# Binary Input with manual operation, 8-fold, 230 AC/DC, MDRC, 2CDG 110 093 R0011

2CDC 071 012 F0010

**BE/S 8.230.2.1**

The 8-fold Binary Input BE/S 8.230.2.1 with manual operation is a modular installation device for installation in distribution boards. The device is suitable for detection of 10…230 V AC/DC signals.

Buttons for manual operation, which can be used to simulate the input state are located on the front. The current status of the inputs is indicated via yellow LEDs.

The device is ready for operation after connecting the bus voltage.
The Binary Input is parameterized via ETS. The connection to the KNX is implemented using the bus connection terminal on the front.

**Technical data**

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|---|---|---|
| **Supply** | Bus voltage | 21…32 V DC |
| | Current consumption, bus | Maximum 6 mA |
| | Power consumption, Bus | Maximum 120 mW |
| | Leakage loss, bus | Maximum 1.5 W at AC operation<br>Maximum 3.0 W at DC operation |
| **Inputs** | Number | 8 individual |
| | Permissible voltage range Un | 0…265 V AC / DC |
| | Input current In | Maximum 1 mA |
| | Signal level for 0 signal | 0…2 V AC / DC |
| | Signal level for 1 signal | 7…265 V AC / DC |
| | Permissible cable length | Maximum 100 m at 1.5 mm² |
| **Connections** | KNX | Via bus connection terminals |
| | Inputs | Via universal head screw terminals (PZ 1) |
| **Bus connection terminals** | Screw terminal | Screw terminals with universal head (PZ 1)<br>0.2…4 mm² stranded, 2 x (0.2…2.5 mm²)<br>0.2…6 mm² single core, 2 x (0.2…4 mm²) |
| | Ferrules without/with plastic sleeves | without: 0.25…2.5 mm²<br>with: 0.25…4 mm² |
| | TWIN ferrules | 0.5…2.5 mm²<br>Contact pin length at least 10 mm |
| | Tightening torque | Maximum 0.8 Nm |
| | Grid | 6.35 |
| **Operating and display elements** | *Programming* Button<br>*Programming* LED | For assignment of the physical address |
| | Button /LED | For toggling between manual operation/ operation via ABB i-bus® and displays |
| | Button A /LED<br>(applies for all Binary Inputs, A…H) | For switching and display |
| **Enclosure** | IP 20 | To DIN EN 60 529 |
| **Safety class** | II | To DIN EN 61 140 |
| **Isolation category** | Overvoltage category | III to DIN EN 60 664-1 |
| | Pollution degree | 2 to DIN EN 60 664-1 |
| **KNX safety extra low voltage** | SELV 24 V DC | |

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|---|---|---|
| **Temperature range** | Operation | -5 °C…+45 °C |
| | Storage | -25 °C…+55 °C |
| | Transport | -25 °C…+70 °C |
| **Ambient conditions** | Maximum air humidity | 93 %, no condensation allowed |
| **Design** | Modular installation device (MDRC) | Modular installation device, Pro *M* |
| | Dimensions | 90 x 72 x 67.5 mm (H x W x D) |
| | Mounting width in space units | 4 modules at 18 mm |
| | Mounting depth | 67.5 mm |
| **Installation** | On 35 mm mounting rail | To DIN EN 60 715 |
| **Mounting position** | As required | |
| **Weight** | 0.2 kg | |
| **Housing/colour** | Plastic housing, grey | |
| **Approvals** | KNX to EN 50 090-1, -2 | Certification |
| **CE mark** | In accordance with the EMC guideline and low voltage guideline | |

| Device type | Application program | Maximum number of communication objects | Maximum number of group addresses | Maximum number of associations |
|---|---|---|---|---|
| **BE/S 8.230.2.1** | Binary 8f 23021/...* | 83 | 254 | 254 |

* … = current version number of the application program

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**Note**

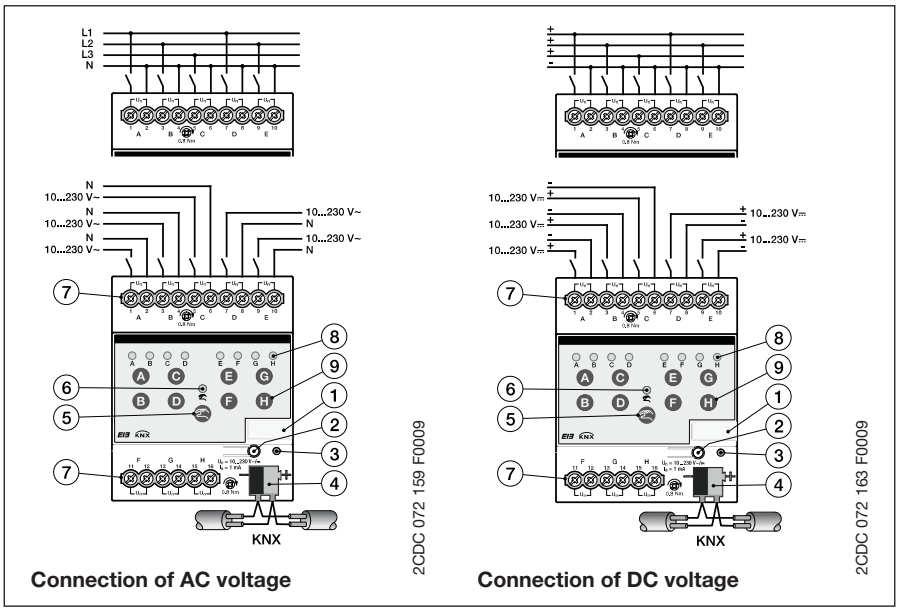
For a detailed description of the application program see „Binary Inputs“ product manual.
It is available free-of-charge at *www.ABB.de/KNX*.

The ETS and the current version of the device application program are required for programming.

The current version of the application program is available for download on the Internet at *www.abb.com/knx*. After import it is available in the ETS under *ABB/Input/Binary input 8-fold*.

The device does not support the closing function of a KNX device in the ETS. If you inhibit access to all devices of the project with a BCU code, it has no effect on this device. Data can still be read and programmed.

**Circuit diagram**
**BE/S 8.230.2.1**




**Connection of AC voltage** **Connection of DC voltage**

**1** Label carrier
**2** *Programming* button
**3** *Programming* LED
**4** Bus connection terminal
**5** *Manual operation* button
**6** *Manual operation* LED
**7** Connection terminals
**8** *Binary input* LED
**9** *Binary input* button

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| **Important** |
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| When AC voltage is connected, up to eight separate RCD (earth-leakage circuit breaker) circuits can be connected. |

| **Important** |
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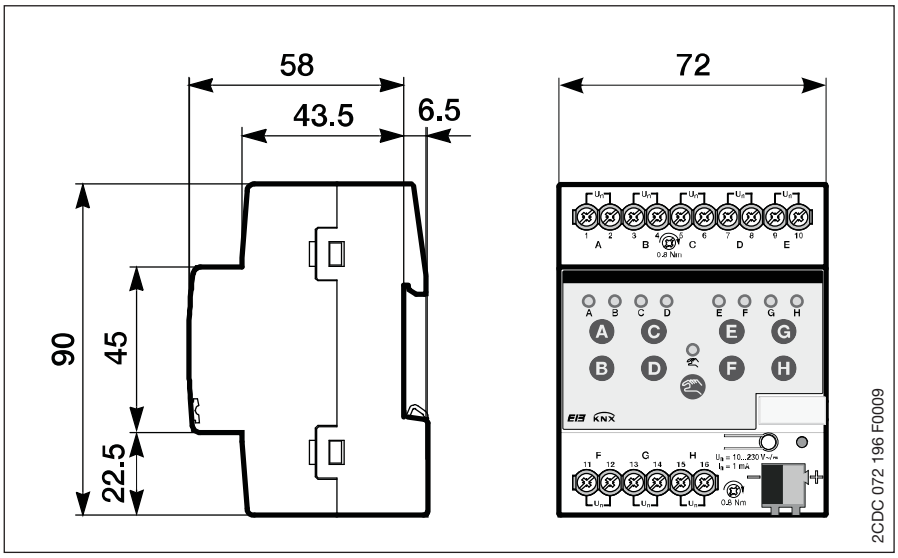
| Please observe the correct polarity when connecting DC voltage!<br>The input cannot be read and processed if incorrectly connected. |

**Dimension drawing**
**BE/S 8.230.2.1**

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