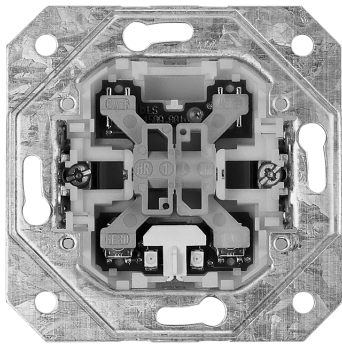


**DELTA Bus Coupling Unit UP 116
without physical external interface**
5WG1 116-2AB...

Product and Applications Description



The DELTA bus coupling unit UP 116 is available in the below variants:

two-state-switch type, single	5WG1 116-2AB01
two-state-switch type, 2-fold	5WG1 116-2AB11
push-button type, single	5WG1 116-2AB21
push-button type, 2-fold	5WG1 116-2AB31

Rocker switches from conventional DELTA switches series can be slid onto a DELTA bus coupling unit UP 116. According to their configuration (single or 2-fold) the single or 2-fold rocker switches can be used with or without window. Additionally, two LEDs are available for displaying the current state or for use as an orientation light (can be set in the parameter list). The LEDs are powered by the bus voltage.

Two state switch types have two switching points, they can be operated by pushing the top and bottom. Push-button types have only one (rocking down) switching point.

The single and 2-fold rocker switches slide onto the bus coupling unit UP 116 together with their frames.

The DELTA bus coupling unit UP 116 requires an appropriate application program to work properly, i.e. it consists of the devices (hardware) and the application program (software).

The single or 2-fold rocker switches and appropriate frames are not included and therefore have to be ordered separately.

With the ETS (*EIB Tool Software*) the application program is selected, the appropriate parameters and addresses are assigned and downloaded.

Accessories

- Rocker switches and frames from the conventional DELTA switches series

Application Programs

12 S1 On-off-toggle/Dim/Shu/Display 211101

- two-state-switch type, single
- 1 x switching on- off or toggle or
- 1 x dimming or 1 x shutter control
- 2 x status display and 1 x orientation light

12 S2 On-off-toggle/Dim/Shu/Display 221001

- two-state-switch type, 2-fold
- 2 x switching on- off or toggle or
- 2 x dimming or 2 x shutter control or
- 1 x dimming and 1 x shutter control
- 2 x status display and 1 x orientation light

12 S1 On-off-toggle/Display 210F01

- push-button type, single
- 1 x switching on- off or toggle or
- 1 x status display and 1 x orientation light

12 S2 On-off-toggle/Dim/Shu/Display 220F01

- push-button type, 2-fold
- 2 x switching on- off or toggle or
- 1 x dimming or 1 x shutter control
- 2 x status display and 1 x orientation light

Installation Instructions

- The device may be used for permanent interior installations in dry locations within box mounts.



WARNING

- The device must be mounted and commissioned by an authorised electrician.
- The device must not be connected to 230 V or mounted in box mounts together with 230 V devices and/or 230 V cables.
- The device may be mounted to switch and socket combination box mounts if VDE-certified devices are used exclusively.
- The mounting hanger must not be earthed.
- The prevailing safety rules must be heeded.
- The device must not be opened.
- For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.

**DELTA Bus Coupling Unit UP 116
without physical external interface****5WG1 116-2AB...****Technical Specifications****Power supply**

via bus cable

Operator elements

1 learning button (combined with LED):
for switching between normal operating mode and
addressing mode

Display elements

- 1 red LED (combined with learning button):
for monitoring bus voltage and displaying mode,
selected with the learning button
- 2 red LEDs:
for use as orientation lights or for displaying the
current state (can be set in the parameter list)

Connections

- bus line, screwless bus connection block:
Ø 0,6 ... 0,8 mm single core
remove approx. 5mm of isolation
- single or twin rocker switch levers (as appropriate for
configuration) for sliding on DELTA rocker switches

Physical specifications

- housing: plastic
- dimensions:
 - W x H: 71 x 71 mm
 - mounting depth: 32 mm
- weight: approx. 80 g
- fire load: approx. 406 kJ ± 10 %
- installation:
 - when connecting to a single bus cable only:
box mount: Ø 60 mm, 40 mm deep
 - when connecting to more than one bus cable
(looped through):
junction box mount: Ø 60 mm, 60 mm deep

Electrical safety

- degree of pollution (according to IEC 60664-1): 2
- protection (according to EN 60529): IP 20
- protection class (according to IEC 61140): III
- overvoltage class (according to IEC 60664-1): III
- bus: safety extra low voltage SELV DC 24 V
- device complies with
EN 50090-2-2 and IEC 60664-1: 1992

Reliability

rate of failure: 235 fit at 40 °C

Electromagnetic compatibility

complies with
EN 50081-1, EN 50082-2 and EN 50090-2-2

Environmental specifications

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

Certification

EIB certificate

CE norm

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

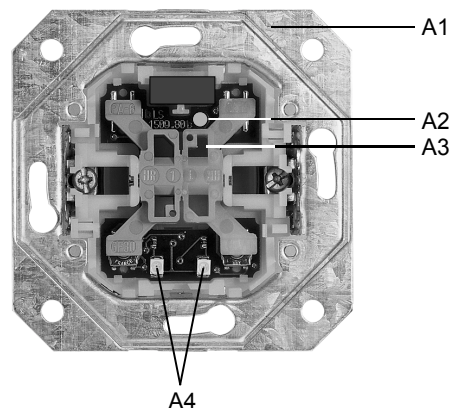
**Location and Function of the Display and
Operator Elements**

Figure 1: Location of the display and operator elements

- A1 Mounting hanger
- A2 Learning button for switching between normal
operating mode and addressing mode combined
with the
LED for indicating normal operating mode (LED
off) and addressing mode (LED on); upon receiv-
ing the physical address the device automatically
returns to normal operating mode
- A3 Single or double switching lever (depending on
configuration) for plugging on a DELTA rocker
- A4 LEDs for displaying states or for use as orientation
lights

**DELTA Bus Coupling Unit UP 116
without physical external interface**

5WG1 116-2AB...

Mounting and Wiring

General description

The bus coupling unit is mounted to installation boxes, \varnothing 60 mm with screws and/or mounting clamps. The connection to the bus line is established via bus connection block 193 (screwless plug-in terminals for single core conductors).

Slipping off bus connection blocks (Figure 2)

- The bus connection block (B2) is situated on the back of the bus coupling unit (B1). It consists of two components (B2.1 and B2.2) with four terminal contacts each. Take care not to damage the two test sockets (B2.3) by accidentally connecting them to the bus cable or with the screw-driver (e.g. when attempting to unplug the bus connection block).
- Carefully put the screw driver to the wire-inserting slit of the bus connection block's grey component (B2.2) and pull the bus connection block (B2) from the bus coupling unit (B1) as shown by the arrow.

Note

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

Slipping on bus connection blocks (Figure 2)

- Slip the bus connection block (B2) onto the guide slot of the bus coupling unit (B1)
- press the bus connection block (B2) down to the stop.

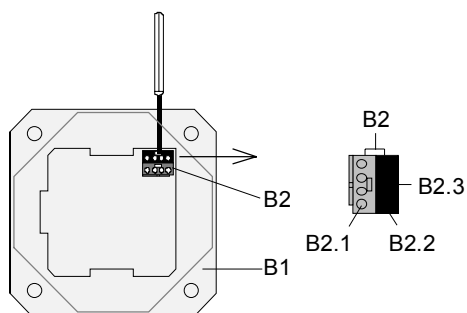


Figure 2: Attaching and removing a bus connection

Connecting bus cables (figure 3)

- The bus connection block (C1) can be used with single core conductors \varnothing 0,6 ... 0,8 mm.
- Remove approx. 5 mm of insulation from the conductor (C2) and plug it into the bus connection block (C1) (red = +, grey = -).

Disconnecting bus cables (figure 3)

- Unplug the bus connection block (C1) and remove the bus cable conductor (C2) while simultaneously wiggling it.

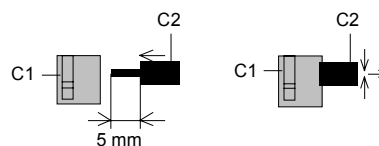


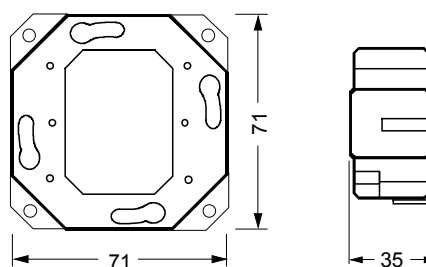
Figure 3: Connecting/disconnecting a bus cable

Note

If using two-state-switch type DELTA bus coupling units: If using the DELTA fläche switches series you need special *instabus* EIB rockers. If using the DELTA profil switches series you have to remove the colourless rubber pins from the backside of the rockers.

Dimension Diagram

Dimensions in mm



General Notes

- Any faulty devices should be returned to the local Siemens office.
- If you have further questions about the product, please contact our Technical Support:

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 ☎ +49 (0) 180 50 50-223
 ✉ adsupport@siemens.com