

	<h2>application software</h2>	
<ul style="list-style-type: none"> ▲ Manufacturers ▲ Hager Electro ▲ Inputs/Outputs <li style="background-color: #e0f0e0; padding: 2px;">Input/output modules 	<p>Input module - ON/OFF outputs and blind shutter</p> <p><i>Electrical/Mechanical characteristics: See product user manual</i></p>	

	Product reference	Product designation	Application software ref	TP device Radio device
	TXB692F	2 inputs + 1 shutter output/2 ON/OFF outputs to be embedded	STXB692F 1.x Version	

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1. General

1.1 About this guide

The purpose of this manual is to describe the operation and configuration of KNX devices using ETS software or Easy tool software.

It consists of 4 parts:

- General information.
- The parameters and KNX objects available.
- The Easy tool configurations are available.
- Technical characteristics.

1.2 About the program ETS

1.2.1 ETS compatibility

The application programs are compatible with ETS4 and ETS5. They can be downloaded from our website under the order number.

ETS Version	File extension of compatible files
ETS4 (V4.1.8 or higher)	*.knxprod
ETS5	*.knxprod

1.2.2 Application descriptions

Application	Product reference
STXB692F	TXB692F

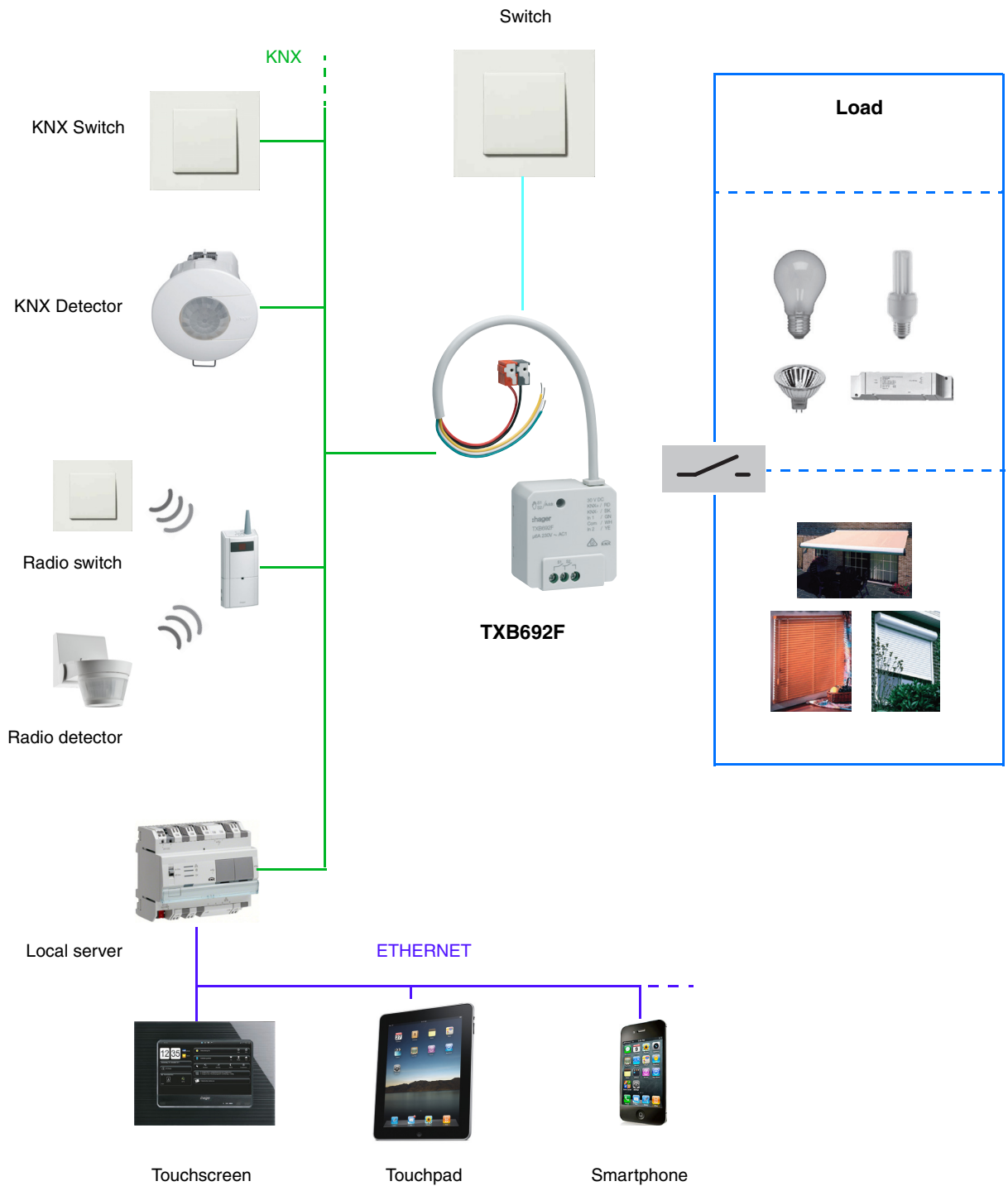
1.3 Easy tool software appearance

This product can also be configured using the TXA100 configuration tool. It is composed of a TJA665 configuration server. It is essential to update the configuration server software version. (Please refer to the TXA100 user manual).

2. General Description

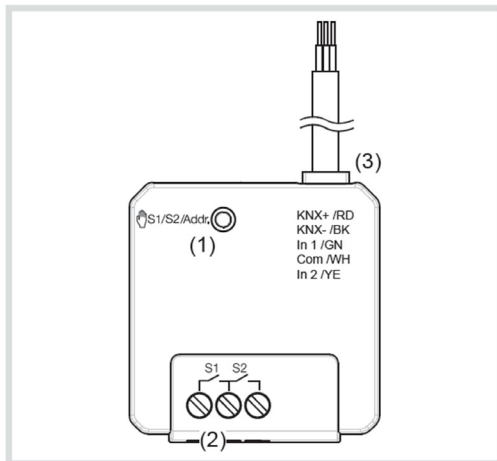
2.1 Installation of the device

2.1.1 Overview presentation



2.1.2 Description of the device

- TXB692F



- (1) Illuminated button for manual operation/
programming button
- (2) Connection of load(s)
- (3) KNX bus connection cable/
connection inputs

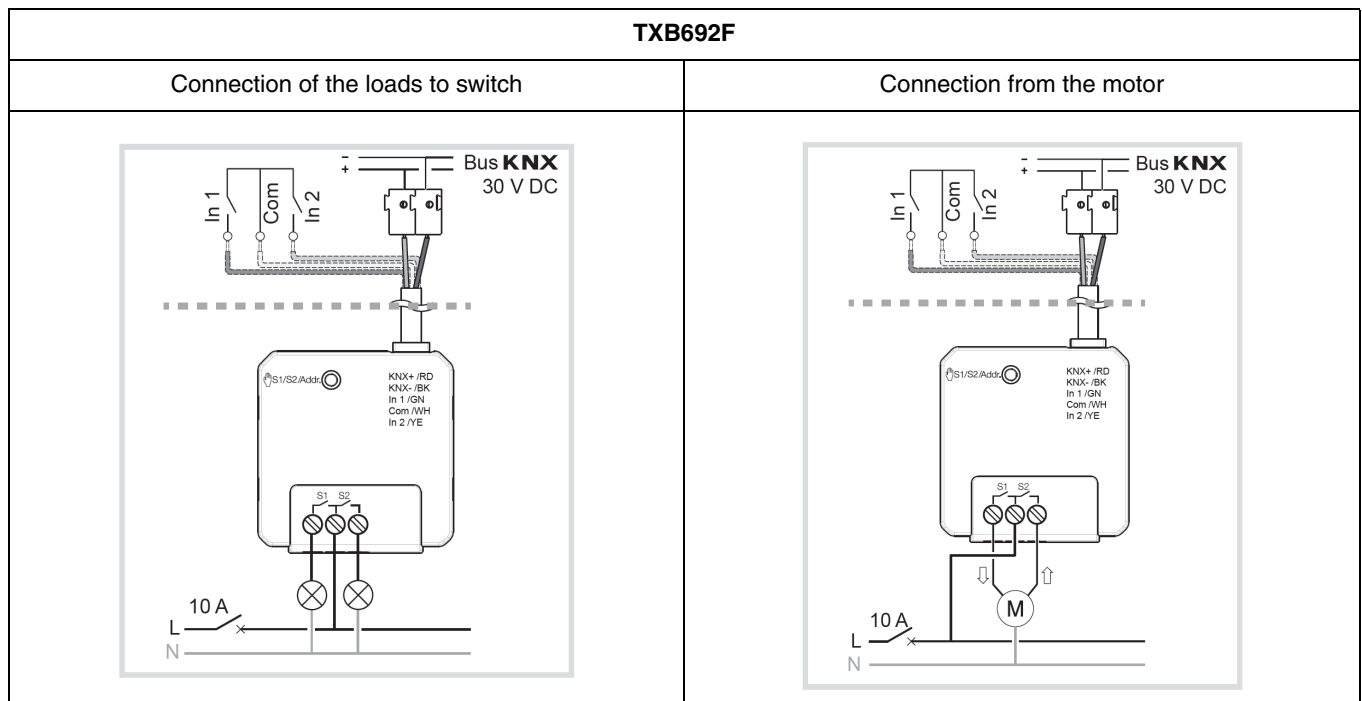
2.1.3 Physical addressing

In order to perform the physical addressing or to check whether or not the bus is connected, press the lighted push button (see chapter 2.1.2 for the button location).

Light on = bus connected and ready for physical addressing.

Programming mode is activated, until the physical address is transferred from ETS. Pressing the button again, exits programming mode. Physical addressing can be carried out in automatic or manual mode.

2.1.4 Connection



2.2 Function modules of the application

2.2.1 Output

The switch actuators of the devices can be used in 2 different modes:

ON/OFF

- Each switching contact is used separately to switch a load.

Shutter/blind

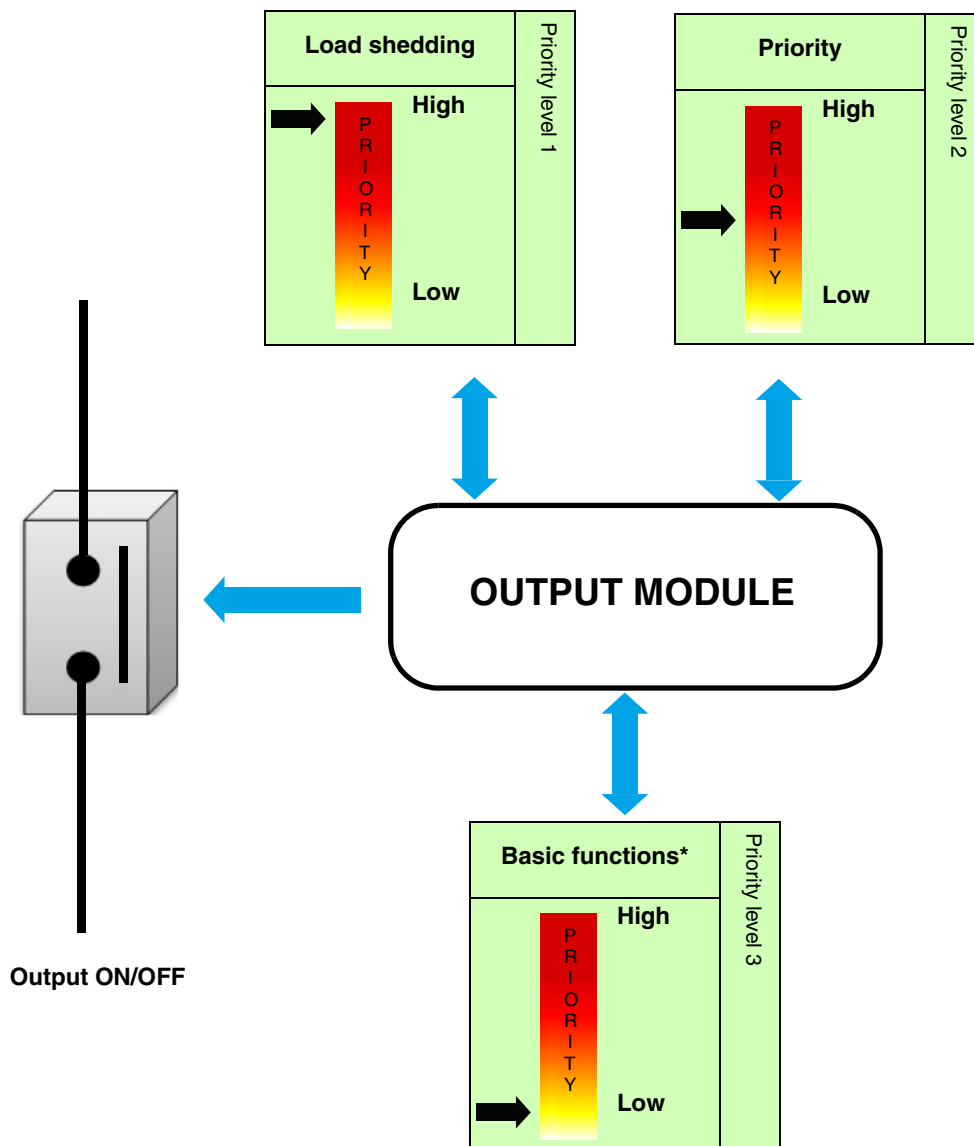
- Each pair of outputs constitutes a shutter and blind channel.

A mix of the two operating modes is possible.



WARNING: The devices are delivered in ON/OFF operating mode. When connecting shutters or blinds, ensure that both contacts are not turned on at the same time !

2.2.1.1 ON/OFF



* ON/OFF - Timer - Scene: The last command received will have priority.

The applications allow individual configuration of the device outputs.

The most important functions are:

■ **ON/OFF**

An output can be switched on or off using the ON/OFF function. The command can come from switches, buttons or other control inputs.

■ **Timer**

The Timer function is used to switch an output on for a programmable period. A programmable Cut-OFF pre-warning announces the end of the delay time by a 1-second inversion of the output status. The timer duration can be modified via the bus KNX.

■ **Priority**

The Priority function is used to force the output into a defined state. The Priority function is controlled with a 2-bit command. Priority: Load shedding > **Priority** > Basic function. Application: Keeping lighting on for security reasons.

■ **Automatic control**

The Automatic control function is used to command an output in parallel to the ON/OFF function. The two functions have the same level of priority. The last command received will act on the status of the output. An additional command object is used to activate or deactivate the Automatic control.

■ **Load shedding**

The Load shedding function is used to force an output to OFF. Load shedding is activated by receipt of a 1-byte command. Priority: **Load shedding** > Priority > Basic function. This command has the highest priority. No other command is taken into account if the mode is active. The status of the output is memorised but not applied. At the end of load shedding, the output is switched to the theoretical status without Load shedding (memorisation).

■ **Scene**

The Scene function is used to switch groups of outputs into a configurable predefined state. Pressing a push button activates a scene. A scene is activated by receipt of a 1-byte command. Each output can be included in 64 different scenes.

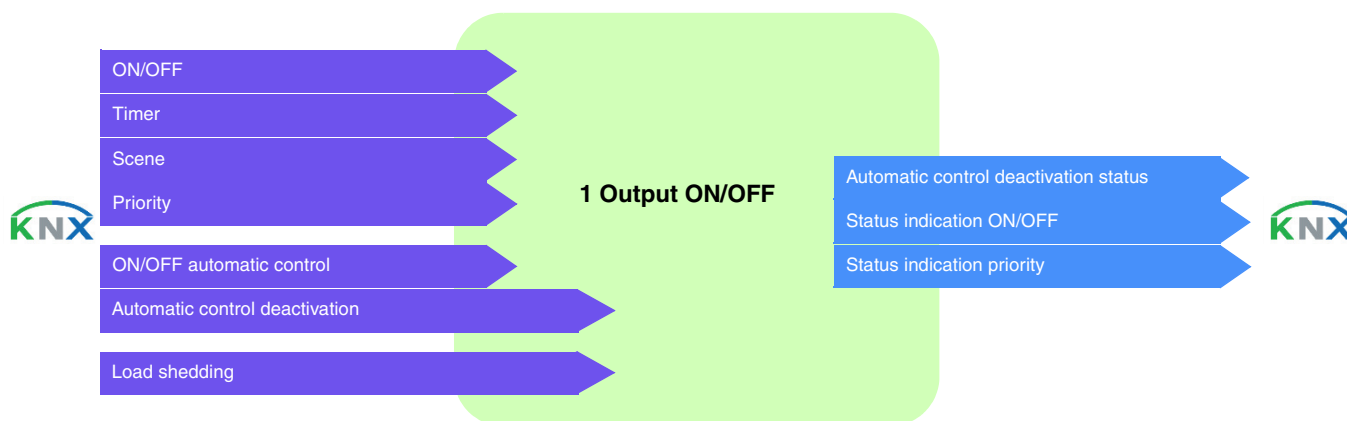
■ **Manual mode**

Manual mode allows the device to be disconnected from the bus. In this mode, each output can be priority controlled locally.

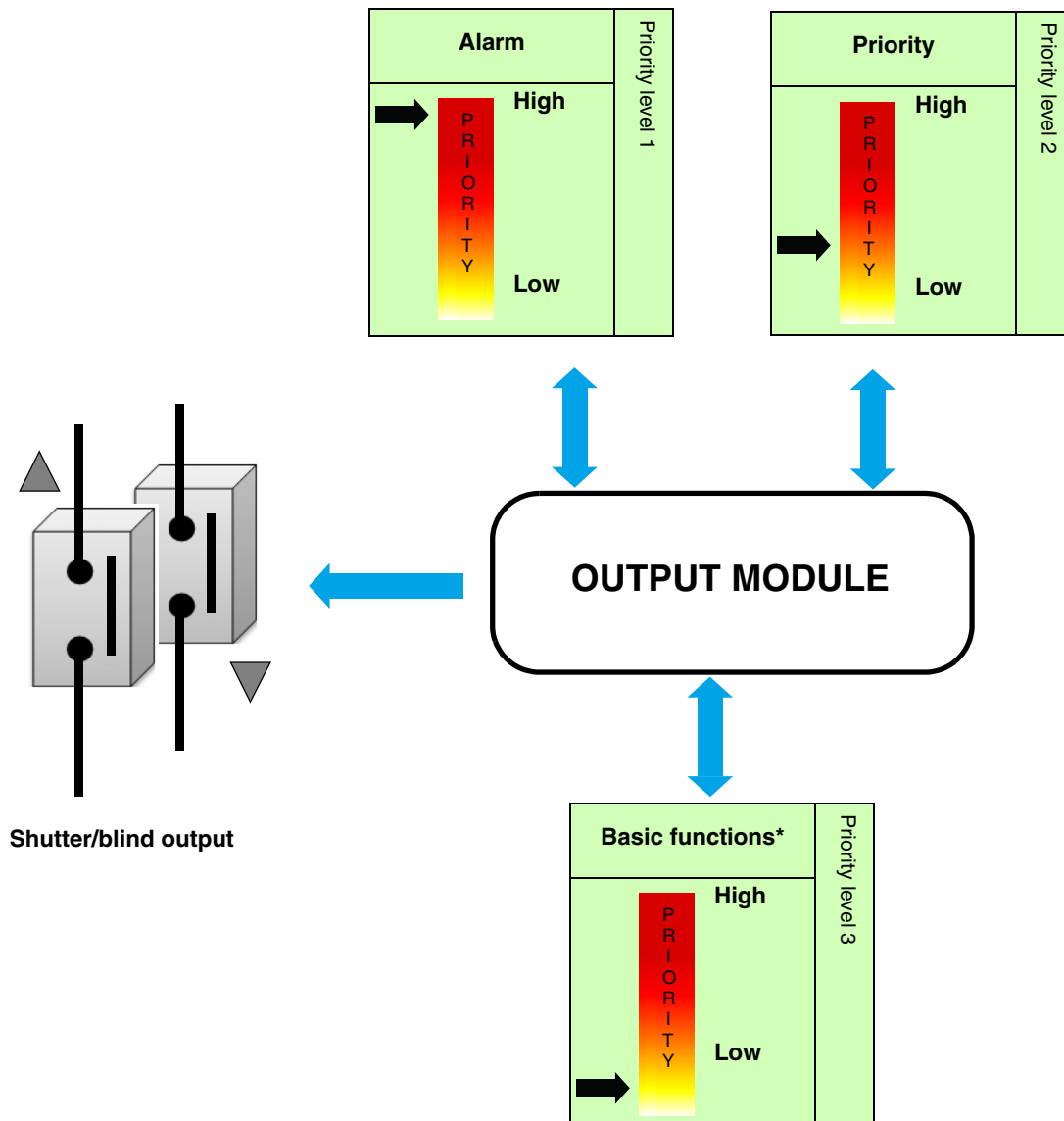
■ **Status indication**

The Status indication sends the switching status of the individual output contact on the KNX bus.

Communication objects



2.2.1.2 Shutter/blind



* Up/down - Step/stop control - Position in % - Slat angle (0-100%) - Scene: The last command received will have priority.

The applications allow individual configuration of the device outputs.

The most important functions are:

■ Up/down

The UP/DOWN function is used to run up or down shutters, blinds, awnings, etc.

This function can also be used to open and close electric blinds.

The command can be given by touch sensors (long press), switches or automatically.

■ Slat position/Stop

The Slat position/Stop function is used to adjust the slats of a blind or to stop its ongoing movement. This function can be used to alter the shade and the incidence of light from outside.

The control command may be issued by a push button, for example: A short press on UP/DOWN buttons.

■ Stop

The Stop function is used to stop the movement of a shutter or blind. For a blind, this function does not alter the tilt of the slats.

■ Scene

The Scene function is used to switch groups of outputs into a configurable predefined state. Pressing a push button activates a scene. A scene is activated by receipt of a 1-byte command. Each output can be included in 64 different scenes.

■ Priority

The Priority function is used to force the output into a defined state.

Priority: Alarm > **Priority** > Basic function.

Application: Maintaining a hanging position for security reasons.

■ Alarm

With the Alarm function a shutter or blind can be positioned in a configurable predefined state.

Priority: **Alarm** > Priority > Basic function.

Up to 3 alarm functions are possible (Alarm 1 - Alarm 2 - Alarm 3).

The alarm prevents any actuation until an alarm cancellation command has been received.

■ Automatic control

The Automatic control function is used to control an output in parallel to the Up/Down or Slat tilt/stop function.

The functions have the same level of priority. The last command received will act on the status of the output.

An additional command object is used to activate or deactivate the Automatic control.

■ Manual mode

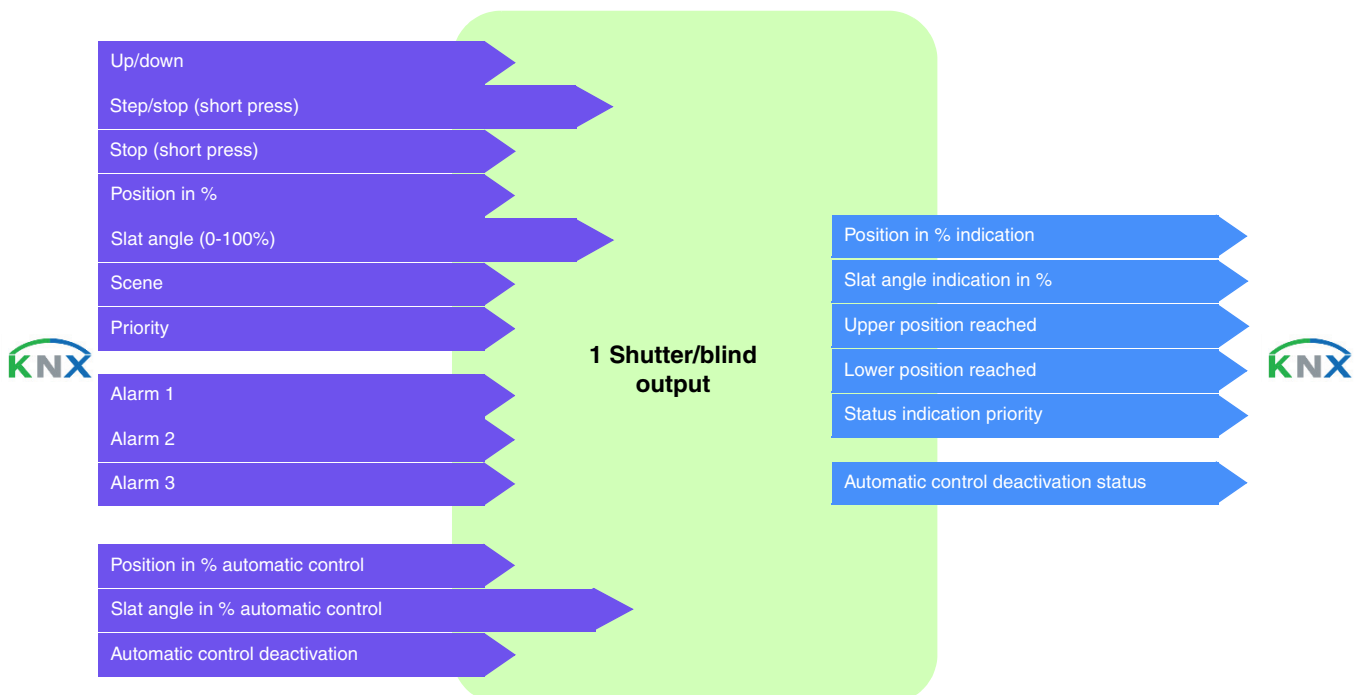
Manual mode allows the device to be disconnected from the bus. In this mode, each output can be priority controlled locally.

■ Status indication

Using the Status indication function, the following can be sent via the bus:

- Status indication position in %: Indicates the position of the shutter or blind.
- Indication of slat position in %: Indicates the slat pitch of the blind.
- Upper or lower position reached: Indicates arrival at the upper or lower position.

Communication objects



2.2.2 Input

The command organs connected to inputs (remote switch, switch, automation) enable lighting, shutters, blinds, heating and scenes commands.

The most important functions are:

■ Toggle switch

The Toggle switch function consists in inverting the output status after each press.

■ ON/OFF

The ON/OFF function a lighting, rolling shutter or heating circuit to be switched on or off. The command can come from switches, push-buttons or automations.

■ Timer

The Timer function enables a lighting, rolling shutter or heating circuit to be switched on or off for a programmable length of time. A short press on the push-button re-launches the timer. The timer can be interrupted before the end of the time by a long press. A programmable Cut-OFF pre-warning announces the end of the delay time by a 1-second inversion of the output status.

■ Shutter/blind

This function enables a rolling shutter or a blind to be controlled from 2 push-buttons. The Up/Down command (**Up/Down** object) is issued by a long press on the button. The Stop/Tilt function issues the object **Tilt/Stop** (short press).

■ Dimming

This function enables a light to be dimmed from one or two input contacts. The ON/OFF function issues the object **ON/OFF** (short press). The Dimming function issues the object **Dimming** (long press).

■ Heating

This function enables a heating or air-conditioning instruction (Auto, Comfort, Economy, Night setpoint, Frost protection) to be selected. The command can come from switches, push-buttons or automations.

■ Priority

The Priority function enables an input to be forced into a defined state. The priority action depends on the type of application commanded: Lighting ON/OFF, Rolling shutter, Heating.

■ Scene

This function enables scenes to be saved or selected. These concern different types of output (lighting, blind, shutter, heating) to create ambiances or scenarios (leaving scenario, reading ambiance etc.).

■ Alarms

The wind, rain and freeze Alarm functions enable alarms to be issued on a cyclical basis to the bus from automations (anemometer, rain detector, twilight switch, etc.).

■ Automatic control

The Automatic control function enables an output to be controlled in parallel to the standard control. An additional command object (Automatic control deactivation) is used to activate or deactivate Automatic control.

■ Load shedding

The Load shedding function is used to force an output to OFF. Load shedding is activated by receipt of a 1-byte command. At the end of load shedding, the output is switched to the theoretical status without Load shedding (memorisation).

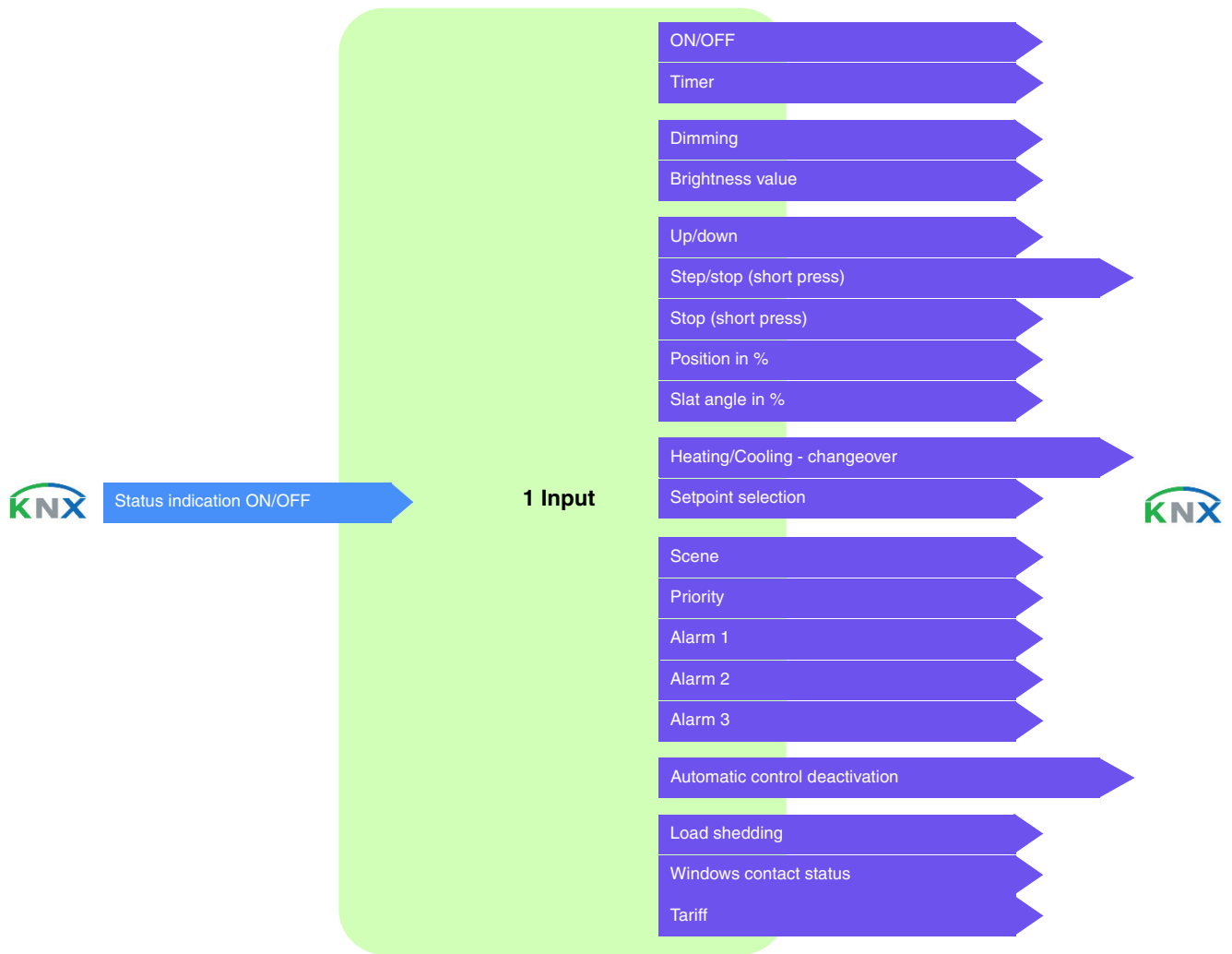
■ Windows contact

The Window contact function enables the window opening/closing information to be sent to the KNX bus.

■ Tariff

The Tariff function enables T1/T2 tariff information to be sent to the KNX bus.

Communication objects



3. Programming by ETS

The function of the different devices only differs in the number of outputs. For this reason, only one device or one output will ever be described.

3.1 Parameters

3.1.1 Closing type for the outputs

This configuration window is used to set the Closing type for the outputs.

The following parameters are available:

ON/OFF

- Each switching contact is used separately to switch a load.

Shutter/blind

- Each pair of outputs constitutes a shutter and blind channel.

Parameter	Description	Value
Function Ox-Oy	The outputs are used as ON/OFF switches. The outputs are used for shutters and blinds. One output for raising and one output for lowering.	ON/OFF* Shutter and blind

The assignment of the outputs is carried out following:

	ON/OFF	Shutter
Function O1-O2	Output 1: ON/OFF Output 2: ON/OFF	Output 1-2: Shutter and blind

3.1.2 Fixed parameters

The fixed parameters define the operating mode of the output relays.

3.1.2.1 General

Parameter	Description	Value
Output contact	On receipt of an ON command: The output relay closes.	Normally open
Parameters overwrite at next download (scenes)	The parameter values stored in the device will be overwritten with the ETS configured values at the next download.	Active
Status after priority	At the end of the priority, the output is: Switched back to the status before priority was activated.	Status before priority

* Default value

3.1.2.2 ON/OFF

Parameter	Description	Value
Status after ETS download	The output status remains unchanged after ETS download. <i>Note: During ETS-parameters download, the outputs remain unchanged.</i>	Maintain status
Status after bus power cut	The output status remains unchanged during at bus return. <i>Note: The device will reboot on bus return. The priority functions that were present before the bus power cut are no longer active (Load shedding, Priority).</i>	Maintain status

3.1.2.3 Shutter/blind

Parameter	Description	Value
Status after ETS download	Maintain the position before download. <i>Note: During ETS-parameters download, the outputs remain unchanged.</i>	Maintain status
Status after bus power cut	Maintain the position before the bus power cut. <i>Note: The device will reboot on bus return. The priority functions that were present before the bus power cut are no longer active (Alarm, Priority).</i>	Maintain status
Position after alarm	Runs to the position which would be active according to other communication objects if the alarm had not taken place.	Theoretical status without alarm

3.1.3 Functions of each switch actuator

3.1.3.1 Timer

The Timer function is used to switch on a lighting circuit for a programmable period. The timer may be interrupted before expiry of the delay time. A programmable Cut-OFF pre-warning announces the end of the delay time by a 1-second inversion of the output status.

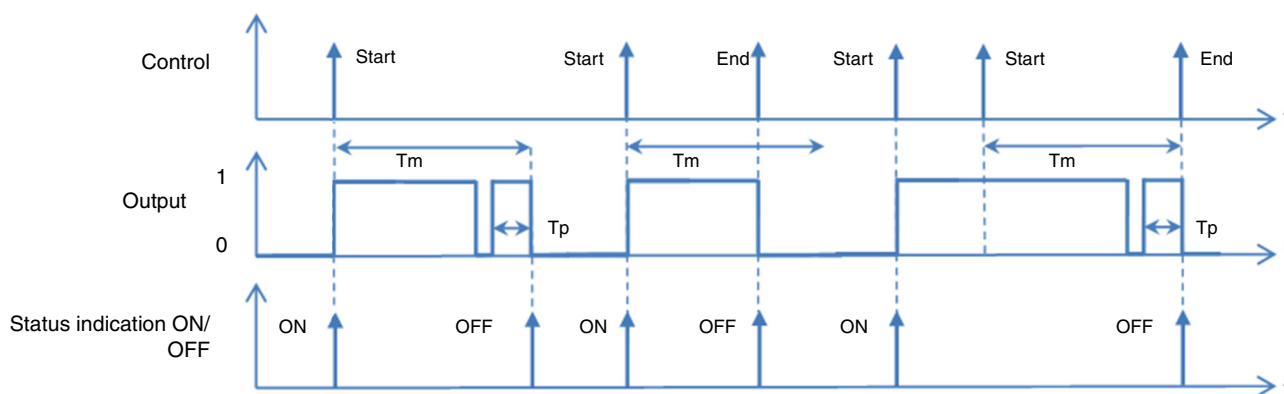
Timer	<input checked="" type="checkbox"/>
Timer duration	2 min
Cut-OFF pre-warning	30 s

Parameter	Description	Value
Timer duration	This parameter determines the timer duration.	Not active, 1 s, 2 s, 3 s, 5 s, 10 s, 15 s, 20 s, 30 s, 45 s, 1 min, 1 min 15 s, 1 min 30 s, 2 min* , 2 min 30 s, 3 min, 5 min, 15 min, 20 min, 30 min, 1 h, 2 h, 3 h, 5 h, 12 h, 24 h

* Default value

Parameter	Description	Value
Cut-OFF pre-warning	This parameter determines the lead time of the cut-OFF pre-warning.	Not active, 15 s, 30 s* , 1 min

Operating principle:



T_m : Timer duration
 T_p : Pre-warning lead time

Note: If the lead time of the cut-OFF pre-warning is greater than the duration of the timer, the cut-OFF pre-warning is not triggered.

Communication objects: [2 - Output 1 - Timer \(1 Bit – 1.001 DPT_Switch\)](#)
[12 - Output 2 - Timer \(1 Bit – 1.001 DPT_Switch\)](#)

3.1.3.2 Priority

The Priority function is used to force the output into a defined state.

Priority: Load shedding > **Priority** > Basic function.

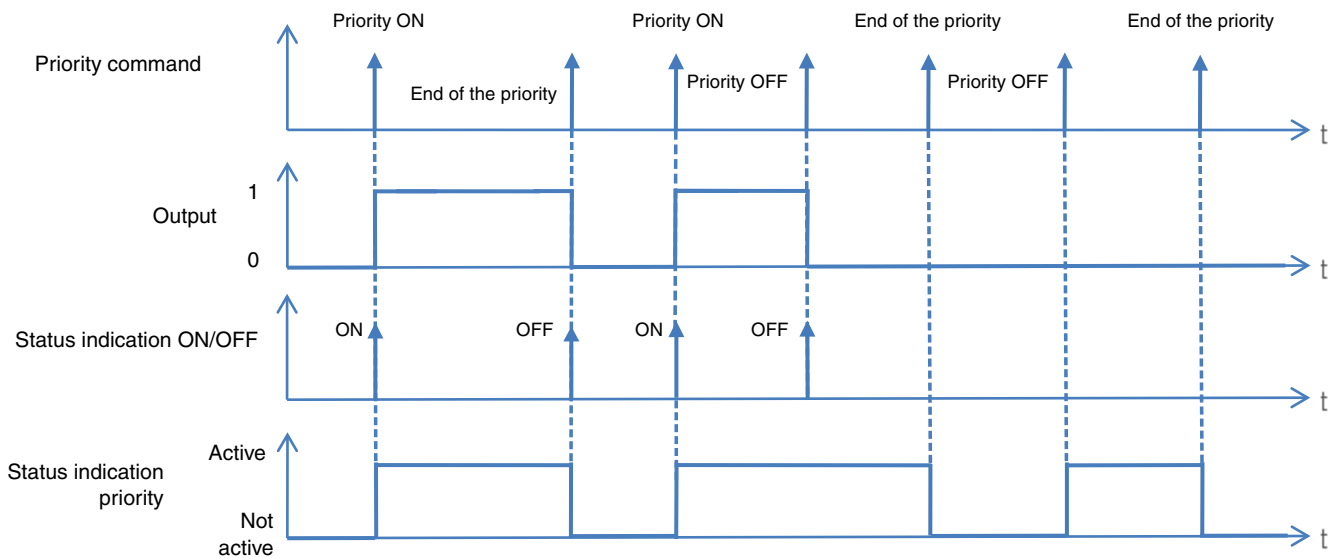
At the end of the priority, the output returns to the status it had before the priority (Memorisation function).

The device responds to telegrams received via the **Priority** object, as given in the following table:

Telegram received by the priority operation object			Output behaviour
Hexadecimal Value	Binary Value		
	Bit 1 (MSB)	Bit 0 (LSB)	
00	0	0	End of the priority
01	0	1	End of the priority
02	1	0	Priority OFF
03	1	1	Priority ON

* Default value

Operating principle:



Communication objects:

- 3 - Output 1 - Priority** (2 Bit – 2.002 DPT_Bool_Control)
- 13 - Output 2 - Priority** (2 Bit – 2.002 DPT_Bool_Control)
- 4 - Output 1 - Status indication priority** (1 Bit – 1.011 DPT_State)
- 14 - Output 2 - Status indication priority** (1 Bit – 1.011 DPT_State)

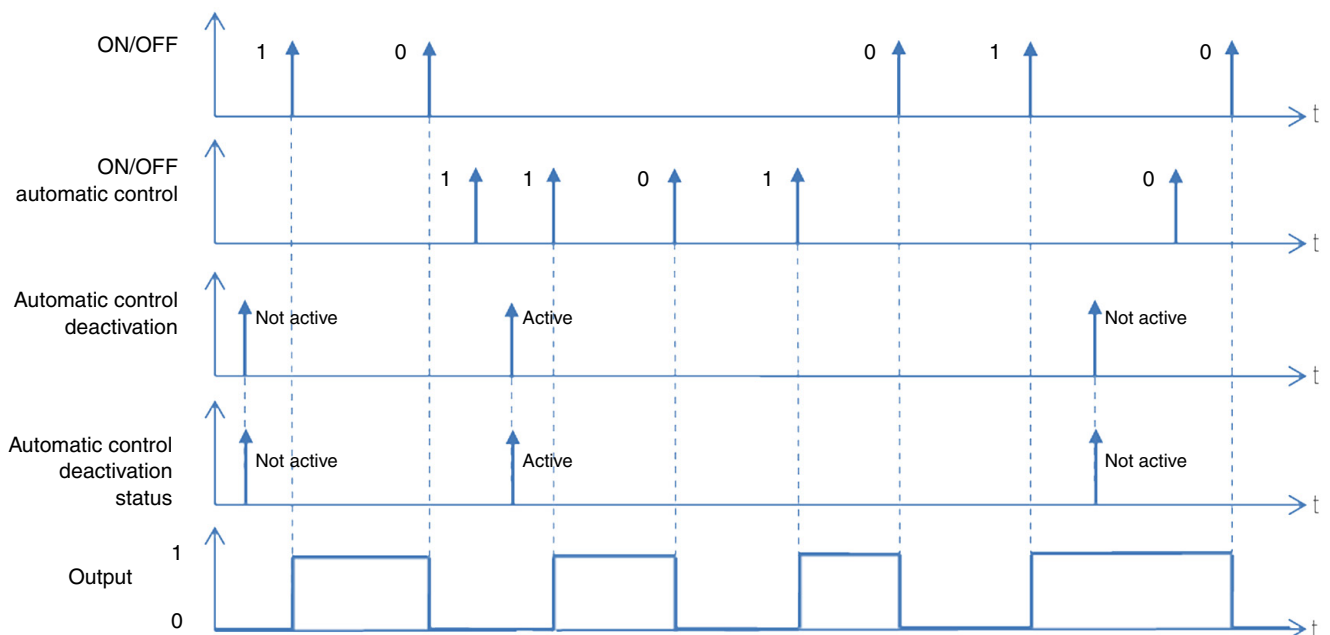
3.1.3.3 Automatic control

The Automatic control function is used to command an output in parallel to the ON/OFF function. The two functions have the same level of priority. The last command received will act on the status of the output. An additional command object is used to activate or deactivate the Automatic control.

Example: when an output is controlled by a button and in parallel by an automatic control (timer, twilight switch, weather station, etc.) the automatic control can be deactivated for reasons of comfort (vacations, public holidays, etc.).

Automatic control	<input checked="" type="checkbox"/>
Automatic control deactivation	<input checked="" type="checkbox"/>

Operating principle:



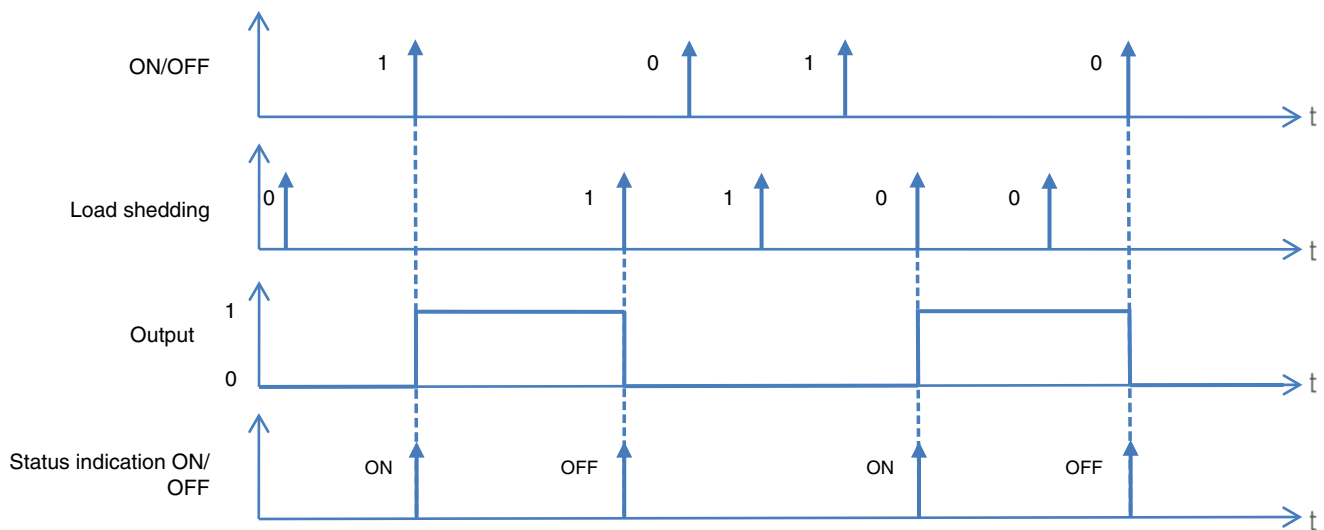
Communication objects: **6 - Output 1 - ON/OFF automatic control** (1 Bit – 1.001 DPT_Switch)
16 - Output 2 - ON/OFF automatic control (1 Bit – 1.001 DPT_Switch)

Communication objects: **7 - Output 1 - Automatic control deactivation** (1 Bit – 1.001 DPT_Switch)
17 - Output 2 - Automatic control deactivation (1 Bit – 1.001 DPT_Switch)
8 - Output 1 - Automatic control deactivation status (1 Bit – 1.001 DPT_Switch)
18 - Output 2 - Automatic control deactivation status (1 Bit – 1.001 DPT_Switch)

3.1.3.4 Load shedding

The Load shedding function is used to force an output to OFF. Load shedding is activated by receipt of a 1-byte command.
 Priority: **Load shedding** > Priority > Basic function.
 This command has the highest priority. No other command is taken into account if the mode is active. The status of the output is memorised but not applied. At the end of load shedding, the output is switched to the theoretical status without Load shedding (memorisation).

Example: Load shedding function



Communication objects: **9 - Output 1 - Load shedding** (1 Bit – 1.001 DPT_Switch)
19 - Output 2 - Load shedding (1 Bit – 1.001 DPT_Switch)

3.1.3.5 Scene

Scene	<input checked="" type="checkbox"/>
Number of scenes used	8
Scene 1	<input checked="" type="checkbox"/>
Output status for scene 1	<input type="radio"/> OFF <input checked="" type="radio"/> ON
Scene 2	<input type="checkbox"/>
Scene 3	<input type="checkbox"/>
Scene 4	<input type="checkbox"/>
Scene 5	<input type="checkbox"/>
Scene 6	<input type="checkbox"/>
Scene 7	<input type="checkbox"/>
Scene 8	<input type="checkbox"/>

Parameter	Description	Value
Number of scenes used	This parameter determines the number of scenes used.	8* - 16 - 32 - 48 - 64

Note: If the Scene number received on the Scene object is greater than the maximum number of scenes, the status of the output remains unchanged.

Parameter	Description
Scene x	This parameter is used to activate the scene in question.

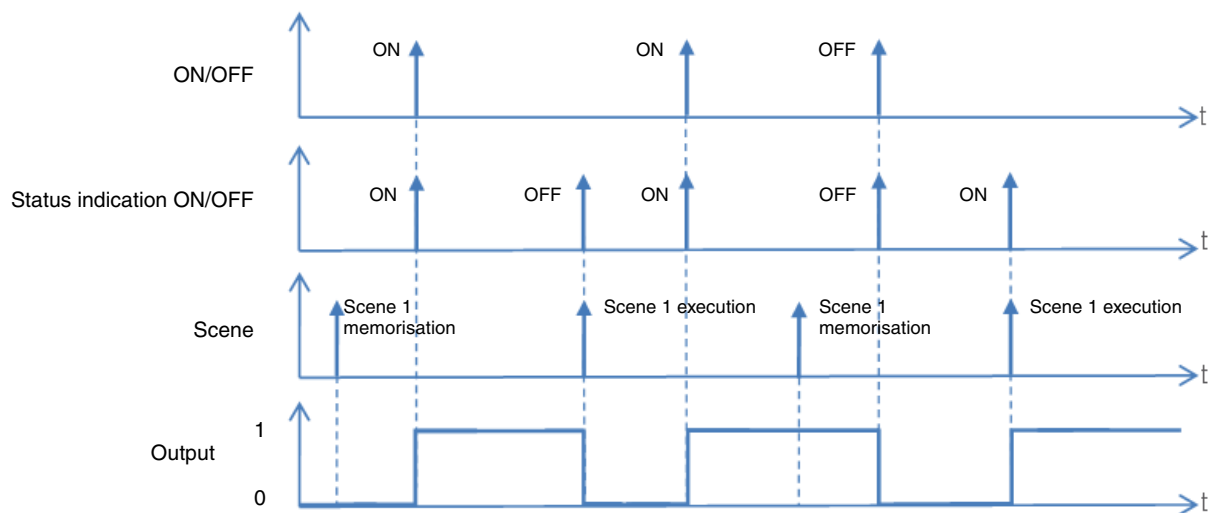
Parameter	Description	Value
Output status for scene x	On activation of Scene x, the output is: Selectively switched on. Selectively switched off.	ON* OFF

x = 1 to 64

*Note: Each output has up to 64 scenes available, in accordance with the **Number of scenes used** parameter.*

Communication objects: **5 - Output 1 - Scene** (1 Byte – 17.001 DPT_SceneNumber)
 15 - Output 2 - Scene (1 Byte – 17.001 DPT_SceneNumber)

Operating principle:



* Default value

Learning and storing scenes

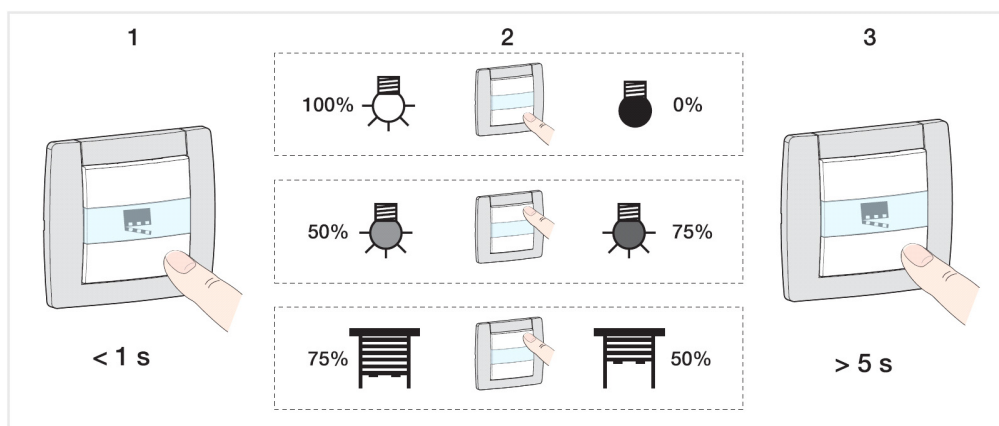
This process is used to change and store a scene. For example, by locally pressing the key in the room or by emission of the values from a visualization.

To access and store scenes, the following values must be sent:

Scene number	Access scene (Object value: 1 byte)	Store scene (Object value: 1 byte)
1-64	= Scene number -1	= Scene number +128
Examples		
1	0	128
2	1	129
3	2	130
...	...	
64	63	191

Here is the scene memorisation for local switches, for example.

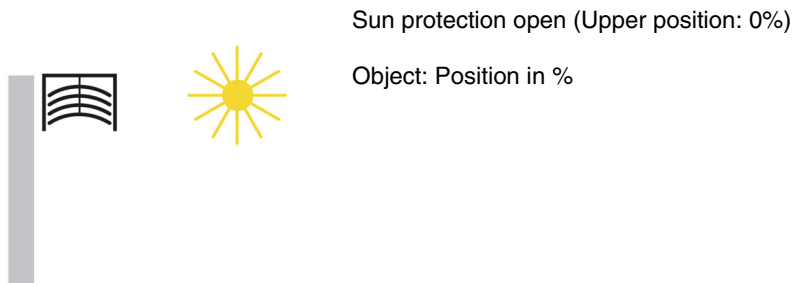
- Activate scene by briefly pressing the transmitter that starts it.
- The outputs (lights, shutters, etc.) are set in the desired state using the usual local control devices (buttons, remote control, etc.).
- Memorise the status of the outputs with a press greater than 5 seconds long on the transmitter that starts the scene. The memorisation can be displayed by short-term activation of the outputs.



3.1.4 Functions for each shutter/blind output

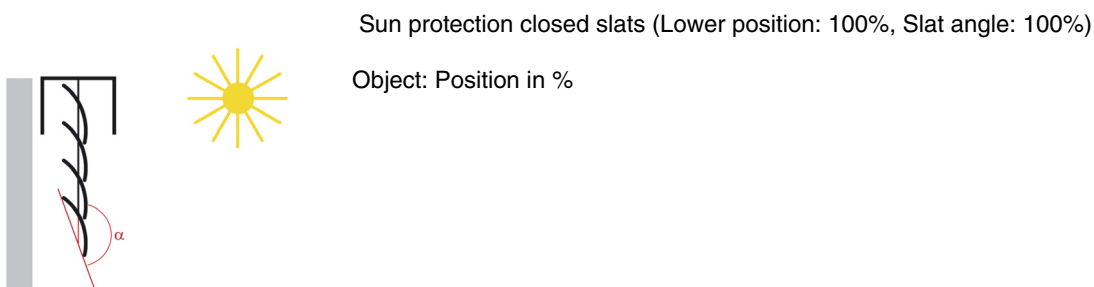
Slat position for horizontal slats

The blind drive actuators have 2 limit position switches and can be run to a Sun protection position using a position setting in percent. The value of 0% is used to control the upper position (i.e. Sun protection fully open) or is reported as a status.

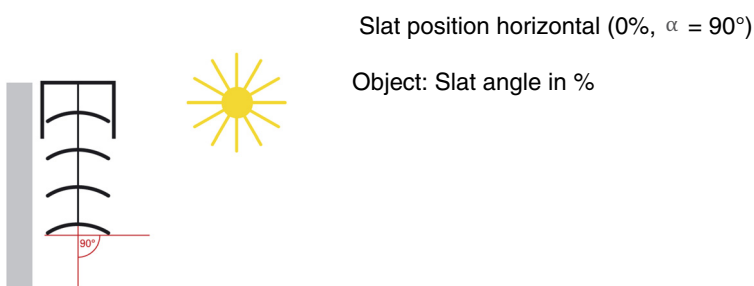


If the lower position is to be approached, then this will be sent to the blinds as Sun protection position 100% or on reaching the lower position (i.e. Sun protection completely closed). The position will be reported using this value. If a blind is run from the upper position, the slats initially tilt into an almost vertical position and then the sun protection runs with closed slats to the lower position.

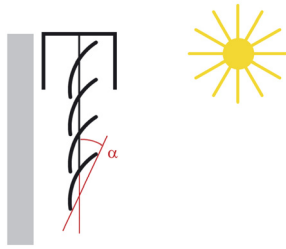
When the blind is located at the lower position and the slats are fully closed, then this slat position is described as vertical and equal to 100%. Normally, however, fully closed slats have no exactly vertical position ($\alpha = 180^\circ$) but rather form a small angle with the vertical.



From their vertical position (completely closed, 100%) the slats can be adjusted to their horizontal position (fully open, 0% and $\alpha = 90^\circ$). The blind drive used thus determines whether this adjustment can be carried out using many small steps or whether it is only possible via a few large steps (As with most standard drives).



For standard blinds, the slats can be adjusted continuously to the horizontal position or until the slat adjustment ends and the raising of the blind begins. The slats then form an angle of between 0° and 90° with the vertical.



Slat position at the start of moving the blind (Up)

Object: Slat angle in %

Slat position for vertical slats

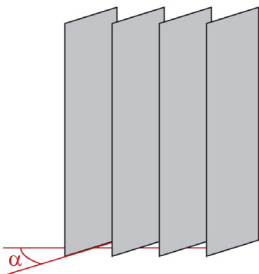
If an interior shade or privacy shield with vertical slats is controlled via a blind actuator, then the position in which the slats are fully open is controlled or reported as the 0% slat position. The slats then form an angle of 90° with the direction of travel from Shade fully open to Shade fully closed.



Fully opened vertical slats (Slat angle 0%)

Object: Slat angle in %

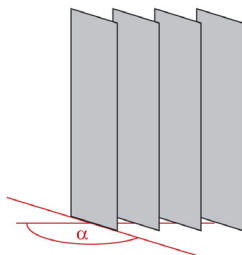
If the slats are fully closed, this position will be controlled and reported as slat position 100%. This is the position to which the shade is run from its side limit position in front of the window. The angle that the slats then form with the direction of movement is therefore a little > 0°.



Fully closed vertical slats (Slat angle 100%)

Object: Slat angle in %

If the shade is then driven back (i.e. opened), then the vertical slats are turned to a position that is somewhat smaller than 180°.



Vertical slats at the start of moving UP

3.1.4.1 Function selection

These parameters are available individually for each output (Pair).

Outputs 1-2: Function selection	Closing type	<input type="radio"/> Shutter <input checked="" type="radio"/> Shutter and blind
Outputs 1-2: Fixed parameters	Complete up movement duration	120 Second (s)
– Outputs 1-2	Complete down movement duration	120 Second (s)
Outputs 1-2: Function select...	Relay closing time for slat positioning	150 milliseconds
+ Input 1	Total number of slat angles	12
+ Input 2	Status indication	<input checked="" type="checkbox"/>
+ Information	Position status	<input checked="" type="checkbox"/>
	Slat angle status	<input checked="" type="checkbox"/>
	Upper position reached	<input type="checkbox"/>
	Lower position reached	<input type="checkbox"/>
	Alarm	Not active
	Priority	<input type="checkbox"/>
	Automatic control	<input type="checkbox"/>
	Scene	<input type="checkbox"/>

Parameter	Description	Value
Closing type	This parameter defines the operating mode used for the affected outputs. An operating mode of the shutter and blind type gives access to additional parameters to control the slat pitch.	Shutter and blind* Shutter

- Communication objects:
- 0 - Outputs 1-2 - Up/down** (1 Bit – 1.008 DPT_UpDown)
 - 2 - Outputs 1-2 - Stop (short press)** (1 Bit – 1.007 DPT_Step)
 - 3 - Outputs 1-2 - Position in %** (1 Byte – 5.001 DPT_Scaling)

Note: These objects are always visible.

- Communication objects:
- 1 - Outputs 1-2 - Step/stop control (Short press)** (1 Bit – 1.007 DPT_Step)
 - 4 - Outputs 1-2 - Slat angle in %** (1 Byte – 5.001 DPT_Scaling)

*Note: These objects are only visible when the **Closing type** parameter has the value: **Shutter and blind**.*

Parameter	Description	Value
Complete up movement duration	This parameter defines the time taken, during which the contact must be closed, to reach the upper position.	1... 120* ...500 s

* Default value

Parameter	Description	Value
Complete down movement duration	This parameter defines the time taken, during which the contact must be closed, to reach the lower position.	1... 120* ...500 s

Parameter	Description	Value
Relay closing time for slat positioning	This parameter defines how long the contacts must be closed in order to perform an elementary angle step for the slats.	100... 150* ...2500 ms

*Note: This parameter is only visible when the **Closing type** has the value: **Shutter and blind**.*

Parameter	Description	Value
Total number of slat angles	This parameter defines the total number of elementary slat steps available for adjusting the slats from the inclined downwards position to be inclined upwards position.	1... 12* ...50

*Note: Before setting the **Total number of slat angles** parameter, it is essential to first set the closed contact duration for an elementary slat step.*

*Note: This parameter is only visible when the **Closing type** has the value: **Shutter and blind**.*

3.1.4.2 Status indication

Using the Status indication function, the following can be sent via the bus:

- Status indication position in %: Indicates the position of the shutter or blind.
- Indication of slat position in %: Indicates the slat pitch of the blind.
- Upper or lower position reached: Indicates arrival at the upper or lower position.

Status indication	✓
Position status	✓
Slat angle status	✓
Upper position reached	✓
Lower position reached	✓

Parameter	Description
Status indication	This parameter allows the display of different status indication objects of the outputs concerned.

Parameter	Description
Position status	This parameter authorizes the Status indication position in % object.

Communication objects: [5 - Outputs 1-2 - Status indication position in % \(1 Byte – 5.001 DPT_Scaling\)](#)

* Default value

Parameter	Description
Slat angle status	This parameter authorizes the Slat angle indication in % object.

Note: This parameter is only visible when the **Closing type** has the value: **Shutter and blind**.

Communication objects: [6 - Outputs 1-2 - Slat angle indication in % \(1 Byte – 5.001 DPT_Scaling\)](#)

Parameter	Description
Upper position reached	This parameter authorizes the Upper position reached object.

Communication objects: [7 - Outputs 1-2 - Upper position reached \(1 Bit – 1.002 DPT_Bool\)](#)

Parameter	Description
Lower position reached	This parameter authorizes the Lower position reached object.

Communication objects: [8 - Outputs 1-2 - Lower position reached \(1 Bit – 1.002 DPT_Bool\)](#)

3.1.4.3 Alarm

With the Alarm function a shutter or blind can be positioned in a configurable predefined state.

Priority: **Alarm** > Priority > Basic function.

The alarm prevents any actuation until an alarm cancellation command has been received.

Up to 3 alarm functions are possible (Alarm 1 - Alarm 2 - Alarm 3).

The change of output status when an alarm appears is defined using a parameter (Up, Down, Not active).

If they are activated, the alarm objects must be filled in cyclically. The time between 2 objects being sent must be less than 30 minutes. If not, the alarm will trigger automatically.

After the alarm, the shutter or blind takes up the position it would be in if no alarm had occurred.

Alarm	Alarm 1 > Alarm 2 > Alarm 3
Position on alarm 1	Maintain status
Position on alarm 2	Maintain status
Position on alarm 3	Maintain status

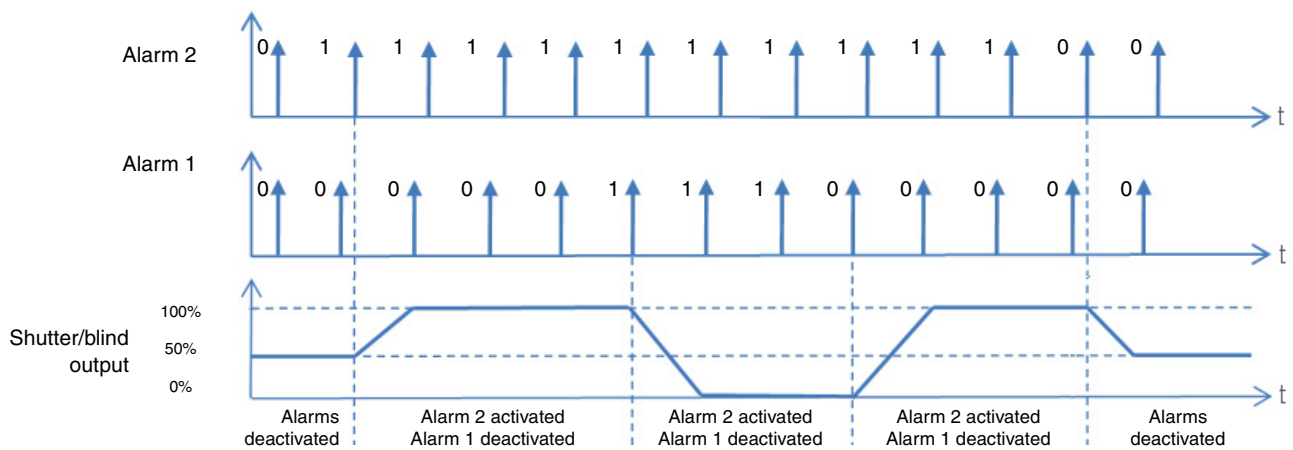
Parameter	Description	Value
Alarm	The Alarm tab and the associated parameters and objects are: Hidden Displayed for 1 alarm object Displayed for 2 alarm objects Displayed for 3 alarm objects	Not active* Alarm 1 Alarm 1 > Alarm 2 Alarm 1 > Alarm 2 > Alarm 3

Communication objects: **12 - Outputs 1-2 - Alarm 1** (1 Bit – 1.005 DPT_Alarm)
 13 - Outputs 1-2 - Alarm 2 (1 Bit – 1.005 DPT_Alarm)
 14 - Outputs 1-2 - Alarm 3 (1 Bit – 1.005 DPT_Alarm)

Operating principle:

Example:

- Position on alarm 2: Up.
- Position on alarm 1: Down.



If several alarms triggered at the same time, the commands associated with the highest priority alarm are executed.

Parameter	Description	Value
Position on alarm X	On Alarm x, the shutter/blind output: Not changed. Closes the Up contact Closes the down contact	Not active* Up Down

X = 1 - 2 - 3

* Default value

3.1.4.4 Priority

The Priority function is used to force the output into a defined state.

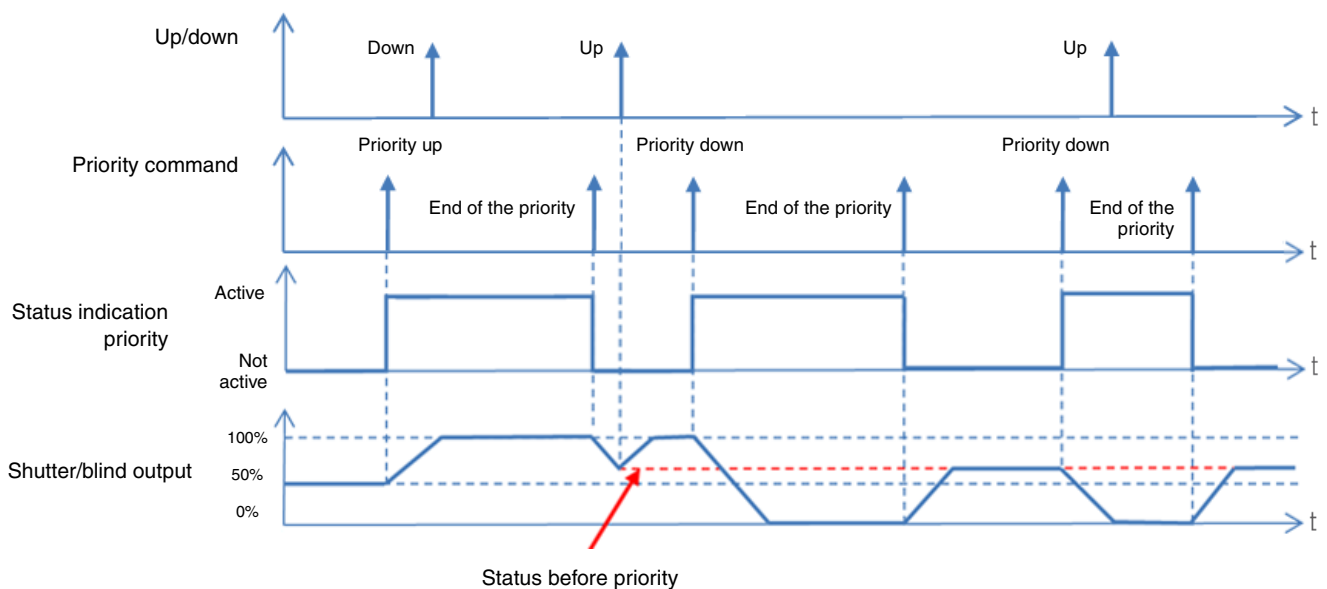
Priority: Alarm > **Priority** > Basic function.

At the end of the priority, the output returns to the status it had before the priority (Memorisation function).

The device responds to telegrams received via the **Priority** object, as given in the following table:

Telegram received by the priority operation object			Output behaviour
Hexadecimal Value	Binary Value		
	Bit 1 (MSB)	Bit 0 (LSB)	
00	0	0	End of the priority
01	0	1	End of the priority
02	1	0	Priority up
03	1	1	Priority down

Operating principle:



Communication objects:

[9 - Outputs 1-2 - Priority \(2 Bit – 2.002 DPT_Bool_Control\)](#)

[10 - Outputs 1-2 - Status indication priority \(1 Bit – 1.011 DPT_State\)](#)

3.1.4.5 Automatic control

The Automatic control function is used to control an output in parallel to the Up/Down or Slat tilt/stop function.

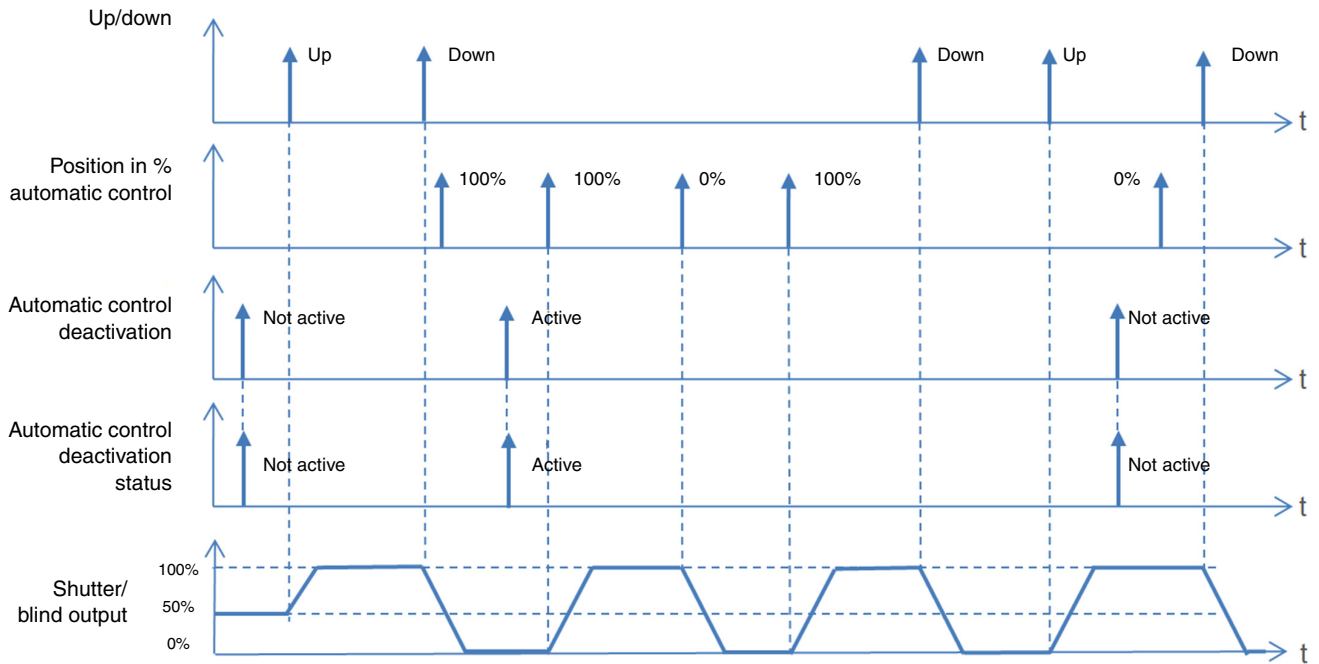
The functions have the same level of priority. The last command received will act on the status of the output.

An additional command object is used to activate or deactivate the Automatic control.

Example: when an output is controlled by a button and in parallel by an automatic control (timer, twilight switch, weather station, etc.) the automatic control can be deactivated for reasons of comfort (vacations, public holidays, etc.).

Automatic control	<input checked="" type="checkbox"/>
Automatic control deactivation	<input checked="" type="checkbox"/>

Operating principle:



Communication objects: **15 - Outputs 1-2 - Position in % automatic control (1 Bit – 1.001 DPT_Switch)**
16 - Outputs 1-2 - Slat angle in % automatic control (1 Bit – 1.001 DPT_Switch)

Communication objects: **17 - Outputs 1-2 - Automatic control deactivation (1 Bit – 1.001 DPT_Switch)**
18 - Outputs 1-2 - Automatic control deactivation status (1 Bit – 1.001 DPT_Switch)

3.1.4.6 Scene

The Scene function is used to switch groups of outputs into a configurable predefined state. Pressing a push button activates a scene.

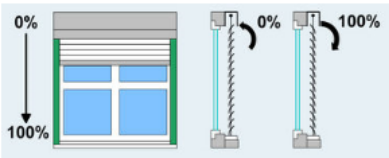
A scene is activated by receipt of a 1-byte command.

Each output can be included in 64 different scenes.

When the scene is memorised, the position and angle of the slats are memorised.

Scene

Number of scenes used



Scene 1

Position for scene 1 (0-100%) %

Slat angle for scene 1 (0-100%) %

Scene 2

Scene 3

Scene 4

Scene 5

Scene 6

Scene 7

Scene 8

Parameter	Description	Value
Number of scenes used	This parameter determines the number of scenes used.	8* - 16 - 24 - 32 - 48 - 64

Note: If the Scene number received on the Scene object is greater than the maximum number of scenes, the status of the output remains unchanged.

Parameter	Description
Scene x	This parameter is used to activate the scene in question.

x = 1 to 64

Parameter	Description	Value
Position for scene x (0-100%)	This parameter defines the position to run the shutter or blind to for scene x.	0*...100

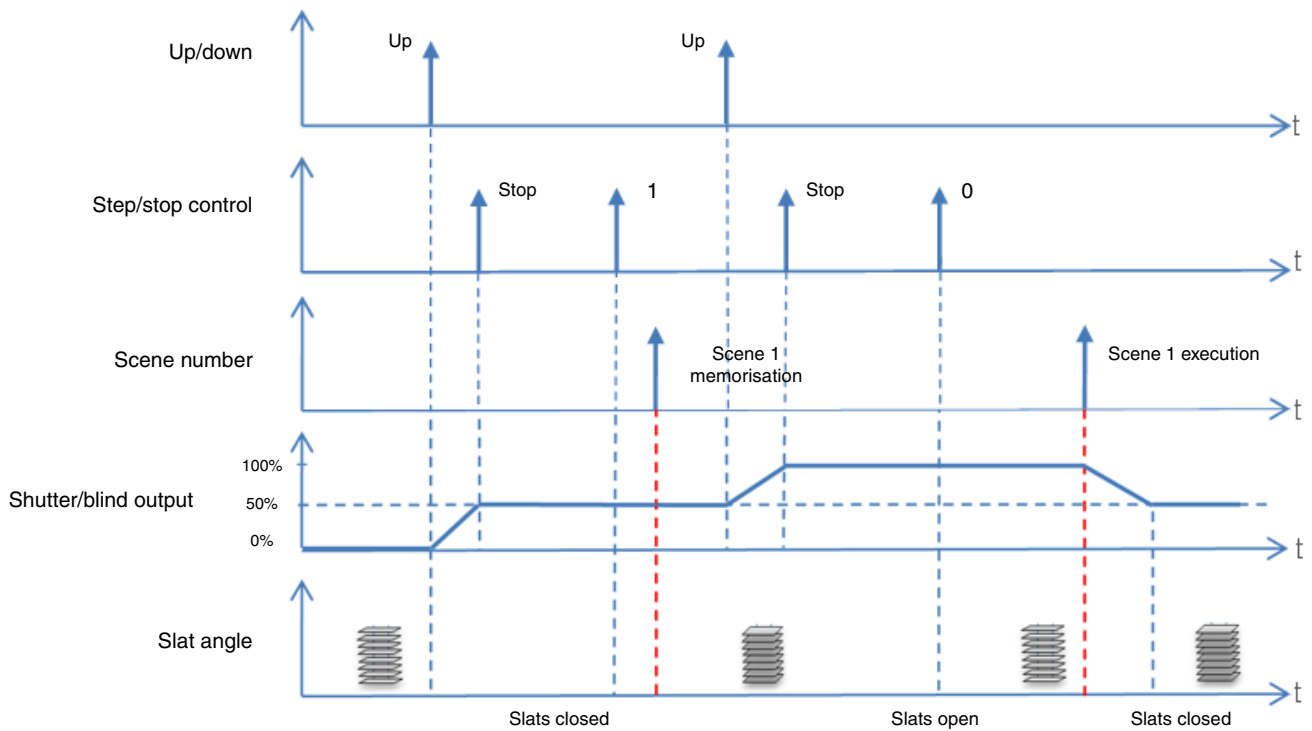
* Default value

Parameter	Description	Value
Slat angle for scene x (0-100%)	This parameter defines the slat position of the blind to be used for scene x.	0*...100

Note: This parameter is only visible when the **Closing type** has the value **Shutter and blind**.

Communication objects: [11 - Outputs 1-2 - Scene \(1 Byte – 17.001 DPT_SceneNumber\)](#)

Operating principle:



* Default value

Learning and storing scenes

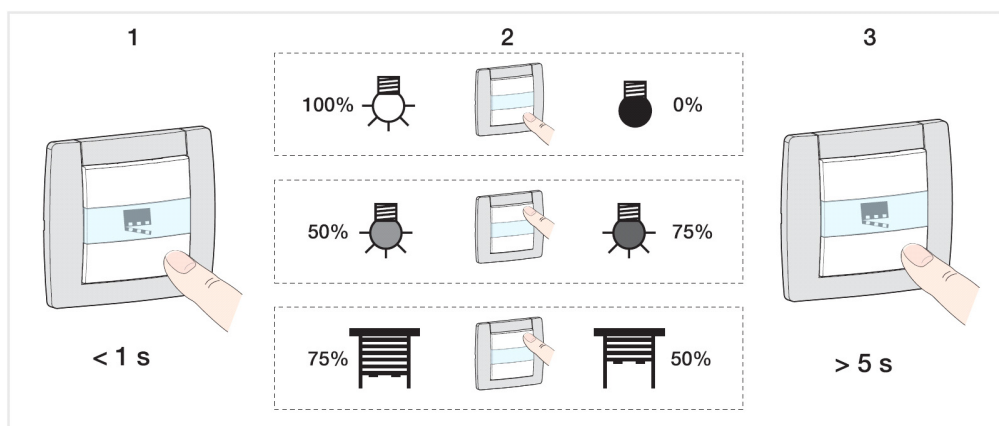
This process is used to change and store a scene. For example, by locally pressing the key in the room or by emission of the values from a visualization.

To access and store scenes, the following values must be sent:

Scene number	Access scene (Object value: 1 byte)	Store scene (Object value: 1 byte)
1-64	= Scene number -1	= Scene number +128
Examples		
1	0	128
2	1	129
3	2	130
...	...	
64	63	191

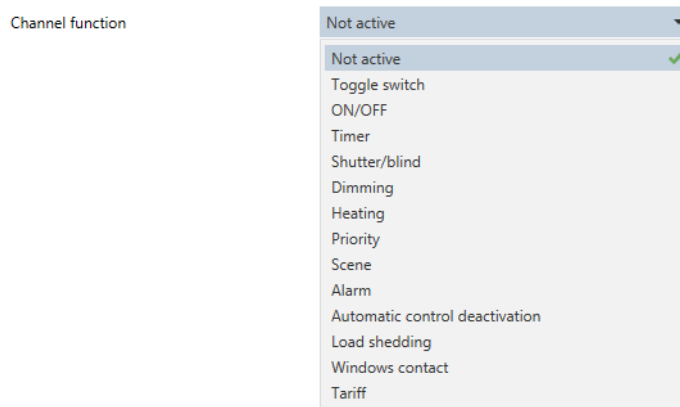
Here is the scene memorisation for local switches, for example.

- Activate scene by briefly pressing the transmitter that starts it.
- The outputs (lights, shutters, etc.) are set in the desired state using the usual local control devices (buttons, remote control, etc.).
- Memorise the status of the outputs with a press greater than 5 seconds long on the transmitter that starts the scene. The memorisation can be displayed by short-term activation of the outputs.



3.1.5 Input operation mode

This configuration enables the input operating mode to be defined. These parameters are available for each input individually.



The input default value is not active.

The following parameters are available:

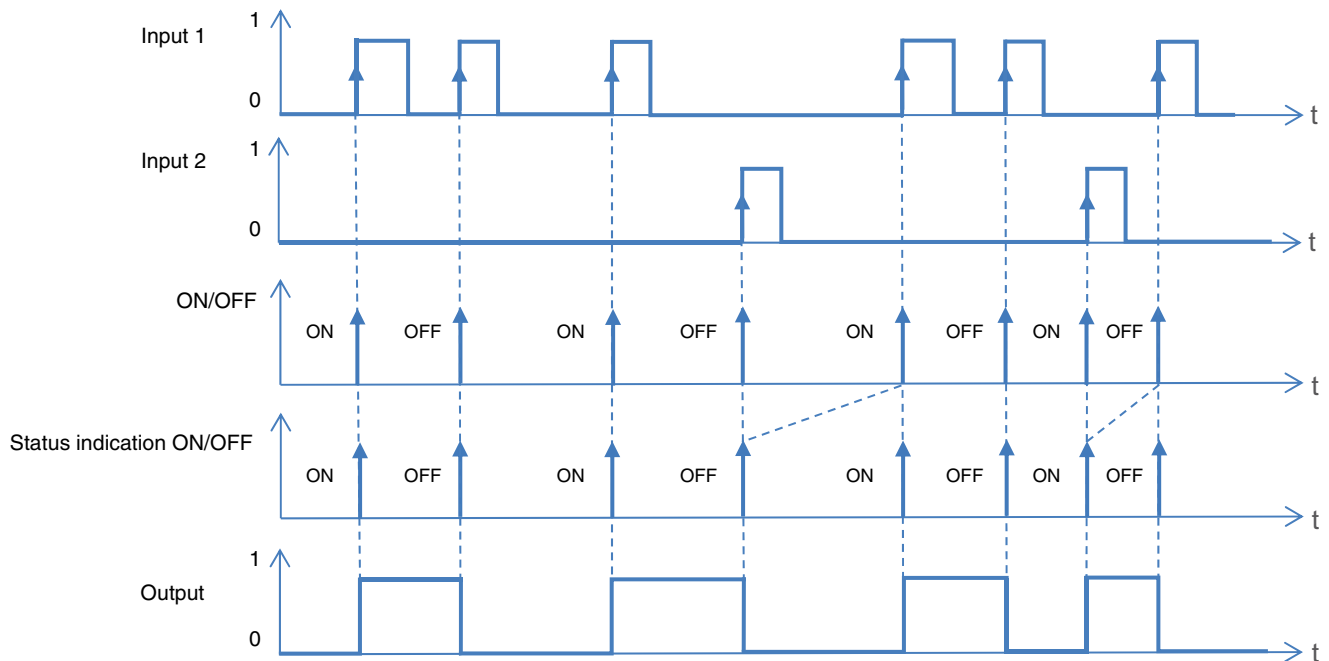
- Toggle switch
- ON/OFF
- Timer
- Shutter/blind
- Dimming
- Heating
- Priority
- Scene
- Alarm
- Automatic control deactivation
- Load shedding
- Windows contact
- Tariff

3.1.5.1 Toggle switch

This function enables a lighting circuit or any other load to be commanded to switch on or off. Each time the push-button is pressed the output status is inverted.

Description: After a press on the push-button, according to the object **Indication of ON/OFF status** an ON or OFF command will be issued to the bus via the object **ON/OFF**..

Operating principle:



- Communication objects:
- 20 - Input 1 - Status indication ON/OFF** (1 Bit – 1.001 DPT_Switch)
 - 21 - Input 1 - ON/OFF** (1 Bit – 1.001 DPT_Switch)
 - 28 - Input 2 - Status indication ON/OFF** (1 Bit – 1.001 DPT_Switch)
 - 29 - Input 2 - ON/OFF** (1 Bit – 1.001 DPT_Switch)

3.1.5.2 ON/OFF

An output can be switched on or off using the ON/OFF function. The command can come from switches, push-buttons or automations.

Channel function	ON/OFF
Using mode	ON/OFF
Inverted	<input type="checkbox"/>

Parameter	Description	Value
Using mode	This parameter defines the commands issued at changes of the input status.	ON/-, OFF/-, ON/OFF* , OFF/ON, -/ON, -/OFF

*Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).*

The operation of the input contact may be configured according to whether the contact is open or closed (ON, OFF).

6 different combinations are available:

Function by press	Function on release
ON	-
OFF	-
ON	OFF
OFF	ON
-	ON
-	OFF

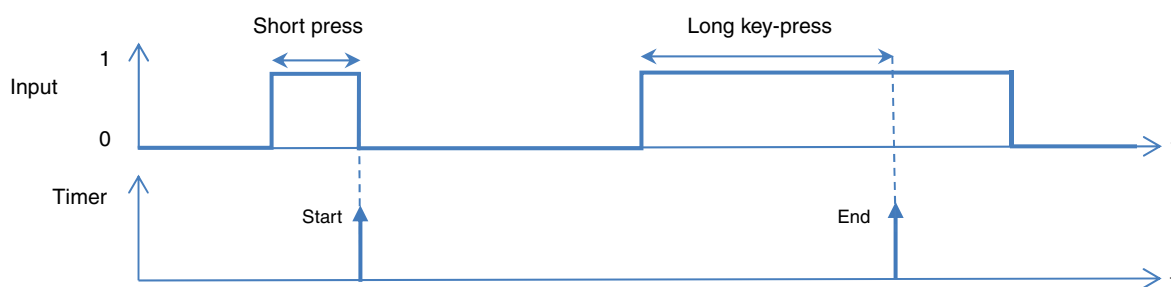
Communication objects: [20 - Input 1 - ON/OFF](#) (1 Bit – 1.001 DPT_Switch)

[29 - Input 2 - ON/OFF](#) (1 Bit – 1.001 DPT_Switch)

3.1.5.3 Timer

The Timer function enables a lighting, rolling shutter or heating circuit to be switched on or off for a programmable length of time. A short press on the push-button re-launches the timer. The timer can be interrupted before the end of the time by a long press.

Operating principle:



Communication objects: [20 - Input 1 - Timer](#) (1 Bit – 1.001 DPT_Switch)

[29 - Input 2 - Timer](#) (1 Bit – 1.001 DPT_Switch)

* Default value

3.1.5.4 Shutter and blind

This function enables a rolling shutter or a blind to be controlled from 2 push-buttons. The Up/Down command (**Up/Down** object) is issued by a long press on the button. The Stop/Tilt function issues the object **Tilt/Stop** (short press).

Channel function	Shutter/blind
Closing type	<input checked="" type="radio"/> Shutter <input type="radio"/> Shutter and blind
Shutter function	Up/down/stop
Function by press	<input checked="" type="radio"/> Up <input type="radio"/> Down

Parameter	Description	Value
Closing type	This parameter defines the operating mode used for the affected outputs. An operating mode of the shutter and blind type gives access to additional parameters to control the slat pitch.	Shutter* Shutter and blind

■ Shutter

Parameter	Description	Value
Shutter function	The shutter command works: Using the input contact programmed to up or down. According to whether the input contact is open or closed. According to a position value in % on pressing and releasing the input contact.	Up/down/stop* Switch for shutter control Position (0-100%)

- Up/down/stop

This function corresponds to the shutter command on 2 buttons.

Parameter	Description	Value
Function by press	On shutting the input contact, the order issued is: Opening the rolling shutter. Closing the rolling shutter.	Up* Down

*Note: This parameter is only visible when the parameter **Shutter function** has the value: **Up/down/stop**.*

- Switch for shutter control

Parameter	Description	Value
Using mode	This parameter defines the commands issued at changes of the input status.	Up/- Down/- Up/down* Down/Up -/Up -/Down Up/stop Stop/up

*Note: This parameter is only visible when the parameter **Shutter function** has the value: **Switch for shutter control**.*

* Default value

The operation of the input contact may be configured according to whether the contact is open or closed (Up, Down).

6 different combinations are available:

Function by press	Function on release
Up	-
Down	-
Up	Down
Down	Up
-	Up
-	Down
Up	Stop
Stop	Up

Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).

- Communication objects:
- [21 - Input 1 - Up/down](#) (1 Bit – 1.008 DPT_UpDown)
 - [22 - Input 1 - Stop \(short press\)](#) (1 Bit – 1.017 DPT_Trigger)
 - [29 - Input 2 - Up/down](#) (1 Bit – 1.008 DPT_UpDown)
 - [30 - Input 2 - Stop \(short press\)](#) (1 Bit – 1.017 DPT_Trigger)

- Position (0-100%)

This function enables the object **Position in %** to be issued according to 2 types of event. These 2 events correspond to the open or closed status of the input contact. Additional parameters define the positions for the 2 events.

Parameter	Description	Value
Using mode	The shutter command operates according to a position value in %: On pressing and releasing the input contact. On only pressing the input contact. On only releasing the input contact.	Function by press/ release* Function by press Function on release

Note: This parameter is only visible when the parameter **Shutter function** has the value: **Position (0-100%)**.

Parameter	Description	Value
Position (0-100%) by press	This parameter defines the position of the rolling shutter to apply during the press.	0... 100*

Note: This parameter is only visible when the parameter **Shutter function** has the value: **Position (0-100%)**.

Parameter	Description	Value
Position (0-100%) on release	This parameter defines the position of the rolling shutter to apply at release.	0* ...100

Note: This parameter is only visible when the parameter **Shutter function** has the value: **Position (0-100%)**.

Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).

* Default value

Communication objects: [21 - Input 1 - Position in % \(1 Byte – 5.001 DPT_Scaling\)](#)
[33 - Input 2 - Position in % \(1 Byte – 5.001 DPT_Scaling\)](#)

■ Shutter and blind

Parameter	Description	Value
Blind function	The shutter/blind command operates: Using the input contact programmed to up or down. According to the slat angle value in % on pressing and releasing the input contact. According to a position value in % and a slat angle in % on pressing and releasing the input contact.	Up/down/step/stop* Slat angle (0-100%) Position/Slat angle (0-100%)

- Up/down/step/stop

Parameter	Description	Value
Function by press	On shutting the input contact, the order issued is: Shutter or blind open. Shutter or blind closed.	Up* Down

*Note: This parameter is only visible when the parameter **Blind function** has the value: **Up/down/step/stop**.*

Communication objects: [21 - Input 1 - Up/down \(1 Bit – 1.008 DPT_UpDown\)](#)
[22 - Input 1 - Step/stop \(short press\) \(1 Bit – 1.007 DPT_Step\)](#)
[29 - Input 2 - Up/down \(1 Bit – 1.008 DPT_UpDown\)](#)
[30 - Input 2 - Step/stop \(short press\) \(1 Bit – 1.007 DPT_Step\)](#)

- Position/Slat angle (0-100%)

This function enables the objects **Position in %** and **Slat angle in %** to be issued according to 2 types of event. These 2 events correspond to the open or closed status of the input contact. Additional parameters define the positions for the 2 events.

Parameter	Description	Value
Using mode	The shutter/blind command operates according to a position value in % and a slat angle in %: On pressing and releasing the input contact. On only pressing the input contact. On only releasing the input contact.	Function by press/ release* Function by press Function on release

*Note: This parameter is only visible when the parameter **Blind function** has the value: **Slat angle (0-100%)** or **Position/Slat angle (0-100%)**.*

Parameter	Description	Value
Slat angle (0-100%) by press	This parameter defines the slat position to apply during the press.	0... 100*

*Note: This parameter is only visible when the parameter **Blind function** has the value: **Slat angle (0-100%)** or **Position/Slat angle (0-100%)**.*

* Default value

Parameter	Description	Value
Slat angle (0-100%) on release	This parameter defines the slat position to apply at release.	0*...100

Note: This parameter is only visible when the parameter **Blind function** has the value: **Slat angle (0-100%)** or **Position/Slat angle (0-100%)**.

Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).

Parameter	Description	Value
Position (0-100%) by press	This parameter defines the blind position to apply during the press.	0...100*

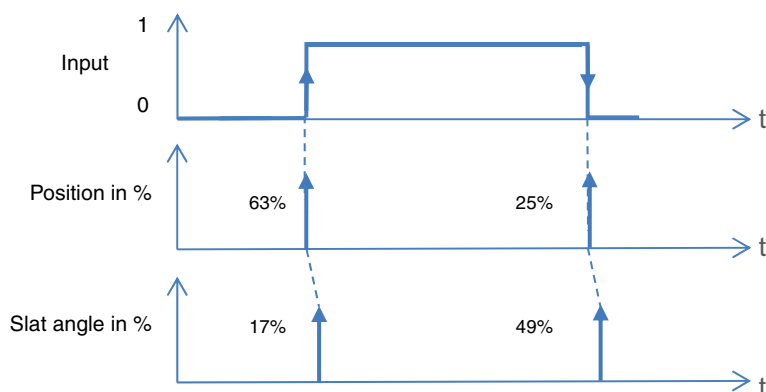
Note: This parameter is only visible when the parameter **Blind function** has the value: **Position/Slat angle (0-100%)**.

Parameter	Description	Value
Position (0-100%) on release	This parameter defines the blind position to apply at release.	0*...100

Note: This parameter is only visible when the parameter **Blind function** has the value: **Position/Slat angle (0-100%)**.

Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).

- Communication objects:
- [25 - Input 1 - Position in % \(1 Byte – 5.001 DPT_Scaling\)](#)
 - [26 - Input 1 - Slat angle in % \(1 Byte – 5.001 DPT_Scaling\)](#)
 - [33 - Input 2 - Position in % \(1 Byte – 5.001 DPT_Scaling\)](#)
 - [34 - Input 2 - Slat angle in % \(1 Byte – 5.001 DPT_Scaling\)](#)



Note: The value of the object **Position in %** is issued before the object value **Slat angle in %** so that the output module can position the blind before tilting it.

* Default value

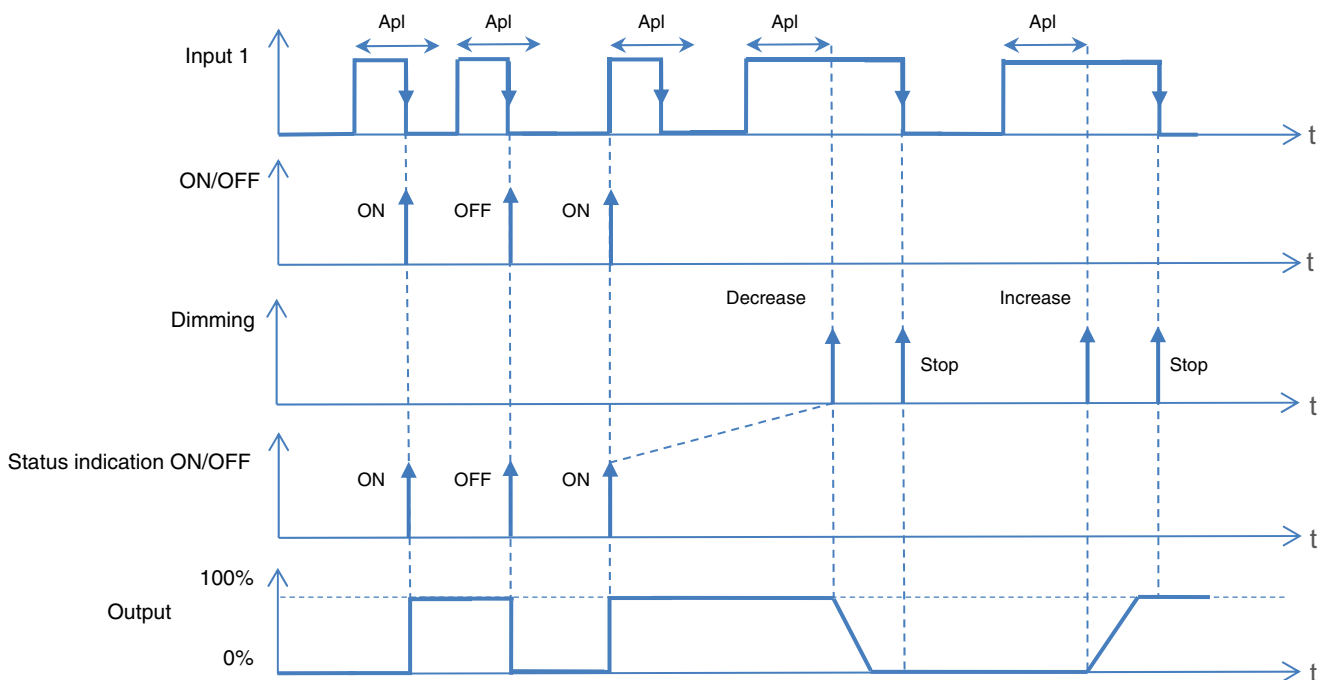
3.1.5.5 Dimming

Channel function	Dimming
Dimming function	Increase/decrease
Function by press	<input checked="" type="radio"/> Increase <input type="radio"/> Decrease

Parameter	Description	Value
Dimming function	<p>The dimming command operates:</p> <p>Using the input contact configured to increase or decrease (Dimming command on 2 buttons).</p> <p>Using the input contact configured to increase or decrease (Dimming command on 1 button).</p> <p>According to a brightness value in % on pressing and releasing the input contact.</p>	<p>Increase/decrease*</p> <p>Increase/decrease Toggle switch</p> <p>Brightness value</p>

- Increase/decrease Toggle switch

This function enables the objects **ON/OFF**, **Dimming** and **ON/OFF status indication** to be issued according to 2 types of event. These 2 events correspond to a short press enabling the ON/OFF command or long press enabling the dimming command. This function corresponds to the dimming command on 1 button.



Apl: Long key-press

- Communication objects:
- 20 - Input 1 - Status indication ON/OFF** (1 Bit – 1.001 DPT_Switch)
 - 21 - Input 1 - ON/OFF** (1 Bit – 1.001 DPT_Switch)
 - 24 - Input 1 - Dimming** (4 Bits – 3.007 DPT_Control_Dimming)
 - 28 - Input 2 - Status indication ON/OFF** (1 Bit – 1.001 DPT_Switch)
 - 29 - Input 2 - ON/OFF** (1 Bit – 1.001 DPT_Switch)
 - 32 - Input 2 - Dimming** (4 Bits – 3.007 DPT_Control_Dimming)

* Default value

- Increase/decrease

This function enables the objects **ON/OFF** and **Dimming** to be issued according to 2 types of events. These 2 events correspond to a short press enabling the ON/OFF command or long press enabling the dimming command. Additional parameters defined the dimming direction.

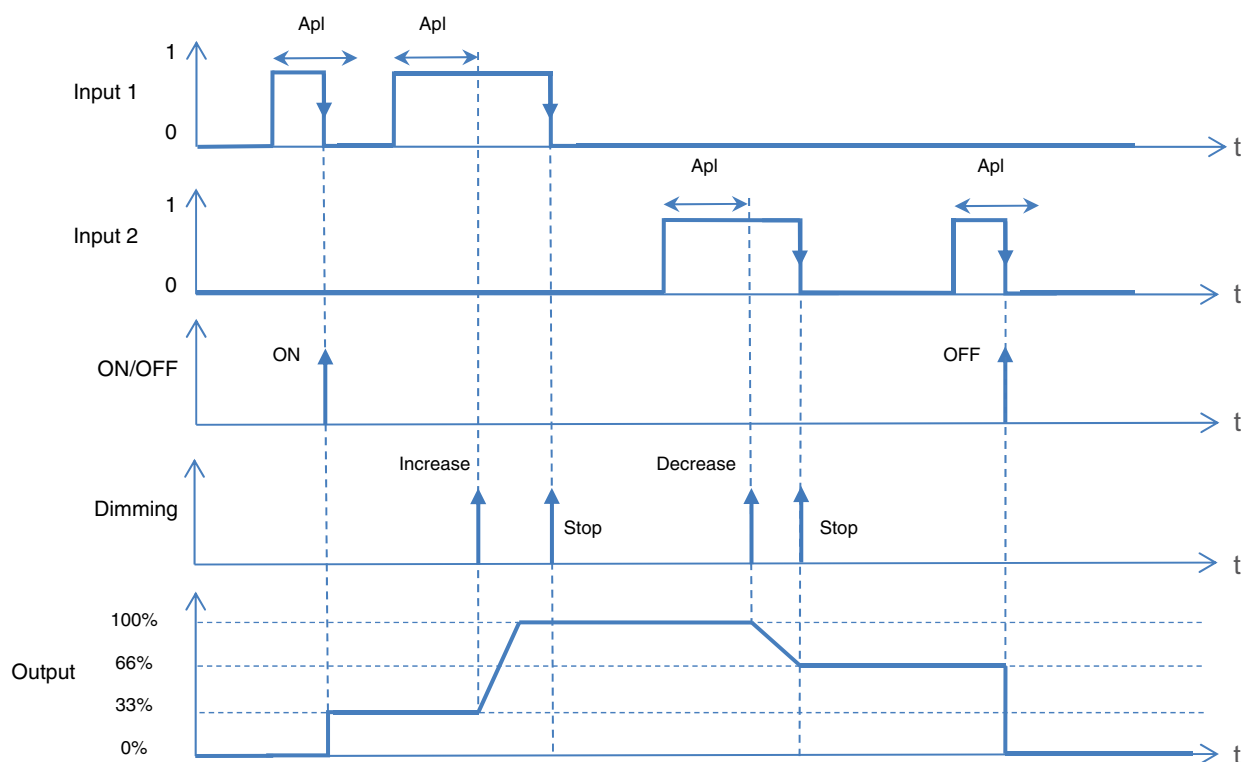
This function corresponds to the dimming command on 2 buttons.

Parameter	Description	Value
Function by press	This parameter defines the dimming direction corresponding to the input.	Increase* Decrease

*Note: This parameter is only visible when the parameter **Dimming function** has the value: **Increase/decrease**.*

- Communication objects:
- [21 - Input 1 - ON/OFF](#) (1 Bit – 1.001 DPT_Switch)
 - [24 - Input 1 - Dimming](#) (4 Bits – 3.007 DPT_Control_Dimming)
 - [29 - Input 2 - ON/OFF](#) (1 Bit – 1.001 DPT_Switch)
 - [32 - Input 2 - Dimming](#) (4 Bits – 3.007 DPT_Control_Dimming)

Example: Input 1: Increase
 Input 2: Decrease



Apl: Long key-press

* Default value

- Brightness value

Parameter	Description	Value
Using mode	The dimming command operates according to a brightness value in %: On pressing and releasing the input contact. On only pressing the input contact. On only releasing the input contact.	Function by press/ release* Function by press Function on release

Note: This parameter is only visible when the parameter **Dimming function** has the value: **Brightness value**.

Parameter	Description	Value
Brightness value by press	This parameter defines the brightness value to apply during the press.	0...100*

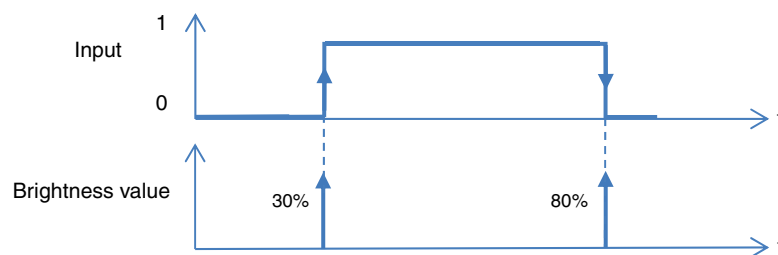
Note: This parameter is only visible when the parameter **Dimming function** has the value: **Brightness value**.

Parameter	Description	Value
Brightness value at release	This parameter defines the brightness value to apply at release.	0*...100

Note: This parameter is only visible when the parameter **Dimming function** has the value: **Brightness value**.

Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).

- Communication objects:
- [25 - Input 1 - Brightness value \(1 Byte – 5.001 DPT_Scaling\)](#)
 - [33 - Input 2 - Brightness value \(1 Byte – 5.001 DPT_Scaling\)](#)



* Default value

3.1.5.6 Heating

Channel function	Heating
Heating function	Setpoint selection
Using mode	Function by press/release
Setpoint by press	Comfort
Setpoint on release	Night setpoint
Inverted	<input type="checkbox"/>

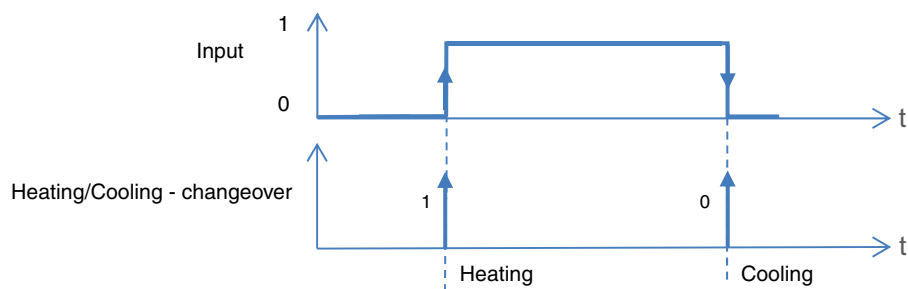
Parameter	Description	Value
Heating function	The heating command operates according to a heating instruction on pressing and releasing the input contact. Using the input contact configured in heating or cooling mode. By successive presses according to an instruction value in °C.	Setpoint selection* Heating/Cooling Override setpoint

- Heating/Cooling

This function enables the object (Heating/cooling-changeover) to be issued on the KNX bus.

Communication objects: [21 - Input 1 - Heating/Cooling - changeover \(1 Bit – 1.008 DPT_UpDown\)](#)
[29 - Input 2 - Heating/Cooling - changeover \(1 Bit – 1.008 DPT_UpDown\)](#)

*Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).*



* Default value

- Setpoint selection

This function enables the object **Instruction selection** to be issued according to 2 types of event. These 2 events correspond to the open or closed status of the input contact. Extra parameters define the heating instructions for 2 events.

Parameter	Description	Value
Using mode	The heating command operates according to a heating instruction: On pressing and releasing the input contact. On only pressing the input contact. On only releasing the input contact.	Function by press/release* Function by press Function on release

*Note: This parameter is only visible when the parameter **Heating function** has the value: **Setpoint selection**.*

Parameter	Description	Value
Setpoint by press	This parameter defines the heating instruction to apply during the press.	Auto Comfort* Standby Night setpoint Frost protection

Parameter	Description	Value
Threshold at release	This parameter defines the heating instruction to apply at release.	Auto Comfort Standby Night setpoint* Frost protection

*Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).*

Communication objects: [25 - Input 1 - Setpoint selection](#) (1 Byte – 20.102 DPT_HVAC mode)
 [33 - Input 2 - Setpoint selection](#) (1 Byte – 20.102 DPT_HVAC mode)

3.1.5.7 Priority

Channel function	Priority ▼
Using mode	<input checked="" type="radio"/> Priority ON/down/comfort <input type="radio"/> Priority OFF/up/frost protection
Inverted	<input type="checkbox"/>

* Default value

The Priority function is used to force the output into a defined state.

The priority action depends on the type of application commanded: Lighting ON/OFF, Rolling shutter, Heating.

This function the priority or priority cancellation controls to be issued.

No other command is taken into account when the Priority is active. Only priority or alarm cancellation commands will be taken into account.

Parameter	Description	Value
Using mode	This parameter defines the priority type to apply during the press.	Priority ON/down/comfort* Priority OFF/up/frost protection

*Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).*

Communication objects: [23 - Input 1 - Priority \(2 Bit – 2.002 DPT_Bool_Control\)](#)

[31 - Input 2 - Priority \(2 Bit – 2.002 DPT_Bool_Control\)](#)

3.1.5.8 Scene

This function enables scenes to be saved or selected. These concern different types of output (lighting, blind, shutter, heating) to create ambiances or scenarios (leaving scenario, reading ambiance etc.).

Parameter	Description	Value
Scene function	The scene command operates: According to a scene number on pressing the input contact. According to a scene number on pressing and releasing the input contact.	Scene 1-64* Switch for scene

- Scene 1-64

Parameter	Description	Value
Scene number (1-64) by press	This parameter defines the scene number to apply during the press.	1*...64

*Note: This parameter is only visible when the parameter **Scene function** has the value: Scene 1-64.*

Communication objects: [25 - Input 1 - Scene \(1 Byte – 17.001 DPT_SceneNumber\)](#)

[33 - Input 2 - Scene \(1 Byte – 17.001 DPT_SceneNumber\)](#)

* Default value

- Switch for scene

Parameter	Description	Value
Using mode	The scene number is sent On pressing and releasing the input contact. On only pressing the input contact. On only releasing the input contact.	Function by press/ release* Function by press Function on release

Note: This parameter is only visible when the parameter **Scene function** has the value: **Switch for scene**.

Parameter	Description	Value
Scene number (1-64) by press	This parameter defines the scene number to apply during the press.	1*...64

Parameter	Description	Value
Scene number (1-64) on release	This parameter defines the scene number to apply at release.	1...2*...64

Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).

Communication objects: [25 - Input 1 - Scene](#) (1 Byte – 17.001 DPT_SceneNumber)
 [33 - Input 2 - Scene](#) (1 Byte – 17.001 DPT_SceneNumber)

3.1.5.9 Alarm

The Alarm function issues alarms on a cyclical basis to the bus from automations (anemometer, rain detector, twilight switch etc.).

The cycle time is set to 10 minutes.

Channel function

Alarm type

Inverted

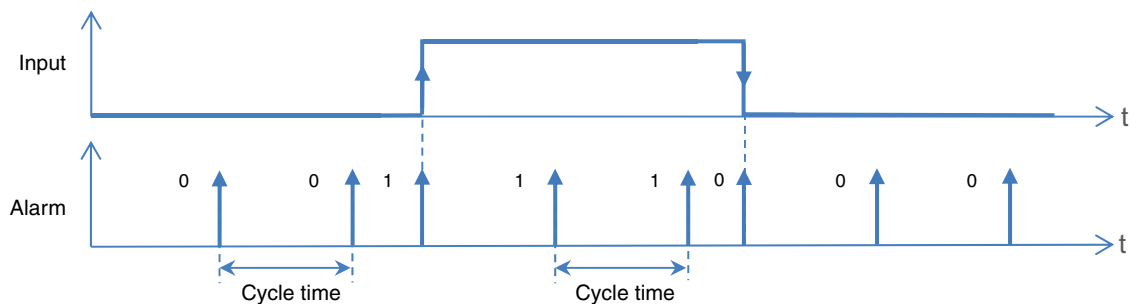
Parameter	Description	Value
Alarm type	This parameter defines the type of alarm to be issued on the KNX bus.	Alarm 1* Alarm 2 Alarm 3

* Default value

- Communication objects:
- 21 - Input 1 - Alarm 1** (1 Bit – 1.005 DPT_Alarm)
 - 29 - Input 2 - Alarm 1** (1 Bit – 1.005 DPT_Alarm)

 - 21 - Input 1 - Alarm 2** (1 Bit – 1.005 DPT_Alarm)
 - 29 - Input 2 - Alarm 2** (1 Bit – 1.005 DPT_Alarm)

 - 21 - Input 1 - Alarm 3** (1 Bit – 1.005 DPT_Alarm)
 - 29 - Input 2 - Alarm 3** (1 Bit – 1.005 DPT_Alarm)



3.1.5.10 Automatic control deactivation

The Automatic control function enables an output to be controlled in parallel to the standard control. An additional command object (Automatic control deactivation) is used to activate or deactivate Automatic control.

*Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).*

- Communication objects:
- 21 - Input 1 - Automatic control deactivation** (1 Bit – 1.003 DPT_Enable)
 - 29 - Input 2 - Automatic control deactivation** (1 Bit – 1.003 DPT_Enable)

3.1.5.11 Load shedding

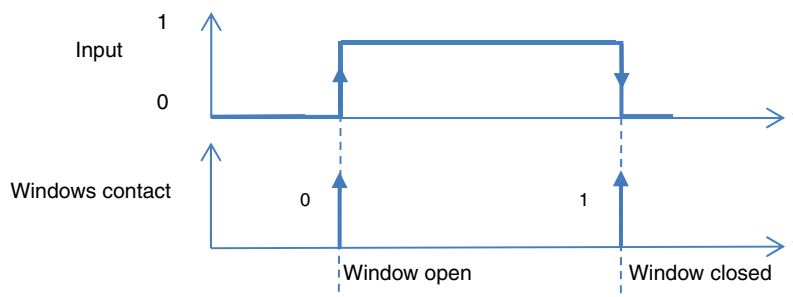
The Load shedding function is used to force an output to OFF. Load shedding is activated by receipt of a 1-byte command. At the end of load shedding, the output is switched to the theoretical status without Load shedding (memorisation).

*Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).*

- Communication objects:
- 21 - Input 1 - Load shedding** (1 Bit – 1.002 DPT_Bool)
 - 29 - Input 2 - Load shedding** (1 Bit – 1.002 DPT_Bool)

3.1.5.12 Windows contact

The Window contact function enables the window opening/closing information to be sent to the KNX bus.

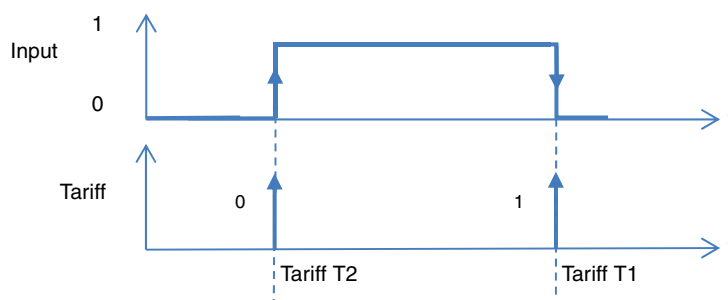


*Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).*

- Communication objects:
- 21 - Input 1 - Windows contact** (1 Bit – 1.019 DPT_window/door)
 - 29 - Input 2 - Windows contact** (1 Bit – 1.019 DPT_window/door)

3.1.5.13 Tariff

The Tariff function enables T1/T2 tariff information to be sent to the KNX bus.



*Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).*

- Communication objects:
- 21 - Input 1 - Tariff** (1 Bit – 1.002 DPT_Bool)
 - 29 - Input 2 - Tariff** (1 Bit – 1.002 DPT_Bool)

3.2 Communication objects

3.2.1 Output communication objects ON/OFF

	Number	Name	Function of the object	Length	C	R	W	T
	0	Output 1	ON/OFF	1 bit	C	R	W	-
	1	Output 1	Status indication ON/OFF	1 bit	C	R	-	T
	2	Output 1	Timer	1 bit	C	R	W	-
	3	Output 1	Priority	2 bit	C	R	W	-
	4	Output 1	Status indication priority	1 bit	C	R	-	T
	5	Output 1	Scene	1 byte	C	R	W	-
	6	Output 1	ON/OFF automatic control	1 bit	C	R	W	-
	7	Output 1	Automatic control deactivation	1 bit	C	R	W	-
	8	Output 1	Automatic control deactivation status	1 bit	C	R	-	T
	9	Output 1	Load shedding	1 bit	C	R	W	-
	10	Output 2	ON/OFF	1 bit	C	R	W	-
	11	Output 2	Status indication ON/OFF	1 bit	C	R	-	T
	12	Output 2	Timer	1 bit	C	R	W	-
	13	Output 2	Priority	2 bit	C	R	W	-
	14	Output 2	Status indication priority	1 bit	C	R	-	T
	15	Output 2	Scene	1 byte	C	R	W	-
	16	Output 2	ON/OFF automatic control	1 bit	C	R	W	-
	17	Output 2	Automatic control deactivation	1 bit	C	R	W	-
	18	Output 2	Automatic control deactivation status	1 bit	C	R	-	T
	19	Output 2	Load shedding	1 bit	C	R	W	-

3.2.1.1 ON/OFF

No.	Name	Function of the object	Data type	Flags
0, 10	Output x	ON/OFF	1 bit - 1.001 DPT_Switch	C, R, W
<p>These objects are always activated. They enable switching of the output contact in accordance with the value that is sent via the KNX bus.</p> <p>Normally open:</p> <ul style="list-style-type: none"> - On input of an OFF command, the output relay contact opens. - On input of an ON command, the output relay contact closes. 				

3.2.1.2 Status indication

No.	Name	Function of the object	Data type	Flags
1, 11	Output x	Status indication ON/OFF	1 bit - 1.001 DPT_Switch	C, R, T

These objects are always activated.
This object allows the status of the output contact to be sent from the device over the KNX bus.

Object value:

- If the output relay is open, a telegram with logic value 0 is sent on the KNX bus.
- If the output relay is closed, a telegram with logic value 1 is sent on the KNX bus.

This object is sent when there is a status change.

3.2.1.3 Timer

No.	Name	Function of the object	Data type	Flags
2, 12	Output x	Timer	1 bit - 1.010 DPT_Start	C, R, W

This object is activated when the **Timer** parameter is active.
This object is used to activate the Timer function of the device via the KNX bus.

Object value:

- If a rising edge (0 to 1) arrives at this object, the output switches for a configurable period.
- If a falling edge (1 to 0) arrives at this object, the output remains in its current state.

Note: The timer duration can be interrupted by a long press on the button controlling the timer.
Note: When a start command is received during the timer, the timer duration is reset.

For further information, see: [Timer](#).

3.2.1.4 Priority

No.	Name	Function of the object	Data type	Flags
3, 13	Output x	Priority	2 bit - 2.002 DPT_Bool_Control	C, R, W

This object is activated if the **Priority** parameter is active.
The status of the output contact is determined directly by this object.

Details on the format of the object are given below.

Telegram received by the priority operation object			Output behaviour
Hexadecimal Value	Binary Value		
	Bit 1 (MSB)	Bit 0 (LSB)	
00	0	0	End of the priority
01	0	1	End of the priority
02	1	0	Priority OFF
03	1	1	Priority ON

The first bit of this object (Bit 0) determines the status of the output contact, which should be priority controlled. The second bit activates or deactivates the Priority.

For further information, see: [Priority](#).

No.	Name	Function of the object	Data type	Flags
4, 14	Output x	Status indication priority	1 bit - 1.011 DPT_State	C, R, T
<p>This object is activated if the Priority parameter is active. This object allows the status of the Priority to be sent from the device on the KNX bus.</p> <p>Object value: 0 = Not forced, 1 = Forced:</p> <ul style="list-style-type: none"> - If Priority is deactivated, a telegram is sent with logic value 0. - If Priority is activated, a telegram is sent with logic value 1. <p>This object is sent when there is a status change. For further information, see: Priority.</p>				

3.2.1.5 Scene

No.	Name	Function of the object	Data type	Flags																
5, 15	Output x	Scene	1 byte - 18.001 DPT_SceneNumber	C, R, W																
<p>This object is activated when the Scene parameter is active. This object is used to recall or save a scene.</p> <p>Details on the format of the object are given below.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">7</td> <td style="text-align: center;">6</td> <td style="text-align: center;">5</td> <td style="text-align: center;">4</td> <td style="text-align: center;">3</td> <td style="text-align: center;">2</td> <td style="text-align: center;">1</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="text-align: center;">Learning</td> <td style="text-align: center;">Not used</td> <td colspan="6" style="text-align: center;">Scene number</td> </tr> </table> <p>Bit 7: 0: The scene is called / 1: The scene is saved. Bit 6: Not used. Bit 5 to Bit 0: Scene numbers from 0 (Scene 1) to 63 (Scene 64).</p> <p>For further information, see: Scene.</p>					7	6	5	4	3	2	1	0	Learning	Not used	Scene number					
7	6	5	4	3	2	1	0													
Learning	Not used	Scene number																		

3.2.1.6 ON/OFF automatic control

No.	Name	Function of the object	Data type	Flags
6, 16	Output x	ON/OFF automatic control	1 bit - 1.001 DPT_Switch	C, R, W
<p>This object is activated when the Automatic control parameter is active. They enable switching of the output contact in accordance with the value that is sent via the KNX bus.</p> <p>Normally open:</p> <ul style="list-style-type: none"> - On input of an OFF command, the output relay contact opens. - On input of an ON command, the output relay contact closes. <p>For further information, see: Automatic control.</p>				

3.2.1.7 Automatic control deactivation

No.	Name	Function of the object	Data type	Flags
7, 17	Output x	Automatic control deactivation	1 bit - 1.003 DPT_Enable	C, R, W
<p>This object is activated when the Automatic control deactivation parameter is active. This object is used to activate the automatic control function.</p> <p>Object value:</p> <ul style="list-style-type: none"> - If the object receives the value 0, the automatic control function is inactive. - If the object receives the value 1, the automatic control function is active. <p>For further information, see: Automatic control.</p>				

No.	Name	Function of the object	Data type	Flags
8, 18	Output x	Automatic control deactivation status	1 bit - 1.003 DPT_Enable	C, R, T
<p>This object is activated when the Automatic control deactivation parameter is active. This object is used to send the status of the Automatic control deactivation function of the device on the KNX bus.</p> <p>Object value:</p> <ul style="list-style-type: none"> - If the Automatic control deactivation function is deactivated, a telegram with a logical value 0 is sent. - If the Automatic control deactivation function is activated, a telegram with a logical value 1 is sent. <p>This object is sent when there is a status change. For further information, see: Automatic control.</p>				

3.2.1.8 Load shedding

No.	Name	Function of the object	Data type	Flags
9, 19	Output x	Load shedding	1 bit - 1.002 DPT_Bool	C, R, W
<p>This object is activated when the Load shedding parameter is active. This object is used to force an output to OFF.</p> <p>Object value:</p> <ul style="list-style-type: none"> - If the object receives the value 0, the output remains unchanged. - If the object receives the value 1, the output is forced to OFF. <p>For further information, see: Load shedding.</p>				

3.2.2 Communication objects for each shutter/blind output

	Number	Name	Function of the object	Length	C	R	W	T
	0	Outputs 1-2	Up/down	1 bit	C	R	W	-
	1	Outputs 1-2	Step/stop (short press)	1 bit	C	R	W	-
	2	Outputs 1-2	Stop (Short press)	1 bit	C	R	W	-
	3	Outputs 1-2	Position in %	1 byte	C	R	W	-
	4	Outputs 1-2	Slat angle in %	1 byte	C	R	W	-
	5	Outputs 1-2	Status indication position in %	1 byte	C	R	-	T
	6	Outputs 1-2	Slat angle indication in %	1 byte	C	R	-	T
	7	Outputs 1-2	Upper position reached	1 bit	C	R	-	T
	8	Outputs 1-2	Lower position reached	1 bit	C	R	-	T
	9	Outputs 1-2	Priority	2 bit	C	R	W	-
	10	Outputs 1-2	Status indication priority	1 bit	C	R	-	T
	11	Outputs 1-2	Scene	1 byte	C	R	W	-
	12	Outputs 1-2	Alarm 1	1 bit	C	R	W	-
	13	Outputs 1-2	Alarm 2	1 bit	C	R	W	-
	14	Outputs 1-2	Alarm 3	1 bit	C	R	W	-
	15	Outputs 1-2	Position in % automatic control	1 byte	C	R	W	-
	16	Outputs 1-2	Slat angle in % automatic control	1 byte	C	R	W	-
	17	Outputs 1-2	Automatic control deactivation	1 bit	C	R	W	-
	18	Outputs 1-2	Automatic control deactivation status	1 bit	C	R	-	T

3.2.2.1 Control

No.	Name	Function of the object	Data type	Flags
0	Output x-y	Up/down	1 bit - 1.008 DPT_UpDown	C, R, W

These objects are always activated. It is used to control the shutter or blind in connection with the value that is sent on the KNX bus.

Object value:

- If the object receives value 0, the shutter or blind moves to the upper position.
- If the object receives value 1, the shutter or blind moves to the lower position.

For further information, see: [Function selection](#).

No.	Name	Function of the object	Data type	Flags
1	Output x-y	Step/stop (short press)	1 bit - 1.007 DPT_Step	C, R, W
<p>This object is activated when the Closing type has the value Shutter and blind. It is used to stop the movement of the shutter or blind or the tilting of the slats according to the value that is sent on the KNX bus.</p> <p>Object value:</p> <ul style="list-style-type: none"> - Regardless of which value (0 or 1) is sent to this object, the movement of the shutter or blind will be stopped. - If the object receives the value 0, the slats will be opened by one slat step. - If the object receives the value 1, the slats will be closed by one slat step. <p>For further information, see: Function selection.</p>				

No.	Name	Function of the object	Data type	Flags
2	Output x-y	Stop (Short press)	1 bit - 1.017 DPT_Trigger	C, R, W
<p>These objects are always activated. It is only used to stop the vertical movements of the shutter or blind according to the value sent on the KNX bus.</p> <p>Object value:</p> <ul style="list-style-type: none"> - Regardless of which value (0 or 1) is sent to this object, the movement of the shutter or blind will be stopped. <p>For further information, see: Function selection.</p>				

No.	Name	Function of the object	Data type	Flags
3	Output x-y	Position in %	1 byte - 5.001 DPT_Scaling	C, R, W
<p>These objects are always activated. It is used for positioning the shutter or blind at the desired height, in response to the value sent on the KNX bus.</p> <p>On the blind, the slats have the same tilt after reaching the same position as they had before the movement. If a telegram is received during the movement of the shutter or blind, the shutter will be positioned at the desired height after the originally requested position has been reached.</p> <p>Object value: 0 to 255</p> <ul style="list-style-type: none"> - 0 (0%): Upper position. - 255 (100%): Lower position. <p>For further information, see: Function selection.</p>				

No.	Name	Function of the object	Data type	Flags
4	Output x-y	Slat angle in %	1 byte - 5.001 DPT_Scaling	C, R, W
<p>This object is activated when the Closing type has the value Shutter and blind. It is used to position the shutter or blind in response to the value that is sent on the KNX bus.</p> <p>Object value: 0 to 255</p> <ul style="list-style-type: none"> - 0 (0%): Slats open. - 255 (100%): Slats closed. <p>For further information, see: Function selection.</p>				

3.2.2.2 Status indication

No.	Name	Function of the object	Data type	Flags
5	Output x-y	Status indication position in %	1 byte - 5.001 DPT_Scaling	C, R, T
<p>This object is activated when the Position status parameter is active. This object allows the status of the position to be sent over the KNX bus. It is sent after the position of the blind or shutter has been achieved.</p> <p>Object value: 0 to 255</p> <ul style="list-style-type: none"> - 0 (0%): Upper position. - 255 (100%): Lower position. <p>This object is sent when there is a status change. For further information, see: Status indication.</p>				

No.	Name	Function of the object	Data type	Flags
6	Output x-y	Slat angle indication in %	1 byte - 5.001 DPT_Scaling	C, R, T
<p>This object is activated when the Slat angle status parameter is active. This object allows the status of the slat angle to be sent over the KNX bus. It is sent after the tilting of the blind has been achieved.</p> <p>Object value: 0 to 255</p> <ul style="list-style-type: none"> - 0 (0%): Slats open. - 255 (100%): Slats closed. <p>This object is sent when there is a status change. For further information, see: Status indication.</p>				

No.	Name	Function of the object	Data type	Flags
7	Output x-y	Upper position reached	1 bit - 1.002 DPT_Bool	C, R, T
<p>This object is activated when the Upper position reached parameter is active. This object is used to send the status of the upper position of the shutter or blind over the KNX bus.</p> <p>Object value:</p> <p>0 = Position not reached, 1 = Position reached</p> <ul style="list-style-type: none"> - If the upper position of the shutter or blind is not reached, a telegram is sent with a logic value of 0 on the KNX bus. - If the upper position of the shutter or blind is reached, a telegram is sent with a logic value of 1 on the KNX bus. <p>This object is sent when there is a status change. For further information, see: Status indication.</p>				

No.	Name	Function of the object	Data type	Flags
8	Output x-y	Lower position reached	1 bit - 1.002 DPT_Bool	C, R, T
<p>This object is activated when the Lower position reached parameter is active. This object is used to send the status of the lower position of the shutter or blind over the KNX bus.</p> <p>Object value: 0 = Position not reached, 1 = Position reached</p> <ul style="list-style-type: none"> - If the lower position of the shutter or blind is not reached, a telegram is sent with a logic value of 0 on the KNX bus. - If the lower position of the shutter or blind is reached, a telegram is sent with a logic value of 1 on the KNX bus. <p>This object is sent when there is a status change. For further information, see: Status indication.</p>				

3.2.2.3 Priority

No.	Name	Function of the object	Data type	Flags																											
9	Output x-y	Priority	2 bit - 2.002 DPT_Bool_Control	C, R, W																											
<p>This object is activated if the Priority parameter is active. The status of the output contact is determined directly by this object.</p> <p>Details on the format of the object are given below.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="3">Telegram received by the priority operation object</th> <th rowspan="2">Output behaviour</th> </tr> <tr> <th rowspan="2">Hexadecimal Value</th> <th colspan="2">Binary Value</th> </tr> <tr> <th></th> <th>Bit 1 (MSB)</th> <th>Bit 0 (LSB)</th> <th></th> </tr> </thead> <tbody> <tr> <td>00</td> <td>0</td> <td>0</td> <td>End of the priority</td> </tr> <tr> <td>01</td> <td>0</td> <td>1</td> <td>End of the priority</td> </tr> <tr> <td>02</td> <td>1</td> <td>0</td> <td>Priority up</td> </tr> <tr> <td>03</td> <td>1</td> <td>1</td> <td>Priority down</td> </tr> </tbody> </table> <p>The first bit of this object (Bit 0) determines the status of the output contact, which should be priority controlled. The second bit activates or deactivates the Priority.</p> <p>For further information, see: Priority.</p>					Telegram received by the priority operation object			Output behaviour	Hexadecimal Value	Binary Value			Bit 1 (MSB)	Bit 0 (LSB)		00	0	0	End of the priority	01	0	1	End of the priority	02	1	0	Priority up	03	1	1	Priority down
Telegram received by the priority operation object			Output behaviour																												
Hexadecimal Value	Binary Value																														
		Bit 1 (MSB)	Bit 0 (LSB)																												
00	0	0	End of the priority																												
01	0	1	End of the priority																												
02	1	0	Priority up																												
03	1	1	Priority down																												

No.	Name	Function of the object	Data type	Flags
10	Output x-y	Status indication priority	1 bit - 1.011 DPT_State	C, R, T
<p>This object is activated if the Priority parameter is active. This object allows the status of the Priority to be sent from the device on the KNX bus.</p> <p>Object value: 0 = Not forced, 1 = Forced</p> <ul style="list-style-type: none"> - If Priority is deactivated, a telegram is sent with logic value 0. - If Priority is activated, a telegram is sent with logic value 1. <p>This object is sent when there is a status change. For further information, see: Priority.</p>				

3.2.2.4 Scene

No.	Name	Function of the object	Data type	Flags
11	Output x-y	Scene	1 byte - 18.001 DPT_SceneNumber	C, R, W

This object is activated when the **Scene** parameter is active.
This object is used to recall or save a scene.

Details on the format of the object are given below.

7	6	5	4	3	2	1	0
Learning		Not used		Scene number			

Bit 7: 0: The scene is called / 1: The scene is saved.

Bit 6: Not used.

Bit 5 to Bit 0: Scene numbers from 0 (Scene 1) to 63 (Scene 64).

For further information, see: [Scene](#).

3.2.2.5 Alarm

No.	Name	Function of the object	Data type	Flags
12	Output x-y	Alarm 1	1 bit - 1.005 DPT_Alarm	C, R, W

This object is only visible if the **Alarm** parameter has the following value: **Alarm 1** or Alarm 1 > Alarm 2 or Alarm 1 > Alarm 2 > Alarm 3.

This object is used to switch the output back to the predefined settings.

Object value:

- If the object receives the value 0, the alarm is not activated.
- -If the object receives the value 1, the alarm is activated.

For further information, see: [Alarm](#).

No.	Name	Function of the object	Data type	Flags
13	Output x-y	Alarm 2	1 bit - 1.005 DPT_Alarm	C, R, W

This object is only visible if the **Alarm** parameter has the following value: Alarm 1 > Alarm 2 or Alarm 1 > Alarm 2 > Alarm 3.
This object is used to switch the output back to the predefined settings.

Object value:

- If the object receives the value 0, the alarm is not activated.
- -If the object receives the value 1, the alarm is activated.

For further information, see: [Alarm](#).

No.	Name	Function of the object	Data type	Flags
14	Output x-y	Alarm 3	1 bit - 1.005 DPT_Alarm	C, R, W

This object is only visible if the **Alarm** parameter has the following value: Alarm 1 > Alarm 2 > Alarm 3.
This object is used to switch the output back to the predefined settings.

Object value:

- If the object receives the value 0, the alarm is not activated.
- -If the object receives the value 1, the alarm is activated.

For further information, see: [Alarm](#).

3.2.2.6 Position in % automatic control

No.	Name	Function of the object	Data type	Flags
15	Output x-y	Position in % automatic control	1 byte - 5.001 DPT_Scaling	C, R, W
<p>This object is activated when the Automatic control parameter is active. It is used for positioning the shutter or blind at the desired height, in response to the value sent on the KNX bus.</p> <p>Object value: 0 to 255</p> <ul style="list-style-type: none"> - 0 (0%): Upper position. - 255 (100%): Lower position. <p>For further information, see: Automatic control.</p>				

3.2.2.7 Slat angle in % automatic control

No.	Name	Function of the object	Data type	Flags
16	Output x-y	Slat angle in % automatic control	1 byte - 5.001 DPT_Scaling	C, R, W
<p>This object is activated when the Closing type has the value Shutter and blind and when the Automatic control parameter is active. It is used to position the shutter or blind in response to the value that is sent on the KNX bus.</p> <p>Object value: 0 to 255</p> <ul style="list-style-type: none"> - 0 (0%) : Slats open. - 255 (100%): Slats closed. <p>For further information, see: Automatic control.</p>				

3.2.2.8 Automatic control deactivation

No.	Name	Function of the object	Data type	Flags
17, 37, 57, 77, 97	Output x-y	Automatic control deactivation	1 bit - 1.003 DPT_Enable	C, R, W
<p>This object is activated when the Automatic control deactivation parameter is active. This object is used to activate the automatic control function.</p> <p>Object value:</p> <ul style="list-style-type: none"> - If the object receives the value 0, the automatic control function is inactive. - If the object receives the value 1, the automatic control function is active. <p>For further information, see: Automatic control.</p>				

No.	Name	Function of the object	Data type	Flags
18, 38, 58, 78, 98	Output x-y	Automatic control deactivation status	1 bit - 1.003 DPT_Enable	C, R, T
<p>This object is activated when the Automatic control deactivation parameter is active. This object is used to send the status of the Automatic control deactivation function of the device on the KNX bus.</p> <p>Object value:</p> <ul style="list-style-type: none"> - If the Automatic control deactivation function is deactivated, a telegram with a logical value 0 is sent. - If the Automatic control deactivation function is activated, a telegram with a logical value 1 is sent. <p>This object is sent when there is a status change. For further information, see: Automatic control.</p>				

3.2.3 Communication objects by input

Channel function		Number	Name	Function of the object	Length	C	R	W	T
Toggle switch		20	Input 1	Status indication ON/OFF	1 bit	C	R	W	-
		21	Input 1	ON/OFF	1 bit	C	R	-	T
ON/OFF		21	Input 1	ON/OFF	1 bit	C	R	-	T
Timer		21	Input 1	Timer	1 bit	C	R	-	T
Shutter		21	Input 1	Up/down	1 bit	C	R	-	T
		22	Input 1	Stop (short press)	1 bit	C	R	-	T
		25	Input 1	Position in %	1 byte	C	R	-	T
Shutter/blind		21	Input 1	Up/down	1 bit	C	R	-	T
		22	Input 1	Step/stop (short press)	1 bit	C	R	-	T
		26	Input 1	Slat angle in %	1 byte	C	R	-	T
		25	Input 1	Position in %	1 byte	C	R	-	T
		26	Input 1	Slat angle in %	1 byte	C	R	-	T
Dimming		21	Input 1	ON/OFF	1 bit	C	R	-	T
		24	Input 1	Dimming	4 bit	C	R	-	T
		20	Input 1	Status indication ON/OFF	1 bit	C	R	W	-
		21	Input 1	ON/OFF	1 bit	C	R	-	T
		24	Input 1	Dimming	4 bit	C	R	-	T
		25	Input 1	Brightness value	1 byte	C	R	-	T
Heating		21	Input 1	Heating/Cooling - changeover	1 bit	C	R	-	T
		25	Input 1	Setpoint selection	1 byte	C	R	-	T
Priority		23	Input 1	Priority	2 bit	C	R	-	T
Scene		25	Input 1	Scene	1 byte	C	R	-	T
Alarm		21	Input 1	Alarm 1	1 bit	C	R	-	T
		21	Input 1	Alarm 2	1 bit	C	R	-	T
		21	Input 1	Alarm 3	1 bit	C	R	-	T
Automatic control deactivation		21	Input 1	Automatic control deactivation	1 bit	C	R	-	T
Load shedding		21	Input 1	Load shedding	1 bit	C	R	-	T
Windows contact		21	Input 1	Windows contact status	1 bit	C	R	-	T
Tariff		21	Input 1	Tariff	1 bit	C	R	-	T

Channel function		Number	Name	Function of the object	Length	C	R	W	T
Toggle switch		28	Input 2	Status indication ON/OFF	1 bit	C	R	W	-
		29	Input 2	ON/OFF	1 bit	C	R	-	T
ON/OFF		29	Input 2	ON/OFF	1 bit	C	R	-	T
Timer		29	Input 2	Timer	1 bit	C	R	-	T
Shutter		29	Input 2	Up/down	1 bit	C	R	-	T
		30	Input 2	Stop (short press)	1 bit	C	R	-	T
		33	Input 2	Position in %	1 byte	C	R	-	T
Shutter/blind		29	Input 2	Up/down	1 bit	C	R	-	T
		30	Input 2	Step/stop (short press)	1 bit	C	R	-	T
		34	Input 2	Slat angle in %	1 byte	C	R	-	T
		33	Input 2	Position in %	1 byte	C	R	-	T
		34	Input 2	Slat angle in %	1 byte	C	R	-	T
Dimming		29	Input 2	ON/OFF	1 bit	C	R	-	T
		32	Input 2	Dimming	4 bit	C	R	-	T
		28	Input 2	Status indication ON/OFF	1 bit	C	R	W	-
		29	Input 2	ON/OFF	1 bit	C	R	-	T
		32	Input 2	Dimming	4 bit	C	R	-	T
		33	Input 2	Brightness value	1 byte	C	R	-	T
Heating		29	Input 2	Heating/Cooling - changeover	1 bit	C	R	-	T
		33	Input 2	Setpoint selection	1 byte	C	R	-	T
Priority		23	Input 2	Priority	2 bit	C	R	-	T
Scene		33	Input 2	Scene	1 byte	C	R	-	T
Alarm		29	Input 2	Alarm 1	1 bit	C	R	-	T
		29	Input 2	Alarm 2	1 bit	C	R	-	T
		29	Input 2	Alarm 3	1 bit	C	R	-	T
Automatic control deactivation		29	Input 2	Automatic control deactivation	1 bit	C	R	-	T
Load shedding		29	Input 2	Load shedding	1 bit	C	R	-	T
Windows contact		29	Input 2	Windows contact status	1 bit	C	R	-	T
Tariff		29	Input 2	Tariff	1 bit	C	R	-	T

3.2.3.1 ON/OFF and toggle switch

No.	Name	Function of the object	Data type	Flags
21, 29	Input x	ON/OFF	1 bit - 1.001 DPT_Switch	C, R, T
<p>This object is activated when the parameter Channel function has the value Toggle switch, ON/OFF or Dimming.</p> <p>This object enables the ON/OFF control to be issued from the input contact on the KNX bus.</p> <ul style="list-style-type: none"> - To issue an OFF command, a telegram with a logical value 0 is issued. - To issue an ON command, a telegram with a logical value 1 is issued. <p>This object is sent when there is a status change.</p> <p><i>Note: By default, the input operates like an NO contact (Normally open). If the parameter Inverted is validated, the input operates like an NC contact (Normally closed).</i></p> <p>For further information, see: ON/OFF or Toggle switch.</p>				

No.	Name	Function of the object	Data type	Flags
20, 28	Input x	Status indication ON/OFF	1 bit - 1.001 DPT_Switch	C, R, W
<p>This object is activated when the parameter Channel function has the value Toggle switch or Dimming.</p> <p>This object enables the status of the ON/OFF output sent to the KNX bus to be received.</p> <ul style="list-style-type: none"> - If the object receives the value 0, the status indication changes to OFF. - If the object receives the value 1, the status indication changes to ON. <p><i>Note: By default, the input operates like an NO contact (Normally open). If the parameter Inverted is validated, the input operates like an NC contact (Normally closed).</i></p> <p>For further information, see: ON/OFF or Toggle switch.</p>				

3.2.3.2 Timer

No.	Name	Function of the object	Data type	Flags
21, 29	Input x	Timer	1 bit - 1.001 DPT_Switch	C, R, T
<p>This object is activated when the parameter Channel function has the value Timer.</p> <p>This object enables the Timer command to be issued from the input contact on the KNX bus.</p> <ul style="list-style-type: none"> - To issue a Timer command, a telegram with a logical value 1 is issued. <p>For further information, see: Timer.</p>				

3.2.3.3 Shutter and blind

No.	Name	Function of the object	Data type	Flags
21, 29	Input x	Up/down	1 bit - 1.008 DPT_UpDown	C, R, T
<p>This object is activated when the parameter Channel function has the value Shutter/blind.</p> <p>This object enables the UP/Down command to be sent from the input contact on the KNX bus.</p> <ul style="list-style-type: none"> - To issue an Up command, a telegram with a logical value 0 is issued. - To issue a Down command, a telegram with a logical value 1 is issued. <p>This object is sent when there is a status change.</p> <p><i>Note: By default, the input operates like an NO contact (Normally open). If the parameter Inverted is validated, the input operates like an NC contact (Normally closed).</i></p> <p>For further information, see: Shutter and blind.</p>				

No.	Name	Function of the object	Data type	Flags
22, 30	Input x	Stop (short press)	1 bit - 1.017 DPT_Trigger	C, R, T
<p>This object is activated when the parameter Channel function has the value Shutter/blind.</p> <p>This object enables the Stop command to be issued from the input contact on the KNX bus.</p> <ul style="list-style-type: none"> - To issue a Stop command, a telegram with a logical value 1 is issued. <p>This object is sent when there is a status change. For further information, see: Shutter and blind.</p>				

No.	Name	Function of the object	Data type	Flags
25, 33	Input x	Position in %	1 byte - 5.001 DPT_Scaling	C, R, T
<p>This object is activated when the parameter Channel function has the value Shutter/blind.</p> <p>This object enables the shutter or blind position command to be issued from the input contact on the KNX bus.</p> <p>Object value: 0 to 255</p> <ul style="list-style-type: none"> - 0 (0%): Upper position. - 255 (100%): Lower position. <p>This object is sent when there is a status change. For further information, see: Shutter and blind.</p>				

No.	Name	Function of the object	Data type	Flags
22, 30	Input x	Step/stop (short press)	1 bit - 1.007 DPT_Step	C, R, T
<p>This object is activated when the parameter Channel function has the value Shutter/blind.</p> <p>This object enables the Stop command to be issued from the input contact on the KNX bus.</p> <ul style="list-style-type: none"> - To issue a Stop command, a telegram with a logical value 0 or 1 is issued. - To issue a slat opening command, a telegram with a logical value 0 is issued. - To issue a slat closing command, a telegram with a logical value 1 is issued.. <p>This object is sent when there is a status change. For further information, see: Shutter and blind.</p>				

No.	Name	Function of the object	Data type	Flags
26, 34	Input x	Slat angle in %	1 byte - 5.001 DPT_Scaling	C, R, T
<p>This object is activated when the parameter Channel function has the value Shutter/blind.</p> <p>This object enables the slat angle command to be issued from the input contact on the KNX bus.</p> <p>Object value: 0 to 255</p> <ul style="list-style-type: none"> - 0 (0%): Slats open. - 255 (100%): Slats closed. <p>This object is sent when there is a status change. For further information, see: Shutter and blind.</p>				

3.2.3.4 Dimming

No.	Name	Function of the object	Data type	Flags
24, 32	Input x	Dimming	4 bit - 3.007 DPT_Control_Dimming	C, R, T

This object is activated when the parameter **Channel function** has the value **Dimming**.
This object enables the dimming command relating to the brightness to be issued from the input contact on the KNX bus.

Object value:

b3	b2	b1	b0
C	Steps		

Data fields	Description	Code
C	Increase or reduction in brightness	0: Decrease 1: Increase
Steps	Brightness between 0% and 100% divided into steps	0: Stop 1: 100% 2: 50% 3: 25% 4: 12% 5: 6% 6: 3% 7: 1%

This object is sent when there is a status change.
For further information, see: [Dimming](#).

No.	Name	Function of the object	Data type	Flags
25, 33	Input x	Brightness value	1 byte - 5.001 DPT_Scaling	C, R, T

This object is activated when the parameter **Channel function** has the value **Dimming**.
This object enables the brightness absolute dimming command to be issued from the input on the KNX bus.

Object value: 0 to 255: 0 = 0%, 255 = 100%.
Resolution: Approx. 0.4%.

This object is sent when there is a status change.
For further information, see: [Dimming](#).

3.2.3.5 Heating

No.	Name	Function of the object	Data type	Flags
21, 29	Input x	Heating/Cooling - changeover	1 bit - 1.100 DPT_Heating/cooling	C, R, T

This object is activated when the parameter **Channel function** has the value **Heating**.

This object enables the heating system operating mode to be issued from the input contact on the KNX bus.

- To issue the heating information, a telegram with a logical value 1 is issued.
- To issue the cooling information, a telegram with logical value 0 is issued.

This object is sent when there is a status change.

*Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).*

For further information, see: [Heating](#).

No.	Name	Function of the object	Data type	Flags
25, 33	Input x	Setpoint selection	1 byte - 20.102 DPT_HVAC mode	C, R, T

This object is activated when the parameter **Channel function** has the value **Heating**.

This object enables the heating mode to be issued from the input contact on the KNX bus.

Depending on the status of the input contact (open or closed), a heating mode is issued for each status.

Heating mode	Value
Auto	0
Comfort	1
Standby	2
Night setpoint	3
Frost protection	4

This object is sent when there is a status change.

For further information, see: [Heating](#).

3.2.3.6 Priority

No.	Name	Function of the object	Data type	Flags																										
23, 31	Input x	Priority	2 bit - 2.002 DPT_Bool_Control	C, R, T																										
<p>This object is activated when the parameter Channel function has the value Priority. This object enables the Priority command to be issued from the input contact on the KNX bus.</p> <p>Details on the format of the object are given below.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3">Telegram received by the priority operation object</th> <th rowspan="2">Output behaviour</th> </tr> <tr> <th rowspan="2">Hexadecimal Value</th> <th colspan="2">Binary Value</th> </tr> <tr> <th>Bit 1 (MSB)</th> <th>Bit 0 (LSB)</th> <th></th> </tr> </thead> <tbody> <tr> <td>00</td> <td>0</td> <td>0</td> <td>End of the priority</td> </tr> <tr> <td>01</td> <td>0</td> <td>1</td> <td>End of the priority</td> </tr> <tr> <td>02</td> <td>1</td> <td>0</td> <td>Priority OFF/up/frost protection</td> </tr> <tr> <td>03</td> <td>1</td> <td>1</td> <td>Priority ON/down/comfort</td> </tr> </tbody> </table> <p>The first bit of this object (Bit 0) determines the status of the output contact, which should be priority controlled. The second bit activates or deactivates the Priority.</p> <p><i>Note: By default, the input operates like an NO contact (Normally open). If the parameter Inverted is validated, the input operates like an NC contact (Normally closed).</i></p> <p>For further information, see: Priority.</p>					Telegram received by the priority operation object			Output behaviour	Hexadecimal Value	Binary Value		Bit 1 (MSB)	Bit 0 (LSB)		00	0	0	End of the priority	01	0	1	End of the priority	02	1	0	Priority OFF/up/frost protection	03	1	1	Priority ON/down/comfort
Telegram received by the priority operation object			Output behaviour																											
Hexadecimal Value	Binary Value																													
	Bit 1 (MSB)	Bit 0 (LSB)																												
00	0	0	End of the priority																											
01	0	1	End of the priority																											
02	1	0	Priority OFF/up/frost protection																											
03	1	1	Priority ON/down/comfort																											

3.2.3.7 Scene

No.	Name	Function of the object	Data type	Flags																
25, 33	Input x	Scene	1 byte - 17.001 DPT_SceneNumber	C, R, T																
<p>This object is activated when the parameter Channel function has the value Scene. This object enables the scene number to be issued from the input contact on the KNX bus. It also memorises a scene.</p> <p>Details on the format of the object are given below.</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 12.5%;">7</td> <td style="width: 12.5%;">6</td> <td style="width: 12.5%;">5</td> <td style="width: 12.5%;">4</td> <td style="width: 12.5%;">3</td> <td style="width: 12.5%;">2</td> <td style="width: 12.5%;">1</td> <td style="width: 12.5%;">0</td> </tr> <tr> <td>Learning</td> <td>Not used</td> <td colspan="6">Scene number</td> </tr> </table> <p>Bit 7: 0: The scene is called / 1: The scene is saved. Bit 6: Not used. Bit 5 to Bit 0: Scene numbers from 0 (Scene 1) to 63 (Scene 64).</p> <p>For further information, see: Scene.</p>					7	6	5	4	3	2	1	0	Learning	Not used	Scene number					
7	6	5	4	3	2	1	0													
Learning	Not used	Scene number																		

3.2.3.8 Alarm

No.	Name	Function of the object	Data type	Flags
21, 29	Input x	Alarm 1	1 bit - 1.005 DPT_Alarm	C, R, T
21, 29	Input x	Alarm 2	1 bit - 1.005 DPT_Alarm	C, R, T
21, 29	Input x	Alarm 3	1 bit - 1.005 DPT_Alarm	C, R, T

This object is activated when the parameter **Channel function** has the value **Alarm**.

This object enables the alarm command to be issued from the input contact on the KNX bus.

- To issue an inactive alarm command, a telegram with a logical value 0 is issued.
- To issue an active alarm command, a telegram with a logical value 1 is issued.

This object is sent when there is a status change.

*Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).*

For further information, see: [Alarm](#).

3.2.3.9 Automatic control

No.	Name	Function of the object	Data type	Flags
21, 29	Input x	Automatic control deactivation	1 bit - 1.003 DPT_Enable	C, R, T

This object is activated when the parameter **Channel function** has the value **Automatic control deactivation**.

This object enables the automatic control deactivation command to be issued from the input contact on the KNX bus.

- To issue an inactive automatic control command, a telegram with a logical value 0 is issued.
- To issued an active automatic control command, a telegram with a logical value 1 is issued.

This object is sent when there is a status change.

*Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).*

For further information, see: [Automatic control deactivation](#).

3.2.3.10 Load shedding

No.	Name	Function of the object	Data type	Flags
21, 29	Input x	Load shedding	1 bit - 1.002 DPT_Bool	C, R, T

This object is activated when the parameter **Channel function** has the value **Load shedding**.

This object enables the load-shedding command to be issued from the input contact on the KNX bus.

- To issue a load-shedding command (forcing the output to OFF), a telegram with a logical value 1 is issued.

This object is sent when there is a status change.

*Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).*

For further information, see: [Load shedding](#).

3.2.3.11 Windows contact

No.	Name	Function of the object	Data type	Flags
21, 29	Input x	Windows contact status	1 bit - 1.019 DPT_window/door	C, R, T
<p>This object is activated when the parameter Channel function has the value Windows contact.</p> <p>This object enables the status of a window contact to be issued from the input contact on the KNX bus.</p> <ul style="list-style-type: none"> - To signal a closed window contact, a telegram with a logical value 1 is issued. - To signal an open window contact, a telegram with a logical value 0 is issued. <p>This object is sent when there is a status change.</p> <p><i>Note: By default, the input operates like an NO contact (Normally open). If the parameter Inverted is validated, the input operates like an NC contact (Normally closed).</i></p> <p>For further information, see: Windows contact.</p>				

3.2.3.12 Tariff

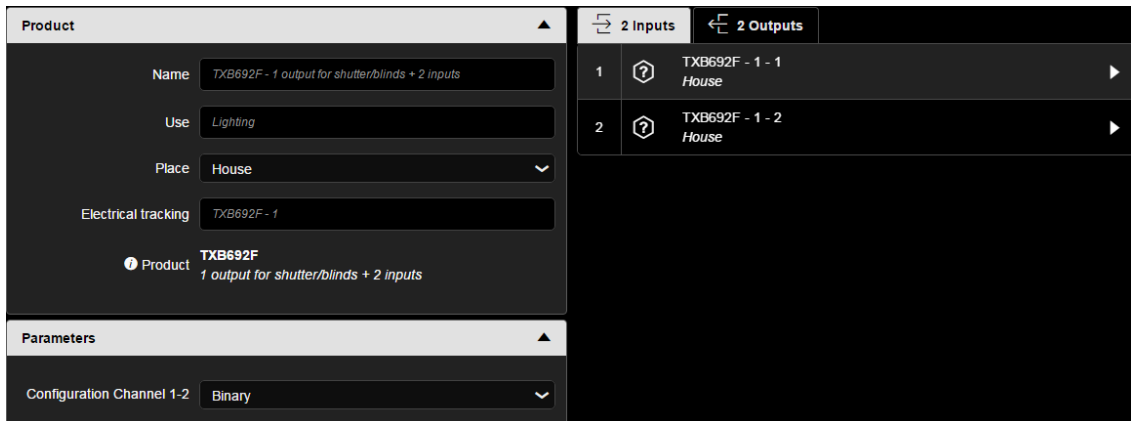
No.	Name	Function of the object	Data type	Flags
21, 29	Input x	Tariff	1 bit - 1.002 DPT_Bool	C, R, T
<p>This object is activated when the parameter Channel function has the value Tariff.</p> <p>This object enables the tariff status to be issued from the input contact on the KNX bus.</p> <ul style="list-style-type: none"> - To issue to the tariff information T1, a telegram with a logical value 1 is issued. - To issue to the tariff information T2, a telegram with a logical value 0 is issued. <p>This object is sent when there is a status change.</p> <p><i>Note: By default, the input operates like an NO contact (Normally open). If the parameter Inverted is validated, the input operates like an NC contact (Normally closed).</i></p> <p>For further information, see: Tariff.</p>				

4. Programming by Easy Tool

4.1 Product overview

■ TXB692F: 2 inputs + 1 shutter output/2 ON/OFF outputs to be embedded

Product view:



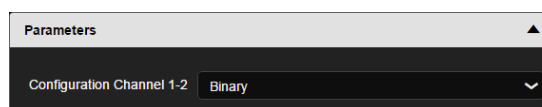
View of channels:

2 inputs	
	TXB692F - 1 - 1 Housing
	TXB692F - 1 - 2 Housing

2-fold output	
	TXB692F - 1 - 1 Housing - Lighting
	TXB692F - 1 - 2 Housing - Lighting

■ Product settings

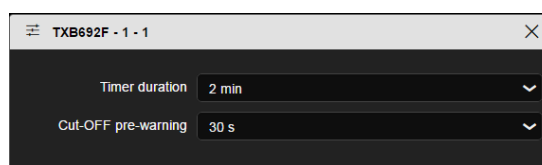
This configuration window is used for general configuration of the device.



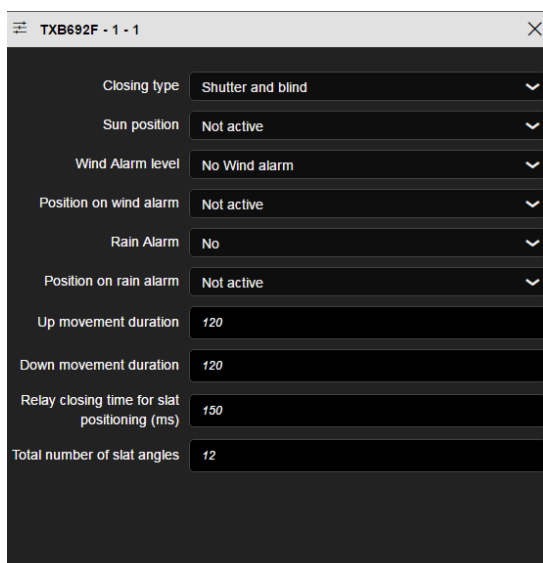
■ Pathway parameters

This parameter window is used to set the device outputs. These parameters are available individually for each output.

- ON/OFF



- Shutter/blind






■ Available functionalities: ON/OFF

	ON		Automatic control ON
	OFF		Automatic control OFF
	ON/OFF		ON/OFF automatic control
	Toggle switch		Load shedding
	Timer		Scene
	Priority ON		Scene switch
	Priority OFF		Automatic control deactivation
	Priority ON push-button (1)		Deactivation Automatic control push-button (1)
	Priority OFF push-button (1)		

(1) This function is only available with push-button input products with LEDs indicating status.

Note: Dimming functions can also be linked with ON/OFF outputs. In this case, only the ON/OFF function is used. This procedure enables a same input to be connected to an ON/OFF output and to a dimming output.

	Increase dimming/ON
	Decrease dimming/OFF
	Increase/decrease dimming

■ Available functionalities: Shutter/blind

	Blinds up		Priority up
	Blinds down		Priority down
	Shutter UP		Priority up push-button (1)
	Shutter DOWN		Priority down push-button (1)
	Up/down		Wind alarm
	Down/up		Rain alarm
	Switch up		Automatic control shutter angle
	Down switch		Automatic control slat angle
	Up/stop		Automatic control shutter and slat angle
	Down/stop		Automatic control shutter position switch
	Shutter position		Automatic control inter slat angle
	Slat angle		Automatic control inter shutter and slat angle
	Shutter and slat angle		Scene
	Shutter angle switch		Scene switch
	Slat angle switch		Automatic control deactivation
	Shutter and slat angle switch		Deactivation Automatic control push-button (1)

















(1) This function is only available with push-button input products with LEDs indicating status.





■ Available functionalities: Input

Lighting			
	ON		Automatic control ON
	OFF		Automatic control OFF
	ON/OFF		ON/OFF automatic control
	Toggle switch		Load shedding
	Timer		Automatic control deactivation
	Priority ON		Scene
	Priority OFF		Scene switch

Dimming			
	Increase dimming/ON		Dimming automatic control PB
	Decrease dimming/OFF		Dimmer switch automatic control
	Increase/decrease dimming		Scene
	Dimming		Scene switch
	Dimming switch		Automatic control deactivation

Shutter/blind			
	Blinds up		Priority up
	Blinds down		Priority down
	Shutter UP		Wind alarm
	Shutter DOWN		Rain alarm
	Up/down		Automatic control shutter angle
	Down/up		Automatic control slat angle
	Switch up		Automatic control shutter and slat angle
	Down switch		Automatic control shutter position switch
	Up/stop		Automatic control inter slat angle
	Down/stop		Automatic control inter shutter and slat angle
	Shutter position		Scene
	Slat angle		Scene switch
	Shutter and slat angle		Automatic control deactivation
	Shutter angle switch		
	Slat angle switch		
	Shutter and slat angle switch		

Heating/Cooling			
	Comfort mode		Comfort mode automatic control
	Eco mode		Eco mode automatic control
	Standby mode		Standby mode automatic control
	Protection mode		Protection mode automatic control
	Switch mode		Switch mode automatic control
	Heating/Cooling		Automatic control deactivation
	Comfort priority		Scene
	Protection priority		Scene switch

Metering			
	Tariff		Scene
	Automatic control deactivation		Scene switch

4.2 Closing type for the outputs

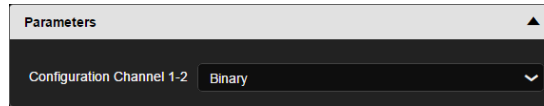
This configuration window is used to set the Closing type for the outputs.
The following parameters are available:

ON/OFF

- Each switching contact is used separately to switch a load.

Shutter

- Each pair of outputs constitutes a shutter and blind channel.



Parameter	Description	Value
Configuration path x-y	The outputs are used as ON/OFF switches. The outputs are used for shutters and blinds. One output for raising and one output for lowering.	TOR/TOR* Shutter

The assignment of the outputs is carried out following:

	ON/OFF	Shutter and blind
Configuration path 1-2	Output 1: ON/OFF Output 2: ON/OFF	Output 1-2: Shutter and blind

* Default value

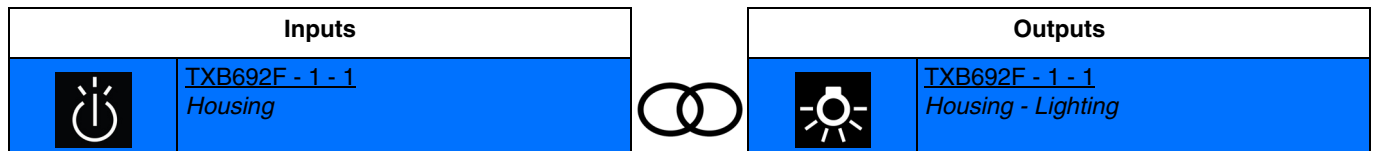
4.3 Product functions at output

4.3.1 Functions of each switch actuator

4.3.1.1 ON/OFF

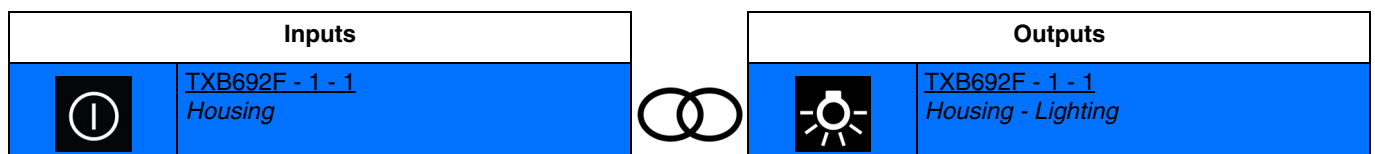
An output can be switched on or off using the ON/OFF function. The command can come from switches, buttons or other control inputs.

- **ON:** Turns on the lighting circuit.



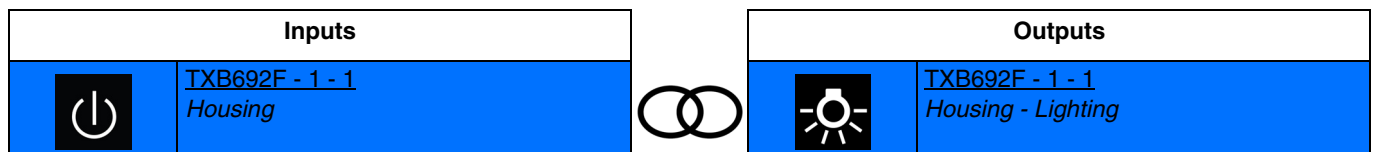
Closing input contact: turn on the light.
Opening input contact: no action.

- **OFF:** Turns off the lighting circuit.



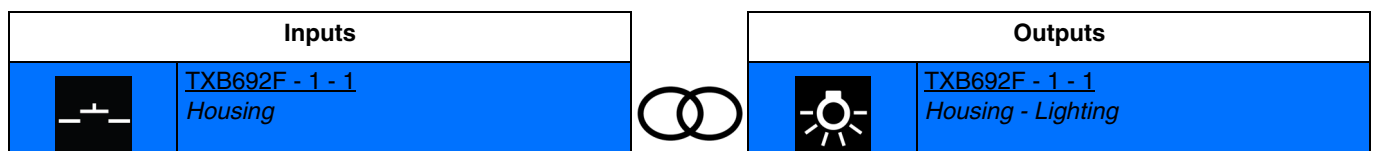
Closing input contact: turns off the light.
Opening input contact: no action.

- **ON/OFF:** Turns on or shuts off the lighting circuit (Switch).



Closing input contact: turn on the light.
Opening input contact: turns off the light.

- **Toggle switch:** Inverses the lighting circuit status.



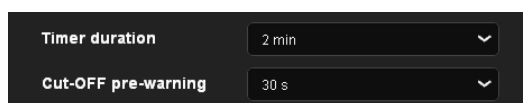
Closing input contact: switch between turning the lights on and off.
Successive closings inverse output contact status each time.

Note: Dimming functions can also be linked with ON/OFF outputs. In this case, only the ON/OFF function is used. This procedure enables a same input to be connected to an ON/OFF output and to a dimming output.

	Increase dimming/ON
	Decrease dimming/OFF
	Increase/decrease dimming

4.3.1.2 Timer

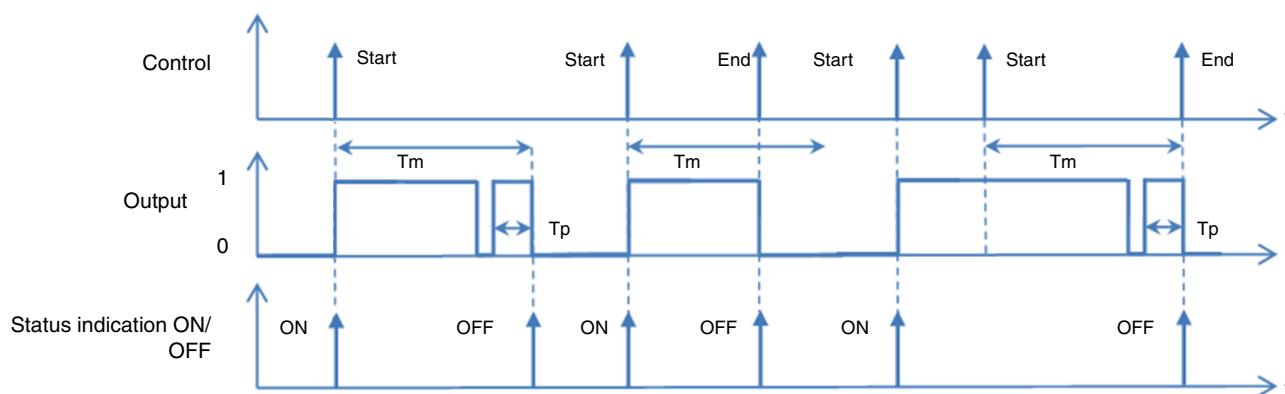
The Timer function is used to switch on a lighting circuit for a programmable period. The timer may be interrupted before expiry of the delay time. A programmable Cut-OFF pre-warning announces the end of the delay time by a 1-second inversion of the output status.



Parameter	Description	Value
Timer duration	This parameter determines the timer duration.	Not active, 1 s, 2 s, 3 s, 5 s, 10 s, 15 s, 20 s, 30 s, 45 s, 1 min, 1 min 15 s, 1 min 30 s, 2 min* , 2 min 30 s, 3 min, 5 min, 15 min, 20 min, 30 min, 1 h, 2 h, 3 h, 5 h, 12 h, 24 h

Parameter	Description	Value
Cut-OFF pre-warning	This parameter determines the lead time of the cut-OFF pre-warning.	Not active, 15 s, 30 s* , 1 min

Operating principle:

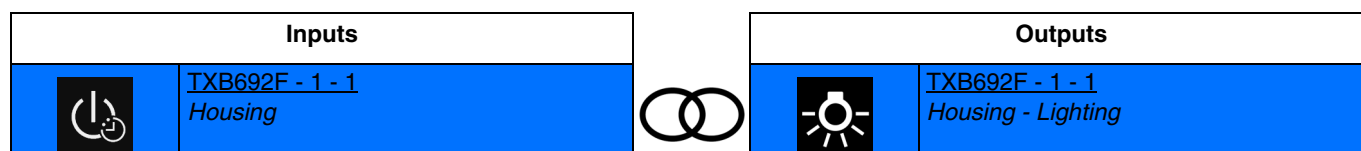


T_m : Timer duration
 T_p : Pre-warning lead time

Note: If the lead time of the cut-OFF pre-warning is greater than the duration of the timer, the cut-OFF pre-warning is not triggered.

■ The connection:

The Timer function is used to switch on a lighting circuit for a programmable period.



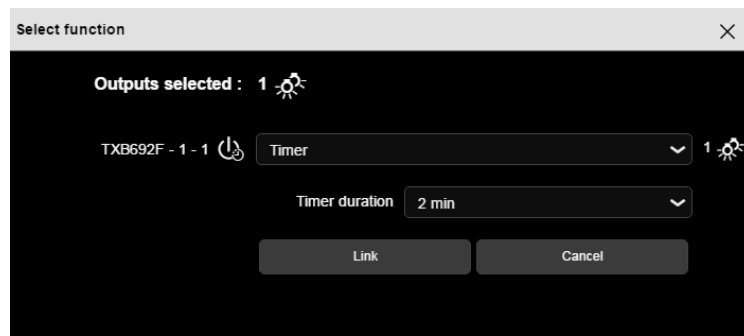
Brief closing of the input contact: timing function light switched on at the last saved level.

Timing function interruption:

Prolonged closing of the input contact: stop of timing delay in progress and light is turned off.

* Default value

Note: At the time of connection, it is possible to define the timer duration.



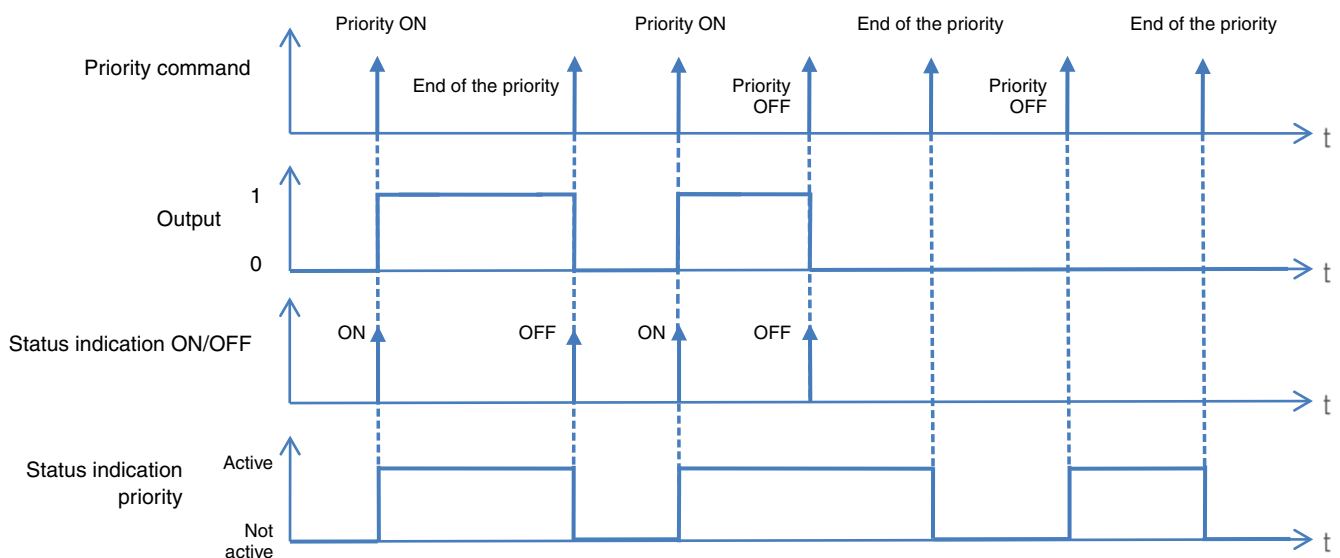
4.3.1.3 Priority

The Priority function is used to force the output into a defined state.

Priority: **Priority** > Basic function.

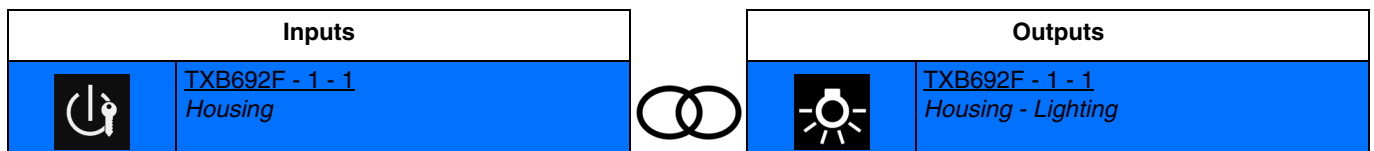
At the end of the priority, the output returns to the status it had before the priority (Memorisation function).

Operating principle:



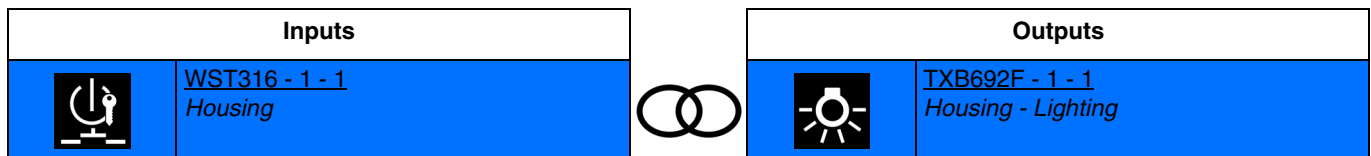
■ Links

- **Priority ON:** Allows forcing and keeping the lighting circuit on.



Closing input contact: turn on the light.
Opening input contact: end of the priority.

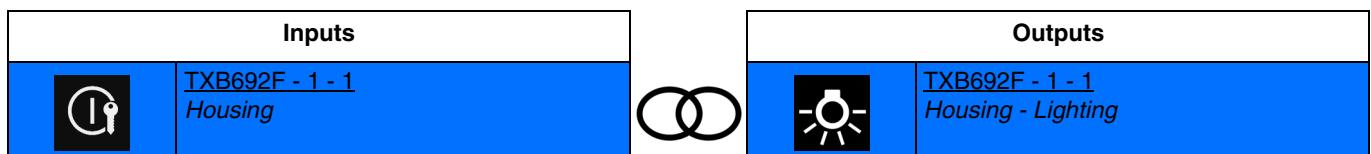
- **Priority ON push-button:** Allows forcing and keeping the light circuit on using a push-button.



Press on the push-button: turn on the light.
A second press on the push-button cancels the priority.

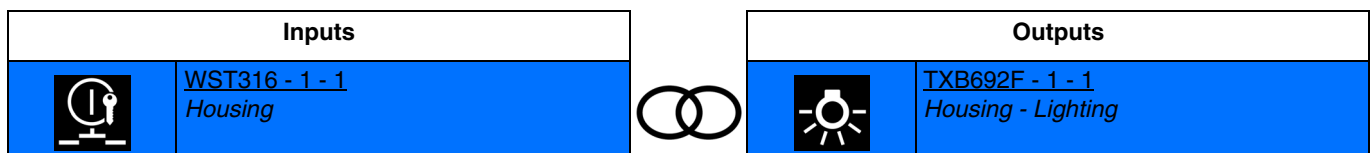
Note: This function is only available with push-button input products with LEDs indicating status.

- **Priority OFF:** Allows forcing and keeping the lighting circuit off.



Closing input contact: turns off the light.
Opening input contact: end of the priority.

- **Priority OFF push-button:** Allows forcing and keeping the lighting circuit off using a push-button.



Press on the push-button: turns off the light.
A second press on the push-button cancels the priority.

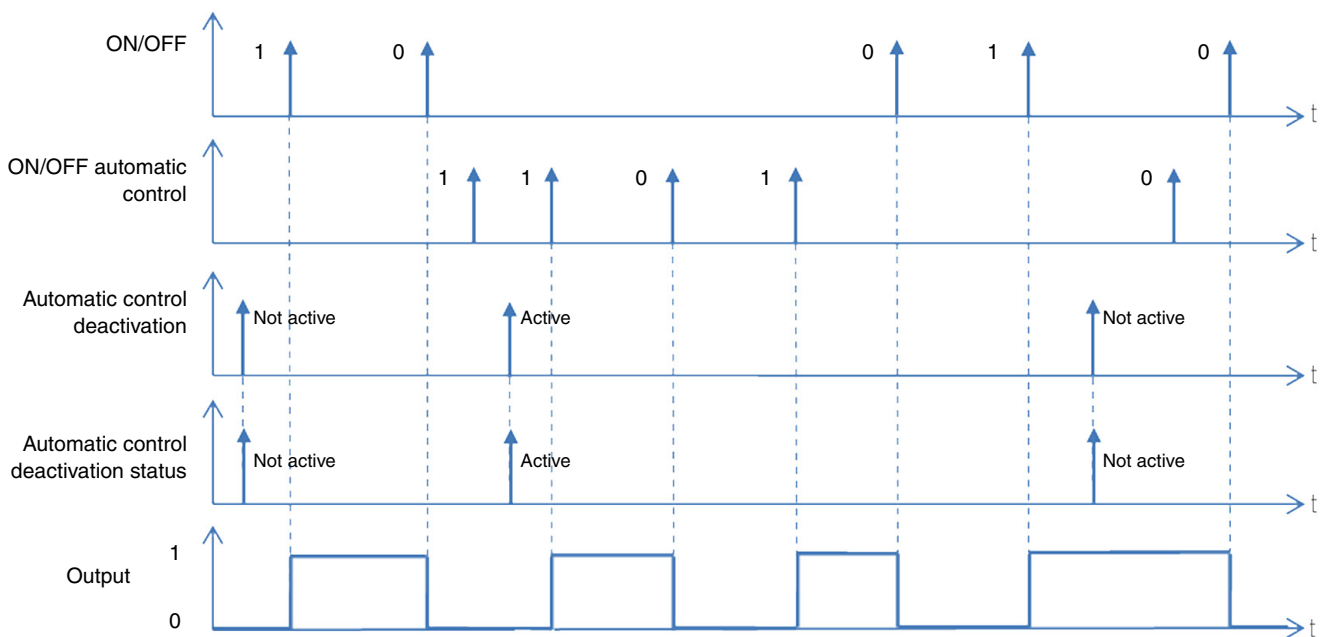
Note: This function is only available with push-button input products with LEDs indicating status.

4.3.1.4 Automatic control

The Automatic control function is used to command an output in parallel to the ON/OFF function. The two functions have the same level of priority. The last command received will act on the status of the output. An additional command object is used to activate or deactivate the Automatic control.

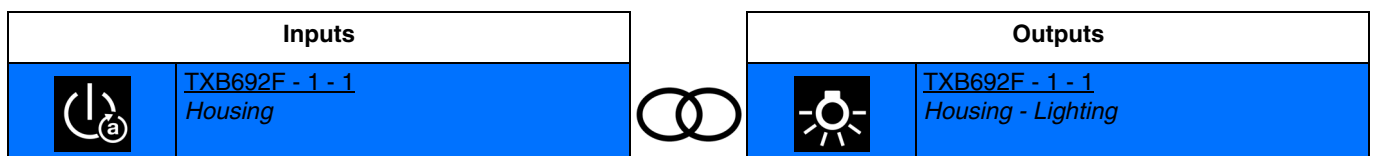
Example: when an output is controlled by a button and in parallel by an automatic control (timer, twilight switch, weather station, etc.) the automatic control can be deactivated for reasons of comfort (vacations, public holidays, etc.).

Operating principle:



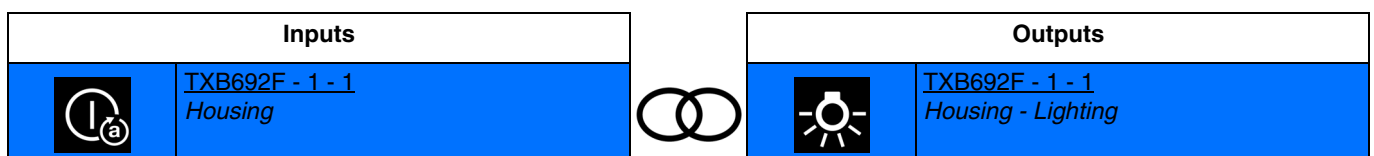
■ **Links**

- **Automatic control ON:** Allows turning on the light circuit using Automatic control.



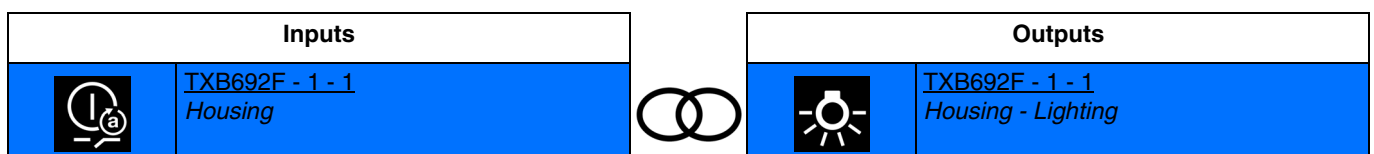
Closing input contact: turn on the light.
Opening input contact: no action.

- **Automatic control OFF:** Allows switching off the light circuit using automatic control.



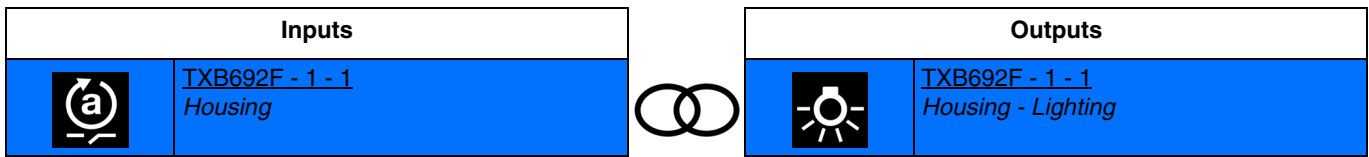
Closing input contact: turns off the light.
Opening input contact: no action.

- **ON/OFF automatic control:** Allows turning the lighting circuit on or off using Automatic control (Switch).



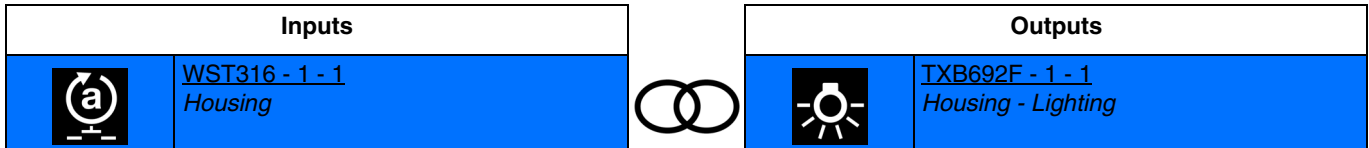
Closing input contact: turns on the light at the last saved level.
Opening input contact: turns off the light.

- **Automatic control deactivation:** Deactivates automatic control.



Closing input contact: deactivated automatic control.
 Opening input contact: activated automatic control.

- **Deactivation Automatic control push-button:** Deactivates Automatic control using a push-button.



Press on the push-button: deactivated automatic control.
 A second press on the push-button activates the automatic control.

Note: This function is only available with push-button input products with LEDs indicating status.

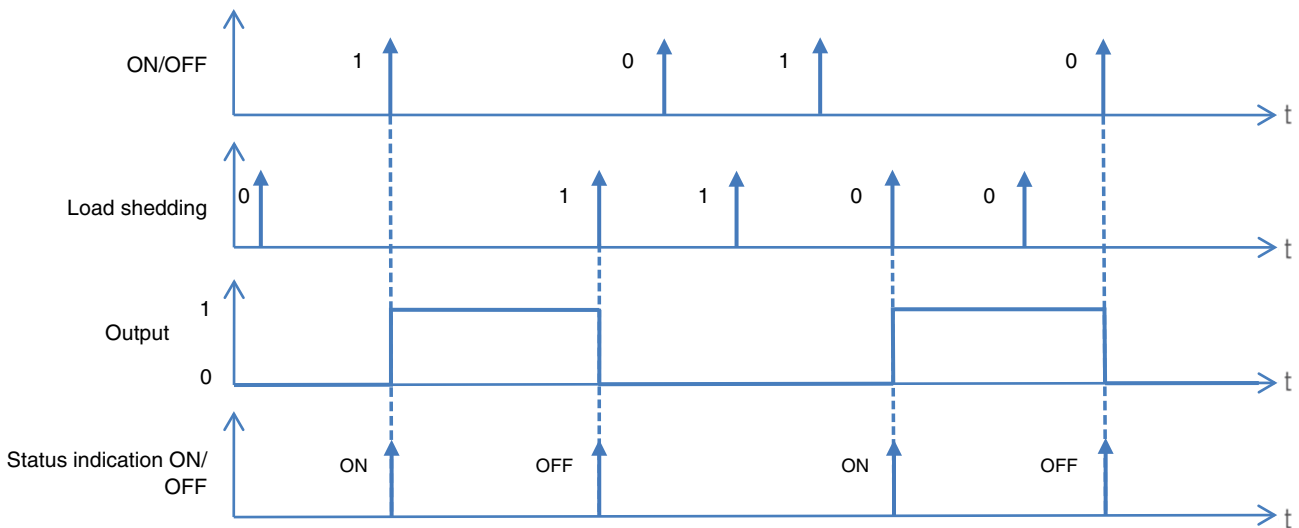
4.3.1.5 Load shedding

The Load shedding function is used to force an output to OFF.

Priority: **Load shedding** > Priority > Basic function.

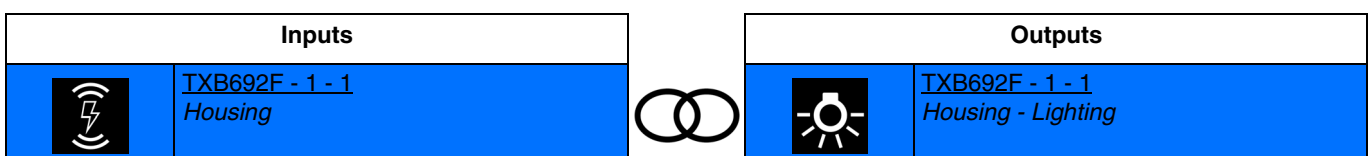
This command has the highest priority. No other command is taken into account if the mode is active. The status of the output is memorised but not applied. At the end of load shedding, the output is switched to the theoretical status without Load shedding (memorisation).

Example: Load shedding function



■ Links

- **Load shedding:** Allows forcing an output to OFF.

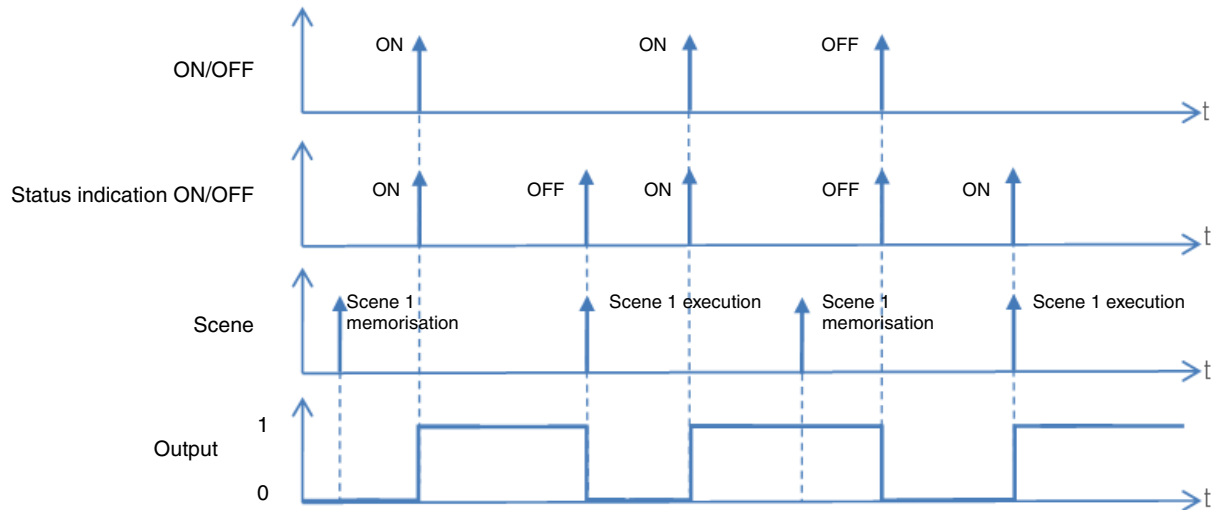


Closing input contact: priority of the output to off.
 Opening input contact: return to output status before load shedding (memorisation).

4.3.1.6 Scene

The Scene function is used to switch groups of outputs into a configurable predefined state. Each output can be included in 8 different scenes.

Operating principle:



Learning and storing scenes

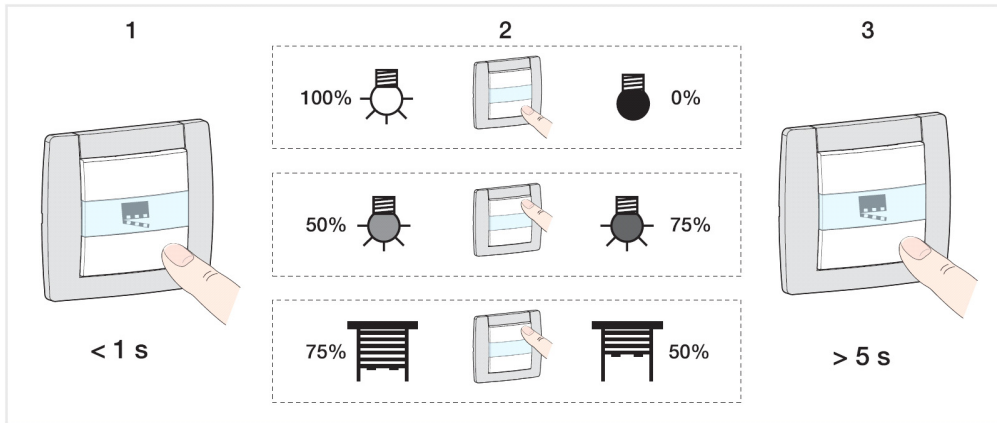
This process is used to change and store a scene. For example, by locally pressing the key in the room or by emission of the values from a visualization.

To access and store scenes, the following values must be sent:

Scene number	Access scene (Object value: 1 byte)	Store scene (Object value: 1 byte)
1-64	= Scene number - 1	= Scene number + 128
Examples		
1	0	128
2	1	129
3	2	130
...	...	
64	63	191

Here is the scene memorisation for local switches, for example.

- Activate scene by briefly pressing the transmitter that starts it.
- The outputs (lights, shutters, etc.) are set in the desired state using the usual local control devices (buttons, remote control, etc.).
- Memorise the status of the outputs with a press greater than 5 seconds long on the transmitter that starts the scene. The memorisation can be displayed by short-term activation of the outputs.



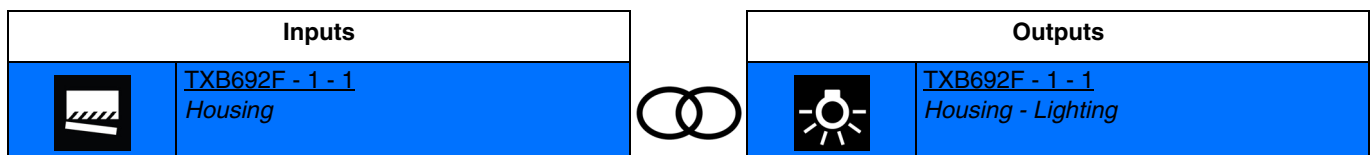
Product learning and memorisation

This procedure allows modifying a scene using a local action on the push buttons located on the front side of the product.

- Activate the scene using a short press on the ambiance push button, which triggers the scene,
- Set the product to manual mode and set the outputs to the desired status by pressing the push-buttons associated with the outputs,
- Return to Auto mode,
- Save the scene using a long push for more than 5 seconds on the push-button that triggers the scene,
- Memorisation is signalled by the inversion of the concerned output status for 3 sec.

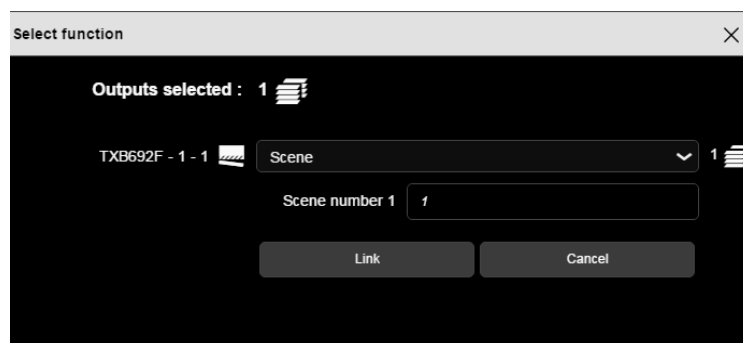
■ Links

- **Scene:** The scene is activated by pressing the push-button.

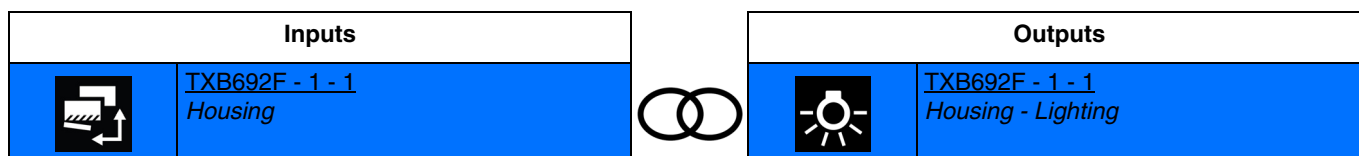


Closing input contact: scene activation.
Opening input contact: no action.

Note: At the time the connection is made, the scene number must be defined for the closing input contact.

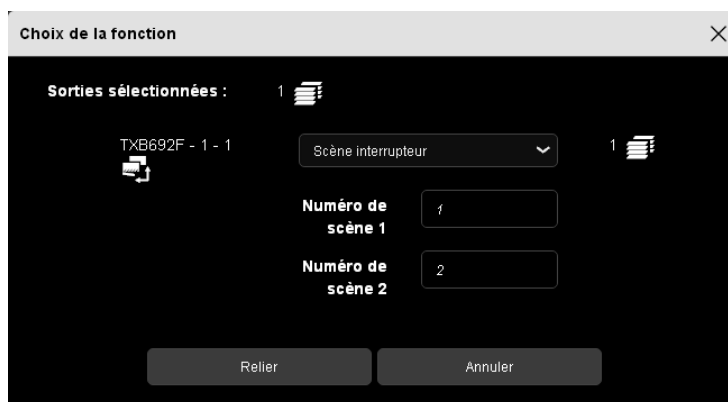


- **Scene switch:** The scene is activated according to the closing or opening input contact.



Closing input contact: scene activation 1.
 Opening input contact: scene activation 2.

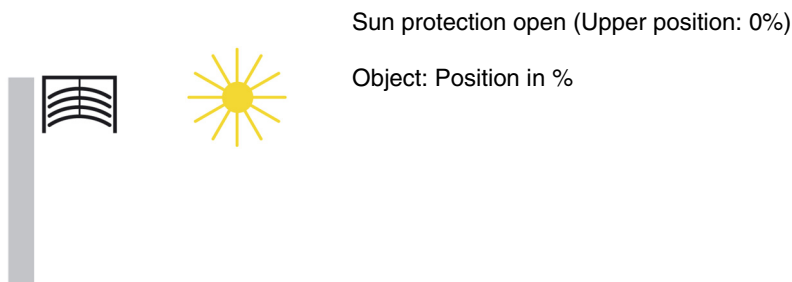
Note: At the time the connection is made, the scene number must be defined for the closing and opening input contact.



4.3.2 Functions for each shutter/blind output

Slat position for horizontal slats

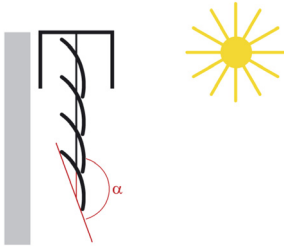
The blind drive actuators have 2 limit position switches and can be run to a Sun protection position using a position setting in percent. The value of "0%" is used to control the upper position (i.e. Sun protection fully open) or is reported as a status.



If the lower position is to be approached, then this will be sent to the blinds as Sun protection position 100% or on reaching the lower position (i.e. Sun protection completely closed). The position will be reported using this value. If a blind is run from the upper position, the slats initially tilt into an almost vertical position and then the sun protection runs with closed slats to the lower position.

When the blind is located at the lower position and the slats are fully closed, then this slat position is described as vertical and equal to 100%. Normally, however, fully closed slats have no exactly vertical position ($\alpha = 180^\circ$) but rather form a small angle with the vertical.

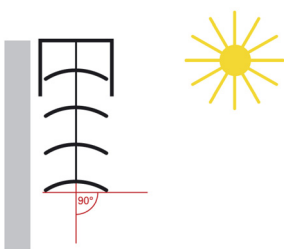
Sun protection closed slats (Lower position: 100%, Slat angle: 100%)



Object: Position in %

From their vertical position (completely closed, 100%) the slats can be adjusted to their horizontal position (fully open, 0% and $\alpha = 90^\circ$) The blind drive used thus determines whether this adjustment can be carried out using many small steps or whether it is only possible via a few large steps (As with most standard drives).

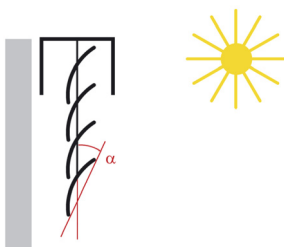
Slat position horizontal (0%, $\alpha = 90^\circ$)



Object: Slat angle in %

For standard blinds, the slats can be adjusted continuously to the horizontal position or until the slat adjustment ends and the raising of the blind begins. The slats then form an angle of between 0° and 90° with the vertical.

Slat position at the start of moving the blind (Up)



Object: Slat angle in %

Slat position for vertical slats

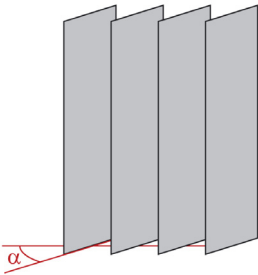
If an interior shade or privacy shield with vertical slats is controlled via a blind actuator, then the position in which the slats are fully open is controlled or reported as the 0% slat position. The slats then form an angle of 90° with the direction of travel from Shade fully open to Shade fully closed.

Fully opened vertical slats (Slat angle 0%)



Object: Slat angle in %

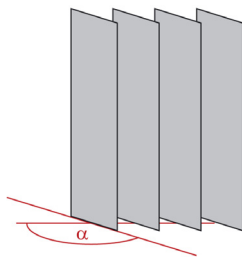
If the slats are fully closed, this position will be controlled and reported as slat position 100%. This is the position to which the shade is run from its side limit position in front of the window. The angle that the slats then form with the direction of movement is therefore a little $> 0^\circ$.



Fully closed vertical slats (Slat angle 100%)

Object: Slat angle in %

If the shade is then driven back (i.e. opened), then the vertical slats are turned to a position that is somewhat smaller than 180° .



Vertical slats at the start of moving UP

4.3.2.1 Pathway parameters

These parameters are available individually for each output (Pair).

☰ TXA610 - 1 - 1
✕

Closing type	Shutter and blind ▼
Sun position	No Facade ▼
Wind Alarm level	No Wind alarm ▼
Position on wind alarm	Not active ▼
Rain Alarm	No ▼
Position on rain alarm	Not active ▼
Complete up movement duration	120
Complete down movement duration	120
Relay closing time for slat positioning (ms)	150
Total number of slat angles	12

Parameter	Description	Value
Closing type	This parameter defines the operating mode used for the affected outputs. An operating mode of the shutter and blind type gives access to additional parameters to control the slat pitch.	Shutter Shutter and blind*

* Default value

Parameter	Description	Value
Complete up movement duration	This parameter defines the time taken, during which the contact must be closed, to reach the upper position.	1... 120* ...500 s

Parameter	Description	Value
Complete down movement duration	This parameter defines the time taken, during which the contact must be closed, to reach the lower position.	1... 120* ...500 s

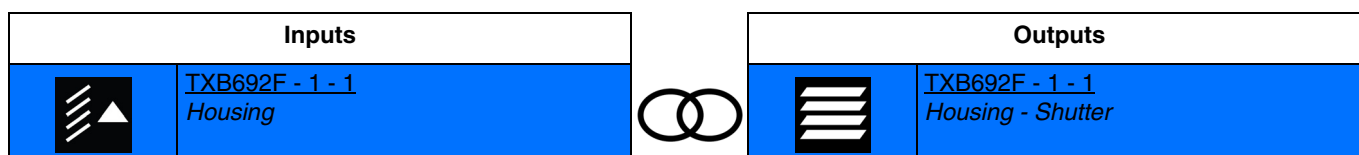
Parameter	Description	Value
Relay closing time for slat positioning (ms)	This parameter defines how long the contacts must be closed in order to perform an elementary angle step for the slats.	1... 150* ...2500 ms

Parameter	Description	Value
Total number of slat angles	This parameter defines the total number of elementary slat steps available for adjusting the slats from the inclined downwards position to be inclined upwards position.	1... 12* ...50

*Note: Before setting the **Total number of slat angles** parameter, it is essential to first set the closed contact duration for an elementary slat step.*

4.3.2.2 Up/down

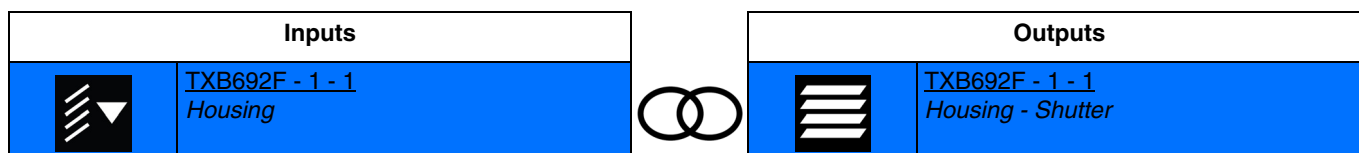
- **Blinds up:** Allows to raise or stop a blind or tilt the blind slats.



Brief closing of the input contact: brief closing of the raise input contact.
Prolonged closing of the input contact: delayed closing of the raise output contact.
Opening input contact: no action.

Note: If a brief input contact occurs during the delay, the output contact opens (stop function).

- **Blinds down:** allows to lower or stop a blind or tilt the blind blades.

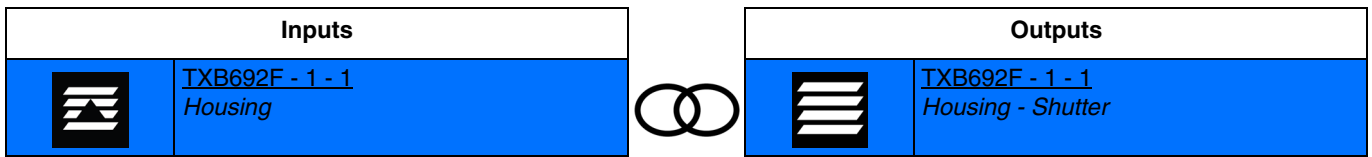


Brief closing of the input contact: brief closing of a lowering output contact.
Prolonged closing of the input contact: delayed closing of the lowering output contact.
Opening input contact: no action.

Note: If a brief input contact occurs during the delay, the output contact opens (stop function).

* Default value

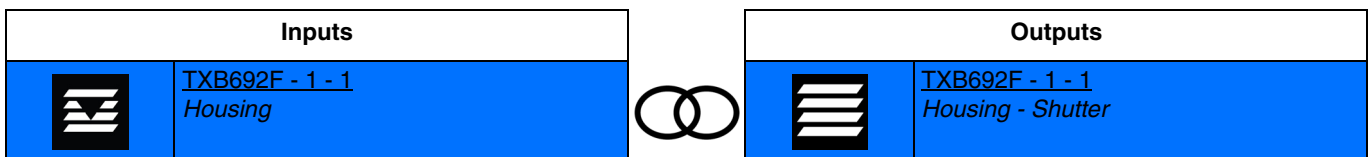
- **Shutter UP:** Allows to raise or stop a rolling shutter.



Prolonged closing of the input contact: delayed closing of the raise output contact.
 Opening input contact: no action.

Note: If a brief input contact occurs during the delay, the output contact opens (stop function).

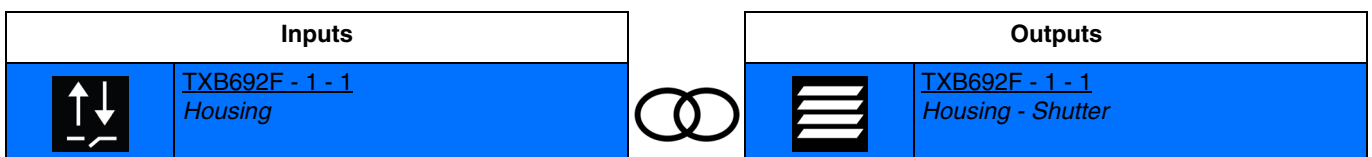
- **Shutter DOWN:** Allows to lower or stop a rolling shutter.



Prolonged closing of the input contact: delayed closing of the lowering output contact.
 Opening input contact: no action.

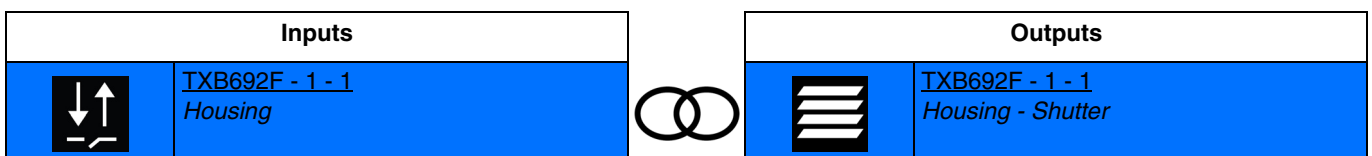
Note: If a brief input contact occurs during the delay, the output contact opens (stop function).

- **Up/down:** Allows to raise or lower a rolling shutter or a blind using a switch.



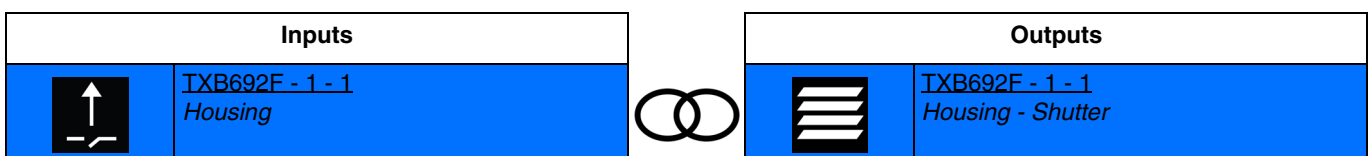
Closing input contact: delayed closing of the raise output contact.
 Opening input contact: delayed closing of the lowering output contact.

- **Down/up:** Allows to raise or lower a rolling shutter or a blind using a switch.



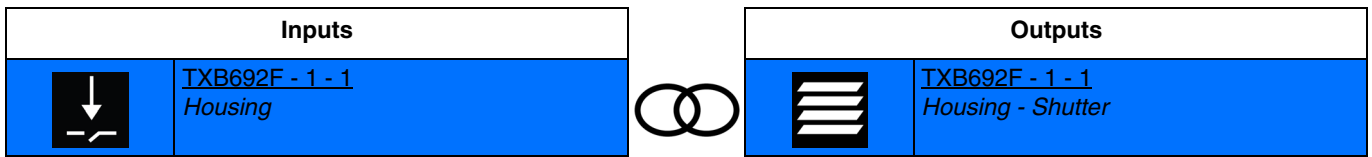
Closing input contact: delayed closing of the lowering output contact.
 Opening input contact: delayed closing of the raise output contact.

- **Switch up:** Allows to raise a rolling shutter or a blind using a switch.



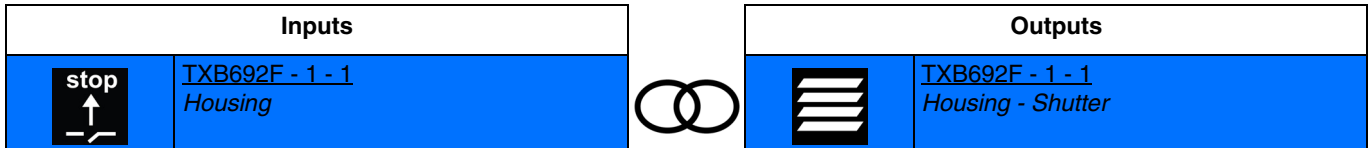
Closing input contact: delayed closing of the raise output contact.
 Opening input contact: no action.

- **Down switch:** Allows to lower a rolling shutter or a blind using a switch.



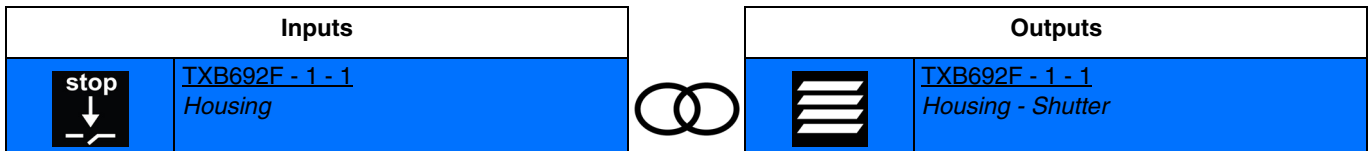
Closing input contact: delayed closing of the lowering output contact.
 Opening input contact: no action.

- **Up/stop:** Allows to raise or stop a rolling shutter or a blind using a switch.



Closing input contact: delayed closing of the raise output contact.
 Opening input contact: opening an output contact (stop function).

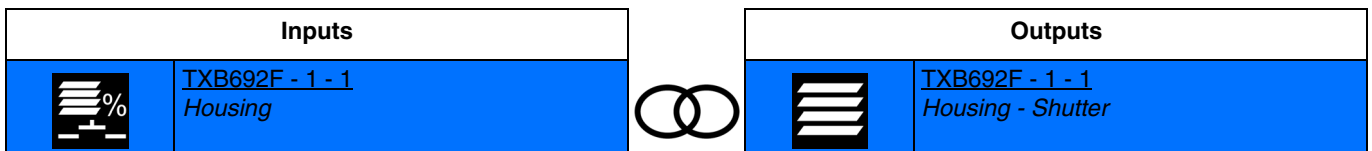
- **Down/stop:** Allows to lower or stop a rolling shutter or a blind using a switch.



Closing input contact: delayed closing of the lowering output contact.
 Opening input contact: opening an output contact (stop function).

4.3.2.3 Shutter or blind angle

- **Shutter position:** Allows to angle a rolling shutter or blind to the desired height according to a value in %.

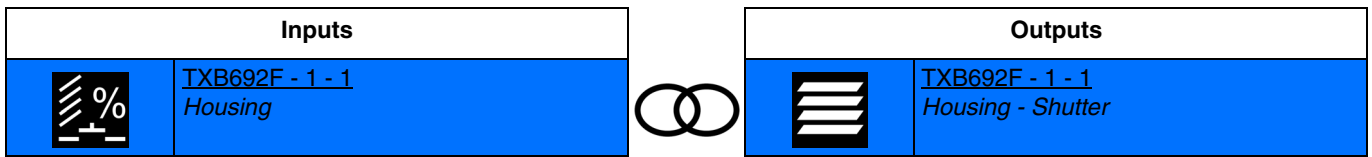


Closing input contact: delayed closing of output contacts for angling the shutter or blind.
 Opening input contact: no action.

Note: When the connection is made, the value in % of the shutter angle must be defined (0%: upper position, 100%: lower position).

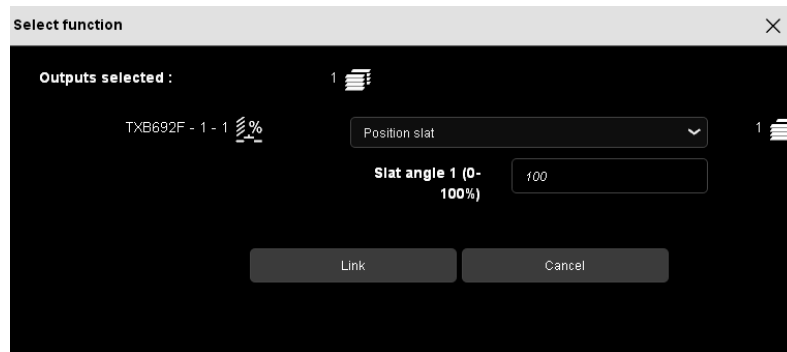


- **Slat angle:** Allows positioning shutter slats according to a value in %.

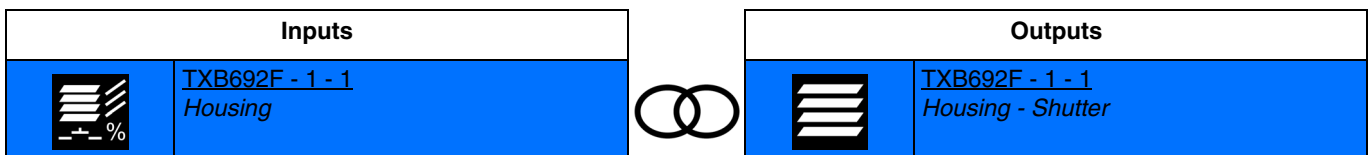


Closing input contact: delayed closing of output contacts for the shutter slat tilt.
 Opening input contact: no action.

Note: When the connection is made, the value in % of the shutter slat angle must be defined (0%: slats open, 100%: slats closed).



- **Shutter and slat angle:** Allows positioning a rolling shutter or blind at the desired height and the blind slats according to a value in %.

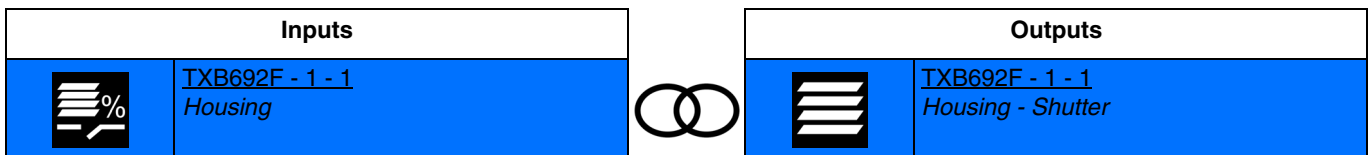


Closing input contact: delayed closing of output contacts for the shutter or blind angle and for the blind slat tilt.
 Opening input contact: no action.

Note: When the connection is made, the value in % for the shutter position must be defined (0%: high position, 100% low position) and the value in % of the blind slat position (0%: slats open, 100%: slats closed).

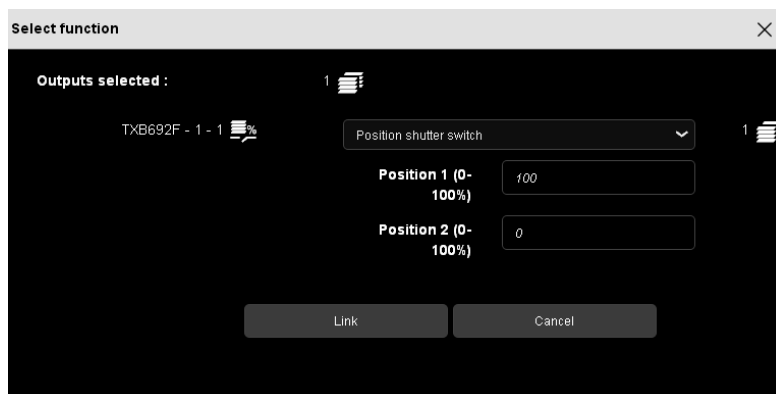


- **Shutter angle switch:** Allows positioning a rolling shutter or blind at the desired height according to a value in % using a switch.

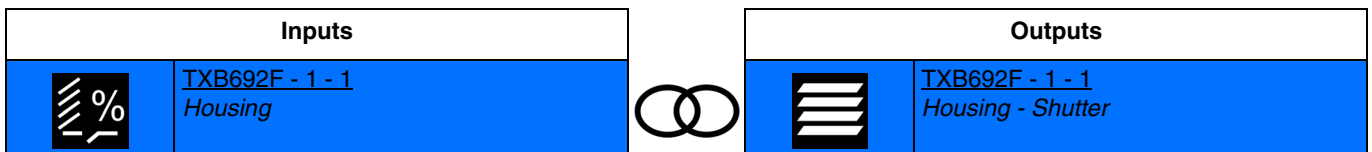


Closing input contact: delayed closing of output contacts for position 1 of the shutter or blind.
 Opening input contact: delayed closing of output contacts for position 2 of the shutter or blind.

Note: When the connection is made, values must be defined in % for shutter positions 1 and 2 (0%: upper position, 100%: lower position).

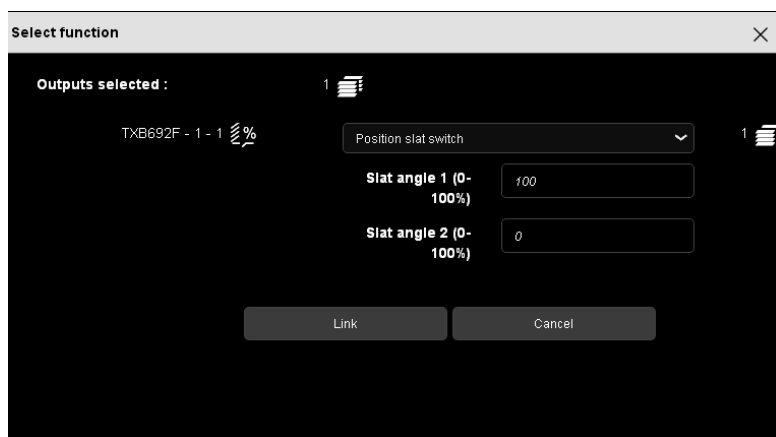


- **Slat angle switch:** Allows positioning blind slates according to a value in % using a switch.

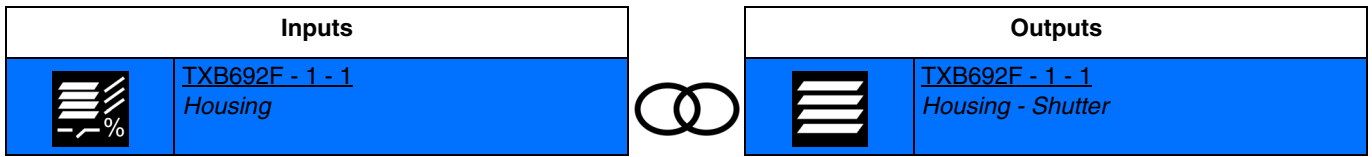


Closing input contact: delayed closing of output contacts for position 1 of the blind slats.
 Opening input contact: delayed closing of output contacts for position 2 of the blind slats.

Note: When the connection is made, values must be defined in % for blind slat positions 1 and 2 (0%: slats open, 100%: slats closed).

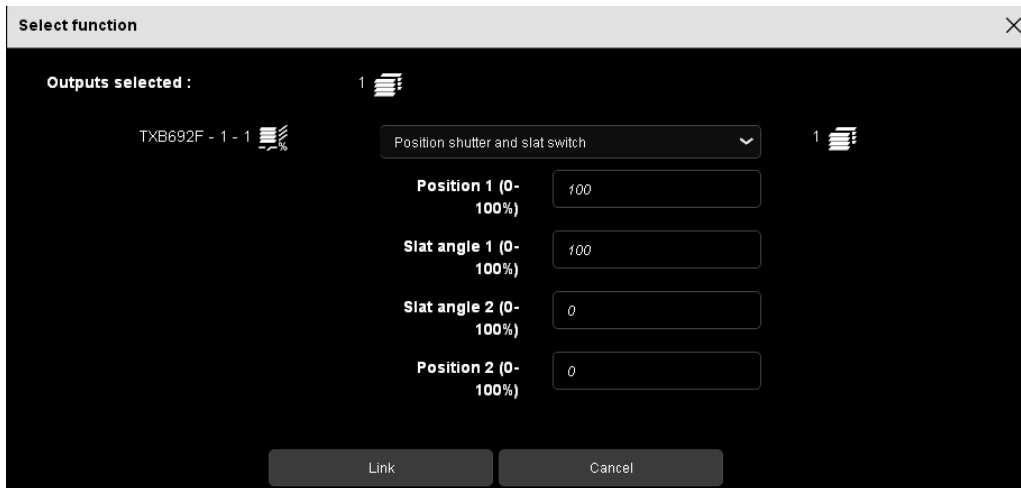


- **Shutter and slat angle switch:** Allows positioning a rolling shutter or a blind at the desired height and the blind slats according to a value in % using a switch.



Closing input contact: delayed closing of output contacts for position 1 of the shutter or blind and for position 1 for blind slats.
 Opening input contact: delayed closing of output contacts for position 2 of the shutter or blind and for position 2 for blind slats.

Note: When the connection is made, values must be defined in % for shutter positions 1 and 2 (0%: high position, 100%: low position) and values in % for blind slats positions 1 and 2 (0%: slats open, 100%: slats closed).



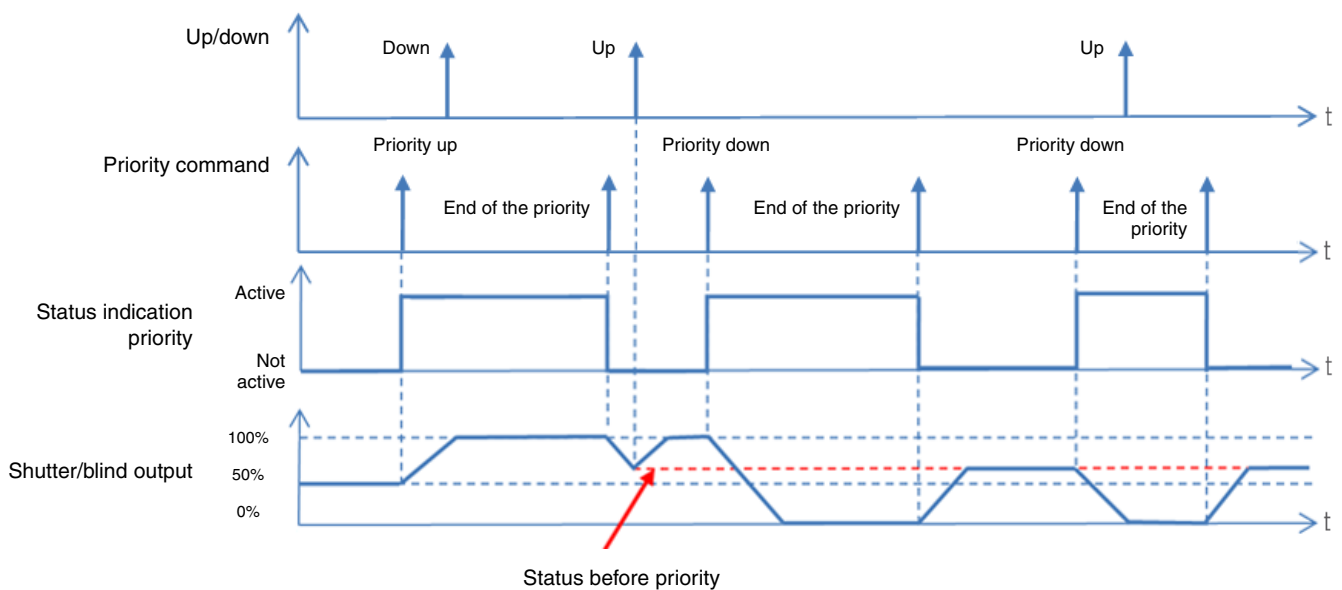
4.3.2.4 Priority

The Priority function is used to force the output into a defined state.

Priority: Alarm > **Priority** > Basic function.

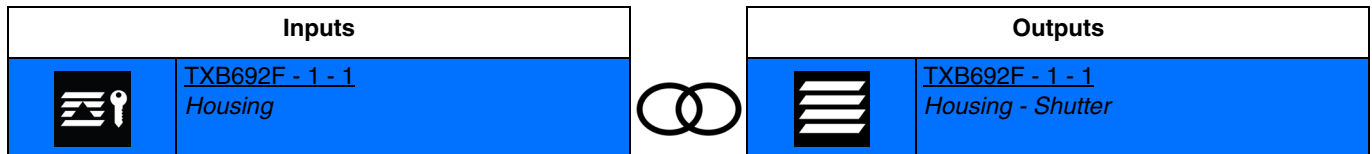
At the end of the priority, the output returns to the status it had before the priority (Memorisation function).

Operating principle:



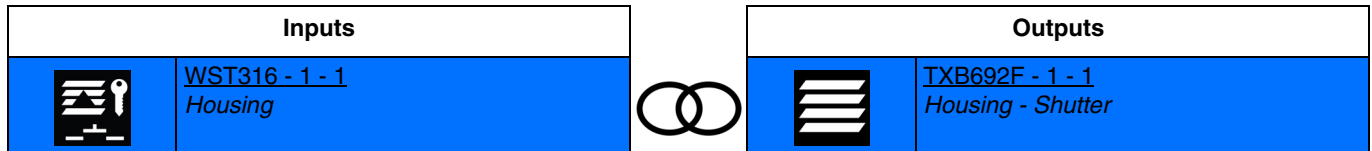
■ Links

- **Priority up:** Allows forcing a rolling shutter or blind to raise.



Closing input contact: activation priority and delayed closing of the raise output contact.
 Opening input contact: end of the priority.

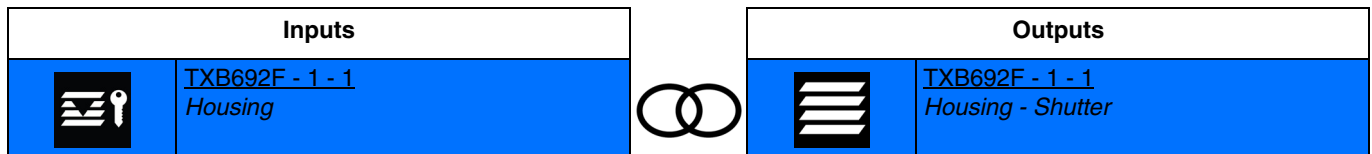
- **Priority up push-button:** Allows forcing a rolling shutter or blind to raise using a push-button.



Press on the push-button: activation priority and delayed closing of the raise output contact.
 A second press on the push-button cancels the priority.

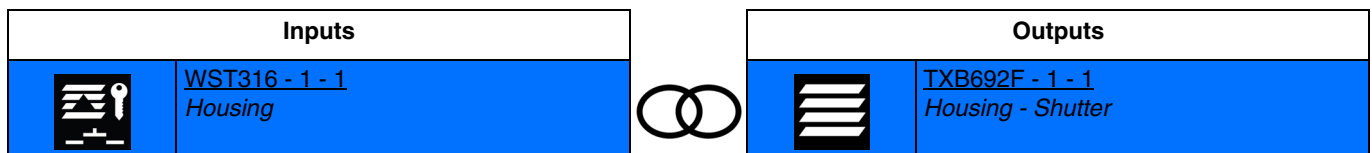
Note: This function is only available with push-button input products with LEDs indicating status.

- **Priority down:** Allowing forcing a rolling shutter or blind to lower.



Closing input contact: activation of priority and delayed closing of the lowering output contact.
 Opening input contact: end of the priority.

- **Priority down push-button:** Allows forcing a rolling shutter or blind to lower using a push-button.



Press on the push-button: activation of priority and delayed closing of the lowering output contact.
 A second press on the push-button cancels the priority.

Note: This function is only available with push-button input products with LEDs indicating status.

4.3.2.5 Alarm

With the Alarm function a shutter or blind can be positioned in a configurable predefined state.

Priority: **Alarm** > Priority > Basic function.

The alarm prevents any actuation until an alarm cancellation command has been received.

Up to 2 alarm functions are possible (Wind alarm > Rain alarm).

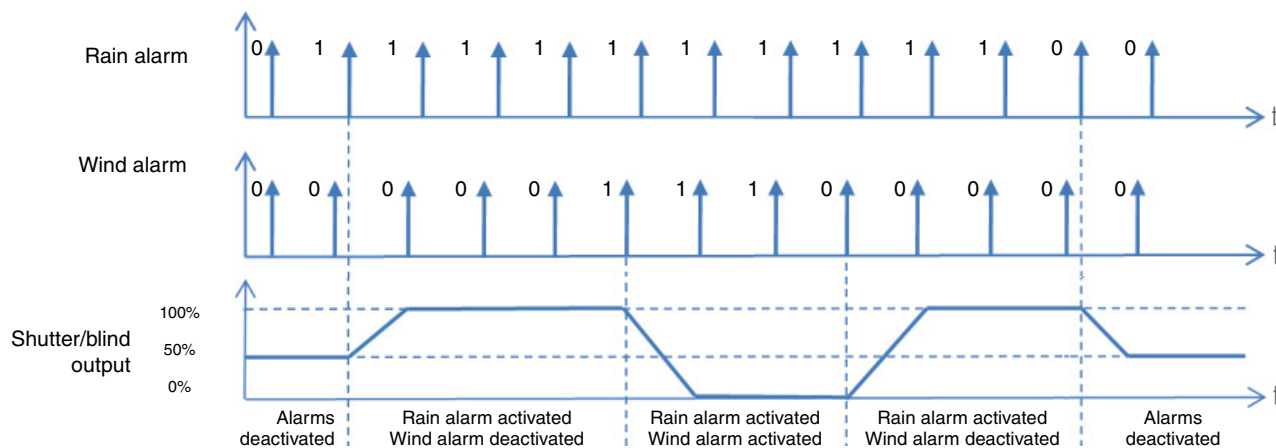
When an alarm appears, change in output status is defined by a setting (Up, Down, Unchanged position).

After the alarm, the shutter or blind takes up the position it would be in if no alarm had occurred.

Operating principle:

Example:

- Position on rain alarm: up.
- Position on wind alarm: down.



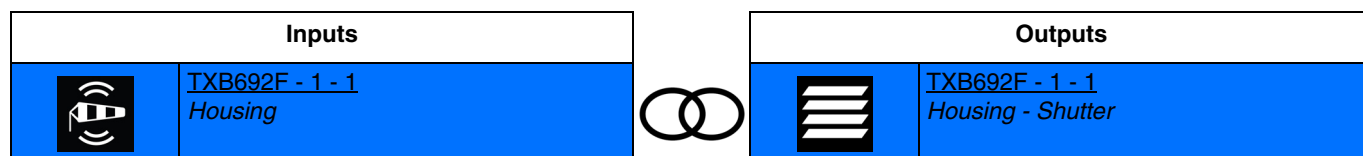
If several alarms triggered at the same time, the commands associated with the highest priority alarm are executed.

For the alarms, the connections are made in 2 ways:

- Classic connections: Alarm information is sent using an input product connected to the KNX bus. Therefore, information can come from any device other than KNX having a dry contact output.
- Automatic connections: Alarm information is sent directly to the KNX bus. In general, it comes from a weather station connected to the KNX bus. In this case, the connection is made through a simple configuration.

■ Links

- **Wind alarm:** Allows to set the rolling shutter or blind in a defined position when the alarm is activated.



Closing input contact: wind alarm activation.

Opening input contact: alarm end.

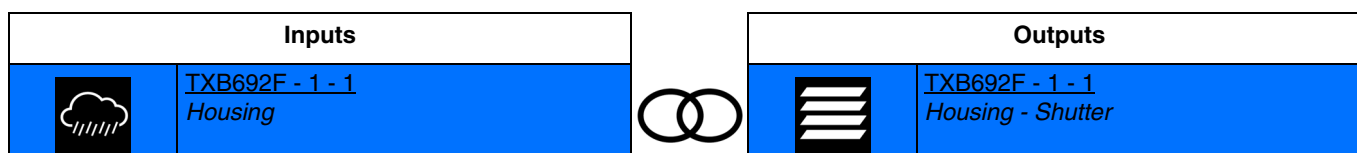
The rolling shutter or blind angle is defined through a setting.

Wind Alarm level	No Wind alarm
Position on wind alarm	Not active

Parameter	Description	Value
Position on wind alarm	During the wind alarm, the shutter/blind output: Not changed Closes the Up contact Closes the down contact	Not active* Up Down

Note: The setting **Wind alarm level** is not taken into account with this type of connection.

- **Rain alarm:** Allows to set the rolling shutter or blind in a defined position when the alarm is activated.



Closing input contact: rain alarm activation.
Opening input contact: alarm end.

The rolling shutter or blind angle is defined through a setting.

Rain Alarm No

Position on rain alarm Not active

Parameter	Description	Value
Position on rain alarm	Defines the status of the shutter output on receipt of the rain alarm.	Not active* Up Down

Note: The setting **rain alarm** is not taken into account with this type of connection.

■ Automatic connections

This link is established depending on the configuration of products.

- **Wind alarm:** Allows to set the rolling shutter or blind in a defined position when the alarm is activated.

For the wind alarm, please refer to the shutter configuration.

Wind Alarm level No Wind alarm

Position on wind alarm Not active

Parameter	Description	Value
Wind alarm stepping switch	Activates the shutter output on receipt of wind alarms 1, 2 or 3.	No wind alarm* Step 1 Step 2 Step 3

Wind alarm 1: The alarm is activated if the wind speed > 4 m/s (14.4km/h)
Wind alarm 2: The alarm is activated if the wind speed > 8 m/s (28.8km/h)
Wind alarm 3: The alarm is activated if the wind speed > 12 m/s (43.2km/h)

Note: Please refer to the weather station documentation for further information.

* Default value

Parameter	Description	Value
Position on wind alarm	During the wind alarm, the shutter/blind output: Not changed Closes the Up contact Closes the down contact	Not active* Up Down

- **Rain alarm:** Allows to set the rolling shutter or blind in a defined position when the alarm is activated.

For the rain alarm, please see the shutter configuration.

Rain Alarm No

Position on rain alarm Not active

Parameter	Description	Value
Rain alarm	Activates the shutter output on receipt of the rain alarm.	Yes No*

Parameter	Description	Value
Position on rain alarm	Defines the status of the shutter output on receipt of the rain alarm.	Not active* Up Down

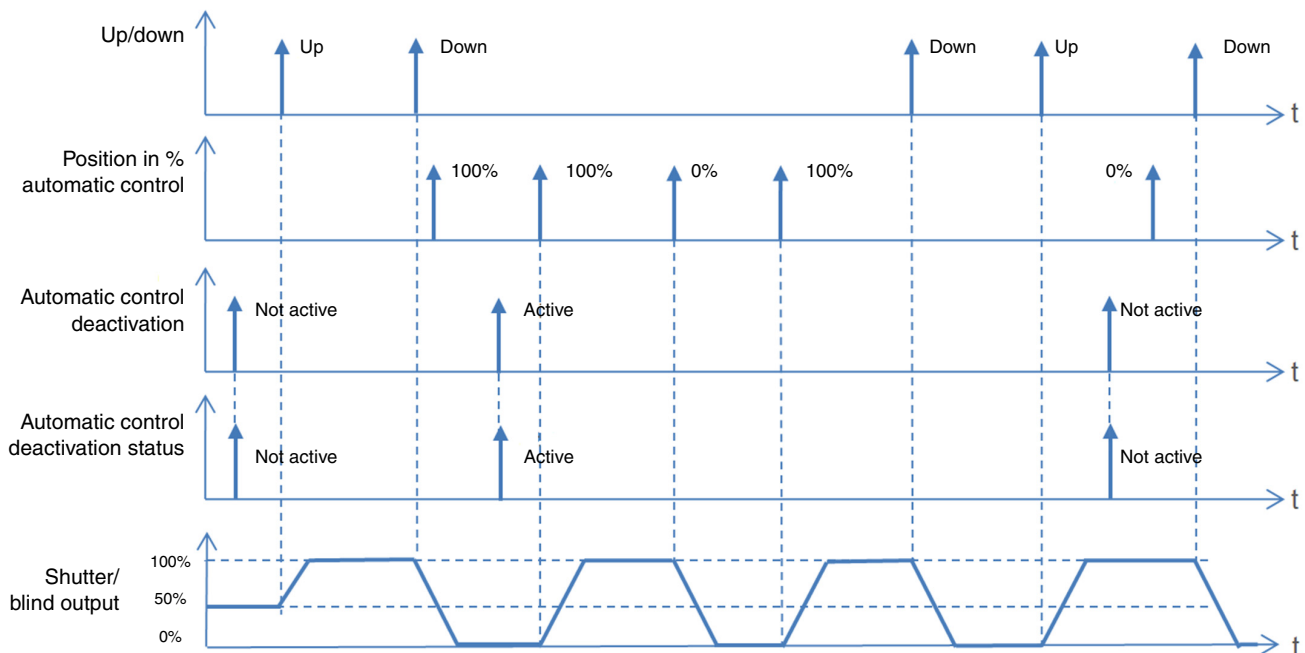
* Default value

4.3.2.6 Automatic control

The Automatic control function is used to control an output in parallel to the Up/Down or Slat tilt/stop function. The functions have the same level of priority. The last command received will act on the status of the output. An additional command object is used to activate or deactivate the Automatic control.

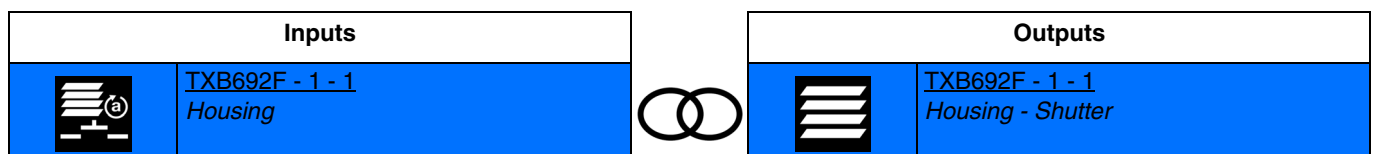
Example: when an output is controlled by a button and in parallel by an automatic control (timer, twilight switch, weather station, etc.) the automatic control can be deactivated for reasons of comfort (vacations, public holidays, etc.).

Operating principle:



■ Links

- **Automatic control shutter angle:** Allows positioning a rolling shutter or blind to the desired height according to a value in % using automatic control.

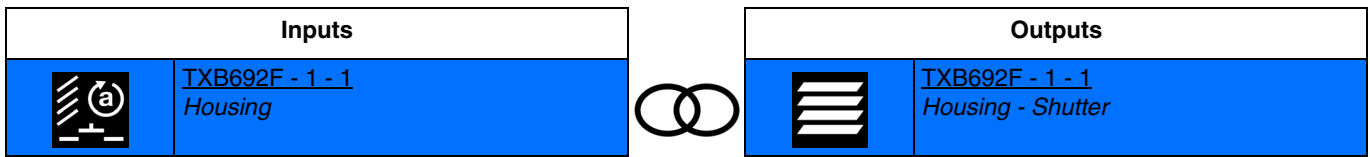


Closing input contact: delayed closing of output contacts for angling the shutter or blind.
 Opening input contact: no action.

Note: When the connection is made, the value in % of the shutter angle must be defined (0%: upper position, 100%: lower position).

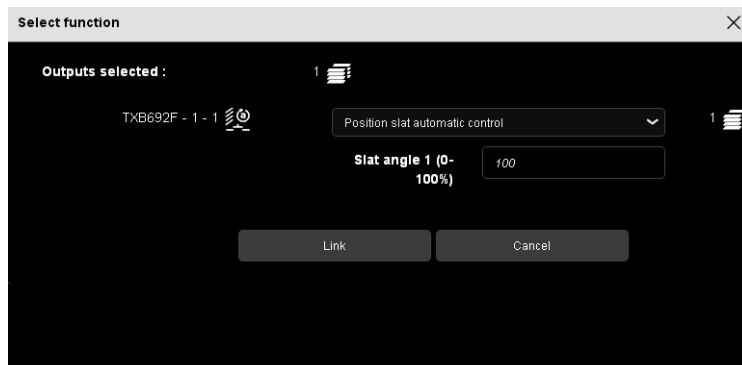


- **Automatic control slat angle:** Allows positioning blind slats according to a value in % using automatic control.

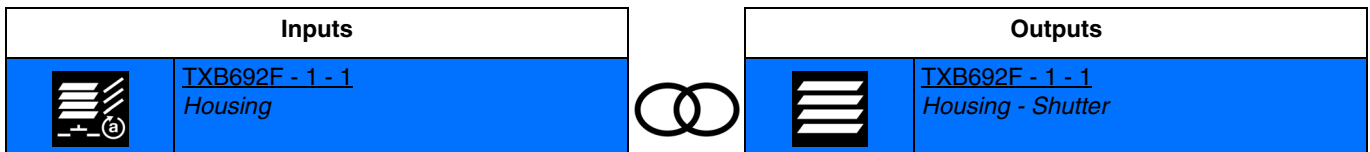


Closing input contact: delayed closing of output contacts for the shutter slat tilt.
 Opening input contact: no action.

Note: When the connection is made, the value in % of the shutter slat angle must be defined (0%: slats open, 100%: slats closed).

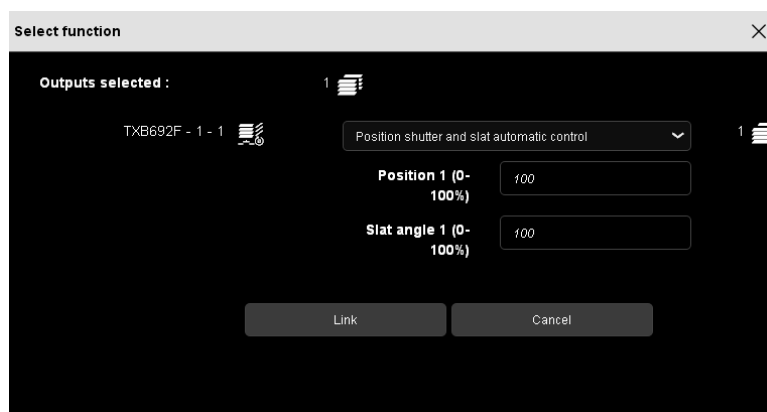


- **Automatic control shutter and slat angle:** Allows positioning a rolling shutter or blind to the desired height and blind slats according to a value in % using automatic control.

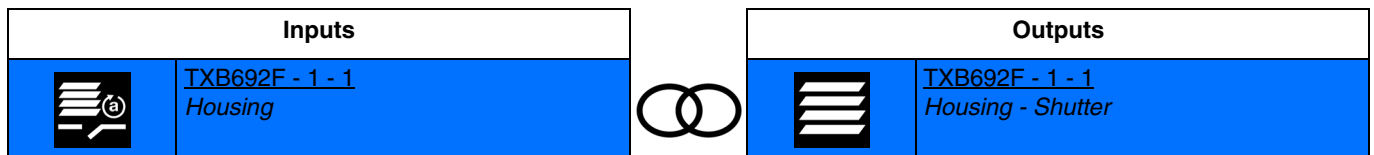


Closing input contact: delayed closing of output contacts for the shutter or blind angle and for the blind slat tilt.
 Opening input contact: no action.

Note: When the connection is made, the value in % for the shutter position must be defined (0%: high position, 100% low position) and the value in % of the blind slat position (0%: slats open, 100%: slats closed).



- **Automatic control shutter position switch:** Allows positioning a rolling shutter or blind to the desired height according to a value in % using a switch and automatic control.

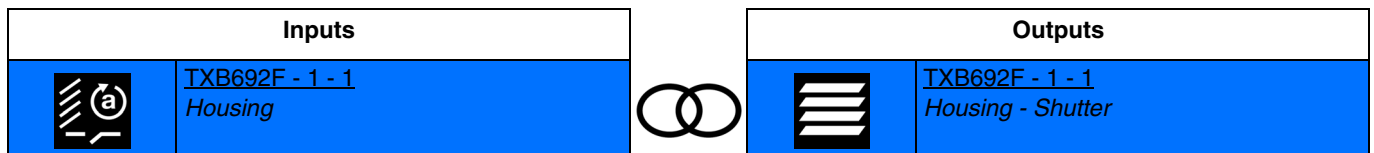


Closing input contact: delayed closing of output contacts for position 1 of the shutter or blind.
 Opening input contact: delayed closing of output contacts for position 2 of the shutter or blind.

Note: When the connection is made, values must be defined in % for shutter positions 1 and 2 (0%: upper position, 100%: lower position).



- **Automatic control inter slat angle:** Allows positioning blind slats according to a value in % using a switch and automatic control.

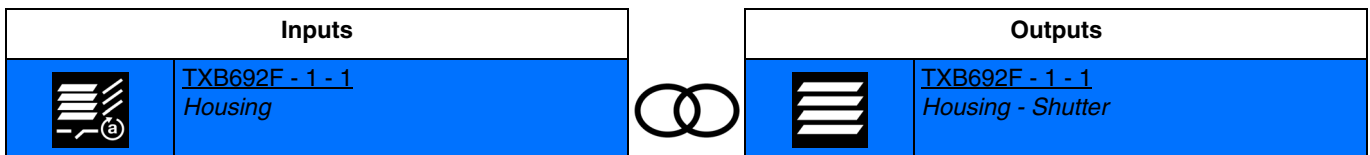


Closing input contact: delayed closing of output contacts for position 1 of the blind slats.
 Opening input contact: delayed closing of output contacts for position 2 of the blind slats.

Note: When the connection is made, values must be defined in % for blind slat positions 1 and 2 (0%: slats open, 100%: slats closed).

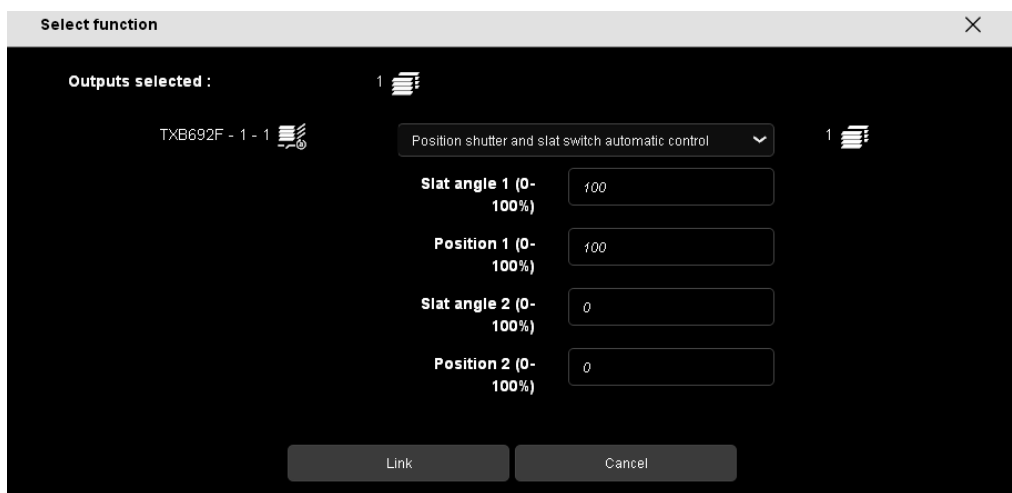


- **Automatic control inter shutter and slat angle:** Allows positioning a rolling shutter or blind to the desired height and blind slats according to a value in % using a switch or automatic control.

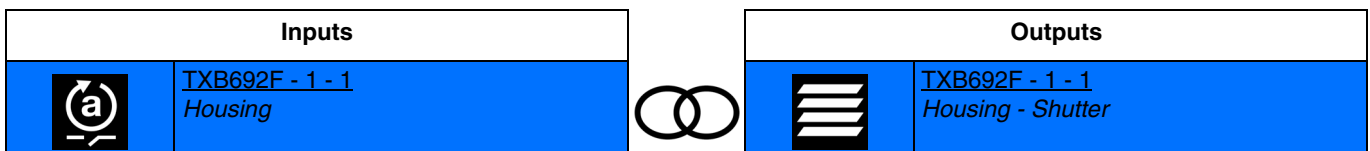


Closing input contact: delayed closing of output contacts for position 1 of the shutter or blind and for position 1 for blind slats.
 Opening input contact: delayed closing of output contacts for position 2 of the shutter or blind and for position 2 for blind slats.

Note: When the connection is made, values must be defined in % for shutter positions 1 and 2 (0%: high position, 100%: low position) and values in % for blind slats positions 1 and 2 (0%: slats open, 100%: slats closed).

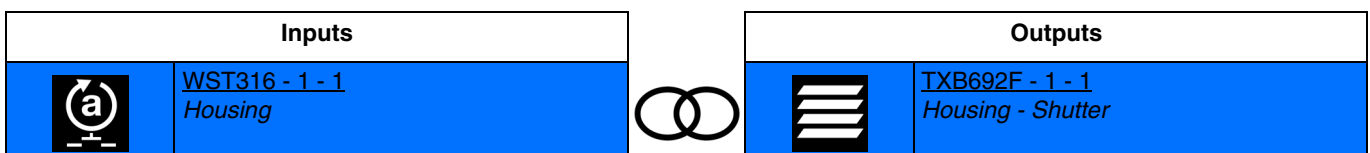


- **Automatic control deactivation:** Deactivates automatic control.



Closing input contact: deactivated automatic control.
 Opening input contact: activated automatic control.

- **Deactivation Automatic control push-button:** Deactivates Automatic control using a push-button.



Press on the push-button: deactivated automatic control.
 A second press on the push-button activates the automatic control.

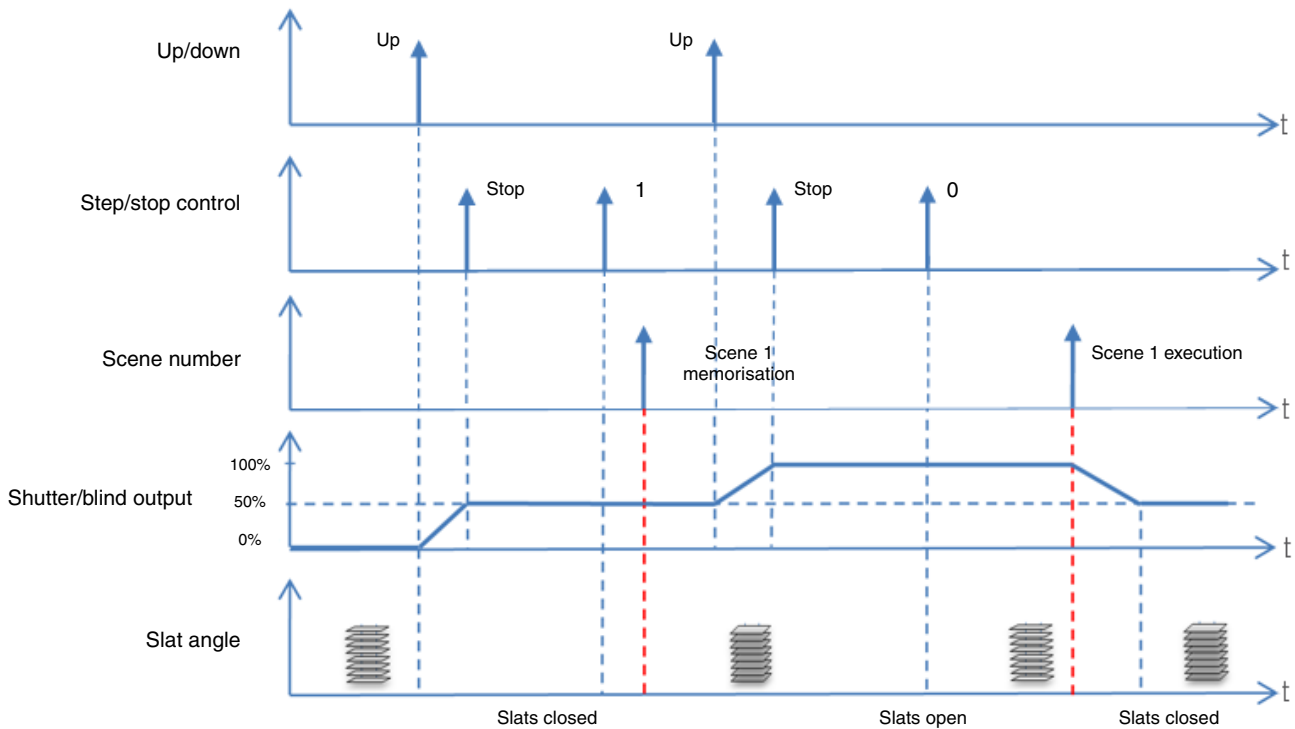
Note: This function is only available with push-button input products with LEDs indicating status.

4.3.2.7 Scene

The Scene function is used to switch groups of outputs into a configurable predefined state. Each output can be included in 8 different scenes.

When the scene is memorised, the position and angle of the slats are memorised.

Operating principle:



Learning and storing scenes

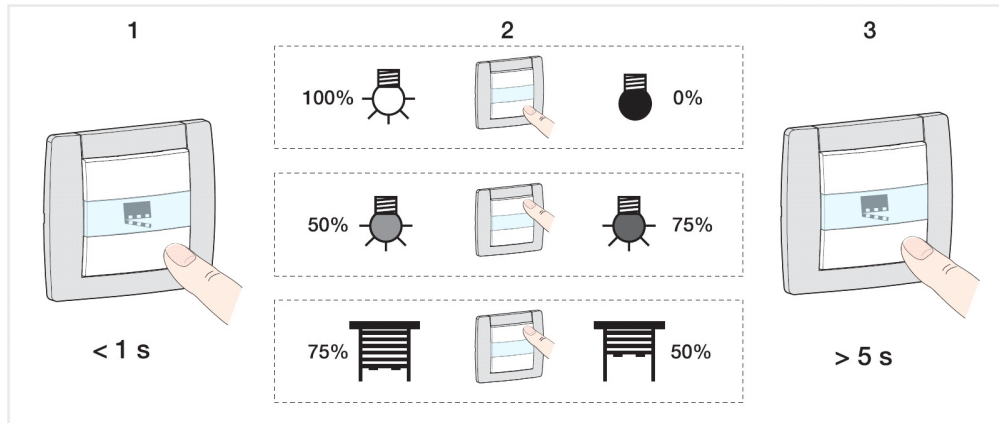
This process is used to change and store a scene. For example, by locally pressing the key in the room or by emission of the values from a visualization.

To access and store scenes, the following values must be sent:

Scene number	Access scene (Object value: 1 byte)	Store scene (Object value: 1 byte)
1-64	= Scene number - 1	= Scene number + 128
Examples		
1	0	128
2	1	129
3	2	130
...	...	
64	63	191

Here is the scene memorisation for local switches, for example.

- Activate scene by briefly pressing the transmitter that starts it,
- The outputs (lights, shutters, etc.) are set in the desired state using the usual local control devices (buttons, remote control, etc.),
- Memorise the status of the outputs with a press greater than 5 seconds long on the transmitter that starts the scene. The memorisation can be displayed by short-term activation of the outputs.



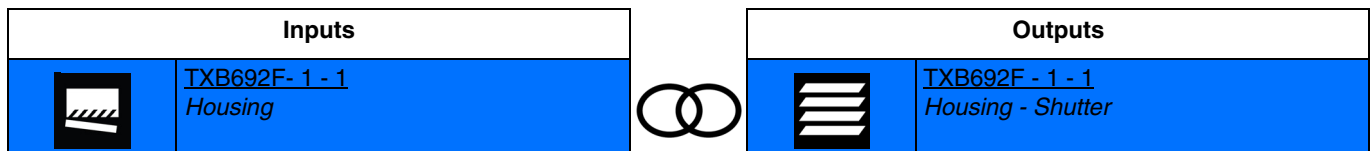
Product learning and memorisation

This procedure allows modifying a scene using a local action on the push buttons located on the front side of the product.

- Activate the scene using a short press on the ambiance push button, which triggers the scene,
- Set the product to manual mode and set the shutters or blinds to the desired status by pressing the associated push-buttons,
- Return to Auto mode,
- Save the scene using a long push for more than 5 seconds on the push-button that triggers the scene,
- Memorisation is signalled by the inversion of the concerned output status for 3 sec.

■ Links

- **Scene:** The scene is activated by pressing the push-button.

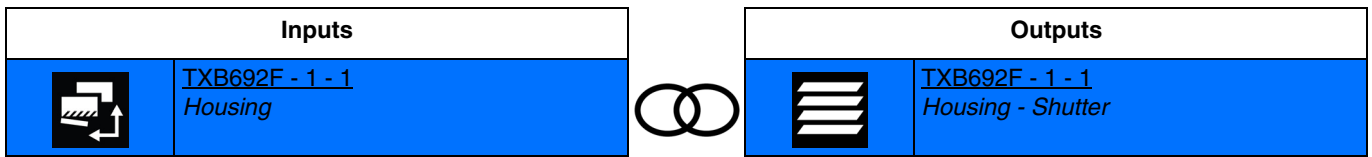


Closing input contact: scene activation.
Opening input contact: no action.

Note: At the time the connection is made, the scene number must be defined for the closing input contact.



- **Scene switch:** The scene is activated according to the closing or opening input contact.



Closing input contact: scene activation 1.
 Opening input contact: scene activation 2.

Note: At the time the connection is made, the scene number must be defined for the closing and opening input contact.



4.4 Input operation mode

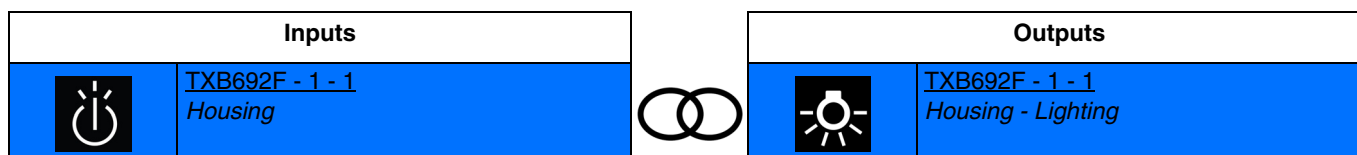
4.4.1 Lighting

An output can be switched on or off using the ON/OFF function.

Available functionalities	
ON	Automatic control ON
OFF	Automatic control OFF
ON/OFF	ON/OFF automatic control
Toggle switch	Load shedding
Timer	Scene
Priority ON	Scene switch
Priority OFF	Automatic control deactivation

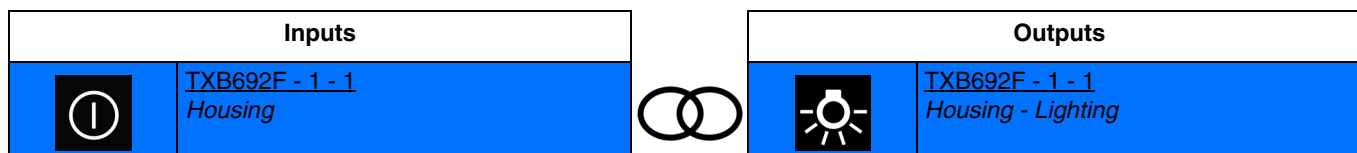
Note: For the function **Automatic control deactivation**, see: [Automatic control deactivation](#).
For the function **Scene** and **Switch scene**, see: [Scene](#).

- **ON**: Turns on the lighting circuit.



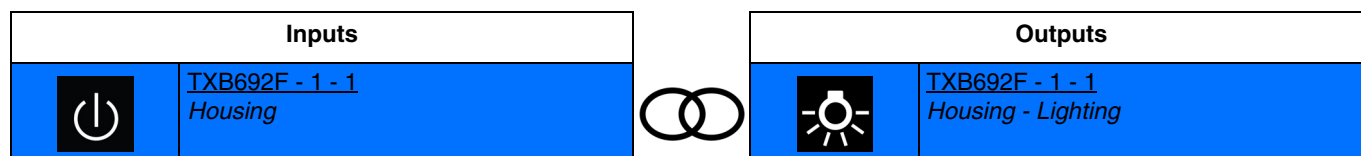
Activation of the input by short presses switches on the light.
Successive activation keeps the light on.

- **OFF**: Turns off the lighting circuit.



Activating the input switches off the light.
Successive activation keeps the light off.

- **ON/OFF:** Turns on or shuts off the lighting circuit (Switch).



Closing the input contact switches on the light.
Opening the input contact switches off the light.

*Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).*

Below are the outputs which can also have these functions:

	Dimming	Controls the dimming output for switching the light on and off. This procedure enables a same input to be connected to an ON/OFF output and to a dimming output.
	Heating	Controls the output for switching the heating system on and off.
	CMV	Controls the output for switching the CMV system on and off.
	Backlight	Receives status indications from another product for controlling the Backlight.
	Override	Overrides the current operating mode.
	Logical operation	Receives the status of the inputs or outputs of one or more products in order to perform a logical operation for displaying information.

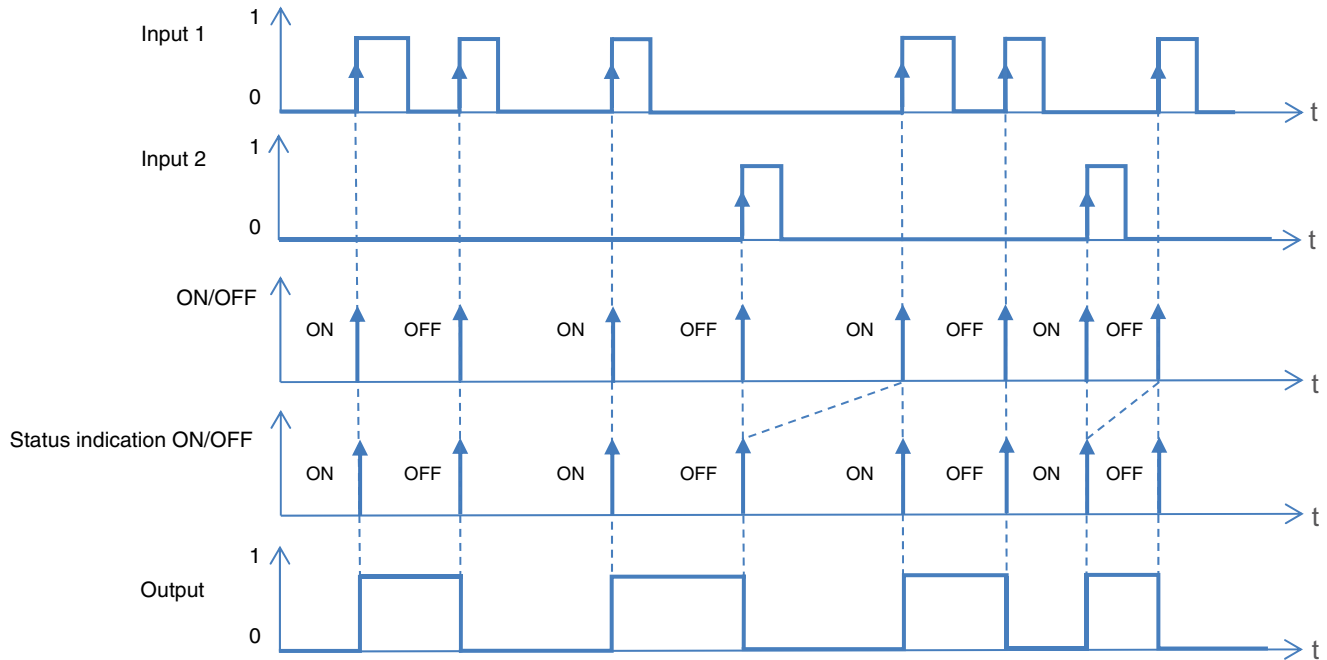
It is also possible to make a link between 2 inputs. Below are the inputs which can also have these functions:

	Domestic Hot Water (DHW) control	Enables the control of a DHW boiler.
	Increase/decrease dimming	Controls the dimming input for switching the light on and off (Only with TX511 and TXC511).

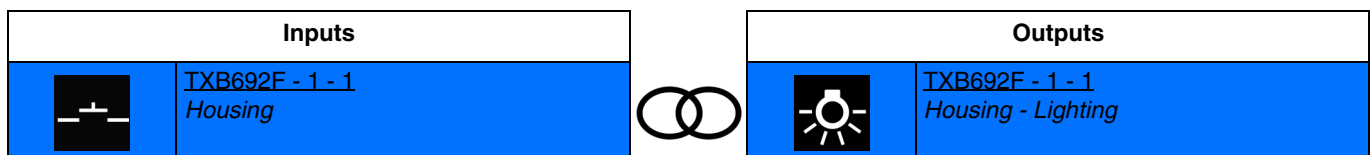
4.4.1.1 Toggle switch

This function enables a lighting circuit or any other load to be commanded to switch on or off. Each time the push-button is pressed the output status is inverted.

Operating principle:



- **Toggle switch:** Inverses the lighting circuit status.





Activating the input by a short press switches between on and off. Successive activation inverts the output contact status each time.

Below are the outputs which can also have these functions:

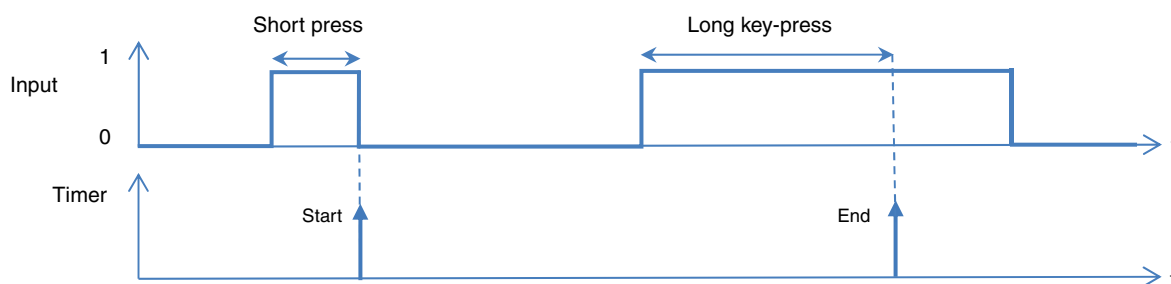
	Dimming	Controls the dimming output for switching the light on and off. This procedure enables a same input to be connected to an ON/OFF output and to a dimming output.
	Heating	Controls the output for switching the heating system on and off.
	CMV	Controls the output for switching the CMV system on and off.
	Backlight	Receives status indications from another product for controlling the Backlight.
	Override	Overrides the current operating mode.
	Logical operation	Receives the status of the inputs or outputs of one or more products in order to perform a logical operation for displaying information.

It is also possible to make a link between 2 inputs. Below are the inputs which can also have these functions:

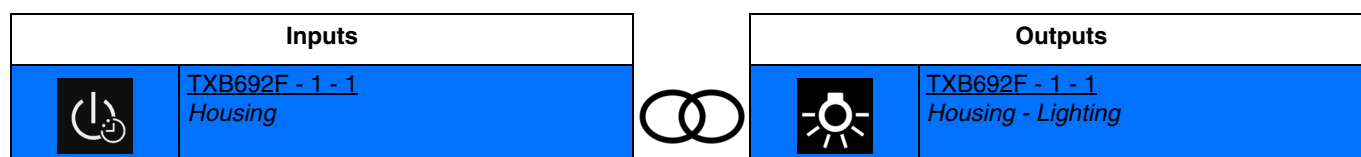
	Domestic Hot Water (DHW) control	Enables the control of a DHW boiler.
	Increase/decrease dimming	Controls the dimming output for switching the light on and off (Only with TX511 and TXC511).

4.4.1.2 Timer

The Timer function can switch a lighting circuit on or off for a configurable period. A short press on the push-button re-launches the timer. The timer can be interrupted before the end of the time by a long press.



The Timer function is used to switch on a lighting circuit for a programmable period.

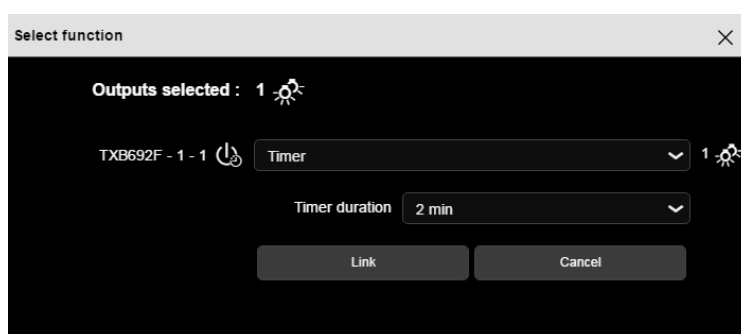


Activating the input by a short press <1 s switches on the light for a length of time.

Timing function interruption:



Activating the input with a long press >1 s stops timing function mid way and switches off (OFF).

Note: At the time of connection, it is possible to define the timer duration. This duration is defined on the output product.



*Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).*

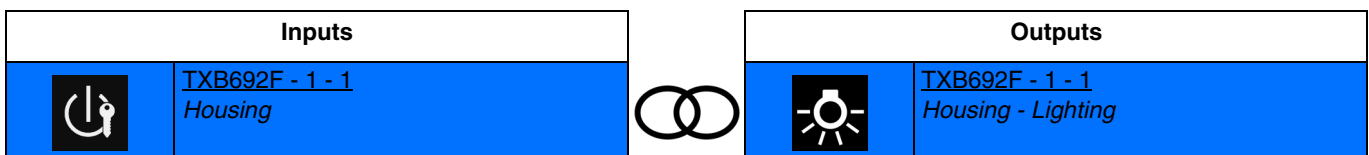
Below are the outputs which can also have these functions:

	Dimming	Controls the dimming output for switching on the light to the last level memorised for a programmable duration.
	CMV	Controls the output for switching on the CMV system for a programmable duration.

4.4.1.3 Priority

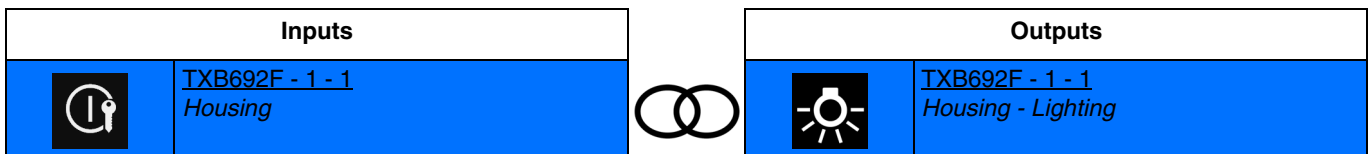
The Priority function is used to force the output into a defined state.
 This function the priority or priority cancellation controls to be issued.
 No other command is taken into account when the Priority is active. Only priority or alarm cancellation commands will be taken into account.

- **Priority ON:** Allows forcing and keeping the lighting circuit on.




Activating the input forces the output to ON.
 Successive activation switches between ON priority and priority cancellation.

- **Priority OFF:** Allows forcing and keeping the lighting circuit off.




Activating the input forces the output to OFF.
 Successive activation switches between OFF priority and priority cancellation.

Below are the outputs which can also have these functions:

	Dimming	Forces and keeps the lighting circuit on or off.
---	---------	--

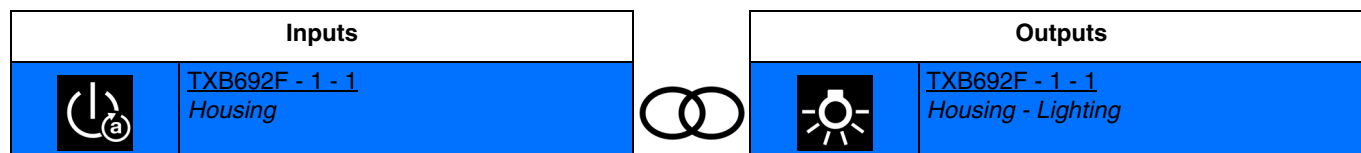
It is also possible to make a link between 2 inputs. Below are the inputs which can also have these functions:

	Increase/decrease dimming	Controls the dimming input for switching the light on and off (Only with TX511 and TXC511).
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4.4.1.4 ON/OFF Automatic control

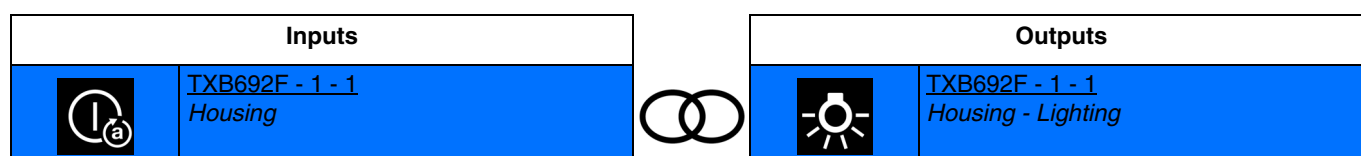
The Automatic control function enables an output to be controlled in parallel to the standard control. An additional command object (Automatic control deactivation) is used to activate or deactivate Automatic control.

- **Automatic control ON:** Allows turning on the light circuit using Automatic control.



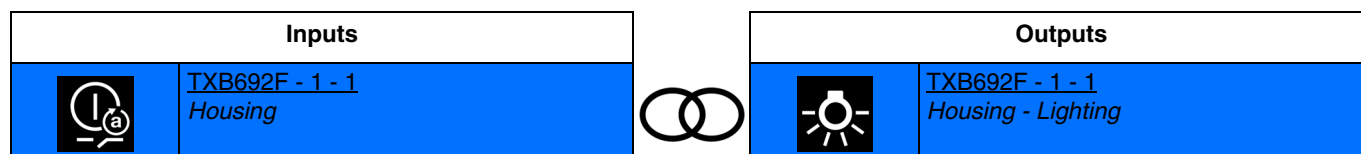
Activation of the input by short presses switches on the light.
Successive activation keeps the light on.

- **Automatic control OFF:** Allows switching off the light circuit using automatic control.




Activating the input switches off the light.
Successive activation keeps the light off.

- **ON/OFF automatic control:** Allows turning the lighting circuit on or off using Automatic control (Switch).



Closing the input contact switches on the light.
Opening the input contact switches off the light.

Below are the outputs which can also have these functions:

	Dimming	Controls the dimming output for switching the light on and off. This procedure enables a same input to be connected to an ON/OFF output and to a dimming output.
---	---------	--

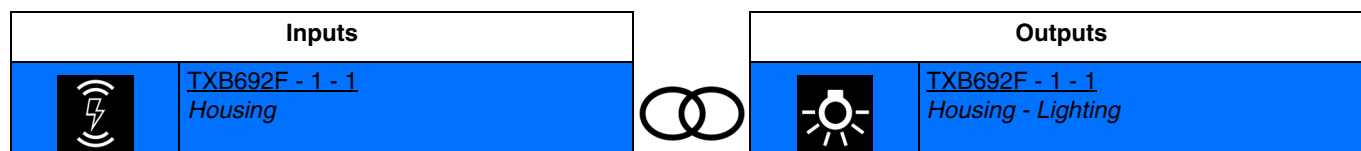
*Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).*

*Note: For the function **Automatic control deactivation**, see: [Automatic control deactivation](#).*

4.4.1.5 Load shedding

The Load shedding function is used to force an output to OFF. At the end of load shedding, the output is switched to the theoretical status without Load shedding (memorisation).

- **Load shedding:** Allows forcing an output to OFF.



Activating the input forces the output to OFF.

Below are the outputs which can also have these functions:

	Dimming	Controls the dimming output switching off the light. This procedure enables a same input to be connected to an ON/OFF output and to a dimming output.
--	---------	---

Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).

4.4.2 Relative or absolute dimming (Brightness value)

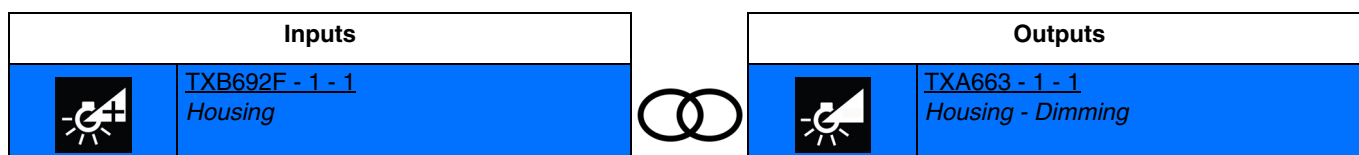
With relative dimming, the brightness value is raised or lowered with respect to the current brightness value. This is achieved, for example, by a long press on a sensor button. With absolute dimming, the brightness value to be achieved is set on the dimmer as a % value.

Available functionalities			
	Increase dimming/ON		Dimming automatic control PB
	Decrease dimming/OFF		Dimmer switch automatic control
	Increase/decrease dimming		Scene
	Dimming		Scene switch
	Dimming switch		Automatic control deactivation

Note: For the function **Automatic control deactivation**, see: [Automatic control deactivation](#).
For the function **Scene** and **Switch scene**, see: [Scene](#).

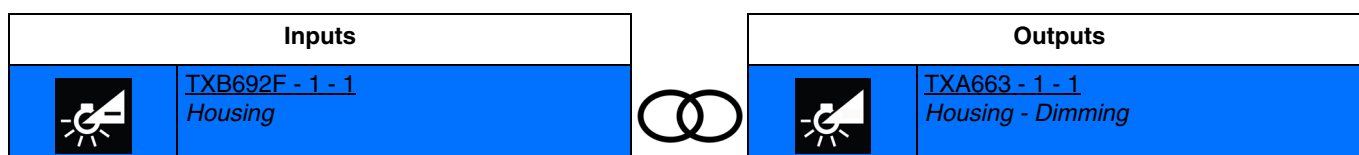
4.4.2.1 Dimming

- **Increase dimming/ON:** Increases the output level.



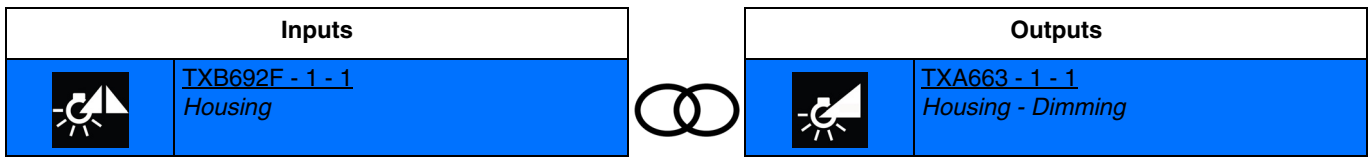
Activating the input by short presses switches on the light to the last level memorised.
Activating the input by long press increases the level of brightness.

- **Decrease dimming/OFF:** Decreases the output level.



Activating the input by a short press switches off the light.
Activating the input by a long press decreases the level of brightness.

- **Increase/decrease dimming:** Varies the light with a single push-button.



Activating the input by a short press switches between Switching the light on to the last level memorised and Switching the light off.

Activating the input by a long press increases or decreases the level of brightness.

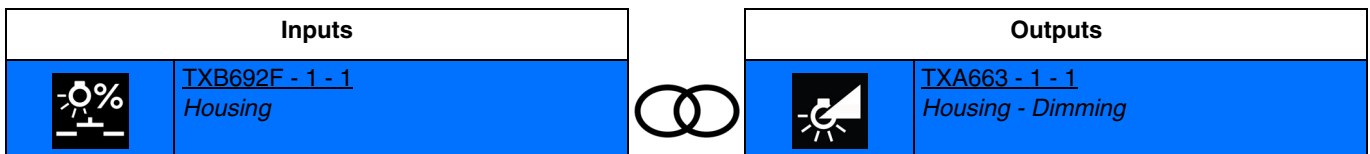
Below are the outputs which can also have these functions:

	Lighting	Controls the ON/OFF output for switching the light on and off. This procedure enables a same input to be connected to an ON/OFF output and to a dimming output.
--	----------	---

It is also possible to make a link between 2 inputs. Below are the inputs which can also have these functions:

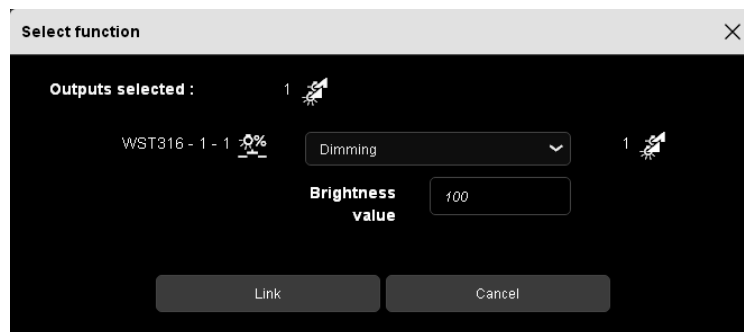
	Increase/decrease dimming	Controls the dimming input for dimming the light (Only with TX511 and TXC511).
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- **Dimming:** Varies the light with a defined brightness value.

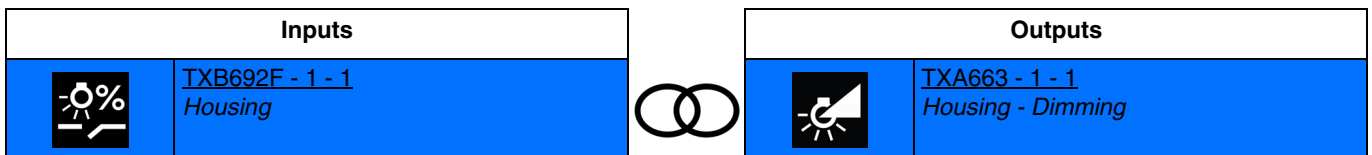


Activating the input switches the light on to the brightness value defined.

Note: At the time the connection is made, the brightness value must be defined for the contact closure input.



- **Dimming switch:** Varies the light with two brightness values defined according to the opening and closing of the input contact.



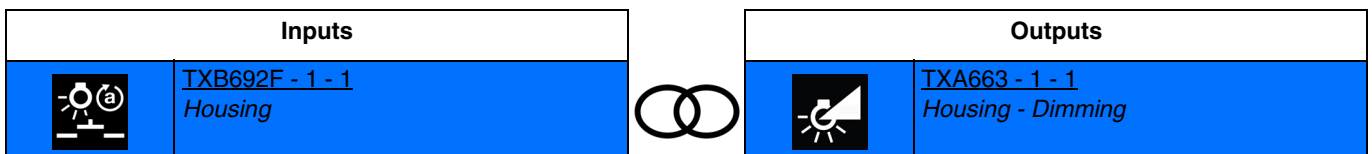
Closing input contact: turns on the light at the 1 brightness value.
 Opening input contact: turns on the light at the 2 brightness value.

Note: At the time the connection is made, the brightness values must be defined for the contact closure input.



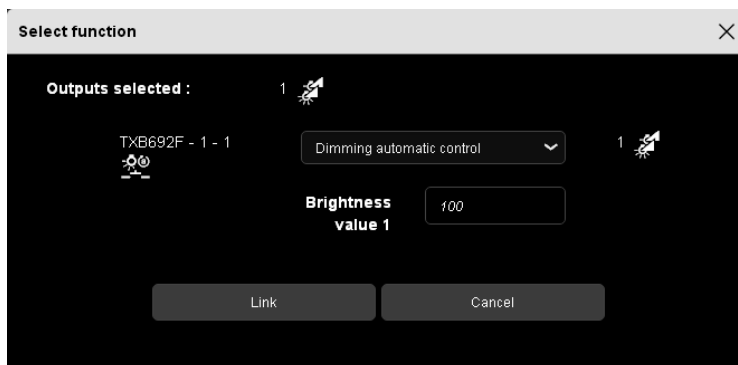
4.4.2.2 Dimming automatic control

- **Dimming automatic control PB:** Allows varying the light with a defined brightness value using Automatic control.

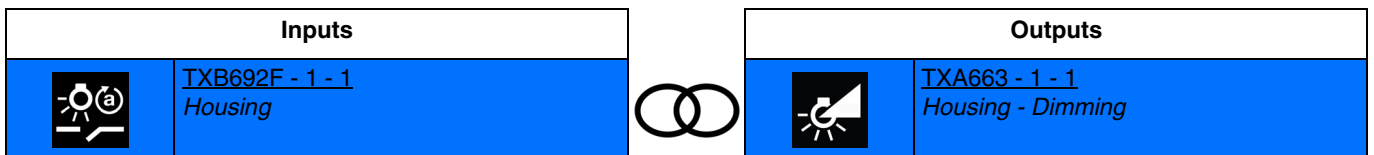


Activating the input switches the light on to the brightness value defined.

Note: At the time the connection is made, the brightness value must be defined for the contact closure input.

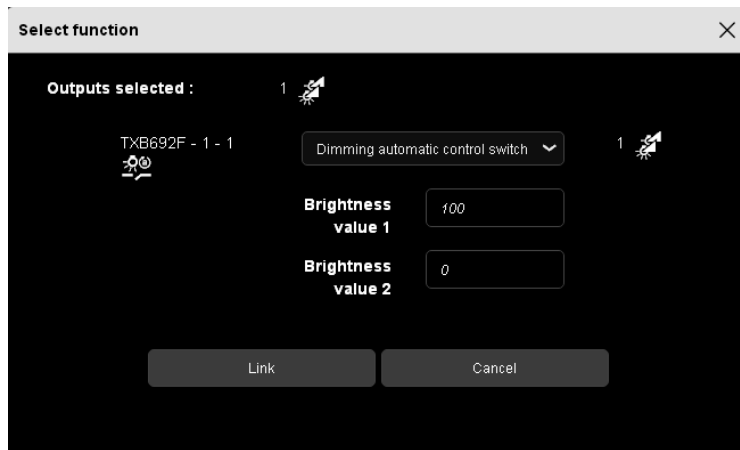


- **Dimmer switch automatic control:** allows varying the light with two defined brightness values according to the opening and closing input contact using automatic control.



Closing input contact: turns on the light at the 1 brightness value.
 Opening input contact: turns on the light at the 2 brightness value.

Note: At the time the connection is made, the brightness values must be defined for the contact closure input.



*Note: For the function **Automatic control deactivation**, see: [Automatic control deactivation](#).*

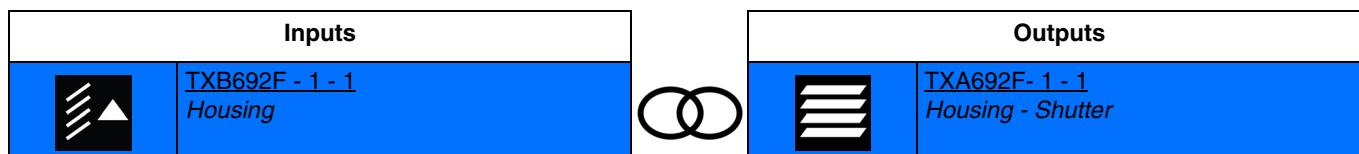
4.4.3 Shutter/blind

Available functionalities			
	Blinds up		Priority up
	Blinds down		Priority down
	Shutter UP		Wind alarm
	Shutter DOWN		Rain alarm
	Up/down		Automatic control shutter angle
	Down/up		Automatic control slat angle
	Switch up		Automatic control shutter and slat angle
	Down switch		Automatic control shutter position switch
	Up/stop		Automatic control inter slat angle
	Down/stop		Automatic control inter shutter and slat angle
	Shutter position		Scene
	Slat angle		Scene switch
	Shutter and slat angle		Automatic control deactivation
	Shutter angle switch		
	Slat angle switch		
	Shutter and slat angle switch		

Note: For the function **Automatic control deactivation**, see: [Automatic control deactivation](#).
 For the function **Scene** and **Switch scene**, see: [Scene](#).

4.4.3.1 Up/down

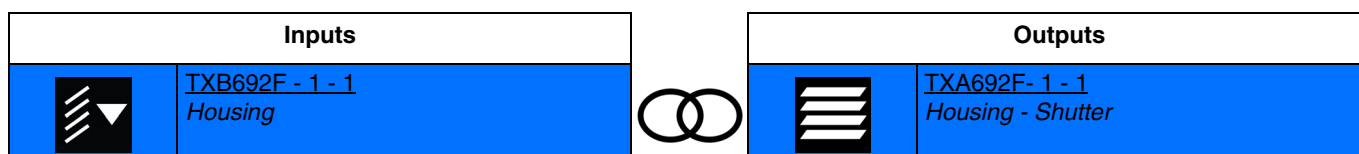
- **Blinds up:** Allows to raise or stop a blind or tilt the blind slats.



Activating the input by a short press briefly closes the Up output contact (function direction of a blind's slats).
 Activating the input by a long press closes the Up output contact for a length of time (function raising a rolling shutter or a blind).

Note: If a brief input contact occurs during the delay, the output contact opens (stop function).

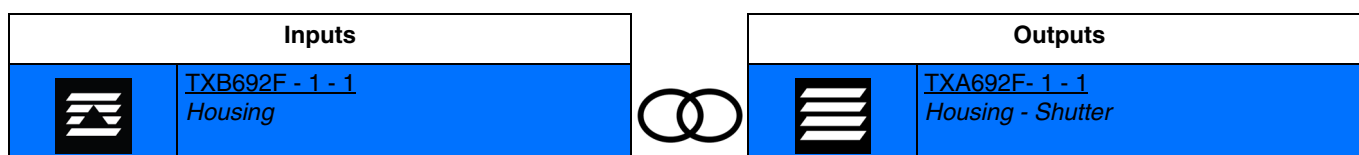
- **Blinds down:** Allows to lower or stop a blind or tilt the blind blades.



Activating the input by a short press briefly closes the Down output contact (function direction of a blind's slats).
 Activating the input by a long press closes the Down output contact for a length of time (function lowering a rolling shutter or a blind).

Note: If a brief input contact occurs during the delay, the output contact opens (stop function).

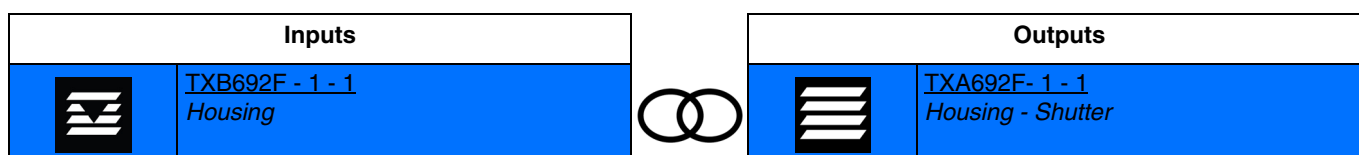
- **Shutter UP:** Allows to raise or stop a rolling shutter.



Activating the input closes the Up output contact for a length of time (function raising a rolling shutter or a blind).

Note: If a brief input contact occurs during the delay, the output contact opens (stop function).

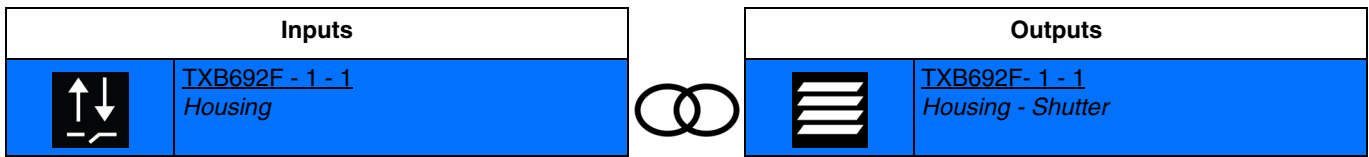
- **Shutter DOWN:** Allows to lower or stop a rolling shutter.



Activating the input closes the Down output contact for a length of time (Function Lowering a rolling shutter or a blind).

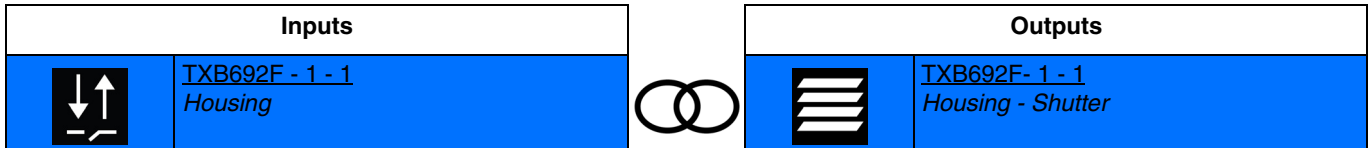
Note: If a brief input contact occurs during the delay, the output contact opens (stop function).

- **Up/down:** Allows to raise or lower a rolling shutter or a blind using a switch.



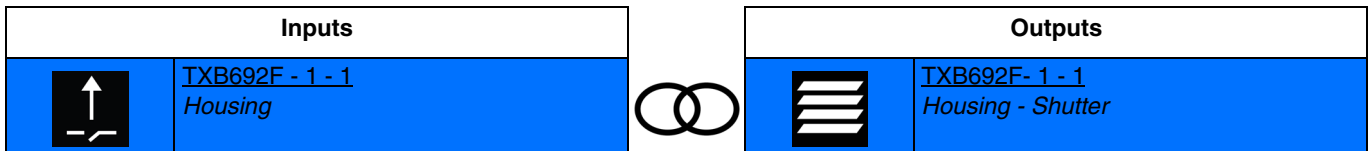
Closing input contact: delayed closing of the raise output contact.
 Opening input contact: delayed closing of the lowering output contact.

- **Down/up:** Allows to raise or lower a rolling shutter or a blind using a switch.



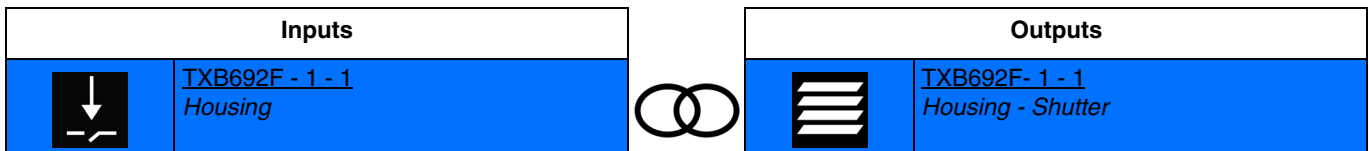
Closing input contact: delayed closing of the lowering output contact.
 Opening input contact: delayed closing of the raise output contact.

- **Switch up:** Allows to raise a rolling shutter or a blind using a switch.



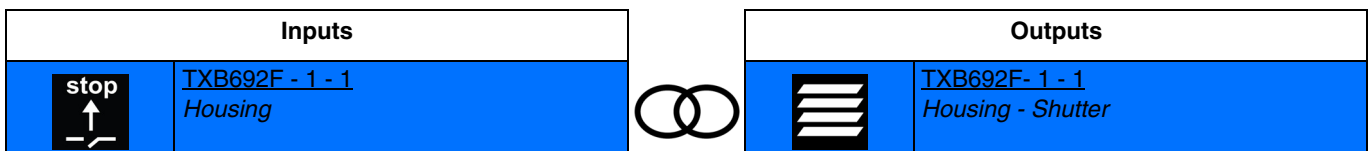
Closing input contact: delayed closing of the raise output contact.
 Opening input contact: no action.

- **Down switch:** Allows to lower a rolling shutter or a blind using a switch.



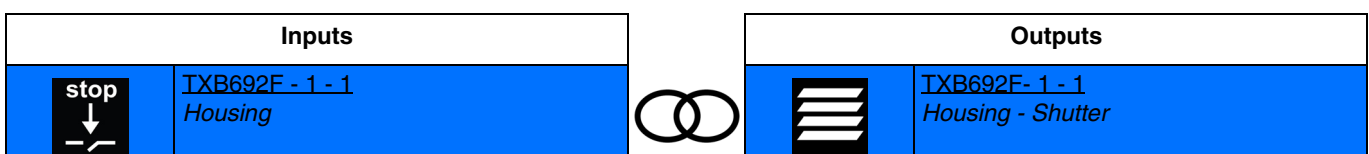
Closing input contact: delayed closing of the lowering output contact.
 Opening input contact: no action.

- **Up/stop:** Allows to raise or stop a rolling shutter or a blind using a switch.



Closing input contact: delayed closing of the raise output contact.
 Opening input contact: opening an output contact (stop function).

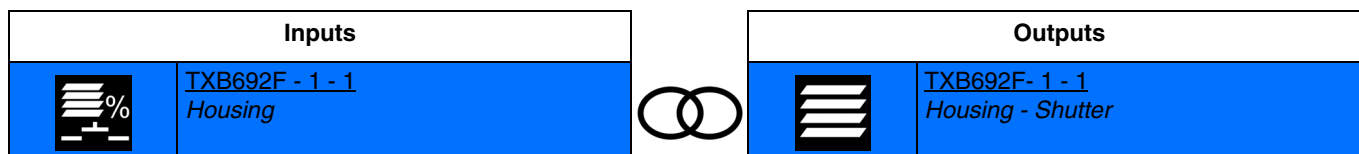
- **Down/stop:** Allows to lower or stop a rolling shutter or a blind using a switch.



Closing input contact: delayed closing of the lowering output contact.
 Opening input contact: opening an output contact (stop function).

4.4.3.2 Shutter or blind angle

- **Shutter position:** Allows to angle a rolling shutter or blind to the desired height according to a value in %.

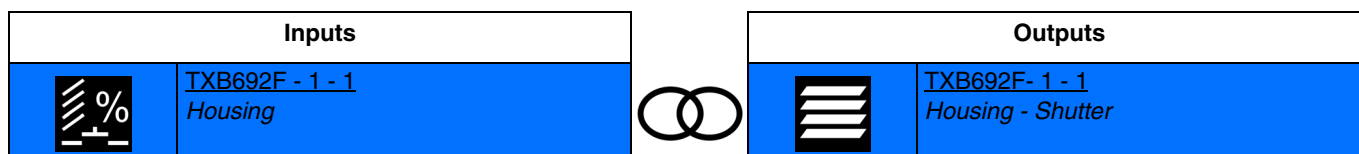


Activating the input closes the output contacts for positioning the shutter or blind for a length of time.

Note: When the connection is made, the value in % of the shutter angle must be defined (0%: upper position, 100%: lower position).

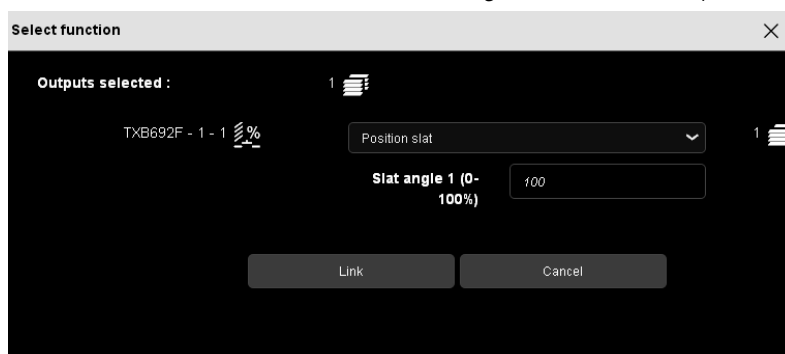


- **Slat angle:** Allows positioning shutter slats according to a value in %.

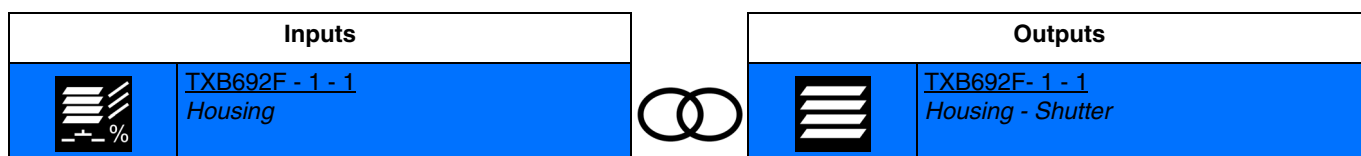


Activating the input closes the output contacts for tilting the blind slats for a length of time.

Note: When the connection is made, the value in % of the shutter slat angle must be defined (0%: slats open, 100%: slats closed).



- **Shutter and slat angle:** Allows positioning a rolling shutter or blind at the desired height and the blind slats according to a value in %.

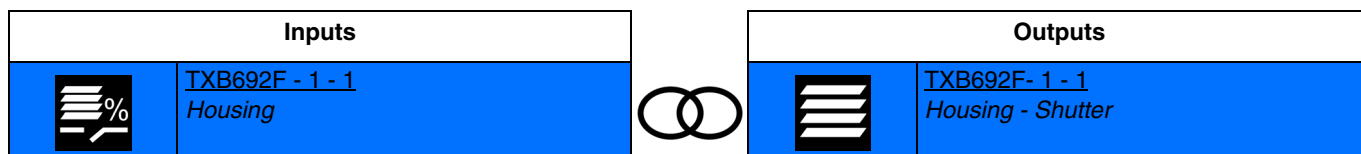


Activating the input closes the output contacts for positioning the shutter or blind and for tilting the blind slats for a length of time.

Note: When the connection is made, the value in % for the shutter position must be defined (0%: high position, 100% low position) and the value in % of the blind slat position (0%: slats open, 100%: slats closed).



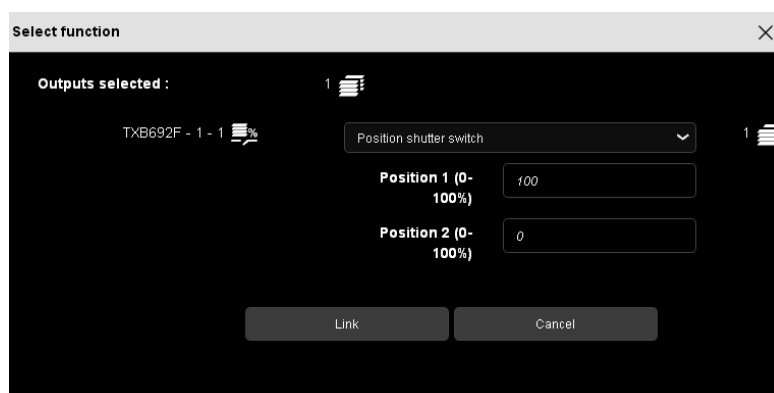
- **Shutter angle switch:** Allows positioning a rolling shutter or blind at the desired height according to a value in % using a switch.



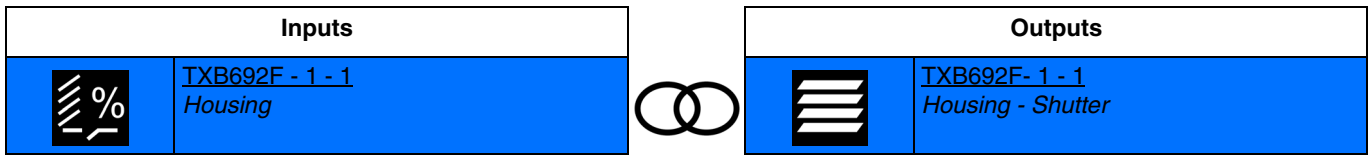
Closing input contact: delayed closing of output contacts for position 1 of the shutter or blind.

Opening input contact: delayed closing of output contacts for position 2 of the shutter or blind.

Note: When the connection is made, values must be defined in % for shutter positions 1 and 2 (0%: upper position, 100%: lower position).

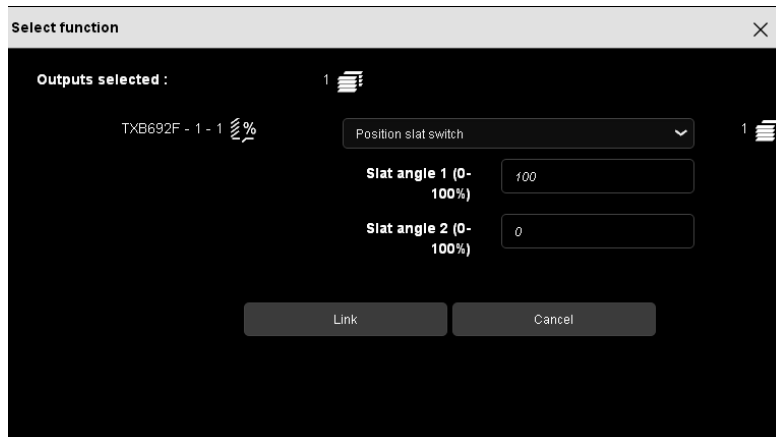


- **Slat angle switch:** Allows positioning blind slates according to a value in % using a switch.

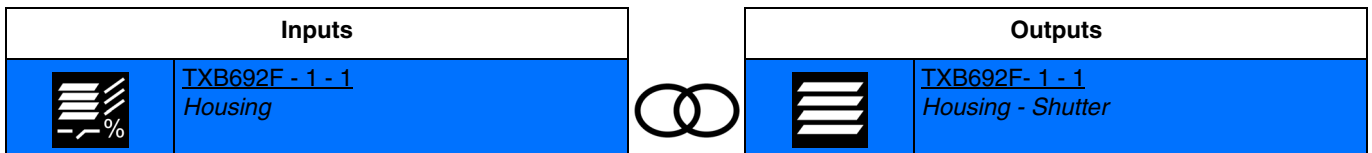


Closing input contact: delayed closing of output contacts for position 1 of the blind slats.
 Opening input contact: delayed closing of output contacts for position 2 of the blind slats.

Note: When the connection is made, values must be defined in % for blind slat positions 1 and 2 (0%: slats open, 100%: slats closed).

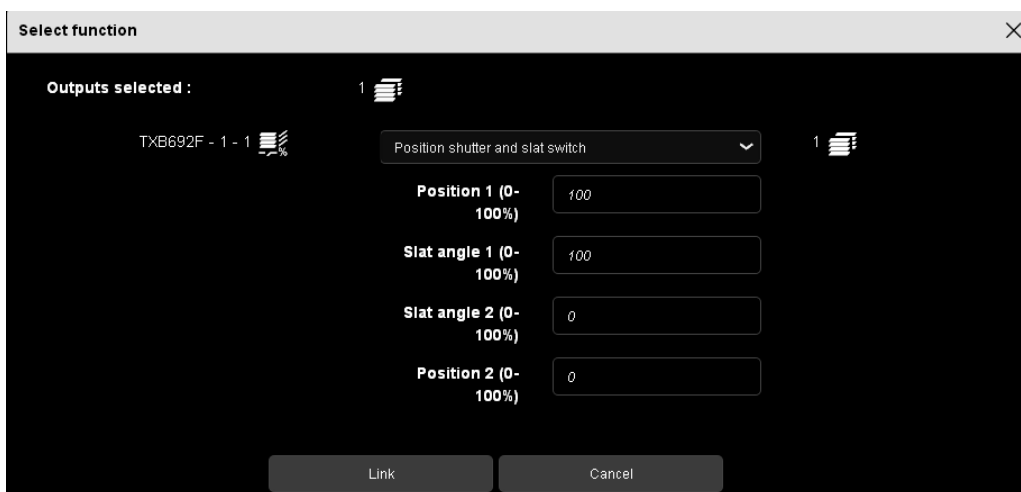


- **Shutter and slat angle switch:** Allows positioning a rolling shutter or a blind at the desired height and the blind slates according to a value in % using a switch.



Closing input contact: delayed closing of output contacts for position 1 of the shutter or blind and for position 1 for blind slats.
 Opening input contact: delayed closing of output contacts for position 2 of the shutter or blind and for position 2 for blind slats.

Note: When the connection is made, values must be defined in % for shutter positions 1 and 2 (0%: high position, 100%: low position) and values in % for blind slats positions 1 and 2 (0%: slats open, 100%: slats closed).



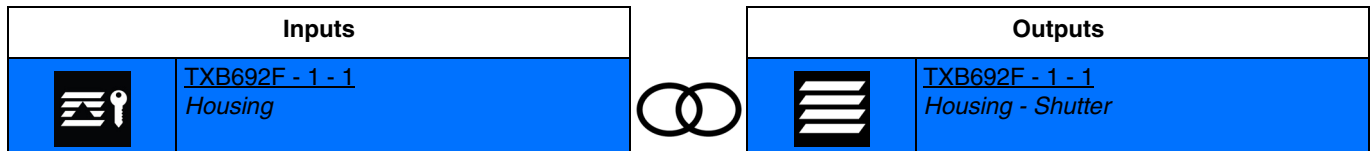
4.4.3.3 Priority

The Priority function forces the control of a shutter.

This function the priority or priority cancellation controls to be issued.

No other command is taken into account when the Priority is active. Only priority or alarm cancellation commands will be taken into account.

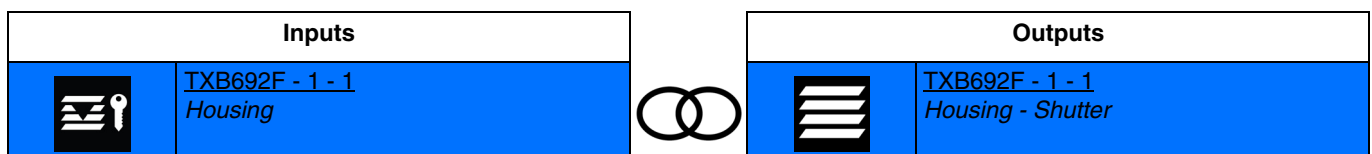
- **Priority up:** Allows forcing a rolling shutter or blind to raise.



Closing input contact: activation priority and delayed closing of the raise output contact.

Opening input contact: end of the priority.

- **Priority down:** Allowing forcing a rolling shutter or blind to lower.



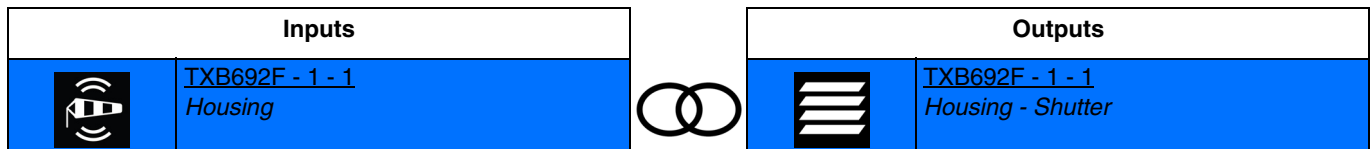
Closing input contact: activation of priority and delayed closing of the lowering output contact.

Opening input contact: end of the priority.

4.4.3.4 Alarm

The Alarm function issues alarms on a cyclical basis to the bus from automations (anemometer, rain detector, twilight switch etc.)

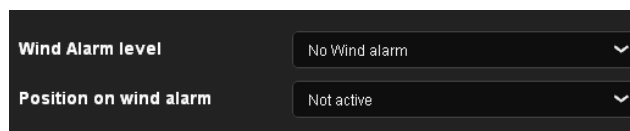
- **Wind alarm:** Allows to set the rolling shutter or blind in a defined position when the alarm is activated.



Closing input contact: wind alarm activation.

Opening input contact: alarm end.

The rolling shutter or blind angle is defined through a setting.

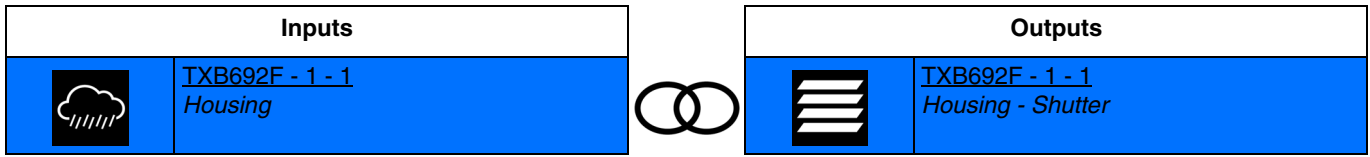


Parameter	Description	Value
Position on wind alarm	During the wind alarm, the shutter/blind output: Not changed Closes the Up contact Closes the down contact	Not active* Up Down

*Note: The setting **Wind alarm level** is not taken into account with this type of connection.*

* Default value

- **Rain alarm:** Allows to set the rolling shutter or blind in a defined position when the alarm is activated.



Closing input contact: rain alarm activation.
 Opening input contact: alarm end.

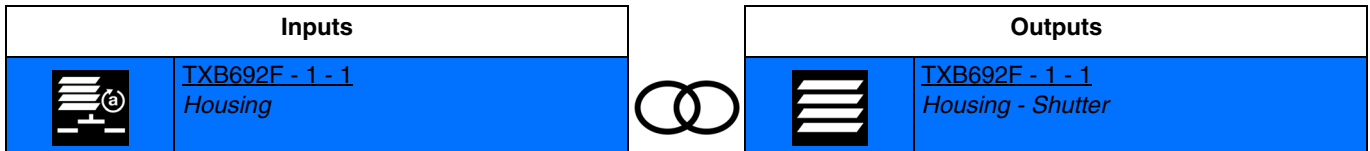
The rolling shutter or blind angle is defined through a setting.

Parameter	Description	Value
Position on rain alarm	Defines the status of the shutter output on receipt of the rain alarm.	Not active* Up Down

*Note: The setting **rain alarm** is not taken into account with this type of connection.*

4.4.3.5 Shutter/blind automatic control

- **Automatic control shutter angle:** Allows positioning a rolling shutter or blind to the desired height according to a value in % using automatic control.

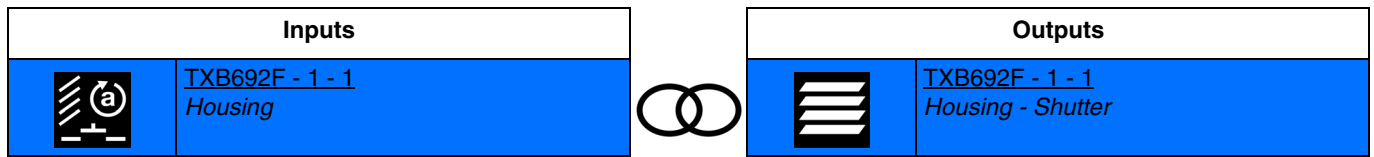


Activating the input closes the output contacts for positioning the shutter or blind for a length of time.

Note: When the connection is made, the value in % of the shutter angle must be defined (0%: upper position, 100%: lower position).

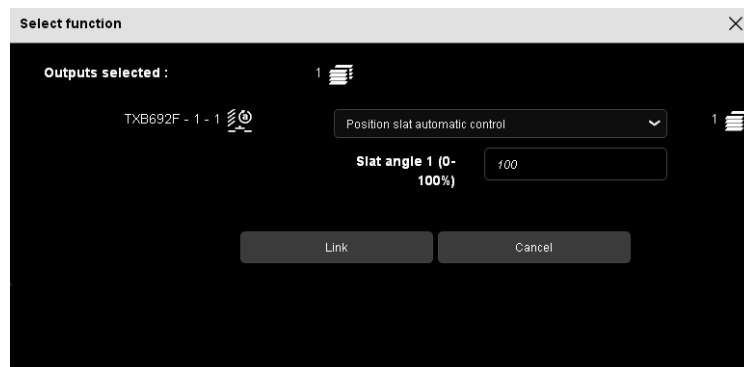
* Default value

- **Automatic control slat angle:** Allows positioning blind slats according to a value in % using automatic control.

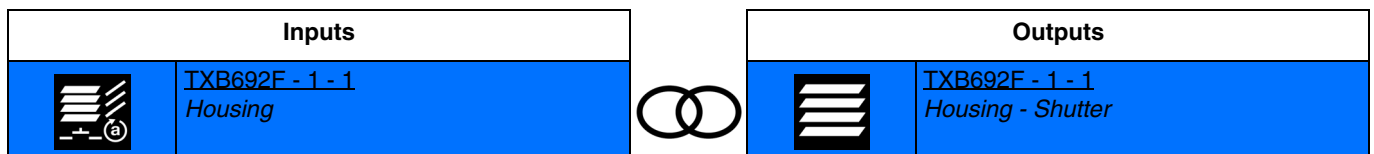


Activating the input closes the output contacts for tilting the blind slats for a length of time.

Note: When the connection is made, the value in % of the shutter slat angle must be defined (0%: slats open, 100%: slats closed).



- **Automatic control shutter and slat angle:** Allows positioning a rolling shutter or blind to the desired height and blind slats according to a value in % using automatic control.

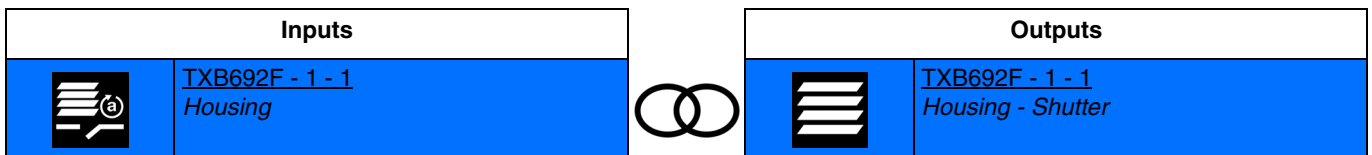


Activating the input closes the output contacts for positioning the shutter or blind and for tilting the blind slats for a length of time.

Note: When the connection is made, the value in % for the shutter position must be defined (0%: high position, 100% low position) and the value in % of the blind slat position (0%: slats open, 100%: slats closed).

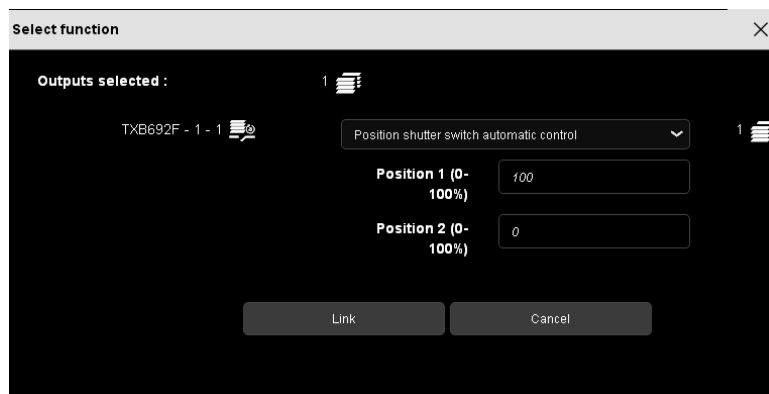


- **Automatic control shutter position switch:** Allows positioning a rolling shutter or blind to the desired height according to a value in % using a switch and automatic control.

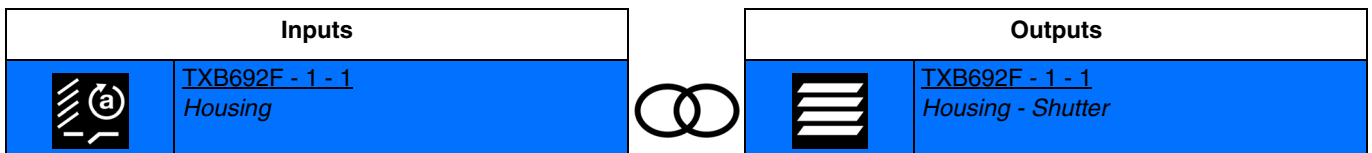


Closing input contact: delayed closing of output contacts for position 1 of the shutter or blind.
 Opening input contact: delayed closing of output contacts for position 2 of the shutter or blind.

Note: When the connection is made, values must be defined in % for shutter positions 1 and 2 (0%: upper position, 100%: lower position).



- **Automatic control inter slat angle:** Allows positioning blind slats according to a value in % using a switch and automatic control.

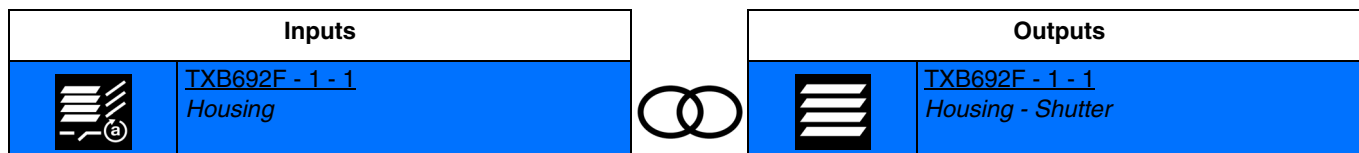


Closing input contact: delayed closing of output contacts for position 1 of the blind slats.
 Opening input contact: delayed closing of output contacts for position 2 of the blind slats.

Note: When the connection is made, values must be defined in % for blind slat positions 1 and 2 (0%: slats open, 100%: slats closed).

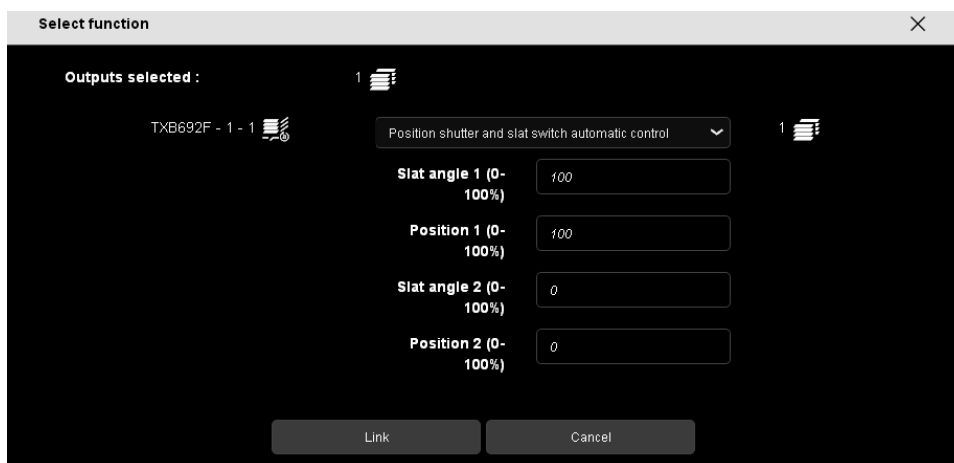


- **Automatic control inter shutter and slat angle:** Allows positioning a rolling shutter or blind to the desired height and blind slats according to a value in % using a switch or automatic control.



Closing input contact: delayed closing of output contacts for position 1 of the shutter or blind and for position 1 for blind slats.
 Opening input contact: delayed closing of output contacts for position 2 of the shutter or blind and for position 2 for blind slats.

Note: When the connection is made, values must be defined in % for shutter positions 1 and 2 (0%: high position, 100%: low position) and values in % for blind slats positions 1 and 2 (0%: slats open, 100%: slats closed).



4.4.4 Heating/Cooling

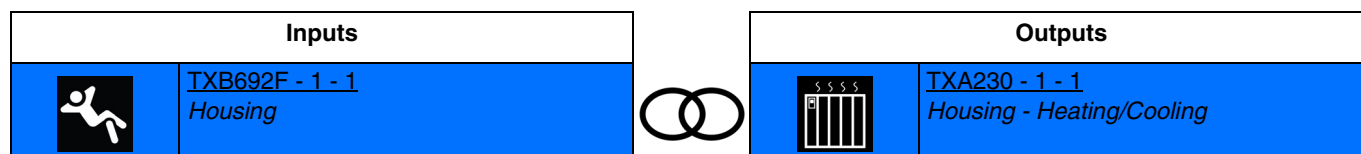
Available functionalities	
Comfort mode	Comfort mode automatic control
Eco mode	Eco mode automatic control
Standby mode	Standby mode automatic control
Protection mode	Protection mode automatic control
Switch mode	Switch mode automatic control
Heating/Cooling	Automatic control deactivation
Comfort priority	Scene
Protection priority	Scene switch

*Note: For the function **Automatic control deactivation**, see: [Automatic control deactivation](#).
 For the function **Scene** and **Switch scene**, see: [Scene](#).*

4.4.4.1 Setpoint selection

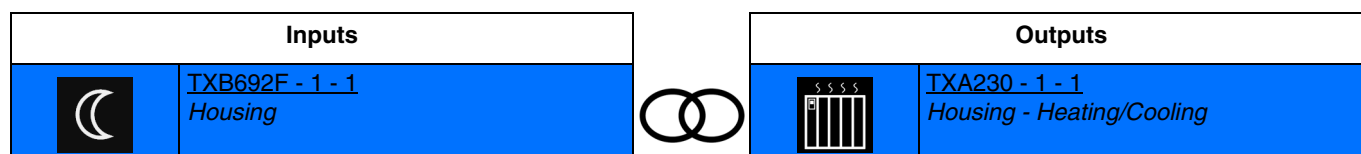
The heating command operates according to a heating instruction.

- **Comfort mode:** Activates Comfort mode for the heating.



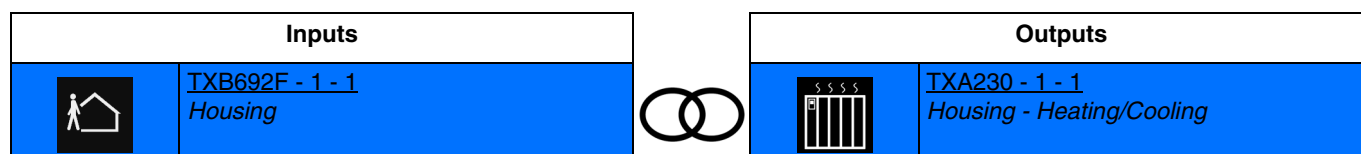
Closing the input contact activates Comfort mode.
The effect of the command is cancelled by any other mode activation command.

- **Eco mode:** Activates Eco mode for the heating.



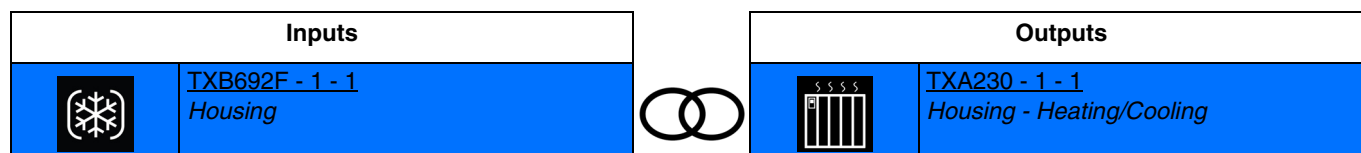
Closing the input contact activates Eco mode.
The effect of the command is cancelled by any other mode activation command.

- **Standby mode:** Activates StandBy mode for the heating.



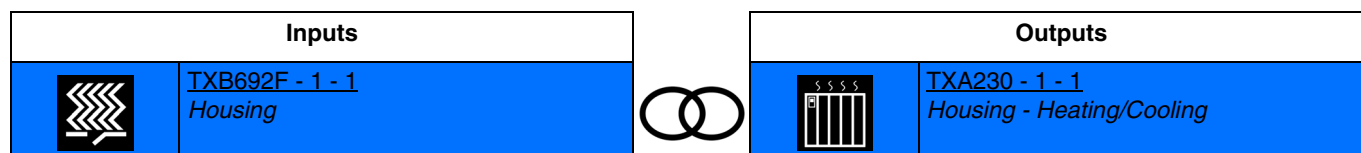
Closing the input contact activates StandBy mode.
The effect of the command is cancelled by any other mode activation command.

- **Protection mode:** Activates Protection mode for the heating.



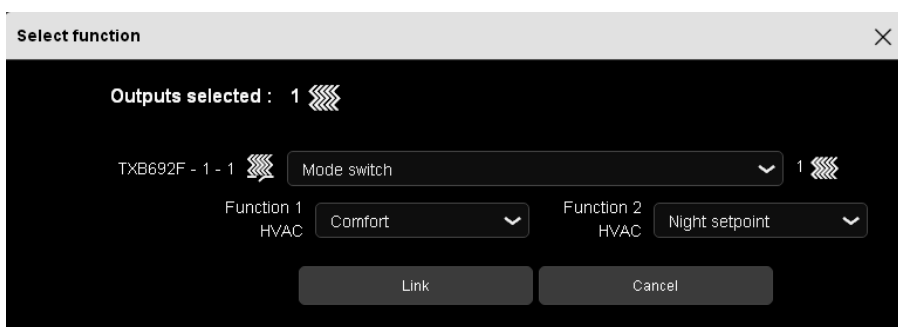
Closing the input contact activates Protection mode.
The effect of the command is cancelled by any other mode activation command.

- **Switch mode:** Switches between 2 heating modes.



Closing the input contact activates heating mode 1.
Opening the input contact activates heating mode 2.
The effect of the command is cancelled by any other mode activation command.

Note: At the time of the connection, one must define the heating mode for input contact closing and opening.



Heating mode available: **Auto**, **Comfort**, **Standby**, **Night setpoint** and **Freeze protection**.

Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed). This is valid for all heating modes.

Below are the outputs which can also have these functions:

	HVAC	Enables control of all heating zones.
--	------	---------------------------------------

It is also possible to make a link between 2 inputs. Below are the inputs which can also have these functions:

	HVAC control	Enables control of heating by zone.
	Setpoints heating	Enables the heating mode to be sent to the thermostat.

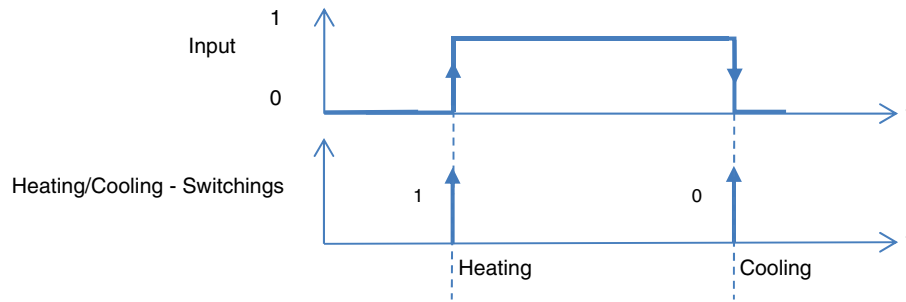
4.4.4.2 Heating/Cooling

- **Heating/Cooling**: Enables switching between heating mode and cooling mode.

To do so, it is necessary to make a connection between two inputs.

Inputs	
	<u>TXB692F - 1 - 1</u> Housing
	<u>TX460 - 1 - 5</u> Housing

Closing the input contact activates the heating mode.
Opening the input contact activates the cooling mode.



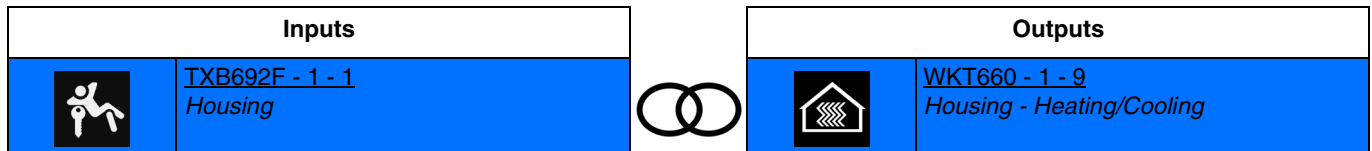
4.4.4.3 Priority

The Priority function forces a heating mode.

This function the priority or priority cancellation controls to be issued.

No other command is taken into account when the Priority is active. Only priority or alarm cancellation commands will be taken into account.

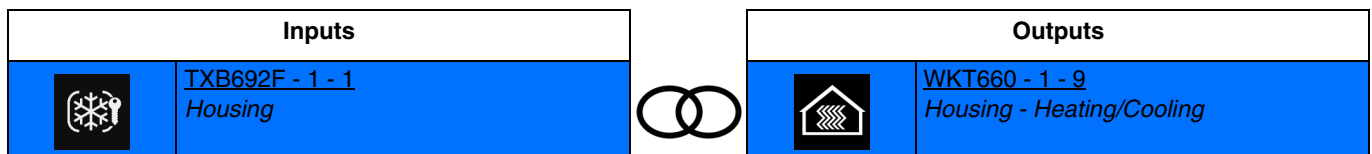
- **Comfort priority:** Activates and maintains Comfort mode.



Closing the contact activates and maintains Comfort mode.

Closing the contact cancels the priority and returns to the usually active mode.


- **Protection priority:** Activates and maintains Protection mode.



Activating the input forces the output to OFF.

Successive activation switches between OFF priority and priority cancellation.

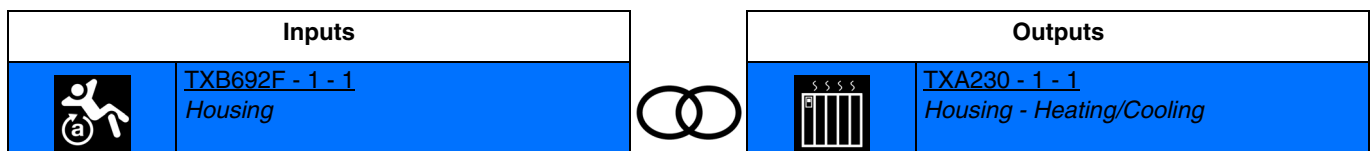
It is also possible to make a link between 2 inputs. Below are the inputs which can also have these functions:

	Setpoints heating	Forces the heating mode for the thermostat.
---	-------------------	---

4.4.4.4 Heating automatic control

The Automatic control function enables the heating mode to be controlled in parallel to the standard control. An additional command object (Automatic control deactivation) is used to activate or deactivate Automatic control.

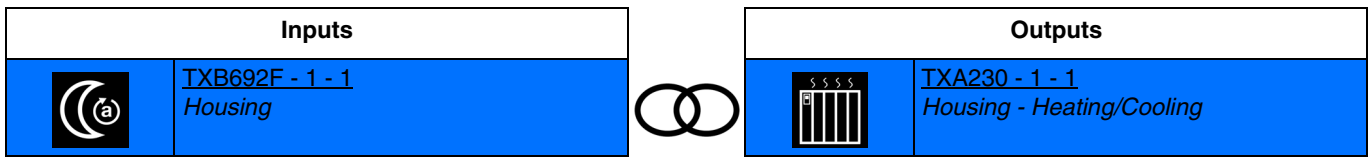
- **Comfort mode automatic control:** Activates Comfort mode for heating using automatic control.



Closing the input contact activates Comfort mode.

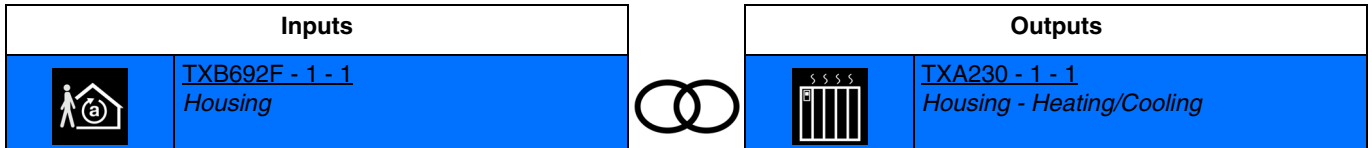
The effect of the command is cancelled by any other mode activation command.

- **Eco mode automatic control:** Activates Eco mode for heating using automatic control.



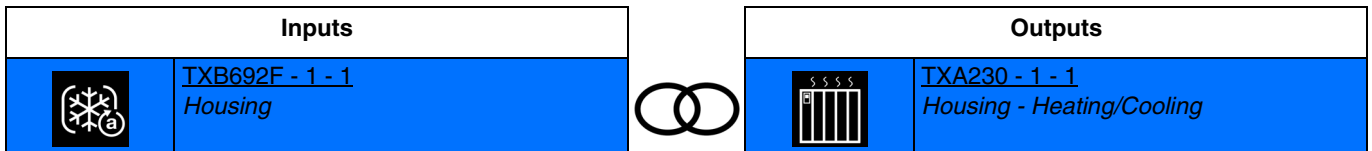
Closing the input contact activates Eco mode.
The effect of the command is cancelled by any other mode activation command.

- **Standby mode automatic control:** Activates StandBy mode for the heating using automatic control.



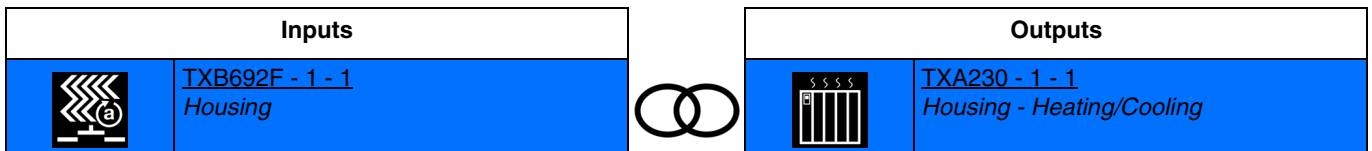
Closing the input contact activates StandBy mode.
The effect of the command is cancelled by any other mode activation command.

- **Protection mode automatic control:** Activates Protection mode for heating using automatic control.



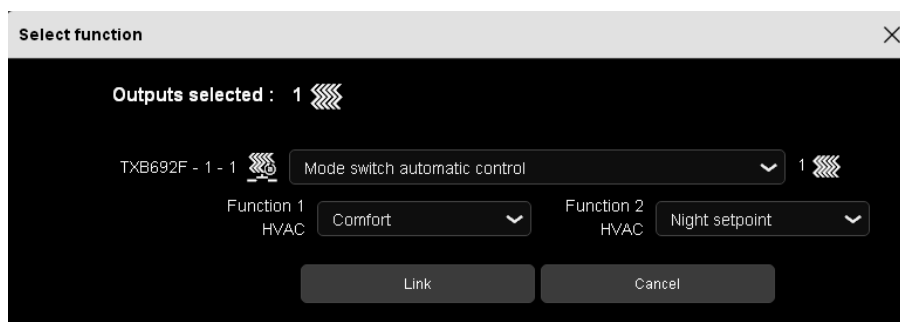
Closing the input contact activates Protection mode.
The effect of the command is cancelled by any other mode activation command.

- **Switch mode automatic control:** Switches between 2 heating modes using automatic control.



Closing the input contact activates heating mode 1.
Opening the input contact activates heating mode 2.
The effect of the command is cancelled by any other mode activation command.


Note: At the time of the connection, one must define the heating mode for input contact closing and opening.





Heating mode available: **Auto, Comfort, Standby, Night setpoint** and **Freeze protection**.

Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed). This is valid for all heating modes.





Below are the outputs which can also have these functions:

	HVAC	Enables control of all heating zones.
---	------	---------------------------------------

It is also possible to make a link between 2 inputs. Below are the inputs which can also have these functions:

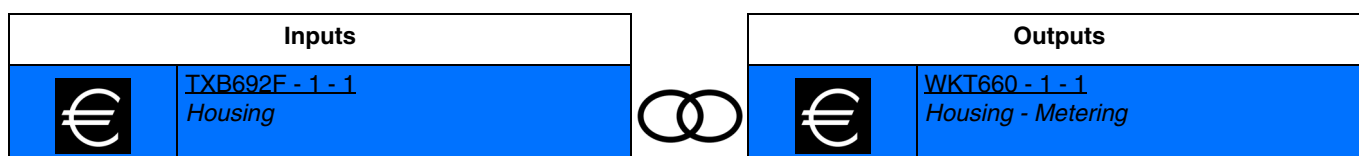
	HVAC control	Enables control of heating by zone.
	Setpoints heating	Enables the heating mode to be sent to the thermostat.

4.4.5 Metering

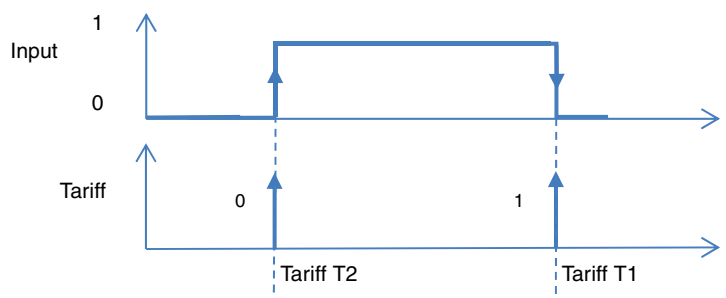
Available functionalities			
	Tariff		Scene
	Automatic control deactivation		Scene switch

Note: For the function **Automatic control deactivation**, see: [Automatic control deactivation](#).
For the function **Scene** and **Switch scene**, see: [Scene](#).

- **Tariff:** Sends T1/T2 tariff information.




Closing the input contact sends the tariff T2.
Opening the input contact sends the tariff T1.



Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).

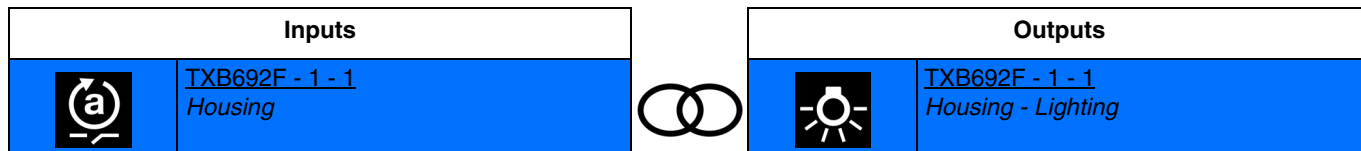
It is also possible to make a link between 2 inputs. Below are the inputs which can also have these functions:

	Energy	Transmits tariff information to the metering input.
---	--------	---

4.4.6 Automatic control deactivation

The Automatic control function enables an output to be controlled in parallel to the standard control. An additional command object (Automatic control deactivation) is used to activate or deactivate Automatic control.





- **Automatic control deactivation:** Deactivates automatic control.




Closing the input contact deactivates automatic control.
Opening the input contact activates automatic control.

*Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).*

Below is the list of outputs where deactivation of automatic control is possible.

 Lighting	 Dimming
 Shutter/blind	 Shading control

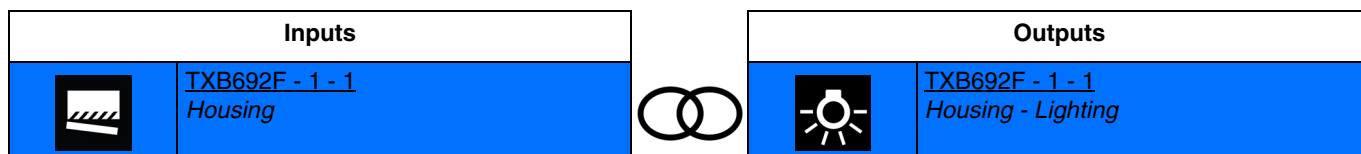
Deactivating automatic control is also possible on the input.

	Setpoints heating
---	-------------------

4.4.7 Scene

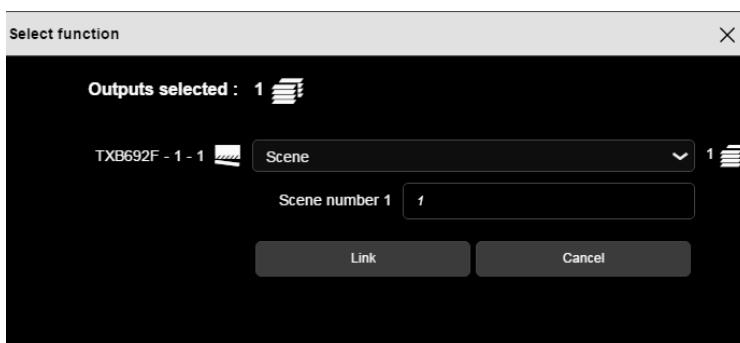
This function enables scenes to be saved or selected. These concern different types of output (lighting, blind, shutter, heating) to create ambiances or scenarios (leaving scenario, reading ambiance etc.).

- **Scene:** The scene is activated by pressing the push-button.



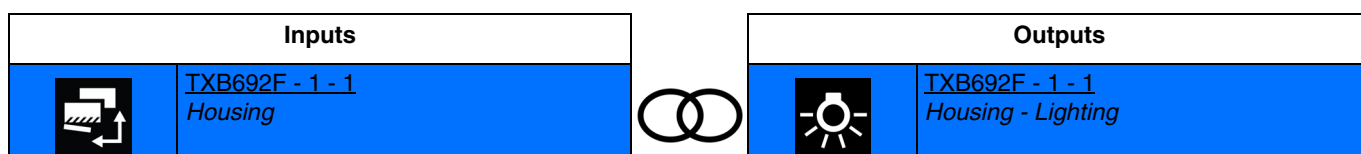
Activating the input activates the scene.

Note: At the time the connection is made, the scene number must be defined for the closing input contact.



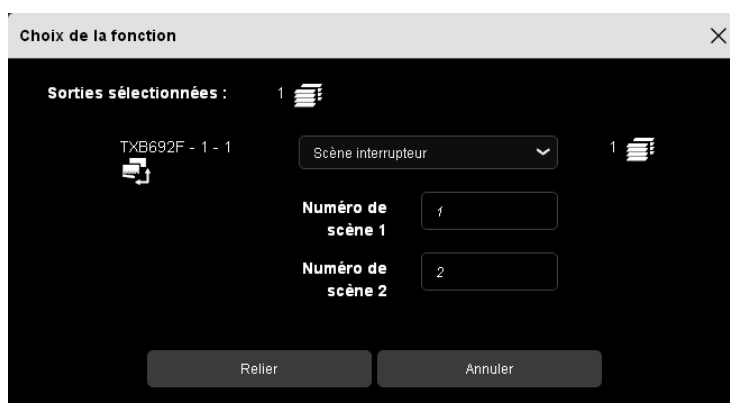
Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).

- **Scene switch:** The scene is activated according to the closing or opening input contact.



Closing the input contact activates scene 1.
Closing the input contact activates scene 2.

Note: At the time the connection is made, the scene number must be defined for the closing and opening input contact.



Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).

Below is the list of outputs where the scene is possible.

	Lighting		Dimming
	Shutter/blind		CMV

The scene is also possible on the input.

	Increase/decrease dimming (Only with TX511 and TXC511)		Setpoints heating
--	--	--	-------------------

5. Appendix

5.1 Specifications

5.1.1 TXB692F

Supply voltage KNX	21...32 V DC SELV
Breaking capacity	μ 6 A AC1 230 V~
Switching current at $\cos \Phi = 0.8$ max.	6 A
Minimum switching current	10 mA
Operating altitude max.	2000 m
Degree of contamination	2
Surge voltage	4 kV
Degree of protection of housing	IP20
Impact protection	IK 04
Overvoltage class	III
Operating temperature	-5 °C...+45 °C
Storage/transport temperature	-20 °C ... +70 °C
Maximum switching cycle rate at full load	
switching cycle/minute	20
Connection capacity	0,75 mm ² ...2,5 mm ²
max. tightening torque	0.5 Nm
Cross-head design	PZ1
Standards	EN 50491-3 ; EN 60669-2-1
Dimensions	44 x 43 x 22,5 mm
Own consumption on the KNX bus:	
typical	7 mA
in standby	5 mA
Incandescent lamps	500 W
HV halogen lamps	500 W
Conventional transformer	500 VA
Electronic transformer	500 W
Fluorescent lamps	
--without ballast	500 W
--with electronic ballast	6 x 48 W
Energy-saving lamps/LED lamps	5 x 13 W
Variant with inputs	
Number of inputs	2
Total length of extension unit cable max.	9,9 m
Scanning voltage extension unit inputs	12 V DC / 1mA

5.2 Characteristics

Device	TXB692F
Max. number of group addresses	254
Max. number of allocations	255
Objects	36

5.3 Index of objects

5.3.1 ON/OFF

ON/OFF	47
Status indication ON/OFF	48
Timer	48
Priority	48
Status indication priority	49
Scene	49
ON/OFF automatic control	49
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Automatic control deactivation status	50
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5.3.2 Shutter/blind

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Stop (Short press)	52
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Slat angle in %	52
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Slat angle indication in %	53
Upper position reached	53
Lower position reached	54
Priority	54
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Alarm 1	55
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Position in % automatic control	56
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5.3.3 Input

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Alarm 3	64
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