SIEMENS

Technical Specification Sheet
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GAMMA

Bus Coupling Unit (BCU1) UP 110/03

Description

The Bus Coupling Unit (BCU) UP 110/03 connects application units (for example, Push Button UP 245) to the bus line through the physical external interface (PEI).

- Telegrams received through the bus line are processed by the BCU and passed on to the application unit.
- Signals coming from the application unit are converted into telegrams and transmitted to the bus line.

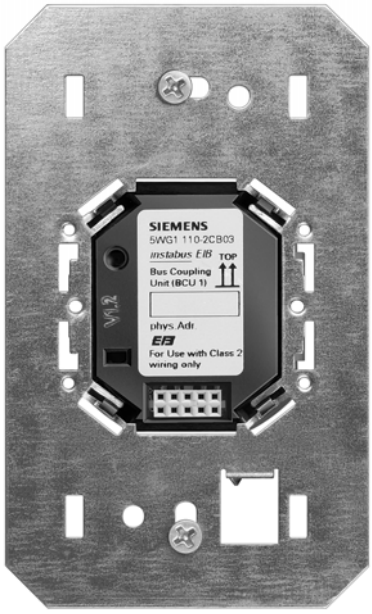
The Bus Coupling Unit UP 110/03 is directly connected to the bus line. It constantly monitors the bus and determines if the line is clear for sending or busy with other telegrams. Events, such as a switch signal, are sent immediately provided the bus is not busy. Otherwise, the sending request is postponed until the line is clear.

The BCU is designed for mounting on NEMA wall boxes or for attaching to data rings directly in the wall. The connection to the bus line is established through the Bus Terminal.

The application units are snapped onto the BCU and secured with screws or clamps.

If it is connected to the bus with reversed polarity, the Bus Coupling Unit UP 110/03 switches off (reverse voltage protection). If the bus line voltage falls below the minimum voltage of approximately 21 Vdc, the application parameters and addressing is saved to the BCU's EEPROM.

The BCU mounting frame is designed to accept a DELTA profil design frame, which must be ordered separately.



Application Programs

The Bus Coupling Unit (BTM) does not require an application program. The description of the application programs is included in the documentation for the application unit that is connected to the BCU.

With the ETS (Engineering Tool Software) the application program associated with the connected device is selected, its parameters and addresses are assigned appropriately and downloaded to the Bus Coupling Unit.

Specifications

Power Supply	Rated voltage: 24 Vdc Bus voltage: 21 to 30 Vdc (Class 2) provided through the bus line
Power Input	Maximum 150 mW
Physical External Interface Application Unit	Supply voltage: 5 Vdc and/or 24 Vdc Power intake: maximum 50 mW
Control Elements	1 mode button: for switching between normal operating mode and addressing mode.
Display Elements	1 red LED: for displaying normal operating mode (OFF) and addressing mode (ON).
Connections	Bus line: Bus terminal (red–black): 20 to 18 AWG solid copper wire (Ø 0.6 to 0.8 mm single core). 10-pin socket (PEI): for connecting an application unit
Physical Specifications	Housing: plastic Dimensions: Height × width: 4.5" × 2.7" (115 mm × 69 mm) Mounting depth: 1.02" (26 mm) Weight: Approximately 2.4 oz. (68 g) Installation: mounting on NEMA-type wall boxes or data rings minimum interior wall box size (H × W × D): 3.5" × 1.97" × 1.57" (89 mm × 50 mm × 40 mm)
Electromagnetic Compatibility	Complies with EN 50090-2-2.
Environmental Conditions	Ambient operating temperature: 23°F to 113°F (-5°C to 45°C) Storage temperature: -13°F to 158°F (-25°C to 70°C) Relative humidity (non-condensing): 5% to 93%
Certification	KNX/EIB certificate
CE marking	Complies with the EMC regulations (residential and commercial/industrial buildings), and low voltage regulations

Ordering Information

Part Number	Description
5WG11102CB03	Bus Coupling Unit-BCU1

Accessories

5WG12408CB11	Frame, DELTA profil, 2 × 4 Wall Mount, 10-pack

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