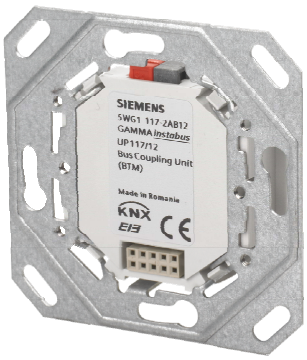
Bus Coupling Unit (BTM) UP117/12 **5WG1 117-2AB12**

Product – and Applications Description



Bus Coupling Units (BTM) UP 117 provide the connection to the bus for DELTA switches and wall box mounted control devices with Bus Transceiver Interface (BTI).

The Bus Coupling Unit (BTM) UP 117/12 comes with a mounting frame for DIN/VDE type wall boxes.

Application Programs

The Bus Coupling Unit (BTM) does not require an application program.

Example of Operation

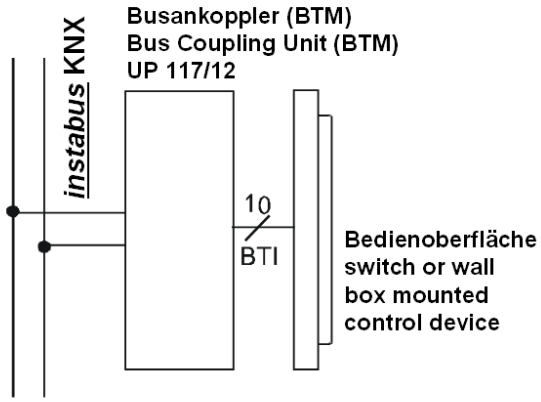


figure 1: Example of operation

Installation Instructions

- The device can be used for permanent installation in dry interior rooms, for mounting in wall boxes.

WARNING

- The device must be mounted and commissioned by an authorized electrician.
- The prevailing safety rules must be heeded.
- The device must not be opened.
- For planning and construction of electrical installations, the relevant guidelines, regulations and standards of the respective country are to be considered.

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Technical Data

Power supply
Input voltage
- Bus: DC 24V (DC 21...30V)

Output voltage and current via BTI
- DC 5V, 10mA
- DC 20V, 25mA

Operator elements
The device has no operator elements.

Display elements
The device has no display elements.

Connections
- Bus line : screwless bus connection block (red-black) 0.6...0.8 mm Ø single core
- 10-pin socket (BTI): for connection of DELTA switches and wall box mounted control devices with BTI plug

Physical specifications
- housing: plastic
- dimensions (L x W x D): 45,5 x 50 x 17,9 mm
- weight: approx. 45 g
- installation: mounted with mounting frame on DIN/VDE type wall boxes

Electrical safety
- degree of pollution (according to IEC 60664-1): 2
- protection (according to EN 60529): IP 20
- overvoltage class (according to IEC 60664-1): III
- bus: safety extra low voltage SELV DC 24 V
- the device complies with EN 50428

Electromagnetic compatibility
complies with EN 50428, EN 61000-6-2, and EN 50371

Environmental specifications
- climatic conditions: EN 50090-2-2
- ambient temperature operating: - 5 ... + 45 °C
- ambient temperature non-op.: - 25 ... + 70 ° C
- relative humidity (non-condensing): 5 % to 93 %

Markings
EIB, KNX

CE mark
complies with the EMC regulations (residential and functional buildings), and low voltage regulations

Location and Function of the Display and Operator Elements

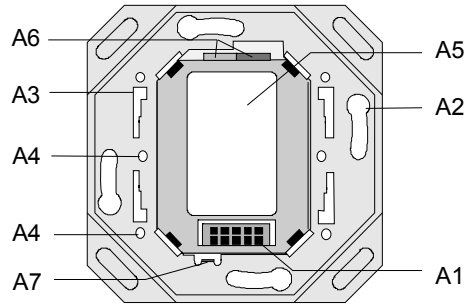

figure 2: Location and Function of the Display and Operator Elements

A1 Bus Transceiver Interface (BTI) socket for connecting an application unit with BTI plug
A2 Slots for attaching the Bus Coupling Unit (BTM) to wall boxes
A3 Slots for mounting application unit with guide and mounting clamps
A4 Thread for mounting screws (for additional support, e.g. for securing the application unit against theft)
A5 Type plate
A6 Bus connection block for single core conductors with Ø 0.6 ... 0.8 mm
A7 earthing plate

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Mounting and Wiring

General description
The connection to the bus line is established via bus connection block 193 (screwless plug-in terminals for single core conductors). The application unit is slipped onto the bus coupling unit (BTM) via guide and mounting clamps and, depending on the device type, fastened with screws.

Note

The Bus Coupling Unit (BTM) UP 117 must be mounted with the Bus Transceiver Interface (BTI) situated at the bottom (see Figure 2). Thus, the application unit will be oriented properly when slid onto the BTI. Use bus devices with mounting screws only to achieve a permanently stable contact at the BTI.

Mounting

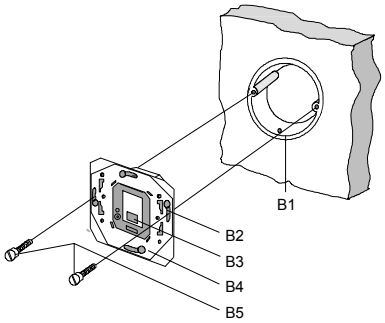

figure 3: mounting

B1 wall box (60 mm Ø, according to DIN 49073)
B2 mounting slots
B3 Bus Transceiver Interface (BTI)
B4 Bus coupling unit (BTM) UP 117
B5 mounting screws

Slipping off/on bus connection blocks

The bus connection block (C2) is situated on the back of the bus coupling unit (BTM) (C1).
It consists of two components (C2.1 and C2.2) with four terminal contacts each. Take care not to damage the two test sockets (C2.3) by accidentally connecting them to the bus cable or with the screw driver (e.g. when attempting to unplug the bus connection block).

Slipping off bus connection blocks
- Carefully put the screw driver to the wire insertion slit of the bus connection block's grey component (C2.2) and
- pull the bus connection block (C2) from the bus coupling unit (BTM) (C1).

Note

Don't try to remove the bus connection block from the bottom side. There is a risk of shorting-out the device!

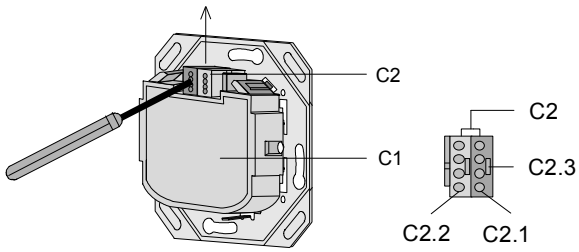

figure 4: Slipping off/on bus connection blocks (figure 3)

Slipping on bus connection blocks
- Slip the bus connection block (C2) onto the guide slot of the BTM (C1) and
- press the bus connection

Connecting bus cables
- The bus connection block (D1) can be used with single core conductors Ø 0.6...0.8 mm.
- Remove approx. 5 mm of insulation from the conductor (D2) and plug it into the bus connection block (D1) (red = +, grey = -)

Disconnecting bus cables
- Unplug the bus connection block (D1) and remove the bus cable conductor (D2) while simultaneously wiggling it.

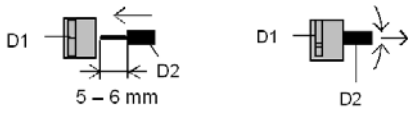

figure 5: Connecting/Disconnecting bus cables

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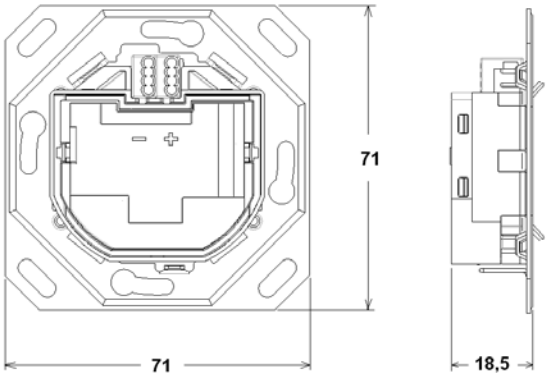
Dimension Diagram

Dimensions in mm



General Notes

- The operating instructions must be handed over to the client.
- Any faulty device is to be sent together with a return delivery note of the local Siemens office.
- For any technical questions, please consult:

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