

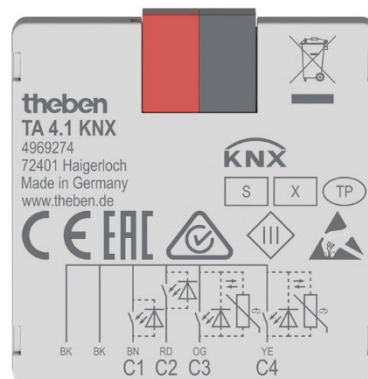
KNX manual

Push button interfaces

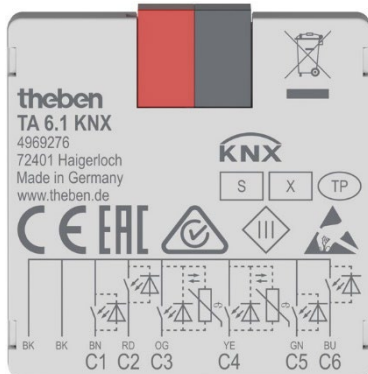
TA 2.1, TA 4.1, TA 6.1 and TA 8.1



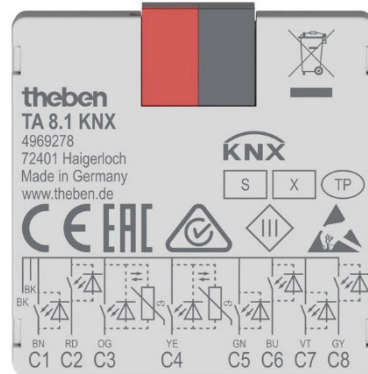
TA 2.1 KNX – 4969272



TA 4.1 KNX – 4969274



TA 6.1 KNX – 4969276



TA 8.1 KNX – 4969278

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1 ⚡ IMPORTANT WARNINGS



Danger of death through electric shock or fire!

- Installation should only be carried out by a qualified electrician!
- Do not connect mains voltage (230 V) or other external voltages to the inputs! Otherwise the device may be destroyed.
- Only connect potential-free buttons/switches.
- Note safe disconnection (SELV) of the connected leads to active parts.
- Do not remove the insulation from the unused inputs.
- Do not cut off the conductors of the unused inputs.
- Do not operate with 230 V leads or devices in the same flush-mounted box.
- Install in standard flush-mounted boxes behind the push button (according to DIN 49073-1)
- Connection of switch/push button and LEDs with provided connection lead and plug (see wiring diagrams)

2 Features

- Binary input push button interfaces
- Can be installed in flush-mounted boxes with conventional push buttons/switches
- Free allocation of functions: switch/push button, dimming, blinds, sequence, valuator, scenes, temperature measurement, LED control
- Flexible LED control, thanks to an increased output current of 3 mA, customary LEDs and low current LEDs can be controlled
- Inputs can be reconfigured to outputs with configurable flash and pulse function
- Colour coding of wiring pairs
- Grooves on side of housing for switch/push button clamps

TA 2.1 KNX

- 2-way push button interface
- 4-pole cable connection

TA 4.1 KNX

- 4-way push button interface
- 6-pole cable connection
- NTC inputs C3/C4 for actual temperature measurement

TA 6.1 KNX

- 6-way push button interface
- 8-pole cable connection
- NTC inputs C3/C4 for actual temperature measurement

TA 8.1 KNX

- 8-way push button interface
- 10-pole cable connection
- NTC inputs C3/C4 for actual temperature measurement

3 Operation

Pressing the switch/push button activates the input and sends the configured telegram. Conventional push buttons, switches or any kind of sensor (thermostat, time switch, etc.) can be connected. Channels configured as an LED output can be directly connected to an LED without a series resistor.

3.1 Reset

The devices can be reset to factory settings as follows:

ETS:

Select the device in the ETS and right-click to select 'Unload' - 'Physical address & application'.

Supply voltage & programming button:

Switch off the supply voltage, press and hold the programming button, switch on the supply voltage, hold the programming button for a further 5 seconds and then release it again.

Programming button:

Press the programming button for 5-10 seconds until the programming LED flashes. Release the programming button (max. 3 seconds) and press again for approx. 5 seconds until the programming LED flashes rapidly. Release the programming button.



Important note:

When resetting to factory settings, all saved information is deleted (physical address, group addresses, parameter settings, keys generated by the ETS (tool key and runtime key) for secure communication).

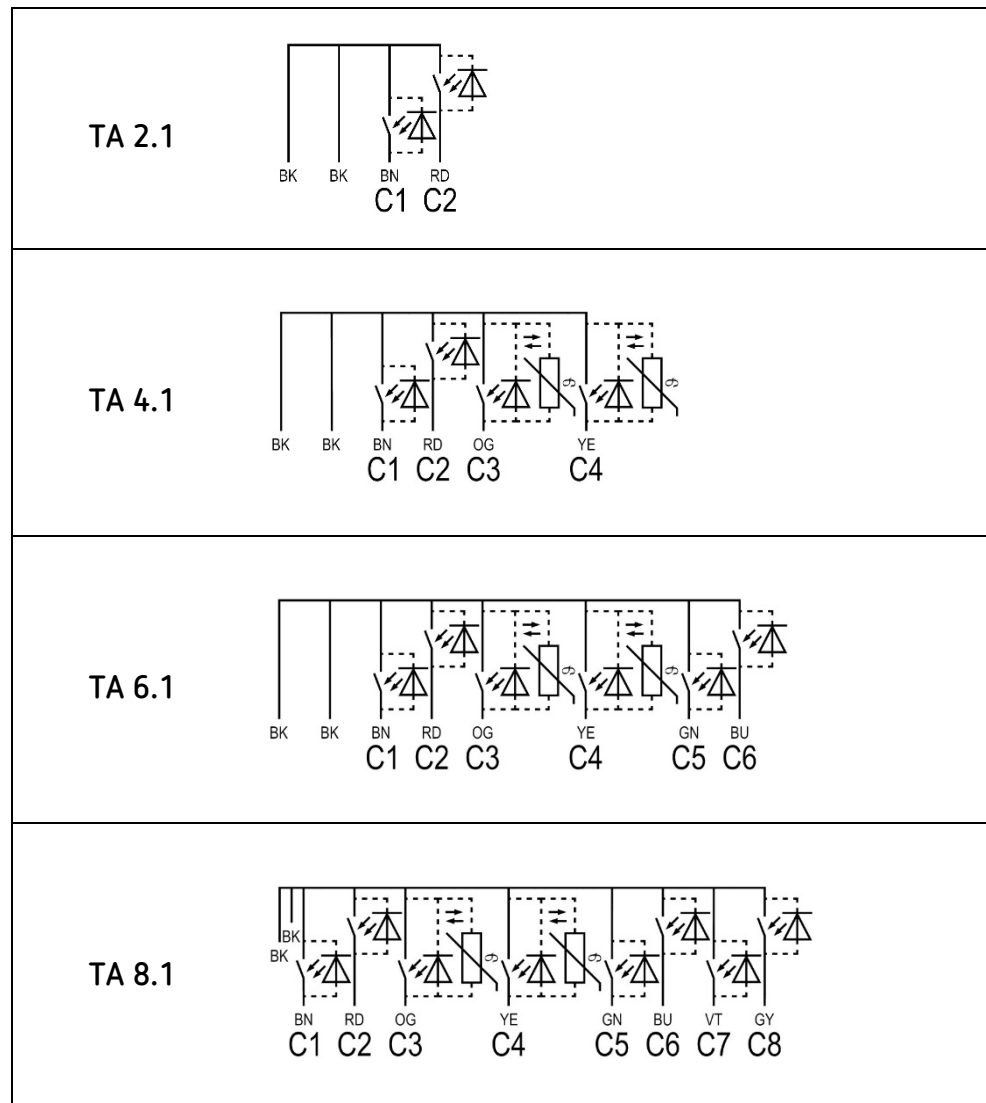
4 Technical data

4.1 Technical data TA 2.1, TA 4.1, TA 6.1, TA 8.1

KNX operating voltage	Bus voltage
Type of connection	Bus connection: KNX bus terminal
Power consumption as input	< 10 mA
Power consumption as output	TA 2.1 10 mA (max. 2 x LED at 3 mA) TA 4.1 12.5 mA (max. 4 x LED at 3 mA) TA 6.1, TA 8.1 15 mA (max. 6 or 8 x LED at 3 mA)
Length of connecting wires	25 cm
Maximum cable length	30 m
Contact voltage	5 V DC
Contact current	0.5 mA (5 mA peak)
Ambient temperature	– 5 °C ... + 45 °C
Type of installation	Flush-mounted installation
Output voltage	5 V DC
Temperature measurement range ¹	– 5 °C ... + 100 °C
LED connection	IF max. 1–3 mA (adjustable), UF up to ~ 3.6 V, no series resistor required
Protection rating	IP 20 in accordance with EN 60529
Protection class	III

¹ TA 4.1, TA 6.1, TA 8.1

4.2 Wiring diagrams



i Either a push button/switch, an LED or a temperature sensor (C3 and C4 only) can be connected to the respective channels.

5 The "TA 2.1/4.1/6.1/8.1" application program

5.1 Selection in the product database

Manufacturer	Theben AG
Product family	Inputs
Product type	Push button interfaces
Program names	TA 2.1, TA 4.1, TA 6.1, TA 8.1

Number of communication objects	Max. 40
Number of group addresses	254
Number of associations	254



The ETS database can be found on our website: www.theben.de/downloads

5.2 Overview of communication objects

5.2.1 Switch/valuator function

No.	Object name	Function	Length	R	W	C	T	DPT
1	Channel C1.1	Switching	1 bit	-	W	C	T	1.001
		Priority switching	2 bit	-	-	C	T	2.001
		Percent (0...100%)	1 byte	-	-	C	T	5.001
		Value (0-255)	1 byte	-	-	C	T	5.010
		Temperature (°C)	2 bytes	-	-	C	T	9.001
		HVAC operating mode	1 byte	-	-	C	T	20.102
		Call up scene	1 byte	-	-	C	T	17.001
		Colour temperature (K)	2 bytes	-	-	C	T	7.600
		Colour (RGB)	3 bytes	-	-	C	T	232.600
		Colour (RGBW)	6 bytes	-	-	C	T	251.600
		Colour (XY)	6 bytes	-	-	C	T	242.600
		1 bit DPT1.*	1 bit	-	-	C	T	1.xxx
		2 bit DPT2.*	2 bit	-	-	C	T	2.xxx
		1 byte without sign DPT5.*	1 byte	-	-	C	T	5.xxx
		2 byte without sign DPT7.*	2 bytes	-	-	C	T	7.xxx
		2 byte with sign DPT8.*	2 bytes	-	-	C	T	8.xxx
		2 byte with sign DPT9.*	2 bytes	-	-	C	T	9.xxx
		4 byte without sign DPT12.*	4 bytes	-	-	C	T	12.xxx
		4 byte with sign DPT13.*	4 bytes	-	-	C	T	13.xxx
		4 byte with sign DPT14.*	4 bytes	-	-	C	T	14.xxx
2	Objects channel C1.2 (details: see channel C1.1)							
3	Objects channel C1.3 (details: see channel C1.1)							
5	Channel C1	Block = 1	1 bit	-	W	C	-	1.003
		Block = 0	1 bit	-	W	C	-	1.003
11-75	Channels 2 to 8 (details: see channel 1)							

5.2.2 Push button/valuator function

No.	Object name	Function	Length	R	W	C	T	DPT
1	Channel C1.1	Switching	1 bit	-	W ²	C	T	1.001
		Priority switching	2 bit	-	-	C	T	2.001
		Percent (0...100%)	1 byte	-	-	C	T	5.001
		Value (0-255)	1 byte	-	-	C	T	5.010
		Temperature (°C)	2 bytes	-	-	C	T	9.001
		HVAC operating mode	1 byte	-	-	C	T	20.102
		Call up scene	1 byte	-	-	C	T	17.001
		Colour temperature (K)	2 bytes	-	-	C	T	7.600
		Colour (RGB)	3 bytes	-	-	C	T	232.600
		Colour (RGBW)	6 bytes	-	-	C	T	251.600
		Colour (XY)	6 bytes	-	-	C	T	242.600
		1 bit DPT1.*	1 bit	-	-	C	T	1.xxx
		2 bit DPT2.*	2 bit	-	-	C	T	2.xxx
		1 byte without sign DPT5.*	1 byte	-	-	C	T	5.xxx
		2 byte without sign DPT7.*	2 bytes	-	-	C	T	7.xxx
		2 byte with sign DPT8.*	2 bytes	-	-	C	T	8.xxx
		2 byte with sign DPT9.*	2 bytes	-	-	C	T	9.xxx
		4 byte without sign DPT12.*	4 bytes	-	-	C	T	12.xxx
		4 byte with sign DPT13.*	4 bytes	-	-	C	T	13.xxx
		4 byte with sign DPT14.*	4 bytes	-	-	C	T	14.xxx
2	Objects channel C1.2 (details: see channel C1.1)							
3	Objects channel C1.3 (details: see channel C1.1)							
5	Channel C1	Block = 1	1 bit	-	W	C	-	1.003
		Block = 0	1 bit	-	W	C	-	1.003
11-75	Channels 2 to 8 (details: see channel 1)							

² Only for the *change over* function

5.2.3 Push button/switching function

No.	Object name	Function	Length	R	W	C	T	DPT
1	Channel C1.1	Switching	1 bit	-	W	C	T	1.001
2	Channel C1.2	Switching	1 bit	-	W	C	T	1.001
3	Channel C1.3	Switching	1 bit	-	W	C	T	1.001
5	Channel C1	Block = 1	1 bit	-	W	C	-	1.003
		Block = 0	1 bit	-	W	C	-	1.003
11-75	Channels 2 to 8 (details: see channel 1)							

5.2.4 Push button/dimming function

No.	Object name	Function	Length	R	W	C	T	DPT
1	Channel C1	Switching	1 bit	-	W	C	T	1.001
2	Channel C1	Brighter/darker	4 bit	-	W	C	T	3.007
		Brighter	4 bit	-	-	C	T	3.007
		Darker	4 bit	-	-	C	T	3.007
3	Channel C1.1 ³	Switching	1 bit	-	W	C	T	1.001
		Priority switching	2 bit	-	-	C	T	2.001
		Percent (0...100%)	1 byte	-	-	C	T	5.001
		Value (0-255)	1 byte	-	-	C	T	5.010
		Temperature (°C)	2 bytes	-	-	C	T	9.001
		HVAC operating mode	1 byte	-	-	C	T	20.102
		Call up scene	1 byte	-	-	C	T	17.001
		Colour temperature (K)	2 bytes	-	-	C	T	7.600
		Colour (RGB)	3 bytes	-	-	C	T	232.600
		Colour (RGBW)	6 bytes	-	-	C	T	251.600
		Colour (XY)	6 bytes	-	-	C	T	242.600
		1 bit DPT1.*	1 bit	-	-	C	T	1.xxx
		2 bit DPT2.*	2 bit	-	-	C	T	2.xxx
		1 byte without sign DPT5.*	1 byte	-	-	C	T	5.xxx
		2 byte without sign DPT7.*	2 bytes	-	-	C	T	7.xxx
		2 byte with sign DPT8.*	2 bytes	-	-	C	T	8.xxx
		2 byte with sign DPT9.*	2 bytes	-	-	C	T	9.xxx
		4 byte without sign DPT12.*	4 bytes	-	-	C	T	12.xxx
		4 byte with sign DPT13.*	4 bytes	-	-	C	T	13.xxx
		4 byte with sign DPT14.*	4 bytes	-	-	C	T	14.xxx
5	Channel C1	Block = 1	1 bit	-	W	C	-	1.003
		Block = 0	1 bit	-	W	C	-	1.003
11-75	Channels 2 to 8 (details: see channel 1)							

³ Only available with double-click

5.2.5 Push button/blinds function

No.	Object name	Function	Length	R	W	C	T	DPT
1	Channel C1	Step/stop	1 bit	-	-	C	T	1.007
2	Channel C1	Up/down	1 bit	-	W	C	T	1.008
		Up	1 bit	-	-	C	T	1.008
		Down	1 bit	-	-	C	T	1.008
3	Channel C1.1	Height (%) ⁴	1 byte	-	-	C	T	5.001
		Switching	1 bit	-	W	C	T	1.001
		Priority switching	2 bit	-	-	C	T	2.001
		Percent (0...100%)	1 byte	-	-	C	T	5.001
		Value (0-255)	1 byte	-	-	C	T	5.010
		Temperature (°C)	2 bytes	-	-	C	T	9.001
		HVAC operating mode	1 byte	-	-	C	T	20.102
		Call up scene	1 byte	-	-	C	T	17.001
		Colour temperature (K)	2 bytes	-	-	C	T	7.600
		Colour (RGB)	3 bytes	-	-	C	T	232.600
		Colour (RGBW)	6 bytes	-	-	C	T	251.600
		Colour (XY)	6 bytes	-	-	C	T	242.600
		1 bit DPT1.*	1 bit	-	-	C	T	1.xxx
		2 bit DPT2.*	2 bit	-	-	C	T	2.xxx
		1 byte without sign DPT5.*	1 byte	-	-	C	T	5.xxx
		2 byte without sign DPT7.*	2 bytes	-	-	C	T	7.xxx
		2 byte with sign DPT8.*	2 bytes	-	-	C	T	8.xxx
		2 byte with sign DPT9.*	2 bytes	-	-	C	T	9.xxx
		4 byte without sign DPT12.*	4 bytes	-	-	C	T	12.xxx
		4 byte with sign DPT13.*	4 bytes	-	-	C	T	13.xxx
		4 byte with sign DPT14.*	4 bytes	-	-	C	T	14.xxx
4	Channel C1.2	Slat (%) ⁵	1 byte	-	-	C	T	5.001
5	Channel C1	Block = 1	1 bit	-	W	C	-	1.003
		Block = 0	1 bit	-	W	C	-	1.003
11-75	Channels 2 to 8 (details: see channel 1)							

⁴ Upon double-click with object type = Height % + slat %

⁵ Upon double-click with object type = Height % + slat %

5.2.6 Push button/sequence function

No.	Object name	Function	Length	R	W	C	T	DPT
1	Channel C1.1	Switching On/Off	1 bit	R	-	C	T	1.001
		Priority switching	2 bit	-	-	C	T	2.001
		Percent (0...100%)	1 byte	-	-	C	T	5.001
		Value (0-255)	1 byte	-	-	C	T	5.010
		Temperature (°C)	2 bytes	-	-	C	T	9.001
		HVAC operating mode	1 byte	-	-	C	T	20.102
		Call up scene	1 byte	-	-	C	T	17.001
		Colour temperature (K)	2 bytes	-	-	C	T	7.600
		Colour (RGB)	3 bytes	-	-	C	T	232.600
		Colour (RGBW)	6 bytes	-	-	C	T	251.600
		Colour (XY)	6 bytes	-	-	C	T	242.600
		1 bit DPT1.*	1 bit	-	-	C	T	1.xxx
		2 bit DPT2.*	2 bit	-	-	C	T	2.xxx
		1 byte without sign DPT5.*	1 byte	-	-	C	T	5.xxx
		2 byte without sign DPT7.*	2 bytes	-	-	C	T	7.xxx
		2 byte with sign DPT8.*	2 bytes	-	-	C	T	8.xxx
		2 byte with sign DPT9.*	2 bytes	-	-	C	T	9.xxx
		4 byte without sign DPT12.*	4 bytes	-	-	C	T	12.xxx
		4 byte with sign DPT13.*	4 bytes	-	-	C	T	13.xxx
		4 byte with sign DPT14.*	4 bytes	-	-	C	T	14.xxx
2	Objects channel C1.2 (details: see channel C1.1)							
3	Objects channel C1.3 (details: see channel C1.1)							
4	Objects channel C1.4 (details: see channel C1.1)							
5	Channel C1	Block = 1	1 bit	-	W	C	-	1.003
		Block = 0	1 bit	-	W	C	-	1.003
11-75	Channels 2 to 8 (details: see channel 1)							

5.2.7 Push button/scenes function

No.	Object name	Function	Length	R	W	C	T	DPT
1	Channel C1.1	Call up scene	1 byte	-	-	C	T	17.001
		Call up/save scene	1 byte	-	-	C	T	18.001
2	Channel C1.2	Call up scene	1 byte	-	-	C	T	17.001
		Call up/save scene	1 byte	-	-	C	T	18.001
3	Channel C1.3	Call up scene	1 byte	-	-	C	T	17.001
		Call up/save scene	1 byte	-	-	C	T	18.001
5	Channel C1	Block = 1	1 bit	-	W	C	-	1.003
		Block = 0	1 bit	-	W	C	-	1.003
11-75	Channels 2 to 8 (details: see channel 1)							

5.2.8 LED output function

No.	Object name	Function	Length	R	W	C	T	DPT
1	Channel C1	LED On/Off	1 bit	-	W	C	-	1.001
2	Channel C1	Set LED brightness 1	1 bit	-	W	C	-	1.001
3	Channel C1	Set LED brightness 2	1 bit	-	W	C	-	1.001
4	Channel C1	Set LED brightness 3	1 bit	-	W	C	-	1.001
5	Channel C1	Set LED brightness percentage	1 byte	-	W	C	-	1.005
11-75	Channels 2 to 8 (details: see channel 1)							

5.2.9 Temperature input function (only C3 and C4)

No.	Object name	Function	Length	R	W	C	T	DPT
21	Channel C3	Feedback actual value temperature (°C)	2 byte	R	-	C	T	9.001
31	Channel C4	Feedback actual value temperature (°C)	2 byte	R	-	C	T	9.001

5.3 Description of communication objects

5.3.1 Switch/valuator function

Object 1: channel C1.1

First output object of the channel (first telegram).
20 telegram formats can be set.

Of these, 11 have a predefined data type:

Switching DPT1.001, priority switching DPT2.001, percentage value DPT5.001, value 0-255 DPT5.010, temperature DPT9.001, HVAC operating mode DPT20.102, call up scene DPT17.001, colour temperature DPT7.600, colour RGB DPT232.600, colour RGBW DPT251.600, colour XY DPT242.600.

If a different format is desired, the general telegram formats can be selected:

1 bit DPT1.*, 2 bit DPT2.*, 1 byte without sign DPT5.*, 2 byte without sign DPT7.*, 2 byte with sign DPT8.*, 2 byte with sign DPT9.*, 4 byte without sign DPT12.*, 4 byte with sign DPT13.*, 4 byte with sign DPT14.*

Object 2: channel C1.2

Second output object of the channel (second telegram).
20 telegram formats can be set.

Switching, priority switching, percentage value, value 0-255, temperature, HVAC operating mode, call up scene, colour temperature, colour RGB, colour RGBW, colour XY, 1 bit DPT1.*, ...

Object 3: channel C1.3

Third output object of the channel (third telegram).
20 telegram formats can be set:

Switching, priority switching, percentage value, value 0-255, temperature, HVAC operating mode, call up scene, colour temperature, colour RGB, colour RGBW, colour XY, 1 bit DPT1.*, ...

Object 5: channel C1 block = 1, or block = 0

The channel is blocked via this object.

The polarity of the block object can be set on the **Configuration options** parameter page. The response when setting or cancelling the block is defined on the parameter page of the respective object.

Objects 11-75

Objects for channels C2-C8.

5.3.2 Push button/valuator function

Object 1: channel C1.1

First output object of the channel (first telegram).
20 telegram formats can be set.

Of these, 11 have a predefined data type:

Switching DPT1.001, priority switching DPT2.001, percentage value DPT5.001, value 0-255 DPT5.010, temperature DPT9.001, HVAC operating mode DPT20.102, call up scene DPT17.001, colour temperature DPT7.600, colour RGB DPT232.600, colour RGBW DPT251.600, colour XY DPT242.600.

If a different format is desired, the general telegram formats can be selected:

1 bit DPT1.*, 2 bit DPT2.*, 1 byte without sign DPT5.*, 2 byte without sign DPT7.*, 2 byte with sign DPT8.*, 2 byte with sign DPT9.*, 4 byte without sign DPT12.*, 4 byte with sign DPT13.*, 4 byte with sign DPT14.*

Object 2: channel C1.2

Second output object of the channel (second telegram).
20 telegram formats can be set.

Switching, priority switching, percentage value, value 0-255, temperature, HVAC operating mode, call up scene, colour temperature, colour RGB, colour RGBW, colour XY, 1 bit DPT1.*, ...

Object 3: channel C1.3

Third output object of the channel (third telegram).
20 telegram formats can be set:

Switching, priority switching, percentage value, value 0-255, temperature, HVAC operating mode, call up scene, colour temperature, colour RGB, colour RGBW, colour XY, 1 bit DPT1.*, ...

Object 5: channel C1 block = 1, or block = 0

The channel is blocked via this object.

The polarity of the block object can be set on the **Configuration options** parameter page. The response when setting or cancelling the block is defined on the parameter page of the respective object.

Objects 11-75

Objects for channels C2-C8.

5.3.3 Push button/switching function

Object 1: channel C1.1 switching

1 bit switch object DPT1.001.

Object 2: channel C1.2 switching

1 bit switch object DPT1.001.

Object 3: channel C1.3 switching

1 bit switch object DPT1.001.

Object 5: channel C1 block = 1, or block = 0

The channel is blocked via this object.

The polarity of the block object can be set on the **Configuration options** parameter page. The response when setting or cancelling the block is defined on the parameter page of the respective object.

Objects 11-75

Objects for channels C2-C8.

5.3.4 Push button/dimming function

Object 1: channel C1 switching

Switches the dimmer on and off.

Object 2: channel C1 brighter, darker, brighter/darker

4 bit dimming commands.

Object 3: channel C1.1 – switching, priority, percentage value..

Output object for the additional function on double-click.

20 telegram formats can be set.

Switching, priority switching, percentage value, value 0-255, temperature, HVAC operating mode, call up scene, colour temperature, colour RGB, colour RGBW, colour XY, 1 bit DPT1.*, ...

Object 5: channel C1 block = 1, or block = 0

The channel is blocked via this object.

The polarity of the block object and the response when setting or cancelling the block can be defined via the parameter pages.

Objects 11-75

Objects for channels C2-C8.

5.3.5 Push button/blinds function

Object 1: channel C1 step/stop

Sends step/stop commands to the blinds actuator.

Object 2: channel C1 up/down, up, down

Sends operating commands to the blinds actuator.

Object 3: channel C1.1 height %, switching, priority, percentage value...

Output object for the additional function on double-click.

21 telegram formats can be set:

Height %, switching, priority switching, percentage value, value 0-255, temperature, HVAC operating mode, call up scene, colour temperature, colour RGB, colour RGBW, colour XY, 1 bit DPT1.*, ...

Object 4: channel C1.1 - slat %

Slat telegram for positioning the blinds upon double-click (together with object 3, at *telegram type = height and slat*).

Object 5: channel C1 block = 1, or block = 0

The channel is blocked via this object.

The polarity of the block object and the response when setting or cancelling the block can be defined via the parameter pages.

Objects 11-75

Objects for channels C2-C8.

5.3.6 Push button/sequence function

Object 1: channel C1.1

First output object of the channel.

20 telegram formats can be set.

Switching On/Off, priority switching, percentage value, value 0-255, temperature, HVAC operating mode, call up scene, colour temperature, colour RGB, colour RGBW, colour XY, 1 bit DPT1.*, ...

Object 2: channel C1.2

Second output object of the channel.

20 telegram formats can be set.

Switching On/Off, priority switching, percentage value, value 0-255, temperature, HVAC operating mode, call up scene, colour temperature, colour RGB, colour RGBW, colour XY, 1 bit DPT1.*, ...

Object 3: channel C1.3

Third output object of the channel.

20 telegram formats can be set.

Switching On/Off, priority switching, percentage value, value 0-255, temperature, HVAC operating mode, call up scene, colour temperature, colour RGB, colour RGBW, colour XY, 1 bit DPT1.*, ...

Object 4: channel C1.4

Fourth output object of the channel.

20 telegram formats can be set.

Switching On/Off, priority switching, percentage value, value 0-255, temperature, HVAC operating mode, call up scene, colour temperature, colour RGB, colour RGBW, colour XY, 1 bit DPT1.*, ...

Object 5: channel C1 block = 1 or block = 0

The channel is blocked via this object.

The polarity of the block object can be set on the **Configuration options** parameter page. The response when setting or cancelling the block is defined on the **Block function** parameter page.

5.3.7 Push button/scenes function

Object 1: channel C1.1

First output object of the channel.

2 telegram formats can be set.

Call up scene DPT17.001, call up/save scene DPT18.001

Object 2: channel C1.2

Second output object of the channel.

2 telegram formats can be set.

Call up scene DPT17.001, call up/save scene DPT18.001

Object 3: channel C1.3

Third output object of the channel.

2 telegram formats can be set.

Call up scene DPT17.001, call up/save scene DPT18.001

Object 5: channel C1 block = 1 or block = 0

The channel is blocked via this object.

The polarity of the block object can be set on the **Configuration options** parameter page. The response when setting or cancelling the block is predefined.

5.3.8 LED output function

Object 1: LED On/Off

Input object:

1 = switch on connected LED.

0 = switch off LED

The switch-on brightness of the LED can either be defined with the objects set *LED brightness 1,2,3*

or with the object *Set LED brightness percentage*⁶

Object 2: set LED brightness 1

Input object:

1 = Set the LED switch-on brightness to the configured value for *brightness 1*.

0 = Resets the LED switch-on brightness to 100%.

Object 3: set LED brightness 2

Input object:

1 = Set the LED switch-on brightness to the configured value for *brightness 2*.

0 = Resets the LED switch-on brightness to 100%.

Object 4: set LED brightness 3

Input object:

1 = Set the LED switch-on brightness to the configured value for *brightness 3*.

0 = Resets the LED switch-on brightness to 100%.

Object 5: set LED brightness percentage

Input object:

With this object the LED switch-on brightness can be set to any value between 5% and 100%.

Values under 5% are not reliable and are interpreted as 5%.

⁶ Exception: After a reset the switch-on brightness is always 100%.

5.3.9 Temperature input function (only C3 and C4)

Object 21: channel C3 – feedback temperature actual value (°C)

Sends the temperature measured at input C3 (remote sensor or floor temperature sensor).

Object 31: channel C4 – feedback temperature actual value (°C)

Sends the temperature measured at input C4 (remote sensor or floor temperature sensor).

5.4 Parameter pages overview

Parameter page	Description
Configuration options	Function of the input, debounce time, number of telegrams, block function, etc. Additionally at C3 and C4: Selection of the temperature sensor, temperature calibration, etc.
Configuration options = switch	
Switch object 1	Object type, transmission behaviour, etc. can be set for each object individually.
Switch object 2	
Switch object 3	
Configuration options = push button/valuator	
Push button object 1	Object type, transmission behaviour, etc. can be set for each object individually.
Push button object 2	
Push button object 3	
Configuration options = push button/switching	
Push button object 1	Object type fixed to switching (on/off/change over). Transmission behaviour etc. can be set for each object individually.
Push button object 2	
Push button object 3	
Configuration options = push button/dimming	
Dimming	Type of control.
Double-click	Additional telegram.
Configuration options = push button/blinds	
Blinds	Type of control.
Double-click	Additional telegram.
Configuration options = push button/scenes	
Push button object 1	Object type and value can be set for each object individually.
Push button object 2	For the object type, it is possible to select between 17.001 call up scene and 18.001 call up/save scene.
Push button object 3	
Configuration options = push button/sequence	
Object types	Format of the 4 sequence objects.
Step 1	Set transmission behaviour, telegrams and time.
Step 2	
Step 3	
Step 4	
Block function	Response when setting or cancelling the block.

5.4.1 Switch/valuator function

5.4.1.1 Configuration options parameter page

Designation	Values	Description
<i>Description</i>	<i>Text input field</i>	User-specific designation for the channel and the objects.
<i>Use</i>	Switch <i>Push button</i> <i>Temperature input</i> <i>LED output</i>	A switch is connected to the input.
<i>Debounce time</i>	<i>30 ms, 50 ms, 80 ms</i> <i>100 ms, 200 ms,</i> <i>1 s, 2 s, 10 s</i>	In order to avoid a disruptive switching due to debouncing of the contact connected to the input, the new status of the input is only accepted after a delay time. Larger values (≥ 1 s) can be used as a switch-on delay
<i>Cycle time for cyclical transmission</i>	<i>1 min, 2 min, 3 min,</i> <i>5 min, 10 min, 15 min</i> 30 min , 45 min, 60 min	Common cycle time for all 3 output objects of the channel.
<i>Activate block function</i>	No Yes	No block function. Show parameters for the block function.
<i>Block telegram polarity</i>	Block with 1 (standard) <i>Block with 0</i>	0 = cancel block 1 = block 0 = block 1 = cancel block
<i>Number of telegrams</i>	One telegram <i>Two telegrams</i> <i>Three telegrams</i>	Each channel has 3 output objects and can thus send up to 3 different telegrams.

5.4.1.2 Switch object 1, 2, 3 parameter pages

Each of the 3 objects can be configured individually on its own parameter page.

Designation	Values	Description
Object type	Switching DPT1.001 Priority switching DPT2.001 Percentage value DPT5.001 Value 0-255 DPT5.010 Temperature DPT9.001 HVAC operating mode DPT20.102 Call up scene DPT17.001 Colour temperature DPT7.600 Colour RGB DPT232.600 Colour RGBW DPT251.600 Colour XY DPT242.600 1 bit DPT1.* 2 bit DPT2.* 1 byte without sign DPT5.* 2 byte without sign DPT7.* 2 byte with sign DPT8.* 2 byte with sign DPT9.* 4 byte without sign PT12.* 4 byte with sign DPT13.* 4 byte with sign DPT14.*	Telegram type for this object.
Send if input = 1	No Yes	Send if voltage is present at the input?
Telegram	With object type = switching DPT1.001 On Off By	Send switch-on command Send switch-off command Invert current state (On-Off-On etc.)
	Priority switching DPT2.001	
	No priority (00)	Function Priority not active (no control) Value 0 (00 _{bin})
	No priority (01)	Function Priority not active (no control) Value 1 (01 _{bin})
	Priority On	Function Switch on with priority (control: enable, on) Value 3 (11 _{bin})
	Priority Off	Function Switch off with priority (control: disable, off) Value 2 (10 _{bin})
	With object type = percentage value DPT5.001	
	0-100%	Any percentage value between 0 and 100% can be sent.
	With object type = value 0-255 DPT5.010	
	0-255	Any value between 0 and 255 can be sent.
	With object type = temperature DPT9.001	
	-273-300 °C Standard: 22 °C	Any temperature value between -273 and 300 can be sent.
	With object type = HVAC operating mode DPT20.102	

Designation	Values	Description
	Auto Comfort Standby Night Frost/heat protection	Send HVAC telegram.
With object type = call up scene DPT17.001		
	Scene number: 1-64	Any scene number between 1 and 64 can be sent.
With object type = colour temperature DPT7.600		
	1000-10000 K Standard: 3300	Send value for colour temperature between 1000 and 10000 K.
With object type = colour RGB DPT232.600		
	RGB value: #000000-FFFFFF	Send 3 byte value for colour RGB.
With object type = colour RGBW DPT251.600		
	RGB value: #000000-FFFFFF White value: 0-255	Send 6 byte value for colour RGBW.
With object type = colour XY DPT242.600		
	X value: 0-1 Y value: 0-1 Brightness value: 0-100	Send 6 byte value for colour XY.
With object type = 1 bit DPT1.*		
	0-1	Send 1 bit value.
With object type = 2 bit DPT2.*		
<i>No priority (00)</i> <i>No priority (01)</i> Priority 1 <i>Priority 0</i>	Function	Value
	Priority not active (no control)	0 (00 _{bin})
	Priority not active (no control)	1 (01 _{bin})
	Priority value 1 (control: enable, on)	3 (11 _{bin})
	Priority value 0 (control: disable, off)	2 (10 _{bin})
With object type = 1 byte without sign DPT5.*		
	0-255	Any value between 0 and 255 can be sent.
With object type = 2 byte without sign DPT7.*		
	0-65535 Standard: 100	Any value between 0 and 65535 can be sent.
With object type = 2 byte with sign DPT8.*		
	-32768- 32767 Standard: 100	Any value between -32768 and 32767 can be sent.
With object type = 2 byte with sign DPT9.*		
	-671088.6- 670433.2 Standard: 100	Any value between -671088.6 and 670433.2 can be sent. Format: floating point
With object type = 4 byte without sign PT12.*		
	0 ... 4 294 967 295 Standard: 100	Any value between 0 and 4294967295 can be sent.
With object type = 4 byte with sign PT13.*		
	-2 147 483 648 ... 2 147 483 647 Standard: 100	Any value between -2147483648 and 2147483647 can be sent.

Designation	Values	Description
	With object type = 4 byte with sign DPT14.* -3,402E+38 ... 3,402E+38 Standard: 100	Any value between -3,402E+38 and 3,402E+38 can be sent. Input format: The ETS only allows the input as a decimal without power. Example: 15234825,123456
Send if input = 0	No Yes	Send if no voltage is present at the input?
Telegram	See above: Same object type as Send if input = 1. Other standard values.	
Send cyclically	No Yes, always Only if input = 1 Only if input = 0	When should cyclical sending take place? The cycle time is set on the main parameter page of the channel.
Response after restoration of the bus supply	None Update (immediately) Update (after 5 s) Update (after 10 s) update (after 15 s)	Do not send. Send update telegram immediately or with delay.
Response when setting the block	Ignore block No response As with input = 1 As with input = 0	The block function is ineffective with this telegram. Do not respond when the block is set. Respond as with rising edge. Respond as with falling edge.
Response when cancelling the block	No response Update	Do not respond when the block is cancelled. Send update telegram.



If a channel is blocked, no telegrams will be sent cyclically.

5.4.2 Push button/valuator function

5.4.2.1 Configuration options parameter page

Designation	Values	Description
<i>Description</i>	<i>Text input field</i>	User-specific designation for the channel and the objects.
<i>Use</i>	<i>Switch</i> Push button <i>Temperature input</i> <i>LED output</i>	A push button is connected to the input.
<i>Push button function</i>	<i>Switching</i> <i>Dimming</i> <i>Blinds</i> <i>Sequence</i> Valuator <i>Scenes</i>	Defines the push button function.
<i>Debounce time</i>	<i>30 ms, 50 ms, 80 ms</i> <i>100 ms, 200 ms</i>	In order to avoid a disruptive switching due to debouncing of the contact connected to the input, the new status of the input is only accepted after a delay time.
<i>Connected push button</i>	NO contact <i>Opening contact</i>	Set the type of connected contact.
<i>Long button push starting at</i>	300 ms, 400 ms <i>500 ms, 600 ms</i> <i>700 ms, 800 ms</i> <i>900 ms, 1 s</i>	Serves to clearly differentiate between long and short button push. If the button is pressed for at least as long as the set time, then a long button push will be registered.
<i>Time for double-click</i>	300 ms, 400 ms <i>500 ms, 600 ms</i> <i>700 ms, 800 ms</i> <i>900 ms, 1 s</i>	Serves to differentiate between a double-click and 2 single clicks. Time period in which the second click must begin, in order to recognise a double-click.
<i>Number of telegrams</i>	One telegram <i>Two telegrams</i> <i>Three telegrams</i>	Each channel has 3 output objects and can thus send up to 3 different telegrams.
<i>Activate block function</i>	No <i>Yes</i>	No block function. Show parameters for the block function.
<i>Block telegram polarity</i>	Block with 1 (standard) <i>Block with 0</i>	0 = cancel block 1 = block 0 = block 1 = cancel block

5.4.2.2 Button object 1, 2, 3 parameter pages

Each of the 3 objects can be configured individually on its own parameter page.

Designation	Values	Description	
Object type	Switching DPT1.001 Priority switching DPT2.001 Percentage value DPT5.001 Value 0-255 DPT5.010 Temperature DPT9.001 HVAC operating mode DPT20.102 Call up scene DPT17.001 Colour temperature DPT7.600 Colour RGB DPT232.600 Colour RGBW DPT251.600 Colour XY DPT242.600 1 bit DPT1.* 2 bit DPT2.* 1 byte without sign DPT5.* 2 byte without sign DPT7.* 2 byte with sign DPT8.* 2 byte with sign DPT9.* 4 byte without sign PT12.* 4 byte with sign DPT13.* 4 byte with sign DPT14.*	Telegram type for this object.	
Send after short operation	do not send Send telegram	Respond to short button push?	
Telegram	With object type = switching DPT1.001		
	On	Send switch-on command	
	Off	Send switch-off command	
	By	Invert current state (On-Off-On etc.)	
	Priority switching DPT2.001		
	No priority (00)	Function	Value
		Priority not active (no control)	0 (00 _{bin})
		Priority not active (no control)	1 (01 _{bin})
		Priority On	Switch on with priority (control: enable, on)
	Priority Off	Switch off with priority (control: disable, off)	2 (10 _{bin})
	With object type = percentage value DPT5.001		
	0-100%	Any percentage value between 0 and 100% can be sent.	
	With object type = value 0-255 DPT5.010		
0-255	Any value between 0 and 255 can be sent.		
With object type = temperature DPT9.001			
-273-300 °C Standard: 22 °C	Any temperature value between -273 and 300 can be sent.		
With object type = HVAC operating mode DPT20.102			

Designation	Values	Description
	<i>Auto</i> <i>Comfort</i> <i>Standby</i> <i>Night</i> <i>Frost/heat protection</i>	Send HVAC telegram.
With object type = call up scene DPT17.001		
	Scene number: <i>1-64</i>	Any scene number between 1 and 64 can be sent.
With object type = colour temperature DPT7.600		
	<i>1000-10000 K</i> Standard: <i>3300</i>	Send value for colour temperature between 1000 and 10000 K.
With object type = colour RGB DPT232.600		
	RGB value: <i>#000000-FFFFFF</i>	Send 3 byte value for colour RGB.
With object type = colour RGBW DPT251.600		
	RGB value: <i>#000000-FFFFFF</i> White value: <i>0-255</i>	Send 6 byte value for colour RGBW.
With object type = colour XY DPT242.600		
	X value: <i>0-1</i> Y value: <i>0-1</i> Brightness value: <i>0-100</i>	Send 6 byte value for colour XY.
With object type = 1 bit DPT1.*		
	<i>0-1</i>	Send 1 bit value.
With object type = 2 bit DPT2.*		
<i>No priority (00)</i> <i>No priority (01)</i> <i>Priority 1</i> <i>Priority 0</i>	Function	Value
	Priority not active (no control)	0 (00 _{bin})
	Priority not active (no control)	1 (01 _{bin})
	Priority value 1 (control: enable, on)	3 (11 _{bin})
	Priority value 0 (control: disable, off)	2 (10 _{bin})
With object type = 1 byte without sign DPT5.*		
	<i>0-255</i>	Any value between 0 and 255 can be sent.
With object type = 2 byte without sign DPT7.*		
	<i>0-65535</i> Standard: <i>100</i>	Any value between 0 and 65535 can be sent.
With object type = 2 byte with sign DPT8.*		
	<i>-32768- 32767</i> Standard: <i>100</i>	Any value between -32768 and 32767 can be sent.
With object type = 2 byte with sign DPT9.*		
	<i>-671088.6- 670433.2</i> Standard: <i>100</i>	Any value between -671088.6 and 670433.2 can be sent. Format: floating point
With object type = 4 byte without sign PT12.*		
	<i>0 ... 4 294 967 295</i> Standard: <i>100</i>	Any value between 0 and 4294967295 can be sent.
With object type = 4 byte with sign PT13.*		
	<i>-2 147 483 648 ... 2 147 483 647</i> Standard: <i>100</i>	Any value between -2147483648 and 2147483647 can be sent.

Designation	Values	Description
	With object type = 4 byte with sign DPT14.* -3,402E+38 ... 3,402E+38 Standard: 100	Any value between -3,402E+38 and 3,402E+38 can be sent. Input format: The ETS only allows the input as a decimal without power. Example: 15234825,123456
<i>Send after long operation</i>	do not send <i>Send telegram</i>	Respond to long button push?
<i>Telegram</i>	See above: Same object type as with <i>Send after short operation</i> . Other standard values.	
<i>Send after double-click</i>	do not send <i>Send telegram</i>	Respond to double-click?
<i>Telegram</i>	See above: Same object type as with <i>Send after short operation</i> . Other standard values.	
<i>Response after restoration of the bus supply</i>	None	Do not send. Parameter cannot be set and is not visible.
<i>Response when setting the block</i>	Ignore block <i>No response</i> <i>As with short</i> <i>As with long</i> <i>As with double-click</i>	The block function is ineffective with this telegram. Do not respond when the block is set. The value to be sent depends on the value configured for long button push, short button push or double-click.
<i>Response when cancelling the block</i>	No response <i>As with short</i> <i>As with long</i> <i>As with double-click</i>	Do not respond when the block is cancelled. The value to be sent depends on the value configured for long button push, short button push or double-click.

5.4.3 Push button/switching function

5.4.3.1 Configuration options parameter page

Designation	Values	Description
<i>Description</i>	<i>Text input field</i>	User-specific designation for the channel and the objects.
<i>Use</i>	<i>Switch</i> Push button <i>Temperature input</i> <i>LED output</i>	A push button is connected to the input.
<i>Push button function</i>	Switching <i>Dimming</i> <i>Blinds</i> <i>Sequence</i> <i>Valuator</i> <i>Scenes</i>	Defines the push button function.
<i>Debounce time</i>	<i>30 ms, 50 ms, 80 ms</i> <i>100 ms, 200 ms</i>	In order to avoid a disruptive switching due to debouncing of the contact connected to the input, the new status of the input is only accepted after a delay time.
<i>Connected push button</i>	NO contact <i>Opening contact</i>	Set the type of connected contact.
<i>Long button push starting at</i>	300 ms, 400 ms <i>500 ms, 600 ms</i> <i>700 ms, 800 ms</i> <i>900 ms, 1 s</i>	Serves to clearly differentiate between long and short button push. If the button is pressed for at least as long as the set time, then a long button push will be registered.
<i>Time for double-click</i>	300 ms, 400 ms <i>500 ms, 600 ms</i> <i>700 ms, 800 ms</i> <i>900 ms, 1 s</i>	Serves to differentiate between a double-click and 2 single clicks. Time period in which the second click must begin, in order to recognise a double-click.
<i>Number of telegrams</i>	One telegram <i>Two telegrams</i> <i>Three telegrams</i>	Each channel has 3 output objects and can thus send up to 3 different telegrams.
<i>Activate block function</i>	No <i>Yes</i>	No block function. Show parameters for the block function.
<i>Block telegram polarity</i>	Block with 1 (standard) <i>Block with 0</i>	0 = cancel block 1 = block 0 = block 1 = cancel block

5.4.3.2 Button object 1, 2, 3 parameter pages

Each of the 3 objects can be configured individually on its own parameter page.

Designation	Values	Description
<i>Object type</i>	Switching DPT1.001	Telegram type for this object. Parameter cannot be set and is not visible.
<i>Send after short operation</i>	<i>do not send</i> Send telegram	Respond to short button push?
<i>Telegram</i>	<i>On</i> <i>Off</i> By	Send switch-on command Send switch-off command Invert current state (On-Off-On etc.)
<i>Send after long operation</i>	<i>do not send</i> Send telegram	Respond to long button push?
<i>Telegram</i>	<i>On</i> <i>Off</i> By	Send switch-on command Send switch-off command Invert current state (On-Off-On etc.)
<i>Send after double-click</i>	<i>do not send</i> Send telegram	Respond to double-click?
<i>Telegram</i>	<i>On</i> <i>Off</i> By	Send switch-on command Send switch-off command Invert current state (On-Off-On etc.)
<i>Response after restoration of the bus supply</i>	None	Do not send. Parameter cannot be set and is not visible.
<i>Response when setting the block</i>	Ignore block <i>No response</i> <i>As with short</i> <i>As with long</i> <i>As with double-click</i>	The block function is ineffective with this telegram. Do not respond when the block is set. The value to be sent depends on the value configured for long button push, short button push or double-click.
<i>Response when cancelling the block</i>	No response <i>As with short</i> <i>As with long</i> <i>As with double-click</i>	Do not respond when the block is cancelled. The value to be sent depends on the value configured for long button push, short button push or double-click.

5.4.4 Push button/dimming function

5.4.4.1 Configuration options parameter page

Designation	Values	Description
<i>Description</i>	<i>Text input field</i>	User-specific designation for the channel and the objects.
<i>Use</i>	<i>Switch</i> Push button <i>Temperature input</i> <i>LED output</i>	A push button is connected to the input.
<i>Push button function</i>	<i>Switching</i> Dimming <i>Blinds</i> <i>Sequence</i> <i>Valuator</i> <i>Scenes</i>	Defines the push button function.
<i>Debounce time</i>	30 ms, 50 ms, 80 ms <i>100 ms, 200 ms</i>	In order to avoid a disruptive switching due to debouncing of the contact connected to the input, the new status of the input is only accepted after a delay time.
<i>Activate block function</i>	No <i>Yes</i>	No block function. Show parameters for the block function.
<i>Block telegram polarity</i>	Block with 1 (standard) <i>Block with 0</i>	0 = cancel block 1 = block 0 = block 1 = cancel block
<i>Long button push starting at</i>	300 ms, 400 ms <i>500 ms, 600 ms</i> <i>700 ms, 800 ms</i> <i>900 ms, 1 s</i>	Serves to clearly differentiate between long and short button push. If the button is pressed for at least as long as the set time, then a long button push will be registered.
<i>Double-click additional function</i>	No <i>Yes</i>	Activate additional function double-click? If yes, a further parameter page is displayed in which an object type can be defined for the double-click.
<i>Time for double-click</i>	300 ms, 400 ms <i>500 ms, 600 ms</i> <i>700 ms, 800 ms</i> <i>900 ms, 1 s</i>	Serves to differentiate between a double-click and 2 single clicks. Time period in which the second click must begin, in order to recognise a double-click.

5.4.4.2 Dimming parameter page

Designation	Values	Description
<i>Response to long/short</i>	One button operation The input distinguishes between a long and a short button push, and can thus carry out 2 functions. The dimmer is operated with a single push button. Short button push = On/Off Long button push = brighter/darker Release = stop With the other variants, the dimmer is operated using 2 buttons (rocker). Brighter/On Short button push = On Long button push = brighter Release = stop Brighter/By Short button push = On/Off Long button push = brighter Release = stop Darker/Off Short button push = Off Long button push = darker Release = stop Darker/By Short button push = On/Off Long button push = darker Release = stop	
<i>Increment for dimming</i>	100% 50% 25% 12.5% 6% 3% 1.5%	With a long button push, the dimming value is: Increased (or decreased) until the button is released. Increased by the selected value (or reduced)
<i>Response after restoration of the bus supply</i>	None	Do not send. Parameter cannot be set and is not visible.
<i>Response when setting the block</i>	Ignore block	The block function is ineffective with this telegram.

Designation	Values	Description
	<i>No response</i>	Do not respond when the block is set.
	<i>On</i>	Switch on dimmer
	<i>Off</i>	Switch off dimmer
<i>Response when cancelling the block</i>	<i>No response</i>	Do not respond when the block is cancelled.
	<i>On</i>	Switch on dimmer
	<i>Off</i>	Switch off dimmer

5.4.4.3 Double-click parameter page

Designation	Values	Description	
Object type	Switching DPT1.001 Priority switching DPT2.001 Percentage value DPT5.001 Value 0-255 DPT5.010 Temperature DPT9.001 HVAC operating mode DPT20.102 Call up scene DPT17.001 Colour temperature DPT7.600 Colour RGB DPT232.600 Colour RGBW DPT251.600 Colour XY DPT242.600 1 bit DPT1.* 2 bit DPT2.* 1 byte without sign DPT5.* 2 byte without sign DPT7.* 2 byte with sign DPT8.* 2 byte with sign DPT9.* 4 byte without sign PT12.* 4 byte with sign DPT13.* 4 byte with sign DPT14.*	Telegram type for this object.	
Telegram	With object type = switching DPT1.001		
	On	Send switch-on command	
	Off	Send switch-off command	
	By	Invert current state (On-Off-On etc.)	
	Priority switching DPT2.001		
	No priority (00)	Function	Value
		Priority not active (no control)	0 (00 _{bin})
		Priority not active (no control)	1 (01 _{bin})
		Priority On	Switch on with priority (control: enable, on)
	Priority Off	Switch off with priority (control: disable, off)	2 (10 _{bin})
	With object type = percentage value DPT5.001		
	0-100%	Any percentage value between 0 and 100% can be sent.	
	With object type = value 0-255 DPT5.010		
	0-255	Any value between 0 and 255 can be sent.	
	With object type = temperature DPT9.001		
-273-300 °C Standard: 22 °C	Any temperature value between -273 and 300 can be sent.		
With object type = HVAC operating mode DPT20.102			

Designation	Values	Description
	<i>Auto</i> Comfort <i>Standby</i> <i>Night</i> <i>Frost/heat protection</i>	Send HVAC telegram.
With object type = call up scene DPT17.001		
	Scene number: 1-64	Any scene number between 1 and 64 can be sent.
With object type = colour temperature DPT7.600		
	<i>1000-10000 K</i> Standard: 3300	Send value for colour temperature between 1000 and 10000 K.
With object type = colour RGB DPT232.600		
	RGB value: #000000-FFFFFF	Send 3 byte value for colour RGB.
With object type = colour RGBW DPT251.600		
	RGB value: #000000-FFFFFF White value: 0-255	Send 6 byte value for colour RGBW.
With object type = colour XY DPT242.600		
	X value: 0-1 Y value: 0-1 Brightness value: 0-100	Send 6 byte value for colour XY.
With object type = 1 bit DPT1.*		
	0-1	Send 1 bit value.
With object type = 2 bit DPT2.*		
<i>No priority (00)</i> <i>No priority (01)</i> Priority 1 <i>Priority 0</i>	Function	Value
	Priority not active (no control)	0 (00 _{bin})
	Priority not active (no control)	1 (01 _{bin})
	Priority value 1 (control: enable, on)	3 (11 _{bin})
	Priority value 0 (control: disable, off)	2 (10 _{bin})
With object type = 1 byte without sign DPT5.*		
	0-255	Any value between 0 and 255 can be sent.
With object type = 2 byte without sign DPT7.*		
	<i>0-65535</i> Standard: 100	Any value between 0 and 65535 can be sent.
With object type = 2 byte with sign DPT8.*		
	<i>-32768- 32767</i> Standard: 100	Any value between -32768 and 32767 can be sent.
With object type = 2 byte with sign DPT9.*		
	<i>-671088.6- 670433.2</i> Standard: 100	Any value between -671088.6 and 670433.2 can be sent. Format: floating point
With object type = 4 byte without sign PT12.*		
	<i>0 ... 4 294 967 295</i> Standard: 100	Any value between 0 and 4294967295 can be sent.
With object type = 4 byte with sign PT13.*		
	<i>-2 147 483 648 ... 2 147 483 647</i> Standard: 100	Any value between -2147483648 and 2147483647 can be sent.

Designation	Values	Description
	With object type = 4 byte with sign DPT14.* -3,402E+38 ... 3,402E+38 Standard: 100	Any value between -3,402E+38 and 3,402E+38 can be sent. Input format: The ETS only allows the input as a decimal without power. Example: 15234825,123456
<i>Response after restoration of the bus supply</i>	None	Do not send. Parameter cannot be set and is not visible.
<i>Response when setting the block</i>	Ignore block <i>No response</i> <i>As with double-click</i>	The block function is ineffective with this telegram. Do not respond when the block is set. The value to be sent depends on the value configured for double-click.
<i>Response when cancelling the block</i>	No response <i>As with double-click</i>	Do not respond when the block is cancelled. The value to be sent depends on the value configured for double-click.

5.4.5 Push button/blinds function

5.4.5.1 Configuration options parameter page

Designation	Values	Description
<i>Description</i>	<i>Text input field</i>	User-specific designation for the channel and the objects.
<i>Use</i>	<i>Switch</i> Push button <i>Temperature input</i> <i>LED output</i>	A push button is connected to the input.
<i>Push button function</i>	<i>Switching</i> <i>Dimming</i> Blinds <i>Sequence</i> <i>Valuator</i> <i>Scenes</i>	Defines the push button function.
<i>Debounce time</i>	30 ms, 50 ms, 80 ms <i>100 ms, 200 ms</i>	In order to avoid a disruptive switching due to debouncing of the contact connected to the input, the new status of the input is only accepted after a delay time.
<i>Activate block function</i>	No <i>Yes</i>	No block function. Show parameters for the block function.
<i>Block telegram polarity</i>	Block with 1 (standard) <i>Block with 0</i>	0 = cancel block 1 = block 0 = block 1 = cancel block
<i>Long button push starting at</i>	300 ms, 400 ms <i>500 ms, 600 ms</i> <i>700 ms, 800 ms</i> <i>900 ms, 1 s</i>	Serves to clearly differentiate between long and short button push. If the button is pressed for at least as long as the set time, then a long button push will be registered.
<i>Double-click additional function</i>	No <i>Yes</i>	Activate additional function double-click? If yes, a further parameter page is displayed in which an object type can be defined for the double-click.
<i>Time for double-click</i>	300 ms, 400 ms <i>500 ms, 600 ms</i> <i>700 ms, 800 ms</i> <i>900 ms, 1 s</i>	Serves to differentiate between a double-click and 2 single clicks. Time period in which the second click must begin, in order to recognise a double-click.

5.4.5.2 Blinds parameter page

Designation	Values	Description
<i>Operation</i>	<i>One button operation</i> <i>Down</i> <i>Up</i>	The input distinguishes between a long and a short button push, and can thus carry out 2 functions. The blinds are operated with a single push button. Short button push = step. Long button push = move. Short button push = step. Long button push = lower. Short button push = step. Long button push = raise.
<i>Movement is stopped by</i>	<i>Releasing the button</i> Short operation	How is the stop command to be triggered?
<i>Response after restoration of the bus supply</i>	None	Do not send. Parameter cannot be set and is not visible.
<i>Response when setting the block</i>	Ignore block <i>No response</i> <i>Up</i> <i>Down</i>	The block function is ineffective with this telegram. Do not respond when the block is set. Raise blinds Lower blinds
<i>Response when cancelling the block</i>	No response <i>Up</i> <i>Down</i>	Do not respond when the block is cancelled. Raise blinds Lower blinds

5.4.5.3 Double-click parameter page

Designation	Values	Description
Telegram type	Any value	The parameter object type is displayed. The telegram type can be set.
	<i>Height and slat</i>	Upon double-click 2 telegrams are sent simultaneously. 1x height % for the desired height of blinds. 1x slat % for the desired slat position. The telegram type is preset to DPT5.001.
Object type	Switching DPT1.001 <i>Priority switching DPT2.001</i> <i>Percentage value DPT5.001</i> <i>Value 0-255 DPT5.010</i> <i>Temperature DPT9.001</i> <i>HVAC operating mode DPT20.102</i> <i>Call up scene DPT17.001</i> <i>Colour temperature DPT7.600</i> <i>Colour RGB DPT232.600</i> <i>Colour RGBW DPT251.600</i> <i>Colour XY DPT242.600</i> <i>1 bit DPT1.*</i> <i>2 bit DPT2.*</i> <i>1 byte without sign DPT5.*</i> <i>2 byte without sign DPT7.*</i> <i>2 byte with sign DPT8.*</i> <i>2 byte with sign DPT9.*</i> <i>4 byte without sign PT12.* 4</i> <i>byte with sign DPT13.*</i> <i>4 byte with sign DPT14.*</i> <i>Height % + slat %</i>	Telegram type for this object. Height % + slat % is displayed if telegram type = height and slat.
Telegram	With object type = switching DPT1.001	
	On	Send switch-on command
	Off	Send switch-off command
	By	Invert current state (On-Off-On etc.)
	Priority switching DPT2.001	
	No priority (00)	Function
		Value
	No priority (01)	Priority not active (no control)
		0 (00 _{bin})
	Priority On	Priority not active (no control)
		1 (01 _{bin})
	Priority Off	Switch on with priority (control: enable, on)
		3 (11 _{bin})
		Switch off with priority (control: disable, off)
		2 (10 _{bin})
	With object type = percentage value DPT5.001	

Designation	Values	Description
	<i>0-100%</i>	Any percentage value between 0 and 100% can be sent.
With object type = value 0-255 DPT5.010		
	<i>0-255</i>	Any value between 0 and 255 can be sent.
With object type = temperature DPT9.001		
	-273-300 °C Standard: 22 °C	Any temperature value between -273 and 300 can be sent.
With object type = HVAC operating mode DPT20.102		
	<i>Auto</i> <i>Comfort</i> <i>Standby</i> <i>Night</i> <i>Frost/heat protection</i>	Send HVAC telegram.
With object type = call up scene DPT17.001		
	Scene number: <i>1-64</i>	Any scene number between 1 and 64 can be sent.
With object type = colour temperature DPT7.600		
	<i>1000-10000 K</i> Standard: 3300	Send value for colour temperature between 1000 and 10000 K.
With object type = colour RGB DPT232.600		
	RGB value: <i>#000000-FFFFFF</i>	Send 3 byte value for colour RGB.
With object type = colour RGBW DPT251.600		
	RGB value: <i>#000000-FFFFFF</i> White value: <i>0-255</i>	Send 6 byte value for colour RGBW.
With object type = colour XY DPT242.600		
	X value: <i>0-1</i> Y value: <i>0-1</i> Brightness value: <i>0-100</i>	Send 6 byte value for colour XY.
With object type = 1 bit DPT1.*		
	<i>0-1</i>	Send 1 bit value.
With object type = 2 bit DPT2.*		
<i>No priority (00)</i> <i>No priority (01)</i> Priority 1 <i>Priority 0</i>	Function	Value
	Priority not active (no control)	0 (00 _{bin})
	Priority not active (no control)	1 (01 _{bin})
	Priority value 1 (control: enable, on)	3 (11 _{bin})
	Priority value 0 (control: disable, off)	2 (10 _{bin})
With object type = 1 byte without sign DPT5.*		
	<i>0-255</i>	Any value between 0 and 255 can be sent.
With object type = 2 byte without sign DPT7.*		
	<i>0-65535</i> Standard: 100	Any value between 0 and 65535 can be sent.
With object type = 2 byte with sign DPT8.*		
	-32768- 32767 Standard: 100	Any value between -32768 and 32767 can be sent.
With object type = 2 byte with sign DPT9.*		

Designation	Values	Description
	-671088.6- 670433.2 Standard: 100	Any value between -671088.6 and 670433.2 can be sent. Format: floating point
	With object type = 4 byte without sign PT12.*	
	0 ... 4 294 967 295 Standard: 100	Any value between 0 and 4294967295 can be sent.
	With object type = 4 byte with sign PT13.*	
	-2 147 483 648 ... 2 147 483 647 Standard: 100	Any value between - 2147483648 and 2147483647 can be sent.
	With object type = 4 byte with sign DPT14.*	
	-3,402E+38 ... 3,402E+38 Standard: 100	Any value between -3,402E+38 and 3,402E+38 can be sent. Input format: The ETS only allows the input as a decimal without power. Example: 15234825,123456
	With object type = height % + slat %	
		Upon double-click 2 telegrams are sent simultaneously:
	Height 0-100%	Desired height of blinds.
	Slat 0-100%	Desired slat position.
Response after restoration of the bus supply	None	Do not send. Parameter cannot be set and is not visible.
Response when setting the block	Ignore block	The block function is ineffective with this telegram.
	No response	Do not respond when the block is set.
	As with double-click	The value to be sent depends on the value configured for double-click.
Response when cancelling the block	No response	Do not respond when the block is cancelled.
	As with double-click	The value to be sent depends on the value configured for double-click.

5.4.6 Push button/sequence function

5.4.6.1 Configuration options parameter page

Designation	Values	Description
<i>Description</i>	<i>Text input field</i>	User-specific designation for the channel and the objects.
<i>Use</i>	<i>Switch</i> Push button <i>Temperature input</i> <i>LED output</i>	A push button is connected to the input.
<i>Push button function</i>	<i>Switching</i> <i>Dimming</i> <i>Blinds</i> Sequence <i>Valuator</i> <i>Scenes</i>	Defines the push button function. The input starts a telegram sequence.
<i>Debounce time</i>	<i>30 ms, 50 ms, 80 ms</i> <i>100 ms, 200 ms</i>	In order to avoid a disruptive switching due to debouncing of the contact connected to the input, the new status of the input is only accepted after a delay time.
<i>Activate block function</i>	No <i>Yes</i>	No block function. Display Block function parameter page.
<i>Block telegram polarity</i>	Block with 1 (standard) <i>Block with 0</i>	0 = cancel block 1 = block 0 = block 1 = cancel block
<i>Connected push button</i>	NO contact <i>Opening contact</i>	Set the type of connected contact.
<i>Sequence details</i>	Step 1-2-3-4-1-2-3-4 <i>Step 1-2-3-4-3-2-1</i>	In which order should the steps be executed?
<i>Advancing the sequence</i>	Via push button <i>Time controlled</i>	The change to the next step is exclusively triggered by a button push. Once triggered, the sequence is automatically executed. The interval between 2 steps can be individually set for each step.
<i>Restart sequence automatically</i>	No <i>Yes</i>	The sequence is only executed once. Once started, the sequence is repeated an unlimited number of times and can, depending on the configuration, be stopped with a double-click or a long button push.

Designation	Values	Description
<i>With long button push</i>	<i>No function</i> <i>Set to step 1</i> <i>End sequence</i>	Long button push will be ignored. Reset sequence to the beginning. End time-controlled sequence.
<i>Long button push starting at</i>	300 ms, 400 ms 500 ms, 600 ms 700 ms, 800 ms 900 ms, 1 s	Serves to clearly differentiate between long and short button push. If the button is pressed for at least as long as the set time, then a long button push will be registered.
<i>On double-click</i>	No function <i>Set to step 1</i> <i>End sequence</i>	Double-click is ignored. Reset sequence to the beginning. End time-controlled sequence.
<i>Time for double-click</i>	300 ms, 400 ms 500 ms, 600 ms 700 ms, 800 ms 900 ms, 1 s	Serves to differentiate between a double-click and 2 single clicks. Time period in which the second click must begin, in order to recognise a double-click.
<i>Response after restoration of the bus supply</i>	None <i>Step 1 (immediately)</i> <i>Step 1 (after 5 s)</i> <i>Step 1 (after 10 s)</i> <i>Step 1 (after 15 s)</i>	No response. Reset sequence immediately Reset sequence with delay

5.4.6.2 Object types parameter page

Up to 4 objects can be defined for the sequence. These are then assigned to the steps on the *Step 1, 2, 3, 4* parameter pages.

Designation	Values	Description
<i>Object 1</i>	Switching DPT1.001 <i>Priority switching DPT2.001</i> <i>Percentage value DPT5.001</i> <i>Value 0-255 DPT5.010</i> <i>Temperature DPT9.001</i> <i>HVAC operating mode DPT20.102</i> <i>Call up scene DPT17.001</i> <i>Colour temperature DPT7.600</i> <i>Colour RGB DPT232.600</i> <i>Colour RGBW DPT251.600</i> <i>Colour XY DPT242.600</i> <i>1 bit DPT1.*</i> <i>2 bit DPT2.*</i> <i>1 byte without sign DPT5.*</i> <i>2 byte without sign DPT7.*</i> <i>2 byte with sign DPT8.*</i> <i>2 byte with sign DPT9.*</i> <i>4 byte without sign PT12.* 4</i> <i>byte with sign DPT13.*</i> <i>4 byte with sign DPT14.*</i>	Telegram type for this object.
<i>Telegram</i>	With object type = switching DPT1.001	
	<i>On</i>	Send switch-on command
	<i>Off</i>	Send switch-off command
	<i>By</i>	Invert current state (On-Off-On etc.)
	Priority switching DPT2.001	
	<i>No priority (00)</i>	Function
		Value
	<i>No priority (01)</i>	Priority not active (no control)
		0 (00 _{bin})
	Priority On	Priority not active (no control)
		1 (01 _{bin})
	<i>Priority Off</i>	Switch on with priority (control: enable, on)
		3 (11 _{bin})
		Switch off with priority (control: disable, off)
		2 (10 _{bin})
	With object type = percentage value DPT5.001	
	<i>0-100%</i>	Any percentage value between 0 and 100% can be sent.
	With object type = value 0-255 DPT5.010	
	<i>0-255</i>	Any value between 0 and 255 can be sent.
	With object type = temperature DPT9.001	
	<i>-273-300 °C</i> Standard: 22 °C	Any temperature value between -273 and 300 can be sent.
	With object type = HVAC operating mode DPT20.102	

Designation	Values	Description										
	<i>Auto</i> Comfort <i>Standby</i> <i>Night</i> <i>Frost/heat protection</i>	Send HVAC telegram.										
With object type = call up scene DPT17.001												
	Scene number: 1-64	Any scene number between 1 and 64 can be sent.										
With object type = colour temperature DPT7.600												
	<i>1000-10000 K</i> Standard: 3300	Send value for colour temperature between 1000 and 10000 K.										
With object type = colour RGB DPT232.600												
	RGB value: #000000-FFFFFF	Send 3 byte value for colour RGB.										
With object type = colour RGBW DPT251.600												
	RGB value: #000000-FFFFFF White value: 0-255	Send 6 byte value for colour RGBW.										
With object type = colour XY DPT242.600												
	X value: 0-1 Y value: 0-1 Brightness value: 0-100	Send 6 byte value for colour XY.										
With object type = 1 bit DPT1.*												
	0-1	Send 1 bit value.										
With object type = 2 bit DPT2.*												
	<i>No priority (00)</i> <i>No priority (01)</i> Priority 1 <i>Priority 0</i>	<table><tr><th>Function</th><th>Value</th></tr><tr><td>Priority not active (no control)</td><td>0 (00_{bin})</td></tr><tr><td>Priority not active (no control)</td><td>1 (01_{bin})</td></tr><tr><td>Priority value 1 (control: enable, on)</td><td>3 (11_{bin})</td></tr><tr><td>Priority value 0 (control: disable, off)</td><td>2 (10_{bin})</td></tr></table>	Function	Value	Priority not active (no control)	0 (00 _{bin})	Priority not active (no control)	1 (01 _{bin})	Priority value 1 (control: enable, on)	3 (11 _{bin})	Priority value 0 (control: disable, off)	2 (10 _{bin})
Function	Value											
Priority not active (no control)	0 (00 _{bin})											
Priority not active (no control)	1 (01 _{bin})											
Priority value 1 (control: enable, on)	3 (11 _{bin})											
Priority value 0 (control: disable, off)	2 (10 _{bin})											
With object type = 1 byte without sign DPT5.*												
	0-255	Any value between 0 and 255 can be sent.										
With object type = 2 byte without sign DPT7.*												
	<i>0-65535</i> Standard: 100	Any value between 0 and 65535 can be sent.										
With object type = 2 byte with sign DPT8.*												
	<i>-32768- 32767</i> Standard: 100	Any value between -32768 and 32767 can be sent.										
With object type = 2 byte with sign DPT9.*												
	<i>-671088.6- 670433.2</i> Standard: 100	Any value between -671088.6 and 670433.2 can be sent. Format: floating point										
With object type = 4 byte without sign PT12.*												
	<i>0 ... 4 294 967 295</i> Standard: 100	Any value between 0 and 4294967295 can be sent.										
With object type = 4 byte with sign PT13.*												
	<i>-2 147 483 648 ... 2 147 483 647</i> Standard: 100	Any value between -2147483648 and 2147483647 can be sent.										

Designation	Values	Description
	With object type = 4 byte with sign DPT14.* -3,402E+38 ... 3,402E+38 Standard: 100	Any value between -3,402E+38 and 3,402E+38 can be sent. Input format: The ETS only allows the input as a decimal without power. Example: 15234825,123456
<i>Object 2</i>	See above: Same object type as <i>Object 1</i> .	Telegram type for this object.
<i>Object 3</i>	See above: Same object type as <i>Object 1</i> .	Telegram type for this object.
<i>Object 4</i>	See above: Same object type as <i>Object 1</i> .	Telegram type for this object.

5.4.6.3 Step 1, 2, 3, 4 parameter page

Up to 4 objects can be defined in each step. If no object is sent in a step, the step will be skipped.

Designation	Values	Description
<i>Send object 1</i>	No Yes	It can be specified whether object 1 should be sent in this step.
<i>Value</i>	<i>Value range depending on the set object type. See parameter page object types.</i>	Set value for object 1.
<i>Send object 2</i>	No Yes	It can be specified whether object 2 should be sent in this step.
<i>Value</i>	<i>Value range depending on the set object type. See parameter page object types.</i>	Set value for object 3.
<i>Send object 3</i>	No Yes	It can be specified whether object 3 should be sent in this step.
<i>Value</i>	<i>Value range depending on the set object type. See parameter page object types.</i>	Set value for object 3.
<i>Send object 4</i>	No	

Designation	Values	Description
	Yes	It can be specified whether object 4 should be sent in this step.
Value	Value range depending on the set object type. See parameter page object types .	Set value for object 4.
Time unit	Seconds Minutes	Time unit for switching to the next step. Only available if parameter Advancing the sequence = Time controlled.
Time interval for advancing	1-120 s	The time that is waited until the objects of the next step are sent. The interval between 2 steps can be individually set for each step.
	1-120 min	

5.4.7 Push button/scenes function

5.4.7.1 Configuration options parameter page

Designation	Values	Description
Description	Text input field	User-specific designation for the channel and the objects.
Use	Switch Push button Temperature input LED output	A push button is connected to the input.
Push button function	Switching Dimming Blinds Sequence Valuator Scenes	Defines the push button function.
Debounce time	30 ms, 50 ms , 80 ms 100 ms, 200 ms	In order to avoid a disruptive switching due to debouncing of the contact connected to the input, the new status of the input is only accepted after a delay time.
Connected push button	NO contact Opening contact	Set the type of connected contact.

Designation	Values	Description
<i>Long button push starting at</i>	300 ms, 400 ms 500 ms, 600 ms 700 ms, 800 ms 900 ms, 1 s	Serves to clearly differentiate between long and short button push. If the button is pressed for at least as long as the set time, then a long button push will be registered.
<i>Number of telegrams</i>	One telegram Two telegrams Three telegrams	Each channel has 3 output objects and can thus send up to 3 different telegrams.
<i>Activate block function</i>	No Yes	No block function. Show parameters for the block function.
<i>Block telegram polarity</i>	Block with 1 (standard) Block with 0	0 = cancel block 1 = block 0 = block 1 = cancel block

5.4.7.2 Button object 1, 2, 3 parameter pages

Each of the 3 objects can be configured individually on its own parameter page.

Designation	Values	Description
<i>Scene function</i>	Call up scenes Call up and save scenes	Telegram type for this object. DPT 17,001 Short button push = Call up scene DPT 18,001 Short button push = Call up scene Long button push = Save scene
<i>Scene number</i>	1-64	Select scene number for telegram.
<i>Response after restoration of the bus supply</i>	None	Do not send. Parameter cannot be set and is not visible.
<i>Response when setting the block</i>	No response	Do not respond when the block is set. Parameter cannot be set.
<i>Response when cancelling the block</i>	No response	Do not respond when the block is cancelled. Parameter cannot be set.

5.4.8 Temperature input function (only C3 and C4)

i The external inputs C3 and C4 can be used as analogue inputs for temperature measurement via remote sensor.

5.4.8.1 Configuration options parameter page

Designation	Values	Description
Description	Text input field	User-specific designation for the channel and the objects.
Use	Switch Push button Temperature input LED output	A temperature sensor is connected to the input.
Temperature calibration	-5.0 - 5.0 K Standard 0 K	Correction value for temperature measurement if sent temperature deviates from the actual ambient temperature. Example: temperature = 20 °C sent temperature = 21 °C Correction value = 1
Send temperature in the event of change of	Not due to a change 0.2 K 0.3 K 0.5 K 0.7 K 1 K 1.5 K 2 K	Only send cyclically (if enabled) Send if the value has changed by the selected amount since the last transmission.
Send cyclically?	No Yes	Send current temperature measurement value cyclically?
Cycle time	1 min, 2 min, 3 min , 5 min, 10 min, 15 min 30 min, 45 min, 60 min	Cycle time for cyclical transmission.
Sensor type	Flush-mounted temperature sensor (9070496)	External temperature sensor for flush-mounted installation. Item no. 9070496.
	Remote sensor 1 (9070191)	External temperature sensor 1 Item no. 9070191, for surface-mounted installation.
	Remote sensor IP65 (9070459)	External temperature sensor RAMSES IP65 Item no. 9070459, for surface-mounted installation.

Designation	Values	Description
	<i>Floor sensor (9070321)</i>	Temperature sensor for laying in floor, IP65 protection rating.

5.4.9 LED parameter

These parameters apply to all channels configured as *LED output*.

Designation	Values	Description
<i>Flashing – duty cycle</i>	100..2000 ms Standard = 500 ms	Desired duty cycle (1000 ms = 1 second).
<i>Flashing – switch-off duration</i>	100..2000 ms Standard = 500 ms	Desired switch-off duration.
<i>Pulsing – interval</i>	1000 – 5000 ms Standard = 2000 ms	Distance between 2 light pulses.

5.4.10 LED output function

5.4.10.1 Configuration options parameter page

Designation	Values	Description
<i>Description</i>	<i>Text input field</i>	User-specific designation for the channel and the objects.
<i>Use</i>	<i>Switch</i> <i>Push button</i> <i>Temperature input</i> LED output	A push button is connected to the input.
<i>Maximum output current</i>	1 mA 1.5 mA 2 mA 2.5 mA 3 mA	Thanks to an increased output current of 3 mA, customary LEDs and low current LEDs can be controlled.
<i>State at object value 1</i>	<i>LED off</i> LED on <i>LED on for configured time</i> <i>LED flashing</i> <i>LED pulsing</i>	Object "LED On/Off" is switched off with a 1. Object "LED On/Off" is switched on with a 1. Object "LED On/Off" is switched on with a 1 and automatically switched off after a configurable time. Object "LED On/Off" flashes after sending a 1. The switch-on and switch-off duration can be set via the LED parameter parameter page. Object "LED On/Off" pulses after sending a 1. The pulse interval can be set via the LED parameter parameter page.

Designation	Values	Description
<i>Duration for automatic off</i>	1-10 s Standard: 5 s	Only available if parameter <i>Status at object value 1</i> = LED on for configured time
<i>State at object value 0</i>	LED off <i>LED on</i> <i>LED on for configured time</i> <i>LED flashing</i> <i>LED pulsing</i>	Object "LED On/Off" is switched off with a 0. Object "LED On/Off" is switched on with a 0. Object "LED On/Off" is switched on with a 0 and automatically switched off after a configurable time. Object "LED On/Off" flashes after sending a 0. The switch-on and switch-off duration can be set via the LED parameter parameter page. Object "LED On/Off" pulses after sending a 0. The pulse interval can be set via the LED parameter parameter page.
<i>Duration for automatic off</i>	1-10 s Standard: 5 s	Only available if parameter <i>Status at object value 0</i> = LED on for configured time
<i>Brightness 1 (from max. current)</i>	5-100% Standard : 80%	Value for the object "Set LED brightness 1". A 1 on the object sets the LED switch-on brightness to the configured value.
<i>Brightness 2 (from max. current)</i>	5-100% Standard : 40%	Value for the object "Set LED brightness 2". A 1 on the object sets the LED switch-on brightness to the configured value.
<i>Brightness 3 (from max. current)</i>	5-100% Standard : 10%	Value for the object "Set LED brightness 3". A 1 on the object sets the LED switch-on brightness to the configured value.

6 Typical applications

i These application examples are designed to aid planning and are not to be considered an exhaustive list. They can be supplemented and extended as desired.
Standard or customer-defined parameter settings apply for the parameters not listed here.

6.1 Switching light

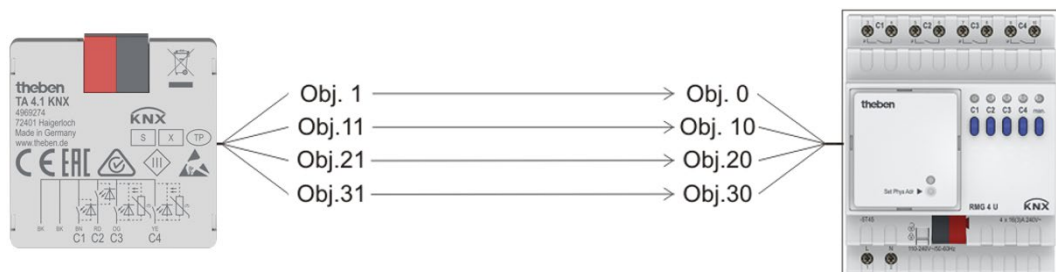
The push button interface TA 4.1 is connected to a 4-way push button and controls the switch actuator RMG 4 U.

All 4 channels are used.

6.1.1 Devices

- TA 4.1 (4969274)
- RMG 4 U (4930223)

6.1.2 Overview



6.1.3 Important parameter settings

TA 4.1

Parameter page	Parameter	Setting
<i>C1... C4: Configuration options</i>	<i>Use</i>	<i>Push button</i>
	<i>Push button function</i>	<i>Switching</i>
<i>C1... C4: Push button object 1</i>	<i>Send after short operation</i>	<i>Send telegram</i>
	<i>Value</i>	<i>Change over</i>

RMG 4 U

Parameter page	Parameter	Setting
<i>RMG 4 U channel C1... C4: Configuration options</i>	<i>Channel function</i>	<i>Switching On/Off</i>
	<i>Activation of function via</i>	<i>Switch object</i>

6.1.4 Objects and links

Links

No.	TA 4.1 Object name	No.	RMG 4 U Object name	Comment
1	<i>Channel C1.1 Switching</i>	0	<i>RMG 4 U channel C1</i>	TA 4.1 sends switch commands to RMG 4 U
11	<i>Channel C2.1 Switching</i>	10	<i>RMG 4 U channel C2</i>	
21	<i>Channel C3.1 Switching</i>	20	<i>RMG 4 U channel C3</i>	
31	<i>Channel C4.1 Switching</i>	30	<i>RMG 4 U channel C4</i>	

6.2 2 lighting groups dimming (one button operation)

The push button interface TA 2.1 controls both channels of the dimming actuator DMG 2 T. One single push-button is used per lighting group (dimming actuator channel).

One short button push switches the light on or off.

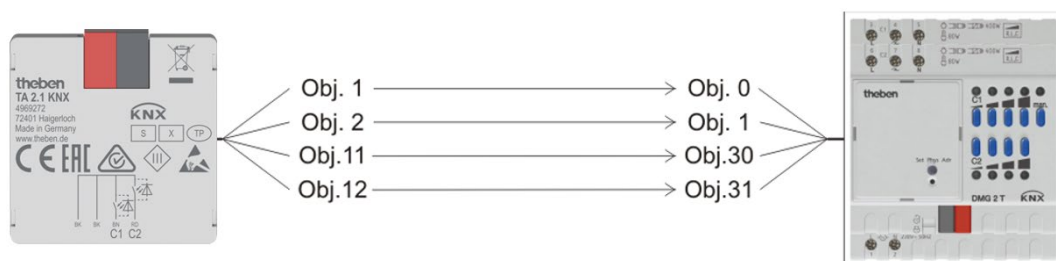
With a long button push the brightness changes.

When pressed again, the dimming direction changes (brighter/darker).

6.2.1 Devices

- TA 2.1 (4969272)
- DMG 2 T (4930270)

6.2.2 Overview



6.2.3 Important parameter settings

TA 2.1

Parameter page	Parameter	Setting
<i>C1 and C2: Configuration options</i>	<i>Use</i>	<i>Push button</i>
	<i>Push button function</i>	<i>Dimming</i>
<i>C1 and C2: Dimming</i>	<i>Response to long/short</i>	<i>One button operation</i>

DMG 2 T

Parameter page	Parameter	Setting
<i>dimming response</i>	<i>Switching on/off with a 4 bit Telegram</i>	<i>no</i>

6.2.4 Objects and links

Table 15: Links

No.	TA 2.1 Object name	No.	DMG 2 T Object name	Comment
1	<i>Channel C1 Switching</i>	0	<i>DMG 2 T channel 1 Switching On/Off</i>	Long button push for Brighter/darker dimming commands.
2	<i>Channel C1 Brighter/darker</i>	1	<i>DMG 2 T channel 1 Brighter/darker</i>	
11	<i>Channel C2 Switching</i>	30	<i>DMG 2 T channel 2 Switching On/Off</i>	Short button push for On/Off commands.
12	<i>Channel C2 Brighter/darker</i>	31	<i>DMG 2 T channel 2 Brighter/darker</i>	

6.3 2 lighting groups dimming (2 rocker buttons)

The push button interface TA 4.1 controls both channels of the dimming actuator DMG 2 T. One rocker button is used per lighting group (dimming actuator channel).

One short button push switches the light on or off.

With a long button push the brightness changes.

- top button → brighter
- bottom button → darker



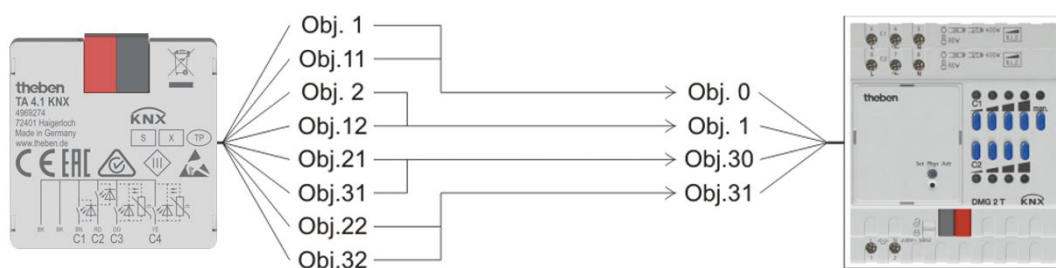
One rocker button, i.e. 2 inputs are used for each lighting group.

The top and bottom buttons of a rocker always send the telegrams to the dimming actuator via a common group address.

6.3.1 Devices

- TA 4.1 (4969274)
- DMG 2 T (4930270)

6.3.2 Overview



6.3.3 Important parameter settings

TA 4.1

Parameter page	Parameter	Setting
<i>C1... C4: Configuration options</i>	<i>Use</i>	<i>Push button</i>
	<i>Push button function</i>	<i>Dimming</i>
<i>C1: Dimming</i>	<i>Response to long/short</i>	<i>Brighter/On⁷</i>
<i>C2: Dimming</i>	<i>Response to long/short</i>	<i>Darker/Off⁸</i>
<i>C3: Dimming</i>	<i>Response to long/short</i>	<i>Brighter/On⁹</i>
<i>C4: Dimming</i>	<i>Response to long/short</i>	<i>Darker/Off¹⁰</i>

DMG 2 T

Parameter page	Parameter	Setting
<i>dimming response</i>	<i>Switching on/off with a 4 bit Telegram</i>	<i>no</i>

6.3.4 Objects and links

Links

No.	TA 4.1	No.	DMG 2 T	Comment
	Object name		Object name	
1	<i>Channel C1 Switching</i>	0	<i>DMG 2 T Channel C1 Switching On/Off</i>	First lighting group: Sends On/Off commands to the dimming actuator with a short button push,
11	<i>Channel C2 Switching</i>			
2	<i>Channel C1 Brighter</i>	1	<i>DMG 2 T Channel C1 Brighter/darker</i>	Sends brighter/darker commands to the dimming actuator with a long button push.
12	<i>Channel C2 Darker</i>			
21	<i>Channel C3 Switching</i>	30	<i>DMG 2 T Channel C2 Switching On/Off</i>	Second lighting group: Sends On/Off commands to the dimming actuator with a short button push,
31	<i>Channel C4 Switching</i>			
22	<i>Channel C3 Brighter</i>	31	<i>DMG 2 T Channel C2 Brighter/darker</i>	Sends brighter/darker commands to the dimming actuator with a long button push.
32	<i>Channel C4 Darker</i>			

⁷ Brighter/BY is also possible.

⁸ Darker/BY is also possible.

⁹ Brighter/BY is also possible.

¹⁰ Darker/BY is also possible.

6.4 Controlling 4 blinds or blind groups

The push button interface TA 4.1 controls the blinds actuator JMG 4 T.

A push button is connected to each input.

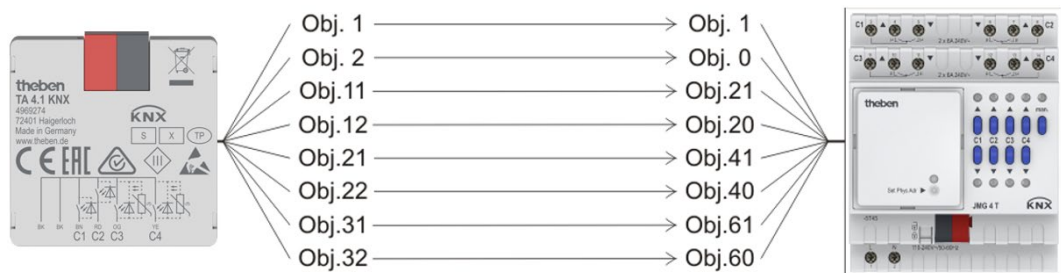
A long button push raises or lowers the blinds.

A short button push triggers the step/stop function.

6.4.1 Devices

- TA 4.1 (4969274)
- JMG 4 T (4930250)

6.4.2 Overview



6.4.3 Important parameter settings

TA 4.1

Parameter page	Parameter	Setting
Channel C1... C4: Configuration options	Use	Push button
	Push button function	Blinds
Channel C1... C4: Blinds	Operation	One button operation

JMG 4 T

Parameter page	Parameter	Setting
JMG 4 JMG 4 T	Type of hanging	Blinds

6.4.4 Objects and links

Links

No.	TA 4.1 Object name	No.	JMG 4 T Object name	Comment
1	Channel C1 Step/stop	1	JMG 4 T C1 Step/stop	Long button push for Up/down operating commands. Short button push for Step/stop commands.
2	Channel C1 Up/down	0	JMG 4 T C1 Up/down	
11	Channel C2 Step/stop	21	JMG 4 T C2 Step/stop	
12	Channel C2 Up/down	20	JMG 4 T C2 Up/down	
21	Channel C3 Step/stop	41	JMG 4 T C3 Step/stop	
22	Channel C3 Up/down	40	JMG 4 T C3 Up/down	
31	Channel C4 Step/stop	61	JMG 4 T C4 Step/stop	
32	Channel C4 Up/down	60	JMG 4 T C4 Up/down	

7 Appendix

7.1 Conversion of percentages to decimal and hexadecimal values

%	Dec.	Hex.	%	Dec.	Hex.	%	Dec.	Hex.
0%	0	\$00	34%	87	\$56	68%	173	\$AD
1%	3	\$02	35%	89	\$59	69%	176	\$AF
2%	5	\$05	36%	92	\$5B	70%	179	\$B2
3%	8	\$07	37%	94	\$5E	71%	181	\$B5
4%	10	\$0A	38%	97	\$60	72%	184	\$B7
5%	13	\$0C	39%	99	\$63	73%	186	\$BA
6%	15	\$0F	40%	102	\$66	74%	189	\$BC
7%	18	\$11	41%	105	\$68	75%	191	\$BF
8%	20	\$14	42%	107	\$6B	76%	194	\$C1
9%	23	\$16	43%	110	\$6D	77%	196	\$C4
10%	26	\$19	44%	112	\$70	78%	199	\$C6
11%	28	\$1C	45%	115	\$72	79%	201	\$C9
12%	31	\$1E	46%	117	\$75	80%	204	\$CC
13%	33	\$21	47%	120	\$77	81%	207	\$CE
14%	36	\$23	48%	122	\$7A	82%	209	\$D1
15%	38	\$26	49%	125	\$7C	83%	212	\$D3
16%	41	\$28	50%	128	\$7F	84%	214	\$D6
17%	43	\$2B	51%	130	\$82	85%	217	\$D8
18%	46	\$2D	52%	133	\$84	86%	219	\$DB
19%	48	\$30	53%	135	\$87	87%	222	\$DD
20%	51	\$33	54%	138	\$89	88%	224	\$E0
21%	54	\$35	55%	140	\$8C	89%	227	\$E2
22%	56	\$38	56%	143	\$8E	90%	230	\$E5
23%	59	\$3A	57%	145	\$91	91%	232	\$E8
24%	61	\$3D	58%	148	\$93	92%	235	\$EA
25%	64	\$3F	59%	150	\$96	93%	237	\$ED
26%	66	\$42	60%	153	\$99	94%	240	\$EF
27%	69	\$44	61%	156	\$9B	95%	242	\$F2
28%	71	\$47	62%	158	\$9E	96%	245	\$F4
29%	74	\$49	63%	161	\$A0	97%	247	\$F7
30%	77	\$4C	64%	163	\$A3	98%	250	\$F9
31%	79	\$4F	65%	166	\$A5	99%	252	\$FC
32%	82	\$51	66%	168	\$A8	100%	255	\$FF
33%	84	\$54	67%	171	\$AA			