# SIEMENS

March 2008

DELTA profil	Pushbutton single	UP 241,	neutral	5WG1 241-2AB_1
		UP 242,	with I/O symbols	5WG1 242-2AB_1
	Pushbutton double	UP 243,	neutral	5WG1 243-2AB_1
		UP 244,	with I/O symbols	5WG1 244-2AB_1
	Pushbutton quadruple	UP 245,	neutral	5WG1 245-2AB_1
		UP 246,	with I/O symbols	5WG1 246-2AB_1
DELTA style	Pushbutton single	UP 285,	neutral	5WG1 285-2AB_1
	Pushbutton double	UP 286,	neutral	5WG1 286-2AB_1
	Pushbutton quadruple	UP 287,	neutral	5WG1 287-2AB_1
	Pushbutton quadruple	UP 287,	neutral	5WG1 287-2AB_1





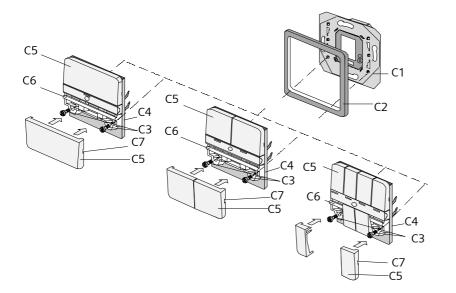
Product		DELTA profil		DELTA style	
Pushbutton single, neutral	0	pearl grey titanium white anthracite silver	5WG1 241-2AB01 5WG1 241-2AB11 5WG1 241-2AB21 5WG1 241-2AB71	basalt black / metallic silver titanium white basalt black platinum metallic titanium white / metallic silver	5WG1 285-2AB01 5WG1 285-2AB11 5WG1 285-2AB21 5WG1 285-2AB41 5WG1 285-2AB81
Pushbutton single, with I/O symbols		pearl grey titanium white anthracite silver	5WG1 242-2AB01 5WG1 242-2AB11 5WG1 242-2AB21 5WG1 242-2AB71		
Pushbutton double, neutral		pearl grey titanium white anthracite silver	5WG1 243-2AB01 5WG1 243-2AB11 5WG1 243-2AB21 5WG1 243-2AB71	basalt black / metallic silver titanium white basalt black platinum metallic titanium white / metallic silver	5WG1 286-2AB01 5WG1 286-2AB11 5WG1 286-2AB21 5WG1 286-2AB41 5WG1 286-2AB81
Pushbutton double, with I/O symbols		pearl grey titanium white anthracite silver	5WG1 244-2AB01 5WG1 244-2AB11 5WG1 244-2AB21 5WG1 244-2AB71		
Pushbutton quadruple, neutral		pearl grey titanium white anthracite silver	5WG1 245-2AB01 5WG1 245-2AB11 5WG1 245-2AB21 5WG1 245-2AB71	basalt black / metallic silver titanium white basalt black platinum metallic titanium white / metallic silver	5WG1 287-2AB01 5WG1 287-2AB11 5WG1 287-2AB21 5WG1 287-2AB41 5WG1 287-2AB81
Pushbutton quadruple, with I/O symbols		pearl grey titanium white anthracite silver	5WG1 246-2AB01 5WG1 246-2AB11 5WG1 246-2AB21 5WG1 246-2AB71		

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		UP 244,	with I/O symbols	5WG1 244-2AB_1
	Pushbutton quadruple	UP 245,	neutral	5WG1 245-2AB_1
		UP 246,	with I/O symbols	5WG1 246-2AB_1
DELTA style	Pushbutton single	UP 285,	neutral	5WG1 285-2AB_1
	Pushbutton double	UP 286,	neutral	5WG1 286-2AB_1
	Pushbutton quadruple	UP 287,	neutral	5WG1 287-2AB_1
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Product	DELTA profil	DELTA style		
France	ordered separately from the DELTA ranges			
Frame	cut-out frames			
Bus coupling unit	UP 110; UP 114			



- C1 Bus coupling unit
- C2 Frame
- C3 Fixing screws \*)
- C4 Basic pushbutton module \*)
- C5 Rockers \*)
- C6 Mounting rack \*)
- C7 Recess \*)

Diagram 1: Mounting the pushbutton

#### **Product and Applications Description**

There is an upper and a lower operating field on the pushbuttons. In the middle of the pushbutton there is a note panel in which pictograms can be inserted. This panel also contains display elements (LEDs) for orientation lighting and also for status displays. Opposing rockers are combined to form a pair e.g. for defined switching, dimming, controlling shutters and blinds.

It is also possible to carry out the switching functions ON and OFF e.g. via a pushbutton "UP".

Using an application program, the flush-mounted pushbuttons give commands via the flush-mounted bus coupler for example to actuators for defined switching on/off, for dimming lamps, raising/lowering shutters or for louvre adjustment or other parameterisable functional units. The device pushbutton is placed together with the relevant DELTA frame on the flush-mounted bus coupler and can only function in combination with the bus coupler UP and an appropriate application program, i.e. the pushbuttons (with bus coupler UP) consist of the devices (hardware) and the application programs (software).

The bus coupler UP and the relevant frame are not supplied with the device but must be ordered separately.

Using the ETS program, the application programs can be selected and the specific parameters and addresses can be assigned.

UP 24x-28x\_Taster, 7 pages

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<sup>\*)</sup> Scope of supply

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	Pushbutton quadruple	UP 245,	neutral	5WG1 245-2AB_1
		UP 246,	with I/O symbols	5WG1 246-2AB_1
DELTA style	Pushbutton single	UP 285,	neutral	5WG1 285-2AB_1
	Pushbutton double	UP 286,	neutral	5WG1 286-2AB_1
	Pushbutton quadruple	UP 287,	neutral	5WG1 287-2AB_1

#### **Application Programs**

#### Pushbutton single

#### 12 S1 On-off-toggle/Dim/Shu/Display 211301

- Pushbutton for
  - switching On / OFF / toggle
  - dimming
  - blinds control
- 1 LED for status indication or orientation light
- 1 LED orientation light

#### 20 S1 Rocker (BCU2) 907402

(when using UP 114)

- Pushbutton for
  - switching On / OFF / toggle / bell function
  - dimming
  - 8 bit value
  - blinds control
  - scene 1 bit (recall/store)
- separate pushbutton objects for switching and value
- 1 LED for status indication via a separate LED object
- 1 LED orientation light

#### Pushbutton double

#### 12 S2 On-off-toggle/Dim/Shu/Display 221301

- Pushbutton for
  - switching On / OFF / toggle
  - dimming
  - blinds control
- 2 LEDs for status indication or orientation light
- 1 LED orientation light
- 20 S2 Rocker (BCU2) 907502

(when using UP 114)

- Pushbutton for
  - switching On / OFF / toggle / bell function
  - dimming
  - 8 bit value
  - blinds control
  - scene 1 bit (recall/store)
- separate pushbutton objects for switching and value
- 2 LEDs for status indication via separate LED objects
- 1 LED orientation light

#### Pushbutton quadruple

#### 12 S4 On-off/Dim/Shutter 241301

- Pushbutton for
  - switching On / OFF / toggle
  - dimming
  - 8 bit value
  - blinds control
- 4 LEDs for status indication or orientation light
- 1 LED orientation light

#### 12 S4 On/Off/Toggle/Value 241901

- Pushbutton for
  - switching On / OFF / toggle / bell function
- 8 bit value separate pushbutton objects
- 4 LEDs for status indication or orientation light
- 1 LED orientation light

#### 20 S4 Rocker (BCU2) 907602

#### (when using UP 114)

- Pushbutton for
  - switching On / OFF / toggle / bell function
  - dimming
  - 8 bit value
  - blinds control
  - scene 1 bit (recall/store)
- · separate pushbutton objects for switching and value
- 4 LEDs for status indication via separate LED objects
- 1 LED orientation light

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#### **Technical Product Information**

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	UP 244,	with I/O symbols	5WG1 244-2AB_1
Pushbutton quadruple	UP 245,	neutral	5WG1 245-2AB_1
	UP 246,	with I/O symbols	5WG1 246-2AB_1
Pushbutton single	UP 285,	neutral	5WG1 285-2AB_1
Pushbutton double	UP 286,	neutral	5WG1 286-2AB_1
Pushbutton quadruple	UP 287,	neutral	5WG1 287-2AB_1
	Pushbutton double Pushbutton quadruple Pushbutton single Pushbutton double	UP 242, Pushbutton double UP 243, UP 244, Pushbutton quadruple UP 245, UP 246, Pushbutton single UP 285,	UP 242,with I/O symbolsPushbutton doubleUP 243,neutralUP 244,with I/O symbolsPushbutton quadrupleUP 245,neutralUP 246,with I/O symbolsPushbutton singleUP 285,neutralPushbutton doubleUP 286,neutral

#### Installation instructions

• The device can be used for permanent interior installations, in dry rooms and for insertion in flush-type boxes.

### \land DANGER

- The device may only be installed and commissioned by an authorized electrician.
- The device may not be inserted in the same box as 230 V devices.
- 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 device may not be opened.
- For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.

#### **Technical data**

#### Power supply

• via the flush-mounted bus coupler

#### **Operating elements**

- 1, 2 or 4 pairs of rockers, idle in the middle position
- Number of switching cycles: > 20,000

#### **Display elements**

- per pair of pushbuttons 1 LED red for status display e.g. pushbutton quadruple = 4 LEDs
- 1 LED red for orientation light

#### Connections

• 10-pole plug connector (PEI): for connection to the flush-mounted bus coupler

#### Mechanical data

- Housing: plastic
- Dimensions:
  - DELTA profil (L x W x D ): 65 x 65 x 11 mm
  - DELTA style (L x W x D): 68 x 68 x 14 mm
- Weight: approx. 40 g
- Fire load: approx. 950 kJ  $\pm$  10 %
- Mounting: placed on the flush-mounted bus coupler

#### **Electrical safety**

- Degree of pollution (according to IEC 60664-2): 2
- Type of protection (according to EN 60529): IP 20
- Protection class (according to IEC 61140): III
- Overvoltage category (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: 27 fit at 40° C

#### **EMC requirements**

• complies with EN 50081-1, EN 61000-6-2 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 %

#### Markings

• KNX / EIB

#### CE mark

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

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Update: http://www.siemens.de/gamma

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	Pushbutton quadruple	UP 245,	neutral	5WG1 245-2AB_1
		UP 246,	with I/O symbols	5WG1 246-2AB_1
DELTA style	Pushbutton single	UP 285,	neutral	5WG1 285-2AB_1
	Pushbutton double	UP 286,	neutral	5WG1 286-2AB_1
	Pushbutton quadruple	UP 287,	neutral	5WG1 287-2AB_1

## Location and function of the operating and display elements

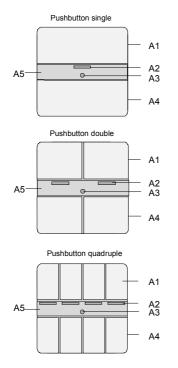


Diagram 2: Location of display and operating elements

- A1 Upper operating field
- A2 LEDs for display
- A3 LED as an orientation light
- A4 Lower operating field
- A5 Cover for pictograms

#### Mounting

#### General description

The pushbutton is placed together with the relevant frame on the flush-mounted bus coupler. The flush-mounted bus coupler (C1) is connected to the flush-type box and fixed in position (refer to the installation instructions for the bus coupler).

#### Mounting sequence

• Place the basic pushbutton module (C4, diagram 3) with the relevant frame (C2) on the flush-mounted bus coupler (C1) and press the one strongly upon the other.

Using fixing screws:

• If the fixing screws (C3) are used first of all the rockers (C5) have to be lifted out altogether. This can be achieved by inserting the screwdriver between the frames in the recess (C7) and applying leverage (diagram 4).

Important: The pushbutton module (C4, diagram 3) and the rockers (C5) together with the frame (C2) must be held down / pressed down.

- Screw down the fixing screws (C3).
- The rockers (C5) have to be orientated properly and clicked upon the mounting rack (C6).

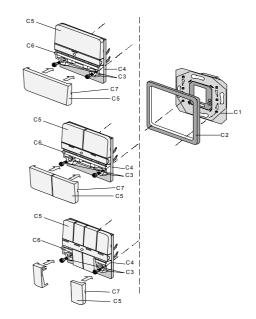


Diagram 3: mounting sequence

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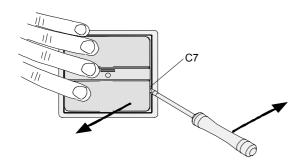
#### GAMMA <u>instabus</u>

#### **Technical Product Information**

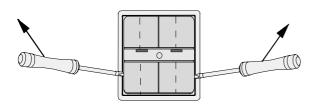
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	Pushbutton quadruple	UP 245,	neutral	5WG1 245-2AB_1
		UP 246,	with I/O symbols	5WG1 246-2AB_1
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	Pushbutton quadruple	UP 287,	neutral	5WG1 287-2AB_1

#### Drawing for mounting the fixing screws



Pushbutton single



Pushbutton double / pushbutton quadruple Holding down as shown with pushbutton single

Diagram 4: Lifting out the rockers

#### Inserting pictograms

• Lift out the pictogram cover (A5) with the screwdriver by applying leverage, during this hold down the pushbutton module (C4).

DELTA profil

• Insert the screwdriver into the slot (A2) until it reaches the stop and then wiggle it.

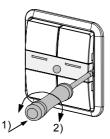
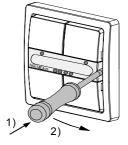


Diagram 5: Lifting out the pictogram cover

- Lay the pictograms onto the foundation.
- Snap on the pictogram cover (A5) again.

#### DELTA style



- 1) Insert the screwdriver between the frame and the pushbutton module.
- 2) Swivel the screwdriver towards the wall.

Diagram 6: Lifting out the pictogram cover

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		UP 246,	with I/O symbols	5WG1 246-2AB_1
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	Pushbutton quadruple	UP 287,	neutral	5WG1 287-2AB_1

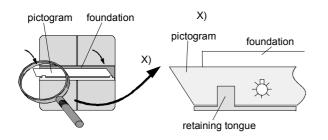


Diagram 7: inserting the pictograms

• Snap on the pictogram cover (A5) again

#### Dismantling

#### Without fixing screws

- Remove the pushbutton (C4, diagram 3) completely together with the frame from the flush-mounted bus coupler (C1):
  - a) with the mere hand
  - b) with a screwdriver beneath the frame / wall

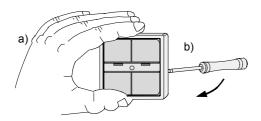


Diagram 8: Dismantling

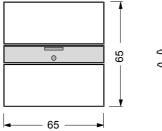
#### With fixing screws

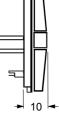
- Remove the rockers as described at "Mounting / using fixing screws".
- Screw out the fixing screws (C3)
- Snap on the rockers (C5) again
- Remove the whole pushbutton module (C4) as described at " Without fixing screws ".

#### **Dimension Diagram**

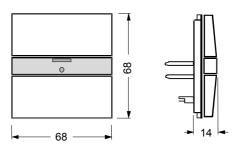
Dimensions in mm







DELTA style



#### **General Notes**

- The operating instructions must be handed over to the client.
- Any faulty device should be returned to the local Siemens office.
- If you have further questions concerning the product please contact our technical support:
- +49 (180) 5050-222
- 📇 +49 (180) 5050-223
- www.siemens.com/automation/support-request

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