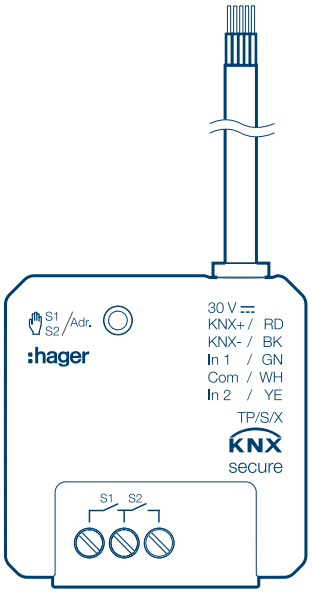
Application description

KNX Building system technology

Output 2 fold , Input 2 fold, flush



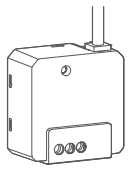
Output module 2x 6A /230V~, 2 inputs, flush mounted, KNX Secure

TYBS692F

:hager

EN

Product overview

	Reference no.	Product designation	Application software ref.	TP device / Radio device
	TYBS692F	Output module 2x 6A /230V~, 2 inputs, flush mounted, KNX Secure		

Subject to technical changes!

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1. General

1.1 About this guide

The purpose of this manual is to describe the operation and configuration of the KNX-devices using the Easy tool program.

It consists of 3 parts:
- General information.
- The Easy tool configurations are available.
- Technical characteristics.

1.2 Easy tool software appearance

This product can also be configured using the configuration tool.

Compatible software version: V 7.0.9 or higher

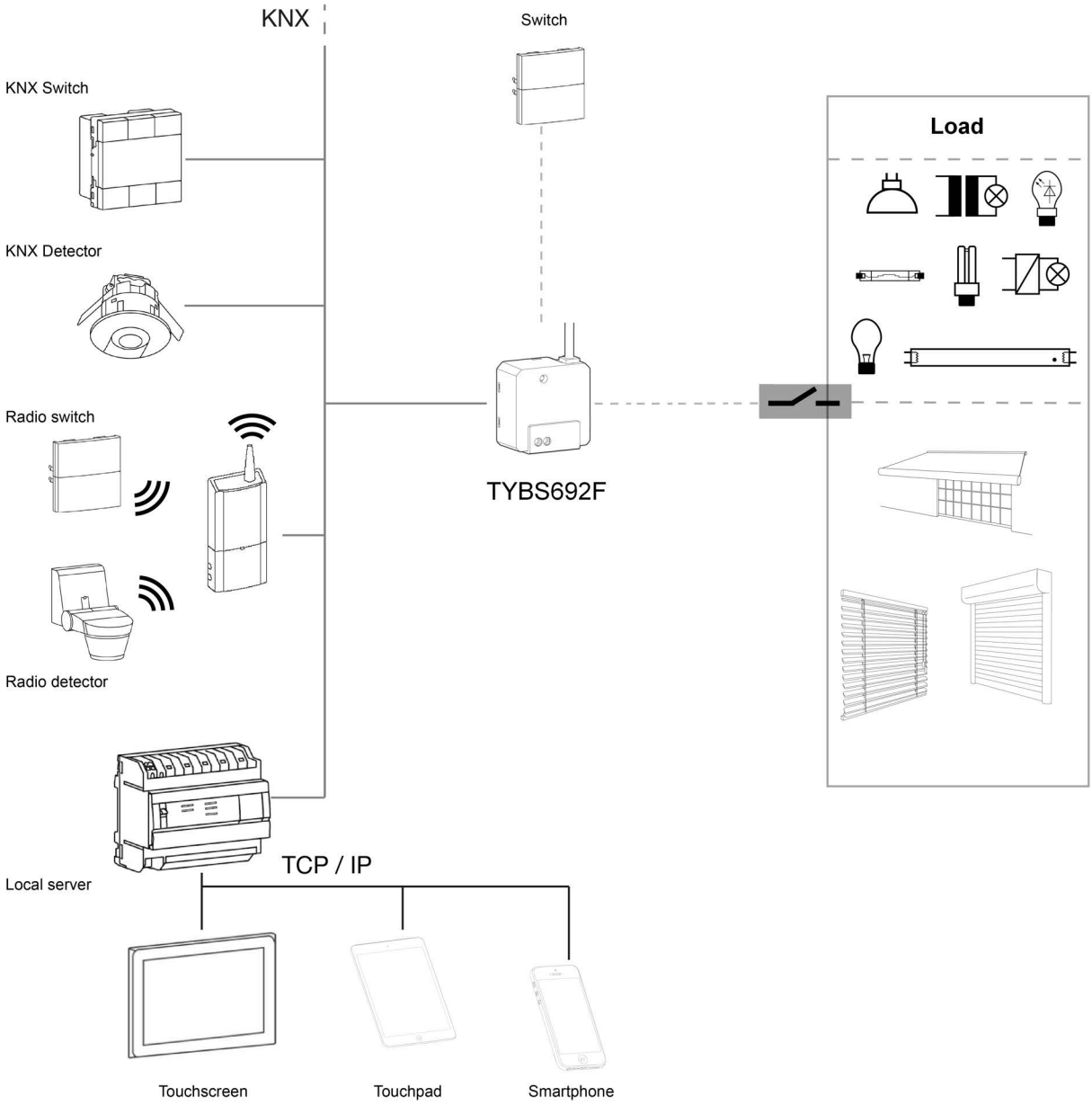
Kompatible Server :
- TJA470: Domovea expert
- TJA670: Domovea basic
- TJA665: Konfigurationsserver KNX easy

It is essential to update the configuration server software version. (Please refer to the user manual).

2. General Description

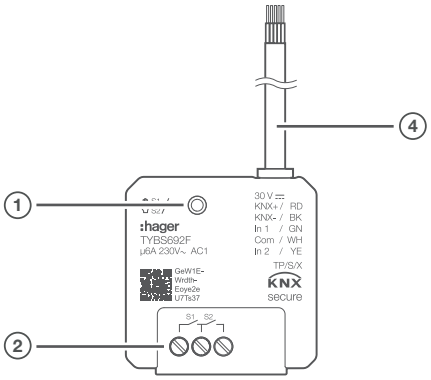
2.1 Installation of the device

2.1.1 Overview presentation



2.1.2 Description of the device

TYBS692F



(1) Illuminated button Manual mode/programming button
(2) Load connection
(3) KNX bus connection cable / connection inputs

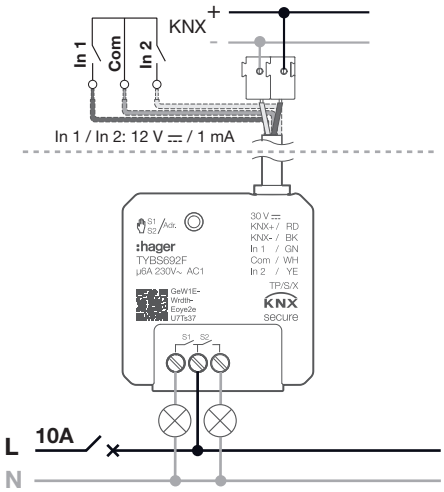
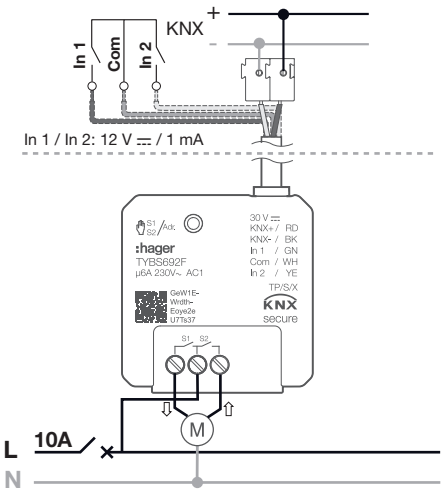
2.1.3 Physical addressing

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

<table>
<tr><th colspan="2">TYBS692F</th></tr>
<tr><td>Connection of the loads to switch</td><td>Connection from the motor</td></tr>
<tr><td> 
</td><td> 
</td></tr>
</table>

2.2 Function modules of the application

2.2.1 Output

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

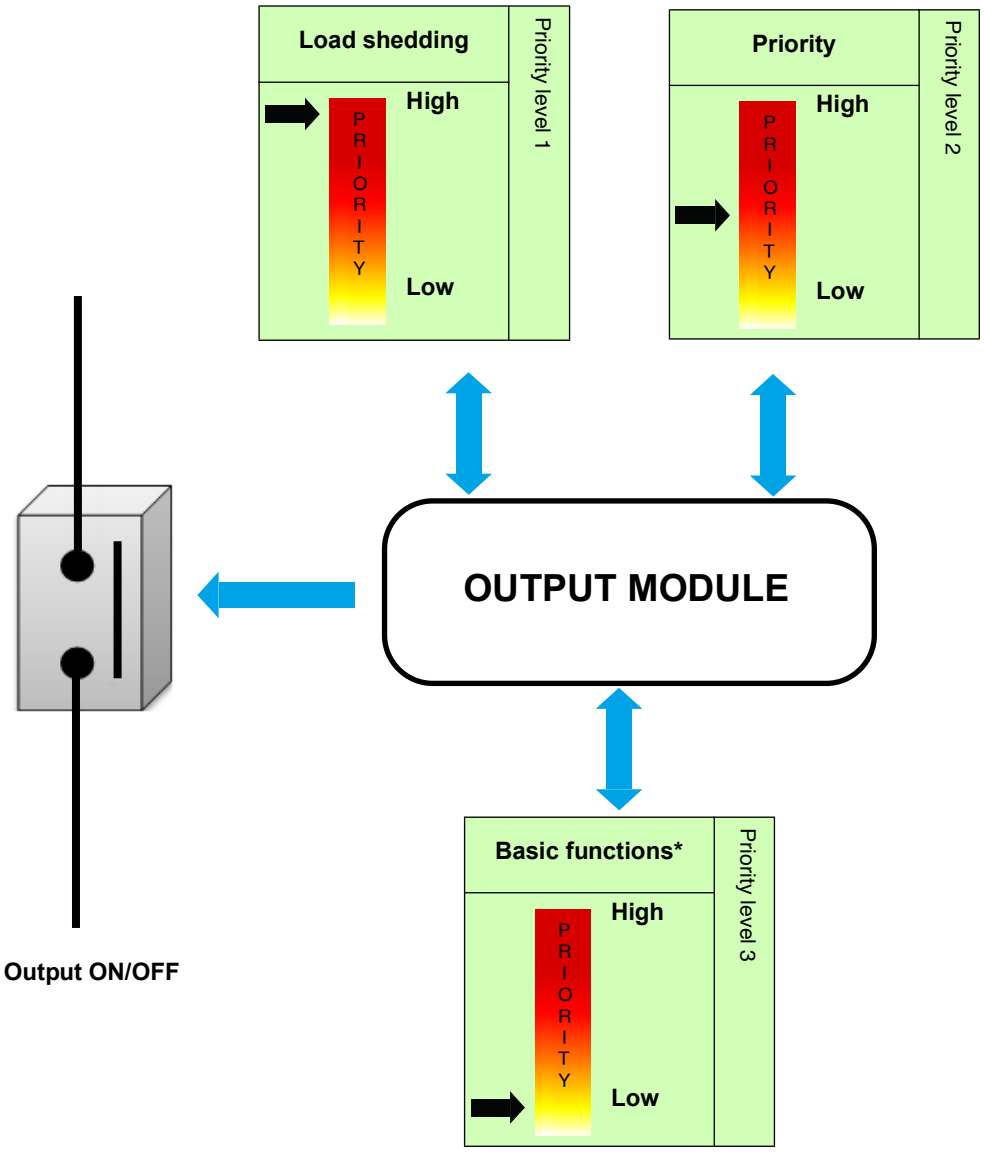
ON/OFF
- Each switching contact is used separately to switch a load.

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.

Central ON/OFF switch

An output can be switched on or off using the ON/OFF function. The command can come from switches, buttons or other control inputs.Unlike the ON/OFF function, it does not send the status indication of the controlled outputs. This prevents KNX bus saturation when switching outputs simultaneously.

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.

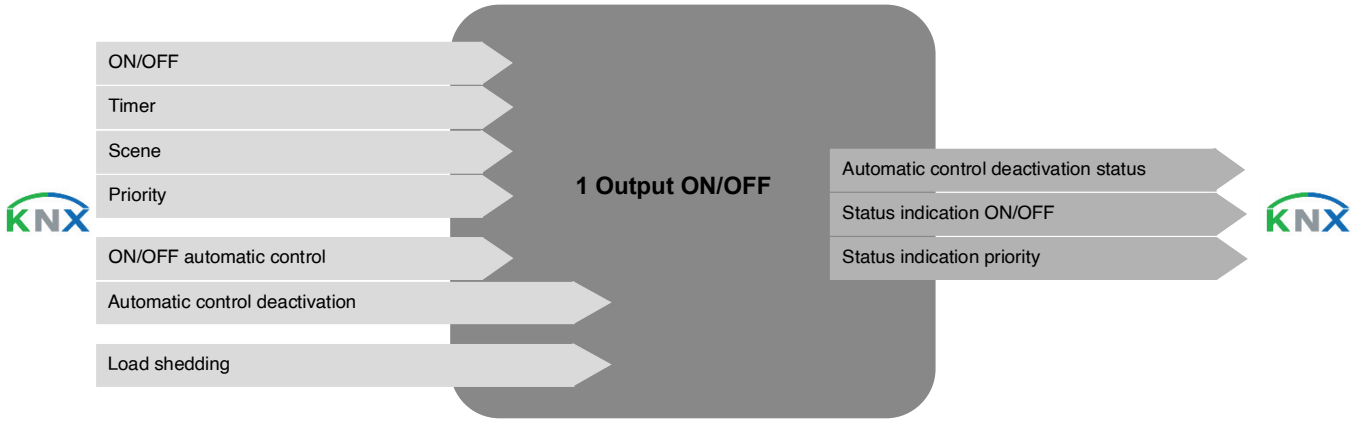
Manual mode

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

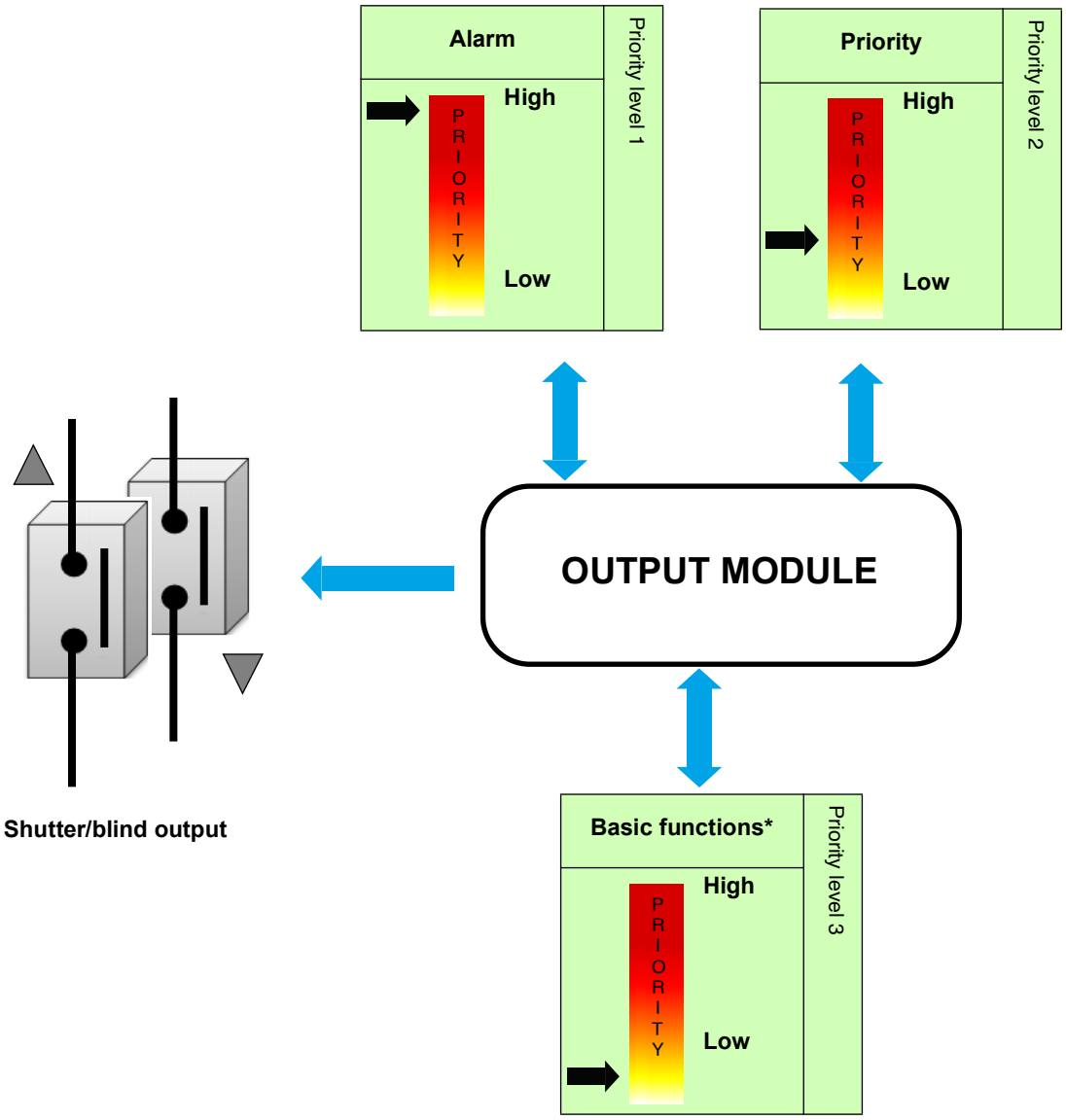
Status indication

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.

- Central ON/OFF switch

The Central up/down switching function is used to open or close a roller shutter group. The command can come from switches, buttons or other control inputs.Unlike the Up/Down function, it does not send the status indication of the controlled outputs. This prevents KNX bus saturation when switching outputs simultaneously.

- 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

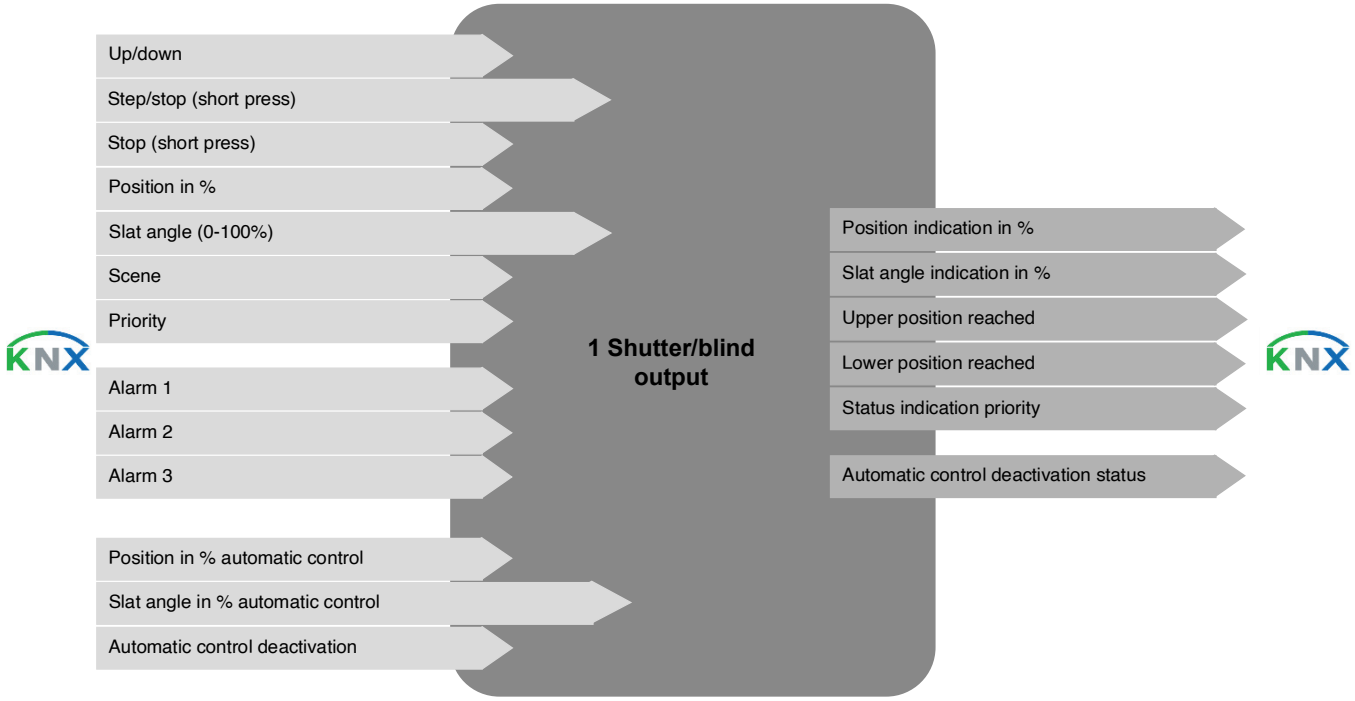
Manual mode allows the device to be disconnected from the bus. In this mode, each output can be priority controlled locally.

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).

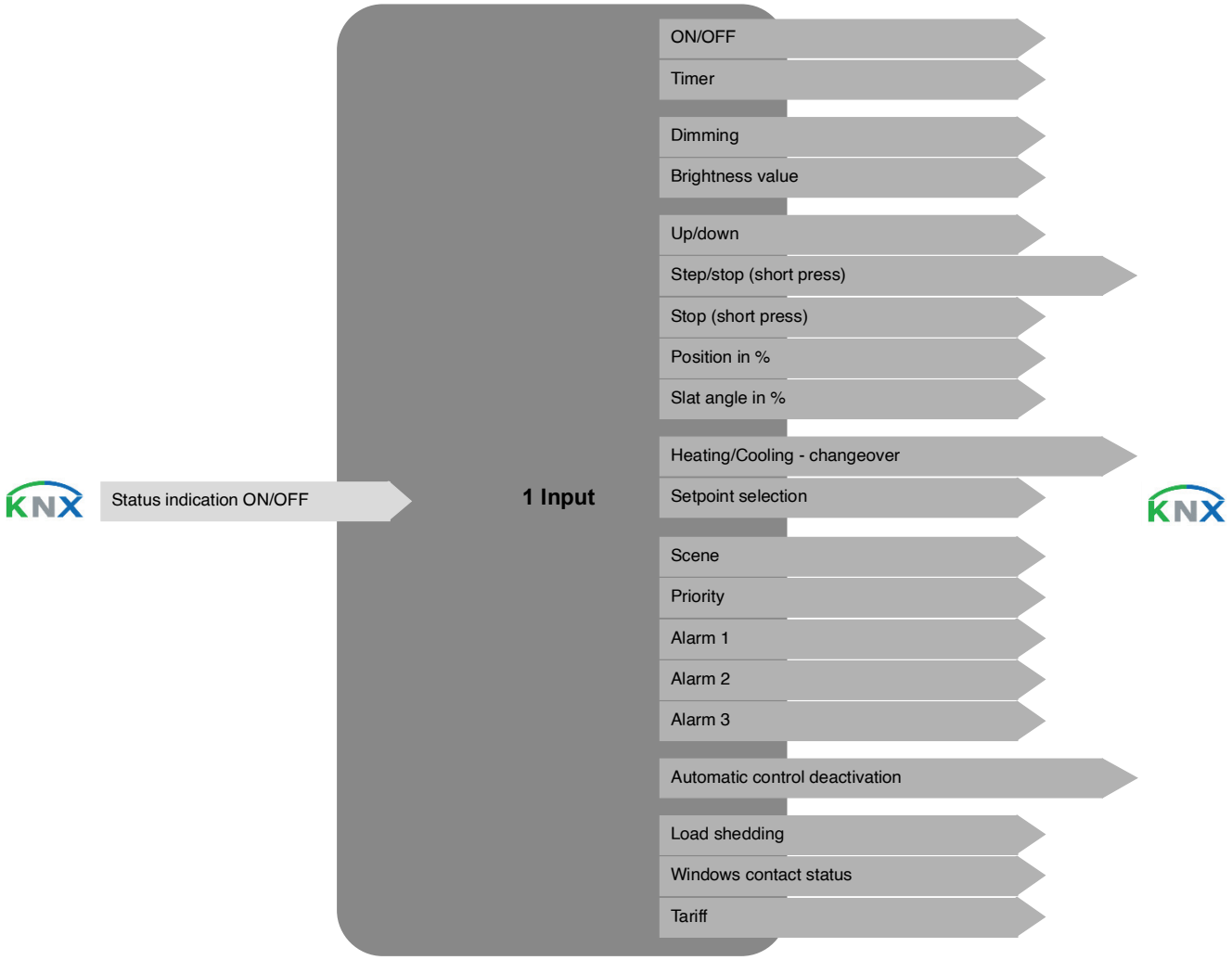
- Windows contact

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

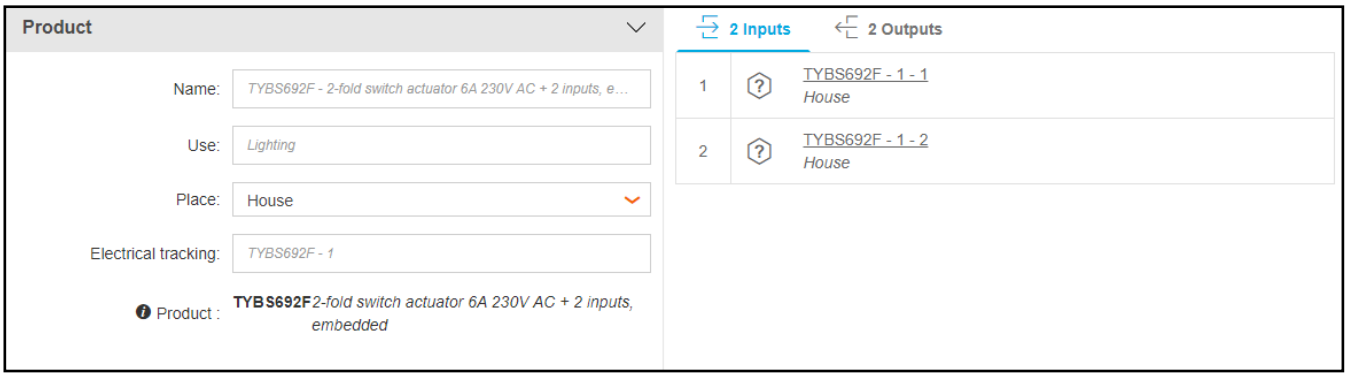


3. Programming by Easy Tool

3.1 Product overview

TYBS692F: 2 inputs + 1 shutter output/2 ON/OFF outputs to be embedded

Product view:



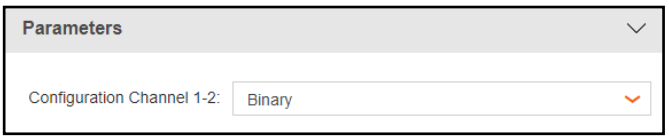
View of channels:

2 inputs	
	TYBS692F - 1 - 1 *Housing*
	TYBS692F - 1 - 2 *Housing*

2-fold output	
	TYBS692F - 1 - 1 *Housing - Lighting*
	TYBS692F - 1 - 2 *Housing - Lighting*

Product settings

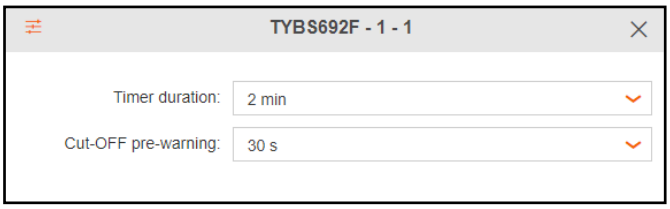
This configuration window is used for general configuration of the device.



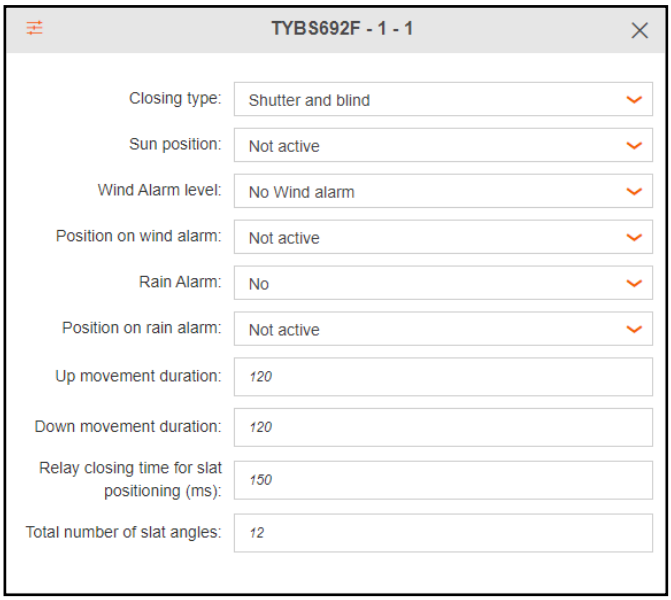
Pathway parameters

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		Central on
	Toggle switch		Central off
	Timer		Central on/off
	Priority ON		Load shedding
	Priority OFF		Scene
	Priority ON push-button (1)		Scene switch
	Priority OFF push-button (1)		Automatic control deactivation
	Automatic control ON		Deactivation Automatic control 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)
	Toggle up/down		Wind alarm
	Up/down		Rain alarm
	Down/up		Automatic control shutter angle
	Switch up		Automatic control slat angle
	Down switch		Automatic control shutter and slat angle
	Up/stop		Automatic control shutter position switch
	Down/stop		Automatic control inter slat angle
	Shutter position		Automatic control inter shutter and slat angle
	Slat angle		Central up
	Shutter and slat angle		Central down
	Shutter angle switch		Central up/down
	Slat angle switch		Scene
	Shutter and slat angle switch		Scene switch

	Automatic control deactivation		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		ON/OFF automatic control
	OFF		Central on
	ON/OFF		Central off
	Toggle switch		Central on/off
	Timer		Load shedding
	Priority ON		Automatic control deactivation
	Priority OFF		Scene
	Automatic control ON		Scene switch
	Automatic control OFF		

Dimming			
	Increase dimming/ON		Colour temperature colder
	Decrease dimming/OFF		Colour temperature warmer
	Increase/decrease dimming		Colour scrolling forward
	Dimming		Colour scrolling backward
	Dimming switch		Scene
	Dimming automatic control PB		Scene switch
	Dimmer switch automatic control		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		Central up
	Slat angle		Central down
	Shutter and slat angle		Central up/down
	Shutter angle switch		Scene
	Slat angle switch		Scene switch
	Shutter and slat angle switch		Automatic control deactivation

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
	Window		

Metering			
	Tariff		Scene
	Automatic control deactivation		Scene switch

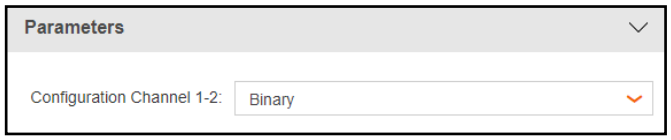
Audio			
	Audio on		Volume +
	Audio off		Volume -
	Audio on/off		Favorite

3.2 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

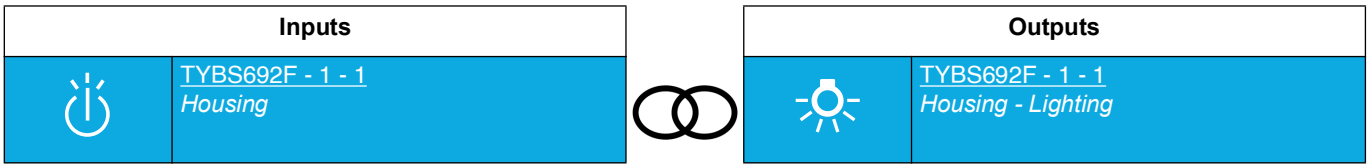
3.3 Product functions at output

3.3.1 Functions of each switch actuator

3.3.1.1 ON/OFF

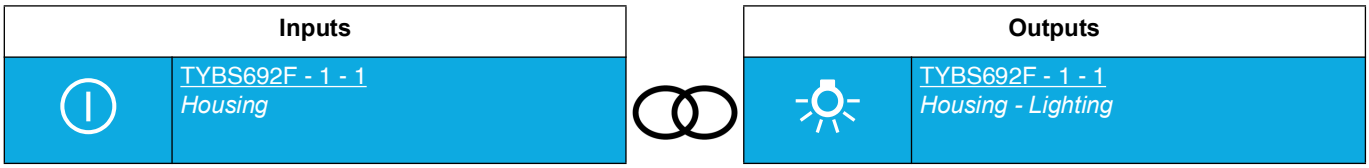
An output can be switched on or off using the ON/OFF function. The command can come from switches, buttons or other control inputs.

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



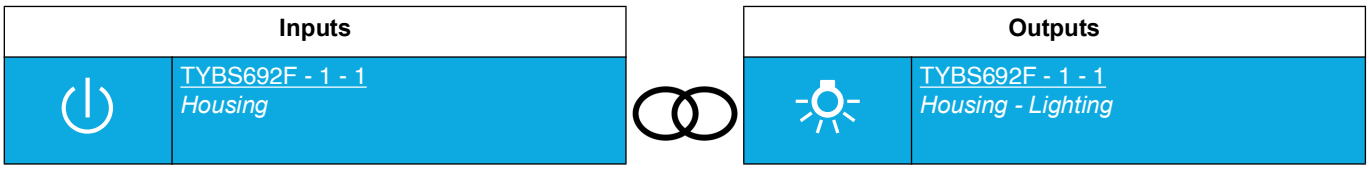
Closing input contact: turn on the light.
Opening input contact: no action.

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



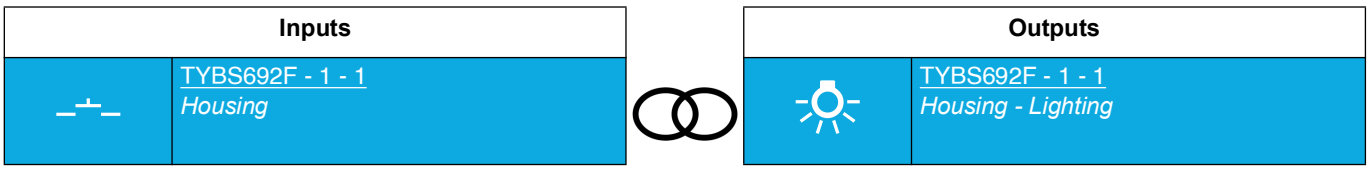
Closing input contact: turns off the light.
Opening input contact: no action.

- **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.



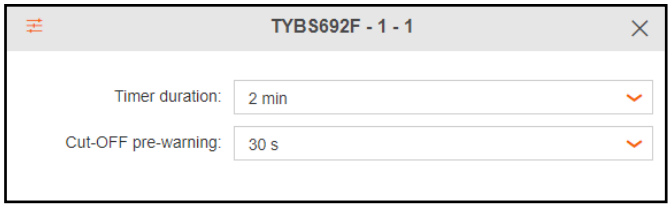
Closing input contact: switch between turning the lights on and off.
Successive closings inverse output contact status each time.

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

3.3.1.2 Timer

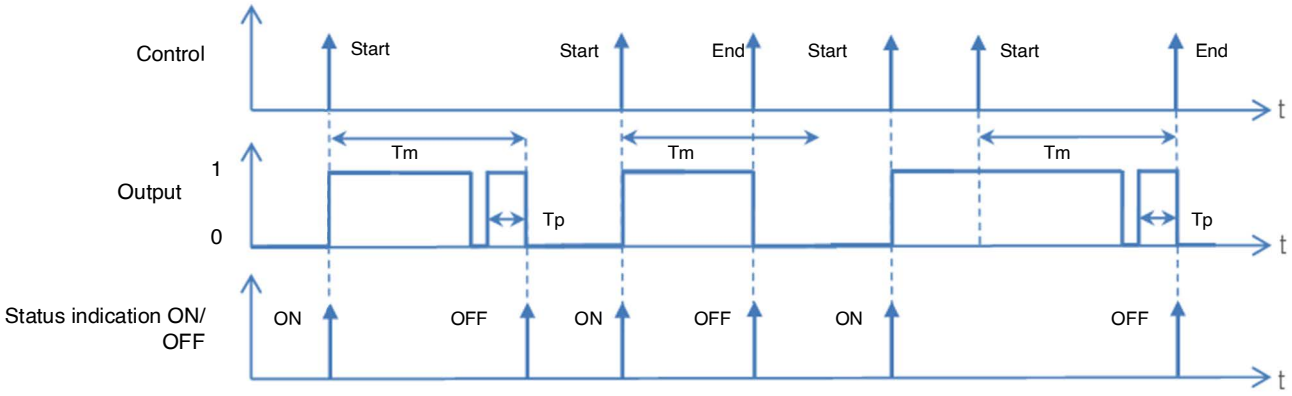
The Timer function is used to switch on a lighting circuit for a programmable period. The timer may be interrupted before expiry of the delay time. A programmable Cut-OFF pre-warning announces the end of the delay time by a 1-second inversion of the output status.



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:



Tm: Timer duration
Tp: 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.

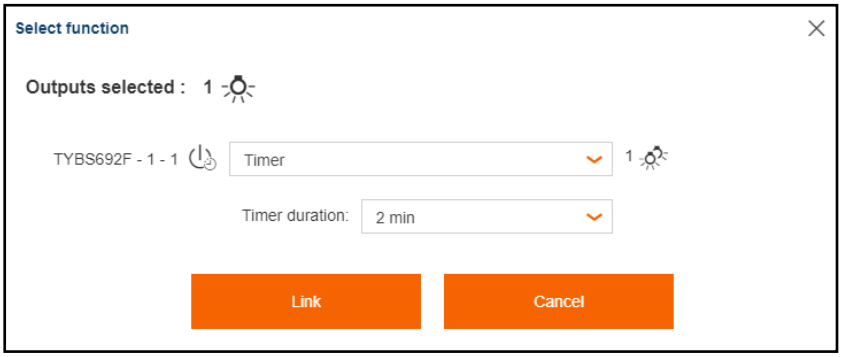
Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Lighting*

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

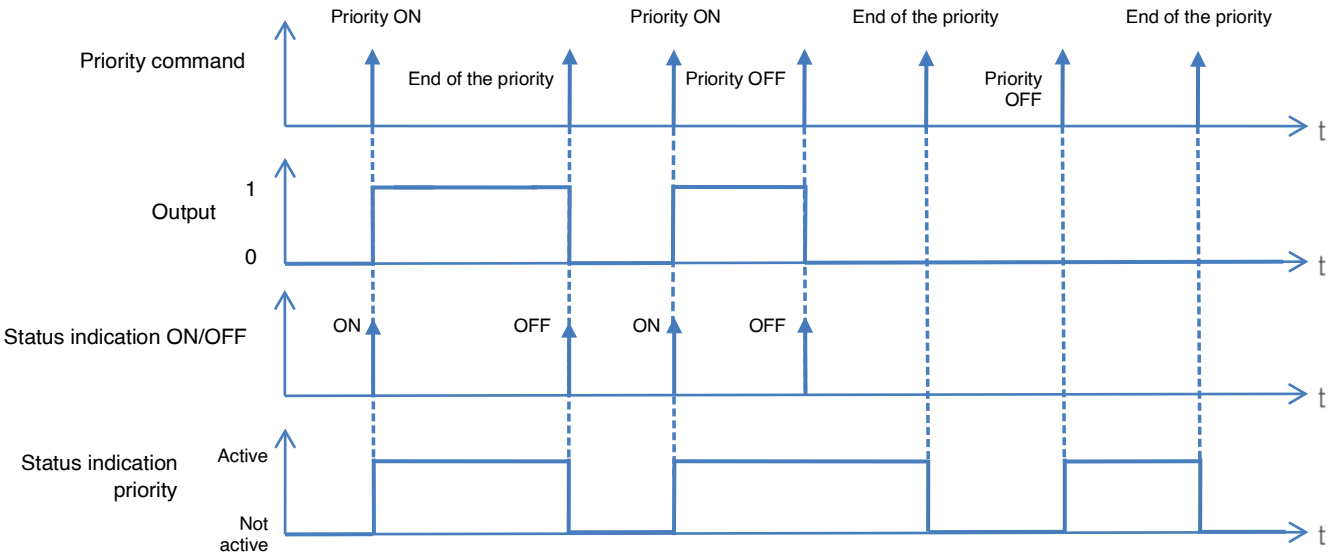
Note: At the time of connection, it is possible to define the timer duration.



3.3.1.3 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:



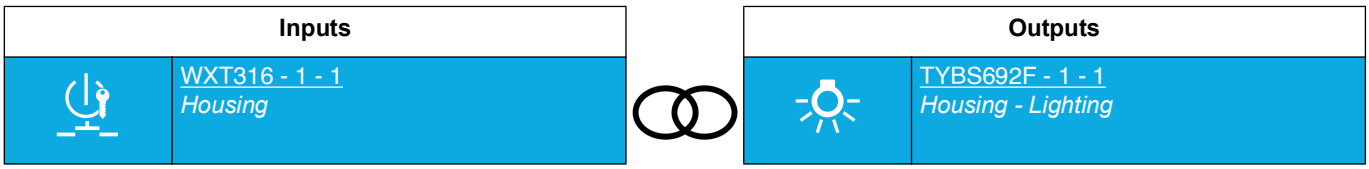
Links

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

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Lighting*

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

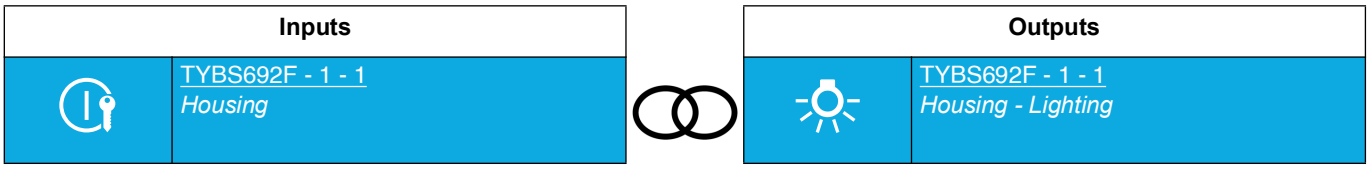
- **Priority ON push-button**: Allows forcing and keeping the light circuit on using a push-button.



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

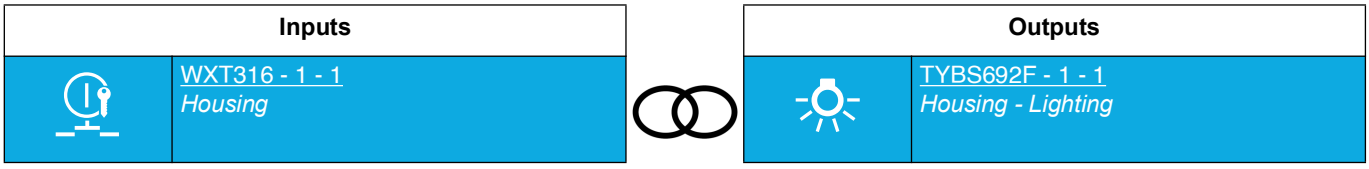
Note: This function is only available with push-button input products with LEDs indicating status.

- **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.

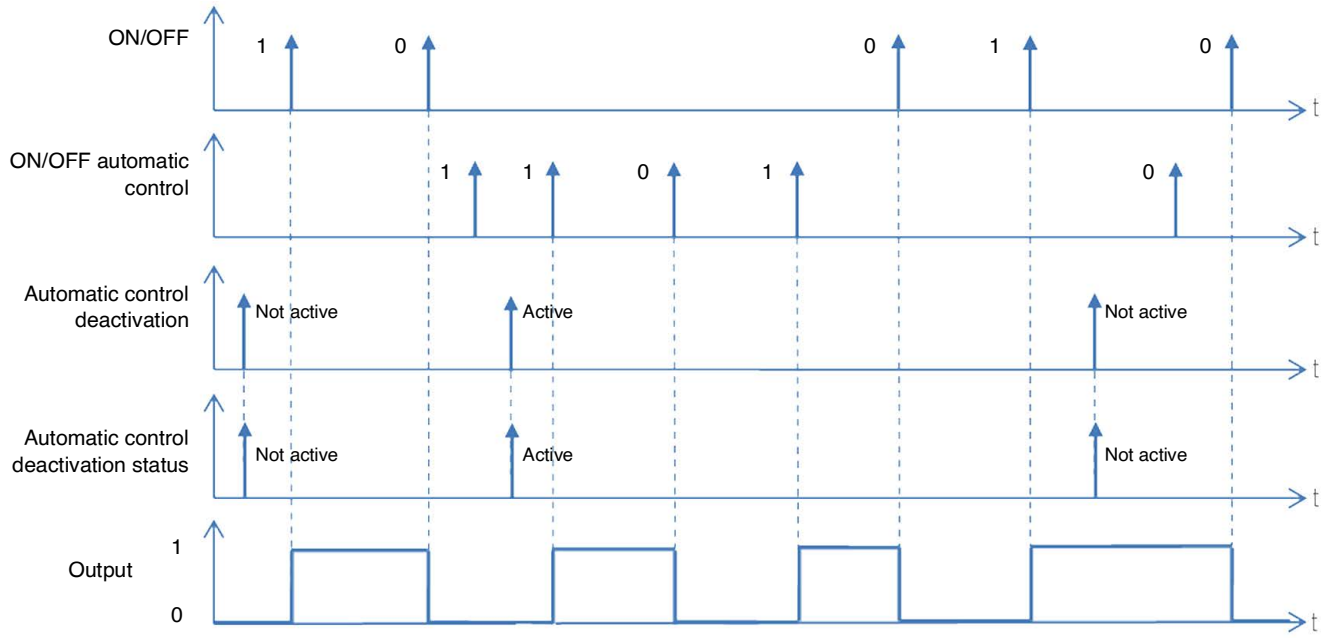
Note: This function is only available with push-button input products with LEDs indicating status.

3.3.1.4 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.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Lighting*

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

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

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Lighting*

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).

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Lighting*

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.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Lighting*

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

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

Inputs		Outputs	
	WXT316 - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Lighting*

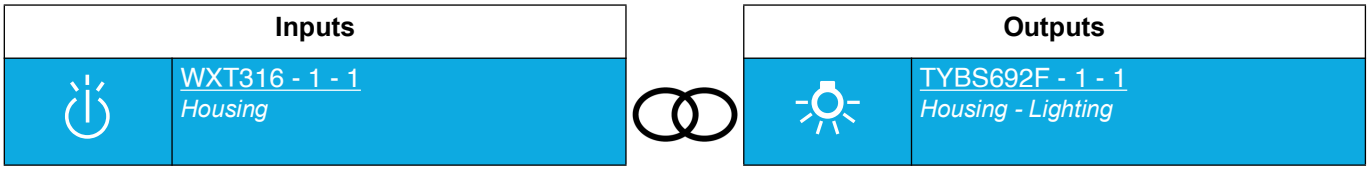
Press on the push-button: deactivated automatic control.
A second press on the push-button activates the automatic control.

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

3.3.1.5 Central ON/OFF switch

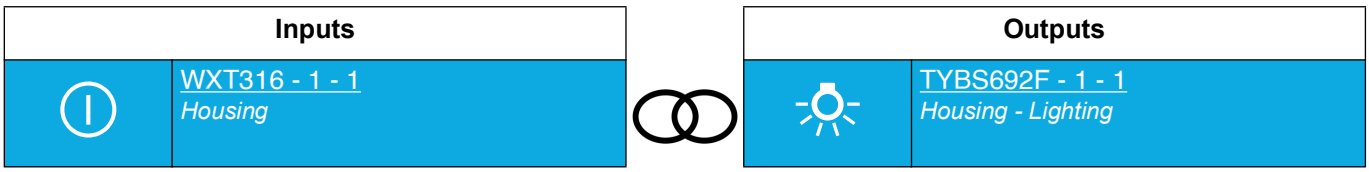
An output can be switched on or off using the ON/OFF function. The command can come from switches, buttons or other control inputs.Unlike the ON/OFF function, it does not send the status indication of the controlled outputs. This prevents KNX bus saturation when switching outputs simultaneously.

- **Central ON**: switches the lighting circuit on.



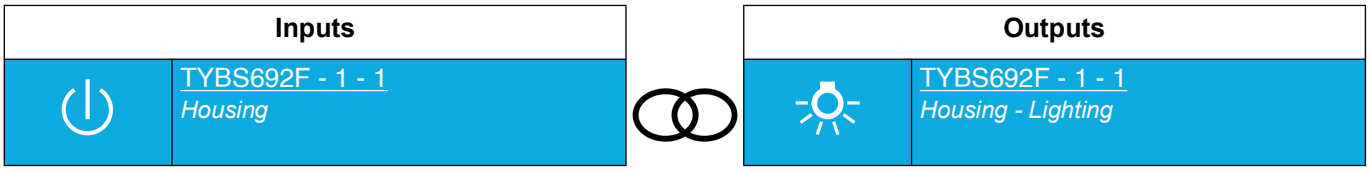
Closing input contact: turns on the light
Opening input contact: no actionn

- **Central OFF**: switches the lighting circuit off.



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

- **Central ON/OFF switch**: switches the lighting circuit on or off(switch).

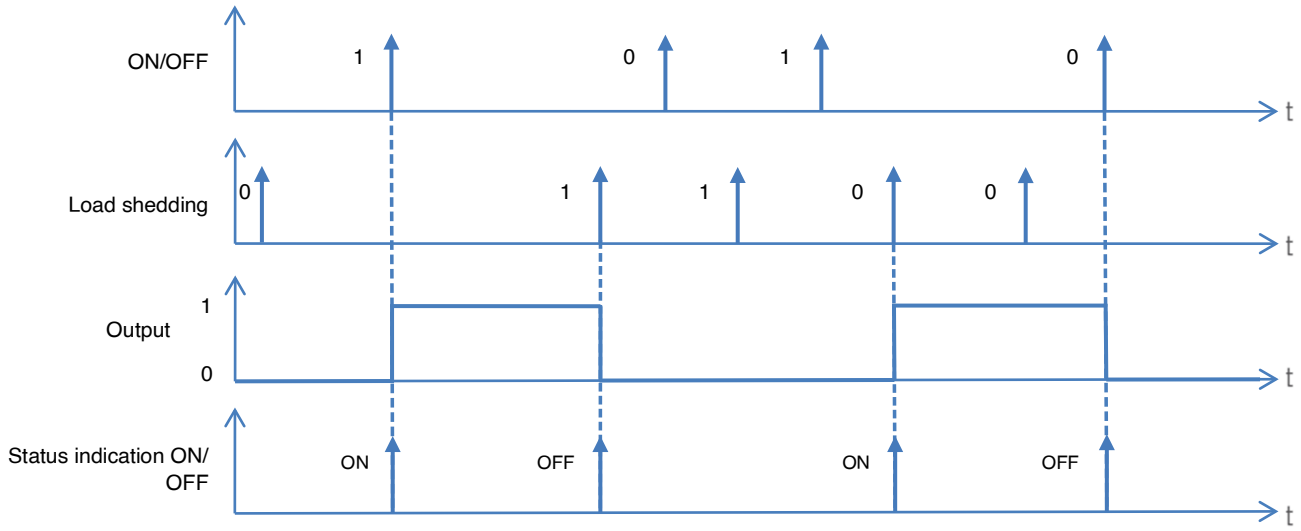


Closing input contact: turns on the light
Opening input contact: turns off the light

3.3.1.6 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.

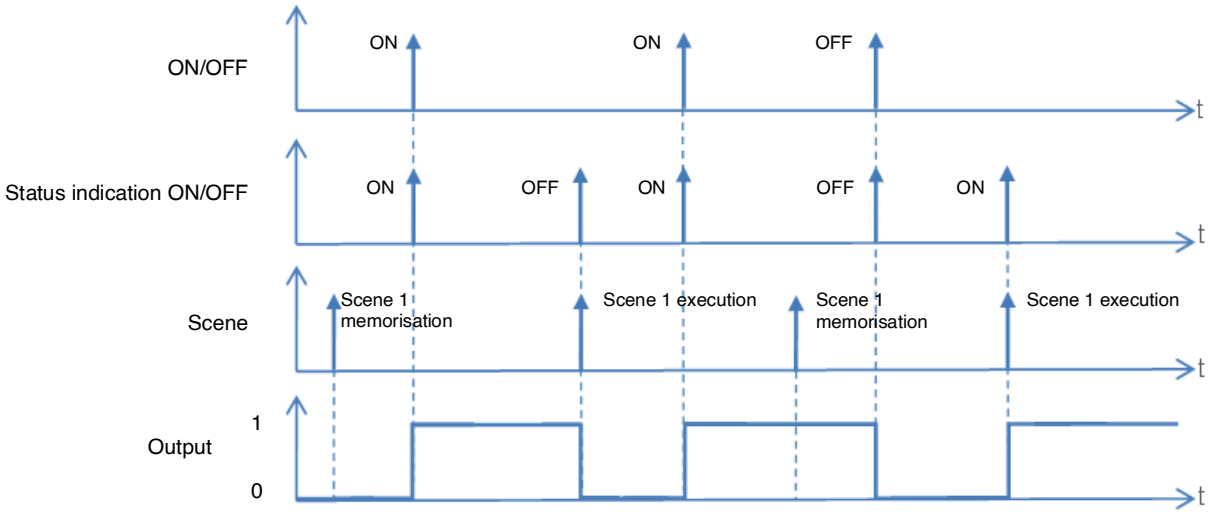
Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Lighting*

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

3.3.1.7 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.

Operating principle:



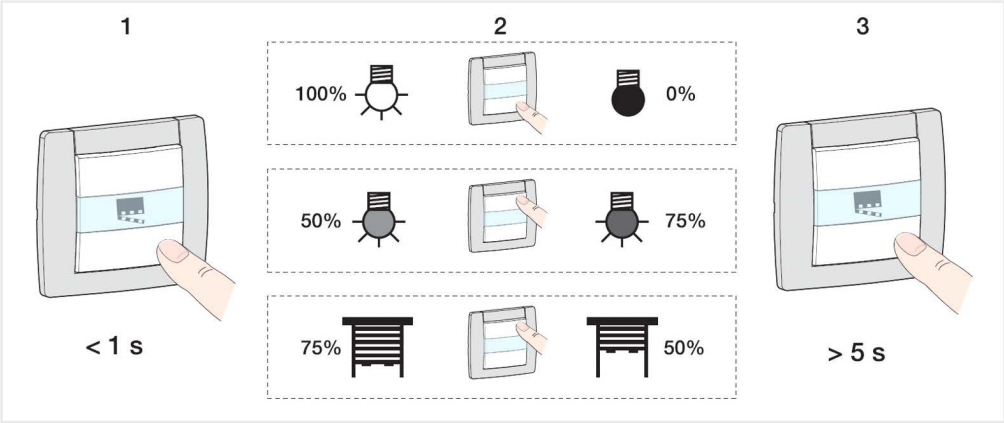
Learning and storing scenes
This process is used to change and store a scene. For example, by locally pressing the key in the room or by emission of the values from a visualization.

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.

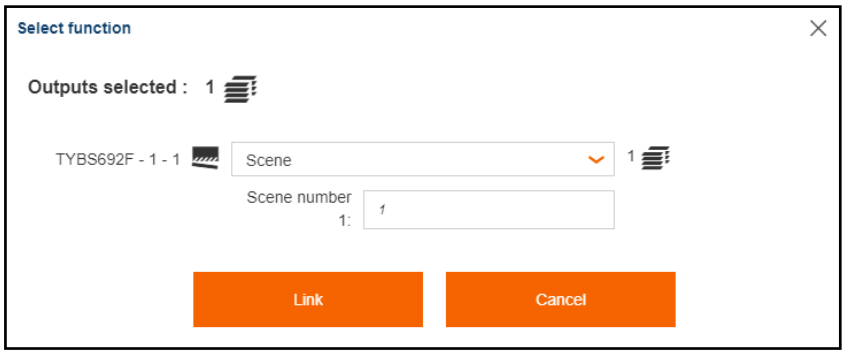
Links

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

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Lighting*

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.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Lighting*

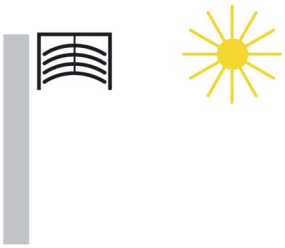
Closing input contact: scene activation 1.
Opening input contact: scene activation 2.

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

3.3.2 Functions for each shutter/blind output

Slat position for horizontal slats

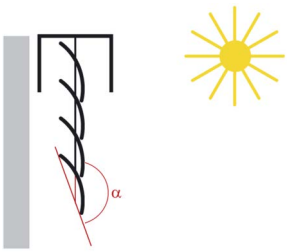
The blind drive actuators have 2 limit position switches and can be run to a Sun protection position using a position setting in percent. The value of "0%" is used to control the upper position (i.e. Sun protection fully open) or is reported as a status.



Sun protection open (Upper position: 0%)

Object: Position in %

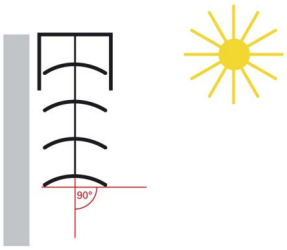
If the lower position is to be approached, then this will be sent to the blinds as Sun protection position 100% or on reaching the lower position (i.e. Sun protection completely closed). The position will be reported using this value. If a blind is run from the upper position, the slats initially tilt 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 (α = 180°) but rather form a small angle with the vertical.



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

Object: Position in %

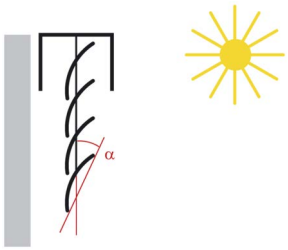
From their vertical position (completely closed, 100%) the slats can be adjusted to their horizontal position (fully open, 0% and α = 90°) The blind drive used thus determines whether this adjustment can be carried out using many small steps or whether it is only possible via a few large steps (As with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



Slat position horizontal (0%, α = 90°)

Object: Slat angle in %

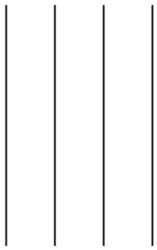
For standard blinds, the slats can be adjusted continuously to the horizontal position or until the slat adjustment ends and the raising of the blind begins. The slats then form an angle of between 0° and 90° with the vertical.



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

Object: Slat angle in %

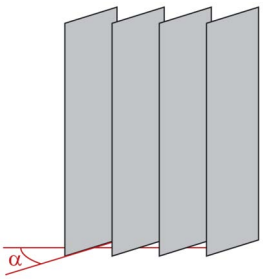
Slat position for vertical slats
If an interior shade or privacy shield with vertical slats is controlled via a blind actuator, then the position in which the slats are fully open is controlled or reported as the 0% slat position. The slats then form an angle of 90° with the direction of travel from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



Fully opened vertical slats (Slat angle 0%)

Object: Slat angle in %

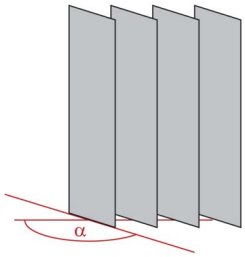
If the slats are fully closed, this position will be controlled and reported as slat position 100%. This is the position to which the shade is run from its side limit position in front of the window. The angle that the slats then form with the direction of movement is therefore a little > 0°.



Fully closed vertical slats (Slat angle 100%)

Object: Slat angle in %

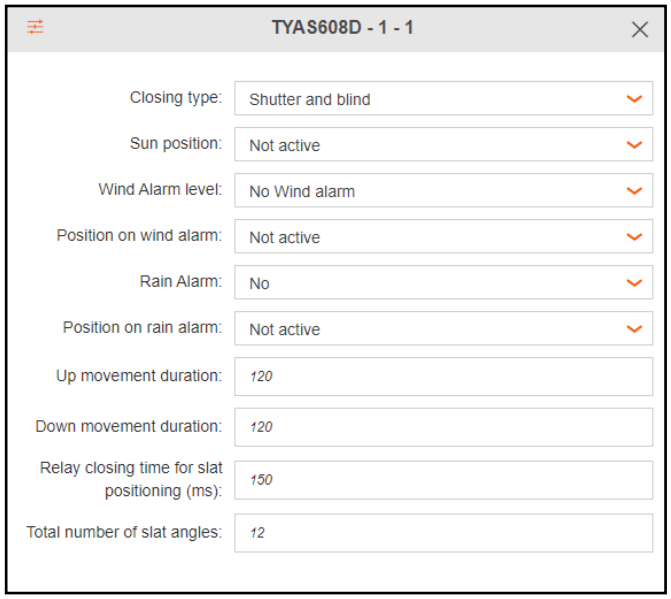
If the shade is then driven back (i.e. opened), then the vertical slats are turned to a position that is somewhat smaller than 180°.



Vertical slats at the start of moving UP

3.3.2.1 Pathway parameters

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



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

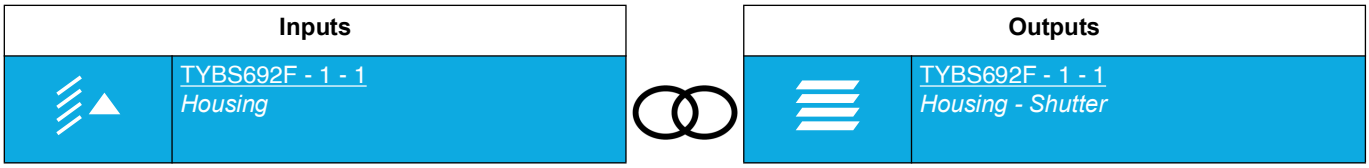
Parameter	Description	Value
Relay closing time for slat positioning (ms)	This parameter defines how long the contacts must be closed in order to perform an elementary angle step for the slats.	1...**150***...2500 ms

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.*

3.3.2.2 Up/down

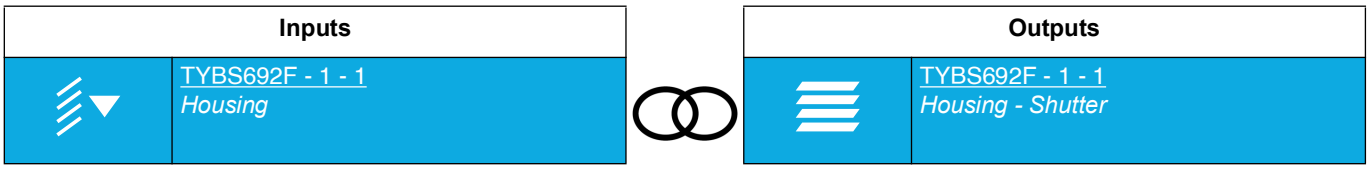
- **Blinds up**: Allows to raise or stop a blind or tilt the blind slats.



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.

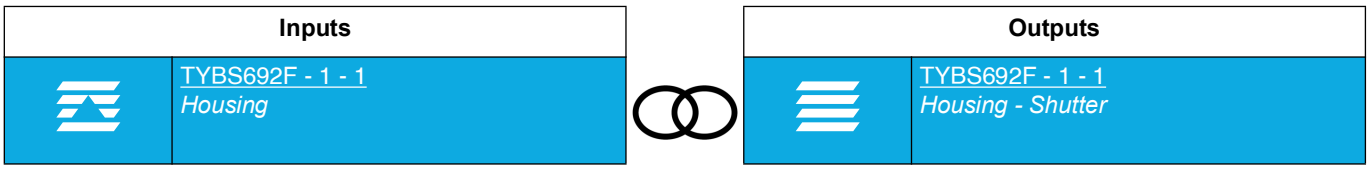


Brief closing of the input contact: brief closing of a lowering output contact.
Prolonged closing of the input contact: delayed closing of the lowering output contact.
Opening input contact: no action.

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

* Default value

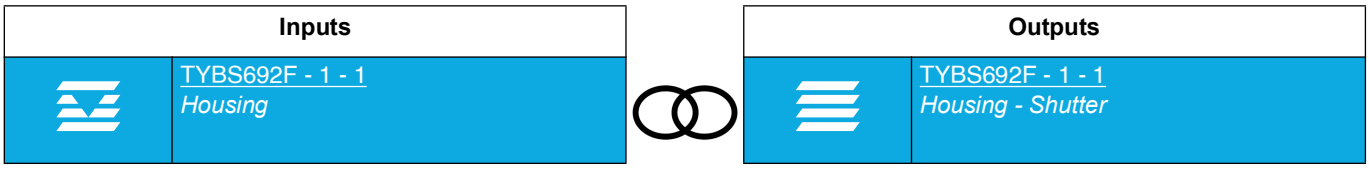
- **Shutter UP**: Allows to raise or stop a rolling shutter.



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).

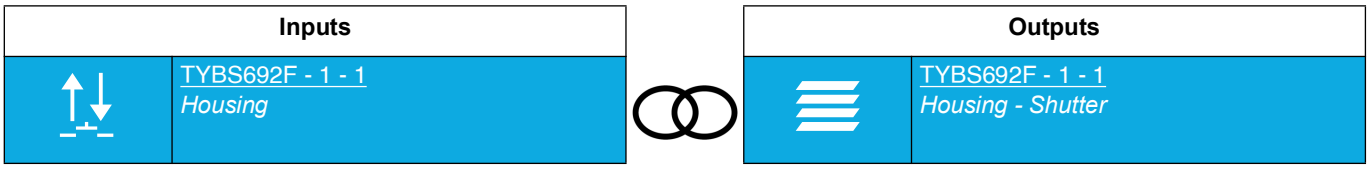
- **Shutter DOWN**: Allows to lower or stop a rolling shutter.



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

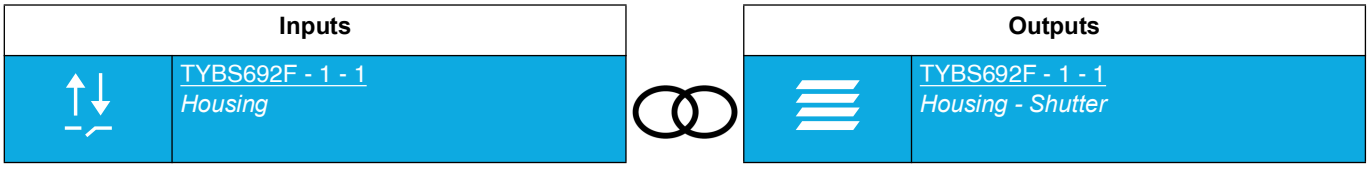
Note: If a brief input contact occurs during the delay, the output contact opens (stop function).

- **Up/down toggle**: inverses tthe direction of the shutter (up or down).



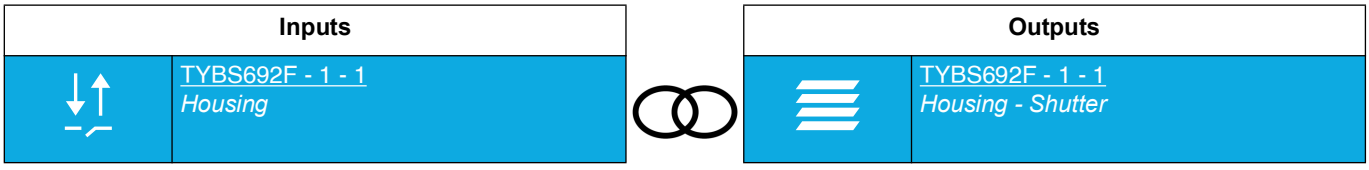
Closing input contact: switches between raising and lowering the shutter..
Successive closings reverse the shutter direction each time.

- **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.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*

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.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*

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.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*

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.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*

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

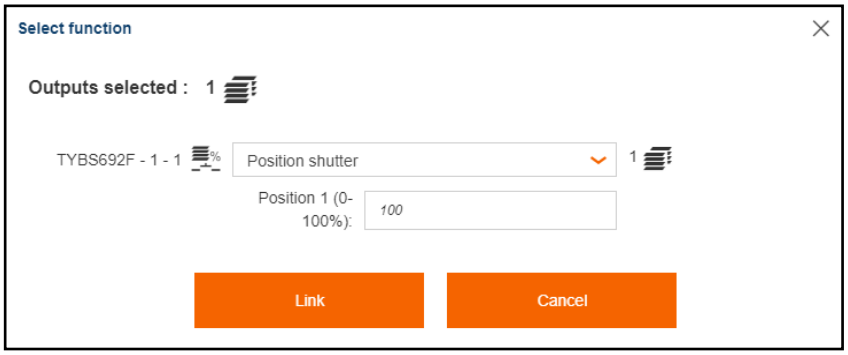
3.3.2.3 Shutter or blind angle

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

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*

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).

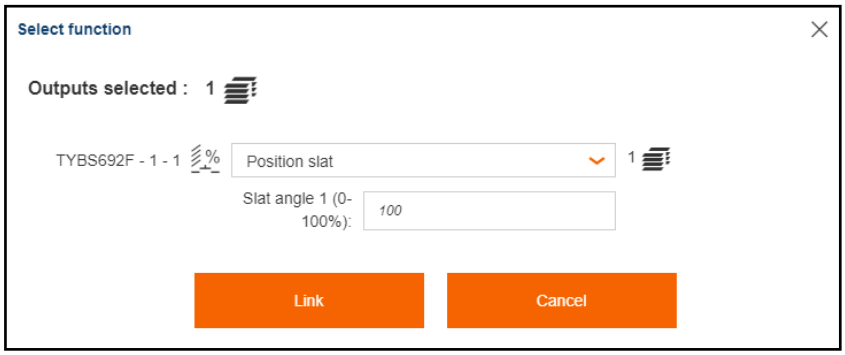


- **Slat angle**: Allows positioning shutter slats according to a value in %.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*

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).

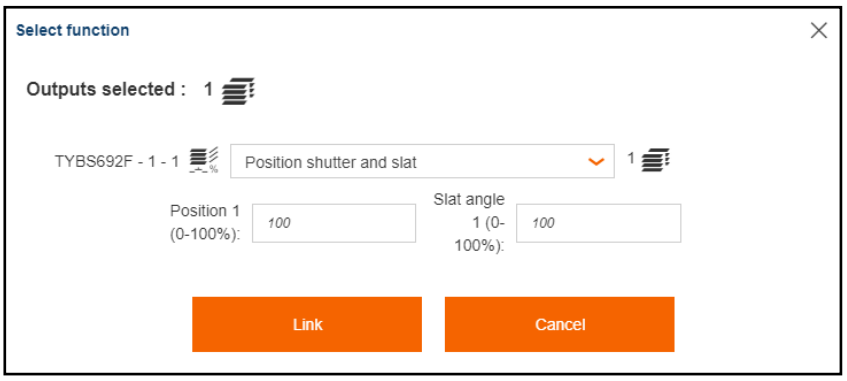


- **Shutter and slat angle**: Allows positioning a rolling shutter or blind at the desired height and the blind slats according to a value in %.

Inputs		Outputs	
TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*	

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).

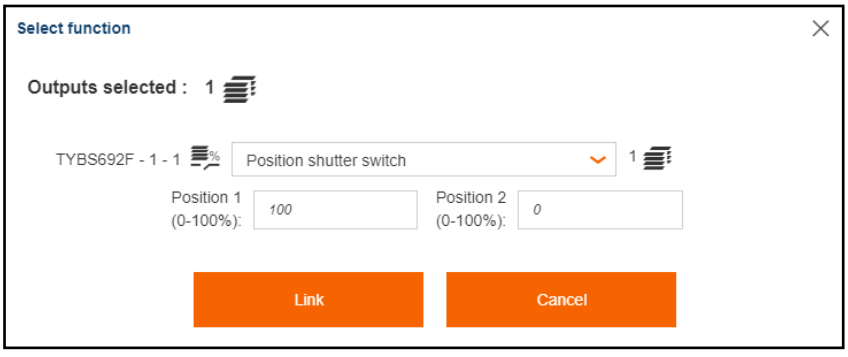


- **Shutter angle switch**: Allows positioning a rolling shutter or blind at the desired height according to a value in % using a switch.

Inputs		Outputs	
TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*	

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).



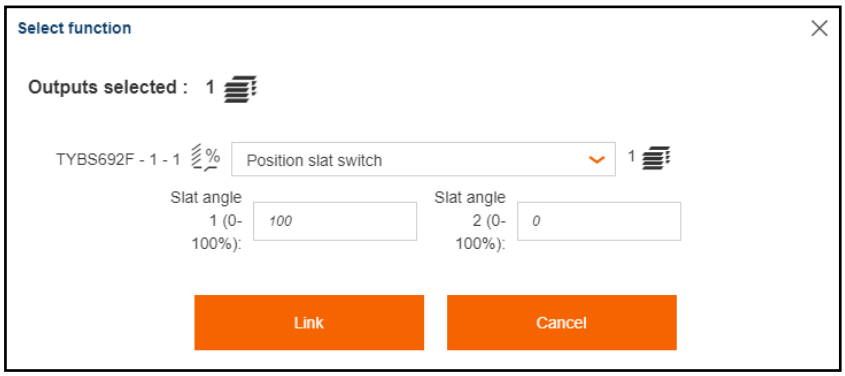
- **Slat angle switch**: Allows positioning blind slates according to a value in % using a switch.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*

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)

.

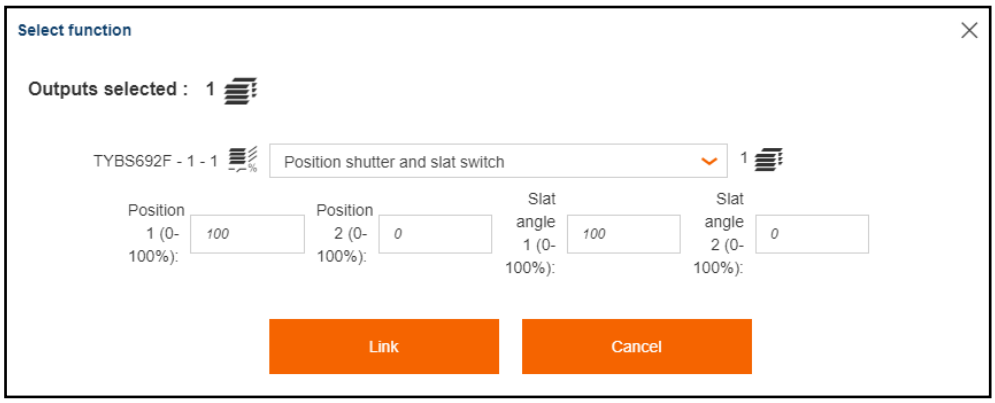


- **Shutter and slat angle switch**: Allows positioning a rolling shutter or a blind at the desired height and the blind slates according to a value in % using a switch.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*

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.

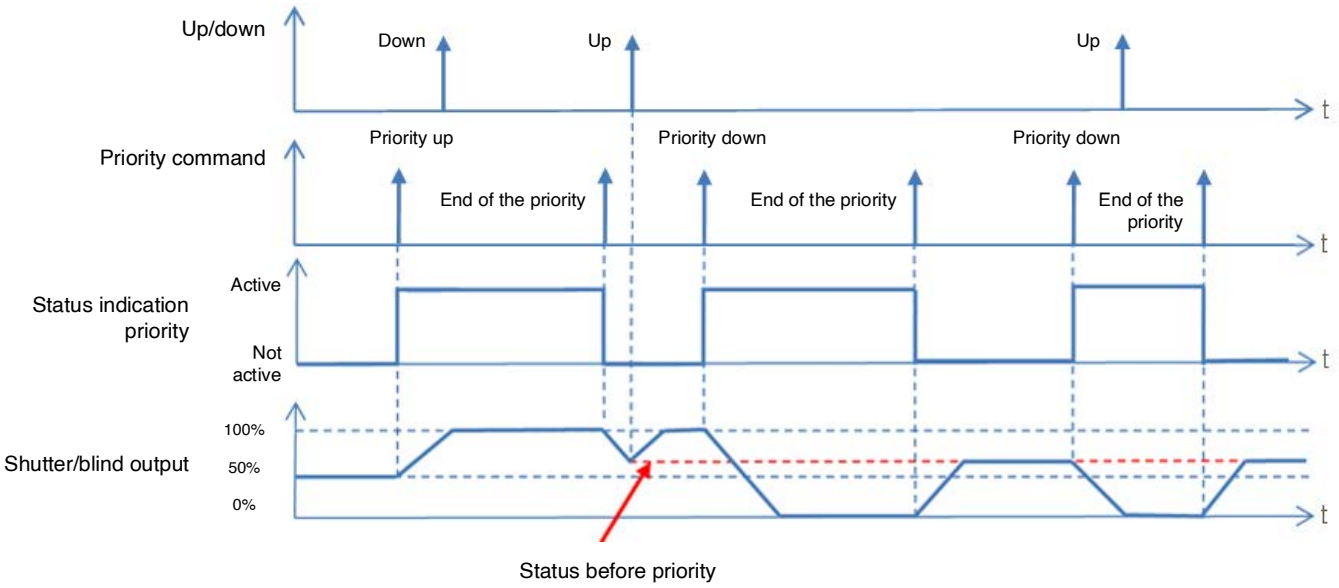
Note: When the connection is made, values must be defined in % for shutter positions 1 and 2 (0%: high position, 100%: low position) and values in % for blind slats positions 1 and 2 (0%: slats open,100%: slats closed).



3.3.2.4 Priority

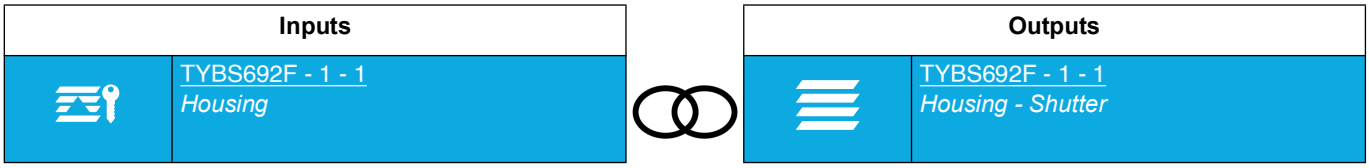
The Priority function is used to force the output into a defined state.
Priority: Alarm > **Priority** > Basic function.
At the end of the priority, the output returns to the status it had before the priority (Memorisation function).

Operating principle:



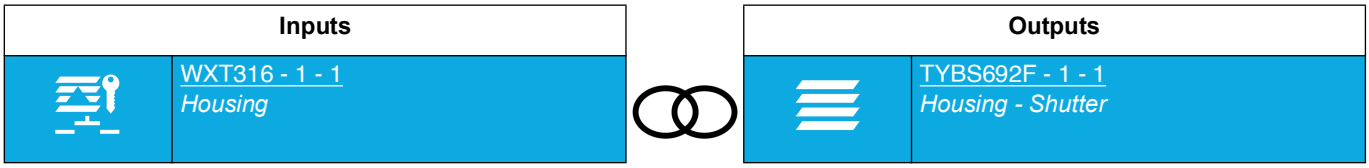
Links

- **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.

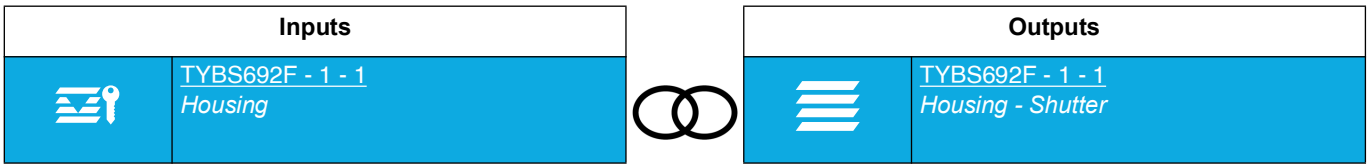
- **Priority up push-button**: Allows forcing a rolling shutter or blind to raise using a push-button.



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.

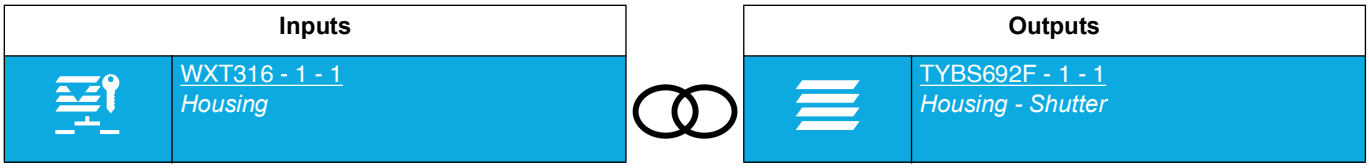
Note: This function is only available with push-button input products with LEDs indicating status.

- **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.

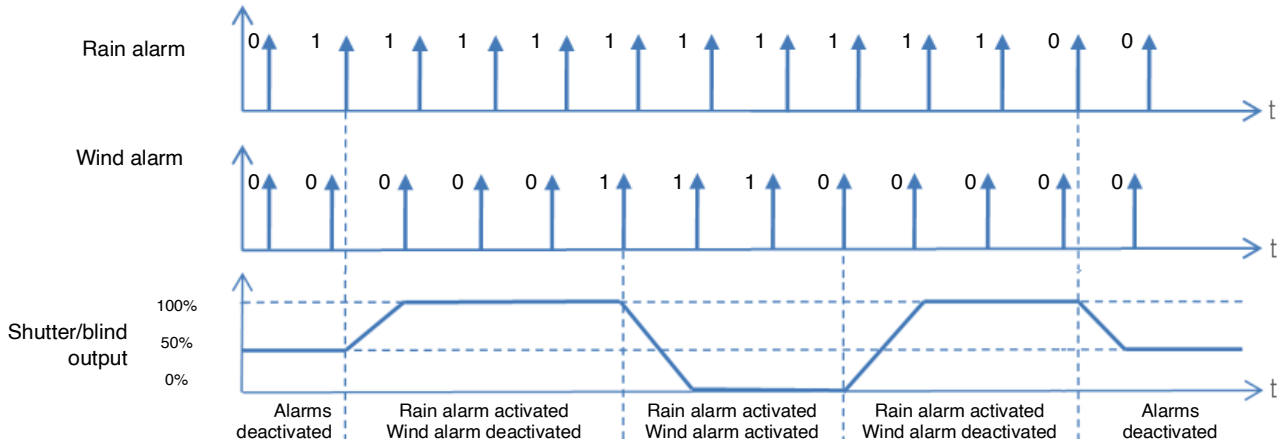
Note: This function is only available with push-button input products with LEDs indicating status.

3.3.2.5 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.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*

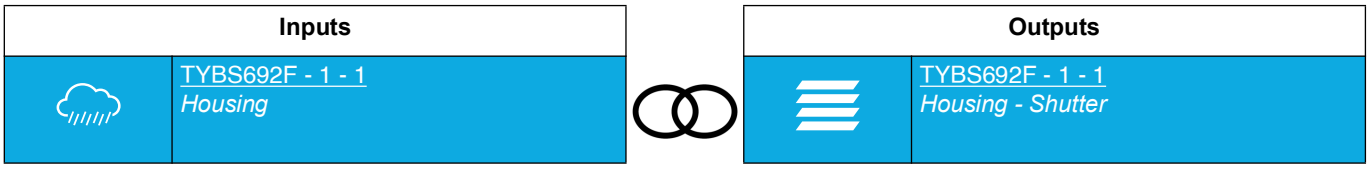
Closing input contact: wind alarm activation.
Opening input contact: alarm end.

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	**Not active***
	Closes the Up contact	Up
	Closes the down contact	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.

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.

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	**Not active***
	Closes the Up contact	Up
	Closes the down contact	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.

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

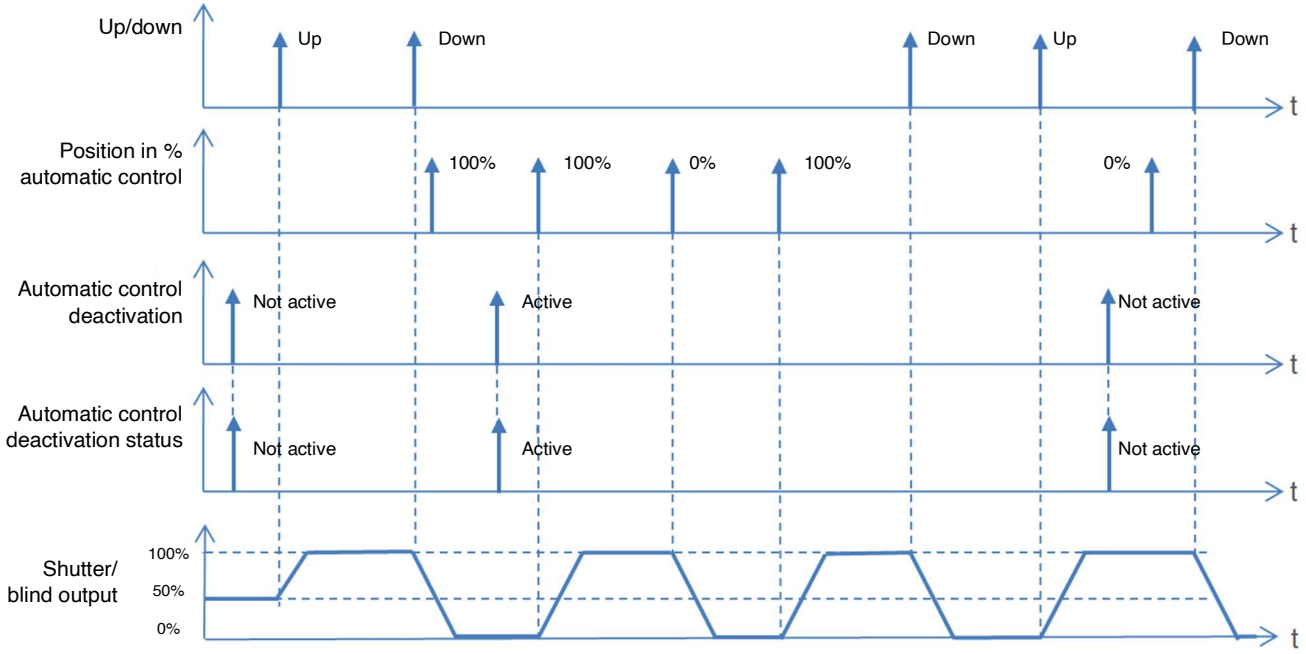
* Default value

3.3.2.6 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:

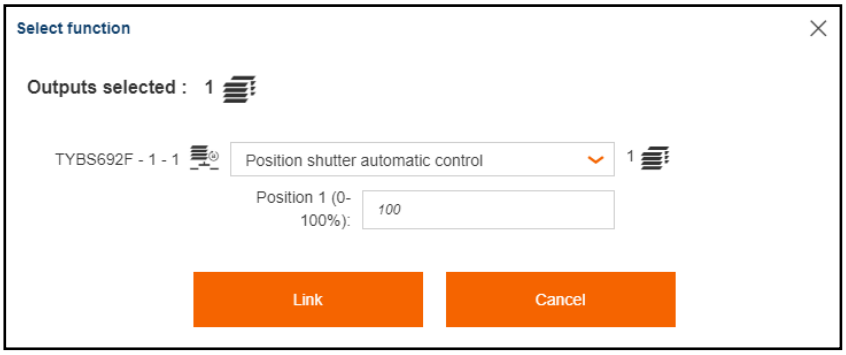


- Links
  - **Automatic control shutter angle**: Allows positioning a rolling shutter or blind to the desired height according to a value in % using automatic control.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*

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).

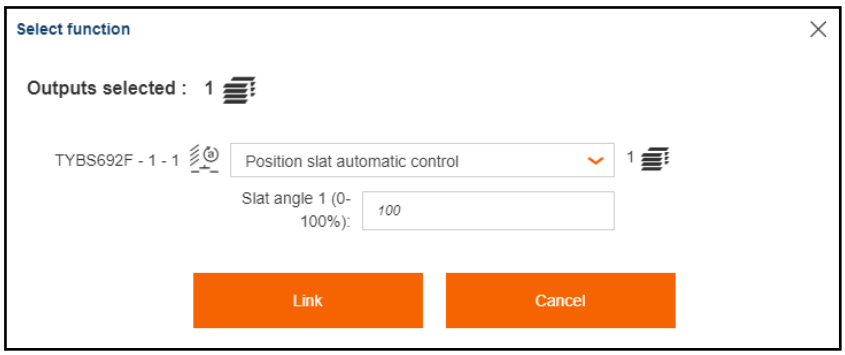


- **Automatic control slat angle**: Allows positioning blind slats according to a value in % using automatic control.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*

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).

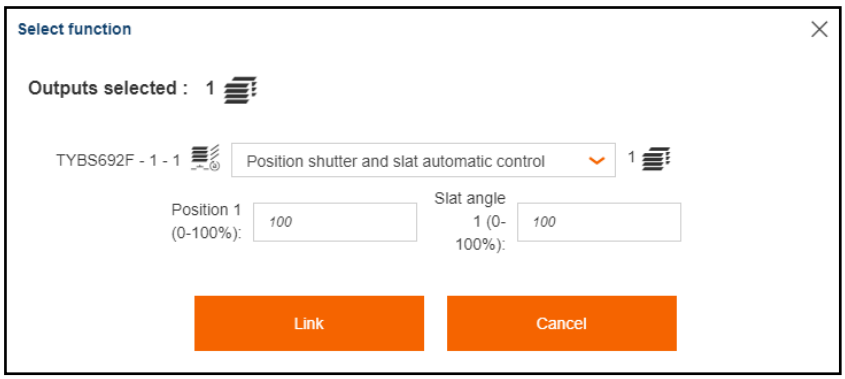


- **Automatic control shutter and slat angle**: Allows positioning a rolling shutter or blind to the desired height and blind slats according to a value in % using automatic control.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*

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).

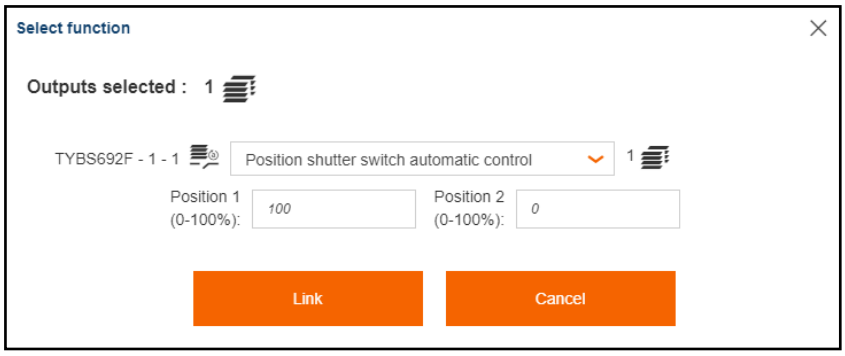


- **Automatic control shutter position switch**: Allows positioning a rolling shutter or blind to the desired height according to a value in % using a switch and automatic control.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*

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).

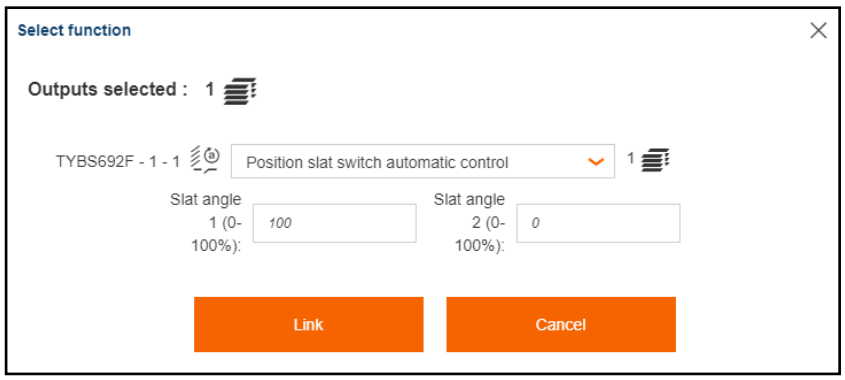


- **Automatic control inter slat angle**: Allows positioning blind slats according to a value in % using a switch and automatic control.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*

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).

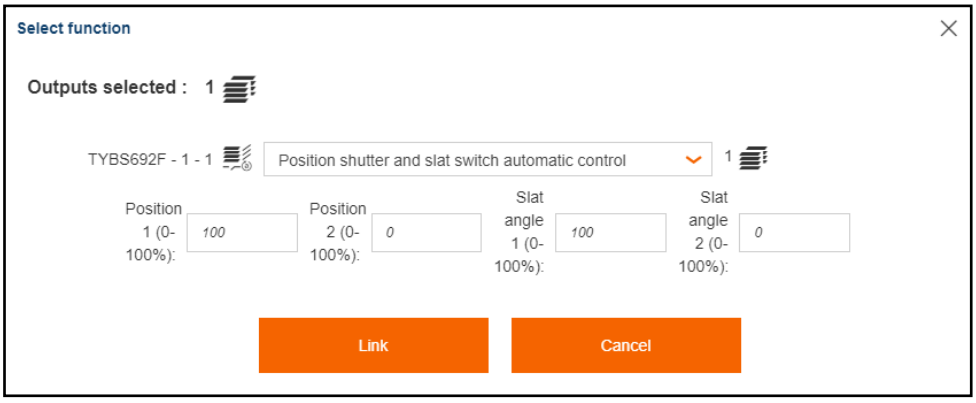


- **Automatic control inter shutter and slat angle**: Allows positioning a rolling shutter or blind to the desired height and blind slats according to a value in % using a switch or automatic control.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*

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.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*

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

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

Inputs		Outputs	
	WXT316 - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*

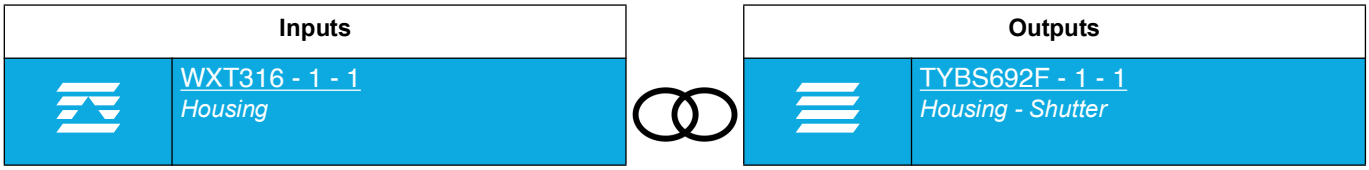
Press on the push-button: deactivated automatic control.
A second press on the push-button activates the automatic control.

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

3.3.2.7 Central Up/Down switch

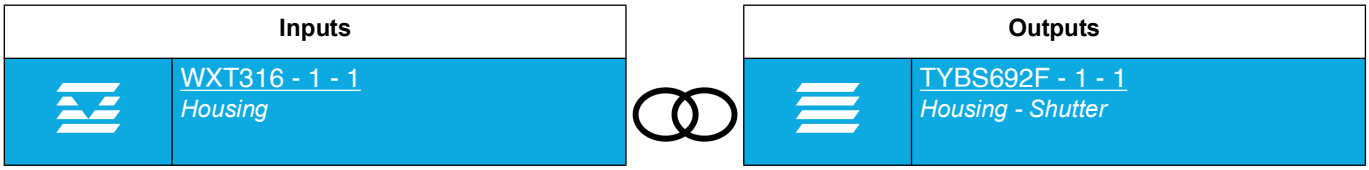
The Central up/down switching function is used to open or close a roller shutter group. The command can come from switches, buttons or other control inputs.Unlike the Up/Down function, it does not send the status indication of the controlled outputs. This prevents KNX bus saturation when switching outputs simultaneously.

- **Central Up**: Enables roller shutters to be raised or stopped.



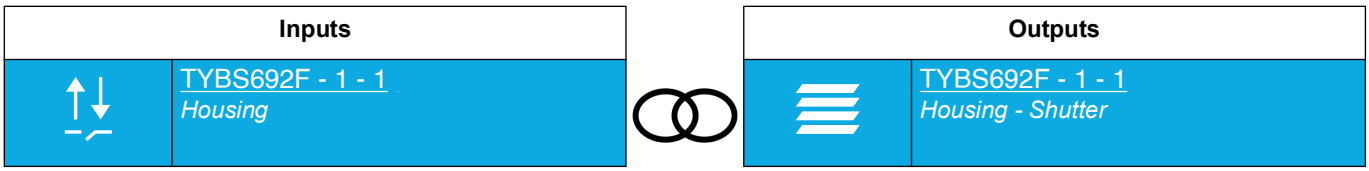
Prolonged closing of the input contact: delayed closing of the raise output contact.
Opening input contact: no action.
Note: If a brief input contact occurs during the delay, the output contact opens (stop function).

- **Central Down**: Enables shutters to be lowered or stopped.



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).

- **Central Up/Down switch**: Allows roller shutters to be raised or lowered using a switch.

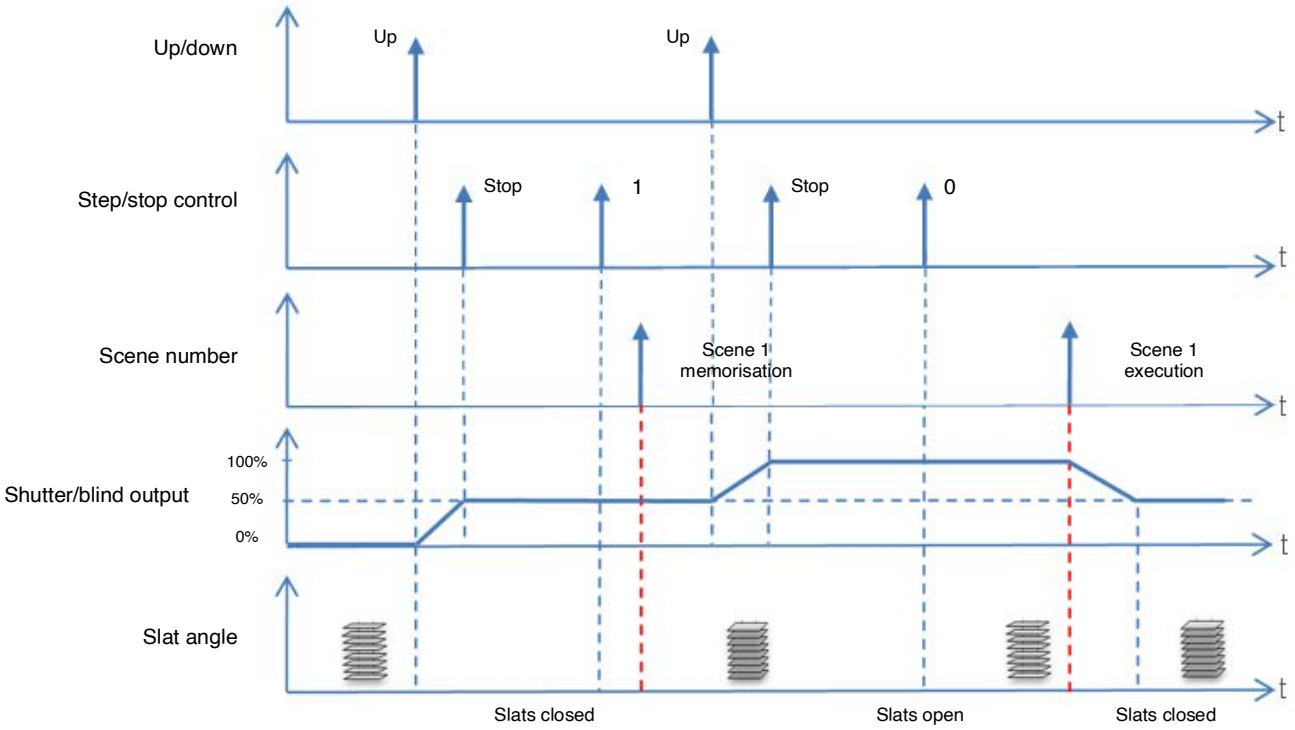


Closing input contact: delayed closing of the raise output contact.
Opening input contact: delayed closing of the lowering output contact.

3.3.2.8 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:



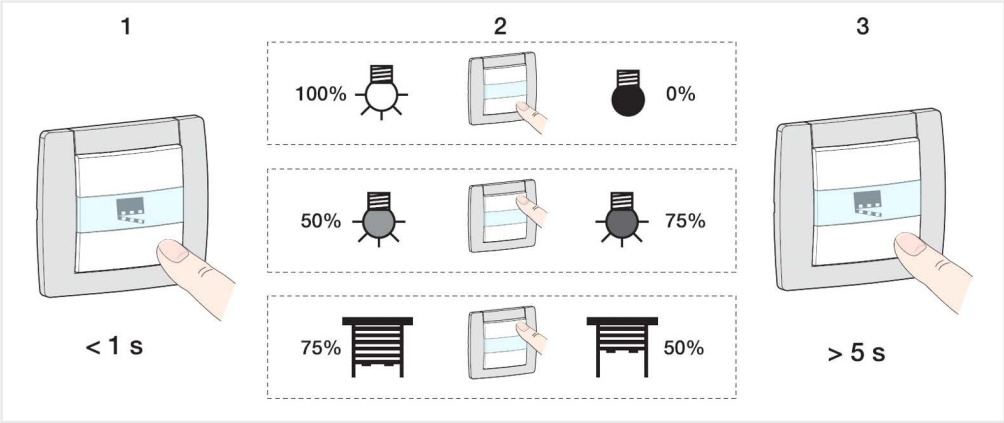
Learning and storing scenes
This process is used to change and store a scene. For example, by locally pressing the key in the room or by emission of the values from a visualization.

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.

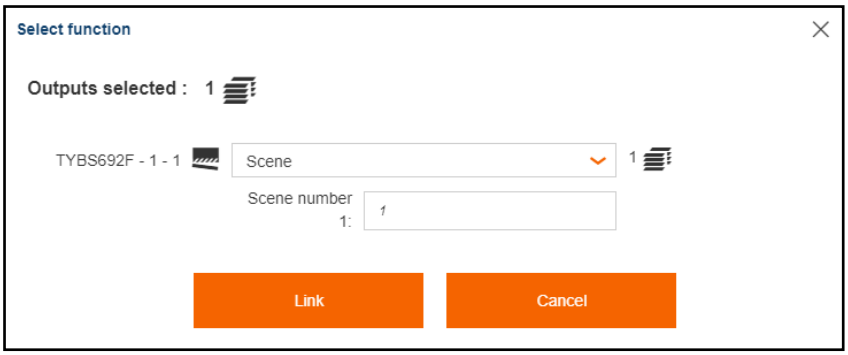
Links

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

Inputs		Outputs	
	TYBS692F- 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*

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.

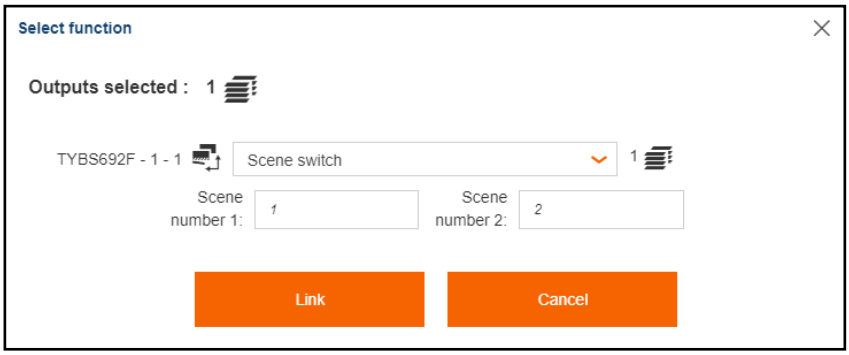


- **Scene switch**: The scene is activated according to the closing or opening input contact.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*

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.



3.4 Input operation mode

3.4.1 Lighting

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

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

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.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Lighting*

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

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

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Lighting*

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

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

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Lighting*

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.
FPL	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.

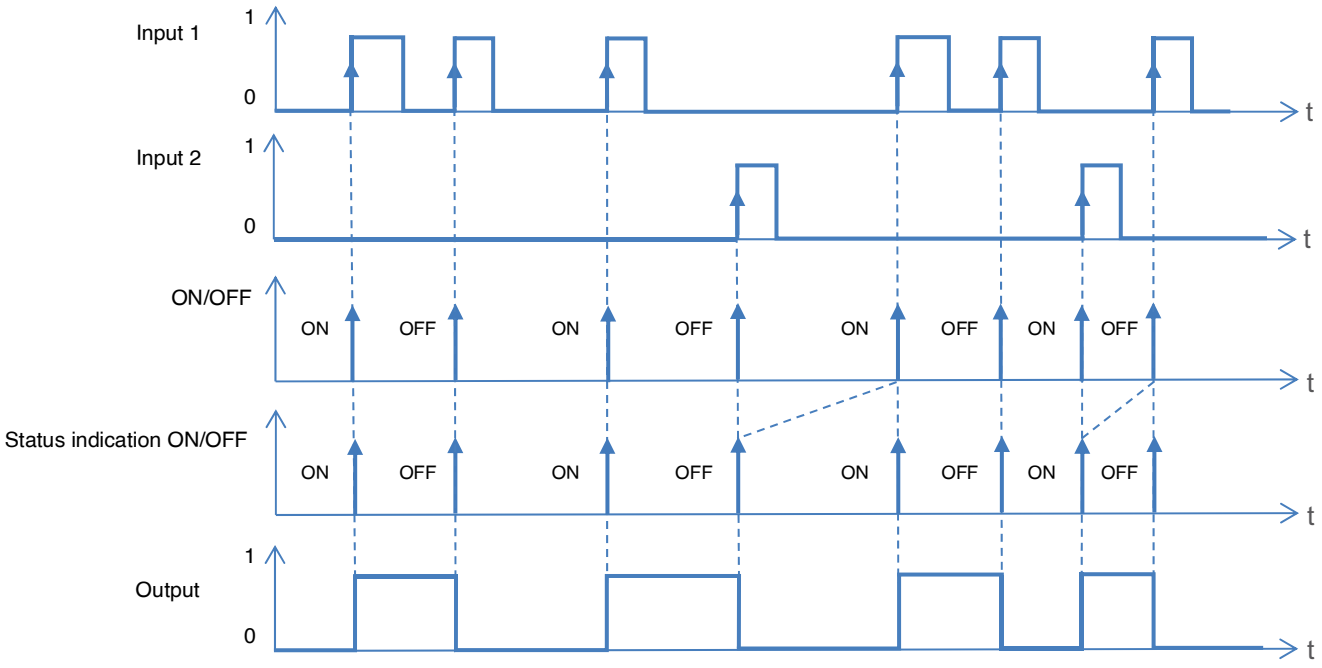
It is also possible to make a link between 2 inputs. Below are the inputs which can also have these functions:

	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).

3.4.1.1 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.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Lighting*

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:

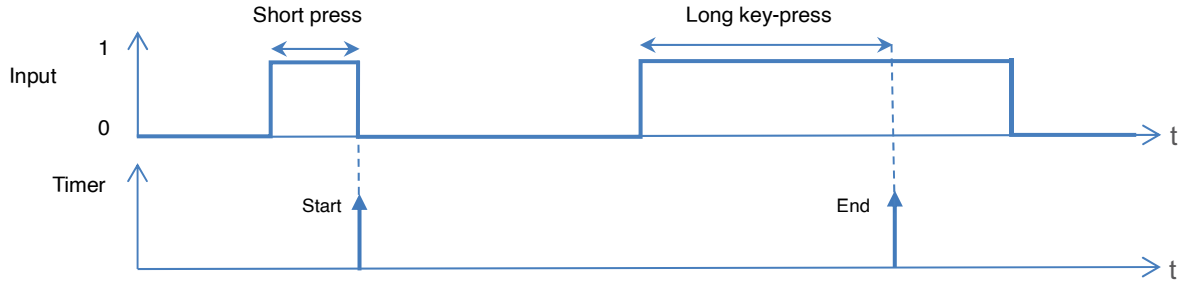
	Dimming	Controls the dimming output for switching the light on and off. This procedure enables a same input to be connected to an ON/OFF output and to a dimming output.
	Heating	Controls the output for switching the heating system on and off.
	CMV	Controls the output for switching the CMV system on and off.
FPL	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).

3.4.1.2 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.



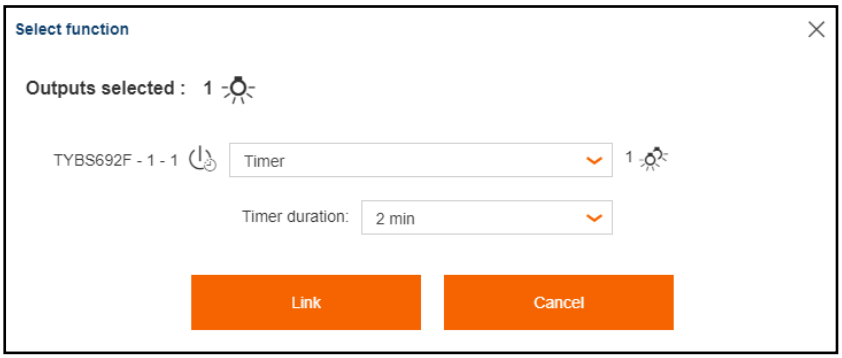
The Timer function is used to switch on a lighting circuit for a programmable period.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Lighting*

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.

3.4.1.3 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.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Lighting*

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.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Lighting*

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.

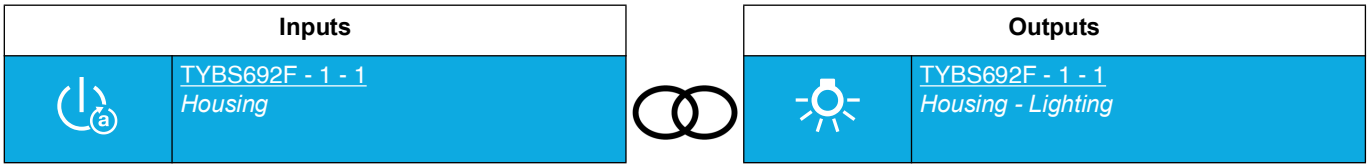
It is also possible to make a link between 2 inputs. Below are the inputs which can also have these functions:

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

3.4.1.4 ON/OFF Automatic control

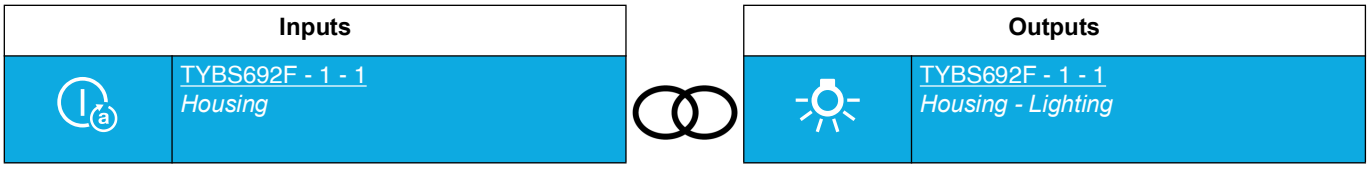
The Automatic control function enables an output to be controlled in parallel to the standard control. An additional command object (Automatic control deactivation) is used to activate or deactivate Automatic control.

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



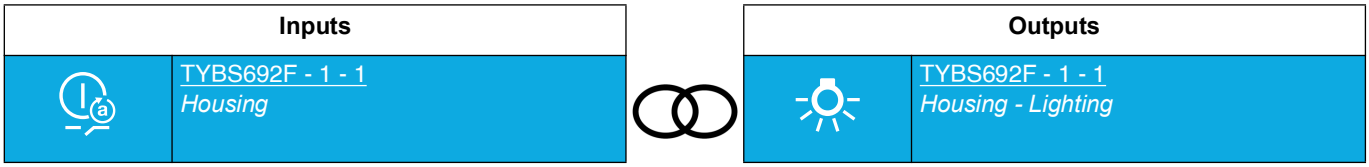
Activation of the input by short presses switches on the light.
Successive activation keeps the light on.

- **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.*

3.4.1.5 Central ON/OFF switch

An output can be switched on or off using the ON/OFF function. Unlike the ON/OFF function, it does not send the status indication of the controlled outputs. This prevents KNX bus saturation when switching outputs simultaneously. It is recommended that you use this function for a number of lighting circuits greater than 20.

- **Central ON**: Switches on a lighting circuit assembly..

Inputs		Outputs	
	WXT316 - 1 - 1 *Haus*		TYAS608D - 1 - 1 *Haus - Beleuchtung*

Closing input contact: turns on the light
Opening input contact: no action

- **Central OFF**: Switches off a lighting circuit assembly.

Inputs		Outputs	
	WXT316 - 1 - 1 *Haus*		TYAS608D - 1 - 1 *Haus - Beleuchtung*

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

- **Central ON/OFF switch**: Switches a lighting circuit assembly on or off (switch).

Inputs		Outputs	
	TYBS692F - 1 - 1 *Haus*		TYAS608D - 1 - 1 *Haus - Beleuchtung*

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

3.4.1.6 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.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Lighting*

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).*

3.4.2 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		Colour temperature colder
	Decrease dimming/OFF		Colour temperature warmer
	Increase/decrease dimming		Colour scrolling forward
	Dimming		Colour scrolling backward
	Dimming switch		Scene
	Dimming automatic control PB		Scene switch
	Dimmer switch automatic control		Automatic control deactivation

Note: *For the function **Automatic control deactivation**, see: Automatic control deactivation.*
*For the function **Scene** and **Switch scene**, see: Scene.*

3.4.2.1 Dimming

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

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYAS664AN - 1 - 1 *Housing - Dimming*

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.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYAS664AN - 1 - 1 *Housing - Dimming*

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.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYAS664AN - 1 - 1 *Housing - Dimming*

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:

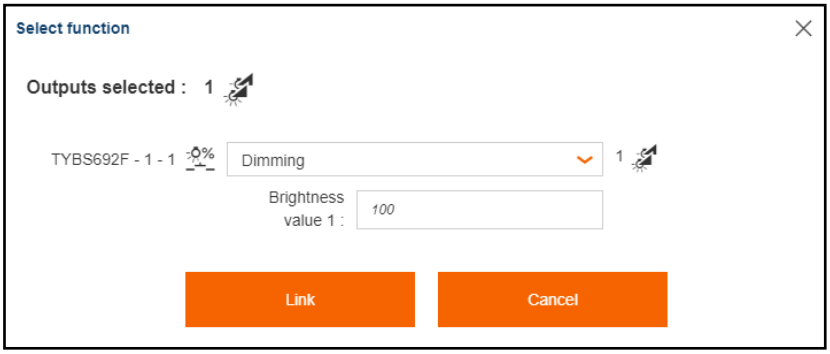
	Increase/decrease dimming	Controls the dimming input for dimming the light (Only with TX511 and TXC511).

- **Dimming**: Varies the light with a defined brightness value.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYAS664AN - 1 - 1 *Housing - Dimming*

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.

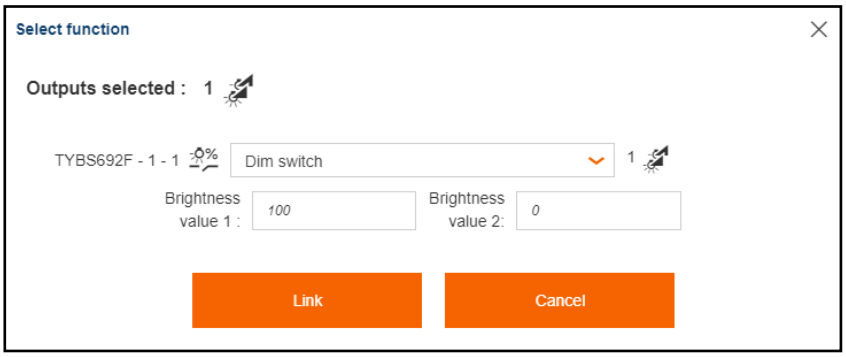


- **Dimming switch**: Varies the light with two brightness values defined according to the opening and closing of the input contact.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYAS664AN - 1 - 1 *Housing - Dimming*

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.



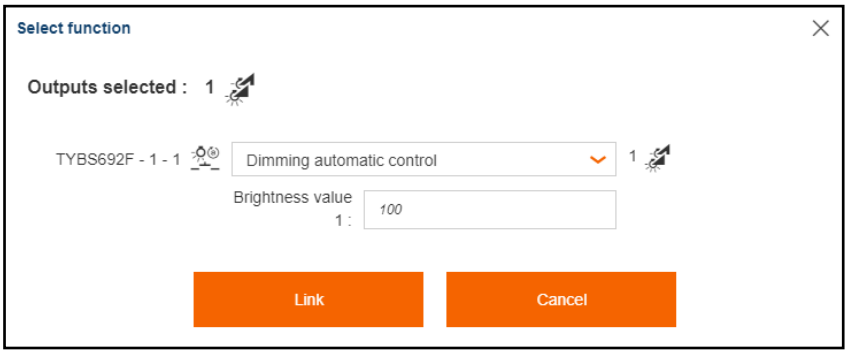
3.4.2.2 Dimming automatic control

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

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYAS664AN - 1 - 1 *Housing - Dimming*

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.

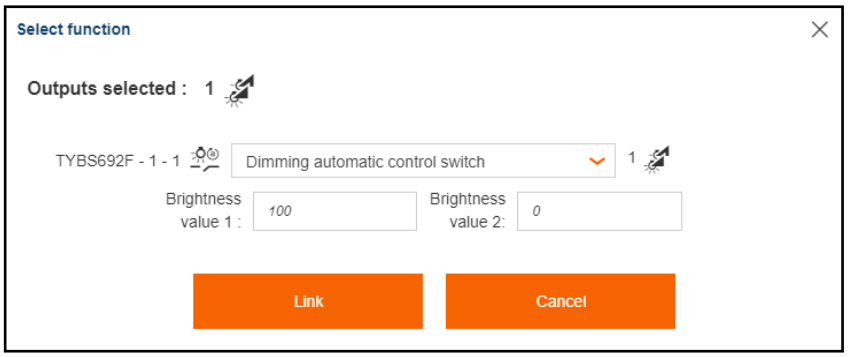


- **Dimmer switch automatic control**: allows varying the light with two defined brightness values according to the opening and closing input contact using automatic control.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYAS664AN - 1 - 1 *Housing - Dimming*

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.

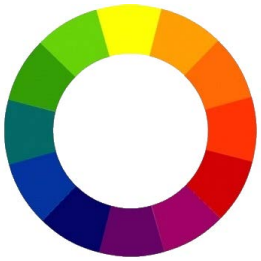


*Note: For the function **Automatic control deactivation**, see: Automatic control deactivation.*

3.4.3 Colour

The product supports control of the DALI "Colour Control" (DALI Device Type 8) equipment. Using appropriate DALI equipment and lighting sources enables the colour of a RGB(W) LED lamp to be controlled.

Scrolling colours allows you to select a pre-defined colour to be applied to the output.
In addition to white, the available color set is as follows:



- **Colour scrolling forward**: enables clockwise colour scrolling.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYAS664D - 1 - 1 *Housing - Dimming*

Prolonged closing of the input contact: forward colour scrolling

- **Colour scrolling backward**: enables anti-clockwise colour scrolling.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYAS664D - 1 - 1 *Housing - Dimming*

Prolonged closing of the input contact: rearward colour scrolling

3.4.4 Colour temperature

The product supports the control of the "Colour Control" DALI equipment (DALI Device Type 8) in the specific character "Tunable White (TW)". Using appropriate DALI equipment and lighting sources enables the colour temperature of a lamp to be controlled.

- **Colour temperature colder**: enables the colour temperature to be increased.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYAS664D - 1 - 1 *Housing - Dimming*

Prolonged closing of the input contact: colour temperature increase
Opening input contact: no action

- **Colour temperature warmer**: enables the colour temperature to be decreased.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYAS664D - 1 - 1 *Housing - Dimming*

Prolonged closing of the input contact: colour temperature decrease
Opening input contact: no action

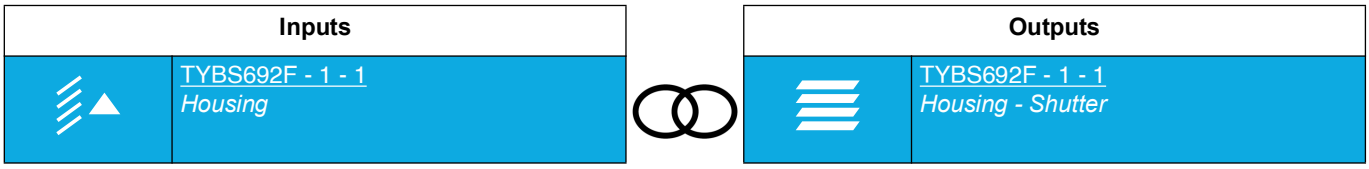
3.4.5 Shutter/blind

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		Central up
	Slat angle		Central down
	Shutter and slat angle		Central up/down switch
	Shutter angle switch		Scene
	Slat angle switch		Scene switch
	Shutter and slat angle switch		Automatic control deactivation

Note: *For the function **Automatic control deactivation**, see: Automatic control deactivation.*
*For the function **Scene** and **Switch scene**, see: Scene.*

3.4.5.1 Up/down

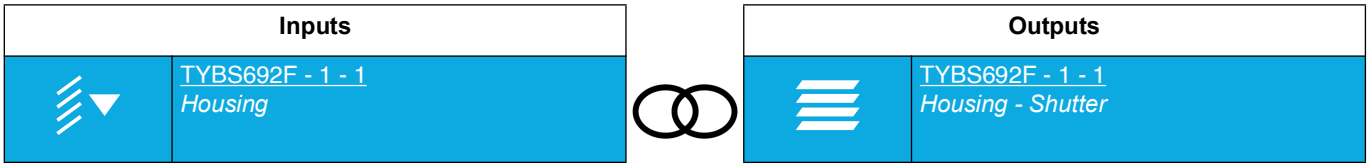
- **Blinds up**: Allows to raise or stop a blind or tilt the blind slats.



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).

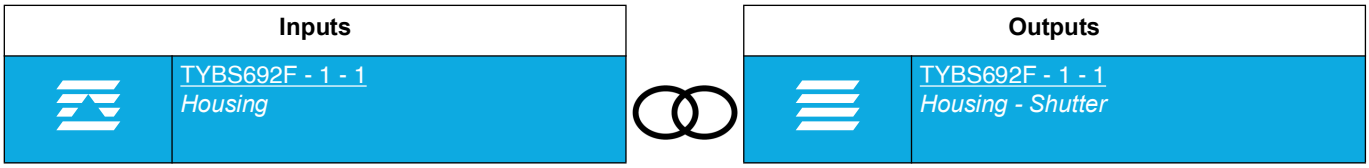
- **Blinds down**: Allows to lower or stop a blind or tilt the blind blades.



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).

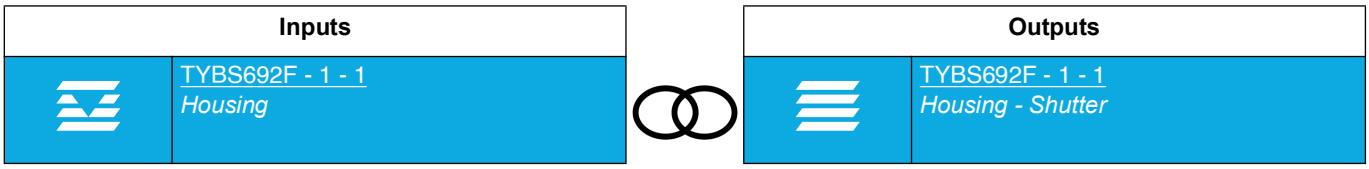
- **Shutter UP**: Allows to raise or stop a rolling shutter.



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).

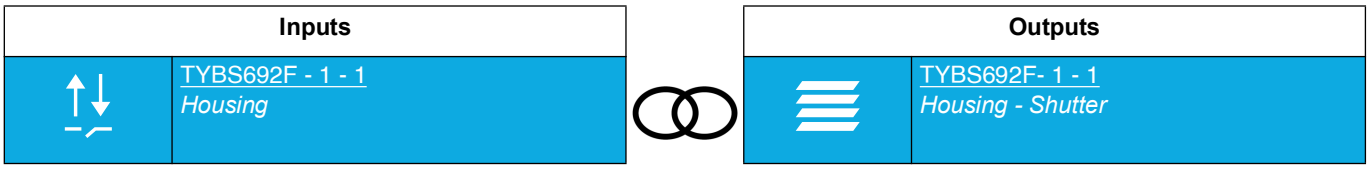
- **Shutter DOWN**: Allows to lower or stop a rolling shutter.



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

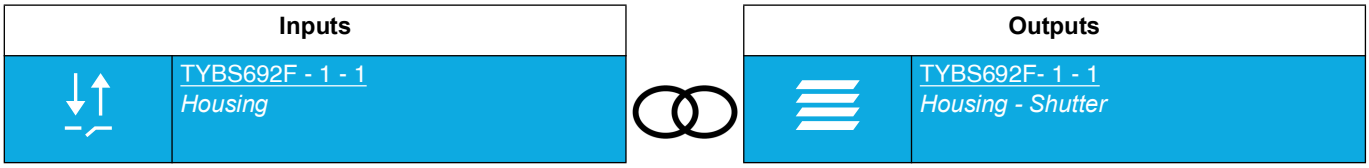
Note: If a brief input contact occurs during the delay, the output contact opens (stop function).

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



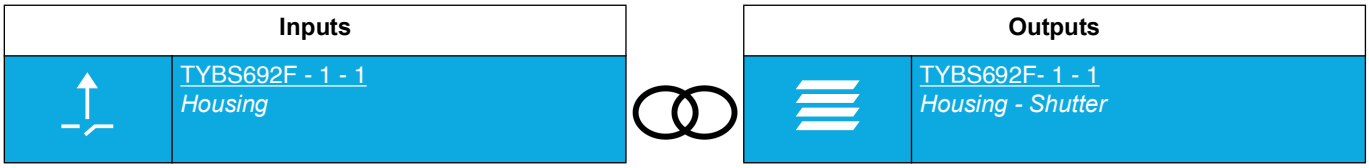
Closing input contact: delayed closing of the raise output contact.
Opening input contact: delayed closing of the lowering output contact.

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



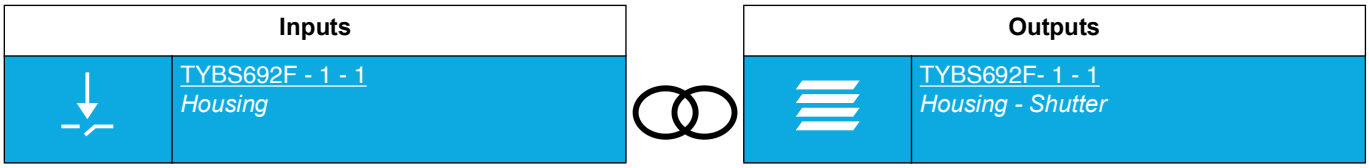
Closing input contact: delayed closing of the lowering output contact.
Opening input contact: delayed closing of the raise output contact.

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



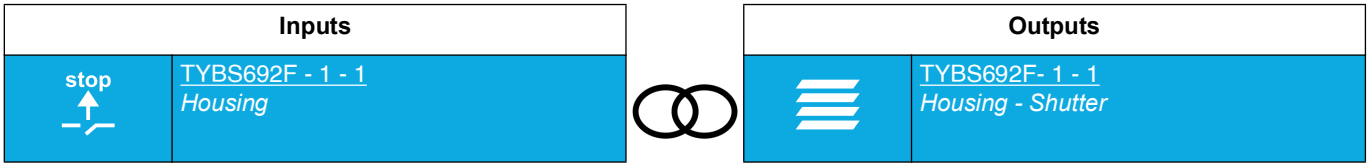
Closing input contact: delayed closing of the raise output contact.
Opening input contact: no action.

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



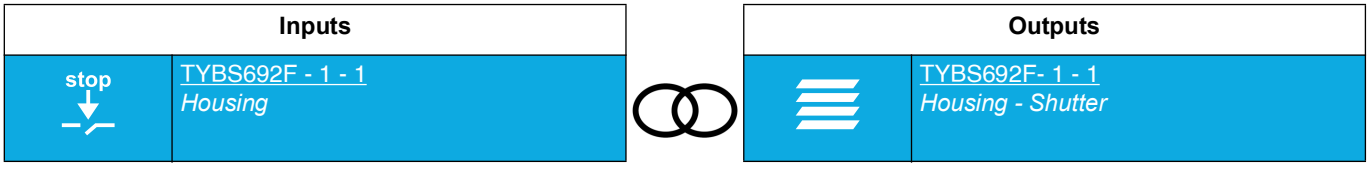
Closing input contact: delayed closing of the lowering output contact.
Opening input contact: no action.

- **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).

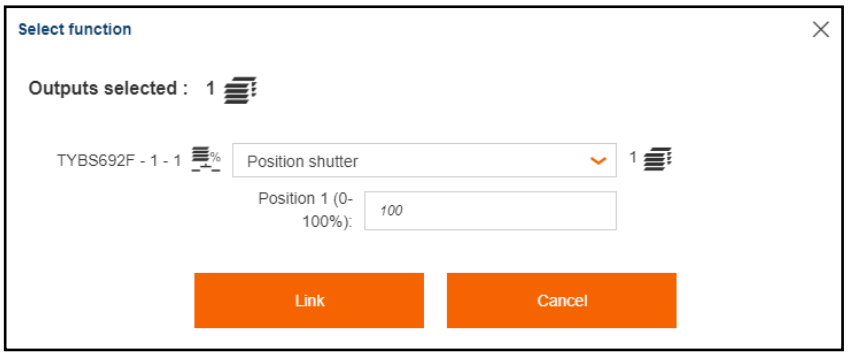
3.4.5.2 Shutter or blind angle

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

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F- 1 - 1 *Housing - Shutter*

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).

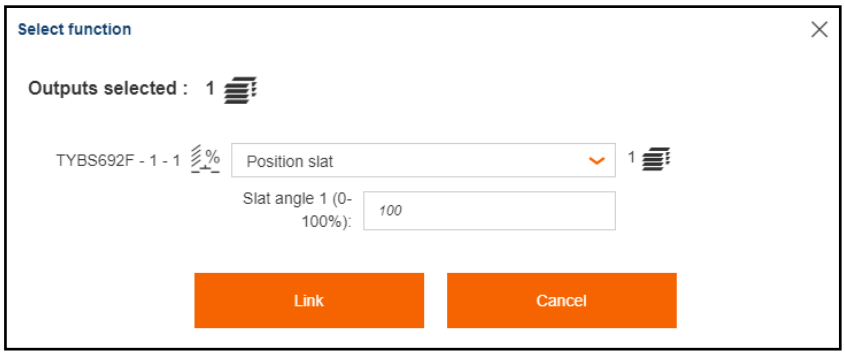


- **Slat angle**: Allows positioning shutter slats according to a value in %.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F- 1 - 1 *Housing - Shutter*

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).

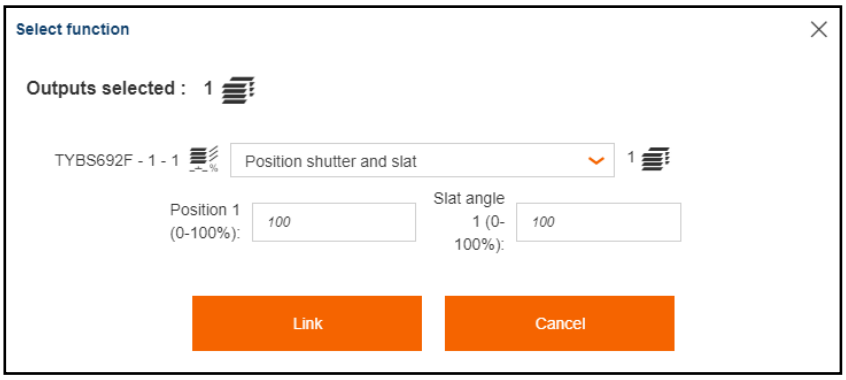


- **Shutter and slat angle**: Allows positioning a rolling shutter or blind at the desired height and the blind slats according to a value in %.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F- 1 - 1 *Housing - Shutter*

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).

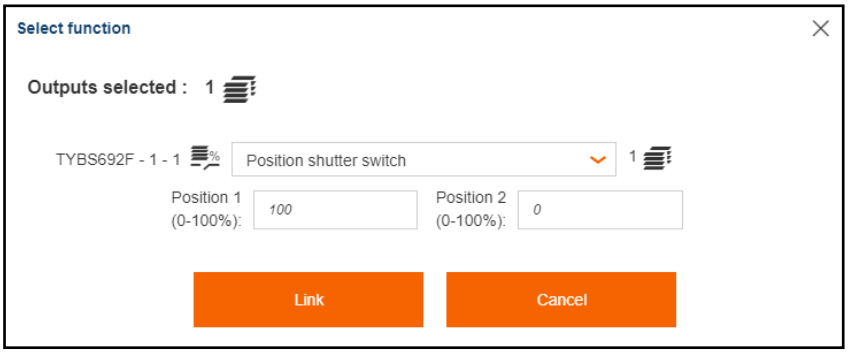


- **Shutter angle switch**: Allows positioning a rolling shutter or blind at the desired height according to a value in % using a switch.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F- 1 - 1 *Housing - Shutter*

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).

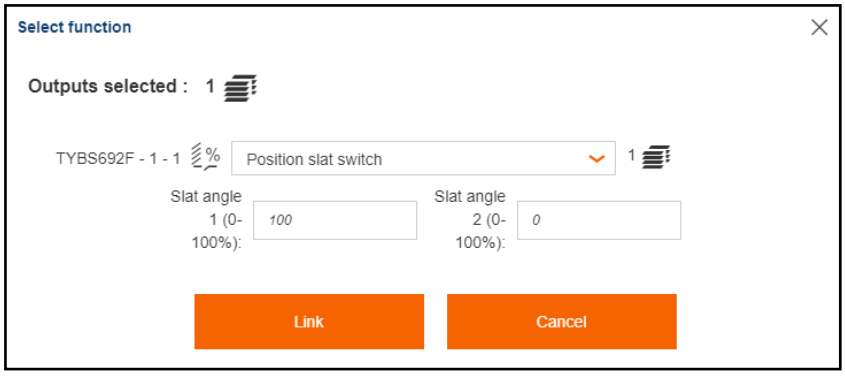


- **Slat angle switch**: Allows positioning blind slates according to a value in % using a switch.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F- 1 - 1 *Housing - Shutter*

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).

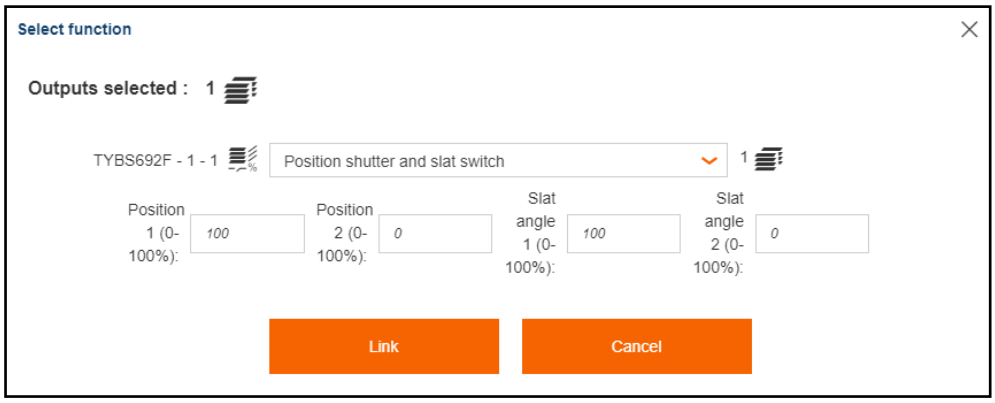


- **Shutter and slat angle switch**: Allows positioning a rolling shutter or a blind at the desired height and the blind slates according to a value in % using a switch.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F- 1 - 1 *Housing - Shutter*

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.

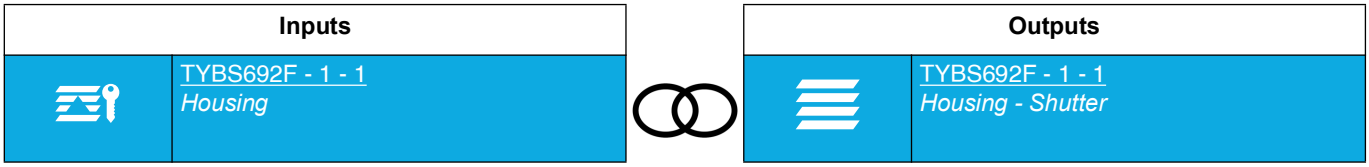
Note: When the connection is made, values must be defined in % for shutter positions 1 and 2 (0%: high position, 100%: low position) and values in % for blind slats positions 1 and 2 (0%: slats open,100%: slats closed).



3.4.5.3 Priority

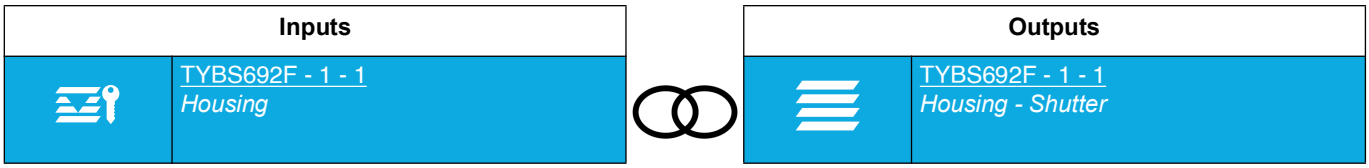
The Priority function forces the control of a shutter.
This function the priority or priority cancellation controls to be issued.
No other command is taken into account when the Priority is active. Only priority or alarm cancellation commands will be taken into account.

- **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.

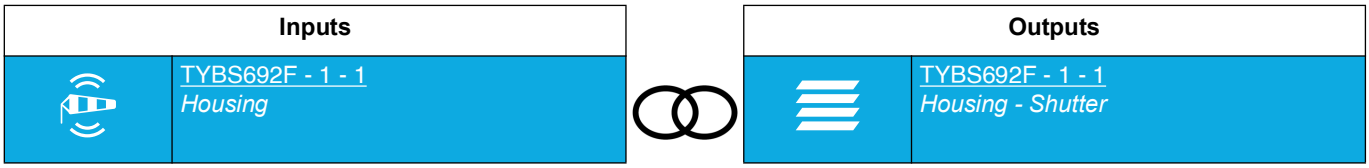


Closing input contact: activation of priority and delayed closing of the lowering output contact.
Opening input contact: end of the priority.

3.4.5.4 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.



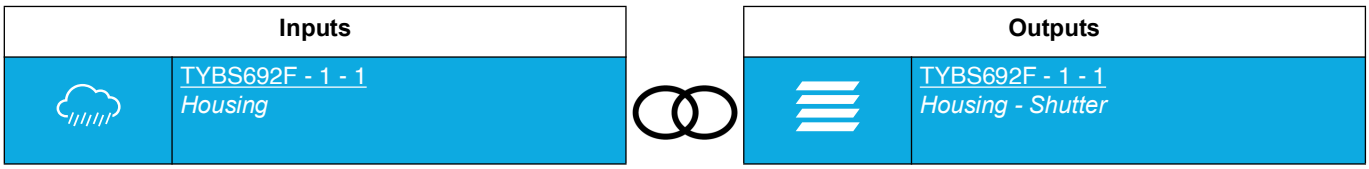
Closing input contact: wind alarm activation.
Opening input contact: alarm end.

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	**Not active***
	Closes the Up contact	Up
	Closes the down contact	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.

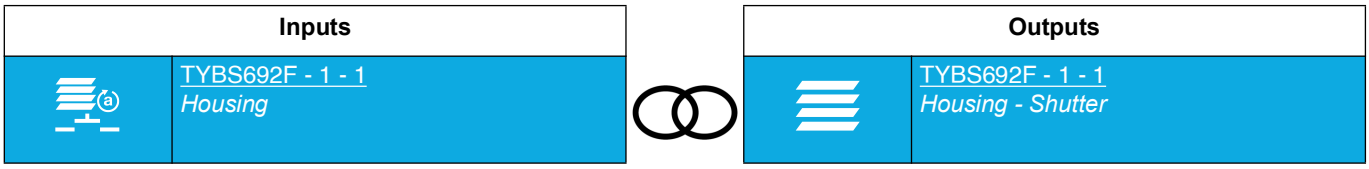
The rolling shutter or blind angle is defined through a setting.

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.*

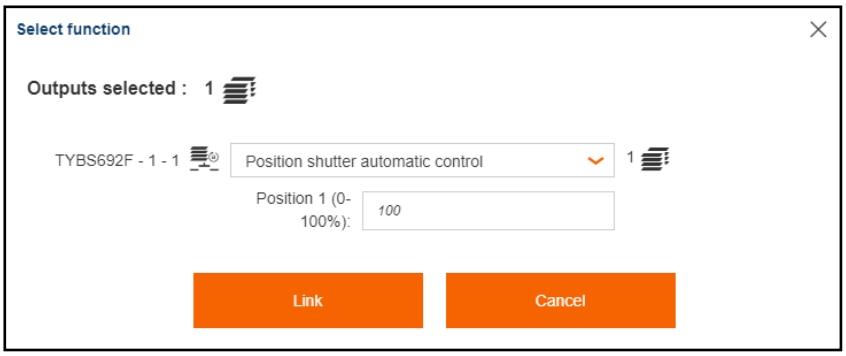
3.4.5.5 Shutter/blind automatic control

- **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).



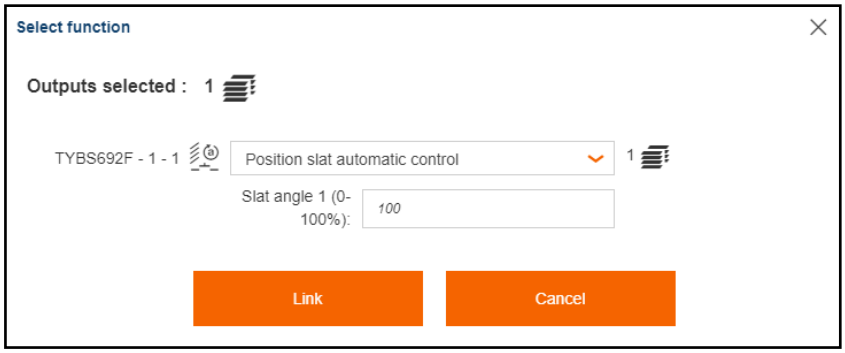
* Default value

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

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*

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).

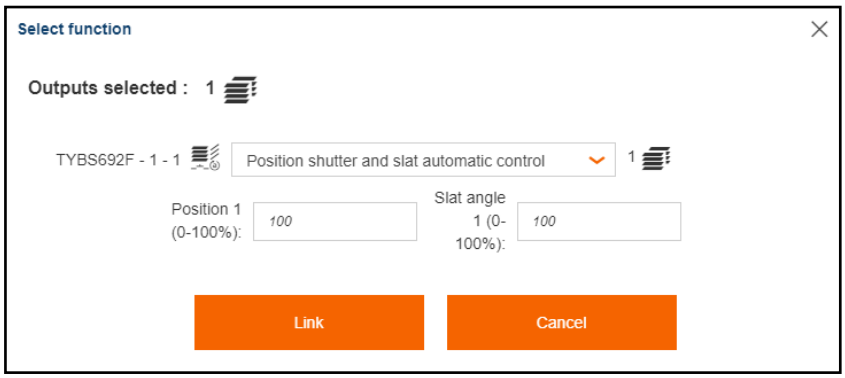


- **Automatic control shutter and slat angle**: Allows positioning a rolling shutter or blind to the desired height and blind slats according to a value in % using automatic control.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*

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).



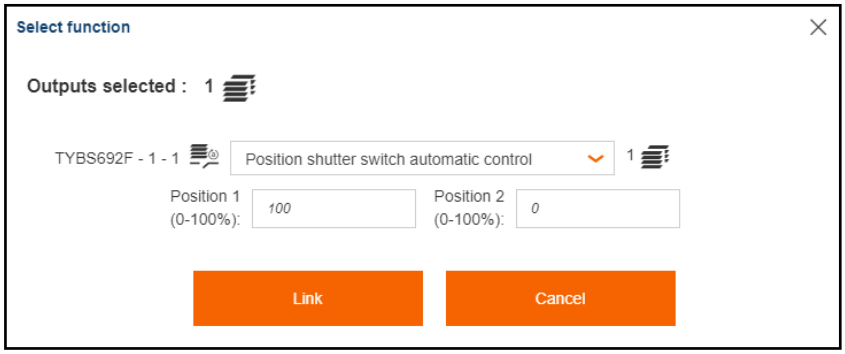
* Default value

- **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.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*

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).

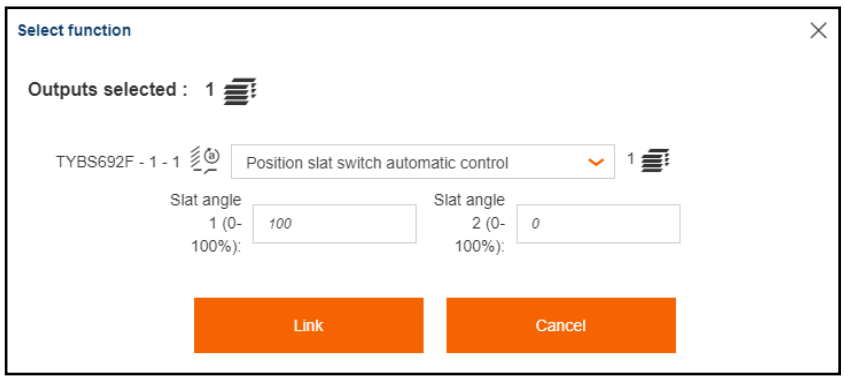


- **Automatic control inter slat angle**: Allows positioning blind slats according to a value in % using a switch and automatic control.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*

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).

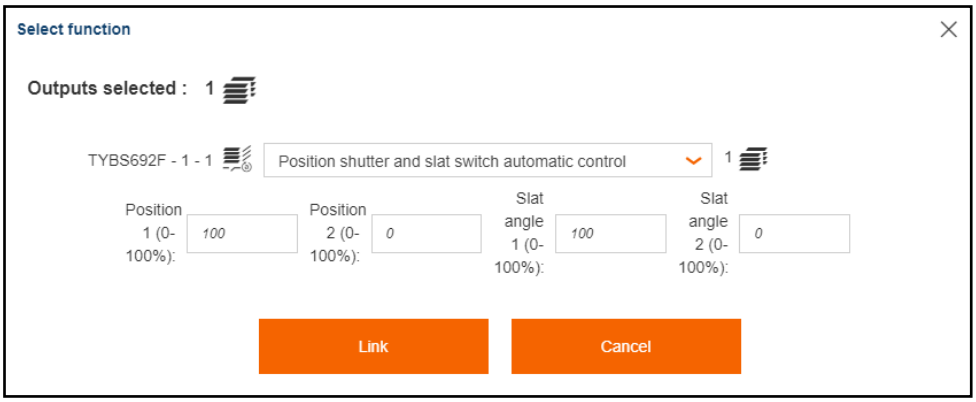


- **Automatic control inter shutter and slat angle**: Allows positioning a rolling shutter or blind to the desired height and blind slats according to a value in % using a switch or automatic control.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Shutter*

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).



3.4.5.6 Central Up/Down switch

The **general up/down** function is used to open or close all of the shutters or blinds. Unlike the Up/Down function, it does not send the status indication of the controlled outputs. This prevents KNX bus saturation when switching outputs simultaneously. It is recommended to use this function when there are more than 20 shutters/blinds.

- **Central Up**: Enables roller shutters to be raised or stopped.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F- 1 - 1 *Housing - Shutter*

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).

- **Central Down**: Enables shutters to be lowered or stopped.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F- 1 - 1 *Housing - Shutter*

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).

- **Central Up/Down switch**: Allows roller shutters to be raised or lowered using a switch.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F- 1 - 1 *Housing - Shutter*

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

3.4.6 Heating/Cooling

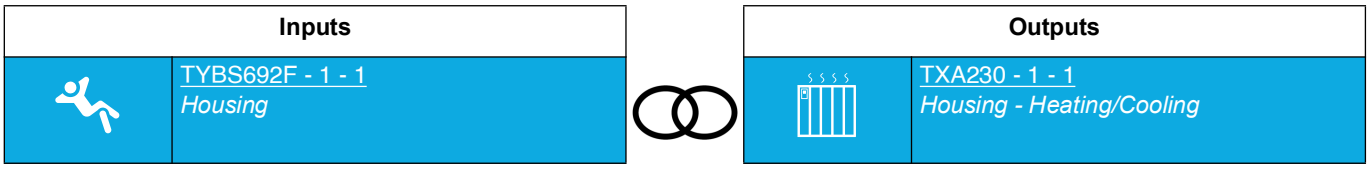
Available functionalities			
	Comfort mode		Comfort mode automatic control
	Eco mode		Eco mode automatic control
	Standby mode		Standby mode automatic control
	Protection mode		Protection mode automatic control
	Switch mode		Switch mode automatic control
	Heating/Cooling		Automatic control deactivation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

Note: *For the function **Automatic control deactivation**, see: Automatic control deactivation.*
*For the function **Scene** and **Switch scene**, see: Scene.*

3.4.6.1 Setpoint selection

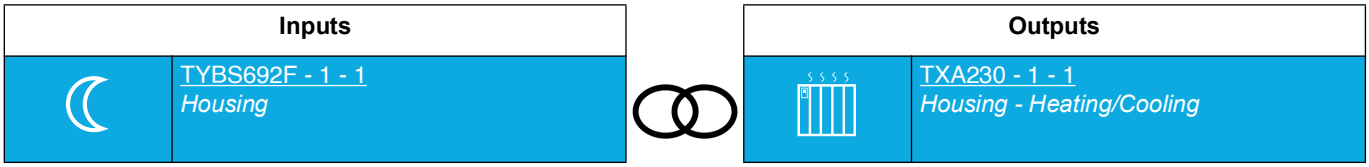
The heating command operates according to a heating instruction.

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



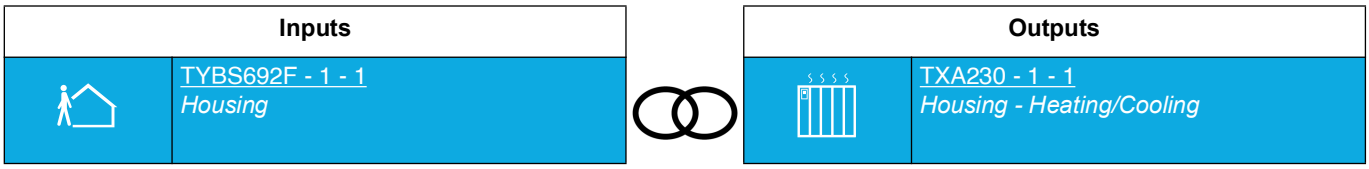
Closing the input contact activates Comfort mode.
The effect of the command is cancelled by any other mode activation command.

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



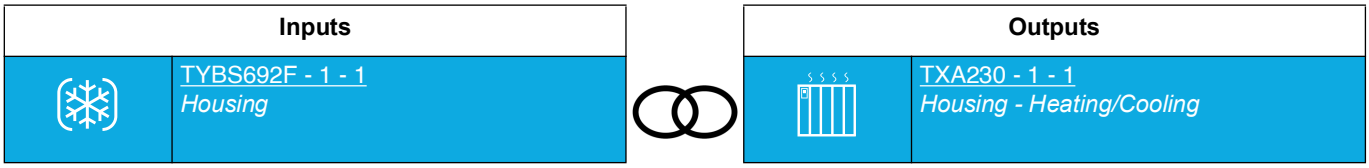
Closing the input contact activates Eco mode.
The effect of the command is cancelled by any other mode activation command.

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



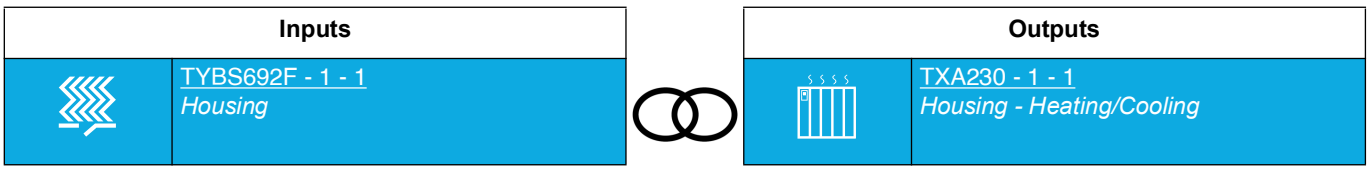
Closing the input contact activates StandBy mode.
The effect of the command is cancelled by any other mode activation command.

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



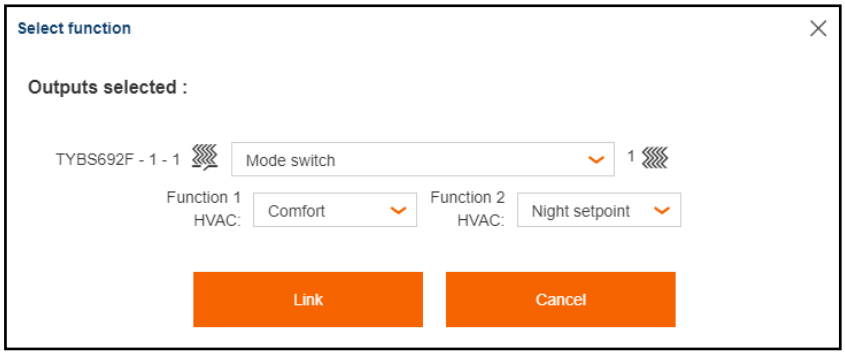
Closing the input contact activates Protection mode.
The effect of the command is cancelled by any other mode activation command.

- **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.

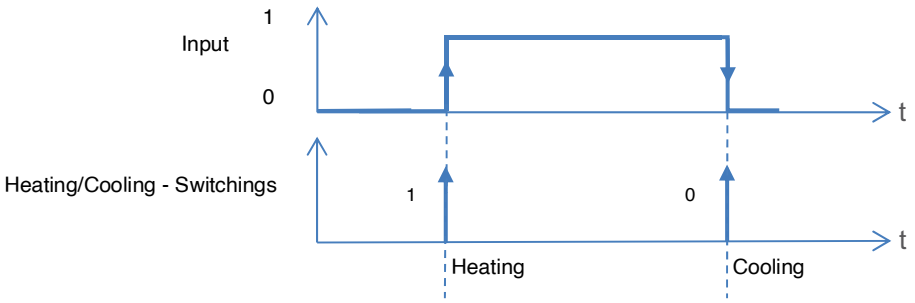
3.4.6.2 Heating/Cooling

- **Heating/Cooling**: Enables switching between heating mode and cooling mode.

To do so, it is necessary to make a connection between two inputs.

Inputs	
	TYBS692F - 1 - 1 Housing
	TX460 - 1 - 5 Housing

Closing the input contact activates the heating mode.
Opening the input contact activates the cooling mode.



3.4.6.3 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.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		WKT660 - 1 - 9 *Housing - Heating/Cooling*

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.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		WKT660 - 1 - 9 *Housing - Heating/Cooling*

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

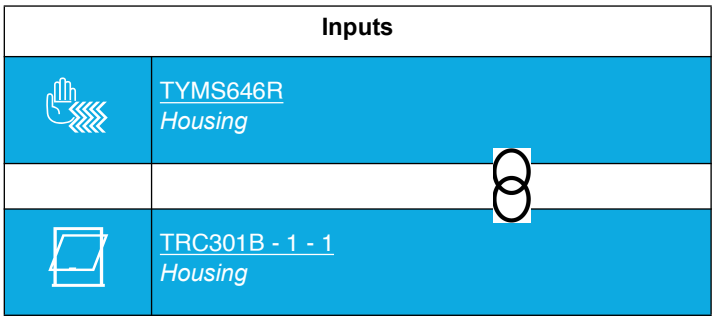
It is also possible to make a link between 2 inputs. Below are the inputs which can also have these functions:

	Setpoints heating	Forces the heating mode for the thermostat.

3.4.6.4 Windows contact

The devices have different possibilities to switch to Protection/Auto mode. This mode can be activated via a window contact.

- Links
  - **Windows contact**: The open and/or closed status of a window is sent to the thermostat.

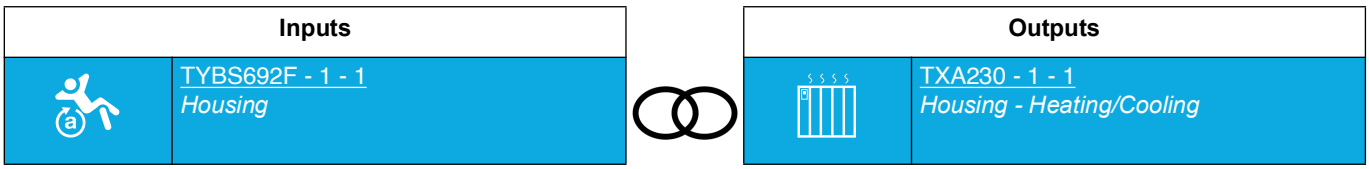


It is used to indicate the position of the window.
0 = Window closed: Auto mode
1 = Window open: Protection mode

3.4.6.5 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.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TXA230 - 1 - 1 *Housing - Heating/Cooling*

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.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TXA230 - 1 - 1 *Housing - Heating/Cooling*

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.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TXA230 - 1 - 1 *Housing - Heating/Cooling*

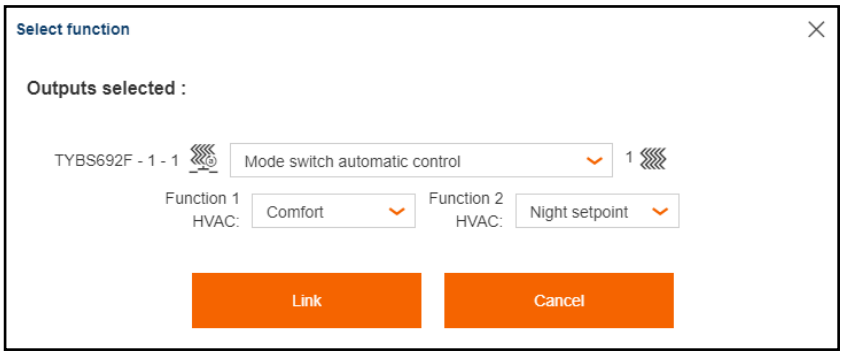
Closing the input contact activates Protection mode.
The effect of the command is cancelled by any other mode activation command.

- **Switch mode automatic control**: Switches between 2 heating modes using automatic control.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TXA230 - 1 - 1 *Housing - Heating/Cooling*

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.

3.4.7 Metering

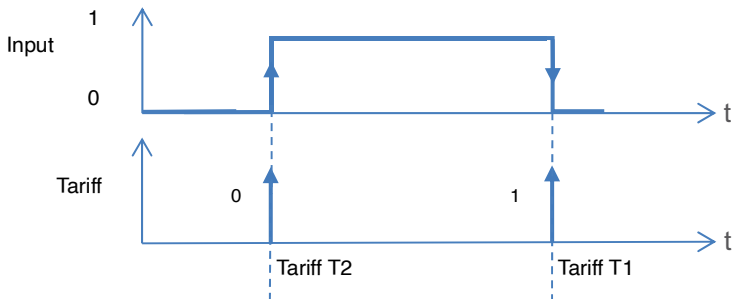
Available functionalities			
	Tariff		Scene
	Automatic control deactivation		Scene switch

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.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		WKT660 - 1 - 1 *Housing - Metering*

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.

3.4.8 Audio

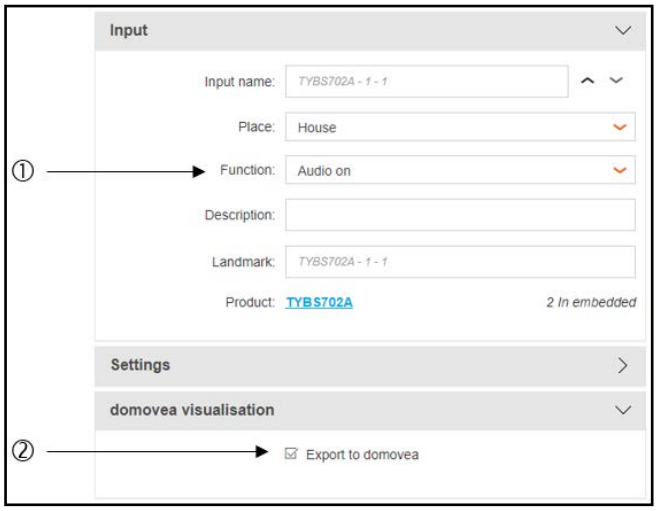
Available functionalities			
	Audio on		Favorite
	Audio off		Scene
	Audio on/off		Scene switch
	Volume +		Automatic control deactivation
	Volume -		

Note: *For the function **Automatic control deactivation**, see: Automatic control deactivation.*
*For the function **Scene** and **Switch scene**, see: Scene.*

The Audio function allows the control of various IoT devices for audio broadcasting. However, configuring this function differs from a traditional KNX output (lighting, shutters, etc.). It is not possible to create a direct link in easytool. You can only export the group address of the selected function to Domovea. The assignment to an Audio function can only be done in domovea via the group address.

To do this:

1. Select the input of the relevant product.
2. Open the input settings.



3. Choose an Audio function (1).
4. Check the box "Export to domovea" (2).

In domovea, the input will now be visible with a dedicated group address. You simply need to assign this group address to the object corresponding to the function of the IoT device.

3.4.9 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.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Lighting*

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

3.4.10 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.).

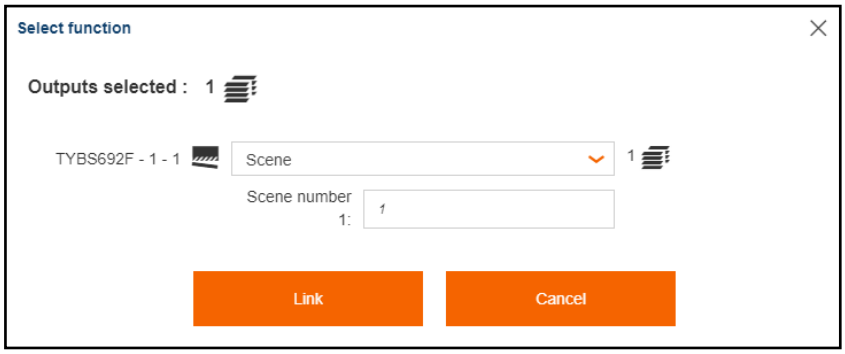
- **Scene**: The scene is activated by pressing the push-button.

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Lighting*

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.

* Default value



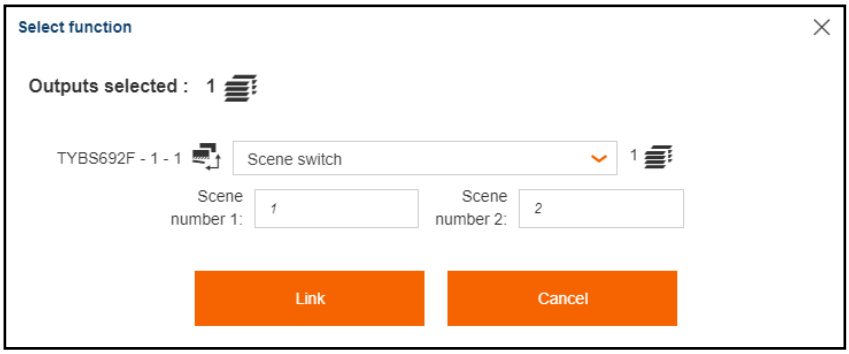
*Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).*

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

Inputs		Outputs	
	TYBS692F - 1 - 1 *Housing*		TYBS692F - 1 - 1 *Housing - Lighting*

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

4. Appendix

4.1 Specifications

KNX Medium	TP1-256
Supply voltage KNX	21…32 V ⎓ SELV
Current consumption KNX	typ. 5 mA
Minimum switching current 230 V~	10 mA
Breaking capacity	µ10 A AC1 230/240 V~
Power dissipation	max. 0.6 W
Circuit-breaker	10 A
Surge voltage	4 kV
Maximum switching cycle rate at full load	20 switching cycle/min.
Interlock time for changing direction of travel	software-dependent
Operating altitude	max. 2000 m
Degree of contamination	2
Operating temperature	-5° ... +45 °C
Dimension	44 x 43 x 22,5 mm
Number of potential-free contacts	2
Total extension unit cable length	max 9,9 m

4.2 Characteristics

Device	TYBS692F
Max. number of group addresses	254
Max. number of allocations	255
Objects	36

Hager Controls S.A.S.
B.P. 10140
Saverne Cedex
France

T +33 (0) 3 88 02 87 00
info@hager.com

hager.com

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