

12 S4 On/Off/Toggle/Value 241D01

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 grey
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
cosmos grey / CORIAN
DELTA ambiente
Order no.: 5WG1 284 -2AB11

Name: Push button UP 284 4-fold
royal blue / wood
DELTA ambiente
Order no.: 5WG1 245 -2AB51

Functional description

Using the application program "12 S4 On/Off/Toggle/Value 241D01", the four rockers of the 4-fold push button UP 284 DELTA ambiente can be independently assigned parameters for the following functions: switching on/off/toggle, sending 8-bit value, each of the 4 LEDs can operate as a status display or be permanently switched on/off, 5th LED (in the centre of the push button) can be permanently switched on/off as an orientation light. One pair of push buttons, consisting of the upper and lower push button together with the LED for the upper push button, forms a unit. The upper and lower push buttons always refer to a separate object. The execution of the set functionality is carried out for each push button immediately once the operation or release of the push button is detected. The status display of the LED always refers to the object value of the upper push button.

Push button functions

The four small and four large push buttons can be assigned various functions. This is carried out by selecting the corresponding parameter setting in the parameter window of the respective push button.

Switch on/off/toggle:

In the "Switch" configuration, the push button sends the required signal depending on the parameter settings when the push button is pressed or released. The operating time is not evaluated. In the "Toggle" setting, the inverted object value is sent. The small and large push buttons always refer to a separate object. A type of "bell function" is also possible as a special function. An "On/Off" signal is sent when the push button is pressed while the inverted signal is sent when the push button is released.

8 bit value:

If the push button is configured for 8 bit values, it sends a set value (0-255) when the push button is pressed. A unique value must be assigned to each push button. The operating time is not evaluated. If required, the push button likewise sends a value when the push button is released: it is only possible to choose between values 0 to 30 in steps.

Display LEDs:

Each of the 4 status LEDs (in the case of the small push buttons, two LEDs form a group) can be switched permanently on or off. If the upper push button is assigned a switch function, the LED can also display the status or the inverted status of the object of the upper push button.

Orientation LED:

The 5th LED (in the centre of the push button) can be used as an orientation light or switched off.

Initialisation signal:

An initialisation signal (on bus voltage recovery) is not possible. It should be noted that the push buttons are always in the neutral position (i.e. not pressed) on bus voltage recovery. If a push button is not in the neutral position on bus voltage recovery, the push button sends the corresponding signal. This cannot however be understood yet by other bus devices as all the devices in the system start up (are ready) at different rates.

Maximum number of group addresses: 27
Maximum number of associations: 27

12 S4 On/Off/Toggle/Value 241D01










Parameters

General:

General	Small buttons left	Large buttons left	Large buttons right	Small buttons right
Orientation light (LED) On				

Parameters	Settings
Orientation light (LED)	On Off
The behaviour of the orientation LED can be set in this parameter. The LED can be switched "On" or "Off" here.	

Communication objects

Phys. Addr.		Program		
no.	Object name		Function	Type
	01.01.001	12 S4 On/Off/Toggle/Value	241D01	
	0	Switch, upper small button left	On / Off	1 Bit
	1	Switch, lower small button left	On / Off	1 Bit
	2	Switch, upper large button left	On / Off	1 Bit
	3	Switch, lower large button left	On / Off	1 Bit
	4	Switch, upper large button right	On / Off	1 Bit
	5	Switch, lower large button right	On / Off	1 Bit
	6	Switch, upper small button right	On / Off	1 Bit
	7	Switch, lower small button right	On / Off	1 Bit

Obj	Object name	Function	Type	Flags
0	Switch, upper small button left	On / Off	1-Bit	CWTU
1	Switch, lower small button left	On / Off	1-Bit	CWTU
2	Switch, upper large button left	On / Off	1-Bit	CWTU
3	Switch, lower large button left	On / Off	1-Bit	CWTU
4	Switch, upper large button right	On / Off	1-Bit	CWTU
5	Switch, lower large button right	On / Off	1-Bit	CWTU
6	Switch, upper small button right	On / Off	1-Bit	CWTU

Obj	Object name	Function	Type	Flags
7	Switch, lower small button right	On / Off	1-Bit	CWTU
These objects serve as switching objects for the push buttons. Depending on the parameter settings (see parameter "Function of upper / lower push button"), either an "On" telegram, an "Off" telegram or an "8 bit value" is sent.				

Note:

The functions and the parameters of the four small and the four large push buttons are identical. Each push button can be used for switching or for sending 8 bit values.

Outer left push buttons (Switch / Switch)

General	Small buttons left	Large buttons left	Large buttons right	Small buttons right
Function of upper push button Switch				
Upper push button press: On				
Function of lower push button Switch				
Lower push button press: Off				
LED placed by upper push button Off				

Parameters	Settings
Function of upper push button	Switch 8-bit Value
This parameter defines the function of the upper push button. In the "Switch" setting, the push buttons sends the required signal when the push button is pressed or released. The operating time is not evaluated. If "Toggle" is selected, the inverted object value is sent. The upper and lower push buttons always refer to a separate object. A type of bell function is also possible as a special function. An "On/Off" signal is sent when the push button is pressed while the inverted signal is sent when the push button is released.	
Upper push button	press: On press: Off press: Toggle release: On release: Off release: Toggle press: On, release: Off press: Off, release: On press: Toggle, release: Toggle
The signal that is sent when the upper push button is pressed can be set via this parameter.	

12 S4 On/Off/Toggle/Value 241D01

Parameters	Settings
Function of lower push button	Switch 8-bit Value
This parameter defines the function of the lower push button. In the "Switch" setting, the push button sends the required signal when the push button is pressed or released. The operating time is not evaluated. If "Toggle" is selected, the inverted object value is sent. The upper and lower push buttons always refer to a separate object. A type of bell function is also possible as a special function. An "On/Off" signal is sent when the push button is pressed while the inverted signal is sent when the push button is released.	
Lower push button	press: On press: Off press: Toggle release: On release: Off release: Toggle press: On, release: Off press: Off, release: On press: Toggle, release: Toggle
The signal that is sent when the lower push button is pressed can be set via this parameter.	
LED placed by upper push button	On Off Status, upper push button Status inverted, upper push button
This parameter determines the function of the LED. The settings "Status, upper push button" or "Status inverted, upper push button" are only possible if the function of the upper push button has been set to "Switch".	

Outer left push buttons (8-bit Value / 8-bit Value)

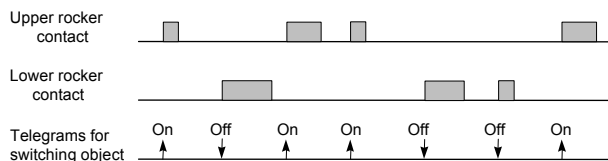
General	Small buttons left	Lage buttons left	Lage buttons right	Small buttons right
Function of upper push button		8-bit Value		
Value of upper push button, Press (0-255)		255		
Value of upper push button, Release		no action		
Function of lower push button		8-bit Value		
Value of lower push button, Press (0-255)		255		
Value of lower push button, Release		no action		
LED placed by upper push button		Off		

Parameters	Settings
Function of upper push button	Switch 8-bit Value
This parameter defines the function of the upper push button. If the push button is configured for "8-bit Value", it sends a set value (0-255) when the push button is pressed. A unique value must be assigned to each push button. The operating time is not evaluated. If required, the push button sends a set value when the push button is released. This value can be set in steps between 0 and 30.	
Value of upper push button, Press (0-255)	0 ... 255
This parameter determines the 8 bit value that is sent when the upper push button is pressed. A value between "0" and "255" can be selected.	
Value of upper push button, Release	no action 0 1 10 20 30
The value that is sent when the upper push button is released can be set via this parameter.	
Function of the lower push button	Switch 8-bit Value
This parameter defines the function of the lower push button. If the push button is configured for "8-bit Value", it sends a set value (0-255) when the push button is pressed. A unique value must be assigned to each push button. The operating time is not evaluated. If required, the push button sends a set value when the push button is released. This value can be set in steps between 0 and 30.	
Value of upper push button, Press (0-255)	0 ... 255
This parameter determines the 8 bit value that is sent when the upper push button is pressed. A value between "0" and "255" can be selected.	
Value of upper push button, Release	no action 0 1 10 20 30
The value that is sent when the upper push button is released can be set via this parameter.	
LED placed by upper push button	On Off
This parameter determines the function of the LED. If the function of the upper push button is set to "Switch", the additional settings of "Status, upper push button" and "Status inverted, upper push button" are possible.	

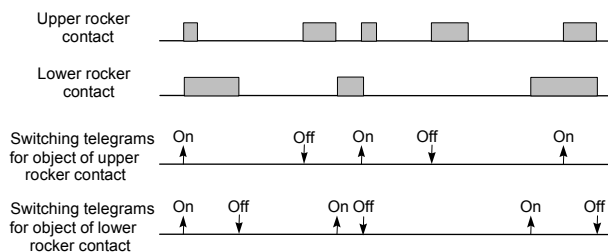
12 S4 On/Off/Toggle/Value 241D01

Timing diagrams: Examples of a push button

1. Configured for switch function: upper "On", lower "Off"



2. Configured for switch function: upper "Toggle", lower "press: On, release: Off"



3. Configured for switch function: upper "8-bit Value", lower "8-bit Value"

