



application software



Radio shutters/blinds input/output products

Electrical/Mechanical characteristics: see product user manual

	Product reference	Product designation	Application software ref	TP device Radio device (
Today To	TRM692G	1 shutter 3A output + 2 inputs KNX radio	STRM692G	(4)

TRM692G 1 6LE001934B



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1. Presentation

1.1 General

The purpose of this manual is to describe the operation and configuration of the KNX-devices using the ETS program. It consists of 4 parts:

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

1.2 About the program ETS

1.2.1 ETS compatibility

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

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

1.2.2 Application descriptions

Application	Product reference
STRM692G	TRM692G

1.2.3 Plugin TR131

The TR131 media coupler enables confuguration by ETS of RF devices for a KNX radio installation or a mixed KNX installation including RF devices and wired buses. The TR131 Plugin must be installed in the ETS software to configure the radio products..

1.3 Easy tool software appearance

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



2. General Description

All radio transmitters referred to in this document are radio quicklink products. They can be recognised by the configuration cfg push button with which they are all equipped. Quicklink indicates the configuration without tools mode.

These products can also be configured in E mode by the USB configurer or in S mode by ETS via the media coupler.

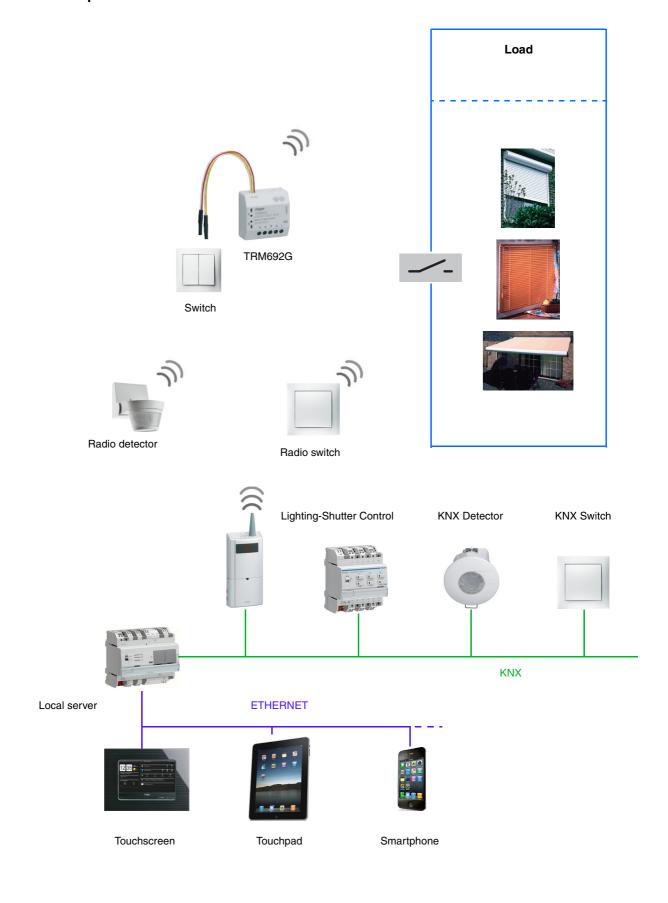
Within the same installation, a single configuration mode may be used.

To re-use a product which has already been programmed in another installation, whatever the configuration mode, a factory reset must be performed on the product.



2.1 Installation of the device

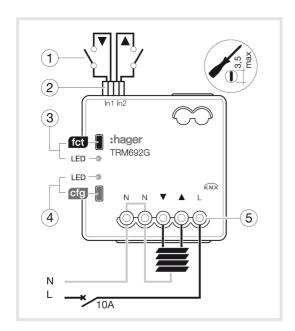
2.1.1 Overview presentation





2.1.2 Description of the device

TRM692G

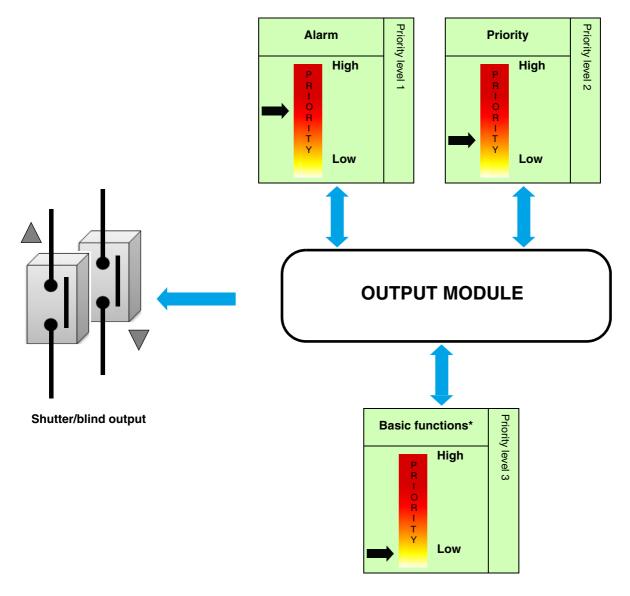


- 1 Pushbutton or standard switch
- (1) Pushbutton or standard switch
 (2) Wires for connecting the 2 inputs for a switch or pushbutton
 (3) Pushbutton and feature LED fct of output
 (4) Pushbutton and configuration LED ofg
 (5) Connector block: L: Phase 230 ~
 N: Neutral
 ▲: Up
 ▼: Down



2.2 Function modules of the application

2.2.1 Shutter/blind



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

The applications allow individual configuration of the device outputs.

The most important functions are:

Up/down

The UP/DOWN function is used to run up or down shutters, blinds, awnings, etc. This function can also be used to open and close electric blinds. The command can be given by touch sensors (long press), switches or automatically.

Slat position/Stop

The Slat position/Stop function is used to adjust the slats of a blind or to stop its ongoing movement. This function can be used to alter the shade and the incidence of light from outside. The control command may be issued by a push button, for example: A short press on UP/DOWN buttons.



Stop

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

Scene

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

Priority

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

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

Application: Maintaining a hanging position for security reasons.

Alarm

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

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

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

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

Automatic control

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

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

Manual mode

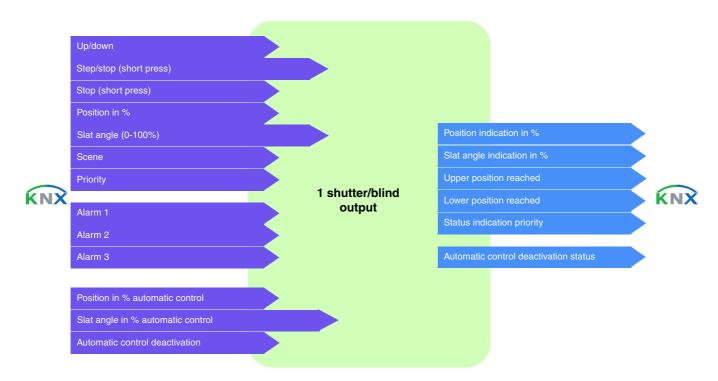
Manual mode allows the device to be disconnected from the bus. In this mode, each output can be priority controlled locally.

Status indication

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

- Position indication 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. It enables instruction exceptions to be issued in order to increase or reduce the temperature. 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

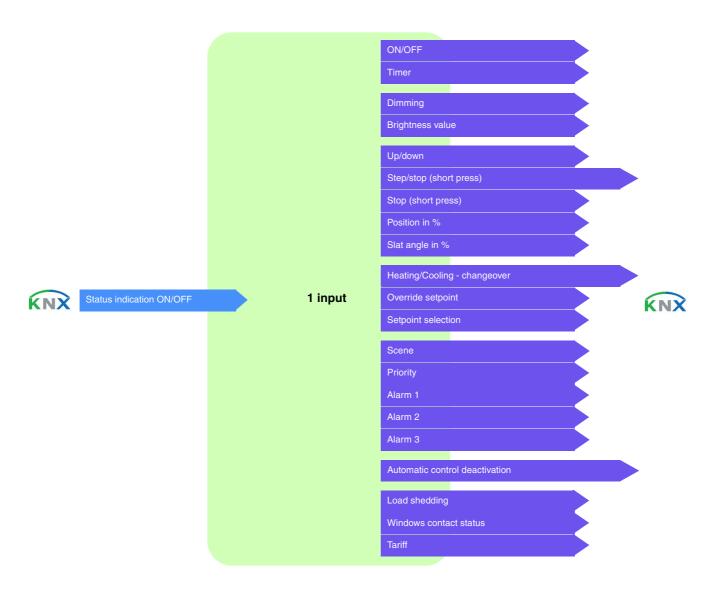
The Window contact function enables the window opening/closing information to be sent to the KNX bus.



Tariff

The Tariff function enables Full Hour (FH) or Part Hour (PH) information to be sent to the KNX bus.

Communication objects





3. Programming by ETS

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

3.1 Parameters

3.1.1 Fixed parameters

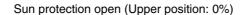
The fixed parameters define the operating mode of the output relays.

Parameter	Description	Value
Output contact	On receipt of an ON command: The output relay closes.	Normally open
Parameters overwrite at next download (scenes)	The parameter values stored in the device will be overwritten with the ETS configured values at the next download.	Active
Status after priority	At the end of the priority, the output is: Switched back to the status before priority was activated.	Status before priority
Position after alarm	Runs to the position which would be active according to other communication objects if the alarm had not taken place.	Theoretical status without alarm
Status after ETS download	The output status remains unchanged after ETS download. Note: During ETS-parameters download, the outputs remain unchanged.	Maintain status
Status at supply return	The output status remains unchanged when the power is turned back on. Note: The priority functions that were present before the bus power cut are no longer active (Load shedding, Priority).	Maintain status

3.1.2 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.





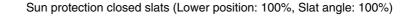


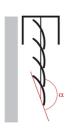
Object: Position in %

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 ($\alpha = 180^{\circ}$) but rather form a small angle with the vertical.

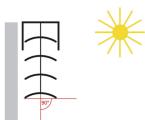






From their vertical position (completely closed, 100%) the slats can be adjusted to their horizontal position (fully open, 0% and $\alpha = 90^{\circ}$). The blind drive used thus determines whether this adjustment can be carried out using many small steps or whether it is only possible via a few large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

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



Object: Slat angle in %

Object: Position in %

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

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



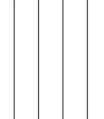


Object: Slat angle in %

Slat position for vertical slats

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

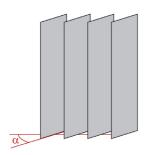
Fully opened vertical slats (Slat angle 0%)



Object: Slat angle in %



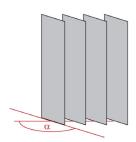
If the slats are fully closed, this position will be controlled and reported as slat position 100%. This is the position to which the shade is run from its side limit position in front of the window. The angle that the slats then form with the direction of movement is therefore a little $> 0^{\circ}$.



Fully closed vertical slats (Slat angle 100%)

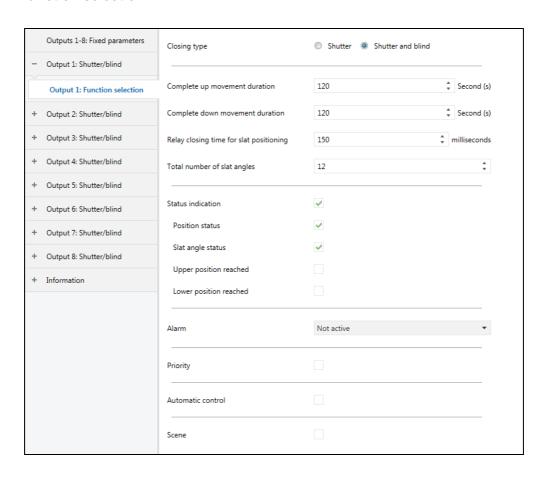
Object: Slat angle in %

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



Vertical slats at the start of moving UP

3.1.2.1 Function selection





Parameter	Description	Value
	J	Shutter and blind* Shutter

Communication objects: **0 - Output - Up/down** (1 Bit – 1.008 DPT_UpDown)

2 - Output - Stop (Short press) (1 Bit - 1.007 DPT_Step)

3 - Output - Position in % (1 Byte - 5.001 DPT_Scaling)

Note: These objects are always visible.

Communication objects: 1 - Output - Step/stop control (Short press) (1 Bit – 1.007 DPT_Step)

4 - Output - Slat angle in % (1 Byte - 5.001 DPT_Scaling)

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

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

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

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

Parameter	Description	Value
•	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.	112*50

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

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

^{*} Default value



3.1.2.2 Status indication

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

- Position indication 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.



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

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

Communication objects: 5 - Output - Position indication in % (1 Byte - 5.001 DPT_Scaling)

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

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

Communication objects: 6 - Output - Slat angle indication in % (1 Byte - 5.001 DPT_Scaling)

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

Communication objects: 7 - Output - Upper position reached (1 Bit – 1.002 DPT_Bool)

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

Communication objects: 8 - Output - Lower position reached (1 Bit – 1.002 DPT_Bool)



3.1.2.3 Alarm

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

Priority: Alarm> Priority > Basic function.

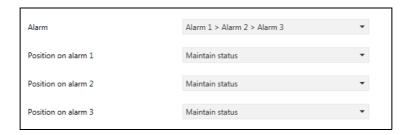
The alarm prevents any actuation until an alarm cancellation command has been received.

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

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

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

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



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

Communication objects: 12 - Output - Alarm 1 (1 Bit – 1.005 DPT_Alarm)

13 - Output - Alarm 2 (1 Bit – 1.005 DPT_Alarm)

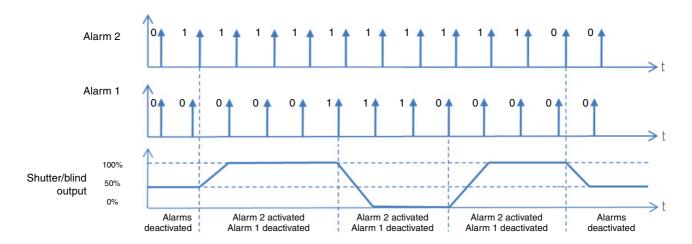
14 - Output - Alarm 3 (1 Bit – 1.005 DPT_Alarm)



Operating principle:

Example:

- Position on alarm 2: up.
- Position on alarm 1: down.



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

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

x = 1 - 2 - 3

3.1.2.4 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).

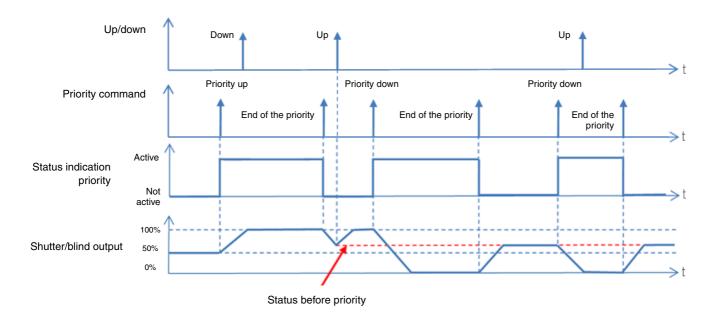
The device responds to telegrams received via the **Priority** object, as given in the following table:

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

^{*} Default value



Operating principle:



Communication objects: 9 - Output - Priority (2 Bit - 2.002 DPT_Bool_Control)
10 - Output - Status indication priority (1 Bit - 1.011 DPT_State)

3.1.2.5 Automatic control

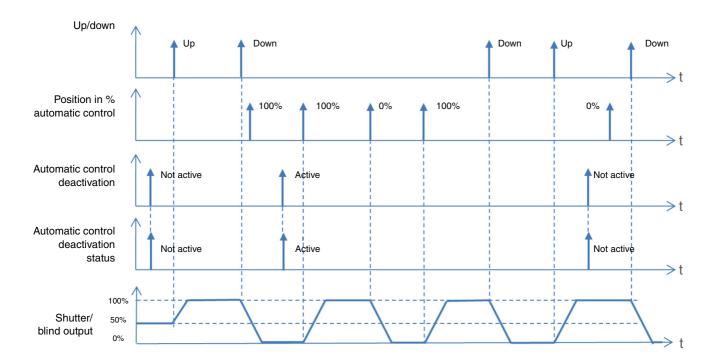
The Automatic control function is used to control an output in parallel to the Up/Down or Slat tilt/stop function.

The functions have the same level of priority. The last command received will act on the status of the output. An additional command object is used to activate or deactivate the Automatic control.

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







Communication objects: 15 - Output - Position in % automatic control (1 Bit – 1.001 DPT_Switch)

16 - Output - Slat angle in % automatic control (1 Bit – 1.001 DPT_Switch)

Communication objects: 17 - Output - Automatic control deactivation (1 Bit – 1.003 DPT_Enable)

18 - Output - Automatic control deactivation status (1 Bit – 1.003 DPT_Enable)



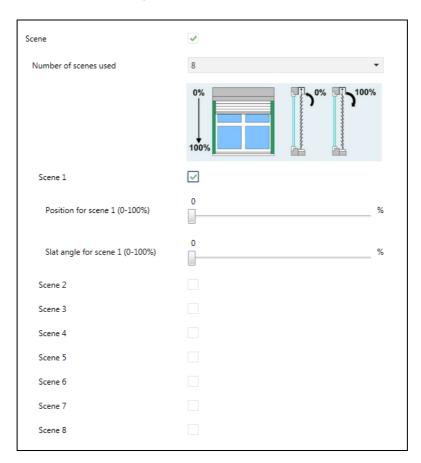
3.1.2.6 Scene

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

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

Each output can be included in 64 different scenes.

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



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

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

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

x = 1 to 64

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

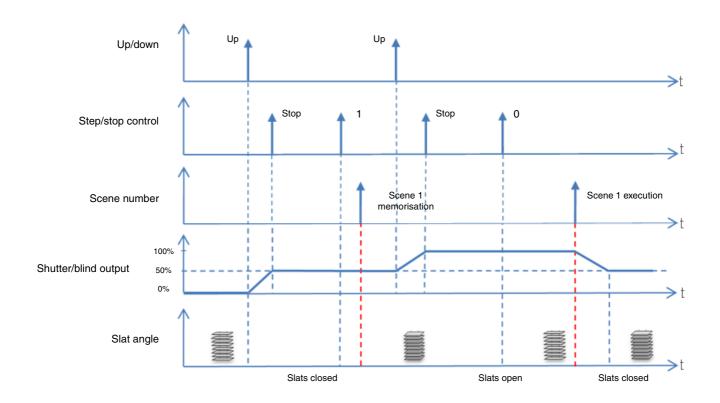


Parameter	Description	Value
Slat angle for scene x (0-100%)	This parameter defines the slat position of the blind to be used for scene x.	0 *100

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

Communication objects: 11 - Output - Scene (1 Byte - 18.001 DPT_SceneControl)

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:

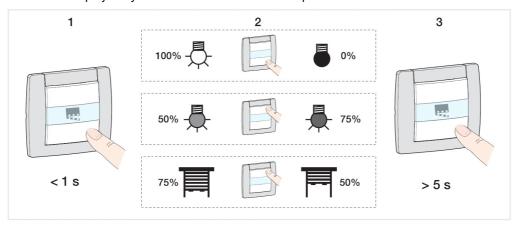
Scene number	Access scene (Object value: 1 byte)	Store scene (Object value: 1 byte)
1-64	= Scene number -1	= Scene number +128
Examples		
1	0	128
2	1	129
3	2	130
64	63	191

^{*} Default value



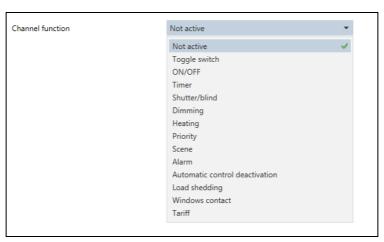
Here is the scene memorisation for local switches, for example.

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



3.1.3 Input operation mode

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



The input default value is not active.

The following parameters are available:

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

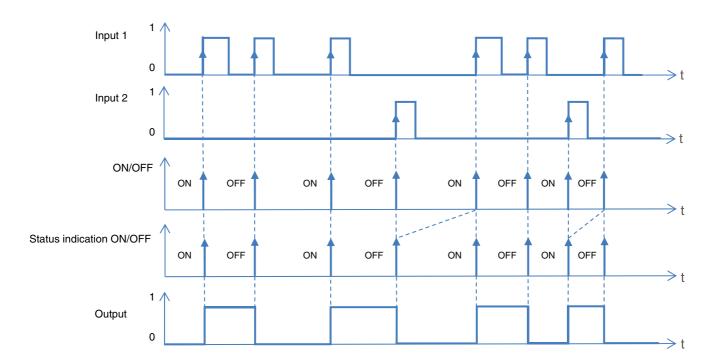


3.1.3.1 Toggle switch

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

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

Operating principle:



Communication objects:

19 - Input 1 - Status indication ON/OFF (1 Bit - 1.001 DPT_Switch)

20 - Input 1 - ON/OFF (1 Bit – 1.001 DPT_Switch)

29 - Input 2 - Status indication ON/OFF (1 Bit - 1.001 DPT_Switch)

30 - Input 2 - ON/OFF (1 Bit – 1.001 DPT_Switch)

3.1.3.2 ON/OFF

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



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

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

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

^{*} Default value



6 different combinations are available:

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

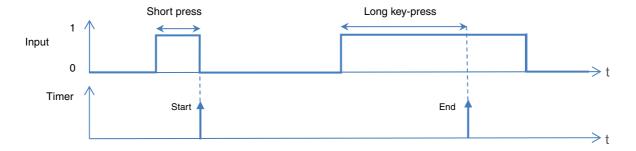
Communication objects: 20 - Input 1 - ON/OFF (1 Bit – 1.001 DPT_Switch)

30 - Input 2 - ON/OFF (1 Bit – 1.001 DPT_Switch)

3.1.3.3 Timer

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

Operating principle:



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

30 - Input 2 - Timer (1 Bit – 1.001 DPT_Switch)

3.1.3.4 Shutter and blind

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





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

Shutter

Parameter	Description	Value
Shutter function	The shutter command works:	
	Using the input contact programmed to up or down	1-button shutter
	Using the input contact programmed to up or down.	2-button shutter*
	According to whether the input contact is open or closed.	Switch for shutter control
	According to a position value in % on pressing and releasing the input contact.	Position (0-100%)

· 2-button shutter

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

Note: This parameter is only visible when the parameter **Shutter function** has the value: **2-button shutter**.

• Switch for shutter control

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

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

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



6 different combinations are available:

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

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

Communication objects: 20 - Input 1 - Up/down (1 Bit – 1.008 DPT_UpDown)

21 - Input 1 - Stop (short press) (1 Bit – 1.017 DPT_Trigger)

30 - Input 2 - Up/down (1 Bit – 1.008 DPT_UpDown)

31 - Input 2 - Stop (short press) (1 Bit – 1.017 DPT_Trigger)

Position (0-100%)

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

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

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

Parameter	Description	Value
• • • • •	This parameter defines the position of the rolling shutter to apply during the press.	0100*

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



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

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

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

Communication objects: 24 - Input 1 - Position in % (1 Byte - 5.001 DPT_Scaling)

34 - Input 2 - Position in % (1 Byte – 5.001 DPT_Scaling)

Shutter and blind

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

Up/down/step/stop

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

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

Communication objects: 20 - Input 1 - Up/down (1 Bit - 1.008 DPT_UpDown)

21 - Input 1 - Step/stop (short press) (1 Bit – 1.007 DPT_Step)

30 - Input 2 - Up/down (1 Bit - 1.008 DPT_UpDown)

31 - Input 2 - Step/stop (short press) (1 Bit – 1.007 DPT_Step)

• Position/Slat angle (0-100%)

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



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

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

Parameter	Description	Value
Slat angle by press (0-100%)	This parameter defines the slat position to apply during the press.	0100*

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

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

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

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

Parameter	Description	Value
Position by press (0-100%)	This parameter defines the blind position to apply during the press.	0100*

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

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

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

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

^{*} Default value

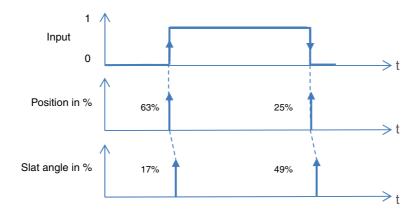


Communication objects: 24 - Input 1 - Position in % (1 Byte - 5.001 DPT_Scaling)

25 - Input 1 - Slat angle in % (1 Byte – 5.001 DPT_Scaling)

34 - Input 2 - Position in % (1 Byte – 5.001 DPT_Scaling)

35 - Input 2 - Slat angle in % (1 Byte – 5.001 DPT_Scaling)



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

3.1.3.5 **Dimming**



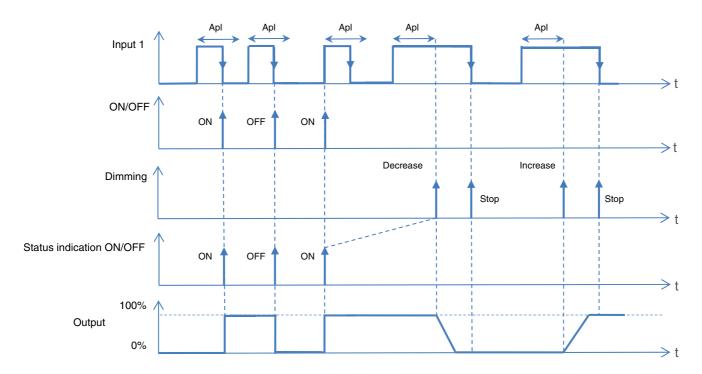
Parameter	Description	Value
Dimming function	The dimming command operates:	
	Using the input contact configured to increase or decrease (Dimming command on 2 buttons).	Increase/decrease*
	Using the input contact configured to increase or decrease (Dimming command on 1 button).	Increase/decrease Toggle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

Increase/decrease Toggle switch

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

This function corresponds to the dimming command on 1 button.





Apl: Long key-press

Communication objects: 19 - Input 1 - Status indication ON/OFF (1 Bit – 1.001 DPT_Switch)

20 - Input 1 - ON/OFF (1 Bit – 1.001 DPT_Switch)

23 - Input 1 - Dimming (4 Bits – 3.007 DPT_Control_Dimming)

29 - Input 2 - Status indication ON/OFF (1 Bit - 1.001 DPT_Switch)

30 - Input 2 - ON/OFF (1 Bit – 1.001 DPT_Switch)

33 - Input 2 - Dimming (4 Bits – 3.007 DPT_Control_Dimming)

Increase/decrease

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

This function corresponds to the dimming command on 2 buttons.

Parameter	Description	Value
Function by press	9	Increase*
	input.	Decrease

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

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

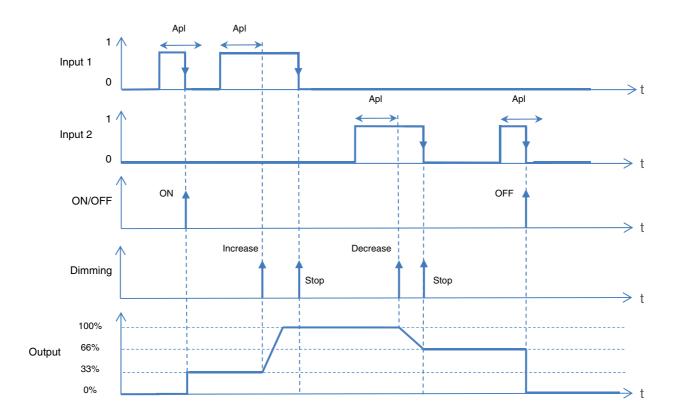
23 - Input 1 - Dimming (4 Bits – 3.007 DPT_Control_Dimming)

30 - Input 2 - ON/OFF (1 Bit - 1.001 DPT_Switch)

33 - Input 2 - Dimming (4 Bits – 3.007 DPT_Control_Dimming)



Example: Input 1: Increase Input 2: Decrease



Apl: Long key-press

• Brightness value

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

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

Parameter	Description	Value
Brightness value by press	This parameter defines the brightness value to apply during the press.	0100*

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



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

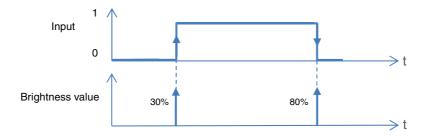
Note: This parameter is only visible when the parameter **Dimming function** has the value: **Brightness value**.

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

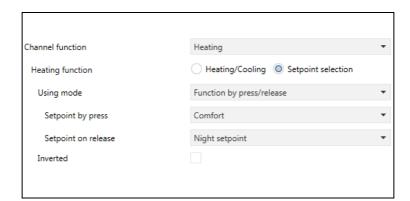
Communication objects: 24 - Input 1 -

24 - Input 1 - Brightness value (1 Byte – 5.001 DPT_Scaling)

34 - Input 2 - Brightness value (1 Byte - 5.001 DPT_Scaling)



3.1.3.6 Heating



Parameter	Description	Value
Heating function	The heating command operates:	
	According to a heating instruction on pressing and releasing the input contact.	Setpoint selection*
	Using the input contact configured in heating or cooling mode.	Heating/Cooling

Heating/Cooling

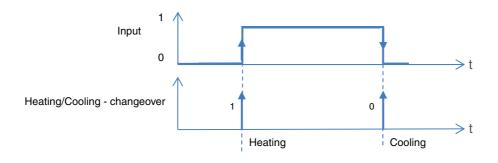
This function enables the object (Heating/cooling-changeover) to be issued on the KNX bus.

Communication objects:

```
20 - Input 1 - Heating/Cooling - changeover (1 Bit – 1.100 DPT_Cooling/heating) 30 - Input 2 - Heating/Cooling - changeover (1 Bit – 1.100 DPT_Cooling/heating)
```

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).





· Setpoint selection

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

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

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

Parameter	Description	Value
Setpoint by press	, ,	Auto
	apply during the press.	Comfort*
		Standby
		Night setpoint
		Frost protection

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

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

Communication objects:

24 - Input 1 - Setpoint selection (1 Byte – 20.102 DPT_HVAC mode) **34 - Input 2 - Setpoint selection** (1 Byte – 20.102 DPT_HVAC mode)



3.1.3.7 Priority



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

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

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

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

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

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

Communication objects: 22 - Input 1 - Priority (2 Bit – 2.002 DPT_Bool_Control)

32 - Input 2 - Priority (2 Bit - 2.002 DPT_Bool_Control)

3.1.3.8 Scene

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



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

Scene 1-64

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

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



Communication objects: 24 - Input 1 - Scene (1 Byte - 18.001 DPT_SceneControl)

34 - Input 2 - Scene (1 Byte - 18.001 DPT_SceneControl)

Switch for scene

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

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

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

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

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

Communication objects: 24 - Input 1 - Scene (1 Byte - 18.001 DPT_SceneControl)

34 - Input 2 - Scene (1 Byte - 18.001 DPT_SceneControl)

3.1.3.9 Alarm

The Alarm function issues alarms on a cyclical basis to the bus from automations (anemometer, rain detector, twilight switch etc.). The cycle time is set to 10 minutes.



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

^{*} Default value



Communication objects: 20 - Input 1 - Alarm 1 (1 Bit – 1.005 DPT_Alarm)

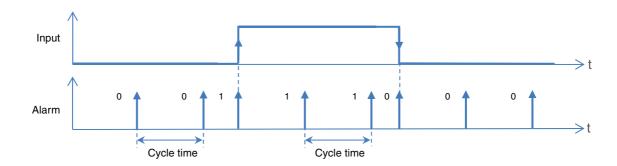
30 - Input 2 - Alarm 1 (1 Bit - 1.005 DPT_Alarm)

20 - Input 1 - Alarm 2 (1 Bit - 1.005 DPT_Alarm)

30 - Input 2 - Alarm 2 (1 Bit - 1.005 DPT_Alarm)

20 - Input 1 - Alarm 3 (1 Bit – 1.005 DPT_Alarm)

30 - Input 2 - Alarm 3 (1 Bit - 1.005 DPT_Alarm)



3.1.3.10 Automatic control deactivation

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

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

Communication objects: 20 - Input 1 - Automatic control deactivation (1 Bit - 1.003 DPT_Enable)

30 - Input 2 - Automatic control deactivation (1 Bit - 1.003 DPT_Enable)

3.1.3.11 Load shedding

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

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

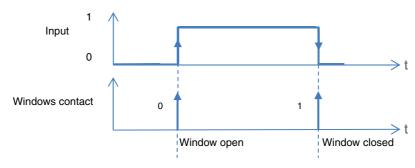
Communication objects: 20 - Input 1 - Load shedding (1 Bit - 1.002 DPT_Bool)

30 - Input 2 - Load shedding (1 Bit - 1.002 DPT_Bool)



3.1.3.12 Windows contact

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



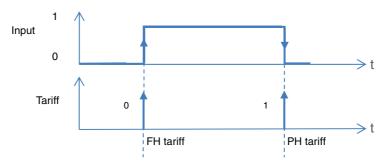
Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).

Communication objects: 20 - Input 1 - Windows contact (1 Bit – 1.002 DPT_Bool)

30 - Input 2 - Windows contact (1 Bit - 1.002 DPT_Bool)

3.1.3.13 Tariff

The Tariff function enables Full Hour (FH) or Part Hour (PH) information to be sent to the KNX bus.



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

Communication objects: 24 - Input 1 - Tariff (1 Byte - 5.006 DPT_Tariff)

34 - Input 2 - Tariff (1 Byte – 5.006 DPT_Tariff)



3.2 Communication objects

3.2.1 Output communication objects dimming

	Number	Name	Function of the object	Length	С	R	W	Т
■ ≵	0	Output	Up/down	1 bit	С	R	W	-
- ≵I	1	Output	Step/stop (short press)	1 bit	С	R	W	-
- ≵	2	Output	Stop (Short press)	1 bit	С	R	W	-
=	3	Output	Position in %	1 byte	С	R	W	-
-	4	Output	Slat angle (0-100%)	1 byte	С	R	W	-
=	5	Output	Status indication position in %	1 byte	С	R	-	Т
=	6	Output	Slat angle indication in %	1 byte	С	R	-	Т
=	7	Output	Upper position reached	1 bit	С	R	-	Т
-	8	Output	Lower position reached	1 bit	С	R	-	Т
=	9	Output	Priority	2 bit	С	R	W	-
-	10	Output	Status indication priority	1 bit	С	R	-	Т
=	11	Output	Scene	1 byte	С	R	W	-
=	12	Output	Alarm 1	1 bit	С	R	W	-
=	13	Output	Alarm 2	1 bit	С	R	W	-
=	14	Output	Alarm 3	1 bit	С	R	W	-
=	15	Output	Position in % automatic control	1 byte	С	R	W	-
- ≵	16	Output	Slat angle in % automatic control	1 byte	С	R	W	-
■ ≵I	17	Output	Automatic control deactivation	1 bit	С	R	W	-
■	18	Output	Automatic control deactivation status	1 bit	С	R	-	Т

3.2.1.1 Control

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

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

Object value:

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

For further information, see: Function selection.



No.	Name	Function of the object	Data type	Flags
1	Output	Step/stop (short press)	1 bit - 1.007 DPT_Step	C, R, W

This object is activated when the Closing type has the value Shutter and blind.

It is used to stop the movement of the shutter or blind or the tilting of the slats according to the value that is sent on the KNX bus.

Object value:

- Regardless of which value (0 or 1) is sent to this object, the movement of the shutter or blind will be stopped.
- If the object receives the value 0, the slats will be opened by one slat step.
- If the object receives the value 1, the slats will be closed by one slat step.

For further information, see: Function selection.

No.	Name	Function of the object	Data type	Flags
2	Output	Stop (Short press)	1 bit - 1.017 DPT_Trigger	C, R, W

These objects are always activated. It is only used to stop the vertical movements of the shutter or blind according to the value sent on the KNX bus.

Object value:

- Regardless of which value (0 or 1) is sent to this object, the movement of the shutter or blind will be stopped.

For further information, see: Function selection.

No.	Name	Function of the object	Data type	Flags
3	Output	Position in %	1 byte - 5.001 DPT_Scaling	C, R, W

These objects are always activated. It is used for positioning the shutter or blind at the desired height, in response to the value sent on the KNX bus.

On the blind, the slats have the same tilt after reaching the same position as they had before the movement.

If a telegram is received during the movement of the shutter or blind, the shutter will be positioned at the desired height after the originally requested position has been reached.

Object value: 0 to 255

- 0 (0%): Upper position.
- 255 (100%): Lower position.

For further information, see: Function selection.

	No.	Name	Function of the object	Data type	Flags
Ī	4	Output	Slat angle in %	1 byte - 5.001 DPT_Scaling	C, R, W

This object is activated when the Closing type has the value Shutter and blind.

It is used to position the shutter or blind in response to the value that is sent on the KNX bus.

Object value: 0 to 255
- 0 (0%): Slats open.
- 255 (100%): Slats closed.

For further information, see: Function selection.



3.2.1.2 Status indication

No.	Name	Function of the object	Data type	Flags
5	Output	Status indication position in %	1 byte - 5.001 DPT_Scaling	C, R, T

This object is activated when the **Position status** parameter is active.

This object allows the status of the position to be sent over the KNX bus. It is sent after the position of the blind or shutter has been achieved.

Object value: 0 to 255

0 (0%): Upper position.255 (100%): Lower position.

This object is sent when there is a status change. For further information, see: Status indication.

lo. Name Funct		Function of the object	Data type	Flags
6	Output	Slat angle indication in %	1 byte - 5.001 DPT_Scaling	C, R, T

This object is activated when the **Slat angle status** parameter is active.

This object allows the status of the slat angle to be sent over the KNX bus. It is sent after the tilting of the blind has been achieved.

Object value: 0 to 255
- 0 (0%): Slats open.
- 255 (100%): Slats closed.

This object is sent when there is a status change. For further information, see: Status indication.

No. Name Fur		Function of the object	Data type	Flags
7	Output	Upper position reached	1 bit - 1.002 DPT_Bool	C, R, T

This object is activated when the **Upper position reached** parameter is active.

This object is used to send the status of the upper position of the shutter or blind over the KNX bus.

Object value:

0 = Position not reached, 1 = Position reached

- If the upper position of the shutter or blind is not reached, a telegram is sent with a logic value of 0 on the KNX bus.
- If the upper position of the shutter or blind is reached, a telegram is sent with a logic value of 1 on the KNX bus.

This object is sent when there is a status change.

For further information, see: Status indication.



No.	Name	Function of the object	Data type	Flags
8	Output	Lower position reached	1 bit - 1.002 DPT_Bool	C, R, T

This object is activated when the Lower position reached parameter is active.

This object is used to send the status of the lower position of the shutter or blind over the KNX bus.

Object value:

0 = Position not reached, 1 = Position reached

- If the lower position of the shutter or blind is not reached, a telegram is sent with a logic value of 0 on the KNX bus.
- If the lower position of the shutter or blind is reached, a telegram is sent with a logic value of 1 on the KNX bus.

This object is sent when there is a status change.

For further information, see: Status indication.

3.2.1.3 Priority

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

This object is activated if the **Priority** parameter is active.

The status of the output contact is determined directly by this object.

Details on the format of the object are given below.

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

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

For further information, see: Priority.

No.	Name	Function of the object	Data type	Flags
10	Output	Status indication priority	1 bit - 1.011 DPT_State	C, R, T

This object is activated if the **Priority** parameter is active.

This object allows the status of the Priority to be sent from the device on the KNX bus.

Object value:

0 = Not forced, 1 = Forced:

- If Priority is deactivated, a telegram is sent with logic value 0.
- If Priority is activated, a telegram is sent with logic value 1.

This object is sent when there is a status change.

For further information, see: Priority.



3.2.1.4 Scene

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

This object is activated when the **Scene** parameter is active.

This object is used to recall or save a scene.

Details on the format of the object are given below.

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

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

Bit 6: Not used.

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

For further information, see: Scene.

3.2.1.5 Alarm

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

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

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

Object value:

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

For further information, see: Alarm.

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

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

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

Object value:

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

For further information, see: Alarm.



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

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

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

Object value:

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

For further information, see: Alarm.

3.2.1.6 Position in % automatic control

N	0.	Name	Function of the object	71	
15	5	Output	Position in % automatic control	1 byte - 5.001 DPT_Scaling	C, R, W

This object is activated when the **Automatic control** parameter is active.

It is used for positioning the shutter or blind at the desired height, in response to the value sent on the KNX bus.

Object value: 0 to 255

0 (0%): Upper position.255 (100%): Lower position.

For further information, see: Automatic control.

3.2.1.7 Slat angle in % automatic control

No.	Name	Function of the object	Data type	Flags
16	Output	Slat angle in % automatic control	1 byte - 5.001 DPT_Scaling	C, R, W

This object is activated when the **Closing type** has the value **Shutter and blind** and when the **Automatic control** parameter is active.

It is used to position the shutter or blind in response to the value that is sent on the KNX bus.

Object value: 0 to 255
- 0 (0%): Slats open.
- 255 (100%): Slats closed.

For further information, see: Automatic control.



3.2.1.8 Automatic control deactivation

No.	Name	Function of the object	71	
17	Output	Automatic control deactivation	1 bit - 1.003 DPT_Enable	C, R, W

This object is activated when the Automatic control deactivation parameter is active.

This object is used to activate the automatic control function.

Object value:

- If the object receives the value 0, the automatic control function is inactive.
- If the object receives the value 1, the automatic control function is active.

For further information, see: Automatic control.

No.	Name	Function of the object	Data type	Flags
18	Output	Automatic control deactivation status	1 bit - 1.003 DPT_Enable	C, R, T

This object is activated when the **Automatic control deactivation** parameter is active.

This object is used to send the status of the Automatic control deactivation function of the device on the KNX bus.

Object value:

- If the Automatic control deactivation function is deactivated, a telegram with a logical value 0 is sent.
- If the Automatic control deactivation function is activated, a telegram with a logical value 1 is sent.

This object is sent when there is a status change.

For further information, see: Automatic control.



3.2.2 Communication objects by input

Channel function		Number	Name	Function of the object	Length	С	R	W	Т
Toggle switch	*	19	Input 1	Status indication ON/OFF	1 bit	С	R	W	-
	*	20	Input 1	ON/OFF	1 bit	С	R	-	Т
ON/OFF	₩	20	Input 1	ON/OFF	1 bit	С	R	-	Т
Timer	₹	20	Input 1	Timer	1 bit	С	R	-	Т
Shutter	₩	20	Input 1	Up/down	1 bit	С	R	-	Т
	*	21	Input 1	Stop (short press)	1 bit	С	R	-	Т
	_₩	24	Input 1	Position in %	1 byte	С	R	-	Т
Shutter/blind	*	20	Input 1	Up/down	1 bit	С	R	-	Т
	*	21	Input 1	Step/stop (short press)	1 bit	С	R	-	Т
	-≵	25	Input 1	Slat angle in %	1 byte	С	R	-	Т
	*	24	Input 1	Position in %	1 byte	С	R	-	Т
	*	25	Input 1	Slat angle in %	1 byte	С	R	-	Т
Dimming	*	20	Input 1	ON/OFF	1 bit	С	R	-	Т
	- ≵	23	Input 1	Dimming	4 bit	С	R	-	Т
	*	19	Input 1	Status indication ON/OFF	1 bit	С	R	W	-
	*	20	Input 1	ON/OFF	1 bit	С	R	-	Т
	*	23	Input 1	Dimming	4 bit	С	R	-	Т
	*	24	Input 1	Brightness value	1 byte	С	R	-	Т
Heating	*	20	Input 1	Heating/Cooling	1 bit	С	R	-	Т
	*	24	Input 1	Setpoint selection	1 byte	С	R	-	Т
Priority	-₩	22	Input 1	Priority	2 bit	С	R	-	Т
Scene	*	24	Input 1	Scene	1 byte	С	R	-	Т
Alarm	*	20	Input 1	Alarm 1	1 bit	С	R	-	Т
	- ∤	20	Input 1	Alarm 2	1 bit	С	R	-	Т
	<u></u> ≱	20	Input 1	Alarm 3	1 bit	С	R	-	Т
Automatic control	- ≵I	20	Input 1	Automatic control deactivation	1 bit	С	R	=	Т
Load shedding	*	20	Input 1	Load shedding	1 bit	С	R	-	Т
Windows		20	Input 1	Windows contact status	1 bit	С	R	-	Т
contact	- ≵								



Channel function		Number	Name	Function of the object	Length	С	R	W	T
Toggle switch	*	29	Input 2	Status indication ON/OFF	1 bit	С	R	W	-
	■ ≵	30	Input 2	ON/OFF	1 bit	С	R	-	Т
ON/OFF	*	30	Input 2	ON/OFF	1 bit	С	R	-	Т
Timer	*	30	Input 2	Timer	1 bit	С	R	-	Т
Shutter	•	30	Input 2	Up/down	1 bit	С	R	-	Т
	*	31	Input 2	Stop (short press)	1 bit	С	R	-	T
	-	34	Input 2	Position in %	1 byte	С	R	-	Т
Shutter/blind	*	30	Input 2	Up/down	1 bit	С	R	-	Т
	■ ≵	31	Input 2	Step/stop (short press)	1 bit	С	R	-	Т
	<u>-</u> ≵l	35	Input 2	Slat angle in %	1 byte	С	R	-	Т
	=	34	Input 2	Position in %	1 byte	С	R	-	Т
	■ ≵l	35	Input 2	Slat angle in %	1 byte	С	R	-	Т
Dimming	-	30	Input 2	ON/OFF	1 bit	С	R	-	Т
	- ≵	33	Input 2	Dimming	4 bit	С	R	-	Т
	■ ≵	29	Input 2	Status indication ON/OFF	1 bit	С	R	W	-
	_ ≵	30	Input 2	ON/OFF	1 bit	С	R	-	Т
	- ≵	33	Input 2	Dimming	4 bit	С	R	-	Т
	- ≵	34	Input 2	Brightness value	1 byte	С	R	-	Т
Heating	=	30	Input 2	Heating/Cooling	1 bit	С	R	-	Т
	<u>-</u> ≵	34	Input 2	Setpoint selection	1 byte	С	R	-	Т
Priority	■ ≵l	32	Input 2	Priority	2 bit	С	R	-	Т
Scene	- ≵l	34	Input 2	Scene	1 byte	С	R	-	Т
Alarm	■ ≵l	30	Input 2	Alarm 1	1 bit	С	R	-	Т
	<u>-</u> ≵	30	Input 2	Alarm 2	1 bit	С	R	-	Т
	- ≵	30	Input 2	Alarm 3	1 bit	С	R	-	Т
Automatic control	<u>-</u> ≵l	30	Input 2	Automatic control deactivation	1 bit	С	R	-	Т
Load shedding	-	30	Input 2	Load shedding	1 bit	С	R	-	Т
Windows contact	- ≵l	30	Input 2	Windows contact status	1 bit	С	R	-	Т
Tariff	•	30	Input 2	Tariff	1 byte	С	R	-	Т



3.2.2.1 ON/OFF and toggle switch

No.	Name	Function of the object	Data type	Flags
20, 30	Input x	ON/OFF	1 bit - 1.001 DPT_Switch	C, R, T

This object is activated when the parameter Channel function has the value Toggle switch, ON/OFF or Dimming.

This object enables the ON/OFF control to be issued from the input contact on the KNX bus.

- To issue an OFF command, a telegram with a logical value 0 is issued.
- To issue an ON command, a telegram with a logical value 1 is issued.

This object is sent when there is a status change.

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

For further information, see: ON/OFF or Toggle switch.

	No.	Name	Function of the object	Data type	Flags
Ī	19, 29	Input x	Status indication ON/OFF	1 bit - 1.001 DPT_Switch	C, R, W

This object is activated when the parameter Channel function has the value Toggle switch or Dimming.

This object enables the status of the ON/OFF output sent to the KNX bus to be received.

- If the object receives the value 0, the status indication changes to OFF.
- If the object receives the value 1, the status indication changes to ON.

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

For further information, see: ON/OFF or Toggle switch.

3.2.2.2 Timer

No.	Name	Function of the object	Data type	Flags
20, 30	Input x	Timer	1 bit - 1.001 DPT_Switch	C, R, T

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

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

- To issue a Timer command, a telegram with a logical value 1 is issued.

For further information, see: Timer.

3.2.2.3 Shutter and blind

No.	Name	Function of the object	Data type	Flags
20, 30	Input x	Up/down	1 bit - 1.008 DPT_UpDown	C, R, T

This object is activated when the parameter Channel function has the value Shutter/blind.

This object enables the UP/Down command to be sent from the input contact on the KNX bus.

- To issue an Up command, a telegram with a logical value 0 is issued.
- To issue a Down command, a telegram with a logical value 1 is issued.

This object is sent when there is a status change.

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

For further information, see: Shutter and blind.



No.	Name	Function of the object	Data type	Flags
21, 31	Input x	Stop (short press)	1 bit - 1.017 DPT_Trigger	C, R, T

This object is activated when the parameter Channel function has the value Shutter/blind.

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

- To issue a Stop command, a telegram with a logical value 1 is issued.

This object is sent when there is a status change. For further information, see: Shutter and blind.

No.	Name	Function of the object	Data type	Flags
24, 34	Input x	Position in %	1 byte - 5.001 DPT_Scaling	C, R, T

This object is activated when the parameter Channel function has the value Shutter/blind.

This object enables the shutter or blind position command to be issued from the input contact on the KNX bus.

Object value: 0 to 255

0 (0%): Upper position.255 (100%): Lower position.

This object is sent when there is a status change. For further information, see: Shutter and blind.

No.	Name	Function of the object	Data type	Flags
21, 31	Input x	Step/stop (short press)	1 bit - 1.007 DPT_Step	C, R, T

This object is activated when the parameter **Channel function** has the value **Shutter/blind**.

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

- To issue a Stop command, a telegram with a logical value 0 or 1 is issued.
- To issue a slat opening command, a telegram with a logical value 0 is issued.
- To issue a slat closing command, a telegram with a logical value 1 is issued..

This object is sent when there is a status change. For further information, see: Shutter and blind.

No.	Name	Function of the object	Data type	Flags
25, 35	Input x	Slat angle in %	1 byte - 5.001 DPT_Scaling	C, R, T

This object is activated when the parameter **Channel function** has the value **Shutter/blind**.

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

Object value: 0 to 255
- 0 (0%): Slats open.
- 255 (100%): Slats closed.

This object is sent when there is a status change. For further information, see: Shutter and blind.



3.2.2.4 **Dimming**

No.	Name	Function of the object	Data type	Flags
23, 33	Input x	3	4 bit - 3.007 DPT_Control_Dimming	C, R, T

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

This object enables the dimming command relating to the brightness to be issued from the input contact on the KNX bus.

Object value:

b3	b2	b1	b0
С	Steps		

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

This object is sent when there is a status change.

For further information, see: Dimming.

No.	Name	Function of the object	Data type	Flags
24, 34	Input x	Brightness value	1 byte - 5.001 DPT_Scaling	C, R, T

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

This object enables the brightness absolute dimming command to be issued from the input on the KNX bus.

Object value: 0 to 255: 0 = 0%, 255 = 100%.

Resolution: Approx. 0.4%.

This object is sent when there is a status change.

For further information, see: Dimming.



3.2.2.5 Heating

No.	Name	Function of the object	Data type	Flags
20, 30	Input x	Heating/Cooling - changeover	1 bit - 1.100 DPT_Heating/cooling	C, R, T

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

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

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

This object is sent when there is a status change.

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

For further information, see: Heating.

No.	Name	Function of the object	Data type	Flags
24, 34	Input x	Setpoint selection	1 byte - 20.102 DPT_HVAC mode	C, R, T

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

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

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

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

This object is sent when there is a status change.

For further information, see: Heating.



3.2.2.6 Priority

No.	Name	Function of the object	Data type	Flags
22, 32	Input x	Priority	2 bit - 2.002 DPT_Bool_Control	C, R, T

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

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

Details on the format of the object are given below.

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

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

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

For further information, see: Priority.

3.2.2.7 Scene

No.	Name	Function of the object	Data type	Flags
24, 34	Input x	Scene	1 byte - 18.001 DPT_SceneControl	C, R, T

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

This object enables the scene number to be issued from the input contact on the KNX bus.

It also memorises a scene.

Details on the format of the object are given below.

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

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

Bit 6: Not used.

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

For further information, see: Scene.



3.2.2.8 Alarm

No.	Name	Function of the object	Data type	Flags
20, 30	Input x	Alarm 1	1 bit - 1.005 DPT_Alarm	C, R, T
20, 30	Input x	Alarm 2	1 bit - 1.005 DPT_Alarm	C, R, T
20, 30	Input x	Alarm 3	1 bit - 1.005 DPT_Alarm	C, R, T

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

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

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

This object is sent when there is a status change.

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

For further information, see: Alarm.

3.2.2.9 Automatic control

No.	Name	Function of the object	Data type	Flags
20, 30	Input x	Automatic control deactivation	1 bit - 1.003 DPT_Enable	C, R, T

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

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

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

This object is sent when there is a status change.

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

For further information, see: Automatic control deactivation.

3.2.2.10 Load shedding

No.	Name	Function of the object	Data type	Flags
20, 30	Input x	Load shedding	1 bit - 1.002 DPT_Bool	C, R, T

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

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

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

This object is sent when there is a status change.

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

For further information, see: Load shedding.



3.2.2.11 Windows contact

No.	Name	Function of the object	Data type	Flags
20, 30	Input x	Windows contact status	1 bit - 1.019 DPT_window/door	C, R, T

This object is activated when the parameter Channel function has the value Windows contact.

This object enables the status of a window contact to be issued from the input contact on the KNX bus.

- To signal a closed window contact, a telegram with a logical value 1 is issued.
- To signal an open window contact, a telegram with a logical value 0 is issued.

This object is sent when there is a status change.

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

For further information, see: Windows contact.

3.2.2.12 Tariff

No.	Name	Function of the object	Data type	Flags
24, 34	Input x	Tariff	1 bit - 5.006 DPT_Tariff	C, R, T

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

This object enables the tariff status to be issued from the input contact on the KNX bus.

- To issue the Full Hour (FH) tariff information, a telegram with a 2 value is issued.
- To issue the Part Hour (PH) tariff information, a telegram with a 1 value is issued.

This object is sent when there is a status change.

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

For further information, see: Tariff.



3.3 Configuration with media coupler

Configuration principle

The TR131 media coupler enables confuguration by ETS of RF devices for a KNX radio installation or a mixed KNX installation including RF devices and wired buses. For normal operation, the radio transmitters operate in a one-direction mode. Configuration takes place in bi-directional mode.

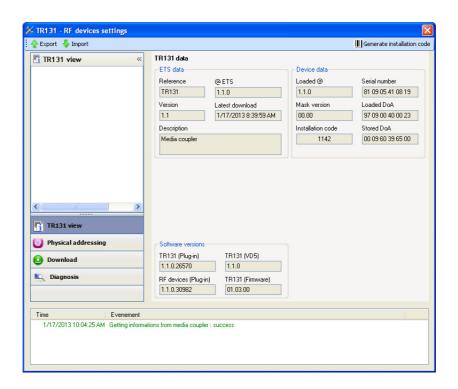
Implementation recommendations

- 1. The Media coupler must remain in place after configuration. It sends the commands between the radio products and the wired products in auto mode.
- 2. The coupler must be at the head of the line: x.y.0 type physical address.
- 3. The coupler must be in a different line than the USB/series/IP interface.
- 4. Use of old generation media couplers (TR130A/B) is not authorised in an installation containing a new media coupler (TR131A/B).
- 5. Separate the radio and TP lines:
 - The radio line must not contain TP products: The views of the line in ETS and in the plug-in would contain inconsistencies.
 - The TP lines must not contain radio products: It would be impossible to configure these radio products.
- 6. Only use the plug-in to program the physical addresses and download the products. As ETS cannot program radio products, it is not possible to use the usual configuration menus.
- 7. The product copy function must not be used in ETS for radio products. It causes inconsistencies in the projects leading to plug-in malfunctions.
- 8. Copying projects which already contain a configured media coupler leads to plug-in malfunctions.
- 9. The use of the "default" button in the ETS parameter setting window is not recommended. This results in:
 - → The loss of the parameters of a product which has already been configured.
 - → Desynchronisation between the plug-in data and the radio products which have already been configured.
- 10. During the physical addressing, the download or the factory reset procedures of unidirectional radio products, several attempts may be needed for a successful completion of the procedure.
- 11. Changing the line of a media coupler which is already configured leads to plug-in malfunctions.
- 12. Do not use ETS Software function Unload/Unload application.

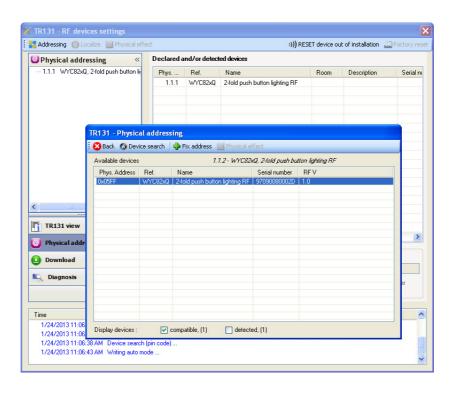
Installation procedure

- · Create a line reserved for RF devices in your ETS plan,
- First insert the media coupler into this line, then insert the other RF devices into this line.
- Perform the programming, parameter settings and group addressing for all the RF products except for the media coupler
- Download the physical address of the media coupler. This must be of the type 1.1.0 (always end with a zero).
- Install the media coupler plug-in: Right-click on the product in the ETS tree structure, then select edit the parameters. Windows Administrator rights are necessary to install the plug in.





- Physical addressing of the radio transmitters
 - · Click on the button Physical addressing to display the physical addressing screen for the plug in.
 - Select the device to be addressed, then click on the field **Addressing** in the menu line at the upper left of the window.
 - Click on **Product search**, if the product is not found by the search, perform a factory reset on the product outside the installation.
 - Select the device to be addressed and click on Attribute address. The physical addressing of the product is performed. The product is now part of the installation.
 - After downloading the physical address, the symbol appears in front of the product.
 - Repeat this operation for the other radio transmitters.

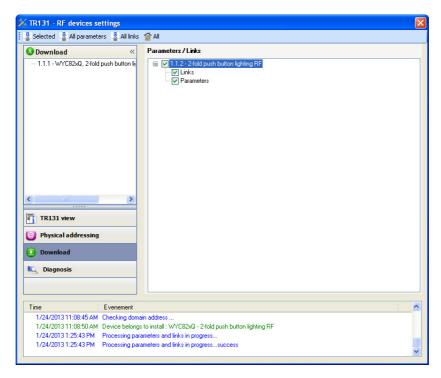




Downloading the program and the parameters

This operation is performed using the plug-in. There are 2 ways of accessing the **Download** view.

- From the media coupler
 - Right-click on the product in the ETS tree structure, then select edit the parameters.
 - Click on **Download** and follow the instructions on the screen.
- From the RF product to be downloaded
 - Right click on the product in the ETS tree structure, then select **Download RF product**... and follow the instructions on the screen.



The right-hand window allows you to select the parameters and/or links to be downloaded for each product.

Finalise the download by selecting the type of download in the upper bar.

- Selected to download the selected parameters and links.
- All parameters to download all the parameters of all the products displayed.
- All links to download all the links for all the products displayed.
- All to download all the parameters and all the links of all the products displayed.

To test the functions and the KNX radio communication, return to normal use mode and wait 15 s before pressing a control button on a transmitter.

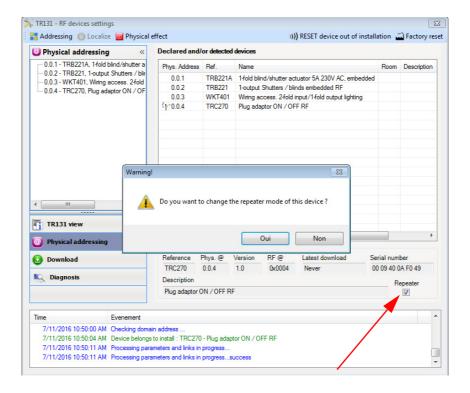
Warning: The media coupler plug-in must be deactivated during the functional tests.

NB: For more information, refer to the description for the TR131 application software.



Repeater Function

It increases the radio range of the system by re-sending the messages received by the product.



To activate the Repeater function, tick the repeater box on the physical addressing screen of the product concerned.

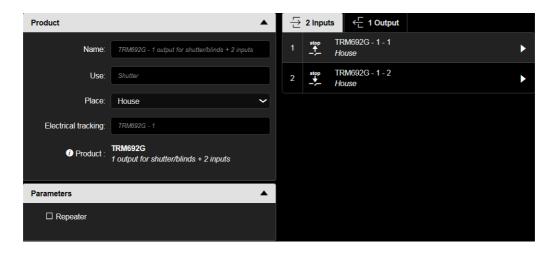


4. Programming by Easy Tool

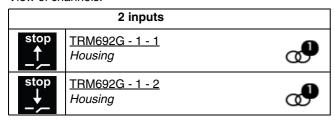
4.1 Product overview

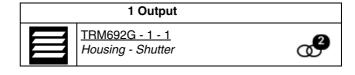
■ TRM692G: 1 shutter 3A output + 2 inputs KNX radio

Product view:



View of channels:





The symbol means that the input and output are connected by default. After every product device reset, this link will be automatically re-established with the function by default.

Product settings

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

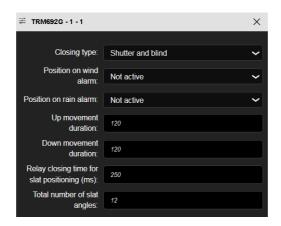




Pathway parameters

This parameter window is used to set the device outputs.

- Shutter/blind





Available functionalities: Shutter/blind

	Blinds up	፷ ፻	Priority up
∮ ▼	Blinds down	≅ 1	Priority down
=	Shutter UP	三 个	Priority up push-button (1)
=	Shutter DOWN	≅ Î	Priority down push-button (1)
<u>†</u>	Up/down	((<u>A</u>))	Wind alarm
<u>†</u> †	Down/up		Rain alarm
<u></u>	Switch up		Automatic control shutter angle
<u>~~</u>	Down switch	<u></u> _	Automatic control slat angle
stop †	Up/stop	= /(a)	Automatic control shutter and slat angle
stop ———	Down/stop		Automatic control shutter position switch
= %	Shutter position		Automatic control inter slat angle
<u>_</u> %	Slat angle		Automatic control inter shutter and slat angle
= /%	Shutter and slat angle	,,,,,	Scene
= %	Shutter angle switch		Scene switch
½ %	Slat angle switch	<u>a</u>	Automatic control deactivation
= %	Shutter and slat angle switch	(a)	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			
宗	ON		Automatic control ON
	OFF		Automatic control OFF
(1)	ON/OFF		ON/OFF automatic control
	Toggle switch	((C))	Load shedding
(j)	Timer	(a)\	Automatic control deactivation
Ŷ	Priority ON	"""	Scene
	Priority OFF		Scene switch

Dimmin	Dimming			
-	Increase dimming/ON	- \overline{\bar{Q}}	Dimming automatic control PB	
-64	Decrease dimming/OFF	- O (a)	Dimmer switch automatic control	
-XI	Increase/decrease dimming	ш	Scene	
- Ç %	Dimming		Scene switch	
- <u>^</u> %	Dimming switch	<u>(a)</u>	Automatic control deactivation	



Shutter/	Shutter/blind				
	Blinds up	፷ ፻	Priority up		
 	Blinds down	≅ †	Priority down		
至	Shutter UP	((<u>A</u>))	Wind alarm		
=	Shutter DOWN		Rain alarm		
<u></u>	Up/down		Automatic control shutter angle		
ŢŢ	Down/up	 - 	Automatic control slat angle		
<u></u>	Switch up		Automatic control shutter and slat angle		
<u></u>	Down switch		Automatic control shutter position switch		
stop †	Up/stop	(a) 	Automatic control inter slat angle		
stop ———	Down/stop		Automatic control inter shutter and slat angle		
= %	Shutter position	,,,,,	Scene		
<u>_%</u>	Slat angle		Scene switch		
= /%	Shutter and slat angle	<u>a)</u>	Automatic control deactivation		
= %	Shutter angle switch				
<u>/</u> %	Slat angle switch				
= %	Shutter and slat angle switch				



Heating	Heating/Cooling				
4	Comfort mode	7(0)	Comfort mode automatic control		
	Eco mode	(a)	Eco mode automatic control		
İ	Standby mode		Standby mode automatic control		
**	Protection mode	***	Protection mode automatic control		
	Switch mode	(((()	Switch mode automatic control		
******	Heating/Cooling	(a)	Automatic control deactivation		
#h	Comfort priority	,,,,,	Scene		
**	Protection priority		Scene switch		

П	Metering			
	(II)	Tariff	"""	Scene
	(a)	Automatic control deactivation		Scene switch



4.2 Repeater Function

It increases the radio range of the system by re-sending the messages received by the product.



To activate the Repeat function, tick the repeater box in the parameters for the affected product.

4.3 Product functions at 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%)



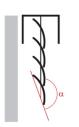


Object: Position in %

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 ($\alpha = 180^{\circ}$) but rather form a small angle with the vertical.



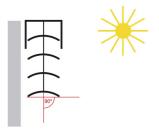




Object: Position in %

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





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

Object: Slat angle in %

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



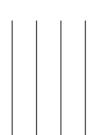


Slat position at the start of moving the blind (Up)

Object: Slat angle in %

Slat position for vertical slats

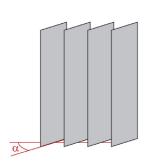
If an interior shade or privacy shield with vertical slats is controlled via a blind actuator, then the position in which the slats are fully open is controlled or reported as the 0% slat position. The slats then form an angle of 90° with the direction of travel from Shade fully open to Shade fully closed.



Fully opened vertical slats (Slat angle 0%)

Object: Slat angle in %

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

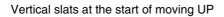


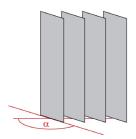
Fully closed vertical slats (Slat angle 100%)

Object: Slat angle in %

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







4.3.1 Pathway parameters



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

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
•	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
	This parameter defines how long the contacts must be closed in order to perform an elementary angle step for the slats.	100 150 *2500 ms

^{*} Default value

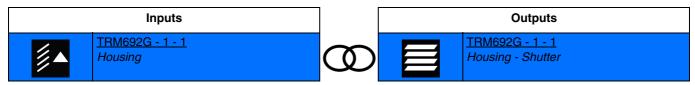


Parameter	Description	Value
_	This parameter defines the total number of elementary slat steps available for adjusting the slats from the inclined downwards position to be inclined upwards position.	1 12 *50

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

4.3.2 Up/down

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



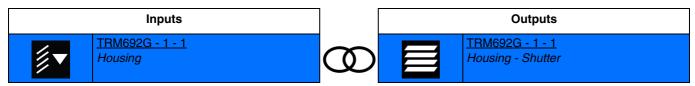
Brief closing of the input contact: brief closing of the raise input contact.

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.



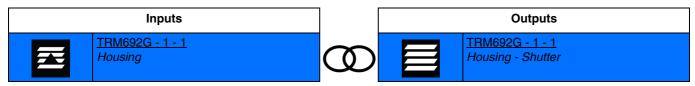
Brief closing of the input contact: brief closing of a lowering output contact.

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).

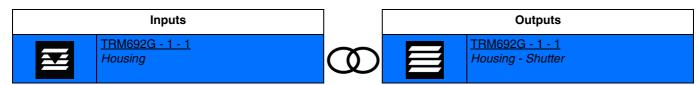
- **Shutter UP**: Allows to raise or stop a rolling shutter.



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.



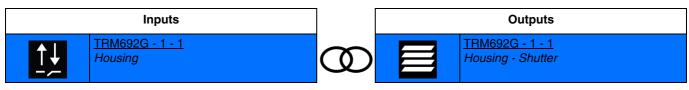
Prolonged closing of the input contact: delayed closing of the lowering output contact. Opening input contact: no action.

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

^{*} Default value

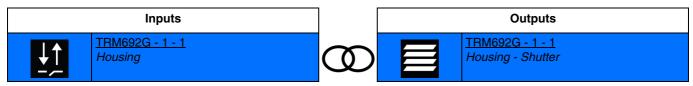


- **Up/down**: Allows to raise or lower a rolling shutter or a blind using a switch.



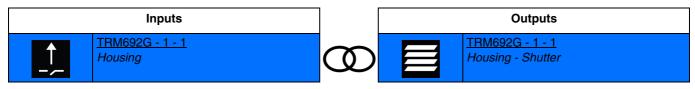
Closing input contact: delayed closing of the raise output contact. Opening input contact: delayed closing of the lowering output contact.

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



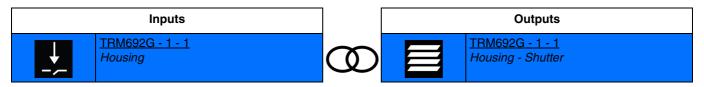
Closing input contact: delayed closing of the lowering output contact. Opening input contact: delayed closing of the raise output contact.

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



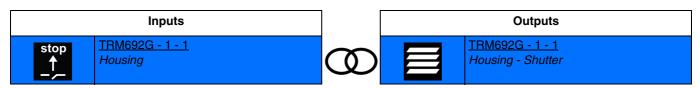
Closing input contact: delayed closing of the raise output contact. Opening input contact: no action.

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



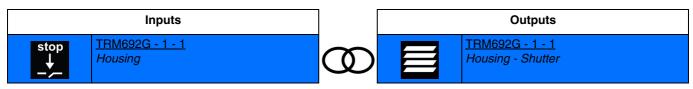
Closing input contact: delayed closing of the lowering output contact. Opening input contact: no action.

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



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

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

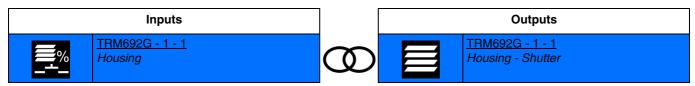


Closing input contact: delayed closing of the lowering output contact. Opening input contact: opening an output contact (stop function).



4.3.3 Shutter or blind angle

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

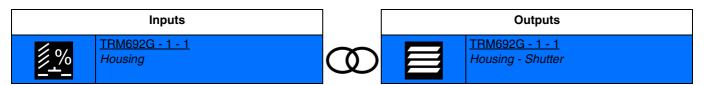


Closing input contact: delayed closing of output contacts for angling the shutter or blind. Opening input contact: no action.

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



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



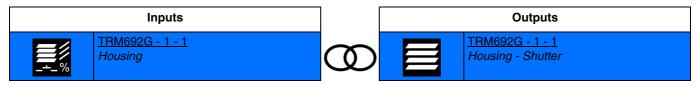
Closing input contact: delayed closing of output contacts for the shutter slat tilt. Opening input contact: no action.

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





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

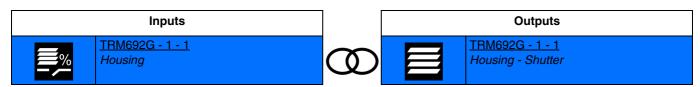


Closing input contact: delayed closing of output contacts for the shutter or blind angle and for the blind slat tilt. Opening input contact: no action.

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



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



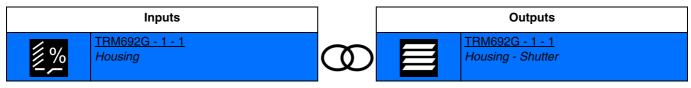
Closing input contact: delayed closing of output contacts for position 1 of the shutter or blind. Opening input contact: delayed closing of output contacts for position 2 of the shutter or blind.

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





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

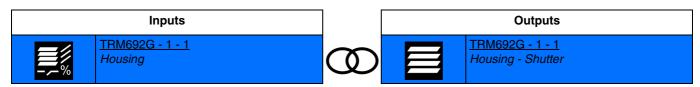


Closing input contact: delayed closing of output contacts for position 1 of the blind slats. Opening input contact: delayed closing of output contacts for position 2 of the blind slats.

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



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



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

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





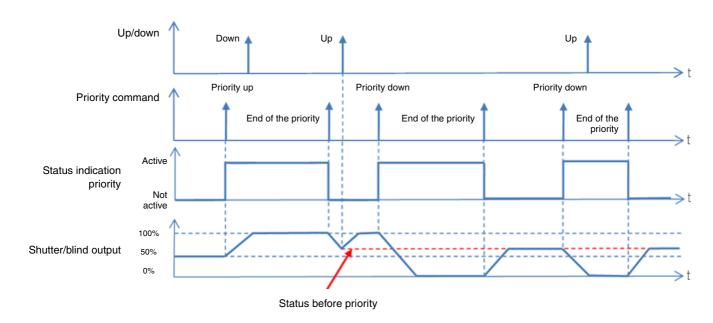
4.3.4 Priority

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

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

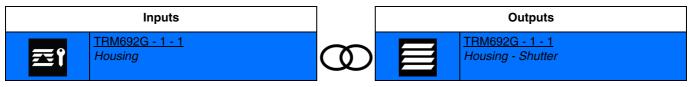
At the end of the priority, the output returns to the status it had before the priority (Memorisation function).

Operating principle:



Links

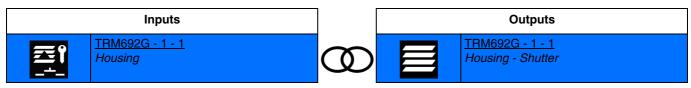
- **Priority up**: Allows forcing a rolling shutter or blind to raise.



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



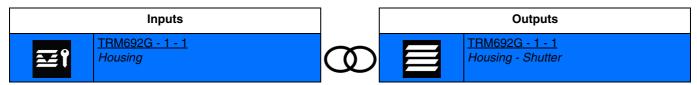
- **Priority up push-button**: Allows forcing a rolling shutter or blind to raise using a push-button.



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

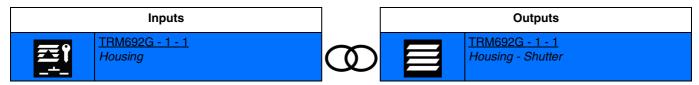
Note: This function is only available with push-button input products with LEDs indicating status.

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



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

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



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

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

4.3.5 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).

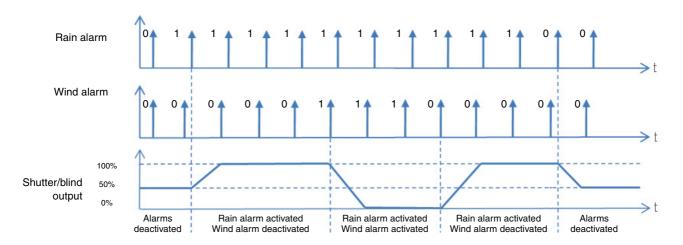
After the alarm, the shutter or blind takes up the position it would be in if no alarm had occurred.



Operating principle:

Example:

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

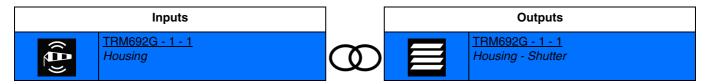


If several alarms triggered at the same time, the commands associated with the highest priority alarm are executed.

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.

Links

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



Closing input contact: wind alarm activation.

Opening input contact: alarm end.

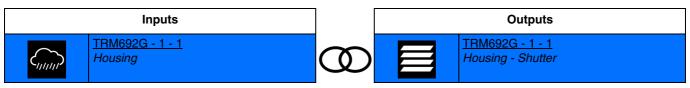
The rolling shutter or blind angle is defined through a setting.



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.



Closing input contact: rain alarm activation.

Opening input contact: alarm end.

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



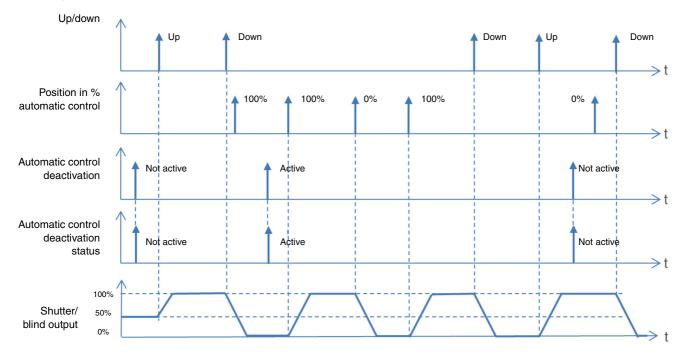
Parameter	Description	Value
Position on rain alarm	Defines the status of the shutter output on receipt of the rain alarm.	Not active*
		Up
		Down

4.3.6 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:

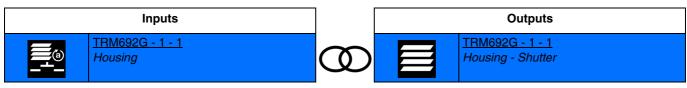


* Default value



Links

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

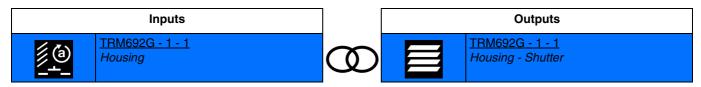


Closing input contact: delayed closing of output contacts for angling the shutter or blind. Opening input contact: no action.

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



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



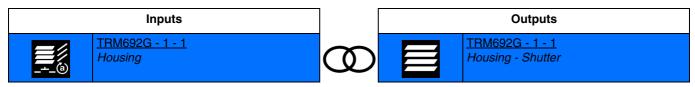
Closing input contact: delayed closing of output contacts for the shutter slat tilt. Opening input contact: no action.

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





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

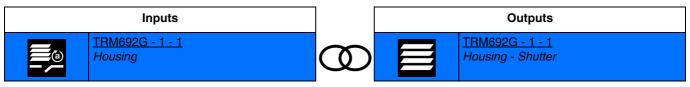


Closing input contact: delayed closing of output contacts for the shutter or blind angle and for the blind slat tilt. Opening input contact: no action.

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



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



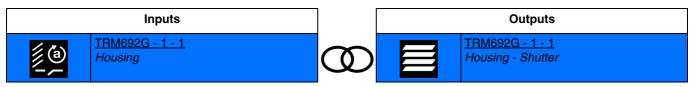
Closing input contact: delayed closing of output contacts for position 1 of the shutter or blind. Opening input contact: delayed closing of output contacts for position 2 of the shutter or blind.

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





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

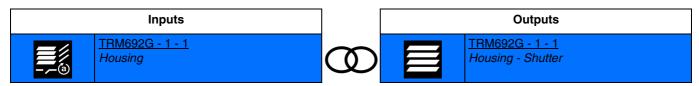


Closing input contact: delayed closing of output contacts for position 1 of the blind slats. Opening input contact: delayed closing of output contacts for position 2 of the blind slats.

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

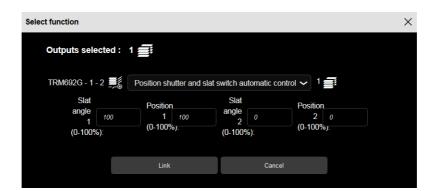


- **Automatic control inter shutter and slat angle**: Allows positioning a rolling shutter or blind to the desired height and blind slats according to a value in % using a switch or automatic control.



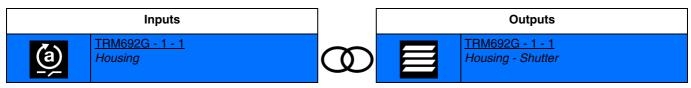
Closing input contact: delayed closing of output contacts for position 1 of the shutter or blind and for position 1 for blind slats. Opening input contact: delayed closing of output contacts for position 2 of the shutter or blind and for position 2 for blind slats.

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



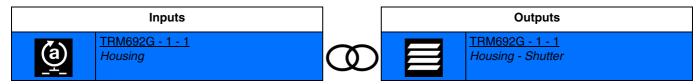


- Automatic control deactivation: Deactivates automatic control.



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

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



Press on the push-button: deactivated automatic control.

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

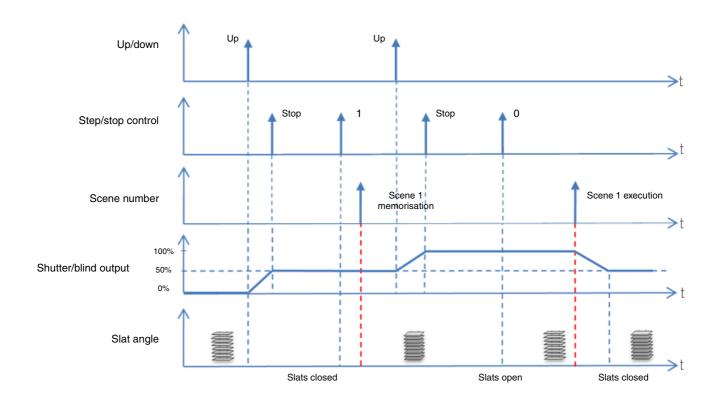
Note: This function is only available with push-button input products with LEDs indicating status.

4.3.7 Scene

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

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

Operating principle:





Learning and storing scenes

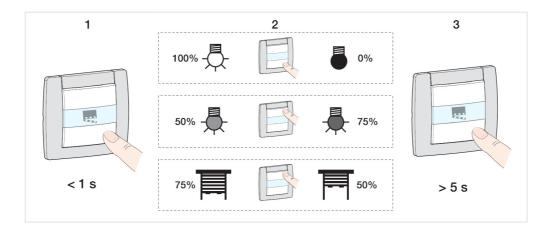
This process is used to change and store a scene. For example, by locally pressing the key in the room or by emission of the values from a visualization.

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

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

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

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



Product learning and memorisation

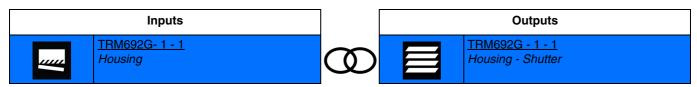
This procedure allows modifying a scene using a local action on the push buttons located on the front side of the product.

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



Links

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

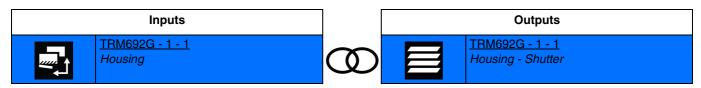


Closing input contact: scene activation. Opening input contact: no action.

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



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



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

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





4.4 Input operation mode

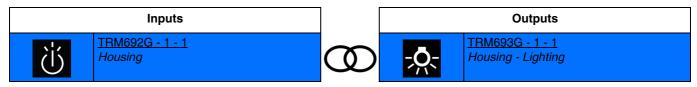
4.4.1 Lighting

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

Availabl	Available functionalities		
宗	ON		Automatic control ON
	OFF		Automatic control OFF
(1)	ON/OFF		ON/OFF automatic control
 	Toggle switch		Load shedding
(j.)	Timer	""	Scene
	Priority ON		Scene switch
	Priority OFF	<u>(a)</u>	Automatic control deactivation

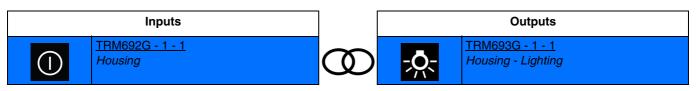
Note: For the function **Automatic control deactivation**, see: <u>Automatic control deactivation</u>. For the function **Scene** and **Switch scene**, see: <u>Scene</u>.

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



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

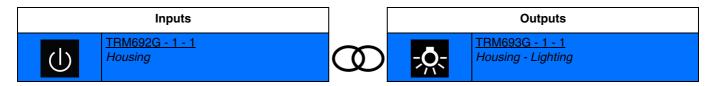
- **OFF**: Turns off the lighting circuit.



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



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



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

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

Below are the outputs which can also have these functions:

-5	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.
*	СМУ	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:

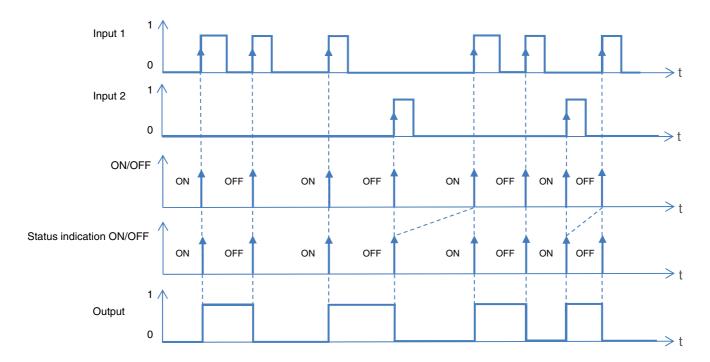
	Domestic Hot Water (DHW) control	Enables the control of a DHW boiler.
-ÇAL	Increase/decrease dimming	Controls the dimming input for switching the light on and off (Only with TX511 and TXC511).



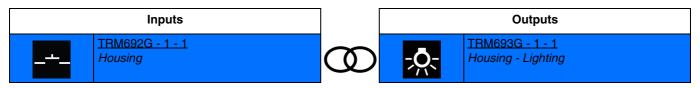
4.4.1.1 Toggle switch

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

Operating principle:



- Toggle switch: Inverses the lighting circuit status.



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

Below are the outputs which can also have these functions:

- <u>ç</u>	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.
米	СМУ	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:

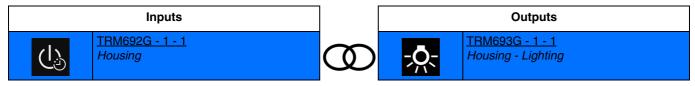
***	Domestic Hot Water (DHW) control	Enables the control of a DHW boiler.
- ÇÎN	Increase/decrease dimming	Controls the dimming output for switching the light on and off (Only with TX511 and TXC511).

4.4.1.2 Timer

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



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

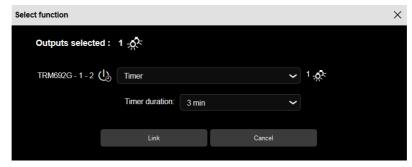


Activating the input by a short press <1 s switches on the light for a length of time.

Timing function interruption:

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

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



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



Below are the outputs which can also have these functions:

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

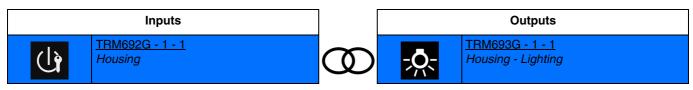
4.4.1.3 Priority

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

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

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

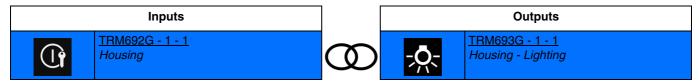
- Priority ON: Allows forcing and keeping the lighting circuit on.



Activating the input forces the output to ON.

Successive activation switches between ON priority and priority cancellation.

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



Activating the input forces the output to OFF.

Successive activation switches between OFF priority and priority cancellation.

Below are the outputs which can also have these functions:

-,6	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:

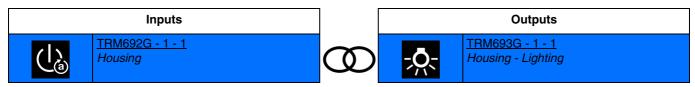
Increase		ing input for switching the light on and off (Only with TX511 and
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4.4.1.4 ON/OFF Automatic control

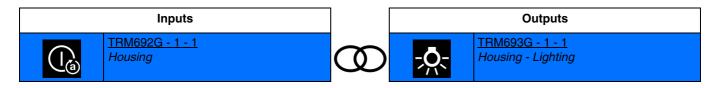
The Automatic control function enables an output to be controlled in parallel to the standard control. An additional command object (Automatic control deactivation) is used to activate or deactivate Automatic control.

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



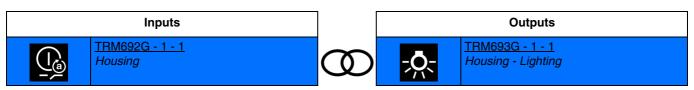
Activation of the input by short presses switches on the light. Successive activation keeps the light on.

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



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

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



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

Below are the outputs which can also have these functions:

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

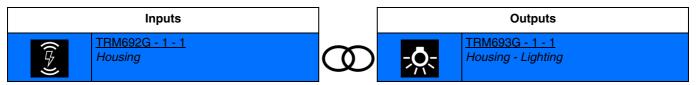
Note: For the function Automatic control deactivation, see: Automatic control deactivation.



4.4.1.5 Load shedding

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

- Load shedding: Allows forcing an output to OFF.



Activating the input forces the output to OFF.

Below are the outputs which can also have these functions:

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

4.4.2 Relative or absolute dimming (Brightness value)

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

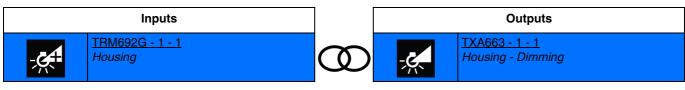
Availabl	Available functionalities		
-64	Increase dimming/ON	- \overline{\ove	Dimming automatic control PB
-55	Decrease dimming/OFF	- <u>^</u> (a)	Dimmer switch automatic control
-XI	Increase/decrease dimming	""	Scene
- <u>0</u> %	Dimming		Scene switch
- <u>^</u> %	Dimming switch	(a)	Automatic control deactivation

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



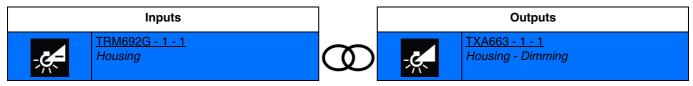
4.4.2.1 **Dimming**

- Increase dimming/ON: Increases the output level.



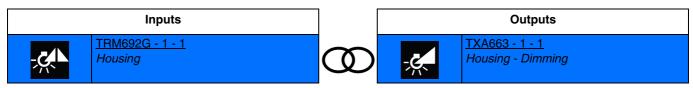
Activating the input by short presses switches on the light to the last level memorised. Activating the input by long press increases the level of brightness.

- Decrease dimming/OFF: Decreases the output level.



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

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



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

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

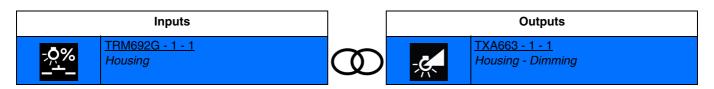
Below are the outputs which can also have these functions:

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

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



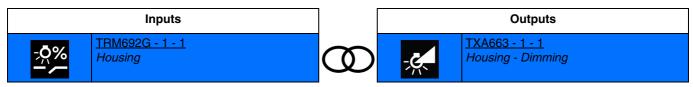
Activating the input switches the light on to the brightness value defined.



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

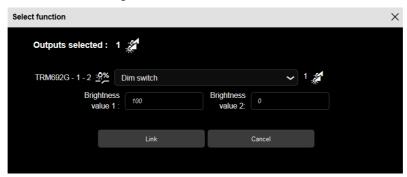


- **Dimming switch**: Varies the light with two brightness values defined according to the opening and closing of the input contact.



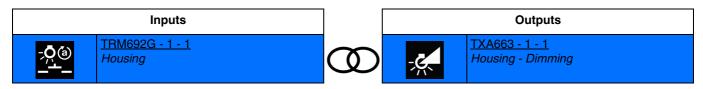
Closing input contact: turns on the light at the 1 brightness value. Opening input contact: turns on the light at the 2 brightness value.

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



4.4.2.2 Dimming automatic control

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



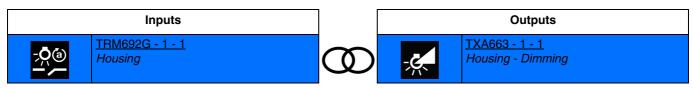
Activating the input switches the light on to the brightness value defined.

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



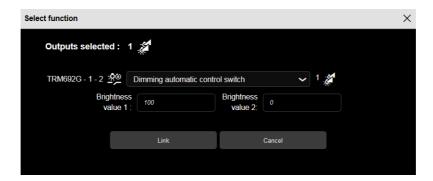


- **Dimmer switch automatic control**: allows varying the light with two defined brightness values according to the opening and closing input contact using automatic control.



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

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



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



4.4.3 Shutter/blind

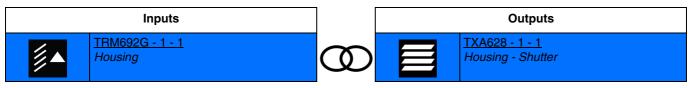
Availabl	e functionalities		
 	Blinds up	፷ ፻	Priority up
	Blinds down	≦ î	Priority down
	Shutter UP	((<u>A</u>))	Wind alarm
	Shutter DOWN		Rain alarm
<u></u>	Up/down	(m) 1	Automatic control shutter angle
→	Down/up	@ \\\\	Automatic control slat angle
← \	Switch up		Automatic control shutter and slat angle
<u>-</u>	Down switch		Automatic control shutter position switch
stop	Up/stop	@(\\\\	Automatic control inter slat angle
stop —	Down/stop		Automatic control inter shutter and slat angle
# %	Shutter position	11	Scene
 %	Slat angle		Scene switch
-	Shutter and slat angle	(a)	Automatic control deactivation
= %	Shutter angle switch		
%	Slat angle switch		
# %	Shutter and slat angle switch		

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



4.4.3.1 Up/down

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

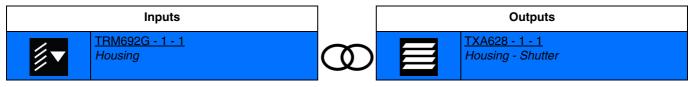


Activating the input by a short press briefly closes the Up output contact (function direction of a blind's slats).

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

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

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

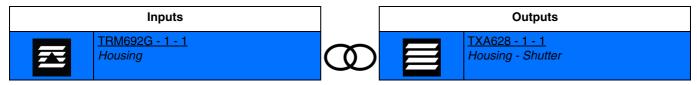


Activating the input by a short press briefly closes the Down output contact (function direction of a blind's slats).

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

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

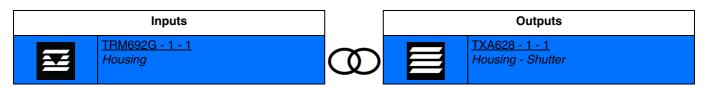
- Shutter UP: Allows to raise or stop a rolling shutter.



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

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

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

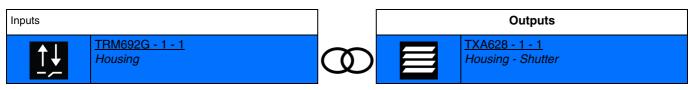


Activating the input closes the Down output contact for a length of time (Function Lowering a rolling shutter or a blind).

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

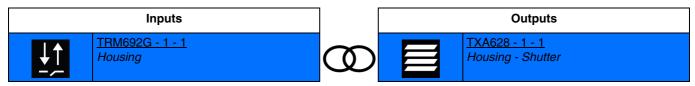


Up/down: Allows to raise or lower a rolling shutter or a blind using a switch.



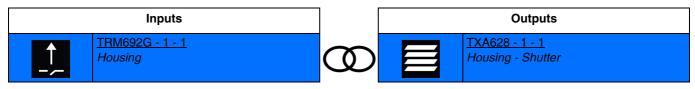
Closing input contact: delayed closing of the raise output contact. Opening input contact: delayed closing of the lowering output contact.

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



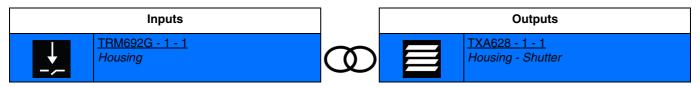
Closing input contact: delayed closing of the lowering output contact. Opening input contact: delayed closing of the raise output contact.

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



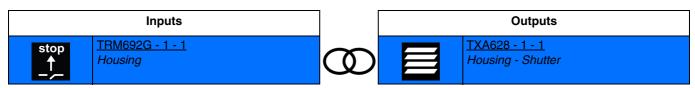
Closing input contact: delayed closing of the raise output contact. Opening input contact: no action.

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



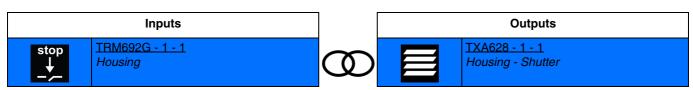
Closing input contact: delayed closing of the lowering output contact. Opening input contact: no action.

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



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

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

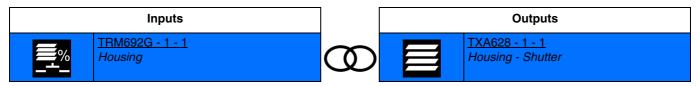


Closing input contact: delayed closing of the lowering output contact. Opening input contact: opening an output contact (stop function).



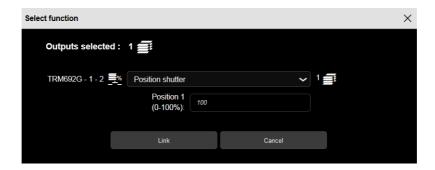
4.4.3.2 Shutter or blind angle

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

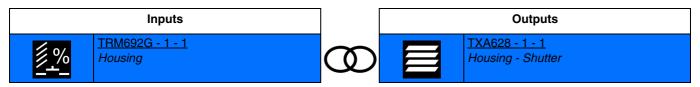


Activating the input closes the output contacts for positioning the shutter or blind for a length of time.

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

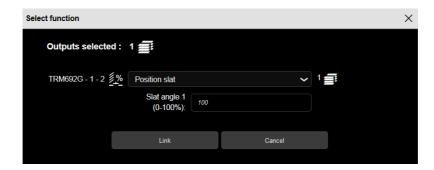


- Slat angle: Allows positioning shutter slats according to a value in %.



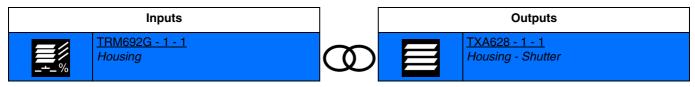
Activating the input closes the output contacts for tilting the blind slats for a length of time.

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





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

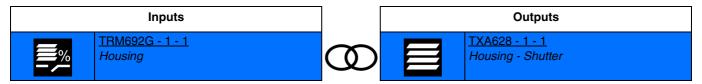


Activating the input closes the output contacts for positioning the shutter or blind and for tilting the blind slats for a length of time.

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



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



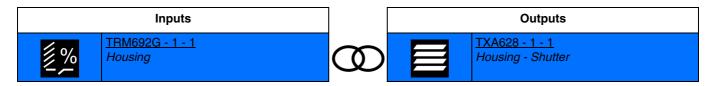
Closing input contact: delayed closing of output contacts for position 1 of the shutter or blind. Opening input contact: delayed closing of output contacts for position 2 of the shutter or blind.

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





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

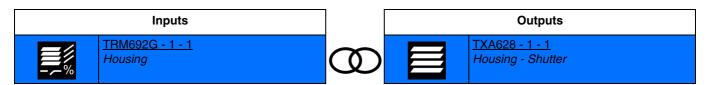


Closing input contact: delayed closing of output contacts for position 1 of the blind slats. Opening input contact: delayed closing of output contacts for position 2 of the blind slats.

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



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



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

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





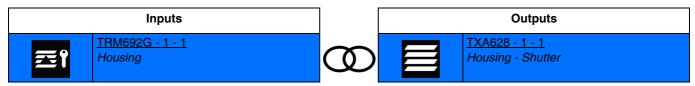
4.4.3.3 Priority

The Priority function forces the control of a shutter.

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

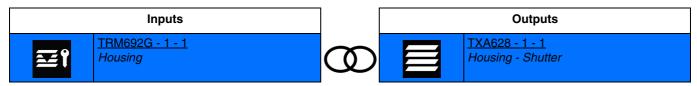
No other command is taken into account when the Priority is active. Only priority or alarm cancellation commands will be taken into account.

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



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

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

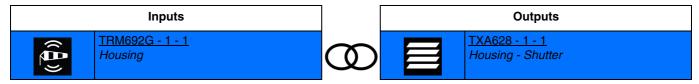


Closing input contact: activation of priority and delayed closing of the lowering output contact. Opening input contact: end of the priority.

4.4.3.4 Alarm

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

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



Closing input contact: wind alarm activation.

Opening input contact: alarm end.

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

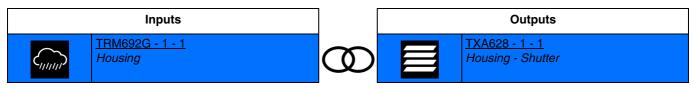


Parameter	Description	Value
Position on wind alarm	During the wind alarm, the shutter/blind output:	
	Not changed	Not active*
	Closes the Up contact	Up
	Closes the down contact	Down

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



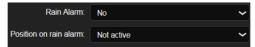
- Rain alarm: Allows to set the rolling shutter or blind in a defined position when the alarm is activated.



Closing input contact: rain alarm activation.

Opening input contact: alarm end.

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

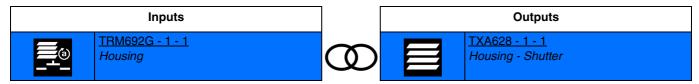


Parameter	Description	Value
Position on rain alarm	Defines the status of the shutter output on receipt of the rain alarm.	Not active*
		Up
		Down

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

4.4.3.5 Shutter/blind automatic control

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



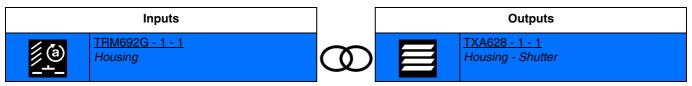
Activating the input closes the output contacts for positioning the shutter or blind for a length of time.

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





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

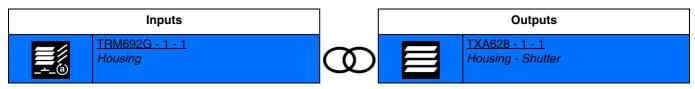


Activating the input closes the output contacts for tilting the blind slats for a length of time.

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



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



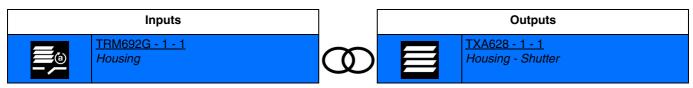
Activating the input closes the output contacts for positioning the shutter or blind and for tilting the blind slats for a length of time.

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





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

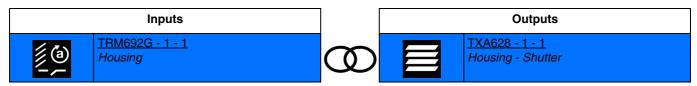


Closing input contact: delayed closing of output contacts for position 1 of the shutter or blind. Opening input contact: delayed closing of output contacts for position 2 of the shutter or blind.

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



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



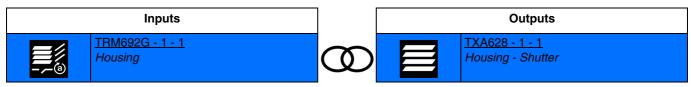
Closing input contact: delayed closing of output contacts for position 1 of the blind slats. Opening input contact: delayed closing of output contacts for position 2 of the blind slats.

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



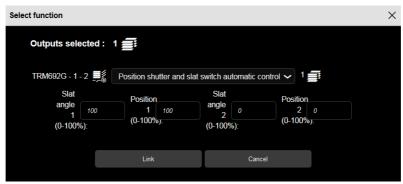


- **Automatic control inter shutter and slat angle**: Allows positioning a rolling shutter or blind to the desired height and blind slats according to a value in % using a switch or automatic control.



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

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



4.4.4 Heating/Cooling

Availabl	Available functionalities		
4	Comfort mode	(a) \(\bar{\partial}{2} \)	Comfort mode automatic control
	Eco mode	((a)	Eco mode automatic control
i ∕	Standby mode	<u>†@</u>	Standby mode automatic control
***	Protection mode	***	Protection mode automatic control
	Switch mode		Switch mode automatic control
***************************************	Heating/Cooling	<u>(a)</u>	Automatic control deactivation
**	Comfort priority	,,,,,	Scene
***	Protection priority		Scene switch

Note: For the function **Automatic control deactivation**, see: <u>Automatic control deactivation</u>.

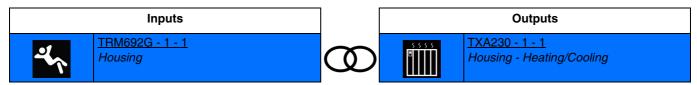
For the function **Scene** and **Switch scene**, see: <u>Scene</u>.



4.4.4.1 Setpoint selection

The heating command operates according to a heating instruction.

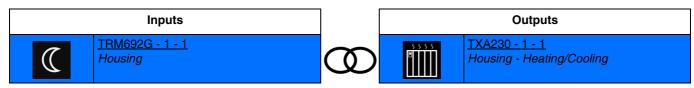
- Comfort mode: Activates Comfort mode for the heating.



Closing the input contact activates Comfort mode.

The effect of the command is cancelled by any other mode activation command.

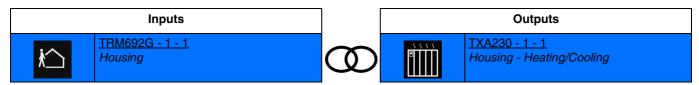
- Eco mode: Activates Eco mode for the heating.



Closing the input contact activates Eco mode.

The effect of the command is cancelled by any other mode activation command.

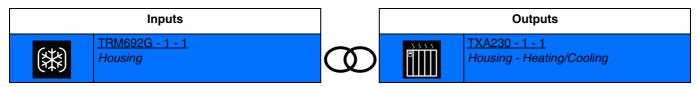
- Standby mode: Activates StandBy mode for the heating.



Closing the input contact activates StandBy mode.

The effect of the command is cancelled by any other mode activation command.

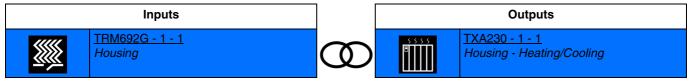
- Protection mode: Activates Protection mode for the heating.



Closing the input contact activates Protection mode.

The effect of the command is cancelled by any other mode activation command.

- Switch mode: Switches between 2 heating modes.



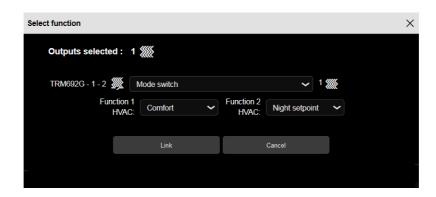
Closing the input contact activates heating mode 1.

Opening the input contact activates heating mode 2.

The effect of the command is cancelled by any other mode activation command.

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





Heating mode available: Auto, Comfort, Standby, Night setpoint and Freeze protection.

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

Below are the outputs which can also have these functions:

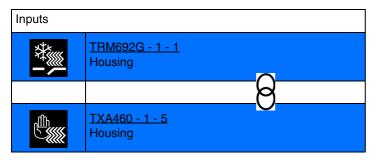
It is also possible to make a link between 2 inputs. Below are the inputs which can also have these functions:

\$ \$ \$ \$	HVAC control	Enables control of heating by zone.
	Setpoints heating	Enables the heating mode to be sent to the thermostat.

4.4.4.2 Heating/Cooling

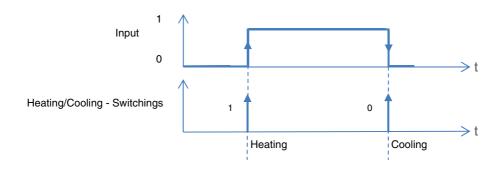
- Heating/Cooling: Enables switching between heating mode and cooling mode.

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



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





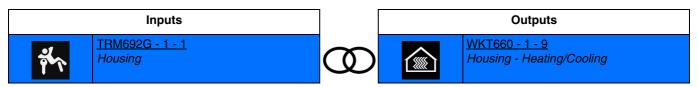
4.4.4.3 Priority

The Priority function forces a heating mode.

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

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

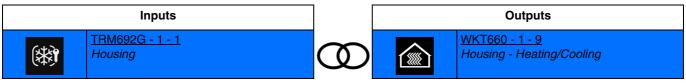
- Comfort priority: Activates and maintains Comfort mode.



Closing the contact activates and maintains Comfort mode.

Closing the contact cancels the priority and returns to the usually active mode.

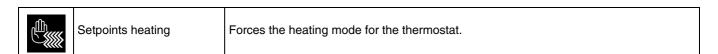
- Protection priority: Activates and maintains Protection mode.



Activating the input forces the output to OFF.

Successive activation switches between OFF priority and priority cancellation.

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

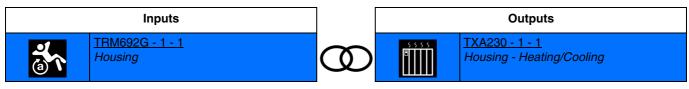




4.4.4.4 Heating automatic control

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

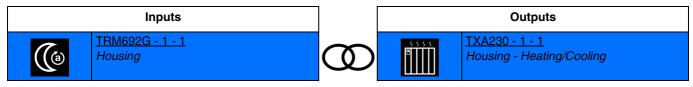
Comfort mode automatic control: Activates Comfort mode for heating using automatic control.



Closing the input contact activates Comfort mode.

The effect of the command is cancelled by any other mode activation command.

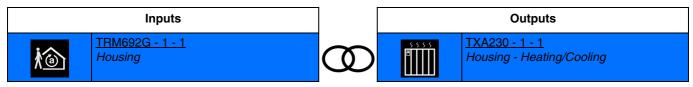
- Eco mode automatic control: Activates Eco mode for heating using automatic control.



Closing the input contact activates Eco mode.

The effect of the command is cancelled by any other mode activation command.

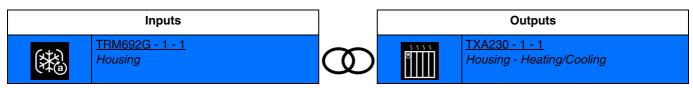
- Standby mode automatic control: Activates StandBy mode for the heating using automatic control.



Closing the input contact activates StandBy mode.

The effect of the command is cancelled by any other mode activation command.

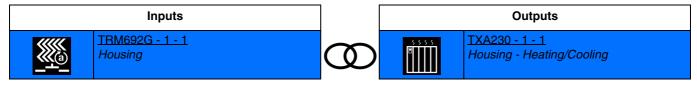
- Protection mode automatic control: Activates Protection mode for heating using automatic control.



Closing the input contact activates Protection mode.

The effect of the command is cancelled by any other mode activation command.

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



Closing the input contact activates heating mode 1.

Opening the input contact activates heating mode 2.

The effect of the command is cancelled by any other mode activation command.

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





Heating mode available: Auto, Comfort, Standby, Night setpoint and Freeze protection.

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

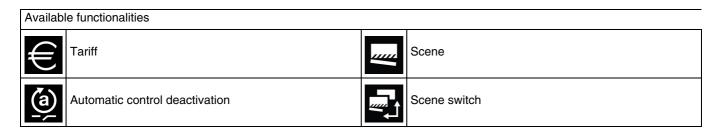
Below are the outputs which can also have these functions:

HVAC	Enables control of all heating zones.
------	---------------------------------------

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

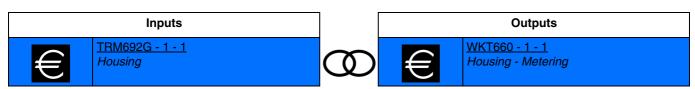
\$ \$ \$ \$	HVAC control	Enables control of heating by zone.
	Setpoints heating	Enables the heating mode to be sent to the thermostat.

4.4.4.5 Metering



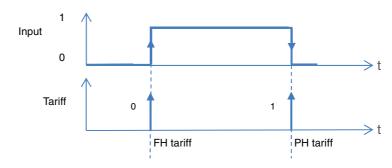
Note: For the function **Automatic control deactivation**, see: <u>Automatic control deactivation</u>. For the function **Scene** and **Switch scene**, see: <u>Scene</u>.

- Tariff: Sends information about Full Hour (FH) tariff or Part Hour (PH) tariff.



Closing the input contact sends the Full Hour (FH) tariff. Opening the input contact sends the Part Hour (PH) tariff.





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

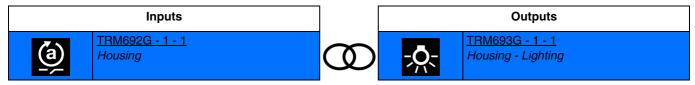
It is also possible to make a link between 2 inputs. Below are the inputs which can also have these functions:

Energy	Transmits tariff information to the metering input.
--------	---

4.4.5 Automatic control deactivation

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

- Automatic control deactivation: Deactivates automatic control.



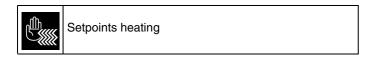
Closing the input contact deactivates automatic control. Opening the input contact activates automatic control.

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

Below is the list of outputs where deactivation of automatic control is possible.

-\ \' \	Lighting	Þ	Dimming
	Shutter/blind		Shading control

Deactivating automatic control is also possible on the input.

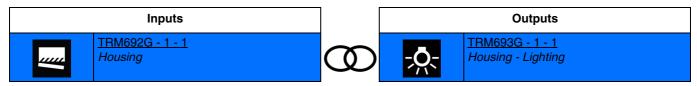




4.4.6 Scene

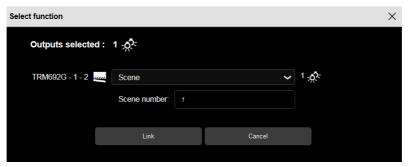
This function enables scenes to be saved or selected. These concern different types of output (lighting, blind, shutter, heating) to create ambiances or scenarios (leaving scenario, reading ambiance etc.).

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



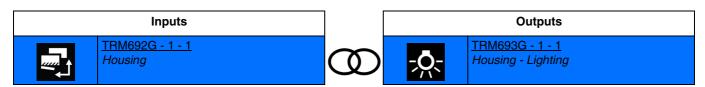
Activating the input activates the scene.

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



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

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



Closing the input contact activates scene 1. Closing the input contact activates scene 2.

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



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



Below is the list of outputs where the scene is possible.

- <u>`</u> Ö	Lighting	Į,	Dimming
	Shutter/blind	X	СМУ

The scene is also possible on the input.

Increase/decrease dimming (Only with TX511 and TXC511)	Setpoints heating
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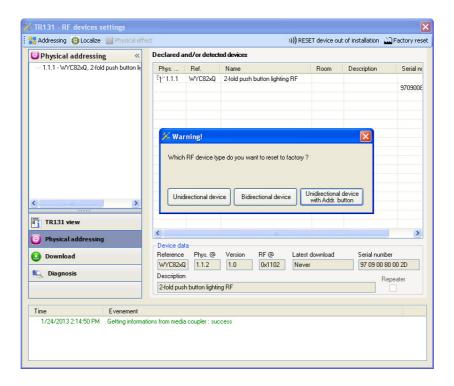


5. Factory reset

This function enables the device to be returned to its initial configuration (configuration when it came out of the factory). After a device reset, the device can be re-used in a new installation. A factory reset can be performed either directly on the product or by the media coupler plug-in. This last solution is recommended if the product is part of an installation configured by ETS, thus the device is erased from the project.

5.1 Factory reset by ETS via the media coupler

- For a product which is part of the installation (known by the media coupler): In the **Physical addressing** menu, select **Factory reset** and then follow the instructions which appear on the screen.
- For a product which is not part of the installation (unknown by the media coupler): In the menu **Physical addressing**, select **RESET device out of installation**, then **Unidirectional device with Addr. button**.



5.2 Factory reset on the product

It is always possible to perform the factory reset directly on the device.

Factory reset on the product:

- Do a long key press (> 10 seconds) on the cfg push button, release the button when the cfg LED blinks.
- Wait for the cfg LED to switch off, indicating that the factory reset has been completed.

Remark:

To re-use a product which has already been programmed in another installation, whatever the configuration mode, a factory reset must be performed on the product.



6. Characteristics

Device	TRM692G
Max. number of group addresses	83
Max. number of allocations	90

