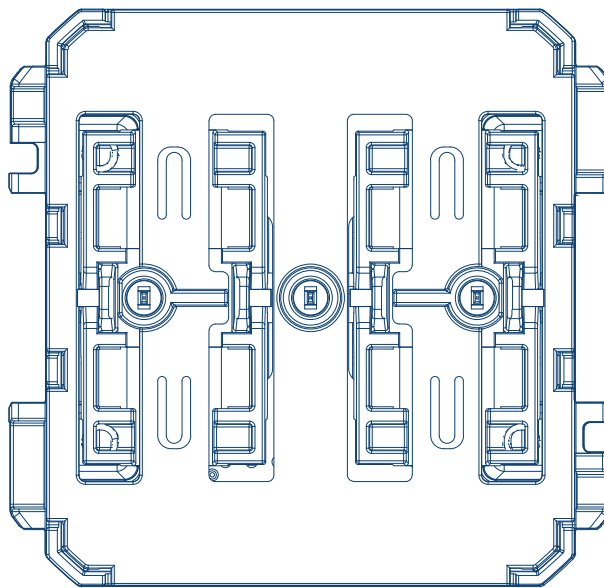


KNX building management system

KNX tactile sensors



KNX push-button module 1-/2-gang

WNT331 / WNT332

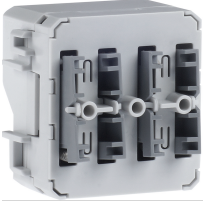
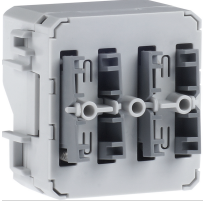
KNX group push-button module 1-gang/2-gang

WNT302 / WNT304



Product overview

Product overview

	Reference number	Product designation	Application programme	TP product  Radio product (II) 
	WNT331	KNX push-button module 1-gang	SWNT3xx 	
	WNT332	KNX push-button module 2-gang	SWNT3xx 	
	WNT302	KNX group push-button module 1-gang	SWNT3xx 	
	WNT304	KNX group push-button module 2-gang	SWNT3xx 	

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1 General

1.1 General information about this application description

This document describes the operation and parameterisation of KNX devices with the aid of the Engineering Tool Software ETS.

The devices are parameterised by the ETS and the required settings are made during the first installation.

1.2 ETS Programming software

The application programmes are compatible with ETS4 or higher and are always available in their latest version on our Internet website.

ETS version	File extension of compatible products	File extension of compatible projects
ETS 4 (v 4.18 and higher)	*.knxprod or *.vd5	*.knxproj
ETS 5 (v 5.04 and higher)	*.knxprod	*.knxproj
ETS 6 (v 6.3 or higher)	*.knxprod	*.knxproj

Table 1: ETS Programming software

1.2.1 ETS Application designation

Application	Product name (reference number)
SWNT3xx	KNX push button module 1-gang (WNT331)
SWNT3xx	KNX push-button module 2-gang (WNT332)
SWNT3xx	KNX group push-button module 1-gang (WNT302)
SWNT3xx	KNX group push-button module 2-gang (WNT304)

Table 2: ETS Application designations

1.3 Commissioning

The commissioning of the push-button/group push-button modules primarily refers to the programming of the physical address and the application data by the ETS Engineering Tool Software.

1.3.1 Physical address

The ETS assigns the physical address. The device has an integrated bus application unit for assigning the physical address; this application unit is fitted with a programming button and a red programming LED. The red programming LED lights up by pressing the programming button. After assignment of the physical address by the ETS, the programming LED goes out. To check whether the bus voltage is present, press the programming button briefly; the red LED lights up. Press the button once again to exit the programming mode.

Example:

- Activate programming mode → Actuate the programming button on the rear side of the push-button module.
Programming LED flashes red.
- The ETS starts downloading the physical address.
The programming mode is automatically cancelled once the download is complete → The programming LED is switched off.
- Label bus application unit with the physical address.



If a device in an existing system is to be programmed, only one device can be in programming mode.

1.3.2 Application programme

The application software can be loaded directly into the bus coupling unit with the assignment of the physical address. If this has not taken place, it can also be programmed at a later date. The application programme is downloaded directly on to the bus application unit of the push-button module.

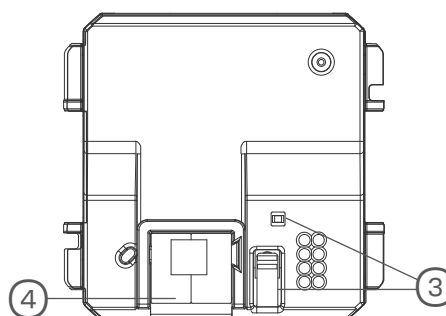


Fig. 1: Push-button module

- ③ Programming button and red programming LED
- ④ KNX bus connection terminal

2 Function and device description

2.1 Device overview

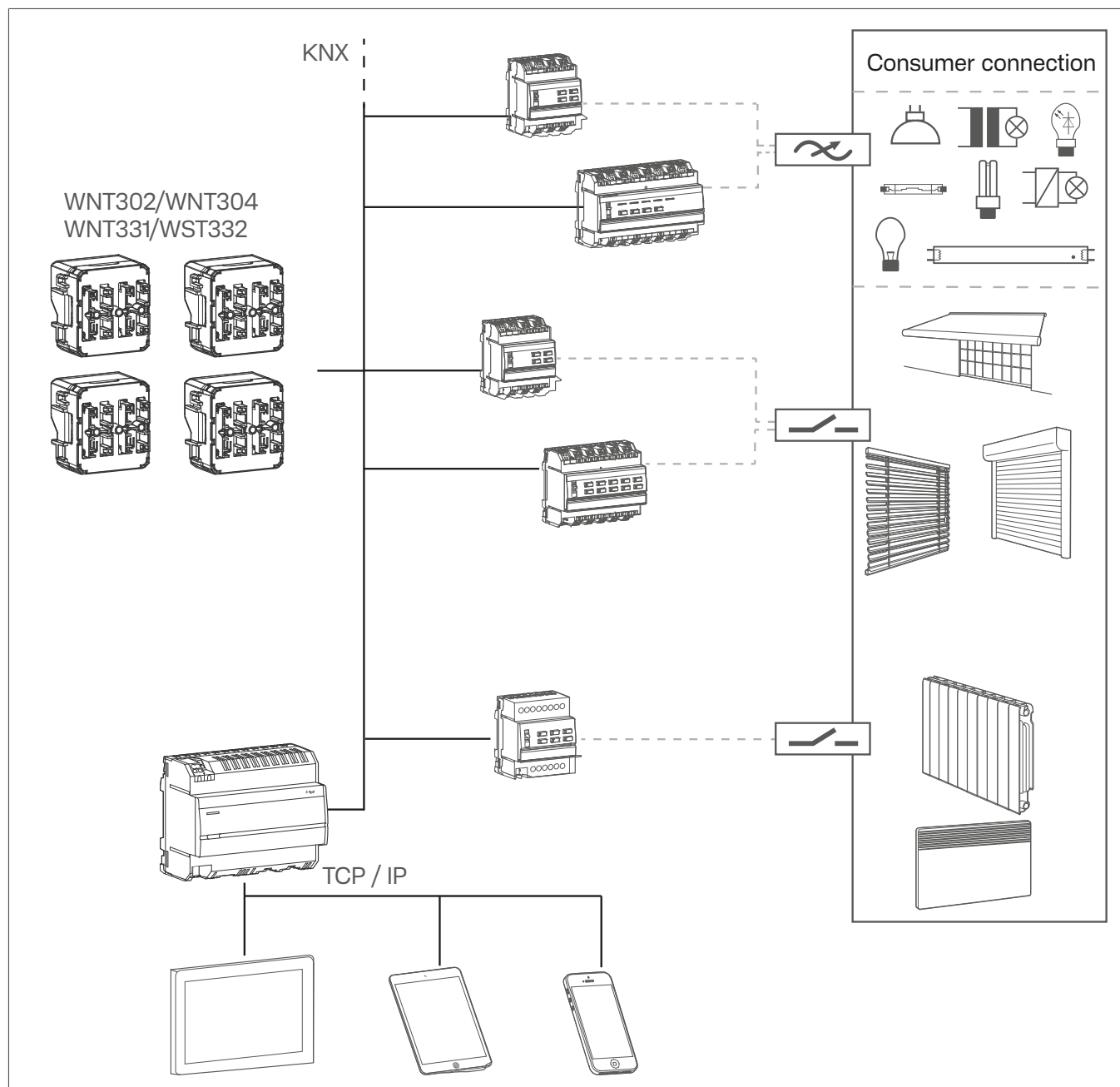


Fig. 2: Device overview

2.2 Functional description

The 1-gang and 2-gang push-button/group push-button modules are monoblock devices with integrated bus application units. The following functions can be assigned to the buttons/rockers: - Switching, dimming, blinds/shutters, light scene recall, value, forced control and room temperature control extension. The assignment of the various functions is freely selectable for each rocker/button and is defined in the settings of the ETS. Depending on the set functions, telegrams that trigger ON/OFF, dimming, blind/shutter functions, call up or save light scenes and set dimming, brightness or temperature values in the corresponding actuators are transmitted to the KNX system bus when rockers/buttons are pressed.

The following functions are identified as 'rocker' and 'individual push-buttons' for the devices listed.

2.2.1 Operating concept

The function of the individual control rockers depends on the type and programming of the push-button module.

x-gang push-button module:

The push-button module can be operated with a 1-gang rocker (Fig. 3, left) or with a 2-gang rocker (Fig. 3, right). The device on the left has only one actuation point (Fig. 3, 1) and the device on the right has two actuation points (Fig. 3, 1-2).

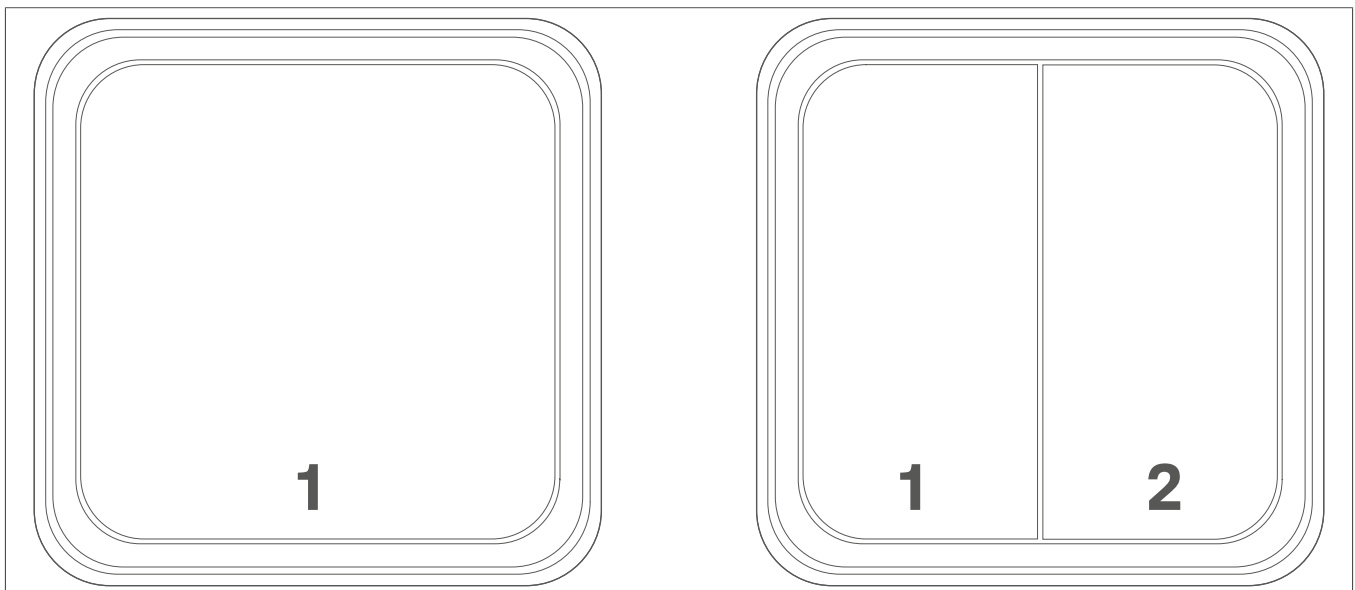


Fig. 3: Distribution of x-gang push-button module

x-gang group push-button module:

The group push-button module can be operated with a 1-gang rocker (Fig. 4, left) or with a 2-gang rocker (Fig. 4, right). Due to the centre position of the rockers, the device has two actuation points on the left-hand side (Fig. 4, 1-2) and the device has four actuation points on the right-hand side (Fig. 4, 1-4).

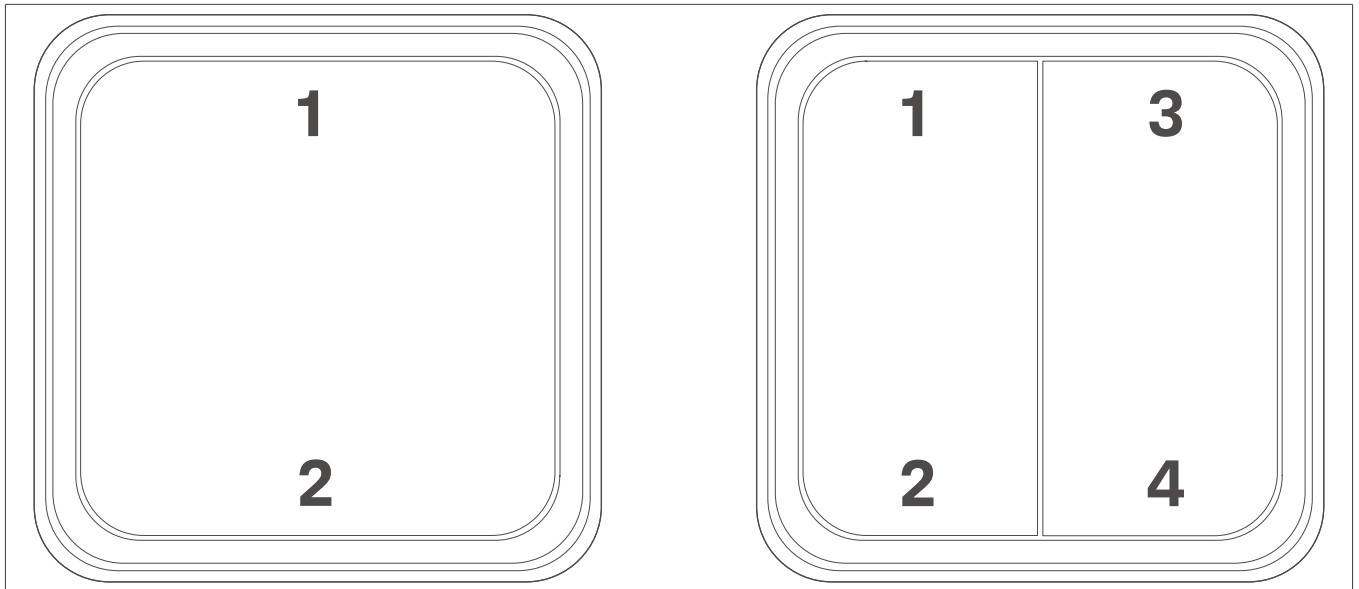


Fig. 4: x-gang group push-button module" distribution

Operating instructions

The device differentiates between short and long touches.

Short touch operation:

- Switching the lighting
- Shutter/blind (step) operation
- Operating mode changeover, etc.

Long touch operation

- Dimming the lighting
- Move command (move) roller shutter/blind
- Saving of a scene

2.2.2 Range of functions

Functions

- Button surfaces can be configured as either a rocker or as independent buttons.
- Each rocker or independent button can be used for the following functions: switching, dimming, shutter/blind control, 1-byte value transmitter, 2-byte value transmitter, scene extension unit, and room thermostat extension unit.
- Switching function: The following settings are possible for each button: Reaction when pressing and/or releasing the rocker/button, switching on, switching off, not active.
- The following adjustments are possible when dimming: Times for short and long touches, dimming in different steps, transmitting a stop telegram at the end of the touch, transmitting dimming values.
- The following adjustments are possible for blind control: UP/DOWN, position (slat position/roller position of roller shutter/blind position), safety travel
- The following settings are possible for the 1-byte and 2-byte value transmitter function: Range selection (0-100%, 0-65535, 0-1500 lux, 0-40°C), value upon actuation.
- The following settings are possible with the scene function: Calling up a scene number (1-64), saving with a long press of the button and transmission delay.
- When using as a control extension unit the following adjustments are possible: Operating mode change-over, heating/cooling change-over.

2.3 Functional descriptions

The functions described in the following section enable the individual configuration of the device inputs or outputs.

Inactive

The deactivated function means that no function is assigned to the button. The rocker/button is disabled.

Toggle switch

The 'Toggle switch' function switches on the lighting upon the first key-press and switches it off again upon the second.

Switching

The 'ON/OFF' function enables the push-button (lighting circuits, for example) to be switched ON or OFF (ON, OFF, ON/OFF, for example).

Dimming

The 'Dimming' function enables the push-button to increase and decrease the dimming in lighting circuits.

This function can either be used as a rocker or as a button (first key-press dims up, second dims down (during toggle mode)).



The rockers/buttons function can only be selected in the group push-button modules.

Roller shutter/blind

The 'Shutter/blind' function allows blinds, shutters, awnings or similar hangings to be opened and closed.

This function can either be used as a rocker or as a button (first key-press moves blind UP, second key-press moves blind DOWN (during toggle mode)).



The rockers/buttons function can only be selected in the group push-button modules.

Value 1 byte/2 bytes

The value transmitter (1 byte) function allows values from 0 to 100 % to be transmitted to a dim actuator, for example.

The value transmitter (2 bytes) function allows values from 0 to 65535, brightness values from 0 to 1000 lx or temperature values from 0 to 40°C to be configured.

Room thermostat extension unit

When being used as a control extension, the following parameter settings can be set/selected for each button or rocker. Override setpoint to a defined operating mode, setpoint selection or heating/cooling changeover

Priority

The 'Priority' function enables a precisely defined state (2 bits) to be specified or enables the function to impose a defined state.

Scene

When functioning as a scene extension, a light scene can be called up in a KNX device.

Deactivate automatic

This function can be used to interrupt and deactivate ongoing operations (time-controlled lighting).



This function must be configured in our TXA... and TYA... actuators.

3 General, 'Parameters'

The following sections describe the configuration of the parameters for the devices 1-gang/2-gang push-button module and group push-button module with bus application unit. The functions of the different modules only differ in the number of channels/buttons.



ETS Engineering Tool Software (version ETS4.x / ETS5.x / ETS6.x) is used for setting and commissioning.

All parameters that are displayed in the following tables in **BOLD** font are the default parameters set in the ETS software.

Global parameter settings for the entire device (i.e. for all buttons/rockers) are made under 'General'.

An image is displayed for the selected device under the operating concept which depicts the press-activation points of the rocker(s)/button(s) relevant to the selected device.

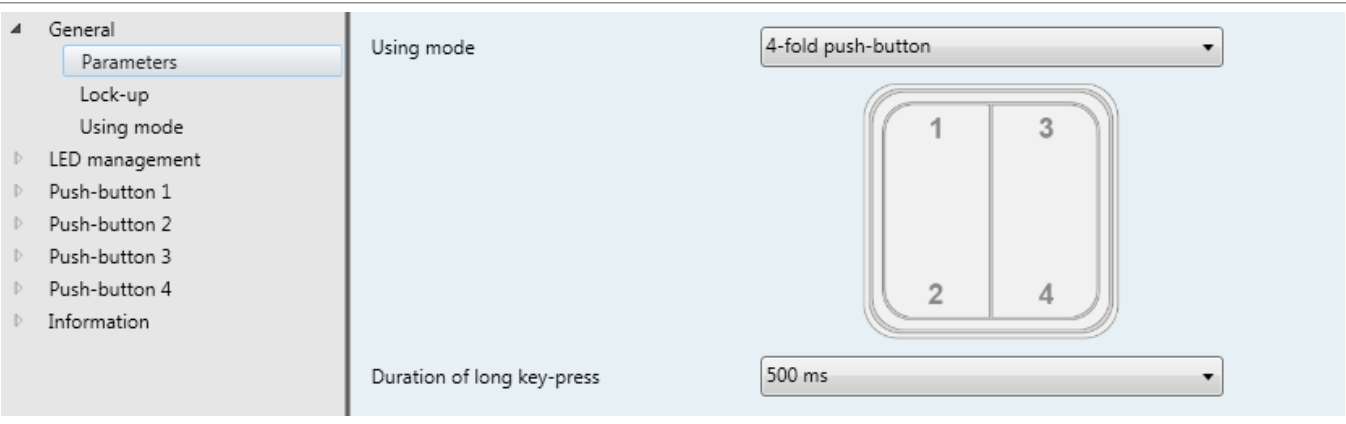


Fig. 5: General, 'Parameters'

Parameter	Description	Value
Operating concept	This parameter selects the device used.	Rocker 1gang Rocker 2gang Push-button 1gang Push-button 2gang
Time for long key-press (dimming, shutter/blind)	This parameter defines the moment from when a long push-button action is detected.	400 ms ... 500 ms ... 1 s

Table 3: General, 'Parameters'

3.1 Disable function

In the following parameter window, the respective functions and selection options of the 'Lock-up' function are displayed and configured for the 'rocker' and 'button' using modes.

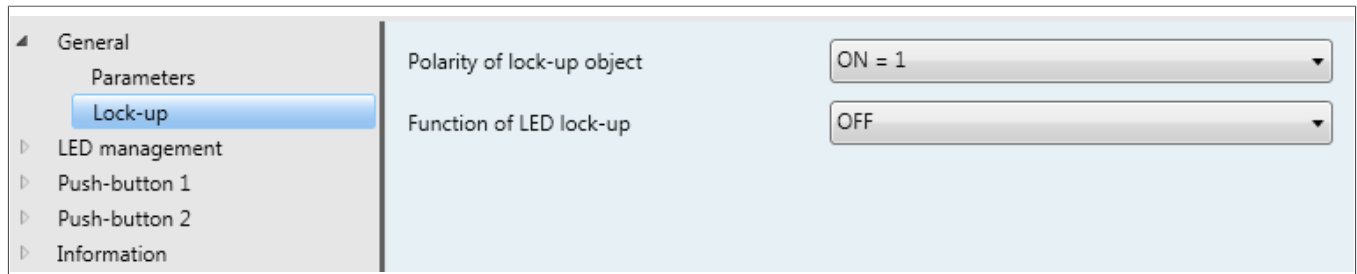


Fig. 6: General – Lock-up

Parameter	Description	Value
Polarity of lock-up object	This parameter defines at what value the blocking function is activated.	ON = 1 ON = 0
Function of LED lock-up	The function of the status LED for the respective button is set with this parameter if the disabling function is active.	Off Flashing

Table 4: General 'Lock-up'

No.	Name	Object function	Length	Data type
4	General	Disable function	1 bit	1.011 DPT_Status

The device has a lock-up function that can be used to lock independent buttons or rockers. **To activate the lock-up function for each button/rocker, the 'Lock-up' function must be explicitly activated (ticked) in the 'Function' parameter branch for each button/rocker.**

After bus voltage recovery, a lock-up remains active if it was activated before the bus voltage failed. The lock-up is always deactivated after a programming process by the ETS.

The polarity of the lock-up object can be parameterised.

If the polarity of the lock-up object is set to 'Inverted (ON = 0)', the push-button is not immediately locked in the event of bus voltage recovery or after a download if no lock-up was switched on before the bus voltage failed. In such cases, the lock-up is only activated in the event of an object update (value = '0') for the lock-up object!

3.2 Parameter „Using mode“

This function only becomes visible when the 1gang push-button or 2gang push-button selection is made under General – Parameters – Operating concept. You can select between the operating concept as a single button or as a rocker for both of these device variants.

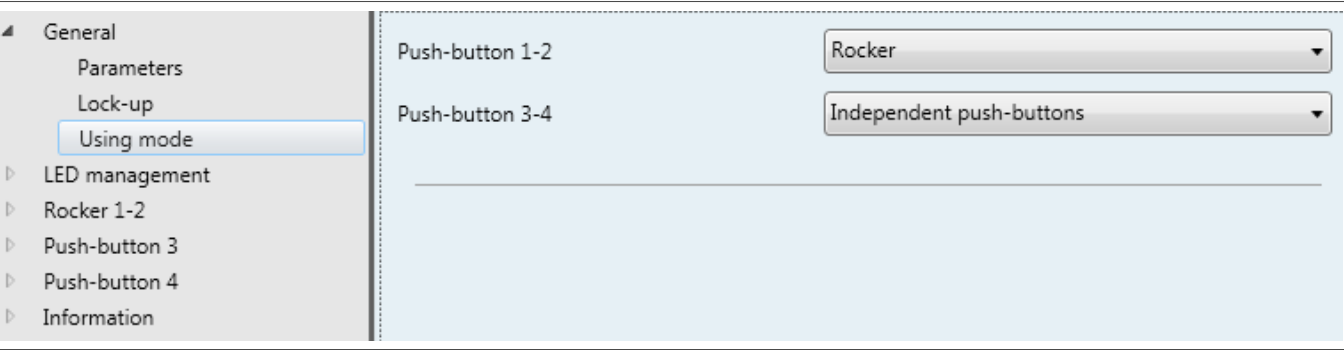


Fig. 7: Parameter „Using mode“

The button pair can be operated in the ‘independent push-button’ function; i.e. each individual independent button can be assigned an individual function (for example, top side of the rocker (button 1) for light ON/OFF, bottom side of the rocker (button 2) for blind UP/DOWN).

The button pair can also be operated in the ‘rocker’ function; i.e. the rocker pair work together to carry out a joint function (for example, top rocker side for light ON, bottom rocker side for light OFF).

Parameter	Description	Value
Push-button 1-2	This parameter can be used to configure the function of the buttons/rocker.	Single push-button Rocker
Push-button 3-4 ¹	This parameter can be used to configure the function of the buttons/rocker.	Single push-button Rocker

Table 5: Parameter „Using mode“

1 This parameter is only visible when the 2gang push-button device is selected under General – Parameters.

3.3 'Status LED brightness' parameter

3.3.1 General

The **status LED brightness** is configured and described in the following parameter window. The colour of the status LED is fixed with the colour red.

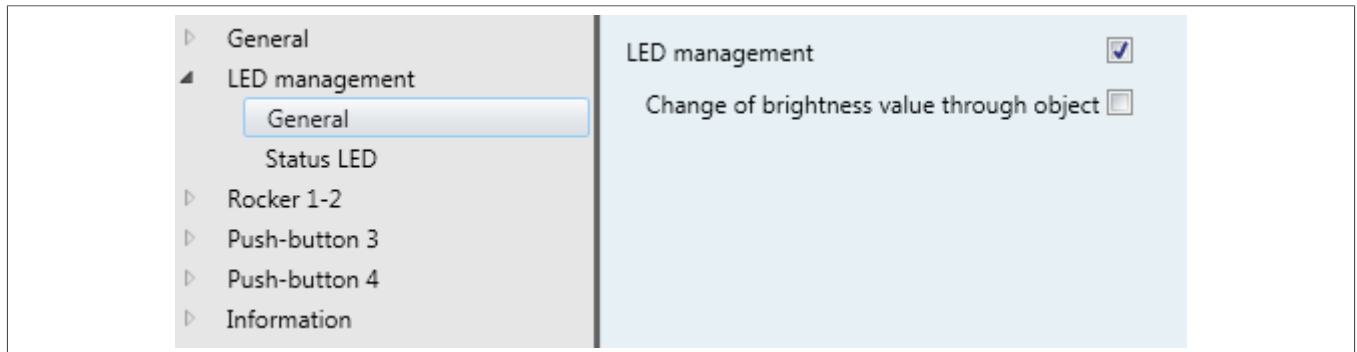


Fig. 8: Status LED brightness, 'General'

The tick box (Fig. 8, 1) must be activated in order to adjust the settings for the status LED brightness. The brightness value for both the status LED and the direction LED can also be changed separately for day and night using separate communication objects. (Fig. 8, 2).

When '**Status LED brightness**' is activated, another parameter for configuring the status LED opens.

3.3.2 Status LED

Each rocker is fitted with one RGB status LED that can be connected internally to the operating function depending on the function of the rocker or button.



If set as an independent push-button, the status LED is assigned to the upper button.

1-gang push-button module (independent push-button):

Button 1 → status LED

Button 2 → no LED function

2-gang push-button module (independent push-button):

Button 1 → status LED

Button 2 → no LED function

Button 3 → status LED

Button 4 → no LED function

Fig. 9: Brightness of the 'Status LED' status LED

Parameter	Description	Value
LED light duration for actuation display Actuation display	With this parameter the lighting duration of the status LED upon pressing the button/rocker is set.	0.5 s, 3 s , 30 s, 5 s
Flashing duration	This parameter defines the blinking duration of the LED	250 ms ... 2 s ... 5 s
Brightness value Day operation (0-100 %)	The sidebar for this parameter can be used to set the brightness value for day-time operation.	0 ... 100%
Brightness value Night operation (0-100 %)	The sliding bar for this parameter can be used to set the brightness value for night-time operation.	0 ... 20 % ... 100 %

Table 6: LED management, 'Status LED'

No.	Name	Object function	Length	Data type
5	Color and brightness Status LED	Day/night	1 bit	
6	Color and brightness Status LED	Device LED ON/OFF	1 bit	1.001 DPT_ON/OFF
9	Color and brightness Status LED	Status LED – brightness Day	1 byte	5.001 DPT_Percentage (0-100 %)
11	Color and brightness Status LED	Status LED – brightness Night	1 byte	5.001 DPT_Percentage (0-100 %)

4 ‘Independent push-button’/‘rocker’ configuration

4.1 General information

This chapter describes the ‘rocker/independent push-button’ configuration. Only the first rocker or the first pair of independent push-buttons are described. An additional rocker / additional independent push-buttons must be configured accordingly.

4.1.1 Individual push-button using mode

Fig. 10: Function type of the button(s)

Parameter	Description	Value
Function of the independent push-button	The parameter sets the Function type of the button(s).	Inactive To (Toggle) switch Dimming Roller shutter/blind Value 1 bytes Value 2 bytes Room thermostat extension unit Priority Scene Deactivate automatic
Status LED	This parameter sets the Function of LED status.	Always Off Always On Acknowledgement

Table 7: ‘Button function type’ parameters



The lock-up function can be activated for the respective independent push-button (tick box, ,1).

The LED status parameter can only be set for button 1 in this type of configuration.

4.1.2 Rocker operating concept

If the device is an xgang group push-button module, two parameters for the rocker configuration become visible (function and status LED).

General

LED management

Push-button 1

Push-button 2

▲ Rocker 3-4

Function

Status LED

Information

Function: Not active

Lock-up: ☐

Fig. 11: Function type of the rocker(s)

General

LED management

Push-button 1

Push-button 2

▲ Rocker 3-4

Function

Status LED

Information

Function of LED status top: Always OFF

Fig. 12: Status LED of the rocker(s)

Parameter	Description	Value
Function rocker	The parameter sets the Function type of the rocker(s).	Inactive Toggle switch Switching Dimming Roller shutter/blind Value 1 bytes Value 2 bytes Room thermostat extension unit Priority Scene Deactivate automatic
Status LED	This parameter sets the Function of LED status.	Always Off Always On Acknowledgement

Table 8: 'Rocker function type' parameters



The lock-up function can be activated for the respective rocker (tick box ,1).

4.2 ‘Toggle switch’ function

The ‘Toggle switch’ function for the push-button or rocker using mode is configured in the parameter windows below (Fig 13).

The ‘Toggle switch’ function means changing over. When the ‘Toggle switch’ function is active, pressing the same push-button/rocker side triggers an alternate switching command.

Fig. 13: ‘Toggle switch’ function of the push-button(s)

When the ‘Toggle switch’ function is active in the rocker using mode, pressing the top or bottom rocker side triggers a switching command. In this configuration, no detailed settings are possible for each rocker side.

No.	Name	Object function	Length	Data type
13, 53,	Rocker x-y	Switching status indicator	1 bit	1.001 DPT_ON/OFF
18, 58,	Rocker x-y	Switching	1 bit	1.001 DPT_ON/OFF

Table 9: ‘Toggle switch’ function communication objects (rocker)

No.	Name	Object function	Length	Data type
13, 33, 53, 73,	Button x	Switching status indicator	1 bit	1.001 DPT_ON/OFF
18, 38, 58, 78,	Button x	Switching	1 bit	1.001 DPT_ON/OFF

Table 10: ‘Toggle switch’ function communication objects (button)

‘Toggle switch’ function – time limited

This function is available in both operating concepts if the tick box in Fig 13, 1 is activated.

Briefly press the button: Status change of the output. The state changes each time a short key-press occurs. If the button is not pressed, the output is switched off after the time set in the output. Pressing the button for a long time retriggers the switch-off time.

Details:

when a short key-press occurs, the push-button transmits the reversal of the last command received on the status object via the on pulse object. When the button is pressed for a long time, the push-button transmits an ON command via the on pulse object.

An ON command on the on pulse object in our TXA products switches on the output for the time set.

An OFF command on the on pulse object switches off the output. If an ON command follows even though the output is still switched on, the switch-on time is restarted (retriggered).

4.3 Switch function

The different function variants of the 'ON/OFF' function for the independent button (Fig 14) and rocker pair are presented and described in the parameter window below.

13	Push-button 1	Heating/Cooling - sta	1 bit	K	-	S	Ü	A	heizen/Kühlk Niedrig
18	Push-button 1	Heating/Cooling - cha	1 bit	K	-	-	Ü	-	heizen/Kühlk Niedrig
42	Push-button 2	Setpoint selection	1 Byte	K	-	-	Ü	-	HVAC Modu Niedrig
62	Push-button 3	Setpoint selection	1 Byte	K	-	-	Ü	-	HVAC Modu Niedrig
82	Push-button 4	Setpoint selection	1 Byte	K	-	-	Ü	-	HVAC Modu Niedrig

Fig. 14: 'Function by press/on release' parameters



The independent button can trigger different responses for the two actuation functions PRESS/RELEASE.

Parameter	Description	Value
Function by pressing the button	The parameter sets the function of the button.	Inactive
Function on release		ON
(Individual push-button configuration)		OFF
Function by press top	The parameter sets the the function of the rocker.	Inactive
Function by press bottom		ON
(Configuration rocker)		OFF
Emission time delay by press	This parameter defines when the button command is to be transmitted to the bus.	Immediate emission
Emission time delay on release		1 s ... 5 min

Table 11: 'Function by press/on release' ON/OFF parameters

No.	Name	Object function	Length	Data type
18, 58,	Rocker x-y	Switching	1 bit	1.001 DPT_ON/OFF

Table 12: 'ON/OFF' function communication objects (rocker)

No.	Name	Object function	Length	Data type
18, 38, 58, 78,	Button x	Switching	1 bit	1.001 DPT_ON/OFF

Table 13: 'ON/OFF' function communication objects (button)

4.4 Dimming function

The Dimming function is described below. The lighting can be switched on/off (short press of button) and dimmed brighter/darker (long press of button) with the 'Dimming' function.

When the control key is set as a rocker, two-push-button operation is preset for the dimming function. For example, this means that in the event of a short press of button 1, the device transmits a telegram to switch on and, in the event of a long press, a telegram to dim upward ('Brighter'). Respectively, in the event of a short press of button 2, it transmits a telegram to switch off and, in the event of a long press, a telegram to dim down ('Darker').

When the control key is set as a button, single-push-button operation is preset for the dimming function. Each time a short press of the respective button occurs, the push-button sends the telegram for the set function. In the event of a long press of the button, the device sends a telegram for the dimming command.

Fig. 15: Dimming function

Parameter	Description	Value
Function of the independent push-button 'Dimming'	With this parameter the following function is assigned to the button in the 'Dimming' function when pressing the button.	Increase (On) Decrease (Off) Increase (Toggle) Decrease (Toggle) Increase/Decrease (Toggle) Dimming value
Function of the 'Dimming' rocker	With this parameter the following function is assigned to the rocker in the Dimming function. A distinction is made here between the function when the rocker is pressed up and the function when the rocker is pressed down.	Increase (On) Decrease (Off) Increase (Toggle) Decrease (Toggle) Increase/Decrease (Toggle) Dimming value

Table 14: Rocker/button 'Dimming' function

No.	Name	Object function	Length	Data type
18, 58,	Rocker x-y	Switching	1 bit	1.001 DPT_ON/OFF

Table 15: 'Dimming (Increase/Decrease)' function communication objects (rocker)

'Independent push-button'/'rocker' configuration

No.	Name	Object function	Length	Data type
21, 61,	Rocker x-y	Dimming	4 bit	3.007 DPT_Dimmer step

Table 15: 'Dimming (Increase/Decrease)' function communication objects (rocker)

No.	Name	Object function	Length	Data type
18, 38, 58, 78,	Button x	Switching	1 bit	1.001 DPT_ON/OFF
21, 41, 61, 81	Button x	Dimming	4 bit	3.007 DPT_Dimmer step

Table 16: 'Dimming (Increase/Decrease)' function communication objects (button)

No.	Name	Object function	Length	Data type
13, 53,	Rocker x-y	Switching status indicator	1 bit	1.001 DPT_ON/OFF
18, 58,	Rocker x-y	Switching	1 bit	1.001 DPT_ON/OFF
21, 61,	Rocker x-y	Dimming	4 bit	3.007 DPT_Dimmer step

Table 17: 'Dimming (Increase/Decrease toggle switch)' function communication objects (rocker)

No.	Name	Object function	Length	Data type
13, 33, 53, 73,	Button x	Switching status indicator	1 bit	1.001 DPT_ON/OFF
18, 38, 58, 78,	Button x	Switching	1 bit	1.001 DPT_ON/OFF
21, 41, 61, 81	Button x	Dimming	4 bit	3.007 DPT_Dimmer step

Table 18: 'Dimming (Increase/Decrease toggle switch)' function communication objects (button)

In addition to the dimming communication objects, the ON/OFF communication objects are also visible. Two separate group addresses for ON/OFF and dimming must be created and connected with the corresponding communication objects.

If the Dimming – dimming value function is selected, the dimming value is to be set by means of the sliderbar (0% ... 100%). Only one communication object can be selected in this function. The Dimming – dimming value function assigns a specific brightness value to the lamp via the connected actuator. The scene values are primarily only set in the actuator. Scenes can only be called up or adjusted on the push-button.

4.5 'Shutter/blind' function

The 'Shutter/blind' function for the button and rocker using modes are configured in the parameter windows below.

This function switches shutters, blinds, awnings and other hangings. In the 'Shutter/blind' function, a distinction is made between long and short key-presses.

→ Short button press: Short key-press: the device transmits a step or stop command to the bus via the Slat Step/Stop (step) communication object.

→ Long button press: Long key-press: The device transmits a motion command (Up/Down) to the bus via the Up/Down (move) communication object.

Fig. 16: Roller shutter/blind function

In the rocker using mode, the 'Shutter/blind' function can be set so that the top rocker side raises the shutter and the bottom side lowers it. The rocker sides work as part of the same function (they function in the same way as 2 shutter/blind buttons). Two communication objects (Rocker x-y Slat Step/Stop (step) and rocker x-y Up/Down (move)) are displayed for the respective function version.

Operating concepts for the roller shutter / blind function

Five different operating concepts are available in the application for activating roller shutters, blinds or similar hangings. In these operating concepts, the telegrams are transmitted to the bus with a different time sequence. This allows the widest range of drive concepts to be set and operated.

Parameter	Description	Value
Using mode of the rocker(s)/independent push-button(s)	This parameter selects the using mode of the 'Shutter/blind' function	Hager/Berker behaviour Short-Long-Short Long-Short Short-Long Long-Short or Short

Table 19: 'Shutter/blind' rocker/button using mode

4.5.1 Hager/Berker behaviour



The 'Hager/Berker behaviour' has been adapted to the new Hager/Berker blind and roller shutter actuators.

Parameter	Description	Value
Blind function (Individual push-button configuration)	In the sun protection type, this parameter selects the function of the independent push-buttons.	Up Down Up/Down/Stop Position (0–100%) Position/Slat angle (0–100%) Slat angle (0–100%)
Function upon press on top Function upon press on bottom (Configuration rocker)	In the sun protection type, this parameter selects the function of the top and bottom rocker side	Up Down Up/Down/Stop Position (0–100%) Position/Slat angle (0–100%) Slat angle (0–100%)

Table 20: Hager/Berker behaviour parameters

Parameter	Description	Value
Position (0–100%) ^[1] ^[2]	This parameter sets a specific shutter/blind position using the sidebar.	0 % ... 100 %
Slat angle (0–100%) ^[2]	This parameter sets the slat angle of the slat using the sidebar.	0 % ... 100 %

Table 21: Blind, shutter and slat position parameters

- ^[1] This parameter is not visible until the value ‘Position (0–100 %)’ or ‘Position/Slat angle (0–100 %)’ is selected in the ‘Function’ parameter.
- ^[2] This parameter is only visible if the value **Slat angle (0..100%)** or **Position/slat angle (0..100%)** is selected in the **Function** parameter.

4.5.2 Short – Long – Short operating concept

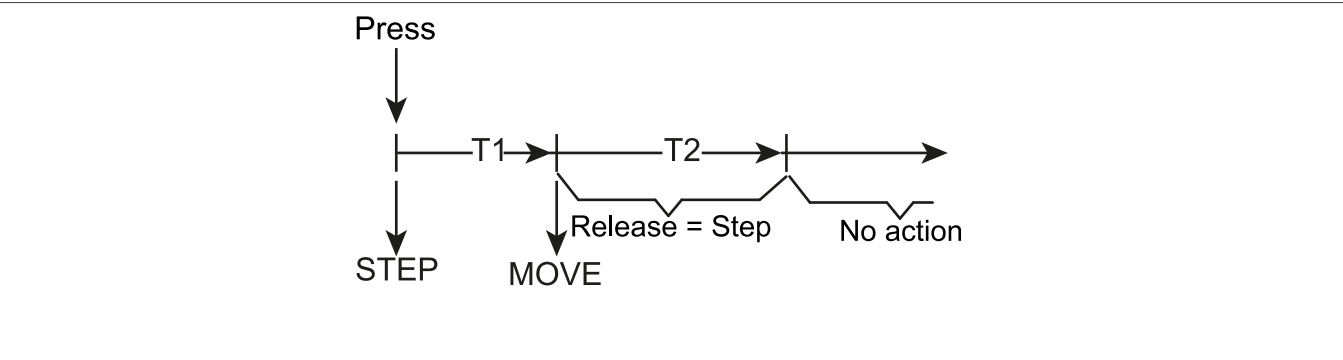


Fig. 17: Short – Long – Short operating concept

As soon as the button is pressed, the device transmits a step telegram to the bus. As a result, a moving drive is stopped and the time T1 (the time between a step and move command) is started. If the button is released again within T1, no further telegram is transmitted. This step stops an ongoing continuous move.



The **time between a step and move command** in the device should be set shorter than the step operation of the actuator so that no disturbing buckling of the blind occurs.

If the button is kept pressed for longer than T1, the push-button transmits a move telegram for extending the drive after T1 has expired and the time T2 ('slat adjusting time') is started.

If the button is released within the slat adjusting time, the device transmits another short-time telegram. This function is used for the slat adjustment of a blind. As a result, the slats can be stopped at any position within their rotation. The length of the slat adjusting time selected should be as long as the time required by the drive to turn the slats completely. If the slat adjusting time selected is longer than the complete operation time of the drive, a touch function is also possible. The driver only moves if the button is pressed down.

If the button is pressed down longer than T2, the device does not transmit any further telegrams. The drive continues moving until the end position is reached.

Times T1 (**time between a step and move command**) and T2 (**slat adjusting time**) must first be adjusted.

Parameter	Description	Value
Duration between short and long button press Key press T1	T1 is the time between one Short- and long-term command	1 ... 4 ... 3000 (x100 ms)
Duration of slat angles T2 setting	T2 is the slat adjusting time.	1 ... 5 ... 3000 (x100 ms)

Table 22: Time setting under 'Short - Long - Short'

Parameter	Description	Value
Blind function (Individual push-button configuration)	In the sun protection type, this parameter selects the function of the independent push-buttons.	Up Down Position (0-100%) Position/Slat angle (0-100%) Slat angle (0-100%)
Function upon press on top Function upon press on bottom (Configuration rocker)	In the sun protection type, this parameter selects the function of the top and bottom rocker side	Up Down Position (0-100%) Position/Slat angle (0-100%) Slat angle (0-100%)
Position (0-100%) ^{[1], [2]}	This parameter allows the shutter/blind to reach a specific position by pressing a button. The value is set using the sidebar.	0 % * ... 100 %

Table 23: Blind, shutter and slat position parameters

Parameter	Description	Value
Slat angle (0–100%) ^[2]	This parameter allows a specific blind slat angle to be set by pressing a button. The value is set using the slider.	0 % * ... 100 %

Table 23: Blind, shutter and slat position parameters

- ^[1] This parameter is only visible when the value ‘Position (0-100 %)’ or ‘Position/slat angle (0-100 %)’ is selected in the ‘Function when pressing the rocker side/independent push-button’ parameter.
- ^[2] This parameter is only visible when the value ‘Slat angle (0-100 %)’ or ‘Position/slat angle (0-100 %)’ is selected in the ‘Function when pressing the rocker side/independent push-button’.

4.5.3 Long – Short operating concept

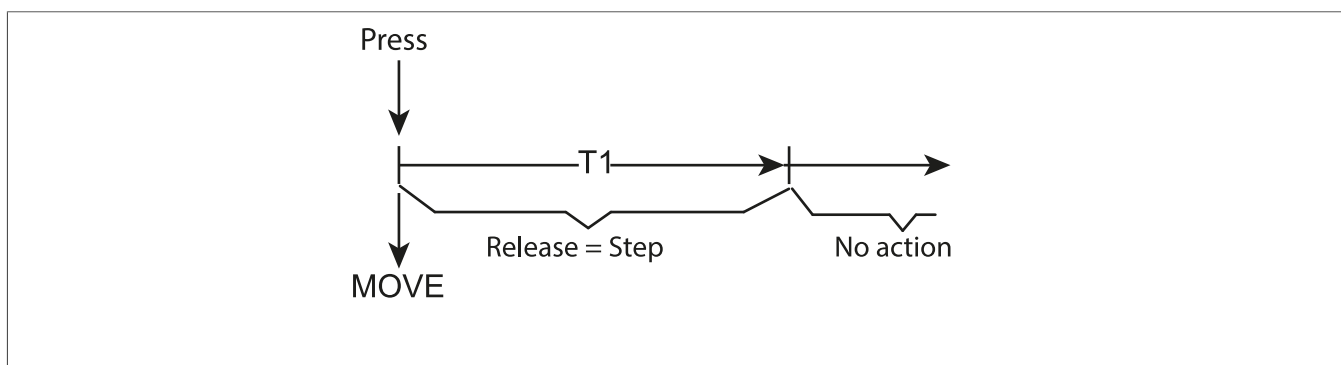


Fig. 18: Long – Short operating concept

Immediately upon pressing the button, the device transmits a long-time telegram (Move). As a result, the drive starts moving and time T1 (‘slat adjusting time’) is started.

If the button is released during the slat adjusting time, the device transmits a step telegram. This function is used for the slat adjustment of a blind. As a result, the slats can be stopped at any position within their rotation. The length of the slat adjusting time selected should be as long as the time required by the drive to turn the slats completely. If the slat adjusting time selected is longer than the complete operation time of the drive, a touch function is also possible. The driver only moves if the button is pressed down.

If the button is pressed down longer than T1, the device does not transmit any further telegrams. The drive continues moving until the end position is reached.

Time T1 (**time between a step and move command**) must first be adjusted.

Parameter	Description	Value
Duration between short and long button press Key press T1	T1 is the time between one Short- and long-term command	1 ... 4 ... 3000 (x100 ms)

Table 24: Time setting under ‘Long – Short’

Parameter	Description	Value
Blind function (Individual push-button configuration)	In the sun protection type, this parameter selects the function of the independent push-buttons.	Up Down Up/Down/Stop Position (0–100%) Position/Slat angle (0–100%) Slat angle (0–100%)
Function upon press on top Function upon press on bottom (Configuration rocker)	In the sun protection type, this parameter selects the function of the top and bottom rocker side	Up Down Up/Down/Stop Position (0–100%) Position/Slat angle (0–100%) Slat angle (0–100%)
Position (0–100%) ^[1]	This parameter allows the shutter/blind to reach a specific position by pressing a button. The value is set using the sidebar.	0 % ... 100 %
Slat angle (0–100%) ^[2]	This parameter allows a specific blind slat angle to be set by pressing a button. The value is set using the sidebar.	0 % * ... 100 %

Table 25: Blind, shutter and slat position parameters

^[1] This parameter is only visible when the value 'Position (0–100 %)' or 'Position/slat angle (0–100 %)' is selected in the 'Function when pressing the rocker side/independent push-button' parameter.

^[2] This parameter is only visible when the value 'Slat angle (0–100 %)' or 'Position/slat angle (0–100 %)' is selected in the 'Function when pressing the rocker side/independent push-button'.

4.5.4 Short – Long operating concept

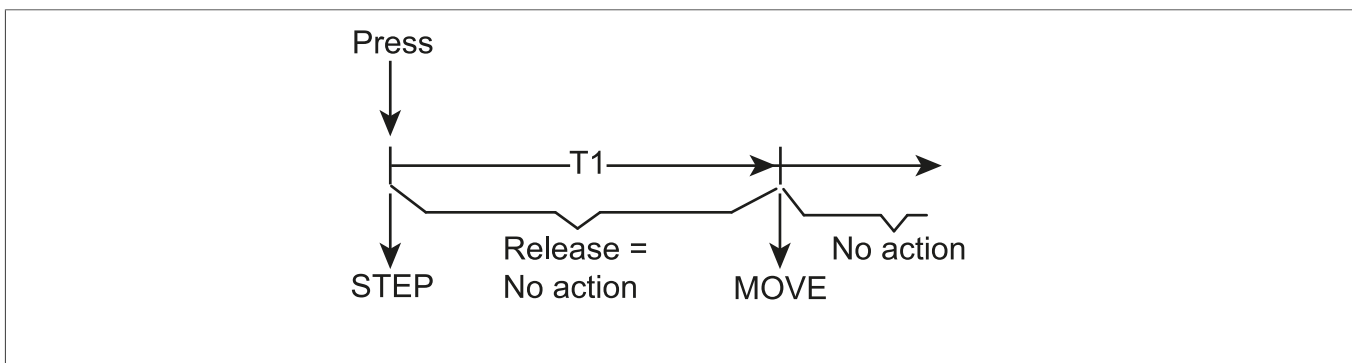


Fig. 19: Short – Long operating concept

Immediately upon pressing the button, the device transmits a short-time telegram. As a result, a moving drive is stopped and the time T1 (the time between a step and move command) is started. If the button is released again within T1, no further telegram is transmitted.

This step stops an ongoing continuous move. The time between a step and move command in the button should be set shorter than the step operation of the actuator so that no disturbing buckling of the blind occurs.

If the button is kept pressed longer than T1, the push button transmits a long-time telegram for extending the driver after T1 has expired.

When the button is released, the push button does not transmit any further telegrams. The drive continues moving until the end position is reached.

Times T1 (**time between a step and move command**) and T2 (**slat adjusting time**) must first be adjusted.

Parameter	Description	Value
Duration between short and long button press Key press T1	T1 is the time between one Short- and long-term command	1 ... 4 ... 3000 (x100 ms)

Table 26: Time setting under Short – Long

Parameter	Description	Value
Blind function (Individual push-button configuration)	In the sun protection type, this parameter selects the function of the independent push-buttons.	Up Down Up/Down/Stop Position (0–100%) Position/Slat angle (0–100%) Slat angle (0–100%)
Function upon press on top Function upon press on bottom (Configuration rocker)	In the sun protection type, this parameter selects the function of the top and bottom rocker side	Up Down Up/Down/Stop Position (0–100%) Position/Slat angle (0–100%) Slat angle (0–100%)
Position (0–100%) ^[1]	This parameter allows the shutter/blind to reach a specific position by pressing a button. The value is set using the sidebar.	0 % ... 100 %
Slat angle (0–100%) ^[2]	This parameter allows a specific blind slat angle to be set by pressing a button. The value is set using the sidebar.	0 % ... 100 %

^[1] This parameter is only visible when the value 'Position (0-100 %)' or 'Position/slat angle (0-100 %)' is selected in the 'Function when pressing the rocker side/independent push-button' parameter.

^[2] This parameter is only visible when the value 'Slat angle (0-100 %)' or 'Position/slat angle (0-100 %)' is selected in the 'Function when pressing the rocker side/independent push-button'.

4.5.5 Long – Short or Short operating concept

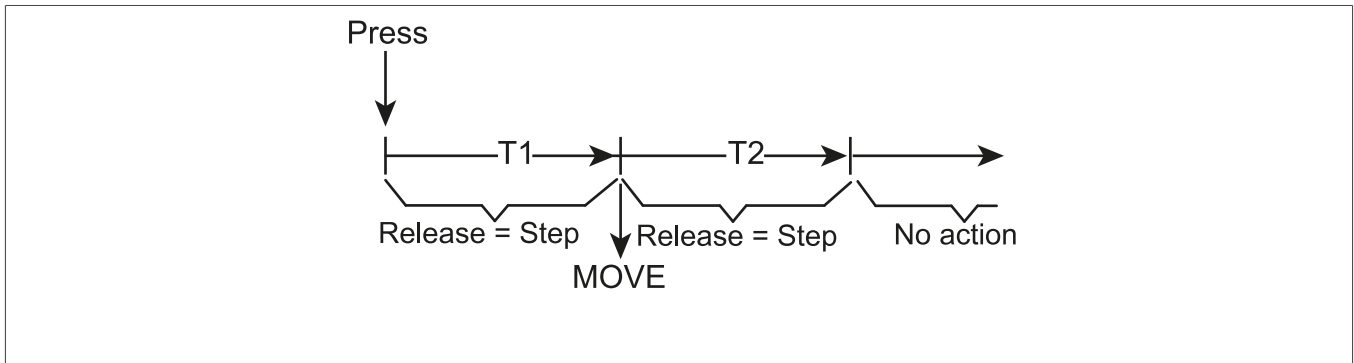


Fig. 20: Long – Short or Short operating concept

As soon as the button is pressed, the device starts the time T1 (time between a step and move command) and waits. If the button is released again before T1 expires, the device transmits a step telegram. In this way, a moving drive can be stopped. A stationary drive turns the slats by one step.

If the button remains pressed after T1 has expired, the device transmits a move telegram and starts the time T2 ('slat adjusting time').

If the button is released within T2, the device transmits a short-time telegram. This function is used for the slat adjustment of a blind. As a result, the slats can be stopped at any position within their rotation.

The length of the slat adjusting time selected should be as long as the time required by the drive to turn the slats completely. If the slat adjusting time selected is longer than the complete operation time of the drive, a touch function is also possible. The driver only moves if the button is pressed down.

If the button is pressed down longer than T2, the device does not transmit any further telegrams. The drive continues moving until the end position is reached.



In this using mode, the device does not transmit a telegram as soon as a button is pressed. This makes it possible in the rocker configuration to also detect a full surface operation.

Times T1 (**time between a step and move command**) and T2 (**slat adjusting time**) must first be adjusted.

Parameter	Description	Value
Duration between short and long button press Key press T1	T1 is the time between one Short- and long-term command	1 ... 4 ... 3000 (x100 ms)
Duration of slat angles T2 setting	T2 is the slat adjusting time	1 ... 5 ... 3000 (x100 ms)

Table 27: Time setting under Long – Short or Short

Parameter	Description	Value
Blind function (Individual push-button configuration)	In the sun protection type, this parameter selects the function of the independent push-buttons.	Up Down Up/Down/Stop Position (0–100%) Position/Slat angle (0–100%) Slat angle (0–100%)
Function upon press on top Function upon press on bottom (Configuration rocker)	In the sun protection type, this parameter selects the function of the top and bottom rocker side	Up Down Up/Down/Stop Position (0–100%) Position/Slat angle (0–100%) Slat angle (0–100%)
Position (0–100%) ^[1]	This parameter allows the shutter/blind to reach a specific position by pressing a button. The value is set using the sidebar.	0 % ... 100 %
Slat angle (0–100%) ^[2]	This parameter allows a specific blind slat angle to be set by pressing a button. The value is set using the sidebar.	0 % ... 100 %

Table 28: Blind, shutter and slat position parameters

^[1] This parameter is only visible when the value ‘Position (0–100 %)’ or ‘Position/slat angle (0–100 %)’ is selected in the ‘Function when pressing the rocker side/independent push-button’ parameter.

[2] This parameter is only visible when the value ‘Slat angle (0–100 %)’ or ‘Position/slat angle (0–100 %)’ is selected in the ‘Function when pressing the rocker side/independent push-button’.

No.	Name	Object function	Length	Data type
18, 58	Rocker x-y	Up/Down	1 bit	1.008 DPT_Up/Down
19, 59	Rocker x-y	Slat/Stop (Short)(	1 bit	1.007 DPT_Step

Table 29: ‘Up/Down’ communication objects for shutter/blind operation (rocker)

No.	Name	Object function	Length	Data type
22, 62,	Rocker x-y	Position in %	1 byte	5.001 DPT_Percentage (0–100 %)

Table 30: ‘Position (0–100 %)’ communication objects for shutter/blind operation (rocker)

No.	Name	Object function	Length	Data type
22, 62	Rocker x-y	Position in %	1 byte	5.001 DPT_Percentage (0–100 %)

Table 31: Communication objects “Position/slat angle (0..100%)” for shutter/blind operation (rocker)

No.	Name	Object function	Length	Data type
23, 63	Rocker x-y	Slat angle in %	1 byte	5.001 DPT_Percentage (0-100 %)

Table 31: Communication objects "Position/slat angle (0..100%)" for shutter/blind operation (rocker)

No.	Name	Object function	Length	Data type
23, 63	Rocker x-y	Slat angle in %	1 byte	5.001 DPT_Percentage (0-100 %)

Table 32: ‘Slat angle (0-100 %)’ communication objects for shutter/blind operation (rocker)

No.	Name	Object function	Length	Data type
18, 38, 58, 78	Button x	Up/Down	1 bit	1.008 DPT_Up/Down
19, 39, 59, 79	Button x	Slat/Stop (Short)	1 bit	1.007 DPT_Step

Table 33: ‘Up/Down’ communication objects for shutter/blind operation (button)

No.	Name	Object function	Length	Data type
22, 42, 62, 82	Button x	Position in %	1 byte	5.001 DPT_Percentage (0-100 %)

Table 34: ‘Position (0-100 %)’ communication objects for shutter/blind operation (button)

No.	Name	Object function	Length	Data type
22, 42, 62, 82	Button x	Position in %	1 byte	5.001 DPT_Percentage (0-100 %)
23, 43, 63, 83	Button x	Slat angle in %	1 byte	5.001 DPT_Percentage (0-100 %)

Table 35: Communication objects "Position/slat angle (0..100%)" for shutter/blind operation (button)

No.	Name	Object function	Length	Data type
23, 43, 63, 83	Button x	Slat angle in %	1 byte	5.001 DPT_Percentage (0-100 %)

Table 36: ‘Slat angle (0-100 %)’ communication objects for shutter/blind operation (button)

4.6 Value 1 bytes function

In the following parameter window, the ‘Value 1 byte’ function is parameterised and set as a rocker or independent push-button in the using mode.

The application provides a 1-byte communication object for each rocker or independent push-button. Pressing a button transmits the set value to the bus. In the rocker operating mode, different values can be parametrised and set for the two rocker sides.

Fig. 21: Function of the ‘Value 1 byte’ rocker

Parameter	Description	Value
Function (Individual push-button configuration)	This parameter assigns the independent push-button one of the following object values. The 1-byte value as a percentage is set using the sliderbar.	Percentage (0 ... 100%)
Function upon press on top Function upon press on bottom (Configuration rocker)	This parameter assigns the rocker one of the following object values when pressed. A distinction is made here between the push-button functions when it is pressed on top or bottom. The 1-byte value as a percentage is set using the sliderbar.	Percentage (0 ... 100%)

Table 37: Function of the ‘Value 1 byte’ rocker/independent push-button

No.	Name	Object function	Length	Data type
22, 62,	Rocker x-y	Value in %	1 byte	5.001 DPT_Percentage

Table 38: ‘Value 1 byte’ communication objects (0-100 %) (rocker)

No.	Name	Object function	Length	Data type
22, 42, 62, 82,	Button x	Value in %	1 byte	5.001 DPT_Percentage

Table 39: ‘Value 1 byte’ communication objects (0-100 %) (button)

The 'Value 1 byte' parameter defines which value range the push-button should use. Relative values ranging from 0 to 100 % can be transmitted to the bus for the 'Value 1 byte' function by means of a slide control.

4.7 Value 2 bytes function

In the following parameter window, the **Value 2 bytes** function is parametrised and set as a rocker or button in the operating concept.

The application provides a 2-byte communication object for each rocker or button. Pressing a button transmits the set value to the bus. In the **rocker** operating mode, different values can be parametrised and set for the two rocker sides.

Fig. 22: Function of the ‘Value 2 bytes’ independent push-button

Parameter	Description	Value
Function of the ‘Value 2 bytes’ independent push-button ^[1] (Individual push-button configuration)	This parameter assigns the independent push-button one of the following object values assigned when pressed.	Value (0-65535) Temperature Brightness
Function of the ‘Value 2 byte’ rocker ^[1] Function upon press on top Function upon press on bottom (Configuration rocker)	This parameter assigns the rocker one of the following object values when pressed. A distinction is made here between the push-button functions when it is pressed on top or bottom.	Value (0-65535) Temperature Brightness

Table 40: Function of the ‘Value 2 bytes’ rocker/independent push-button

^[1] If the respective function value is selected, another parameter window opens for setting the desired 2-byte value (0-65535 / 0-1000 Lux / 0-40°C).

No.	Name	Object function	Length	Data type
24, 64	Rocker x-y	Value (0-65535)	2 byte	7.001 DPT_Pulse
24, 64	Rocker x-y	Temperature value	2 byte	9.001 DPT_Temperature (°C)
24, 64	Rocker x-y	Brightness value	2 byte	9.004 DPT_Lux (Lux)

Table 41: ‘Value 2 bytes’ communication objects (rocker)

No.	Name	Object function	Length	Data type
24, 44, 64, 84	Button x	Value (0-65535)	2 byte	7.001 DPT_Pulse
24, 44, 64, 84	Button x	Temperature value	2 byte	9.001 DPT_Temperature (°C)
24, 44, 64, 84	Button x	Brightness value	2 byte	9.004 DPT_Lux (Lux)

Table 42: 'Value 2 bytes' communication objects (independent push-button)

4.8 Function ‘Room controller extension unit’

This function allows an external KNX room thermostat (KNX thermostat or KNX room controller, for example) to be activated using the push-button module operation button.

It can provide basic controller functions such as:

Operating mode switching or heating/cooling switching from different places in the room to change or adjust.



The thermostat extension is, however, not actively involved in the actual calculation of the temperature control.

The thermostat extension only works properly when all communication objects are connected to the appropriate objects in the associated KNX thermostat with a group address.

Fig. 23: Function of the ‘Thermostat extension’ independent push-button

Parameter	Description	Value
Function of the ‘Room thermostat extension unit’ independent push-button ^[1] (Individual push-button configuration)	This parameter assigns the following function to the push-button in the ‘Thermostat extension’ function when the button is pressed.	Operating mode changeover Heating/cooling – Change-over
Function of the rocker ‘Thermostat extension’ function ^[1] Function upon press on top Function upon press on bottom (Configuration rocker)	This parameter assigns the following function to the rocker in the ‘Thermostat extension’ function. A distinction is made here between the push-button functions when it is pressed on top or bottom.	Operating mode changeover Heating/cooling – Change-over

Table 43: Function of ‘Rocker/room thermostat extension unit’ button

^[1] If the respective function value is selected, another parameter window opens for setting the desired function type.

Parameter	Description	Value
Operating mode changeover	This parameter defines which operating mode is transmitted to the KNX when a button is pressed (on the controller extension). Rocker function: different operating modes can be set for the top and bottom rocker sides Single push-button: One operating mode assigned for when the button is pressed	Auto Comfort Standby Night selection Frost protection
Heating/cooling – Change-over	With this parameter, each time the independent push-button or rocker (top/bottom) is pressed, the function of the heating system (heating/cooling) is changed over. Two 1-bit objects are available for communication here (changeover and status indication).	

Table 44: Function of the 'Thermostat extension' rocker/independent push-button

The 'Override setpoint' function allows the 'Comfort', 'Standby', 'Frost protection', 'Night setpoint' or 'Auto' operating modes to be transmitted to the bus.

Example:

– Comfort

The **Comfort** operating mode sets the room temperature to a temperature value predefined in the thermostat e.g. comfort temperature 21°C for comfort (presence).

– Standby

The **Standby** operating mode reduces the room temperature after leaving the room (brief absence) to a value e.g. 19°C predefined in the thermostat.

– Frost protection

The **Frost protection** operating mode reduces the heating circuit temperature to a minimum temperature of 7°C defined in the controller to protect against frost damage over night or during periods of extended absence.

– Night selection

The **Night setpoint** operating mode turns down the room temperature during a long absence (holiday, for example) to a value of 17°C, for example, defined in the thermostat.

– Auto

The Auto operating mode automatically resets the operating mode to the current operating mode (after priority, for example).



With underfloor heating, the change-over from Comfort to Standby is only noticeable after a certain period of time due to the sluggishness of the underfloor heating system.

'Independent push-button'/'rocker' configuration

No.	Name	Object function	Length	Data type
22, 62,	Rocker x-y	Operating mode changeover	1 byte	20.102 DPT_HVAC mode

Table 45: 'Override setpoint' communication objects (rocker)

No.	Name	Object function	Length	Data type
22, 42, 62, 82,	Button x	Operating mode changeover	1 byte	20.102 DPT_HVAC mode

Table 46: 'Override setpoint' communication objects (independent push-button)

No.	Name	Object function	Length	Data type
13, 53,	Rocker x-y	Heating/cooling Status display	1 bit	1.100 DPT_heating/cooling
18, 58,	Rocker x-y	Heating + cooling Switching	1 bit	1.100 DPT_heating/cooling

Table 47: 'Heating/cooling-changeover' communication objects (rocker)

No.	Name	Object function	Length	Data type
13, 33, 53, 73	Button x	Heating + cooling Status display	1 bit	1.100 DPT_heating/cooling
18, 38, 58, 78	Button x	Heating + cooling Switching	1 bit	1.100 DPT_heating/cooling

Table 48: 'Heating/cooling-changeover' communication objects (independent push-button)

4.9 Priority function

The 'Priority' (forced) function for the independent push-button and rocker is configured in this section. This function allows a switch output to be forced to a switch position by a 2-bit telegram regardless of the ON/OFF object (higher priority).

The value of the 2-bit telegram is defined according to the following syntax:

When 'Priority' is active, incoming switch telegrams are still evaluated internally; when 'Priority' is no longer active, the current internal switch condition, according to the ON/OFF object value, is set.

A 'Priority' function activated before a bus voltage failure is always deactivated after a bus voltage recovery. The effect of the 'Priority' function depends on the actuator channel connected (lighting, shutter/blind, heating).

Fig. 24: Priority function

Value		Output behaviour
Bit 1	Bit 0	
0	0/1	End of 'Priority'
1	0	'Priority' OFF
1	1	'Priority' ON

Table 49: 'Priority' 2-bit communication object

Parameter	Description	Value
Function of the 'Priority' independent push-button (Individual push-button configuration)	This parameter assigns the following function to the independent push-button in the 'Priority' function when the button is pressed.	An Off
Function of the 'Priority' rocker Function upon press on top Function upon press on bottom (Configuration rocker)	This parameter assigns the following function to the rocker in the 'Priority' function. A distinction is made here between the rocker functions when it is pressed on top or bottom.	An Off

Table 50: Function of the 'Priority' rocker/independent push-button

'Independent push-button'/'rocker' configuration

No.	Name	Object function	Length	Data type
13, 53	Rocker x-y	Status indicator Priority	1 bit	1.011 DPT_Status
20, 60	Rocker x-y	Priority	2 bit	2.001 DPT_Status

Table 51: 'Priority' communication objects (rocker)

No.	Name	Object function	Length	Data type
13, 33, 53, 73	Button x	Status indicator Priority	1 bit	1.011 DPT_Status
20, 40, 60.80	Button x	Priority	2 bit	2.001 DPT_Status

Table 52: 'Priority' communication objects (independent push-button)

Example: Window cleaner function

The window cleaner function is an application that prevents a manual operation of the blind/roller shutter from being executed during the window cleaning. As a result, the blind/roller shutter operation is disabled from a central point. Blinds that have already been lowered are moved to the upper stop position. The manual blind/roller shutter function is also enabled from a central point.

4.10 Scene function

In the following parameter window, the Scene function is parametrised and set as a rocker and button in the operating concept.

Fig. 25: Scene function

The 'Scene' function can be used as a scene extension and can be used to call up or save configured light scenes that are stored in other KNX devices. The device can call up and save a maximum of 64 scenes. Through a short key-press, the device transmits a value between 0 and 63 (where value 0 corresponds to scene 1 and value 63 corresponds to scene 64) to the bus via the scene control communication object. The scene is called up when the button is released.

Bit number

7	6	5	4	3	2	1	0
Store	X	Scene number (0 = scene 1 ---- bit no. +1 = scene number)					

Table 53: Structure of 1-byte scene communication object

X = not relevant

If the scene memorisation function is activated with a long key-press, the scene parameter values can be connected to the device and stored with a long key-press. Scene memorisation can also be deactivated with a long key-press (untick box, , 1).

Parameter	Description	Value
Function of the 'Scene' push-button (scene extension) (Individual push-button configuration)	This parameter assigns a scene number to the push-button in the 'Scene' function when the button is pressed.	Scene number (1 ... 64)
Function of the rocker scene (scene extension)	This parameter assigns a scene number to the rocker in the 'Scene' function.	Scene number top button (1 ... 64) Scene number button down (1 ... 64)
Function upon press on top Function upon press on bottom (Configuration rocker)	A distinction is made here between the rocker functions when it is pressed up/down.	

Table 54: Function of the 'Scene' rocker/independent push-button

Parameter	Description	Value
Saving the scene by pressing and holding the button ^[1]	A changed scene can be saved again by activating this function by ticking the box.	

Table 54: Function of the ‘Scene’ rocker/independent push-button

^[1] Scene memorisation is confirmed by the flashing of the respective status LED of the button (1 second). If the parameters of a scene are changed by the device, the new scene parameters can be saved by a long press of the button.

No.	Name	Object function	Length	Data type
22, 62	Rocker x-y	Scene	1 byte	18.001 DPT_Scene control

Table 55: ‘Scene’ communication objects (rocker)

No.	Name	Object function	Length	Data type
22, 42, 62, 82	Button x	Scene	1 byte	18.001 DPT_Scene control

Table 56: ‘Scene’ communication objects (independent push-button)

Example: Procedure for saving scenes

- Switch on scene (in this example ‘Scene TV’) by briefly pressing the button on the push-button module (Fig. 26, A-1)
Scene is activated e.g., lighting dimmed to 30%, blind closed to 85%)

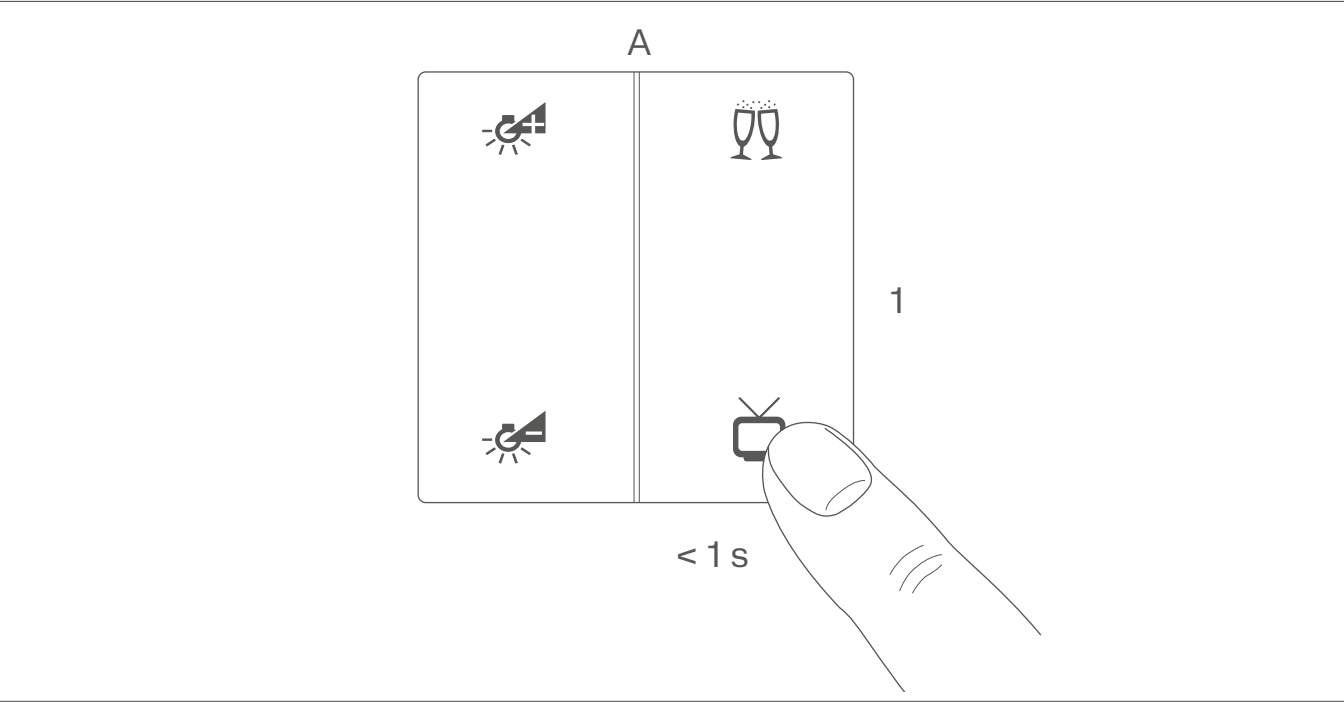


Fig. 26: Scene call-up

Set and save new scene parameters on the push-button.

- Change lighting brightness, dim up or down (Fig. 27, B)

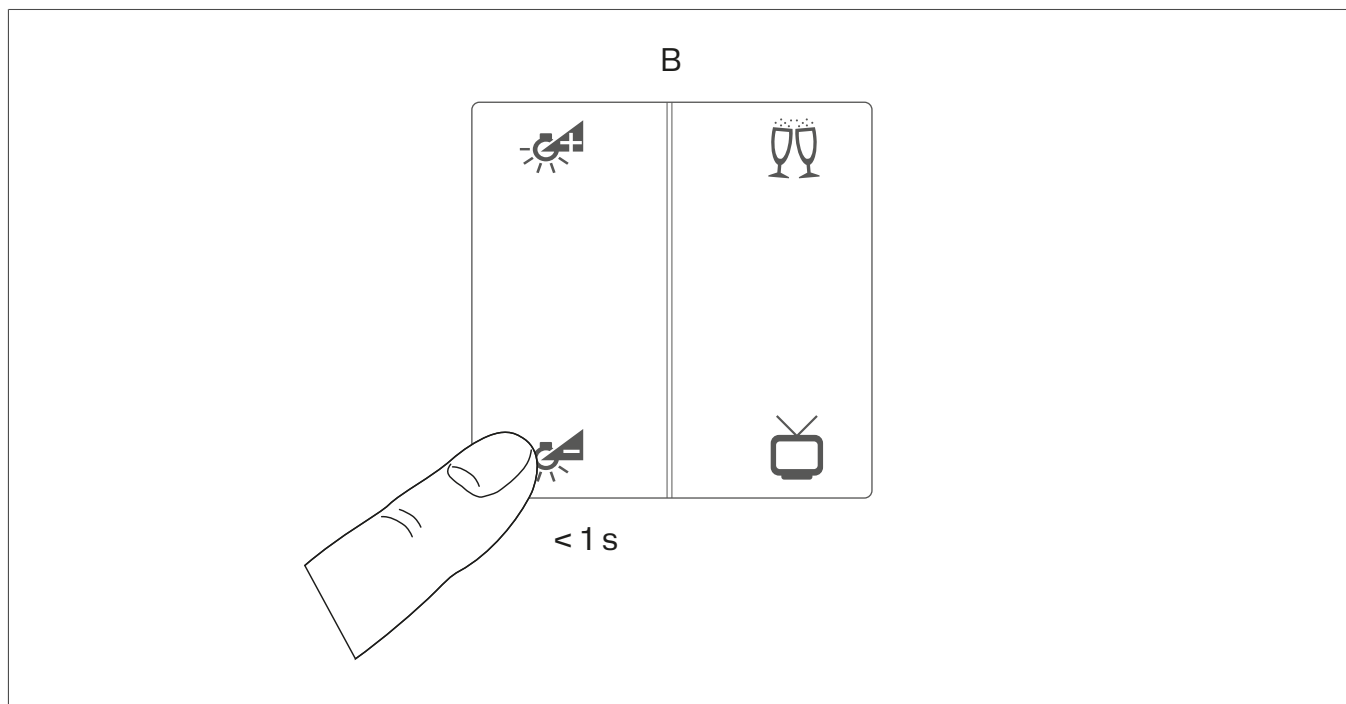


Fig. 27: Setting new scene parameters

- Hold the button for 'Scene TV' for longer than 5 s (, C-1)
New scene parameters have been saved. Pressing the 'Scene TV' button again activates the new scene settings.

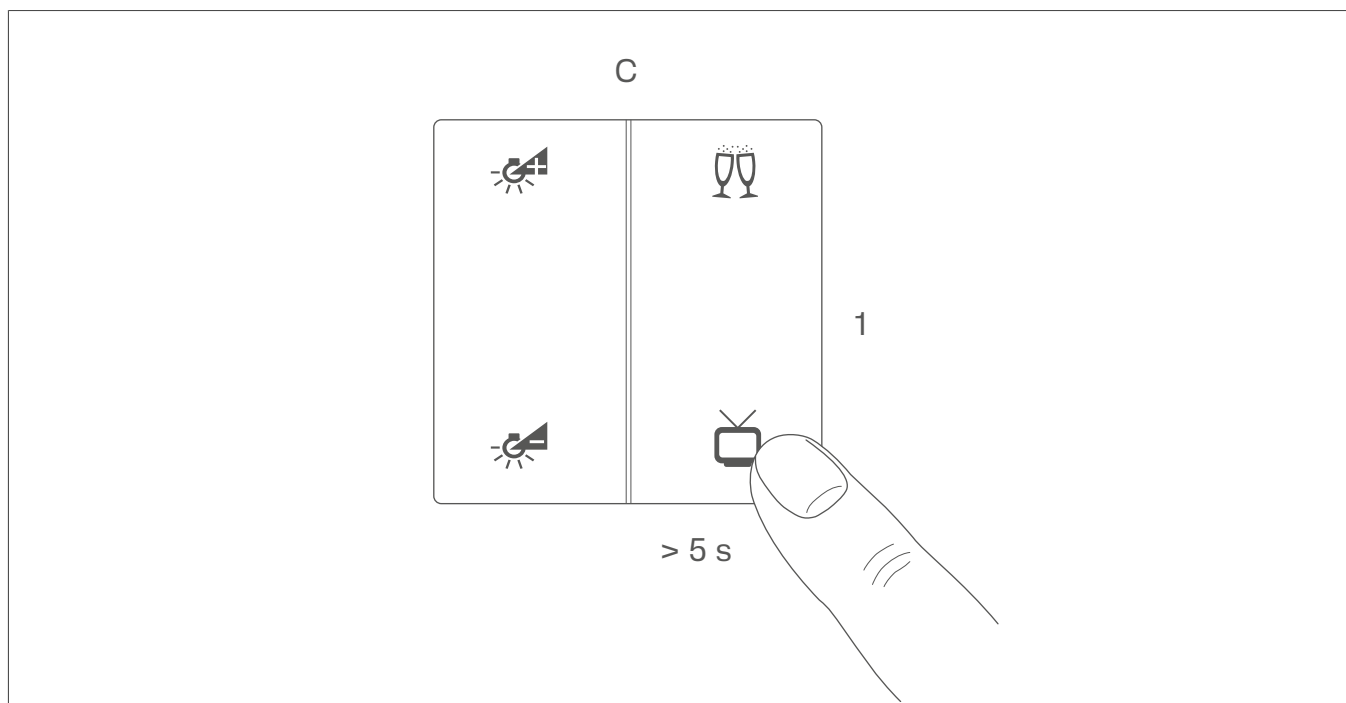


Fig. 28: Saving new scene parameters



The Save scene by a long press of the button function is switched on by default.

4.11 Deactivate automatic function

The automatic Deactivate control function is described and presented in the following section.



Fig. 29: Automatic control deactivation parameter

No.	Name	Object function	Length	Data type
13, 53	Rocker x-y	Automatic control deactivation status	1 bit	1.003 DPT_Enable
18, 58	Rocker x-y	Deactivate automatic	1 bit	1.003 DPT_Enable

Table 57: ‘Automatic control’ communication objects (rocker)

No.	Name	Object function	Length	Data type
13, 33, 53, 73	Button x	Automatic control deactivation status	1 bit	1.003 DPT_Enable
18, 38, 58, 78	Button x	Deactivate automatic	1 bit	1.003 DPT_Enable

Table 58: ‘Automatic functions’ communication objects (independent push-button)

With this 1-bit communication object automatic sequences already running in the actuators can be deactivated, switched off.

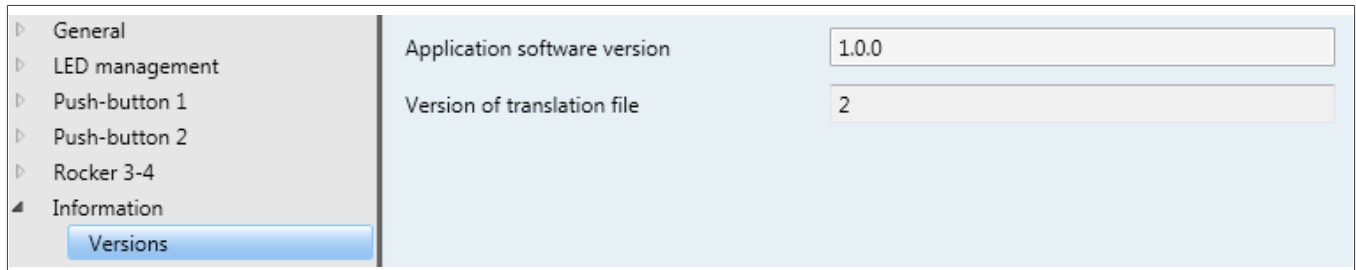
Example: Time-dependent outside lighting ON/OFF

The outside lighting is switched ON and OFF at a specific time every day of the week.

However, on certain occasions (garden parties) the outside lighting should stay on for longer. In such cases, the ‘Automatic control deactivation’ function is used to deactivate/switch off the time-dependent switching on/off of the outside lighting. To do so, a 1-bit command is transmitted to the bus.

4.12 'Information' parameter window

This parameter window specifies which application, database version and translation version the deployed device works with.



The screenshot shows a configuration window with a left sidebar and a main content area. The sidebar contains a tree view with the following items: 'General', 'LED management', 'Push-button 1', 'Push-button 2', 'Rocker 3-4', and 'Information'. The 'Information' item is selected and expanded, showing a sub-item 'Versions' which is highlighted with a blue button. The main content area has a light blue background and contains two text input fields. The first field is labeled 'Application software version' and contains the text '1.0.0'. The second field is labeled 'Version of translation file' and contains the text '2'.

Application software version	1.0.0
Version of translation file	2

Fig. 30: 'Information' parameter window

5 Communication objects

5.1 'General' communication objects

5.1.1 Disable function

4	General	Lock-up	1 bit	C	-	W	-	-	state	Low
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Fig. 31: 'General - Lock-up' communication objects

No.	Name	Object function	Length	Data type	Flags
4	General	Disable function	1 bit	DPT_Status	C, W

This object is always visible but must be activated for each independent push-button/rocker separately.

This object enables the locking-up of another independent push-button/rocker; a 0/1 is transmitted to the respective lock-up object of the other device or the independent push-button/rocker is locked-up by another device when a 0/1 is received.

► For further information, see .

5.2 Status LED communication objects

5.2.1 'Direction LED ON/OFF' brightness

5	LED management	Day/night	1 bit	C	-	W	-	-		Low
6	LED management	Device LED - ON/OFF	1 bit	C	-	W	-	-	switch	Low
9	LED management	Status LED - luminosity day	1 Byte	C	-	W	-	-	percentage (0..100%)	Low
11	LED management	Status LED - luminosity night	1 Byte	C	-	W	-	-	percentage (0..100%)	Low

Fig. 32: 'LED management' communication objects

No.	Name	Object function	Length	Data type	Flags
5	Status LED brightness	Day/night	1 bit		C, W
6	Status LED brightness	Device LED ON/OFF	1 bit	DPT_Switching	C, W

These objects become visible when the 'Status LED brightness' function is activated under 'Status LED brightness - General'.

Objects enable the device LEDs to be permanently switched ON/OFF.

► For further information, see .

5.2.2 Change of brightness value through object

No.	Name	Object function	Length	Data type	Flags
9	Status LED brightness	Status LED - brightness Day	1 byte	DPT_Percentage (0..100%)	C, W
11	Status LED brightness	Status LED - brightness Night	1 byte	DPT_Percentage (0..100%)	C, W

These objects become visible when the 'Change of brightness value through object' function is activated under 'Status LED brightness - General'.

These objects enable the changing of the status LED brightness value for daytime and nighttime operation.

No.	Name	Object function	Length	Data type	Flags
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► For further information, see .

5.3 'Independent push-button/rocker' communication objects

5.3.1 Toggle switch

13	Rocker 1-2	Status indication ON/OFF	1 bit	C	-	W	T	U	switch	Low
18	Rocker 1-2	ON/OFF	1 bit	C	-	-	T	-	switch	Low
53	Rocker 3-4	Status indication ON/OFF	1 bit	C	-	W	T	U	switch	Low
58	Rocker 3-4	ON/OFF	1 bit	C	-	-	T	-	switch	Low

Fig. 33: Rocker 'Toggle switch' communication object

13	Push-button 1	Status indication ON/OFF	1 bit	C	-	W	T	U	switch	Low
18	Push-button 1	ON/OFF	1 bit	C	-	-	T	-	switch	Low
33	Push-button 2	Status indication ON/OFF	1 bit	C	-	W	T	U	switch	Low
38	Push-button 2	ON/OFF	1 bit	C	-	-	T	-	switch	Low
53	Push-button 3	Status indication ON/OFF	1 bit	C	-	W	T	U	switch	Low
58	Push-button 3	ON/OFF	1 bit	C	-	-	T	-	switch	Low
73	Push-button 4	Status indication ON/OFF	1 bit	C	-	W	T	U	switch	Low
78	Push-button 4	ON/OFF	1 bit	C	-	-	T	-	switch	Low

Fig. 34: Independent push-button 'Toggle switch' communication object

No.	Name	Object function	Length	Data type	Flags
13, 53,	Rocker x	Switching status indicator	1 bit	DPT_Switching	C, W, T, U
13, 33, 53, 73,	Button x				
18, 58,	Rocker x	Switching	1 bit	DPT_Switching	C, T
18, 38, 58, 78,	Button x				

These objects are activated when the 'Toggle switch' function is selected in the parameters for each independent push-button/rocker.

These objects (13, 33, 53, 73) allow the return of the status value for the respective switching command. The return of the status value is used for switching an actuator channel by two buttons in toggle mode.

These objects (18, 38, 58, 78) transmit a 1-bit command to the actuator channel and trigger a switching command when a button is pressed.

► For further information, see .

5.3.2 Switching

 18	Rocker 1-2	ON/OFF	1 bit	C	-	-	T	-	switch	Low
 58	Rocker 3-4	ON/OFF	1 bit	C	-	-	T	-	switch	Low

Fig. 35: Rocker 'ON/OFF' communication object

 18	Push-button 1	ON/OFF	1 bit	C	-	-	T	-	switch	Low
 38	Push-button 2	ON/OFF	1 bit	C	-	-	T	-	switch	Low
 58	Push-button 3	ON/OFF	1 bit	C	-	-	T	-	switch	Low
 78	Push-button 4	ON/OFF	1 bit	C	-	-	T	-	switch	Low

Fig. 36: Button 'ON/OFF' communication object

No.	Name	Object function	Length	Data type	Flags
18, 58,	Rocker x	Switching	1 bit	DPT_Switching	C, T
18, 38, 58, 78	Button x				

These objects are activated when the 'ON/OFF' function is selected in the parameters for each independent push-button/rocker.

These objects (18, 38, 58? 78) transmit a 1-bit command to the actuator channel and trigger a switching command when a button is pressed.

► For further information, see .

5.3.3 Dimming

18	Rocker 1-2	ON/OFF	1 bit	C	-	-	T	-	switch	Low
21	Rocker 1-2	Dimming	4 bit	C	-	-	T	-	dimming control	Low
58	Rocker 3-4	ON/OFF	1 bit	C	-	-	T	-	switch	Low
61	Rocker 3-4	Dimming	4 bit	C	-	-	T	-	dimming control	Low

Fig. 37: Rocker 'Dimming - ON/OFF' communication object

18	Push-button 1	ON/OFF	1 bit	C	-	-	T	-	switch	Low
21	Push-button 1	Dimming	4 bit	C	-	-	T	-	dimming control	Low
38	Push-button 2	ON/OFF	1 bit	C	-	-	T	-	switch	Low
41	Push-button 2	Dimming	4 bit	C	-	-	T	-	dimming control	Low
58	Push-button 3	ON/OFF	1 bit	C	-	-	T	-	switch	Low
61	Push-button 3	Dimming	4 bit	C	-	-	T	-	dimming control	Low
78	Push-button 4	ON/OFF	1 bit	C	-	-	T	-	switch	Low
81	Push-button 4	Dimming	4 bit	C	-	-	T	-	dimming control	Low

Fig. 38: Button 'Dimming - ON/OFF' communication object

No.	Name	Object function	Length	Data type	Flags
18, 58,	Rocker x	Switching	1 bit	DPT_Switching	C, T
18, 38, 58, 78	Button x				
21, 61	Rocker x	Dimming	4 bit	DPT_Switching	C, T
21, 41, 61, 81	Button x				

These objects are activated when the 'Dimming - Increase (ON)/Decrease (OFF)' function is selected in the parameters for each independent push-button/rocker.

The objects (18, 38, 58, 78) transmit a 1-bit command to the dimmer actuator channel and trigger a switching command and the objects (21, 41, 61, 81) transmit a 4-bit command to the dimmer actuator channel and trigger a dimming command when the button is pressed.

► For further information, see .

13	Rocker 1-2	Status indication ON/OFF	1 bit	C	-	W	T	U	switch	Low
18	Rocker 1-2	ON/OFF	1 bit	C	-	-	T	-	switch	Low
21	Rocker 1-2	Dimming	4 bit	C	-	-	T	-	dimming control	Low
53	Rocker 3-4	Status indication ON/OFF	1 bit	C	-	W	T	U	switch	Low
58	Rocker 3-4	ON/OFF	1 bit	C	-	-	T	-	switch	Low
61	Rocker 3-4	Dimming	4 bit	C	-	-	T	-	dimming control	Low

Fig. 39: Rocker 'Dimming - Toggle switch' communication object

13	Push-button 1	Status indication ON/OFF	1 bit	C	-	W	T	U	switch	Low
18	Push-button 1	ON/OFF	1 bit	C	-	-	T	-	switch	Low
21	Push-button 1	Dimming	4 bit	C	-	-	T	-	dimming control	Low
33	Push-button 2	Status indication ON/OFF	1 bit	C	-	W	T	U	switch	Low
38	Push-button 2	ON/OFF	1 bit	C	-	-	T	-	switch	Low
41	Push-button 2	Dimming	4 bit	C	-	-	T	-	dimming control	Low
53	Push-button 3	Status indication ON/OFF	1 bit	C	-	W	T	U	switch	Low
58	Push-button 3	ON/OFF	1 bit	C	-	-	T	-	switch	Low
61	Push-button 3	Dimming	4 bit	C	-	-	T	-	dimming control	Low
73	Push-button 4	Status indication ON/OFF	1 bit	C	-	W	T	U	switch	Low
78	Push-button 4	ON/OFF	1 bit	C	-	-	T	-	switch	Low
81	Push-button 4	Dimming	4 bit	C	-	-	T	-	dimming control	Low

Fig. 40: Button 'Dimming - Toggle switch' communication object

No.	Name	Object function	Length	Data type	Flags
13, 53	Rocker x	Switching status indicator	1 bit	DPT_Switching	C, W, T, U
13, 33, 53, 73	Button x				
18, 58,	Rocker x	Switching	1 bit	DPT_Switching	C, T
18, 38, 58, 78	Button x				
21, 61	Rocker x	Dimming	4 bit	DPT_Switching	C, T
21, 41, 61, 81	Button x				

These objects are activated when the 'Dimming - Increase (toggle switch)/Decrease (toggle switch)' function is selected in the parameters for each independent push-button/rocker.

The objects (18, 38, 58, 78) transmit a 1-bit command to the dimmer actuator channel and trigger a switching command and the objects (21, 41, 61, 81) transmit a 4-bit command to the dimmer actuator channel and trigger a dimming command when the button is pressed. The objects (13, 33, 53, 73) allow the return of the status value for the respective switching command (for linking with a status LED, for example).

► For further information, see .

22	Rocker 1-2	Brightness value	1 Byte	C	-	-	T	-	percentage (0..100%)	Low
62	Rocker 3-4	Brightness value	1 Byte	C	-	-	T	-	percentage (0..100%)	Low

Fig. 41: Rocker 'Dimming - dimming value' communication object

22	Push-button 1	Brightness value	1 Byte	C	-	-	T	-	percentage (0..100%)	Low
42	Push-button 2	Brightness value	1 Byte	C	-	-	T	-	percentage (0..100%)	Low
62	Push-button 3	Brightness value	1 Byte	C	-	-	T	-	percentage (0..100%)	Low
82	Push-button 4	Brightness value	1 Byte	C	-	-	T	-	percentage (0..100%)	Low

Fig. 42: Button 'Dimming - dimming value' communication object

No.	Name	Object function	Length	Data type	Flags
22, 62	Rocker x	Dimming value	1 byte	DPT_Percentage (0..100%)	C, T
22, 42, 62, 82	Button x				

These objects are activated when the 'Dimming - dimming value' function is selected in the parameters for each independent push-button/rocker.

The objects (22, 42, 62, 82) transmit a 1-byte command to the dimmer actuator channel and switch on the lighting at a fixed percentage value when the button is pressed.

► For further information, see .

5.3.4 Roller shutter/blind

18	Rocker 1-2	Up/down	1 bit	C	-	-	T	-	up/down	Low
19	Rocker 1-2	Step/stop (short press)	1 bit	C	-	-	T	-	step	Low
58	Rocker 3-4	Up/down	1 bit	C	-	-	T	-	up/down	Low
59	Rocker 3-4	Step/stop (short press)	1 bit	C	-	-	T	-	step	Low

Fig. 43: Rocker 'Shutter/blind' communication object

18	Push-button 1	Up/down	1 bit	C	-	-	T	-	up/down	Low
19	Push-button 1	Step/stop (short press)	1 bit	C	-	-	T	-	step	Low
38	Push-button 2	Up/down	1 bit	C	-	-	T	-	up/down	Low
39	Push-button 2	Step/stop (short press)	1 bit	C	-	-	T	-	step	Low
58	Push-button 3	Up/down	1 bit	C	-	-	T	-	up/down	Low
59	Push-button 3	Step/stop (short press)	1 bit	C	-	-	T	-	step	Low
78	Push-button 4	Up/down	1 bit	C	-	-	T	-	up/down	Low
79	Push-button 4	Step/stop (short press)	1 bit	C	-	-	T	-	step	Low

Fig. 44: Button 'Shutter/blind' communication object

No.	Name	Object function	Length	Data type	Flags
18, 58	Rocker x	Up/down	1 bit	DPT_Up/Down	C, T
18, 38, 58, 78	Button x				
19, 59	Rocker x	Slat Step/Stop (step)	1 bit	DPT_Step	C, T
19, 39, 59, 79	Button x				
22, 62	Rocker x	Position in %	1 byte	DPT_Percentage	C, T
22, 42, 62, 82	Button x				
23, 63	Rocker x	Slat angle in %	1 byte	DPT_Percentage	C, T
23, 43, 63, 83	Button x				

These objects are activated when the 'Shutter/blind' function is selected in the parameters for each independent push-button/rocker.

The objects (18, 38, 58, 78) transmit a 1-bit command to the shutter/roller actuator channel and move the hanging up/down when the button is pressed.

The objects (19, 39, 59, 79) transmit a 1-bit command to the shutter/roller actuator channel and stop the shutter/blind movement or gradually change the position of the hanging.

The objects (22, 42, 62, 82) transmit a 1-byte command to the shutter/roller actuator channel and change the position of the hanging.

The objects (23, 43, 63, 83) transmit a 1-byte command to the shutter/roller actuator channel and gradually change the position of the slats.

► For further information, see .

5.3.5 Value 1 bytes

22	Rocker 1-2	Value in %	1 Byte	C	-	-	T	-	percentage (0..100%)	Low
62	Rocker 3-4	Value in %	1 Byte	C	-	-	T	-	percentage (0..100%)	Low

Fig. 45: Rocker 'Value 1 byte' communication object

22	Push-button 1	Value in %	1 Byte	C	-	-	T	-	percentage (0..100%)	Low
42	Push-button 2	Value in %	1 Byte	C	-	-	T	-	percentage (0..100%)	Low
62	Push-button 3	Value in %	1 Byte	C	-	-	T	-	percentage (0..100%)	Low
82	Push-button 4	Value in %	1 Byte	C	-	-	T	-	percentage (0..100%)	Low

Fig. 46: Button 'Value 1 byte' communication object

No.	Name	Object function	Length	Data type	Flags
22, 62	Rocker x	Value in %	1 byte	DPT_Percentage (0...100%)	C, T
22, 42, 62, 82	Button x				

These objects are activated when the 'Value 1 byte' function is selected in the parameters for each independent push-button/rocker.

The objects (22, 42, 62, 82 - value) transmit a 2-byte command to a switching actuator channel and switch the lighting on at a defined value when the button is pressed.

► For further information, see .

5.3.6 Value 2 bytes

24	Rocker 1-2	Value (0-65535)	2 Byte	C	-	-	T	-	pulses	Low
64	Rocker 3-4	Value (0-65535)	2 Byte	C	-	-	T	-	pulses	Low

Fig. 47: Rocker 'Value 2 byte' communication object

24	Push-button 1	Value (0-65535)	2 Byte	C	-	-	T	-	pulses	Low
44	Push-button 2	Value (0-65535)	2 Byte	C	-	-	T	-	pulses	Low
64	Push-button 3	Value (0-65535)	2 Byte	C	-	-	T	-	pulses	Low
84	Push-button 4	Value (0-65535)	2 Byte	C	-	-	T	-	pulses	Low

Fig. 48: Button 'Value 2 byte' communication object

No.	Name	Object function	Length	Data type	Flags
24, 64	Rocker x	Value (0-65535)	2 byte	DPT_Pulse	C, T
24, 44, 64, 84	Button x				
24, 64	Rocker x	Temperature	2 byte	DPT_Temperature (°C)	C, T
24, 44, 64, 84	Button x				
24, 64	Rocker x	Brightness	2 byte	DPT_Lux (Lux)	C, T
24, 44, 64, 84	Button x				

These objects are activated when the 'Value 2 byte' function is selected in the parameters for each independent push-button/rocker.

The objects (24, 44, 64, 84, - value) transmit a 2-byte command to a switching actuator channel and switch the lighting on at a defined value when the button is pressed.

The objects (24, 44, 64, 84, - temperature) transmit a 2-byte command to a thermostat and change the set temperature, for example, when the button is pressed.

The objects (24, 44, 64, 84, - brightness) transmit a 2-byte command to a dimming actuator channel and switch the lighting on at a defined brightness value when the button is pressed.

► For further information, see .

5.3.7 Room thermostat extension unit

22	Rocker 1-2	Setpoint selection	1 Byte	C	-	-	T	-	HVAC mode	Low
62	Rocker 3-4	Setpoint selection	1 Byte	C	-	-	T	-	HVAC mode	Low

Fig. 49: Rocker 'Thermostat extension' communication object

13	Push-button 1	Heating/Cooling - status indication	1 bit	K	-	S	Ü	A	heizen/kühlen	Niedrig
18	Push-button 1	Heating/Cooling - changeover	1 bit	K	-	-	Ü	-	heizen/kühlen	Niedrig
42	Push-button 2	Setpoint selection	1 byte	K	-	-	Ü	-	HVAC Modus	Niedrig
62	Push-button 3	Setpoint selection	1 byte	K	-	-	Ü	-	HVAC Modus	Niedrig
82	Push-button 4	Setpoint selection	1 byte	K	-	-	Ü	-	HVAC Modus	Niedrig

Fig. 50: Button 'Thermostat extension' communication object

No.	Name	Object function	Length	Data type	Flags
22, 62	Rocker x	Operating mode changeover	1 byte	DPT_HVAC Mode	C, T
22, 42, 62, 82	Button x				
13, 53	Rocker x	Heating/cooling – Status indication	1 bit	DPT_heating/cooling	C, W, T, U
13, 33, 53, 73	Button x				
18, 58	Rocker x	Heating/cooling – Change- over	1 bit	DPT_heating/cooling	C, T
18, 38, 58, 78	Button x				

These objects are activated when the 'Thermostat extension' function is selected in the parameters for each independent push-button/rocker.

The objects (22, 42, 62, 82) transmit a 1-byte command to a thermostat and change the operating mode there (comfort, standby, etc.) when the button is pressed.

The objects (13, 33, 53, 73) transmit a 1-bit command to the bus and show the 'Heating or cooling' status, for example, on a display when the button is pressed.

The objects (18, 38, 58, 78) transmit a 1-bit command to a heating actuator and can therefore switch back and forth between heating and cooling mode.

Warning

The heating system must be equipped for heating and cooling operation.

► For further information, see .

5.3.8 Priority

13	Rocker 1-2	Status indication priority	1 bit	C	-	W	T	U	state	Low
20	Rocker 1-2	Priority	2 bit	C	-	-	T	-	boolean control	Low
53	Rocker 3-4	Status indication priority	1 bit	C	-	W	T	U	state	Low
60	Rocker 3-4	Priority	2 bit	C	-	-	T	-	boolean control	Low

Fig. 51: Rocker ‘Priority’ communication object

13	Push-button 1	Status indication priority	1 bit	C	-	W	T	U	state	Low
20	Push-button 1	Priority	2 bit	C	-	-	T	-	boolean control	Low
33	Push-button 2	Status indication priority	1 bit	C	-	W	T	U	state	Low
40	Push-button 2	Priority	2 bit	C	-	-	T	-	boolean control	Low
53	Push-button 3	Status indication priority	1 bit	C	-	W	T	U	state	Low
60	Push-button 3	Priority	2 bit	C	-	-	T	-	boolean control	Low
73	Push-button 4	Status indication priority	1 bit	C	-	W	T	U	state	Low
80	Push-button 4	Priority	2 bit	C	-	-	T	-	boolean control	Low

Fig. 52: Button ‘Priority’ communication object

No.	Name	Object function	Length	Data type	Flags
13, 53	Rocker x	Priority status indicator	1 bit	DPT_Status	C, W, T, U
13, 33, 53, 73	Button x				
20, 60	Rocker x	Priority	2 bit	DPT_Boolean control	C, T
20, 40, 60, 80	Button x				

These objects are activated when the ‘Priority’ function is selected in the parameters for each independent push-button/rocker.

The objects (13, 33, 53, 73) transmit a 1-bit command to the bus and show the ‘Priority’ status, for example, on a display when the button is pressed.

The object (20, 40, 60, 80) transmits a 2-bit command and switches an actuator channel (roller shutter/blind) into forced mode (motion operation of a roller shutter is blocked) when the button is pressed.

► For further information, see .

5.3.9 Scene

22	Rocker 1-2	Scene	1 Byte	C	-	-	T	-	scene control	Low
62	Rocker 3-4	Scene	1 Byte	C	-	-	T	-	scene control	Low

Fig. 53: Rocker 'Scene' communication object

22	Push-button 1	Scene	1 Byte	C	-	-	T	-	scene control	Low
42	Push-button 2	Scene	1 Byte	C	-	-	T	-	scene control	Low
62	Push-button 3	Scene	1 Byte	C	-	-	T	-	scene control	Low
82	Push-button 4	Scene	1 Byte	C	-	-	T	-	scene control	Low

Fig. 54: Button 'Scene' communication object

No.	Name	Object function	Length	Data type	Flags
22, 62	Rocker x	Scene	1 byte	DPT_scenes	C, T
22, 42, 62, 82	Button x			Control	

These objects are activated when the 'Scene' function is selected in the parameters for each independent push-button/rocker.

The objects (22, 42, 62, 82) transmit a 1-byte command to the bus and switch on the respectively stored scene in the actuator channels (light TV 50%, shutters closed to 75%) when the button is pressed.

► For further information, see .

5.3.10 Deactivate automatic

13	Rocker 1-2	Automatic control deactivation status	1 bit	C	-	W	T	U	enable	Low
18	Rocker 1-2	Automatic control deactivation	1 bit	C	-	-	T	-	enable	Low
53	Rocker 3-4	Automatic control deactivation status	1 bit	C	-	W	T	U	enable	Low
58	Rocker 3-4	Automatic control deactivation	1 bit	C	-	-	T	-	enable	Low

Fig. 55: Rocker ‘Automatic mode’ communication object

13	Push-button 1	Automatic control deactivation status	1 bit	C	-	W	T	U	enable	Low
18	Push-button 1	Automatic control deactivation	1 bit	C	-	-	T	-	enable	Low
33	Push-button 2	Automatic control deactivation status	1 bit	C	-	W	T	U	enable	Low
38	Push-button 2	Automatic control deactivation	1 bit	C	-	-	T	-	enable	Low
53	Push-button 3	Automatic control deactivation status	1 bit	C	-	W	T	U	enable	Low
58	Push-button 3	Automatic control deactivation	1 bit	C	-	-	T	-	enable	Low
73	Push-button 4	Automatic control deactivation status	1 bit	C	-	W	T	U	enable	Low
78	Push-button 4	Automatic control deactivation	1 bit	C	-	-	T	-	enable	Low

Fig. 56: Button ‘Automatic mode’ communication object

No.	Name	Object function	Length	Data type	Flags
13, 53	Rocker x	Automatic control deactivation status	1 bit	DPT_Enable	C, W, T, U
13, 33, 53, 73	Button x				
18, 58	Rocker x	Deactivate automatic	1 bit	DPT_Enable	C, T
18, 38, 58, 78	Button x				

These objects are activated when the ‘Automatic control deactivation’ function is selected in the parameters for each independent button/rocker.

The objects (13, 33, 53, 73) transmit a 1-bit command to the bus and show the ‘Automatic mode’ status, for example, on a display when the button is pressed.

The objects (18, 38, 58, 78) transmit a 1-bit command when the button is pressed which allows it to start/stop a set automatic mode.

► For further information, see .

6 Appendix

6.1 ETS software characteristics

Product	1gang push-button module	2gang push-button module	1gang group push-button module	2gang group push-button module
Max. number of group addresses	254	254	254	254
Max. number of assignments	255	255	255	255
Objects	84	84	84	84

Table 59: ETS software characteristics

6.2 Technical data

KNX Medium	TP 1
Configuration mode	systemlink
KNX nominal voltage	21 ... 32 V $\overline{\text{m}}$ SELV
KNX current consumption	Typ. 10 mA
Power consumption	typ. 150 mW
KNX connection mode	Bus connection terminal
Degree of protection	IP20
Protection class	III
Operating temperature	-40 to +30 °C
Storage/transport temperature	-50 to +50 °C
Standards	EN 60669-2-1; EN 60669-1 EN 50428

6.3 Accessories

Cover for push-button module x-gang	WNT902x, WAN300x, WAN04xx
Frame 1-gang	WNA401x
Frame x-gang horizontal/vertical	WNA40xx, WNA408x
Housing 1-gang with surface-mounted frame	WNA6x1x
Housing 2-gang with surface-mounted frame	WNA68xx, WNA67xx
Housing 3-gang with surface-mounted frame	WNA683x

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