

Product and functional description



The push button AP 115 is available in the following designs:

Neutral position, 1-fold, with window	5WG1 115-3AB01
Neutral position, 2-fold	5WG1 115-3AB11
Switch position, 1-fold, with window	5WG1 115-3AB21
Switch position, 2-fold	5WG1 115-3AB31

The push button AP 115 is a complete device from the splash-proof DELTA fläche range and is suitable for surface mounting with protection type IP 44. It consists of housing, rocker(s) and a bus coupling unit. Depending on the design (1-fold or 2-fold), single rockers with a window or twin rockers without a window are available.

There are also two LEDs which can either be used for status display or as an orientation light (selectable). The LEDs are supplied via the bus voltage. The LEDs are however only visible externally in the 1-fold push button with a window. It is therefore a good idea only to control the LEDs with these devices.

In the neutral position variant, both the upper and lower rocker contact can be operated (two switch contacts per rocker); in the switch position variant, only the lower rocker contact can be operated (one switch contact per rocker).

The push button AP 115 can only function with an appropriate application program i.e. the push button consists of the device (hardware) and the application program (software).

Using the ETS program (*EIB Tool Software*), the application programs can be selected and the specific parameters and addresses can be assigned.

Application programs

12 S1 On-off-toggle/Dim/Shu/Display 211001

- Single rocker for dimming, shutter control or on/off/toggle
- LED for status display or as orientation light

12 S1 On-off-toggle/Display 210F01

- Single rocker for on/off/toggle
- LED for status display or as orientation light

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

- Twin rocker for dimming, shutter control or on/off/toggle
- LED for status display or as orientation light

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

- Twin rocker for dimming, shutter control or on/off/toggle
- LED for status display or as orientation light

Installation instructions

- The device can be used for permanent interior and outdoor installations and wherever the protection type IP 44 is required.



WARNING

- The device may only be installed and commissioned by an authorised electrician.
- The device may not be connected to 230 V.
- It is not permitted to lead 230 V cables into the device and/or loop them through the device.
- The device may be used in switch sockets, if VDE approved devices have been used.
- The prevailing safety and accident regulations must be observed.
- The bus coupling unit may not be opened. Any faulty devices should be returned to the local Siemens office.

Technical data**Power supply**

via the bus line

Operating elements

1 learning button (combined with the display LED):
for toggling between normal mode/addressing mode

Display elements

- 1 red display LED (combined with the learning button):
for checking the bus voltage and for displaying normal mode/addressing mode
- 2 red LEDs (always switched together):
as an orientation light or for status display (selectable),
only advisable for 1-fold push button AP 115 with
window

Connections

- Bus line: screwless bus terminal
0.6 ... 0.8 mm \varnothing single core

Mechanical data

- Housing: plastic housing
- Dimensions (L x W x D): 75 x 66 x 52 mm
- Weight: approx. 120 g
- Fire load: approx. 2500 kJ \pm 10 %
- Installation:
 - surface-mounted, fixing drill holes:
4.5 mm \varnothing drill template supplied
 - cable entry for the bus cable via sliding nipple

Electrical safety

- Pollution degree (according to IEC 664-1): 2
- Type of protection (according to EN 60529): IP 44
- Protection class (according to IEC 1140): III
- Overvoltage category (according to IEC 664-1): III
- Bus: safety extra-low voltage SELV DC 24 V
- Device complies with
EN 50090-2-2 and IEC 664-1: 1992

Reliability

Failure rate: 254 fit for 40 °C (switch position)
262 fit for 40 °C (neutral position)

EMC requirements

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

Environmental conditions

- Climatic withstand capability: EN 50090-2-2
- Ambient operating temperature: - 5 ... + 45 °C
- Storage temperature: - 25 ... + 70 °C

- Relative humidity (not condensing): 5 % to 93 %

Approval

EIB-certified

CE mark

in accordance with the EMC guideline (residential and
functional buildings) and the low voltage guideline

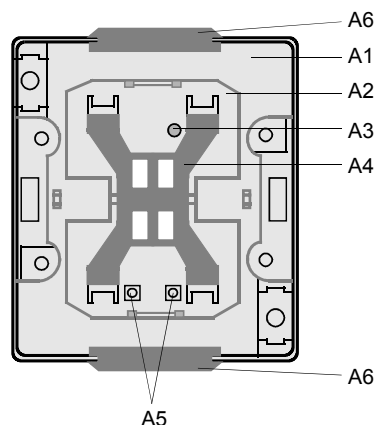
Location and function of the operating and display elements

Diagram 1: Location of the display and
operating elements

- A1 Housing
- A2 Bus coupling unit
- A3 Learning button for toggling between normal mode and addressing mode for transferring the physical address. It is combined with an LED for displaying the normal mode (LED off) or addressing mode (LED on); it is extinguished automatically once the physical address has been transferred.
- A4 Single or twin operating lever (depending on the design) for plugging in the rockers
- A5 LEDs as an orientation light or for status display (only visible externally for 1-fold push button with window)
- A6 Sliding nipple for cable entry

Push button AP 115

5WG1 115-3AB_1

Mounting and wiring

General description

The push buttons AP 115 are surface mounted using screws. All the components (housing, rocker(s), bus coupling unit) are supplied already assembled and screwed together using the relevant screws. The screws are only loosely screwed in and can be accessed by removing the rocker(s).

Once the housing has been mounted for example on the wall, the bus cable is fed into the housing through the sliding nipple and wired accordingly.

The device is connected to the bus line via the bus terminal 193 (screwless plug-in terminals for single core conductors).

The rocker mount (dark grey frame) is then screwed in place using the screws supplied and the rocker(s) is clipped on.

Note:

Once the rocker mount has been screwed together, the learning button is no longer accessible i.e. the physical address should be set beforehand.

Removing the bus terminal (Diagram 2)

- The bus terminal (B2) is located at the back of the bus coupling unit (B1).

The bus terminal (terminal block) (B2) consists of two sections (B2.1, B2.2), each with four terminal contacts. Care should be taken not to damage the two test sockets (B2.3) either by accidentally connecting them to the bus conductor or with the screwdriver when attempting to remove the bus terminal.

- Carefully insert the screwdriver in the wire entry slot in the grey section of the bus terminal (B2.2) and remove the bus terminal (B1) in the direction of the arrows.

Note

Do not lift the bus terminal out sideways as there is a risk of shorting the device.

Plugging in the bus terminal (Diagram 2)

- Place the bus terminal (B2) in the guide slot of the bus coupling unit (B1) and
- press the bus terminal (B2) inwards until it reaches the stop.

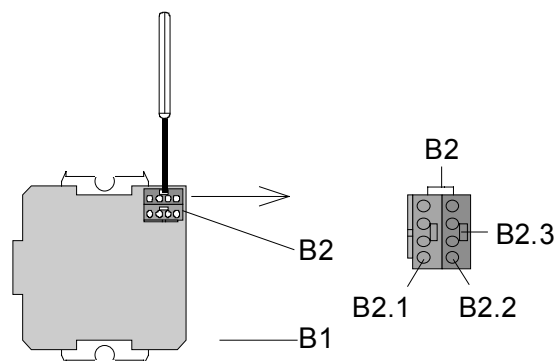


Diagram 2: Removing/plugging in the bus terminal

Connecting the bus cable (Diagram 3)

- The bus terminal (C1) is suitable for single core conductors with 0.6... 0.8 mm Ø.
- Strip the insulation from the conductor (C2) and plug in the terminal (C1) (red = +, black = -)

Disconnecting the bus terminal (Diagram 3)

- Remove the bus terminal (C1) and the conductor (C2) of the bus cable by rotating them simultaneously backwards and forwards.

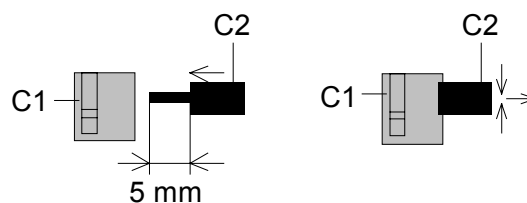
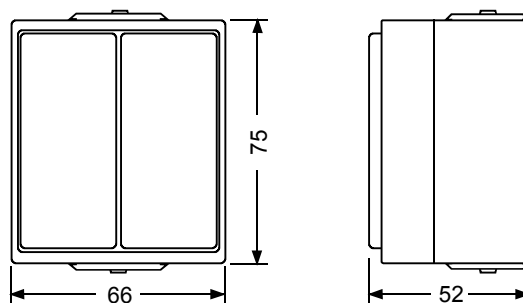


Diagram 3: Connecting/disconnecting the bus cables

Dimension drawing

Dimensions in mm



Space for notes