

12 S4 On-Off/Dim/Shutter 241401**Use of the application program**

Product family: Push button
Product type: Push button, 4-fold
Manufacturer: Siemens

Name: Push button UP 284, 4-fold,
arctic white / arctic white
DELTA ambiente
Order no.: 5WG1 284 -2AB01

Name: Push button UP 284, 4-fold,
arctic white / soft
DELTA ambiente
Order no.: 5WG1 284 -2AB02

Name: Push button UP 284, 4-fold,
arctic white / steel
DELTA ambiente
Order no.: 5WG1 284 -2AB03

Name: Push button UP 284, 4-fold, royal blue
DELTA ambiente
Order no.: 5WG1 284 -2AB11

Name: Push button UP 284, 4-fold, cosmos grey
DELTA ambiente
Order no.: 5WG1 284 -2AB21

Functional description

With the application program "12 S4 On-Off/Dim/Shutter 241401", the four rockers of the 4-fold push button UP 284 DELTA ambiente can be assigned the following functions independently of each other: switching, shutter control, dimming, value setting, status display via LED.

The function of the respective push button is set via the parameter "Function of upper / lower push buttons". The parameter window for the push button changes depending on the function that is set in this parameter and the necessary parameters are displayed with default settings. The objects that are required for the setting are also displayed in the object list and the object types of these objects are modified for the respective push button (e.g. from switching (1 bit) to dimming (4 bit)).

Push button functions

The four push buttons can be assigned different functions. This is carried out via the relevant parameter setting in the parameter window of the push button:

Switching:

The corresponding signal (ON/OFF) is sent when one of the rocker contacts is pressed.

Shutter:

When the push button is pressed briefly, a switching signal is sent which adjusts the louvres or stops shutter movement. After a long push button action, the shutters are raised or lowered.

Dimming:

Switching and dimming functions (On/Off or brighter/darker). A distinction is made between a long and short push button action. A short push button action sends a switching command (e.g. upper contact "ON", lower contact "OFF"). If the push button is pressed for a longer period (the duration of which can be set), a dimming command is sent (upper contact "brighter", lower contact "darker"). A stop telegram is sent when the push button is released.

Value:

Values are assigned to the rocker contacts of the push buttons when assigning parameters. When a contact is pressed, a 1 byte telegram is sent which contains the previously set value.

LED display:

It is possible to use the four LEDs for status display (On/Off) or no display. The LED in the centre of the push button can be permanently switched on or off and thus serves as an additional orientation light.

Maximum number of group addresses: 12
Maximum number of associations: 12

Application program description

September 2001

12 S4 On-Off/Dim/Shutter 241401

Parameters

General:

General	Small buttons left	Large buttons left	Large buttons right	Small buttons right
Long switch operation min. (for dimming or shutter)	0.5 seconds			
Orientation light (LED)	On			

Parameters	Settings
Long switch operation min. (for dimming or shutter)	0.3; 0.4; 0.5 ; 0.6; 0.8; 1.0; 1.2; 1.5; 2.0; 2.5; 3.0; 4.0; 5.0; 6.0; 7.0 seconds
This parameter defines the time limit for a short/long push button action. If a rocker contact is pressed for longer than the set period, the software detects a long push button action.	
Orientation light (LED)	On Off
It can be set via this parameter whether the LED (in the centre of the push button) should be used as an orientation light or always be switched off.	

Communication objects (Switch)

Phys.Addr.		Program		
No.	Function	Object name	Type	
01.01.001		12 S4 On-Off/Dim/Shutter 241401		
0	On / Off	Switch left (small rockers)	1 Bit	
2	On / Off	Switch left (large rockers)	1 Bit	
4	On / Off	Switch right (large rockers)	1 Bit	
6	On / Off	Switch right (small rockers)	1 Bit	

Obj	Function	Object name	Type	Flags
0	On / Off	Switch left (small rockers)	1 Bit	CWTU
2	On / Off	Switch left (large rockers)	1 Bit	CWTU
4	On / Off	Switch right (large rockers)	1 Bit	CWTU
6	On / Off	Switch right (small rockers)	1 Bit	CWTU

These objects are used as switching objects for the push buttons. Depending on the parameter settings (see parameter "Function of upper / lower push buttons"), either an "On" or an "Off" telegram is sent.

Note:

The view of the objects can be arranged individually i.e. this view may vary.

Parameters (Switch)

Small buttons left:

General	Small buttons left	Large buttons left	Large buttons right	Small buttons right
Function of upper / lower push buttons	On / Off			
Function of LED (small rocker top)	no display			

Parameters	Settings
Function of upper / lower push buttons	On / Off Off / On Shutter Up / Down Shutter Down / Up Dimming On / Off Value

The function of the respective push button is set via the parameter "Function of upper / lower push buttons". The parameter window for the push button changes depending on the function that is set in this parameter and the necessary parameters are displayed with default settings. The objects that are required for the setting are also displayed in the object list and the object types of these objects are modified (e.g. from switching (1 bit) to dimming (4 bit)).

The following settings are possible:

Switch (object type: 1 bit)
Shutter (object type: 1 bit)
Dimming (object type: 4 bit)
Value (object type: 1 byte)

Function of LED (small rocker top)	Status display no display
The LED of the small upper push button can be selected for status display.	

Note:

The parameter windows "Large buttons left", "Large buttons right", and "Small buttons right" can be configured in the same way as "Small buttons left".

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Communication objects (Shutter)

Phys.Addr.		Program		Type
No.	Function	Object name		
01.01.001		12 S4 On-Off/Dim/Shutter 241401		
0	Open / Closed	Louvres left (small rockers)	1 Bit	
1	Up / Down	Shutter left (small rockers)	1 Bit	
2	Open / Closed	Louvres left (large rockers)	1 Bit	
3	Up / Down	Shutter left (large rockers)	1 Bit	
4	Open / Closed	Louvres right (large rockers)	1 Bit	
5	Up / Down	Shutter right (large rockers)	1 Bit	
6	Open / Closed	Louvres right (small rockers)	1 Bit	
7	Up / Down	Shutter right (small rockers)	1 Bit	

Obj	Function	Object name	Type	Flags
0	Open / Closed	Louvres left (small rockers)	1 Bit	CT
2	Open / Closed	Louvres left (large rockers)	1 Bit	CT
4	Open / Closed	Louvres right (large rockers)	1 Bit	CT
6	Open / Closed	Louvres right (small rockers)	1 Bit	CT

These objects serve as switching objects for louvre adjustment after a short push button action. A brief operation of the upper rocker contact causes an "Off" telegram to be sent which opens the louvres by a step. A brief operation of the lower contact causes an "On" telegram to be sent which closes the louvres by a step.

A brief operation of the lower contact causes an "On" telegram to be sent which closes the louvres by a step.

1	Up / Down	Shutter left (small rockers)	1 Bit	CT
3	Up / Down	Shutter left (large rockers)	1 Bit	CT
5	Up / Down	Shutter right (large rockers)	1 Bit	CT
7	Up / Down	Shutter right (small rockers)	1 Bit	CT

These objects serve as switching objects for shutter movement after a long push button action. Pressing the upper contact for a long period raises the shutter with an "Off" telegram while the shutter is lowered with an "On" telegram when the lower contact is pressed for a long period. A brief operation of one of the push buttons during shutter movement halts the shutter.

Note:

The view of the objects can be arranged individually i.e. this view may vary.

Parameters (Shutter)

Small buttons left:

General	Small buttons left	Large buttons left	Large buttons right	Small buttons right
Function of upper / lower push buttons		Shutter Up / Down		
Function of LED (small rocker top)		no display		

Parameters	Settings
Function of upper / lower push buttons	On / Off Off / On Shutter Up / Down Shutter Down / Up Dimming On / Off Value
Function of LED (small rocker top)	no display

The function of the respective push button is set via the parameter "Function of upper / lower push buttons". The parameter window for the push button changes depending on the function that is set in this parameter and the necessary parameters are displayed with default settings. The objects that are required for the setting are also displayed in the object list and the object types of these objects are modified (e.g. from switching (1 bit) to dimming (4 bit)).

The following settings are possible:

Switch (object type: 1 bit)
Shutter (object type: 1 bit)
Dimming (object type: 4 bit)
Value (object type: 1 byte)

If a shutter function is assigned to the push button, it is not possible to configure the LED.

Note:

The parameter windows "Large buttons left", "Large buttons right", and "Small buttons right" can be configured in the same way as "Small buttons left".

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Communication objects (Dimming On / Off)

Phys.Addr.		Program		Type
No.	Function	Object name		
01.01.001	12 S4 On-Off/Dim/Shutter 241401			
0	On / Off	Dimming On / Off left (small rockers)	1 Bit	
1	Brighter / Darker	Dimming left (small rockers)	4 Bit	
2	On / Off	Dimming On / Off left (large rockers)	1 Bit	
3	Brighter / Darker	Dimming left (large rockers)	4 Bit	
4	On / Off	Dimming On / Off right (large rockers)	1 Bit	
5	Brighter / Darker	Dimming right (large rockers)	4 Bit	
6	On / Off	Dimming On / Off right (small rockers)	1 Bit	
7	Brighter / Darker	Dimming right (small rockers)	4 Bit	

Obj	Function	Object name	Type	Flags
0	On / Off	Dimming On / Off left (small rockers)	1 Bit	CWTU
2	On / Off	Dimming On / Off left (large rockers)	1 Bit	CWTU
4	On / Off	Dimming On / Off right (large rockers)	1 Bit	CWTU
6	On / Off	Dimming On / Off right (small rockers)	1 Bit	CWTU
These objects serve as switching objects after a short push button action. The following applies: Pressing the upper contact sends an "On" telegram while an "Off" telegram is sent when the lower contact is pressed.				
1	Brighter / Darker	Dimming left (small rockers)	4 Bit	CT
3	Brighter / Darker	Dimming left (large rockers)	4 Bit	CT
5	Brighter / Darker	Dimming right (large rockers)	4 Bit	CT
7	Brighter / Darker	Dimming right (small rockers)	4 Bit	CT
These objects serve as dimming objects and send a dimming telegram after a long push button action. The following applies: Pressing the upper rocker contact for a long period sends a "Dim brighter" telegram while a "Dim darker" telegram is sent when the lower contact is pressed for a long period.				

Note:

The view of the objects can be arranged individually i.e. this view may vary.

Parameters (Dimming On / Off)

Small buttons left:

General	Small buttons left	Large buttons left	Large buttons right	Small buttons right
Function of upper / lower push buttons	Dimming On / Off			
Function of LED (small rocker top)	Status display			

Parameters	Settings
Function of upper / lower push buttons	On / Off Off / On Shutter Up / Down Shutter Down / Up Dimming On / Off Value

The function of the respective push button is set via the parameter "Function of upper / lower push buttons". The parameter window for the push button changes depending on the function that is set in this parameter and the necessary parameters are displayed with default settings. The objects that are required for the setting are also displayed in the object list and the object types of these objects are modified (e.g. from switching (1 bit) to dimming (4 bit)).

The following settings are possible:

Switch (object type: 1 bit)

Shutter (object type: 1 bit)

Dimming On / Off

A short push button action generates a switching telegram. Pressing the upper contact switches on and pressing the lower contact switches off. A long operation of the upper contact produces a "Dim brighter" telegram. A stop command is sent when the rocker is released. A long operation of the lower contact produces a "Dim darker" telegram.

Function of LED (small rocker top)	Status display no display
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The LED of the small upper push button can be selected for status display.

Note:

The parameter windows "Large buttons left", "Large buttons right", and "Small buttons right" can be configured in the same way as "Small buttons left".

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Communication objects (Value)

Phys.Addr.		Program		Type
No.	Function	Object name		
01.01.001		12 S4 On-Off/Dim/Shutter 241401		
0	8 bit	Value left (small rockers)	1 Byte	
2	8 bit	Value left (large rockers)	1 Byte	
4	8 bit	Value right (large rockers)	1 Byte	
6	8 bit	Value right (small rockers)	1 Byte	

Note:

The view of the objects can be arranged individually i.e. this view may vary.

Obj	Function	Object name	Type	Flags
0	8 bit	Value left (small rockers)	1 Byte	CT
2	8 bit	Value left (large rockers)	1 Byte	CT
4	8 bit	Value right (large rockers)	1 Byte	CT
6	8 bit	Value right (small rockers)	1 Byte	CT

These objects serve as sending objects for the assigned values. Two values can be set per push button.

Parameters (Value)

Small buttons left:

General	Small buttons left	Large buttons left	Large buttons right	Small buttons right
Function of upper / lower push buttons	<input type="button" value="Value"/>			
Function of LED (small rocker top)	<input type="button" value="no display"/>			
Value upper contact (0-255)	<input type="button" value="255"/>			
Value lower contact (0-255)	<input type="button" value="0"/>			

Parameters	Settings
Function of upper / lower push buttons	On / Off Off / On Shutter Up / Down Shutter Down / Up Dimming On / Off Value
The function of the respective push button is set via the parameter "Function of upper / lower push buttons". The parameter window for the push button changes depending on the function that is set in this parameter and the necessary parameters are displayed with default settings. The objects that are required for the setting are also displayed in the object list and the object types of these objects are modified (e.g. from switching (1 bit) to dimming (4 bit)).	
The following settings are possible: Switch (object type: 1 bit) Shutter (object type: 1 bit) Dimming (object type: 4 bit) Value (object type: 1 byte)	
Function of LED (small rocker top)	no display
When the push buttons are set to "Value", it is not possible to configure the LED.	
Value upper contact [0..255]	255
This parameter defines the required brightness value (8 bit value) for the upper contact. The value range can be specified between "0" and "255". When the contact is pressed, this value is sent on the bus.	
Value lower contact [0..255]	0
This parameter defines the required brightness value (8 bit value) for the lower contact. The value range can be specified between "0" and "255". When the contact is pressed, this value is sent on the bus.	

Note:

The parameter windows "Large buttons left", "Large buttons right", and "Small buttons right" can be configured in the same way as "Small buttons left".

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Space for notes