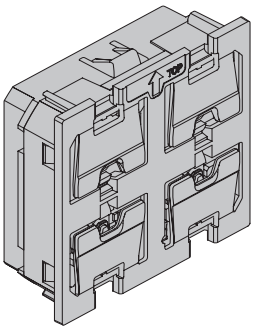
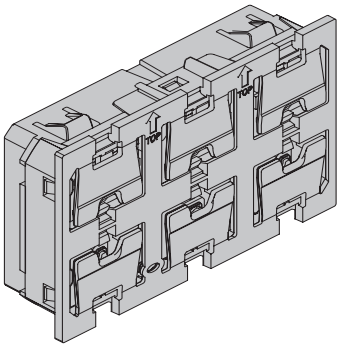


K4651M2KNX



K4651M3KNX

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1. USE

The KNX controls are wiring devices suitable to control lights, shutters or other kind of loads.
They are equipped with 6 completely independent and configurable channels able to perform a wide range of functions.

Main configurable functions:
- 1/2 buttons switching/dimming
- 1/2 buttons shutters and blinds management
- value sending (shutter position, dimming %...)
- sequential value sending
- multiple commands
- conditional commands
- 1/8 bit scenario saving and recall

Each device is also equipped with 6 RGB LEDs fully configurable in term of colors and blinking mode and can switch operating profiles according to defined events or conditions

2. RANGE

	Description	Cat.
	KNX control 2M	K4651M2KNX
	KNX control 3M	K4651M3KNX

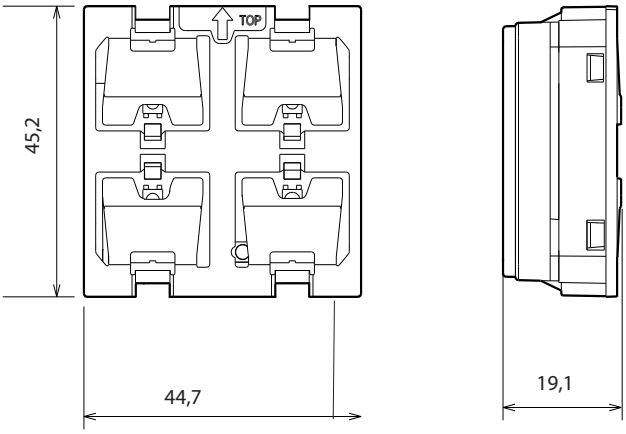
3. TECHNICAL FEATURES

- Supply voltage: 29 V=
- KNX connector: red/black
- Automatic clamp
- Terminal capacity: 4 x (Ø 0,6 mm <  < Ø 0,8 mm)
- KNX BUS absorption: 9.5 mA
- Usage temperature: 0°C/+45°C, negative temperatures are not managed.
- Storage temperature: -25°C/+30°C
- IP40: assembled product
- IP20: without rocker plate
- IK02

Compliant with installation and manufacturing standards, see E-catalogue

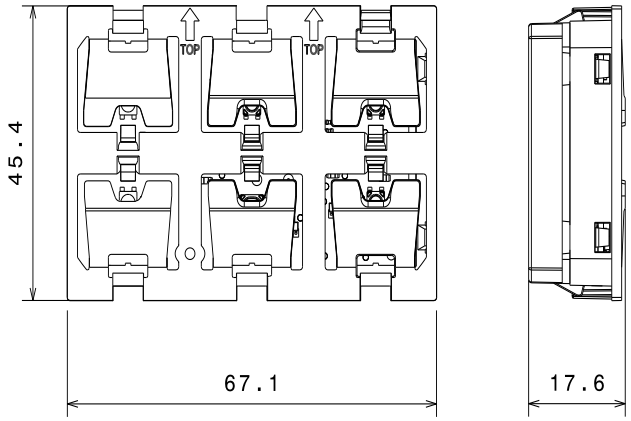
4. OVERALL DIMENSIONS (mm)

K4651M2KNX

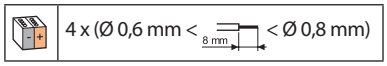


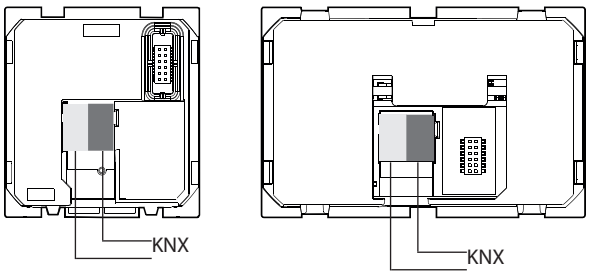
4. OVERALL DIMENSIONS (mm) (continued)

K4651M3KNX

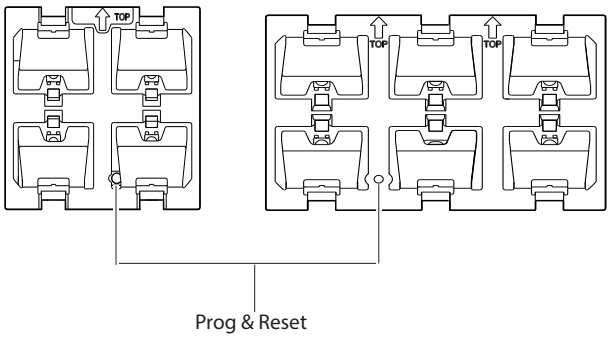


5. CONNECTION





6. DESCRIPTION OF THE MECANISMS

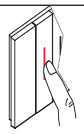
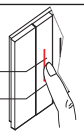
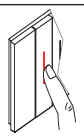
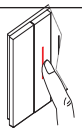
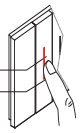
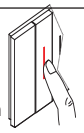
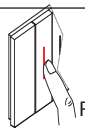
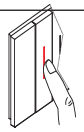
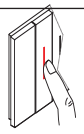
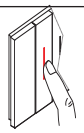


7. OPERATION

■ 7.1 Actuation points

Each actuation point can be configured independently or in pairs, for a short and a long press (time can be configured in the ETS software), for on/off control, dimming, roller blinds, scenario, lock, incremented scenarios, send value, double action send, etc.:
Non-exhaustive list of the possible functions.

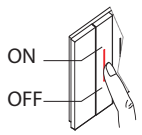
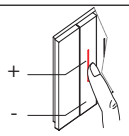
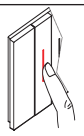
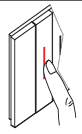
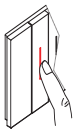
7.1.1 Main functions

	Possible action	
Switch On/Off	• **Pushbutton or remote switch** Cyclical ON/Off: short press	 short press
	• **Switch** ON: short press at top Off: short press at bottom	 short press
Roller blinds	• **1 actuation point** Raise/lower: cyclical mode, long press Stop blind: short press	 long press STOP  short press
	• **2 actuation points (pair)** Cyclical raise/stop: short press at top Cyclical lower/stop: short press at bottom Orientation of slats: long press at top or bottom Stop slats: release	 short press
		 Press and hold STOP  Release
Dim	• **1 actuation point** Cyclical ON/Off: short press Cyclical dim +, dim -: press and hold down Stop dimming: release	 short press
		 Press and hold down
		 Release

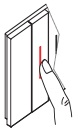
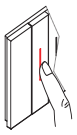
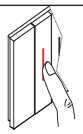
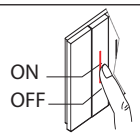
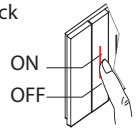
7. OPERATION (continued)

■ 7.1 Actuation points (continued)

7.1.1 Main functions (continued)

		Possible action
Dim (cont.)	• **2 actuation points (pair)** ON/Off: short press at top and bottom Dim +: press at top and hold Dim –: press at bottom and hold Stop dimming: release	 Short press
		 Press and hold down
		 Release
Scenario	• **Short press:** send a scenario number that is in the actuator configuration • **Long press (10 seconds):** save scenario. All actuators with this scenario number will save their status at this moment ⚠ The length of this press cannot be configured in the ETS software	 Short press
		 Long press (10 s)

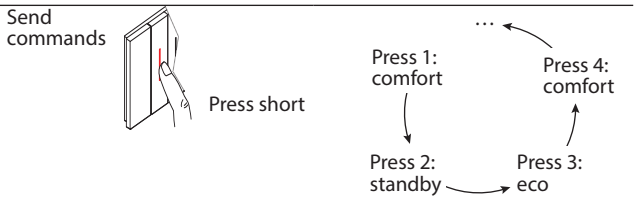
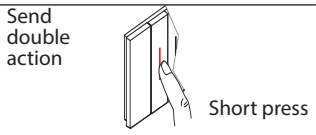
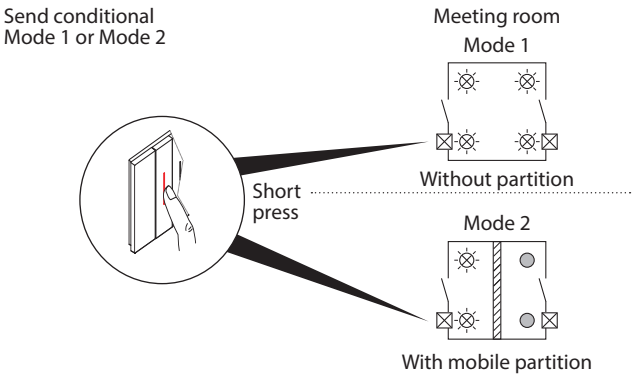
7.1.2 Additional functions

		Possible action
Send a value (lighting level, position of blinds, slats, etc.)	• **Short press:** send a value between 0 and 255. Example: Lighting 33% (value 85)	 Short press
Send 2 values (lighting level, position of blinds, slats, etc.)	• **Short press:** send 1st value between 0 and 255. Example : Lighting 10% (value 25) • **Long press:** send 2nd value between 0 and 255. Example : Lighting 50% (value 127)	 Short press
		 Long press
Send priority (lock)	• **Long press:** lock "ON" or lock "Off" • **Short press (10 seconds):** unlock "ON" or unlock "Off" Example: on a long press, "lock ON", the output of the actuator will remain locked at "ON" until a short press to unlock it ("unlock ON", output at "ON", "unlock Off", output at "Off")	Lock  Short press
		Unlock  Long press

7. OPERATION (continued)

■ 7.1 Actuation points (continued)

7.1.2 Additional functions (continued)

		Possible action
Send incremented commands (by scrolling)	• **Successive short presses:** send incremented commands. The chosen commands are sent one after the other (incrementation or decrementation between a min. and max. value, between 0 and 255) Example: 1st press: comfort (command 1), 2nd press: standby (command 2), 3rd press: eco (command 3), 4th press: comfort (command 1)	
Double action send (send 2 commands)	This function is used to associate products that do not have the scenario function with a scenario	
Conditional send Mode 1/Mode 2	When pressed, sends a command or a second different command, according to a condition. The control can manage different circuits according to an event. Example: in a meeting room, one press activates the switch-on of the 4 luminaires (mode 1). When a mobile partition is used in this meeting room, one press activates the 2 luminaires on the corridor side of the room.	

■ 7.2 Operation of the LEDs

Each control has a number of configurable RGB LEDs (6 depending on the Cat. No.) which indicate, for each press, the status of the system using the colours, flashing and brightness of the LEDs.
When the control has not yet been programmed, all the LEDs change colour quickly.
• Choice of 12 colours: green, blue, white, orange, gold, yellow, turquoise, cyan, light blue, purple, magenta, crimson
• Choice of LED behaviour: on continuously or various types of flashing

Key:
LED goes off — LED blinks slowly
LED blinks quickly — LED flashes

• Choice of the brightness of the LEDs (0 to 100%)
• Default modes:
ON = steady green
Off = steady blue
Alarm = blinking red (cannot be modified)
Control deactivated = steady orange
• Physical address programming mode: steady red LEDs

7.2.1 Setting the brightness

- Normal brightness: adjustable value
- Eco brightness: adjustable value
- Standby brightness: value cannot be adjusted (off)

The LED's lights up at maximum brightness level for 30s after pressing any push button.
The brightness setting will be the same for all the LEDs on the control

7.2.2 Setting the colour and behaviour

• Actuator status feedback: ON or OFF
• System status feedback: contextual information indicated via the BUS
Example: over-consumption, broken lamp, too much wind for roller blinds.
It is also possible to use the control in pilot light mode.

8. STANDARDS AND APPROVALS

• Complies with standard IEC 60 669.2.1
• Marking: KNX , CE

Note:
All technical information is available at
www.legrandoc.com

9. MAINTENANCE

Clean the surface with a cloth.

Do not use acetone, tar-removing cleaning agents or trichloroethylene.

Caution:
Always test before using other special cleaning products.

10. COMMUNICATION OBJECTS DESCRIPTION

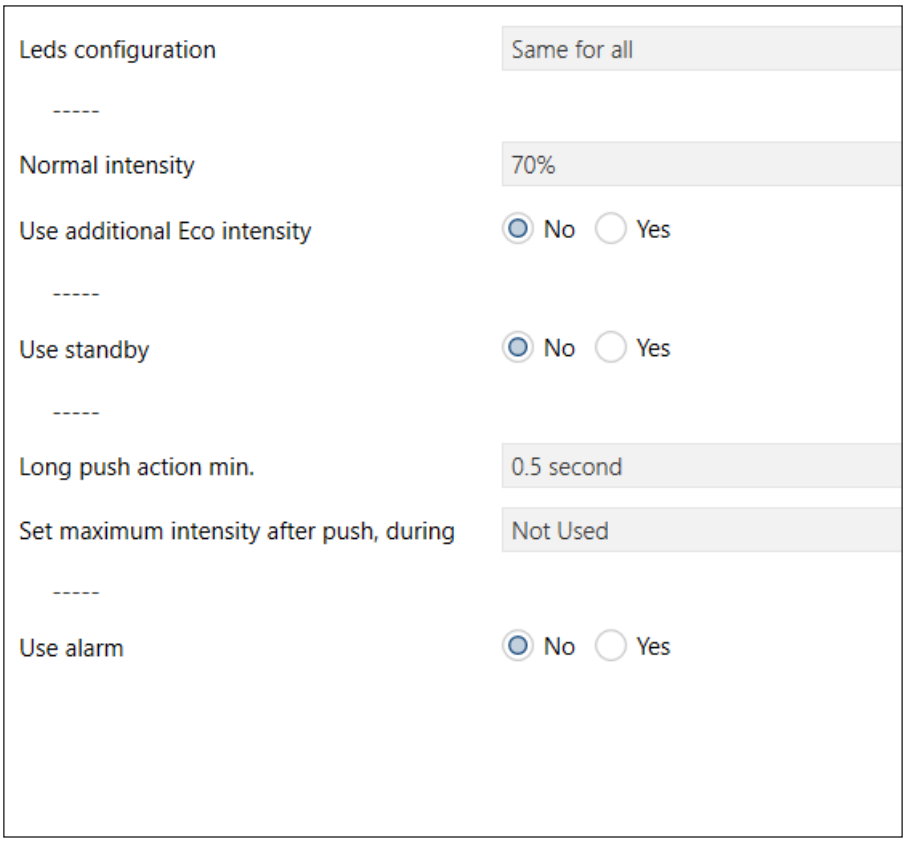
■ 10.1 General configuration

KNX controls can be configured via ETS software (versions ETS 3 , 4 and 5).

• General Parameters

This screen contains the main command parameters, common to all the channels:

- LED settings
- Standby mode settings
- Long push settings
- Disable object settings
- Alarm settings



• Communication Objects

Activation mode 1, 2.
Mode 1 : default operation
Mode 2 : conditional operation

No.	Object name	Function	Size	Flags
71	Mode	Active mode 1	1.010 DP_Start (1 bit)	CW
Mode 1 activation telegrams are sent via the group address linked with this object				
72	Mode	Active mode 2	1.010 DP_Start (1 bit)	CW
Mode 2 activation telegrams are sent via the group address linked with this object				
73	Mode	Mode 1 (False) / 2 (True)	1.002 DP_Bool (1 bit)	CW
False : Mode 1 activation telegrams are sent via the group address linked with this object True : Mode 2 activation telegrams are sent via the group address linked with this object				

10.1.1 Leds configuration

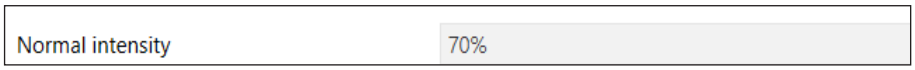
Leds configuration	**Same for all** Config Independently On value
This parameter determines the type of configuration for the LEDs	

10 COMMUNICATION OBJECTS DESCRIPTION (continued)

10.1 General configuration (continued)

10.1.2 Normal intensity General Parameters

(Mode 1 parameters)



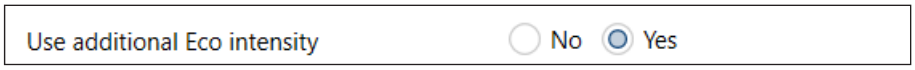
Parameters	Setting
Normal intensity	0 % 5 % 20 % 50% 70 % 100 %
This parameter determines the level in Normal intensity. (This value is felt not measured)	

10.1.3 Use additionnal Eco intensity

Controlled by group address.

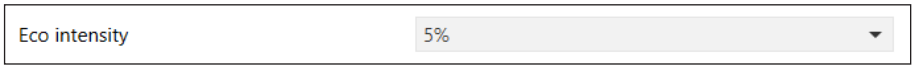
No

Eco is not usable, no accessible communication objects.



Yes (makes available mode eco object)

No.	Object name	Function	Size	Flags
66	Leds Eco/normal	Eco (1)/normal (0)	1.002 DP_Bool (1 bit)	CW
False : Normal mode activation telegrams are sent via the group address linked with this object True : Eco mode activation telegrams are sent via the group address linked with this object				
68	Leds Eco	Eco intensity	1.010 DP_Start (1 bit)	CW
Eco mode activation telegrams are sent via the group address linked with this object				
67	Leds Normal	Normal intensity	1.010 DP_Start (1 bit)	CW
Normal mode activation telegrams are sent via the group address linked with this object				



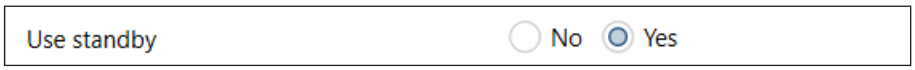
Parameters	Setting
Eco intensity	0 % 5 % 20 % 50% 70 % 100 %

10.1.4 Use standby

Controlled by communication object.

No

Standby is not usable, no accessible communication objects.



Yes (makes available the standby object)

No.	Object name	Function	Size	Flags
69	Leds standby	Standby	1.010 DP_Start (1 bit)	CW
Standby mode activation telegrams are sent via the group address linked with this object				

10. COMMUNICATION OBJECTS DESCRIPTION (continued)

■ 10.1 General configuration (continued)

10.1.4 Use standby (continued)

When standby is active the leds intensity is set to 0% (not adjustable)

Invert standby logic	**No** Yes
This parameter determines the type of logic for active standby	

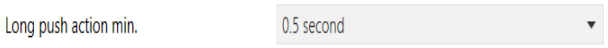
Wake-up

With the "Wake-up" function enabled, when the product is on standby, the first press on any button will light up the LEDs. However, the action will be sent only after the second press.

10.1.5 Long push configuration

This parameter determines the minimum time for detecting a long push action.

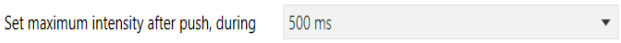
Long push action min.	**0.5 second** 1 second 2 seconds 3 seconds 4 seconds 5 seconds 10 seconds



10.1.6 Set maximum intensity after push during

If selected, after a push, the intensity of the led is raised to 100% during the set time. Return to the initial value at the end of time.

Set maximum intensity after push during :	**Not Used** 500 ms 1 second 2 seconds 5 seconds 10 seconds 30 seconds 1 minute 1 min. 30s 2 min. 10 min. 15 min. 30 min. 45 min 1 h 1 h 30



10.1.7 Use Alarm

A message can activate in red blinking the 4 leds.

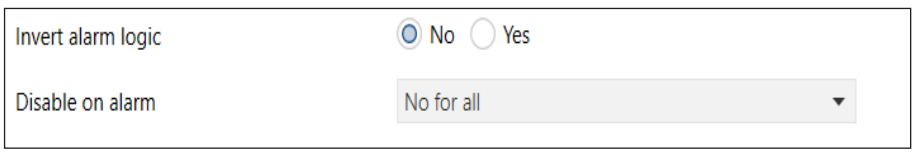
No

Alarm is not usable, no accessible communication object.

Yes (makes available the alarm communication object)

When alarm object is active all the LED blinks and the instensity is set to 100%

No.	Object name	Function	Size	Flags
70	Alarm	Alarm	1.010 DP_Start (1 bit)	CW
Alarm activation telegrams are sent via the group address linked with this object				



10. COMMUNICATION OBJECTS DESCRIPTION (continued)

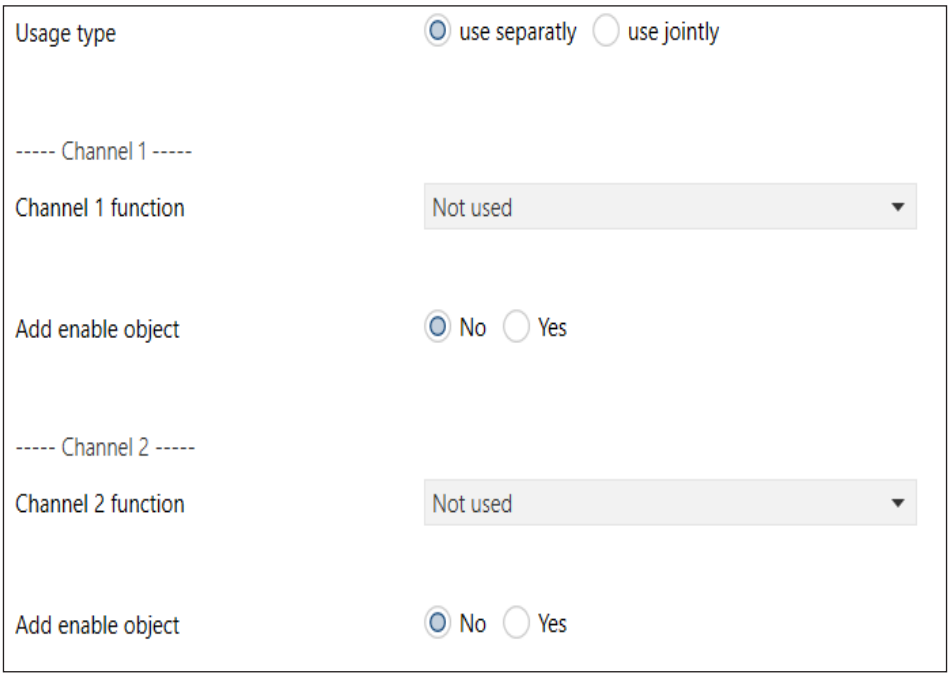
■ 10.1 General configuration (continued)

10.1.7 Use Alarm(continued)

Parameters	Setting
Invert alarm logic	No Yes
This parameter determines the type of logic to active/deactive an alarm	
Disable on Alarm	Yes for all No for all Configure Independatly
The parameter determines if the channels are disabled on alarm. If is it chosen "Configure independently" it is possible to choose one by one the channel behaviour.	

■ 10.2 Channels configuration (1,2,3,4,5,6)

This screen allows to chose how to manage the channels and to configure their settings



10.2.1 Use separately

Channel X function

Not used

Channel is not usable, no accessible communication objects

10.2.1.1 Switching

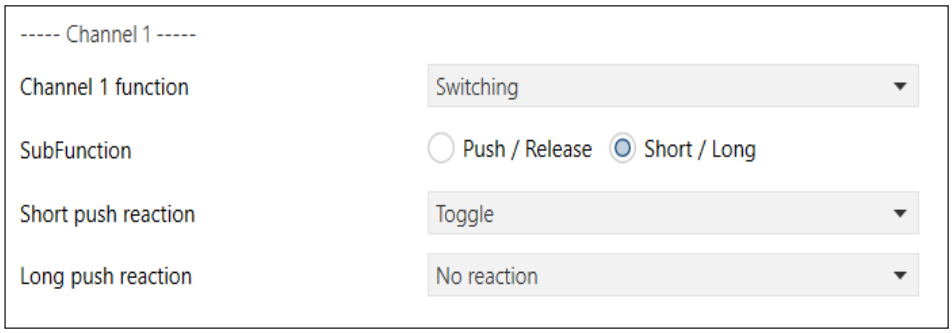
No.	Object name	Function	Size	Flags
1 (10, 19, 28) 1 (10, 19, 28, 37, 46)	Channel 1 (2,3,4) Channel 1 (2,3,4,5,6)	Switching	1.001 DP_Switch (1 bit)	CWT
Switching telegrams are sent via the group address linked with this object				
2 (11,20,29) 2 (11, 20, 29, 38, 47)	Channel 1 (2,3,4) Channel 1 (2,3,4,5,6)	Switching Status	1.01 DP_Switch (1 bit)	CW
Switching status are received via the group address linked with this object.				

10. COMMUNICATION OBJECTS DESCRIPTION (continued)

10.2 Channels configuration (1,2,3,4,5,6) (continued)

10.2.1 Use separately (continued)

10.2.1.1 Switching (continued)



SubFunction

Short/long

Parameters	Setting
Short push reaction	No reaction On Off Toggle
Here an adjustment is made to define which switching value is written into the storage cell of the communication object and sent after short pressing the push button related to the channel. "No reaction": A short push does not change the object value and also does not send a telegram. "On": After short push, the switching value "ON" (binary value, "1") is transferred into the communication object and sent. "Off": After short push, the switching value "OFF" (binary value,"0") is transferred into the communication object and sent. "Toggle" : After short push, the switching value stored in the communication object is inverted and the new value is sent	
Long push reaction	No reaction On Off Toggle
Here an adjustment is made to define which switching value is written into the storage cell of the communication object and sent after long pressing the push button related to the channel. "No reaction": A long push does not change the object value and also does not send a telegram. "On": After long push, the switching value "ON" (binary value, "1") is transferred into the communication object and sent. "Off" : After long push, the switching value "OFF" (binary value,"0") is transferred into the communication object and sent. "Toggle" : After long push, the switching value stored in the communication object is inverted and the new value is sent	

Push/Release

Parameters	Setting
Push reaction	No reaction On Off Toggle
Here an adjustment is made to define which switching value is written into the storage cell of the communication object and sent after pressing the push button related to the channel. "No reaction": Pushing a button action does not change the object value and also does not send a telegram. "On": Pressing a push-button, the switching value "ON" (binary value, "1") is transferred into the communication object and sent. "Off": Pressing a push-button, the switching value "OFF" (binary value,"0") is transferred into the communication object and sent. "Toggle" : Pressing a push-button, the switching value stored in the communication object is inverted and the new value is sent	
Release reaction	No reaction On Off Toggle
Here an adjustment is made to define which switching value is written into the storage cell of the communication object and sent after releasing the push button related to the channel. "No reaction": A release of the push-button does not change the object value and also does not send a telegram. "On": After releasing a push-button, the switching value "ON" (binary value, "1") is transferred into the communication object and sent. "Off" : After releasing a push-button, the switching value "OFF" (binary value,"0") is transferred into the communication object and sent. "Toggle" : Releasing a push-button, the switching value stored in the communication object is inverted and the new value is sent	

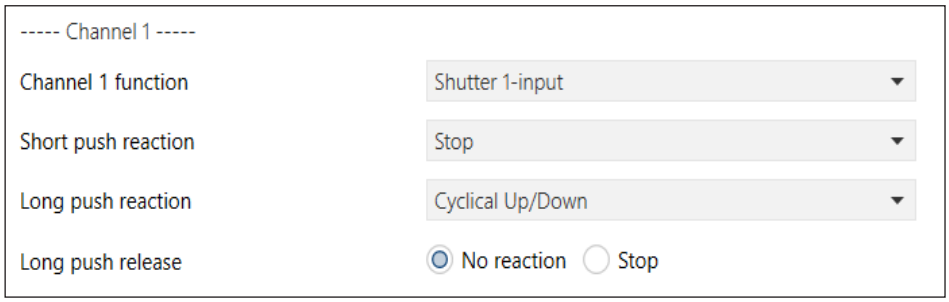
10. COMMUNICATION OBJECTS DESCRIPTION (continued)

■ **10.2 Channels configuration (1,2,3,4,5,6) (continued)**

10.2.1 Use separately (continued)

10.2.1.2 Shutter 1-input

No.	Object name	Function	Size	Flags
1 (10, 19, 28) 1 (10, 19, 28, 37, 46)	Channel 1 (2,3,4) Channel 1 (2,3,4,5,6)	Shutter Up/Down	1.008 DP_UpDown (1 bit)	CWT
The movement commands Up/Down are sent via the address linked with this object in order to raise/lower the solar protection.				
7 (16, 25, 34) 7 (16, 25, 34, 43, 52)	Channel 1 (2,3,4) Channel 1 (2,3,4,5,6)	Shutter Stop - slats	1.009 DP_OpenClose (1 bit)	CWT
The command "STOP" or "Slats OPEN/CLOSE" are sent via the group address linked with this object.				
6 (15, 24, 33) 6 (15, 24, 33, 42, 51)	Channel 1 (2,3,4) Channel 1 (2,3,4,5,6)	Shutter Status	5.001 DP_Scaling (1 Byte)	CW
The shutter status telegrams are received from the shutter actuator via the group address linked with this object.				



Parameters	Setting	
Short push reaction	No reaction Cyclical Up / Down + stop Up + stop Down + stop Cyclical Up / Down	Stop Open slats Close slats Up Down

Here an adjustment is made to define which movement command is written into the storage cell of the communication object and sent after short pressing the push button related to the channel.
"No reaction": a short push does not change the object value and also does not send a telegram.
Cyclical Up / Down + stop : each short push transfers the following sequence command values into the communication object: Up, Stop, Down, Stop, Up, Stop, Down, Stop,etc.
Up + stop : each short push transfers the following sequence command values into the communication object: Up, Stop, Up, Stop,,etc.
Down + stop : each short push transfers the following sequence command values into the communication object: Down, Stop, Down, Stop, etc.
Cyclical Up / Down: each short push transfers the following sequence command values into the communication object : Up, Down, Up, Down,,etc.
Stop : a short push transfers into the communication object the stop command value ("1" or "0")
Open slats: a short push transfers into the communication object the stop (open slats) command value ("0")
Close slats: a short push transfers into the communication object the stop (close slats) command value ("1")
Up: a short push transfers into the communication object the Up command (value "0")
Down: a short push transfers into the communication object the Down command (value "1")

Long push reaction	No reaction Up Down Cyclical Up/Down Stop Cyclical Open/Close slats Open slats Close slats

Here an adjustment is made to define which movement command is written into the storage cell of the communication object and sent after long pressing the push button related to the channel.
"No reaction": a long push does not change the object value and also does not send a telegram.
Up: a long push send the Up command (value "0")
Down: a long push sends the Down command (value "1")
Cyclical Up / Down: each long push sends the following sequence commands: Up, Down, Up, Down,,etc.
Stop : a long push sends the stop command (value "1" or "0")
Cyclical Open /Close slats : each long push sends the following sequence commands : Open slats, Close slats, Open slats, Close slats.

10. COMMUNICATION OBJECTS DESCRIPTION (continued)

10.2 Channels configuration (1,2,3,4,5,6) (continued)

10.2.1 Use separately (continued)

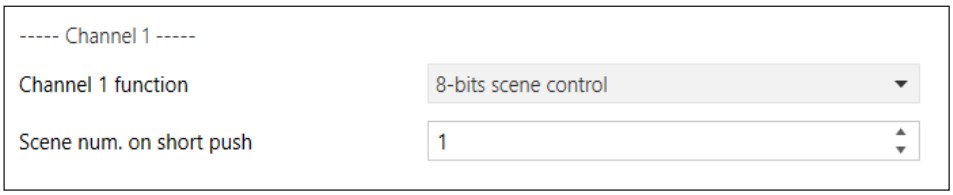
10.2.1.2 Shutter 1-input (continued)

Parameters	Setting
Open slats: a long push action sends the (open slats) command (value "0") Close slats: a long push action sends the (close slats) command (value "1")	
Long push release	No reaction Stop
Here an adjustment is made to define which value is written into the storage cell of the communication object and sent when releasing the push-button releated to the input after a long push. "No reaction": a release does not change the object value and also does not lead to the sending of a telegram. Stop : the stop command (value "1" or "0") is transferred into the communication object and sent	

10.2.1.3 8-bits scene control

This function allows to recall/save up to 64 scene.
A short push recalls the scene and a special long push (10s) allows to save a scene; for the defined scene number all the involved actuators statuses are saved.

No.	Object name	Function	Size	Flags
4 (13, 22, 31) 4 (13, 22, 31, 40, 49)	Channel 1 (2,3,4) Channel 1 (2,3,4,5,6)	8-bits scene	17.001 DP_SceneNumber (1 Byte)	CT
The telegrams to recall the scene with the configured number (1..64) are sent via the group address link with this object.				

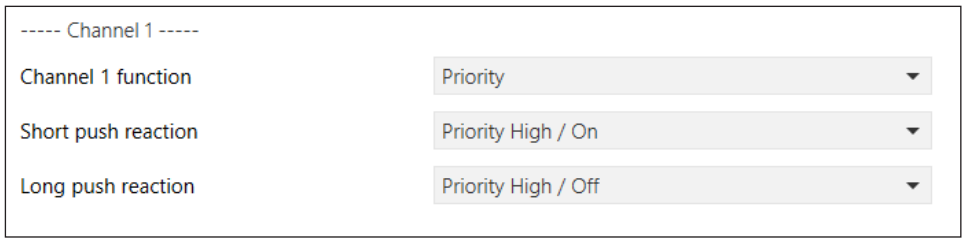


Parameters	Setting
Scene num. on short push	0..64
This parameters determines which scene (1..64) has to be recalled on rising edge. If value "0" is set, no scene is going to be recalled	

10.2.1.4 Priority

This function allows to send lock/unlock commands.

No.	Object name	Function	Size	Flags
4 (13, 22, 31) 4 (13, 22, 31, 40, 49)	Channel 1 (2,3,4) Channel 1 (2,3,4,5,6)	Override 2bits	2.001 DP_Switch_Control (2 bits)	CT
The telegrams with the override commands are sent via the address linked with this object				



10. COMMUNICATION OBJECTS DESCRIPTION (continued)

■ **10.2 Channels configuration (1,2,3,4,5,6) (continued)**

10.2.1 Use separately (continued)

10.2.1.4 Priority (continued)

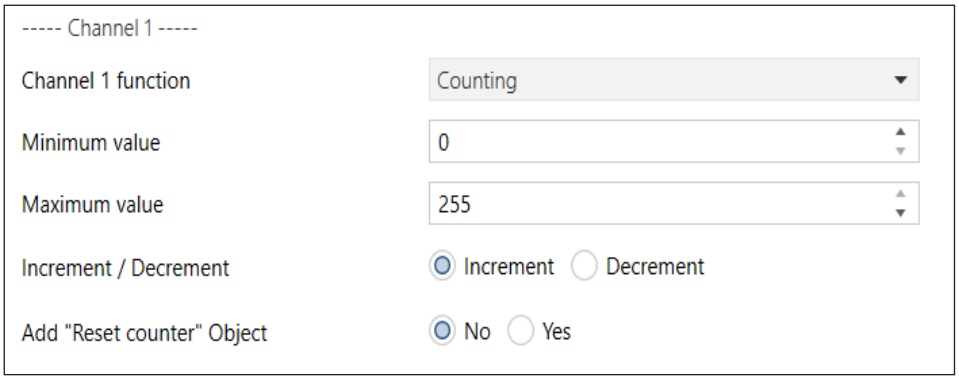
Parameters	Setting
Short push reaction	Priority High / On (lock On) Priority High / Off (lock Off) Priority Low / On (Unlock On) Priority Low / Off (Unlock Off)
Here it is chosen the desired value to be sent upon a short press of the push-button related to the channel.	
Long push reaction	Priority High / On Priority High / Off Priority Low / On Priority Low / Off
Here it is chosen the desired value to be sent upon a long press of the push-button related to the channel.	

Value	Behaviour
00b	Low Priority , Off-State
01b	Low Priority, On-State
10b	High Priority , Off-State
11b	High Priority , On-State

10.2.1.5 Counting

This function allows to send incremental values at each pressure

No.	Object name	Function	Size	Flags
4 (13, 22, 31) 4 (13, 22, 31, 40, 49)	Channel 1 (2,3,4) Channel 1 (2,3,4,5,6)	Counting	17.001 DP_SceneNumber (1 Byte)	CT
The telegrams to recall the scene with the configured number (1..64) are sent via the group address link with this object.				
2 (11, 20, 29) 2 (11, 20, 29, 38, 47)	Channel 1 (2,3,4) Channel 1 (2,3,4,5,6)	Reset Counter	1.015 DP_Reset (1 bit)	CW
If a telegram linked with this object is received, then the counter value is reset to the minimum value set by the "minimum value" parameter.				



Parameters	Setting
Minimum value	0..255, 0
An adjustment is made via this parameter to define the minimum counter value. In case of "decrement" value of "Increment decrement" parameter, the next counter value is set to the maximum.	
Maximum value	0..255, 255
An adjustment is made via this parameter to define the maximum counter value In case of "increment" value of "Increment decrement" parameter, the next counter value is set to the minimum.	
Increment / Decrement	Increment Decrement
Here an adjustment is made as to whether the counter value is to be increased by value 1 or decreased by the value 1 after each rising edge.	
Add "Reset counter" Object	Yes / No
This parameter determines if the "Reset Counter" object is enabled or not.	

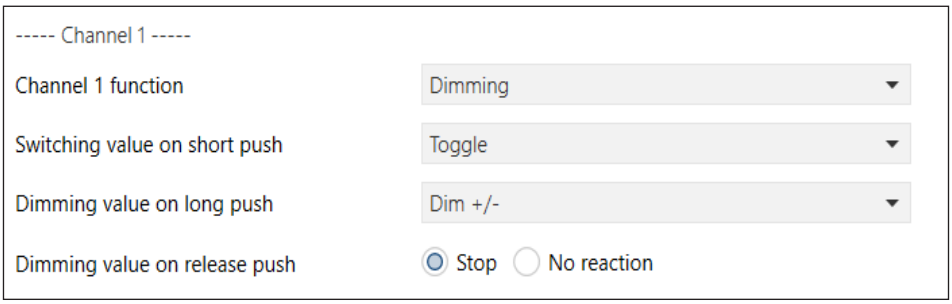
10. COMMUNICATION OBJECTS DESCRIPTION (continued)

■ 10.2 Channels configuration (1,2,3,4,5,6) (continued)

10.2.1 Use separately (continued)

10.2.1.6 Dimming

No.	Object name	Function	Size	Flags
1 (10, 19, 28) 6 pushes 1 (10, 19, 28, 37, 46)	Channel 1 (2,3,4) Channel 1 (2,3,4,5,6)	Switching	1.01 DP_Switch (1bit)	CWT
Switching telegrams are sent via the group address linked with this object.				
5 (14, 23, 32) 5 (14, 23, 32, 49, 50)	Channel 1 (2,3,4) Channel 1 (2,3,4,5,6)	Dimming	3.007 DP_Control_Dimming (4 bit)	CT
Dimming telegrams are sent via the group address linked with this object.				
6 (15, 24, 33) 6 (15, 24, 33, 42, 51)	Channel 1 (2,3,4) Channel 1 (2,3,4,5,6)	Value Status	5.001 DP_Scaling (1 Byte)	CW
Dimming status telegrams are received via the group address linked with this object.				



Parameters	Setting
Switching value on short push	No reaction On Off Toggle
Here an adjustment is made to define which switching value is written into the storage cell of the communication object and sent after short pressing the push button related to the channel. "No reaction": A short push button action does not change the object value and also does not send a telegram. "On": After a short push, the switching value "ON" (binary value, "1") is transferred into the communication object and sent. "Off": After a short push, the switching value "OFF" (binary value,"0") is transferred into the communication object and sent. "Toggle" : After a short push, the switching value stored in the communication object is inverted and the new value is sent.	
Dimming value on long push	Dim +/- Dim + Dim – No reaction
Here an adjustment is made to define which dimming value is written into the storage cell of the communication object and sent after long pressing the push button related to the channel. "No reaction": A long push button action does not change the object value and also does send a telegram. "Dim+/-": After a long push, the dimming value stored in the communication object is inverted and the new value is sent "Dim +" After a long push, the dimming value "Increase 100%" is transferred into the communication object and sent. "Dim -" : After a long push, the dimming value "Decrease 100%" is transferred into the communication object and sent.	
Dimming value on release push	No reaction Stop
Here an adjustment is made to define which dimming value is written into the storage cell of the communication object and sent after a long push release of the push button related to the Channel. "No reaction": a release after a long push does not change the object value and also does not send a telegram. "Stop": When the push button is released after a long push, the dimming value "Stop" is transferred into the communication object and sent.	

10.2.1.7 1 x 1 unsigned byte

No.	Object name	Function	Size	Flags
4 (13, 22, 31) 4 (13, 22, 31, 40, 49)	Channel 1 (2,3,4) Channel 1 (2,3,4,5,6)	Unsigned Value	5.010 DP_Value_1_Ucount (1 Byte)	CT
The telegrams with the unsigned value are sent via the group address linked with this object				

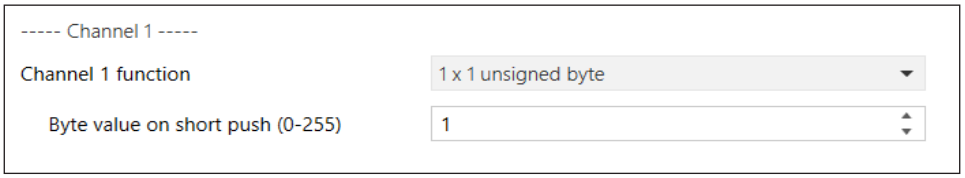
10. COMMUNICATION OBJECTS DESCRIPTION (continued)

■ 10.2 Channels configuration (1,2,3,4,5,6) (continued)

10.2.1 Use separately (continued)

10.2.1.7 1x1 unsigned byte (continued)

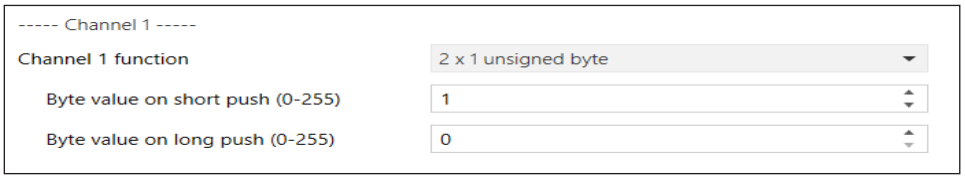
No.	Object name	Function	Size	Flags
4 (13, 22, 31) 4 (13, 22, 31, 40, 49)	Channel 1 (2,3,4) Channel 1 (2,3,4,5,6)	Unsigned Value	5.010 DP_Value_1_Ucount (1 Byte)	CT
The telegrams with the unsigned value are sent via the group address linked with this object				



Parameters	Setting
Byte value on short push (0-255)	0..255, 1
Here an adjustment is made to define which unsigned 8 bits value is written into the storage cell of the communication object and sent after a rising edge in the signal status at the channel (input). The rising edge corresponds to a change in the signal status at the Channel from logical "0" to "1".	

10.2.1.8 2x1 unsigned byte

No.	Object name	Function	Size	Flags
4 (13, 22, 31) 4 (13, 22, 31, 40, 49)	Channel 1 (2,3,4) Channel 1 (2,3,4,5,6)	Unsigned Value	5.010 DP_Value_1_Ucount (1 Byte)	CT
The telegrams with the unsigned value are sent via the group address linked with this object				



Parameters	Setting
Byte value on short push (0-255)	0..255, 1
Here an adjustment is made to define which unsigned-8 bits value is written into the storage cell of the communication object and sent after short pressing of the push button attached to the channel.	
Byte value on long push (0-255)	0..255, 0
Here an adjustment is made to define which unsigned-8 value is written into the storage cell of the communication object and sent after long pressing of the push button attached to the input.	

10.2.1.9 Multi action

This function allows to send two telegrams with a single pressure (Channel X and Channel X Action 2).

Switching:

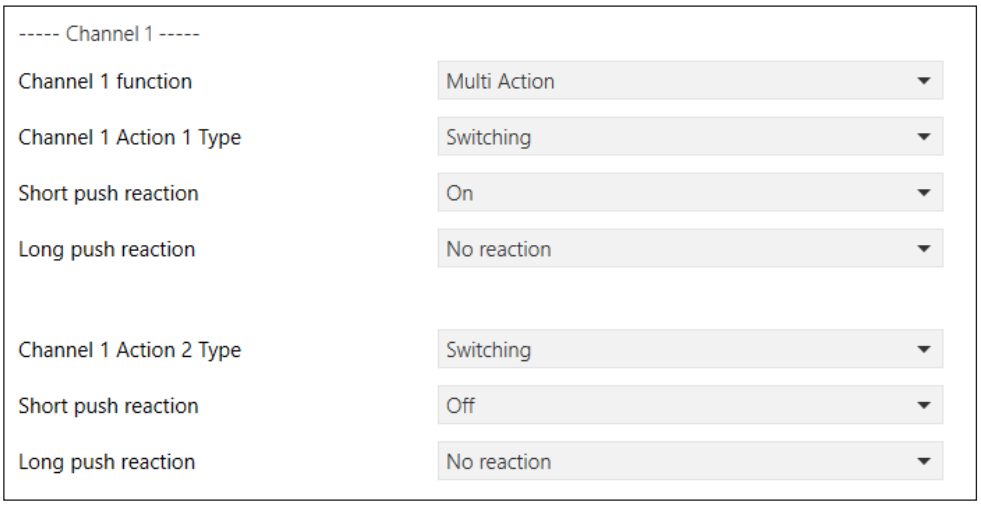
No.	Object name	Function	Size	Flags
1 (10, 19, 28) 1 (10, 19, 28, 37, 46)	Channel 1 (2,3,4) Action 1 Channel 1 (2,3,4,5,6) Action 1	Switching	1.01 DP_Switch (1 bit)	CWT
Switching telegrams are sent via the group address linked with this object				
2 (11, 20, 29) 2 (11, 20, 29, 38, 47)	Channel 1 (2,3,4) Action 1 Channel 1 (2,3,4,5,6) Action 1	Switching Status	1.01 DP_Switch (1 bit)	CW
Switching status are received via the group address linked with this object.				
8 (17, 26, 35) 8 (17, 26, 35, 44, 53)	Channel 1 (2,3,4) Action 2 Channel 1 (2,3,4,5,6) Action 2	Switching	1.01 DP_Switch (1 bit)	CWT
Switching telegrams are sent via the group address linked with this object				

10. COMMUNICATION OBJECTS DESCRIPTION (continued)

10.2 Channels configuration (1,2,3,4,5,6) (continued)

10.2.1 Use separately (continued)

10.2.1.9 Multi action (continued)



Parameters	Setting
Short push reaction	No reaction On Off Toggle
Here an adjustment is made to define which switching value is written into the storage cell of the communication object and sent after short pressing the push button related to the channel. "No reaction": A short push does not change the object value and also does not send a telegram. "On": After a short push, the switching value "ON" (binary value, "1") is transferred into the communication object and sent. "Off": After a short push, the switching value "OFF" (binary value,"0") is transferred into the communication object and sent. "Toggle" : After a short push, the switching value stored in the communication object is inverted and the new value is sent	
Long push reaction	No reaction On Off Toggle
Here an adjustment is made to define which switching value is written into the storage cell of the communication object and sent after a long pressing the push button related to the channel. "No reaction": A long push does not change the object value and also does not send a telegram. "On": After a long push, the switching value "ON" (binary value, "1") is transferred into the communication object and sent. "Off" : After a long push, the switching value "OFF" (binary value,"0") is transferred into the communication object and sent. "Toggle" : After a long push, the switching value stored in the communication object is inverted and the new value is sent	

Shutter:

No.	Object name	Function	Size	Flags
1 (10, 19, 28) 1 (10, 19, 28, 37, 46)	Channel 1 (2,3,4) Action 1 Channel 1 (2,3,4,5,6) Action 1	Shutter Up/Down	1.008 DP_UpDown (1 bit)	CWT
The movement commands Up/Down are sent via the address linked with this object in order to raise/lower the solar protection.				
7 (16, 25, 34) 7 (16, 25, 34, 43, 52)	Channel 1 (2,3,4) Action 1 Channel 1 (2,3,4,5,6) Action 1	Shutter Stop - slats	1.009 DP_OpenClose (1 bit)	CWT
The command "STOP" or "Slats OPEN/CLOSE" are sent via the group address linked with this object.				
6 (15, 24, 33) 6 (15, 24, 33, 42, 51)	Channel 1 (2,3,4) Action 1 Channel 1 (2,3,4,5,6) Action 1	Shutter Status	5.001 DP_Scaling (1 Byte)	CW
The shutter status telegrams are received from the shutter actuator via the group address linked with this object.				
8 (17, 26, 35) 8 (17, 26, 35, 44, 53)	Channel 1 (2,3,4) Action 2 Channel 1 (2,3,4,5,6) Action 2	Shutter Up/Down	1.008 DP_UpDown (1 bit)	CWT
The movement commands Up/Down are sent via the address linked with this object in order to raise/lower the solar protection.				
9 (18, 27, 36) 9 (18, 27, 36, 45, 54)	Channel 1 (2,3,4) Action2 Channel 1 (2,3,4,5,6) Action 2	Shutter Stop - slats	1.009 DP_OpenClose (1 bit)	CWT
The command "STOP" or "Slats OPEN/CLOSE" are sent via the group address linked with this object.				

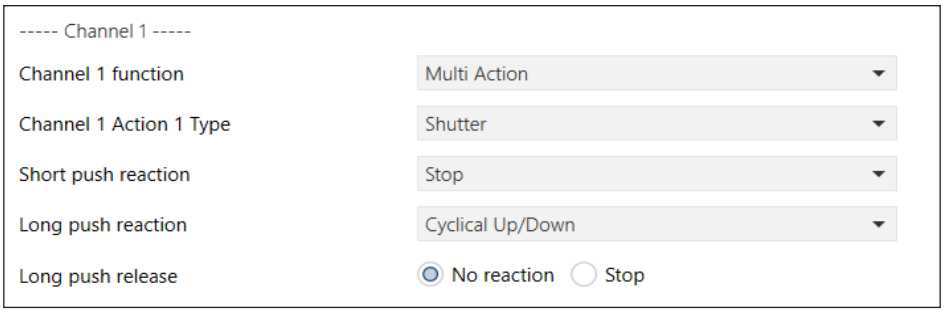
10. COMMUNICATION OBJECTS DESCRIPTION (continued)

■ **10.2 Channels configuration (1,2,3,4,5,6) (continued)**

10.2.1 Use separately (continued)

10.2.1.9 Multi action (continued)

Shutter (continued)



Parameters	Setting
Short push reaction	No reaction Cyclical Up / Down + stop Up + stop Down + stop Cyclical Up / Down Stop Open slats Close slats Up Down

Here an adjustment is made to define which movement command is written into the storage cell of the communication object and sent after short pressing the push button related to the channel.
"No reaction": action does not change the object value and also does not send a telegram.
Cyclical Up / Down + stop : each short push transfers the following sequence command values into the communication object: Up, Stop, Down, Stop, Up, Stop, Down, Stop,etc.
Up + stop : each short push transfers the following sequence command values into the communication object: Up, Stop, Up, Stop,,etc.
Down + stop : each short push transfers the following sequence command values into the communication object: Down, Stop, Down, Stop,,etc.
Cyclical Up / Down: each short push transfers the following sequence command values into the communication object : Up, Down, Up, Down,,etc.
Stop : a short push transfers into the communication object the stop command value ("1" or "0")
Open slats: a short push transfers into the communication object the stop (open slats) command value ("0")
Close slats: a short push transfers into the communication object the stop (close slats) command value ("1")
Up: a short push transfers into the communication object the Up command (value "0")
Down: a short push transfers into the communication object the Down command (value "1")

Long push reaction	No reaction Up Down Cyclical Up/Down Stop Cyclical Open/Close slats Open slats Close slats

Here an adjustment is made to define which movement command is written into the storage cell of the communication object and sent after long pressing the push button related to the channel.
"No reaction": action does not change the object value and also does not send a telegram.
Up: a long push action send is transferred into the communication object the Up command (value "0")
Down: a long push action send the Down command (value "1")
Cyclical Up / Down: each short push send the following sequence commands: Up, Down, Up, Down,,etc.
Stop : a long push action send the stop command (value "1" or "0")
Cyclical Open /Close slats : each short push send the following sequence commands : Open slats, Close slats, Open slats, Close slats
Open slats: a long push action send is transferred into the communication object the stop (open slats) command (value "0")
Close slats: a long push action send is transferred into the communication object the stop (close slats) command (value "1")

Long push release	No reaction Stop

Here an adjustment is made to define which value is written into the storage cell of the communication object and sent after a long press release of the push button related to the Channel.
"No reaction": action does not change the object value and also does not send a telegram.
Stop : the stop command (value "1" or "0") is transferred into the communication object and sent.

10. COMMUNICATION OBJECTS DESCRIPTION (continued)

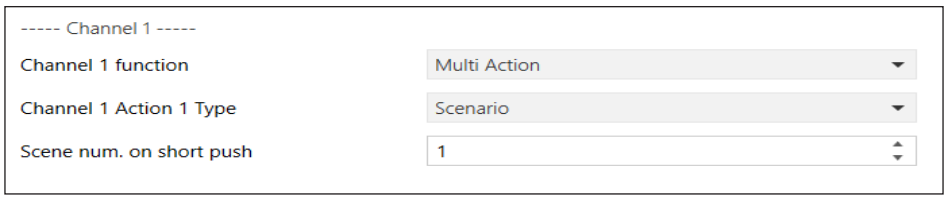
■ **10.2 Channels configuration (1,2,3,4,5,6) (continued)**

10.2.1 Use separately (continued)

10.2.1.9 Multi action (continued)

Scenario:
This function allows to recall/save up to 64 scene.
A short push recalls the scene and a special long push (10s) allows to save a scene; for the defined scene number all the involved actuators statuses are saved.

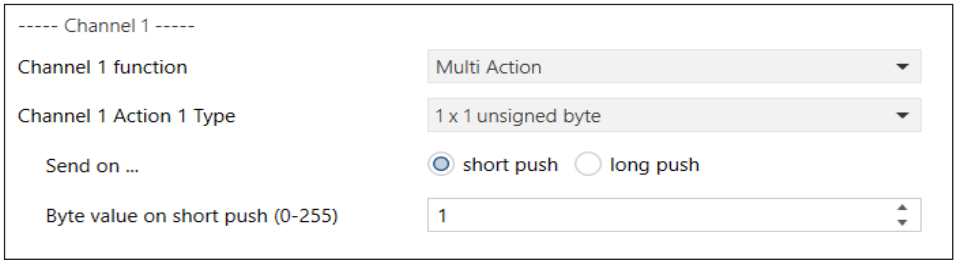
No.	Object name	Function	Size	Flags
4 (13,22,31) 4 (13, 22, 31, 40,49)	Channel 1 (2,3,4) Action 1 Channel 1 (2,3,4,5,6) Action 1	8-bits scene	17.001 DP_SceneNumber (1 Byte)	CT
The telegrams to recall the scene with the configured number (1..64) are sent via the group address link with this object.				
8 (17, 26, 35) 8 (17, 26, 35, 44, 53)	Channel 1 (2,3,4) Action 2 Channel 1 (2,3,4,5,6) Action 2	8-bits scene	17.001 DP_SceneNumber (1 Byte)	CT
The telegrams to recall the scene with the configured number (1..64) are sent via the group address link with this object.				



Parameters	Setting
Scene num. on short push (0:none)	0..64
This parameters determines which scene (1..64) has to be recalled on rising edge. If value "0" is set, no scene is going to be recalled	

1x1 unsigned byte:

No.	Object name	Function	Size	Flags
4 (13,22,31) 4 (13,22,31,40,49)	Channel 1 (2,3,4) Action 1 Channel 1 (2,3,4,5,6) Action 1	Unsigned Value	5.010 DP_Value_1_Ucount (1 Byte)	CT
The telegrams with the unsigned value are sent via the group address linked with this object				
8 (17,26,35) 31 (17,26,35,44,53)	Channel 1 (2,3,4) Action 2 Channel 1 (2,3,4,5,6) Action 2	Unsigned Value	5.010 DP_Value_1_Ucount (1 Byte)	CT
The telegrams with the unsigned value are sent via the group address linked with this object				



Parameters	Setting
Send on…	Short push Long push
Here an adjustment is made to define the lenght of the push to send the byte value.	
Byte value on short push (0-255)	0..255, 1
Here an adjustment is made to define which unsigned value is written into the storage cell of the communication object and sent after a rising edge in the signal status of the channel (input). The rising edge corresponds to a change in the signal status of the Channel from logical "0" to "1".	

10. COMMUNICATION OBJECTS DESCRIPTION (continued)

10.2 Channels configuration (1,2,3,4,5,6) (continued)

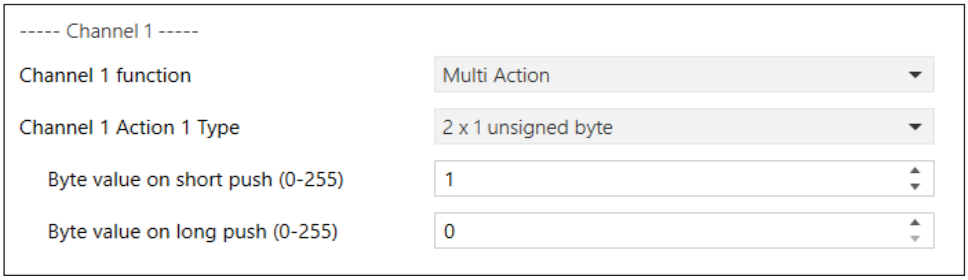
10.2.1 Use separately (continued)

10.2.1.9 Multi action (continued)

Scenario (continued)

2x1 unsigned byte:

No.	Object name	Function	Size	Flags
4 (13,22,31) 4 (13,22,31,40,49)	Channel 1 (2,3,4) Action 1 Channel 1 (2,3,4,5,6) ACtion 1	Unsigned Value	5.010 DP_Value_1_Ucount (1 Byte)	CT
The telegrams with the unsigned value are sent via the group address linked with this object				
8 (17,26,35) 31 (17,26,35,44,53)	Channel 1 (2,3,4) Action 2 Channel 1 (2,3,4,5,6) Action 2	Unsigned Value	5.010 DP_Value_1_Ucount (1 Byte)	CT
The telegrams with the unsigned value are sent via the group address linked with this object				



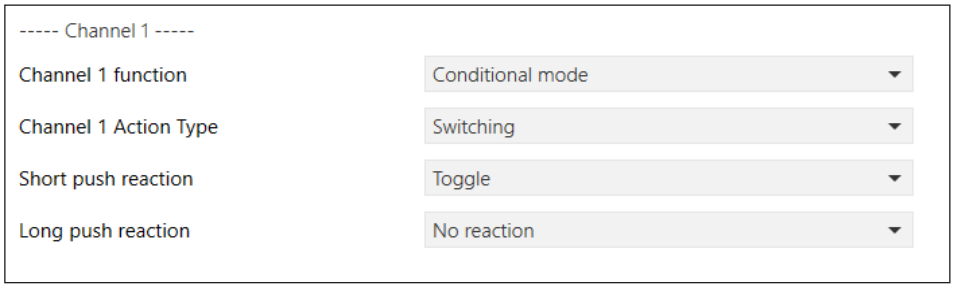
Parameters	Setting
Byte value on short push (0-255)	0..255, 1
Here an adjustment is made to define which unsigned value is written into the storage cell of the communication object and sent after short pressing the push button related to the channel.	
Byte value on long push (0-255)	0..255, 0
Here an adjustment is made to define which unsigned value is written into the storage cell of the communication object and sent after long pressing the push button related to the channel.	

10.2.1.10 Conditional mode

This function allows to send a telegram of the same type in two groups according to Mode 1 or 2 :
- When mode 1 is active, is sent Channel X.
- When mode 2 is active, is sent Channel X Action 2.

Switching:

No.	Object name	Function	Size	Flags
1 (10, 19, 28) 1 (10, 19, 28, 37, 46)	Channel 1 (2,3,4) Mode 1 Channel 1 (2,3,4,5,6) Mode 1	Switching	1.01 DP_Switch (1 bit)	CWT
Switching telegrams are sent via the group address linked with this object				
2 (11, 20, 29) 2 (11, 20, 29, 38, 47)	Channel 1 (2,3,4) Mode 1 Channel 1 (2,3,4,5,6) Mode 1	Switching Status	1.01 DP_Switch (1 bit)	CW
Switching status are received via the group address linked with this object. They are only visible if "Add status object" parameter value is set to "yes".				
8 (17, 26, 35) 8 (17, 26, 35, 44, 53)	Channel 1 (2,3,4) Mode 2 Channel 1 (2,3,4,5,6) Mode 2	Switching	1.01 DP_Switch (1 bit)	CWT
Switching telegrams are sent via the group address linked with this object .				



10. COMMUNICATION OBJECTS DESCRIPTION (continued)

■ **10.2 Channels configuration (1,2,3,4,5,6) (continued)**

10.2.1 Use separately (continued)

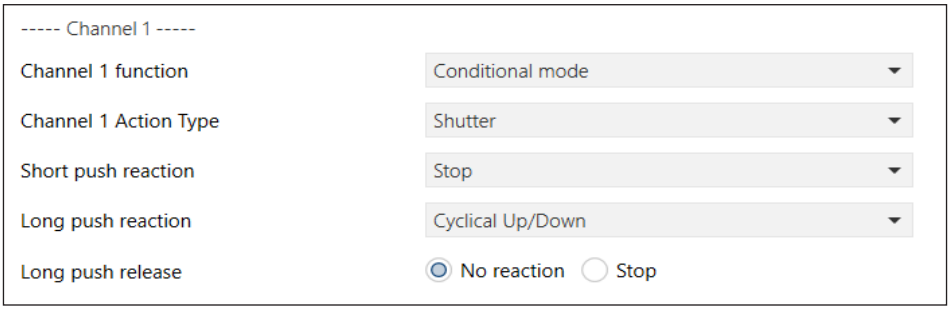
10.2.1.10 Conditional mode (continued)

Switching (continued):

Parameters	Setting
Short push reaction	No reaction On Off Toggle
Here an adjustment is made to define which switching value is written into the storage cell of the communication object and sent after short pressing the push button related to the channel. "No reaction": A short push button action does not change the object value and also does not send a telegram. "On": After a short push, the switching value "ON" (binary value, "1") is transferred into the communication object and sent. "Off": After a short push, the switching value "OFF" (binary value,"0") is transferred into the communication object and sent. "Toggle" : After a short push, the switching value stored in the communication object is inverted and the new value is sent,	
Long push reaction	No reaction On Off Toggle
Here an adjustment is made to define which switching value is written into the storage cell of the communication object and sent after long pressing the push button related to the channel. "No reaction": A long push button action does not change the object value and also does not send a telegram. "On": After a long push, the switching value "ON" (binary value, "1") is transferred into the communication object and sent. "Off" : After a long push, the switching value "OFF" (binary value,"0") is transferred into the communication object and sent. "Toggle" : After a long push, the switching value stored in the communication object is inverted and the new value is sent	

Shutter:

No.	Object name	Function	Size	Flags
1 (10,19, 28) 1 (10, 19, 28, 37, 46)	Channel 1 (2,3,4) Mode 1 Channel 1 (2,3,4,5,6) Mode 1	Shutter Up/Down	1.008 DP_UpDown (1 bit)	CWT
The movement commands Up/Down are sent via the address linked with this object in order to raise/lower the solar protection.				
7 (16, 25, 34) 7 (16, 25, 34, 42, 52)	Channel 1 (2,3,4) Mode 1 Channel 1 (2,3,4,5,6) Mode 1	Shutter Stop - slats	1.009 DP_OpenClose (1 bit)	CWT
The command "STOP" or "Slats OPEN/CLOSE" are sent via the group address linked with this object.				
6 (15, 24, 33) 6 (15, 24, 33, 43, 51)	Channel 1 (2,3,4) Mode 1 Channel 1 (2,3,4,5,6) Mode 1	Shutter Status	5.001 DP_Scaling (1 Byte)	CW
The shutter status telegrams are received from the shutter actuator via the group address linked with this object.				
8 (17, 26, 35) 8 (17, 26, 35, 44, 53)	Channel 1 (2,3,4) Mode 2 Channel 1 (2,3,4,5,6) Mode 2	Shutter Up/Down	1.008 DP_UpDown (1 bit)	CWT
The movement commands Up/Down are sent via the address linked with this object in order to raise/lower the solar protection.				
9 (18, 27, 36) 9 (18, 27, 36, 45, 54)	Channel 1 (2,3,4) Mode 2 Channel 1 (2,3,4,5,6) Mode 2	Shutter Stop - slats	1.009 DP_OpenClose (1 bit)	CWT
The command "STOP" or "Slats OPEN/CLOSE" are sent via the group address linked with this object.				



10. COMMUNICATION OBJECTS DESCRIPTION (continued)

■ **10.2 Channels configuration (1,2,3,4,5,6) (continued)**

10.2.1 Use separately (continued)

10.2.1.10 Conditional mode (continued)

Shutter (continued):

Parameters	Setting
Short push reaction	No reaction Cyclical Up / Down + stop Up + stop Down + stop Cyclical Up / Down Stop Open slats Close slats Up Down
Here an adjustment is made to define which movement command is written into the storage cell of the communication object and sent after short pressing the push button related to the channel. "No reaction": action does not change the object value and also does not send a telegram. Cyclical Up / Down + stop : each short push transfers the following sequence command values into the communication object: Up, Stop, Down, Stop, Up, Stop, Down, Stop,etc. Up + stop : each short push transfers the following sequence command values into the communication object: Up, Stop, Up, Stop,,etc. Down + stop : each short push transfers the following sequence command values into the communication object: Down, Stop, Down, Stop,,etc. Cyclical Up / Down: each short push transfers the following sequence command values into the communication object : Up, Down, Up, Down,,etc. Stop : a short push transfers into the communication object the stop command value ("1" or "0") Open slats: a short push transfers into the communication object the stop (open slats) command value ("0") Close slats: a short push transfers into the communication object the stop (close slats) command value ("1") Up: a short push transfers into the communication object the Up command (value "0") Down: a short push transfers into the communication object the Down command (value "1")	
Long push reaction	No reaction Up Down Cyclical Up/Down Stop Cyclical Open/Close slats Open slats Close slats
Here an adjustment is made to define which movement command is written into the storage cell of the communication object and sent after long pressing the push button related to the channel. "No reaction": action does not change the object value and also does not send a telegram. Up: a long push action send is transferred into the communication object the Up command (value "0") Down: a long push action send the Down command (value "1") Cyclical Up / Down: each short push send the following sequence commands: Up, Down, Up, Down,,etc. Stop : a long push action send the stop command (value "1" or "0") Cyclical Open /Close slats : each short push send the following sequence commands : Open slats, Close slats, Open slats, Close slats Open slats: a long push action send is transferred into the communication object the stop (open slats) command (value "0") Close slats: a long push action send is transferred into the communication object the stop (close slats) command (value "1")	
Long push release	No reaction Stop
Here an adjustment is made to define which value is written into the storage cell of the communication object and sent after releasing a long press on the push button related to the Channel. "No reaction": action does not change the object value and also does not send a telegram. Stop : the stop command (value "1" or "0") is transferred into the communication object and sent	

10. COMMUNICATION OBJECTS DESCRIPTION (continued)

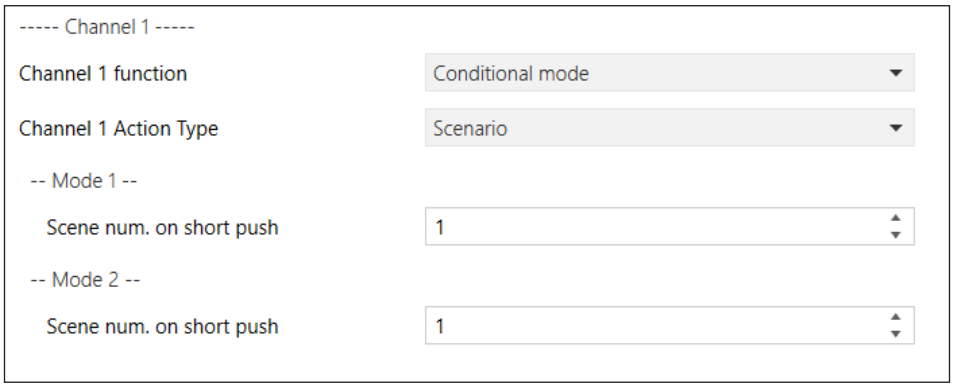
■ **10.2 Channels configuration (1,2,3,4,5,6) (continued)**

10.2.1 Use separately (continued)

10.2.1.10 Conditional mode (continued)

Scenario :
This function allows to recall/save up to 64 scene.
A short push recalls the scene and a special long push (10s) allows to save a scene; for the defined scene number all the involved actuators statuses are saved.

No.	Object name	Function	Size	Flags
4 (13,22,31) 4 (13,22,31,40,49)	Channel 1 (2,3,4) Action 1 Channel 1 (2,3,4,5,6) Action 1	8-bits scene	17.001 DP_SceneNumber (1 Byte)	CT
The telegrams to recall the scene with the configured number (1..64) are sent via the group address link with this object.				



Mode 1

Parameters	Setting
Scene num. on short push	0..64
This parameters determines which scene (1..64) has to be recalled on rising edge when mode 1 is active If value "0" is set, no scene is going to be recalled	

Mode 2

Parameters	Setting
Scene num. on short push	0..64
This parameters determines which scene (1..64) has to be recalled on rising edge when mode 2 is active If value "0" is set, no scene is going to be recalled	

Dimming :

No.	Object name	Function	DP	Flags
1 (10, 19, 28) 1 (10, 19, 28, 37, 46)	Channel 1 (2,3,4) Mode 1 Channel 1 (2,3,4,5,6) Mode 1	Switching	1.01 DP_Switch (1 bit)	CWT
Switching telegrams are sent via the group address linked with this object.				
6 (15, 24, 33) 6 (15, 24, 33, 42, 51)	Channel 1 (2,3,4) Mode 1 Channel 1 (2,3,4,5,6) Mode 1	Value Status	5.001 DP_Scaling (1 Byte)	CW
The dimming status telegrams are received from the dimming actuator via the group address linked with this object.				
8 (17, 26, 35) 8 (17, 26, 35, 44, 53)	Channel 1 (2,3,4) Mode 2 Channel 1 (2,3,4,5,6) Mode 2	Switching	1.01 DP_Switch (1 bit)	CWT
Switching telegrams are sent via the group address linked with this object.				
5 (14, 23, 32) 5 (14, 23, 32, 41, 50)	Channel 1 (2,3,4) Mode 1 Channel 1 (2,3,4,5,6) Mode 1	Dimming	3.007 DP_Control_Dimming (4 bit)	CT
The dimming telegrams are sent to the dimming actuator via the group address linked with this object.				
9 (18, 27, 36) 9 (18, 27, 36, 45, 54)	Channel 1 (2,3,4) Mode 2 Channel 1 (2,3,4,5,6) Mode 2	Dimming	3.007 DP_Control_Dimming (4 bit)	CT
The dimming telegrams are sent to the dimming actuator via the group address linked with this object.				

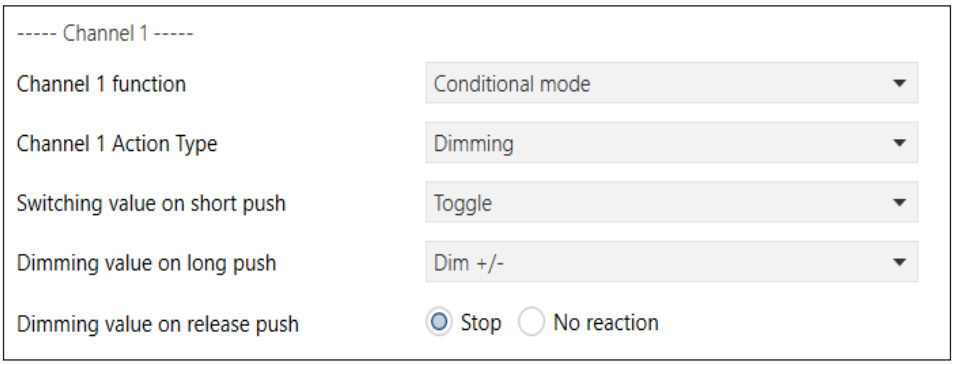
10. COMMUNICATION OBJECTS DESCRIPTION (continued)

■ **10.2 Channels configuration (1,2,3,4,5,6) (continued)**

10.2.1 Use separately (continued)

10.2.1.10 Conditional mode (continued)

Dimming (continued):



Parameters	Setting
Switching value on short push	No reaction On Off Toggle
Here an adjustment is made to define which switching value is written into the storage cell of the communication object and sent after short pressing the push button related to the channel. "No reaction": A short push does not change the object value and also does not send a telegram. "On": After a short press, the switching value "ON" (binary value, "1") is transferred into the communication object and sent. "Off": After a short press, the switching value "OFF" (binary value,"0") is transferred into the communication object and sent. "Toggle" : After a short press, the switching value stored in the communication object is inverted and the new value is sent	
Dimming value on long push	Dim +/- Dim + Dim – No reaction
Here an adjustment is made to define which dimming value is written into the storage cell of the communication object and sent after long pressing the push button related to the channel. "No reaction": A long push does not change the object value and also does not send a telegram. "Dim+/-": After a long press, the dimming value stored in the communication object is inverted and the new value is sent "Dim +" After a long press, the dimming value "Increase 100%" is transferred into the communication object and sent. "Dim -" : After a long press, the dimming value "Decrease 100%" is transferred into the communication object and sent.	
Dimming value on release push	No reaction Stop
Here an adjustment is made to define which dimming value is written into the storage cell of the communication object and sent after releasing a long press of the push button related to the Channel. "No reaction": A long push button action does not change the object value and also does not send a telegram. "Stop": When the push button is released after a long push, the dimming value "Stop" is transferred into the communication object and sent.	

1x1 unsigned byte :

No.	Object name	Function	Size	Flags
4 (13,22,31) 4 (13,22,31,40,49)	Channel 1 (2,3,4) Mode 1 Channel 1 (2,3,4,5,6) Mode 1	Unsigned Value	5.010 DP_Value_1_Ucount (1 Byte)	CT
The telegrams with the unsigned value are sent via the group address linked with this object				
8 (17,26,35) 8 (17,26,35,44,53)	Channel 1 (2,3,4) Mode 2 Channel 1 (2,3,4,5,6) Mode 2	Unsigned Value	5.010 DP_Value_1_Ucount (1 Byte)	CT
The telegrams with the unsigned value are sent via the group address linked with this object				

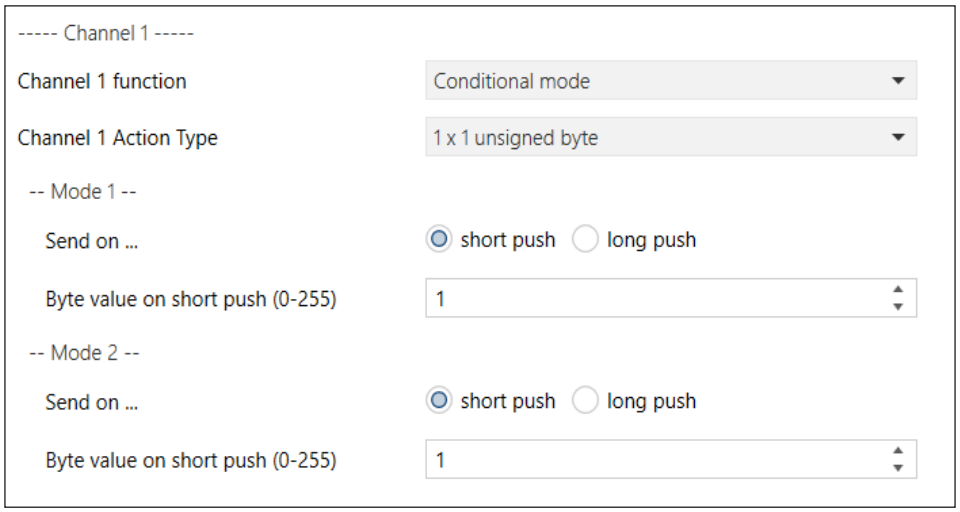
10. COMMUNICATION OBJECTS DESCRIPTION (continued)

■ **10.2 Channels configuration (1,2,3,4,5,6) (continued)**

10.2.1 Use separately (continued)

10.2.1.10 Conditional mode (continued)

1x1 unsigned byte (continued):



Mode 1

Parameters	Setting
Send on…	Short push Long push
Here an adjustment is made to define the length of push to send the byte value.	
Byte value on short push (0-255)	0..255, 1
Here an adjustment is made to define which unsigned-8 bits value is written into the storage cell of the communication object and sent after a rising edge in the signal status of the channel (input). The rising edge corresponds to a change in the signal status of the Channel from logical "0" to "1", when the mode 1 is active.	

Mode 2

Parameters	Setting
Send on…	Short push Long push
Here an adjustment is made to define the length of push to send the byte value.	
Byte value on short push (0-255)	0..255, 1
Here an adjustment is made to define which unsigned-8 bits value is written into the storage cell of the communication object and sent after a rising edge in the signal status of the channel (input). The rising edge corresponds to a change in the signal status of the Channel from logical "0" to "1", when the mode 2 is active.	

2x1 unsigned byte:

No.	Object name	Function	Size	Flags
4 (13,22,31) 4 (13,22,31,40,49)	Channel 1 (2,3,4) Mode 1 Channel 1 (2,3,4,5,6) Mode 1	Unsigned Value	5.010 DP_Value_1_Ucount (1 Byte)	CT
The telegrams with the unsigned value are sent via the group address linked with this object				
8(17,26,35) 8 (17,26,35,44,53)	Channel 1 (2,3,4) Mode 2 Channel 1 (2,3,4,5,6) Mode 2	Unsigned Value	5.010 DP_Value_1_Ucount (1 Byte)	CT
The telegrams with the unsigned value are sent via the group address linked with this object				

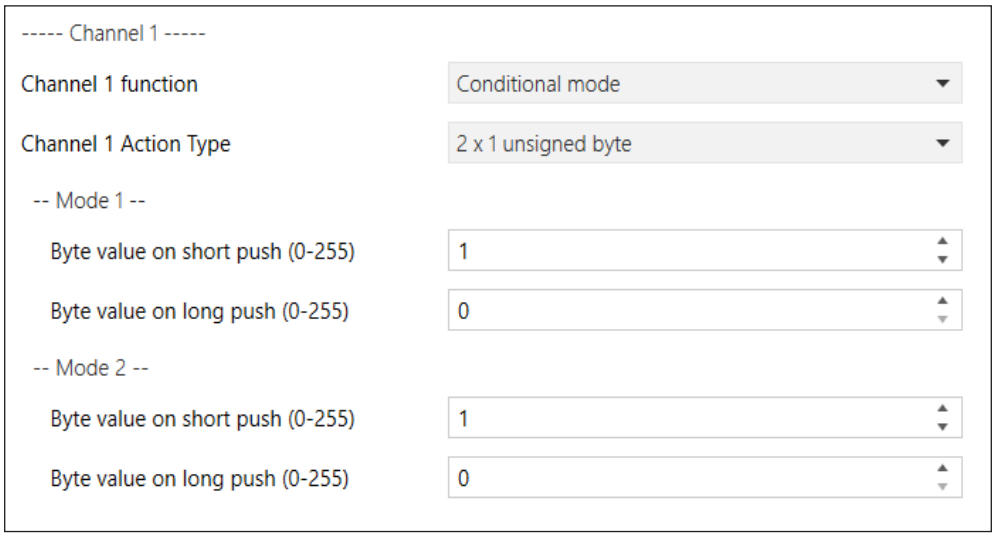
10. COMMUNICATION OBJECTS DESCRIPTION (continued)

■ **10.2 Channels configuration (1,2,3,4,5,6) (continued)**

10.2.1 Use separately (continued)

10.2.1.10 Conditional mode (continued)

2x1 unsigned byte (continued):



Mode 1

Parameters	Setting
Byte value on short push (0-255)	0..255, 1
Here an adjustment is made to define which unsigned 8 bits value is written into the storage cell of the communication object and sent after short pressing of the push button related to the channel, when the mode 1 is active.	
Byte value on long push (0-255)	0..255, 0
Here an adjustment is made to define which unsigned value is written into the storage cell of the communication object and sent after long pressing the push button related to the channel, when the mode 1 is active.	

Mode 2

Parameters	Setting
Byte value on short push (0-255)	0..255, 1
Here an adjustment is made to define which unsigned value is written into the storage cell of the communication object and sent after short pressing the push button related to the channel, when the mode 2 is active.	
Byte value on long push (0-255)	0..255, 0
Here an adjustment is made to define which unsigned value is written into the storage cell of the communication object and sent after long pressing the push button related to the channel, when the mode 2 is active.	

10.2.1.11. Add Enable object

No.	Object name	Function	Size	Flags
3 (12, 21, 30) 3 (12, 21, 30, 39, 48)	Channel 1 (2,3,4) Channel 1 (2,3,4,5,6)	Enable	1.02 DP_Enable (1 bit)	CW
Enable telegrams are received via the group address linked with this object. They are used to lock (disable) or unlock (enable) the corresponding channel. They are only visible if "Add Enable object" parameter value is set to "yes".				

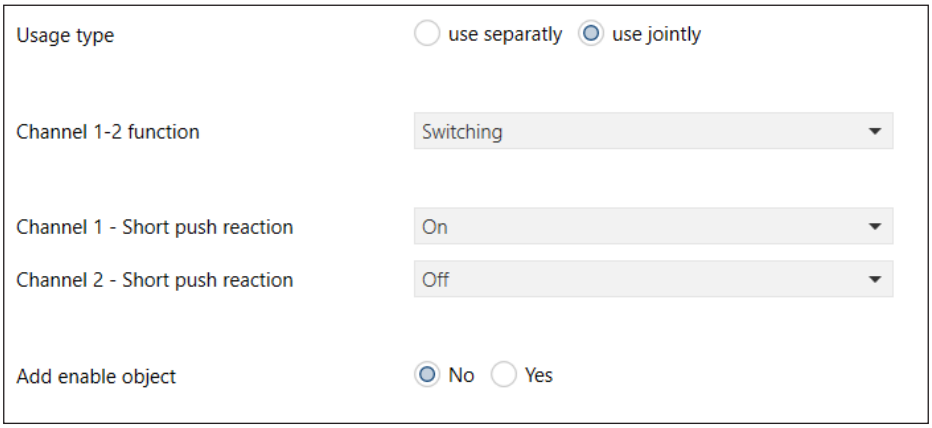
10. COMMUNICATION OBJECTS DESCRIPTION (continued)

■ 10.2 Channels configuration (1,2,3,4,5,6) (continued)

10.2.2 Use Jointly

10.2.2.1 Switching

No.	Object name	Function	Size	Flags
4 pushes 1 (19) 6 pushes 1 (19, 37)	Channel 1-2 (3-4) (5-6)	Switching	1.01 DP_Switch (1 bit)	CWT
Switching telegrams are sent via the group address linked with this object				
4 pushes 2 (20) 6 pushes 2 (20, 38)	Channel 1-2 (3-4) (5-6)	Switching Status	1.01 DP_Switch (1 bit)	CW
Switching status are received via the group address linked with this object.				
4 pushes 3 (21) 6 pushes 3 (21, 39)	Channel 1-2 (3-4) (5-6)	Enable	1.02 DP_Enable (1 bit)	CW
Enable telegrams are received via the group address linked with this object. They are used to lock (disable) or unlock(enable) the corresponding channels. They are only visible if "Add enable object" parameter value is set to yes.				



Parameters	Setting
Channel Xn - Short push reaction	No reaction On Off Toggle
Here an adjustment is made to define which switching value is written into the storage cell of the communication object and sent after short pressing the push button related to the channel. "No reaction": A short push does not change the object value and also does not lead to the sending of a telegram. "On": After a short push, the switching value "ON" (binary value, "1") is transferred into the communication object and sent. "Off": After a short push, the switching value "OFF" (binary value,"0") is transferred into the communication object and sent. "Toggle" : After a short push, the switching value stored in the communication object is inverted and the new value is sent	
Channel Xn+1 - Short push reaction	No reaction On Off Toggle
Here an adjustment is made to define which switching value is written into the storage cell of the communication object and sent after short pressing the push button related to the channel. "No reaction": A short push does not change the object value and also does not send a telegram. "On": After a short push, the switching value "ON" (binary value, "1") is transferred into the communication object and sent. "Off": After a short push, the switching value "OFF" (binary value,"0") is transferred into the communication object and sent. "Toggle" : After a short push, the switching value stored in the communication object is inverted and the new value is sent	
Add Enable object	Yes / No
The parameter determines if the Channels (1-2 or 3-4) can be blocked via an additional Enable object or not. If the Channels are blocked (Enable value = 1) the status changes of these channels are not transmitted.	

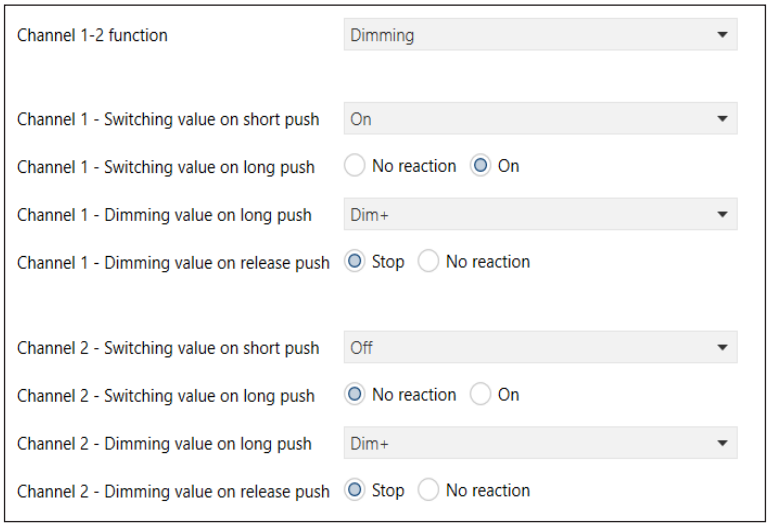
10. COMMUNICATION OBJECTS DESCRIPTION (continued)

■ **10.2 Channels configuration (1,2,3,4,5,6) (continued)**

10.2.2 Use Jointly (continued)

10.2.2.2 Dimming

No.	Object name	Function	Size	Flags
4 pushes 1 (19) 6 pushes 1 (19, 37)	Channel 1-2 (3-4) (5-6)	Switching	1.01 DP_Switch (1 bit)	CWT
Switching telegrams are sent via the group address linked with this object				
4 pushes 5 (23) 6 pushes 5 (23, 41)	Channel 1-2 (3-4) (5-6)	Dimming	3.007 DP_Control_Dimming (4 bit)	CT
Dimming telegrams are sent via the group address linked with this object				
4 pushes 6 (24) 6 pushes 6 (24, 42)	Channel 1-2 (3-4) (5-6)	Value Status	5.001 DP_Scaling (1 byte)	CW
The dimming status telegrams are received from the dimming actuator via the group address linked with this object.				
4 pushes 3 (21) 6 pushes 3 (21, 39)	Channel 1-2 (3-4) (5-6)	Enable	1.02 DP_Enable (1 bit)	CW
Enable telegrams are received via the group address linked with this object. They are used to lock (disable) or unlock(enable) the corresponding channels. They are only visible if "Add Enable object" parameter value is set to "yes".				



Parameters	Setting
Channel X - Switching value on short push	No reaction On Off Toggle
Here an adjustment is made to define which switching value is written into the storage cell of the communication object and sent after short pressing the push button related to the channel. "No reaction": A short push does not change the object value and also does not send a telegram. "On": After a short push, the switching value "ON" (binary value, "1") is transferred into the communication object and sent. "Off": After a short push, the switching value "OFF" (binary value,"0") is transferred into the communication object and sent. "Toggle" : After a short push, the switching value stored in the communication object is inverted and the new value is sent.	
Channel X - Switching value on long push	No reaction On
Here an adjustment is made to define which switching value is written into the storage cell of the communication object and sent after long pressing the push button related to the channel. "No reaction": A long push does not change the object value and also does not send a telegram. "On": After long push, the switching value "ON" (binary value, "1") is transferred into the communication object and sent.	
Channel X - Dimming value on long push	Dim + Dim – No reaction
Here an adjustment is made to define which dimming value is written into the storage cell of the communication object and sent after long pressing of the push button related to the channel. "No reaction": A long push does not change the object value and also does not send a telegram. "Dim +" After a short push, the dimming value "Increase 100%" is transferred into the communication object and sent. "Dim -" : After a short push, the dimming value "Decrease 100%" is transferred into the communication object and sent.	

10. COMMUNICATION OBJECTS DESCRIPTION (continued)

■ **10.2 Channels configuration (1,2,3,4,5,6) (continued)**

10.2.2 Use Jointly (continued)

10.2.2.2 Dimming (continued)

Parameters	Setting
Channel X - Dimming value on release push	No reaction Stop
Here an adjustment is made to define which dimming value is written into the storage cell of the communication object and sent when long pressing the push button related to the Channel. "No reaction": A long push button action does not change the object value and also does not send a telegram. "Stop": When the push button is released after a long push, the dimming value "Stop" is transferred into the communication object and sent.	
Channel X +1 - Switching value on short push	No reaction On Off Toggle
Here an adjustment is made to define which switching value is written into the storage cell of the communication object and sent after short pressing the push button related to the channel. "No reaction": A short push does not change the object value and also does send a telegram. "On": After a short push, the switching value "ON" (binary value, "1") is transferred into the communication object and sent. "Off": After a short push, the switching value "OFF" (binary value,"0") is transferred into the communication object and sent. "Toggle" : After a short push, the switching value stored in the communication object is inverted and the new value is sent	
Channel X +1 - Switching value on long push	No reaction On
Here an adjustment is made to define which switching value is written into the storage cell of the communication object and sent after long pressing the push button related to the channel. "No reaction": A long push does not change the object value and also does not lead to the sending of a telegram. "On": An long push button action, the switching value "ON" (binary value, "1") is transferred into the communication object and sent.	
Channel X +1 - Dimming value on long push	Dim +/- Dim + Dim – No reaction
Here an adjustment is made to define which dimming value is written into the storage cell of the communication object and sent after long pressing of the push button related to the channel. "No reaction": A long push does not change the object value and also does not send a telegram. "Dim+/-": After a long push, the dimming value stored in the communication object is inverted and the new value is sent "Dim +" After a short push, the dimming value "Increase 100%" is transferred into the communication object and sent. "Dim -" : After a short push, the dimming value "Decrease 100%" is transferred into the communication object and sent.	
Channel X +1 - Dimming value on release push	No reaction Stop
Here an adjustment is made to define which dimming value is written into the storage cell of the communication object and sent when long pressing the push button related to the Channel. "No reaction": A long push button action does not change the object value and also does not send a telegram. "Stop": When the push button is released after a long push, the dimming value "Stop" is transferred into the communication object and sent.	
Add Enable object	Yes / No
The parameter determines if the channels can be blocked via an additional Enable object or not. If the channels are blocked (Enable value = 1) the status changes of these channels are not transmitted.	

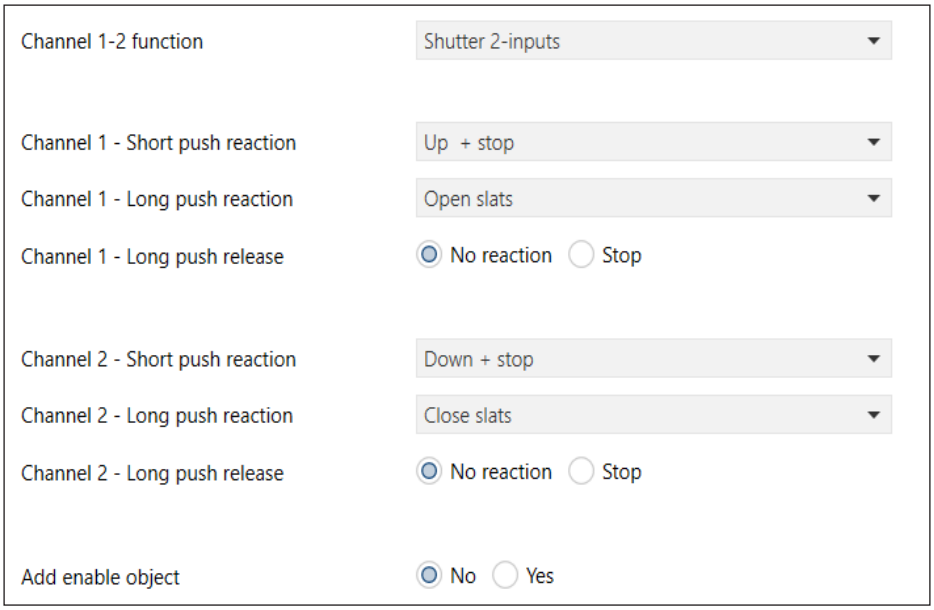
10. COMMUNICATION OBJECTS DESCRIPTION (continued)

■ **10.2 Channels configuration (1,2,3,4,5,6) (continued)**

10.2.2 Use Jointly (continued)

10.2.2.2 Shutter 2-input

No.	Object name	Function	Size	Flags
4 pushes 1 (19) 6 pushes 1 (19, 37)	Channel 1-2 (3-4) (5-6)	Shutter Up/Down	1.008 DP_UpDown (1 bit)	CWT
The movement commands Up/Down are sent via the address linked with this object in order to raise/lower the solar protection.				
4 pushes 7 (25) 7 (25, 43)	Channel 1-2 (3-4) (5-6)	Shutter Stop - slats	1.009 DP_OpenClose (1 bit)	CWT
The command "STOP" or "Slats OPEN/CLOSE" are sent via the group address linked with this object.				
4 pushes 6 (24) 6 pushes 6 (24, 42)	Channel 1-2 (3-4) (5-6)	Shutter Status	5.001 DP_Scaling (1 Byte)	CW
The shutter status telegrams are received from the shutter actuator via the group address linked with this object.				
4 pushes 3 (21) 6 pushes 3 (21, 39)	Channel 1-2 (3-4) (5-6)	Enable	1.03 DP_Enable (1 bit)	CW
Enable telegrams are received via the group address linked with this object. They are used to lock (disable) or unlock(enable) the corresponding channels. They are only visible if "Add Enable object " parameter value is set to yes.				



10. COMMUNICATION OBJECTS DESCRIPTION (continued)

■ **10.2 Channels configuration (1,2,3,4,5,6) (continued)**

10.2.2 Use Jointly (continued)

10.2.2.2 Shutter 2-input (continued)

Parameters	Setting
Channel X - Short push reaction	No reaction Up + stop Down + stop Stop Open slats Close slats Up Down
Here an adjustment is made to define which movement command is written into the storage cell of the communication object and sent after short pressing the push button related to the channel. "No reaction": actions do not change the object value and also does not send a telegram. Up, Stop, Down, Stop,etc. Up + stop : each short push transfers the following sequence command values into the communication object: Up, Stop, Up, Stop,,etc. Down + stop : each short push transfers the following sequence command values into the communication object: Up, Stop, Up, Stop,,etc. Stop : a short push transfers into the communication object the stop command value ("1" or "0") Open slats: a short push transfers into the communication object the stop (open slats) command value ("0") Close slats: a short push transfers into the communication object the stop (close slats) command value ("1") Up: a short push transfers into the communication object the Up command (value "0") Down: a short push transfers into the communication object the Down command (value "1")	
Channel X - Long push reaction	No reaction Up Down Stop Open slats Close slats
Here an adjustment is made to define which movement command is written into the storage cell of the communication object and sent after long pressing the push button related to the channel. "No reaction": actions do not change the object value and also do not send a telegram. Up: a long push action send is transferred into the communication object the Up command (value "0") Down: a long push action send the Down command (value "1") Stop : a long push action send the stop command (value "1" or "0") Open slats: a long push action send is transferred into the communication object the stop (open slats) command (value "0") Close slats: a long push action send is transferred into the communication object the stop (close slats) command (value "1")	
Channel X - Long push release	No reaction Stop
Here an adjustment is made to define which value is written into the storage cell of the communication object and sent a long press release of the push button related to the channel. "No reaction": actions do not change the object value and also do not send a telegram. Stop : the stop command (value "1" or "0") is transferred into the communication object and sent	

10. COMMUNICATION OBJECTS DESCRIPTION (continued)

■ **10.2 Channels configuration (1,2,3,4,5,6) (continued)**

10.2.2 Use Jointly (continued)

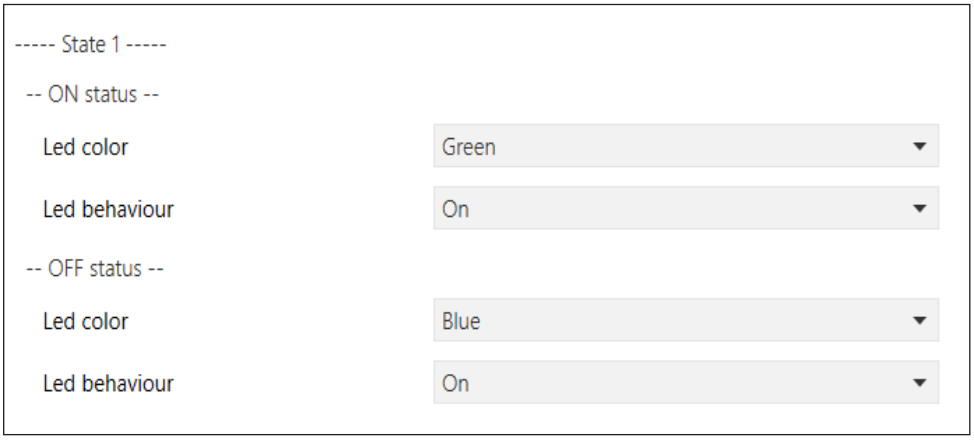
10.2.2.2 Shutter 2-input (continued)

Parameters	Setting
Channel X +1 - Short push reaction	No reaction Up + stop Down + stop Stop Open slats Close slats Up Down
Here an adjustment is made to define which movement command is written into the storage cell of the communication object and sent after short pressing the push button related to the channel. "No reaction": actions do not change the object value and also do not send a telegram. Up + stop : each short push transfers the following sequence command values into the communication object: Up, Stop, Up, Stop,,etc. Down + stop : each short push transfers the following sequence command values into the communication object: Up, Stop, Up, Stop,,etc. Stop : a short push transfers into the communication object the stop command value ("1" or "0") Open slats: a short push transfers into the communication object the stop (open slats) command value ("0") Close slats: a short push transfers into the communication object the stop (close slats) command value ("1") Up: a short push transfers into the communication object the Up command (value "0") Down: a short push transfers into the communication object the Down command (value "1")	
Channel X +1 - Long push reaction	No reaction Up Down Stop Open slats Close slats
Here an adjustment is made to define which movement command is written into the storage cell of the communication object and sent after long pressing the push button related to the Channel. "No reaction": actions do not change the object value and also do not send a telegram. Up: a long push action send is transferred into the communication object the Up command (value "0") Down: a long push action send the Down command (value "1") Stop : a long push action send the stop command (value "1" or "0") Open slats: a long push action send is transferred into the communication object the stop (open slats) command (value "0") Close slats: a long push action send is transferred into the communication object the stop (close slats) command (value "1")	
Channel X - Long push release	No reaction / Stop
Here an adjustment is made to define which value is written into the storage cell of the communication object and sent a long press release of the push button related to the channel. "No reaction": actions do not change the object value and also do not send a telegram. Stop : the stop command (value "1" or "0") is transferred into the communication object and sent	
Add Enable object	Yes / No
The parameter determines if the Channels (1-2 or 3-4) can be blocked via an additional Enable object or not. If the Channels are (1-2 or 3-4) is blocked (Enable value = 1) the status changes of these channels are not transmitted.	

11. COMMUNICATION OBJECTS DESCRIPTION (continued)

■ 10.3 Leds configuration

10.3.1 Same for all / Configuration independently



State 1

Led color	Green Blue White Orange Gold Yellow Turquoise Cyan Light blue Violet Magenta Purple
The parameter determines the color of led X for State 1	
Led behaviour	Off On Slow blink Fast blink Soft blink Flash 1 Flash 2 Flash 3
The parameter determines the behaviour of led X for State 1	

State 2

Led color	Green Blue White Orange Gold Yellow Turquoise Cyan Light blue Violet Magenta Purple
The parameter determines the color of led X for State 2	
Led behaviour	Off On Slow blink Fast blink Soft blink Flash 1 Flash 2 Flash 3
The parameter determines the behaviour of led X for State 2	

10. COMMUNICATION OBJECTS DESCRIPTION (continued)

■ 10.3 Leds configuration (continued)

State 3

Led color	Green Blue White Orange Gold Yellow Turquoise Cyan Light blue Violet Magenta Purple
The parameter determines the color of led X for State 3	
Led behaviour	Off On Slow blink Fast blink Soft blink Flash 1 Flash 2 Flash 3
The parameter determines the behaviour of led X for State 3	

State 4

Led color	Green Blue White Orange Gold Yellow Turquoise Cyan Light blue Violet Magenta Purple
The parameter determines the color of led X for State 4	
Led behaviour	Off On Slow blink Fast blink Soft blink Flash 1 Flash 2 Flash 3
The parameter determines the behaviour of led X for State 4	

Same for all

No.	Object name	Function	Size	Flags
55	Leds-On Off Status	Status	1 bit	CW
The telegram to choose On or Off status is sent via the group adress linked with this object.				
74	Leds-State 1	Active State1	1 bit	CW
The telegram to active led state is sent via the group adress linked with this object.				
75	Leds-State 2	Active State2	1 bit	CW
The telegram to active led state is sent via the group adress linked with this object.				
76	Leds State 3	Active State3	1 bit	CW
The telegram to active led state is sent via the group adress linked with this object.				
77	Leds State 4	Active State4	1 bit	CW
The telegram to active led state is sent via the group adress linked with this object.				

10. COMMUNICATION OBJECTS DESCRIPTION (continued)

■ 10.3 Leds configuration (continued)

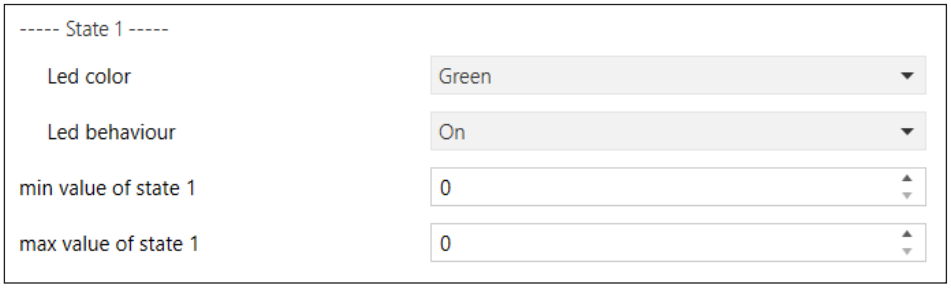
10.3.1 Same for all / Configuration independently (continued)

Configuration Independently

No.	Object name	Function	Size	Flags
55 (56,57)	Led 1 - On Off Status	Status	1 bit	CW
The telegram to choose On or Off status is sent via the group adress linked with this object.				
74 (78,82)	Led 1 (2,3) State 1	Active State1	1 bit	CW
The telegram to active led state is sent via the group adress linked with this object. The activation of state 1 disable all others states but you can activate an other state after without disable state 1				
75 (79,83)	Led 1 (2,3) State 2	Active State2	1 bit	CW
The telegram to active led state is sent via the group adress linked with this object. If two states or more are activated, it's the state with the greater number who has priority, for example, if the state 2 and state 3 are activated, leds are in state 3				
76 (80,84)	Led 1 (2,3) State 3	Active State3	1 bit	CW
The telegram to active led state is sent via the group adress linked with this object. If two states or more are activated, it's the state with the greater number who has priority, for example, if the state 2 and state 3 are activated, leds are in state 3				
77 (81,85)	Led 1 (2,3) State 4	Active State4	1 bit	CW
The telegram to active led state is sent via the group adress linked with this object. If two states or more are activated, it's the state with the greater number who has priority, for example, if the state 2 and state 3 are activated, leds are in state 3				

10.3.2 On value

State 1



Led color	Green Blue White Orange Gold Yellow Turquoise Cyan Light blue Violet Magenta Purple
The parameter determines the color of led X for State 1	
Led behaviour	Off On Slow blink Fast blink Soft blink Flash 1 Flash 2 Flash 3
The parameter determines the behaviour of led X for State 1	
Min value of state 1	0.....255
Here a value to define the begining of interval values which active the state 1	
Max value of state 1	0.....255
Here a value to define the end of interval values which active the state 1	

10. COMMUNICATION OBJECTS DESCRIPTION (continued)

■ 10.3 Leds configuration (continued)

10.3.2 On value (continued)

State 2

Led color	Green Blue White Orange Gold Yellow Turquoise Cyan Light blue Violet Magenta Purple
The parameter determines the color of led X for State 2	
Led behaviour	Off On Slow blink Fast blink Soft blink Flash 1 Flash 2 Flash 3
The parameter determines the behaviour of led X for State 2	
Min value of state 2	0.....255
Here a value to define the begining of interval values which active the state 2	
Max value of state 2	0.....255
Here a value to define the end of interval values which active the state 2	

State 3

Led color	Green Blue White Orange Gold Yellow Turquoise Cyan Light blue Violet Magenta Purple
The parameter determines the color of led X for State 3	
Led behaviour	Off On Slow blink Fast blink Soft blink Flash 1 Flash 2 Flash 3
The parameter determines the behaviour of led X for State 3	
Min value of state 3	0.....255
Here a value to define the begining of interval values which active the state 3	
Max value of state 3	0.....255
Here a value to define the end of interval values which active the state 3	

10. COMMUNICATION OBJECTS DESCRIPTION (continued)

■ 10.3 Leds configuration (continued)

10.3.2 On value (continued)

State 4

Led color	Green Blue White Orange Gold Yellow Turquoise Cyan Light blue Violet Magenta Purple
The parameter determines the color of led X for State 4	
Led behaviour	Off On Slow blink Fast blink Soft blink Flash 1 Flash 2 Flash 3
The parameter determines the behaviour of led X for State 4	
Min value of state 4	0.....255
Here a value to define the begining of interval values which active the state 4	
Max value of state 4	0.....255
Here a value to define the end of interval values which active the state 4	

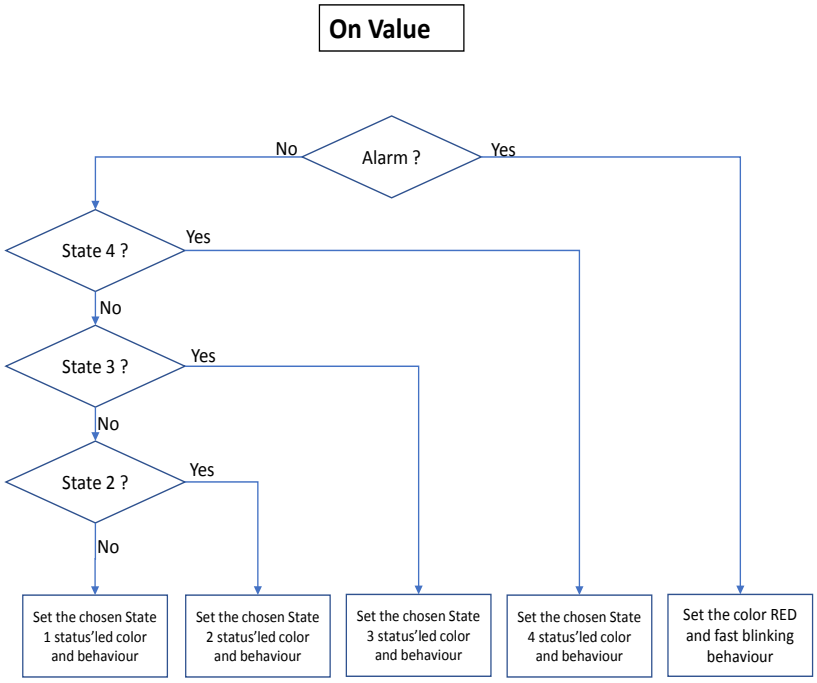
No.	Object name	Function	Size	Flags
55 (56,57)	Led 1 (2,3) Value	Value	1 byte	CW

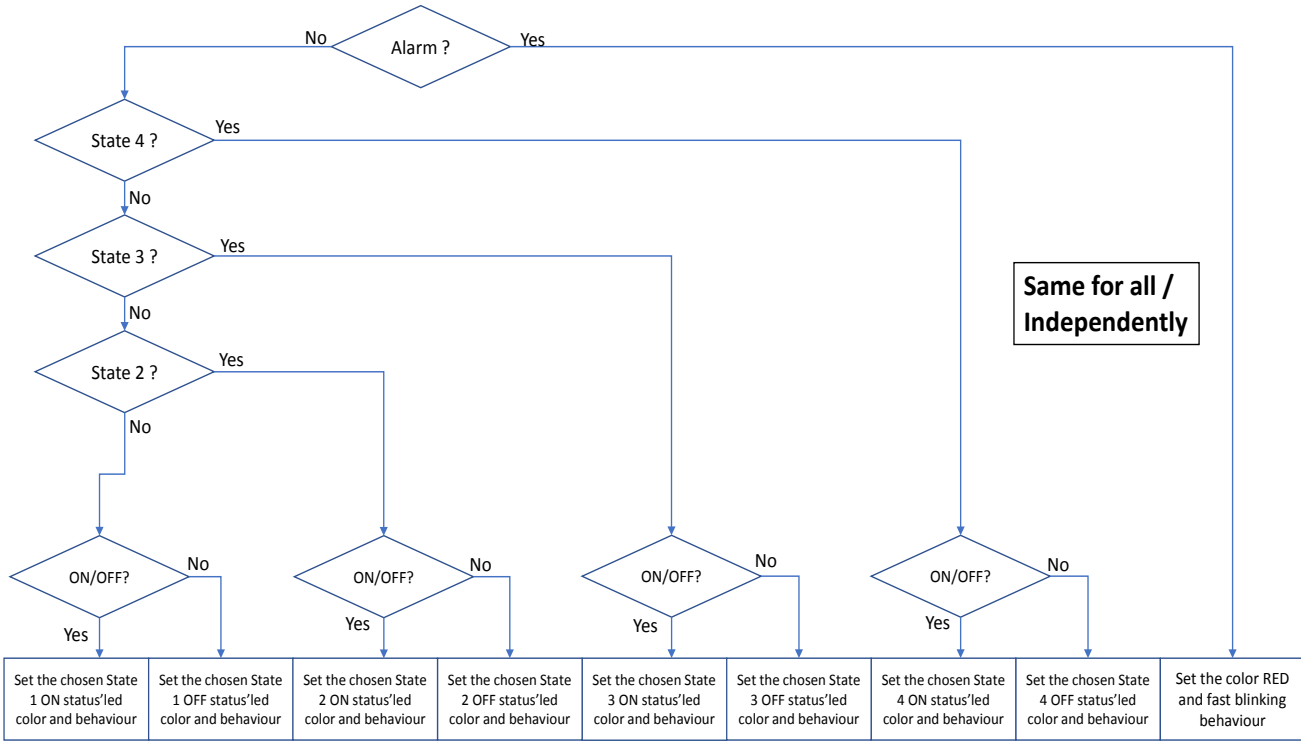
Led value which define the state is sent via the group adress linked with this object.
If the value does not correspond to any interval, state 1 is activated.

10. COMMUNICATION OBJECTS DESCRIPTION (continued)

■ 10.4 Leds color and behaviour updating flowchart

The led color and behaviour changings are performed when :
- Is received an object of : Status, Alarm, Function, Enable.
- Is pushed a button : in shutter mode, 8-bits scene control, priority, counting, 1x1unsigned byte, 2x1 unsigned byte are active.





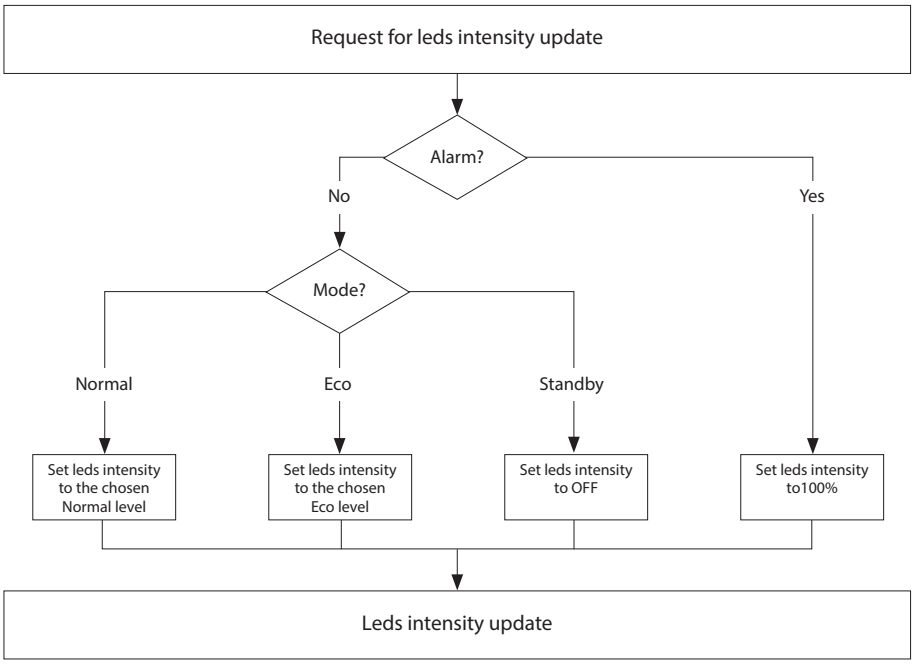
10. COMMUNICATION OBJECTS DESCRIPTION (continued)

■ 10.5 Leds intensity update flowchart

The led color and behaviour changings are performed when :
- Is received an object of : Status, Alarm, Function, Enable.
- Is pushed a button : in shutter mode, 8-bits scene control, priority, counting, 1x1unsigned byte, 2x1 unsigned byte are active.

The leds intensity changings are perfomed when :
- Is received an object of : Standby, Eco mode, Normal mode, Eco/Normal, Alarm
- Is pressed a push-button.

After Standby or Alarm mode the level is set to the previous level (Normal/Eco).
Standby mode is disables if any button is pressed.



■ 10.6 No configuration status and reset procedure

Product not yet configured

The product has no physical address and no group addresses associated.
The leds change colors randomly every 200ms.

Reset procedure