective clothing.
- Use only suitable tools and measuring devices.
- Check the type of supply network (TN system, IT system, TT system) to secure the following power supply conditions (classic connection to ground, protective earthing, necessary additional measures, etc.).
- Observe the correct polarity.

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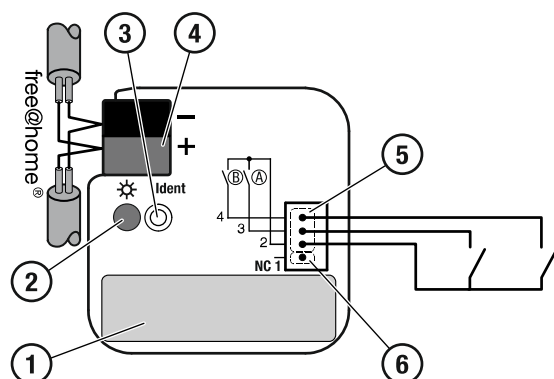


Fig. 2: Overview of devices 2-gang binary input, flush-mounted

BI-F-4.0.x2

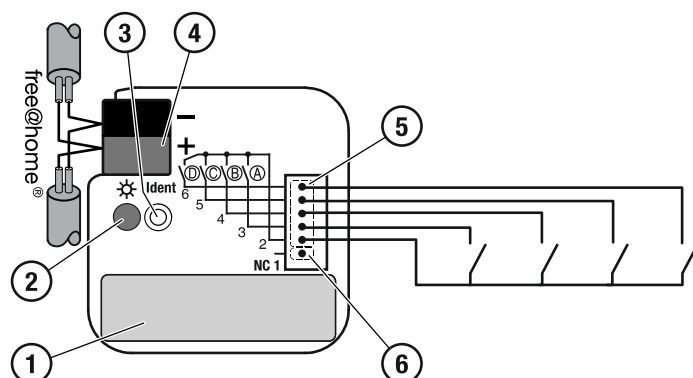


Fig. 3: Overview of devices 4-gang binary input, flush-mounted

- [1] Label holder
- [2] Identification LED
- [3] Device identification during commissioning
- [4] Bus connection terminal
- [5] Inputs, 3/5 wires
- [6] Non-connected line (NC)

2 Technical data

Designation	Value
Power supply	21 - 30 VDC
Bus subscribers	1 (12 mA)
Power loss	0.3 W max.
Connection (free@home Bus)	Bus connection terminal, screwless. 0.6 - 0.8 mm
Line type	J-Y(St)Y, 2 x 2 x 0.8 mm
Wire stripping	5 - 6 mm
Admissible cable length	10 m max.
Input BI-F-2.0.x2 BI-F-2.0.x2 Polling voltage Input current	2 4 20 V (pulsed) 0.5 mA
Safety	Short-circuit-proof, Overload protection, Reverse polarity protection
Protection type	IP 20
Protection class	III
Overvoltage category	III
Pollution degree	2
Air pressure	≥ 80 kPa (corresponds to air pressure at 2,000 m above NN)
Ambient temperature	-5 °C - +45 °C
Storage temperature	-20 °C - +70 °C

Table 1: Technical data

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Technical data 2CKA000073B5761 | EN | Rev. A