:hager

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application software

	Product reference	Product designation	Application software ref	TP device ▬▬ Radio device («
	TXA304	Modular 4 input 230 V module		
	TXA306	Modular 6 input multi-voltage module		
	TXA310	Modular 10 input 230 V module		
	TXB302	2 flush-mounted inputs		
	TXB304	4 flush-mounted inputs		
	TXB322	2 flush-mounted inputs + 2-fold output LED		
	TXB344	4 flush-mounted inputs + 4-fold output LED		

Content

1. General

1.1 About this guide

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

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

1.2 Easy tool software appearance

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

2. General Description

2.1 Installation of the device

2.1.1 Overview presentation

2.1.1.1 Modular products

		Load

KNX

TXA304

Dimmers KNX

TXA306

ON/OFF - Shutter/blind

TXA310

Shutter/blind

Heating

Local server

TCP/IP

Touchscreen   Touchpad   Smartphone

2.1.1.2 Flush-mounted products

Load

KNX

TXB302 / TXB322

Dimmers
KNX

TXB304 / TXB344

ON/OFF Shutter/
blind

Shutter/blind

Heating

Local server

TCP/IP

Touchscreen   Touchpad   Smartphone
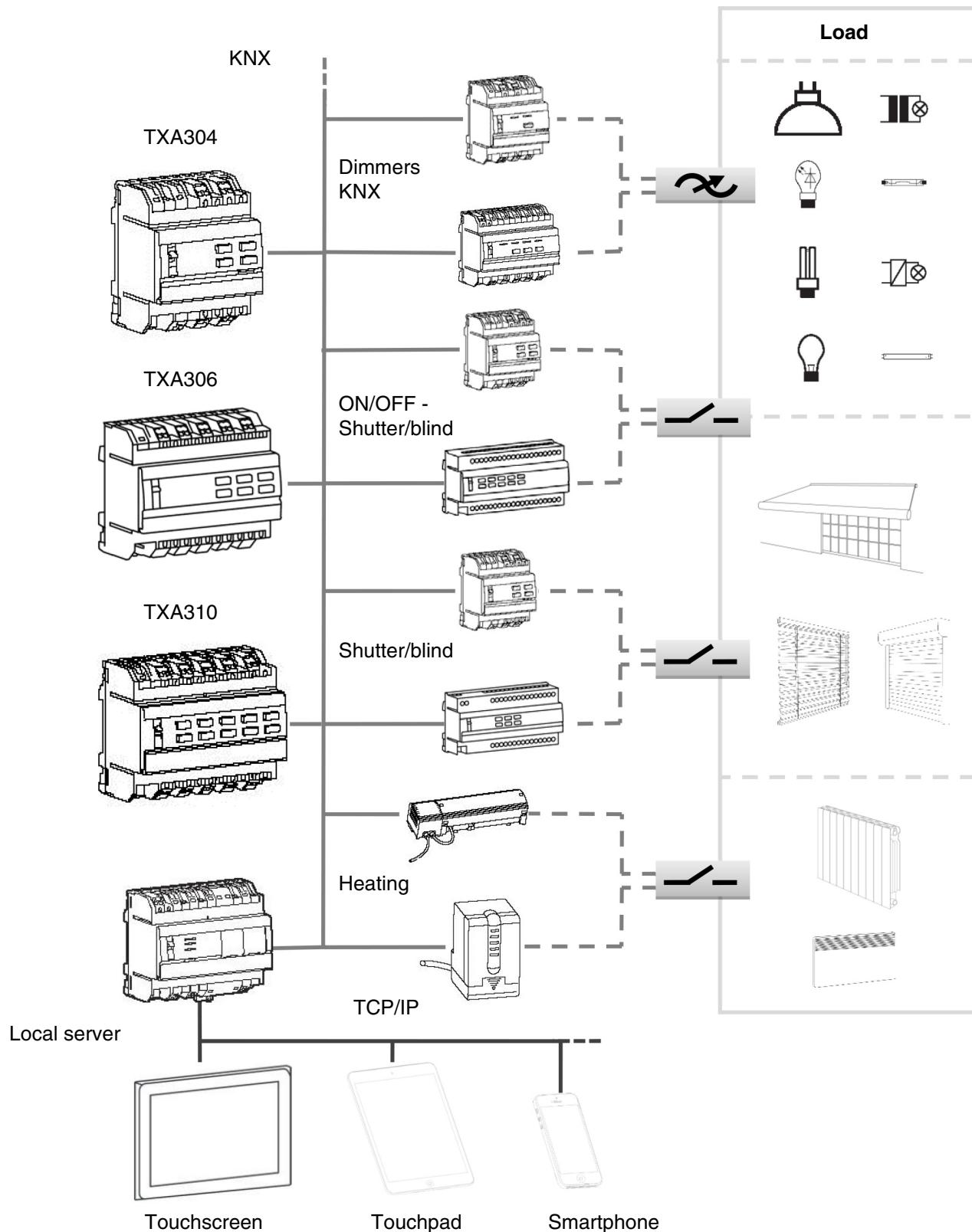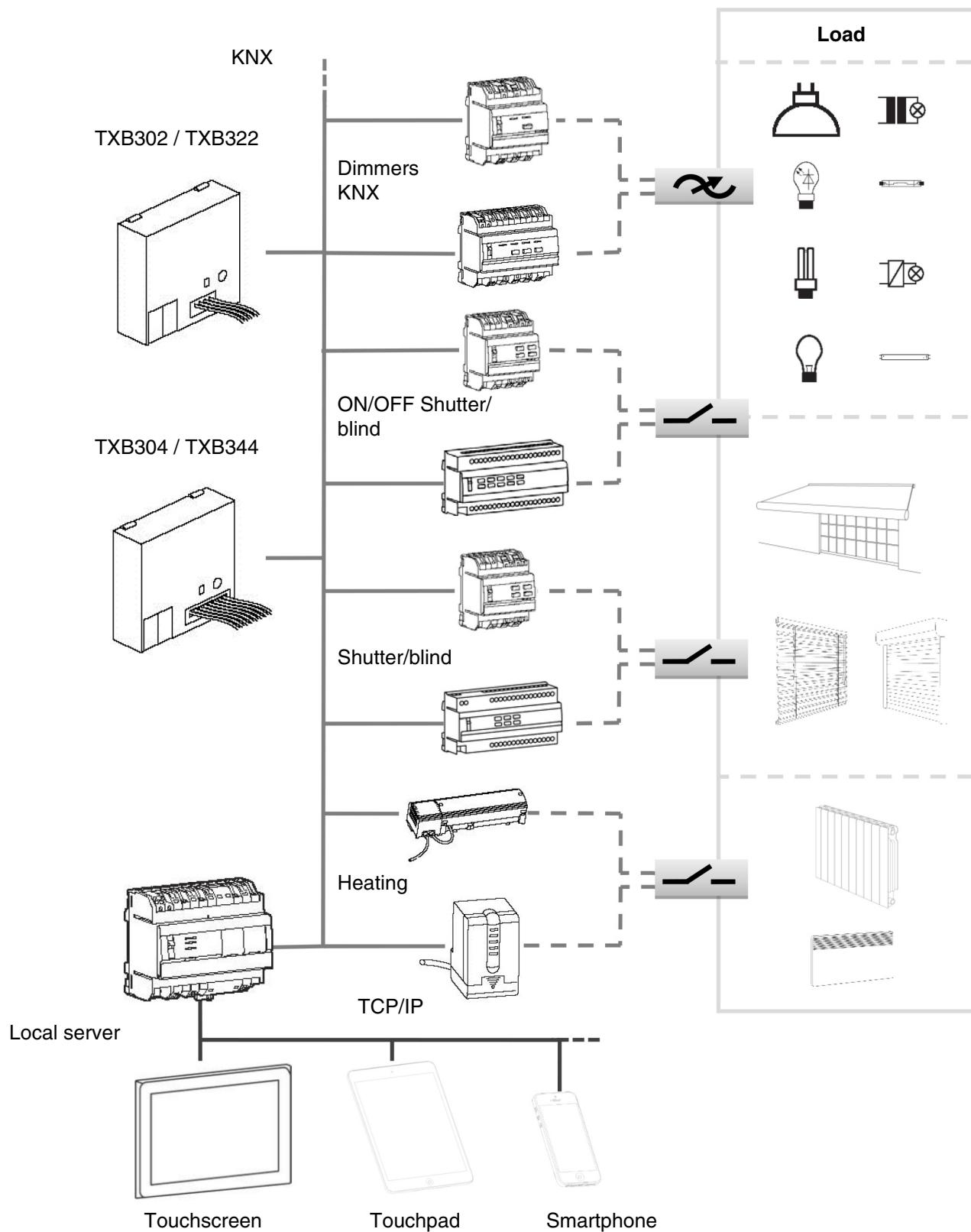
2.1.2 Description

2.1.2.1 Modular products

TXA304
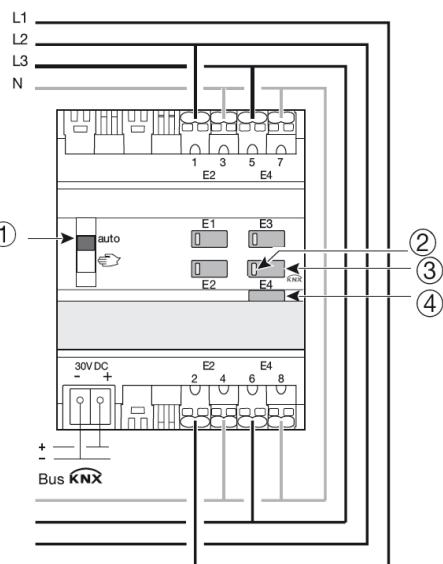
TXA306
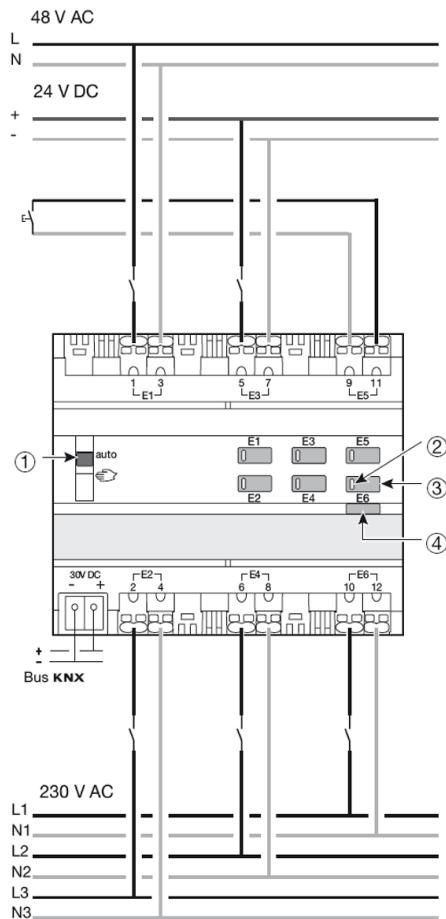
TXA310
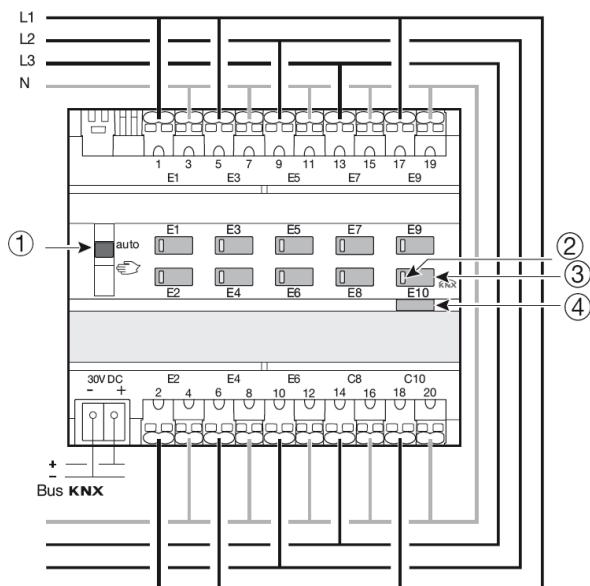
①   Switch

②   LED

③   Pushbutton

④   Physical addressing illuminated pushbutton.

![hager logo]

2.1.2.2 Flush-mounted products
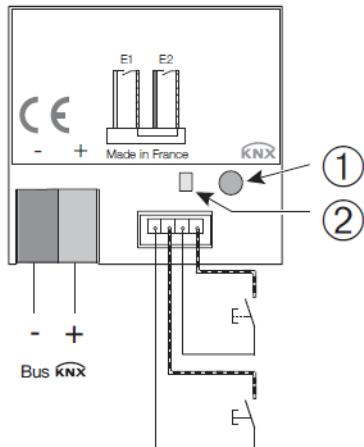
TXB302   TXB304
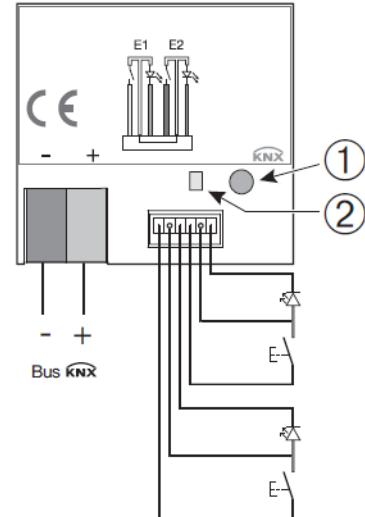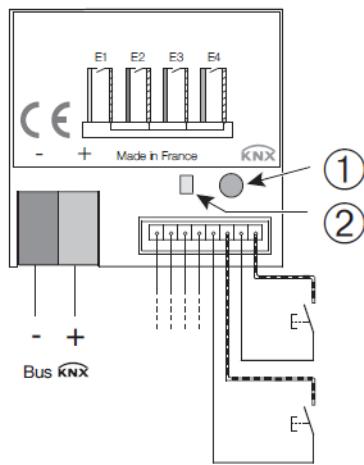
TXB322   TXB344
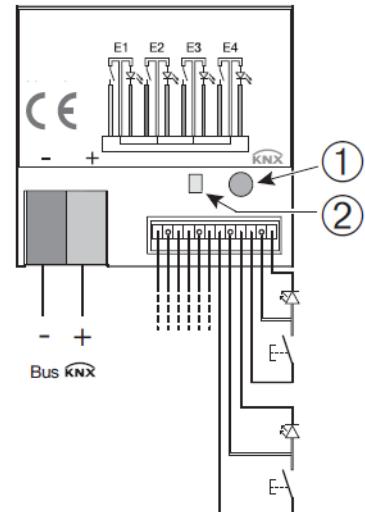
① • Physical addressing pushbutton
② • Physical addressing indicator

2.1.3 Physical addressing

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

Light on = bus connected and ready for physical addressing.

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

2.2 Function modules of the application

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

The most important functions are:

■ Toggle switch

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

■ ON/OFF

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

■ Timer

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

■ Shutter/blind

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

■ Dimming

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

■ Heating

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

■ Priority

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

■ Scene

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

■ Alarms

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

■ Choice of circuits to be displayed on the LED outputs ((TXB322 and TXB344 only))

The LED outputs (status indication) are used to control the switching on of conventional indicator LEDs. This function makes it possible to choose the circuit shown for each LED output:
• The circuit controlled by the corresponding input,
• Any other installation circuit.

3. Programming by Easy Tool

3.1 Product overview

■ **TXA304: Modular 4 input 230 V module**

Product view:

View of channels:

4 inputs
TXA304 - 1 - 1 *Housing*
TXA304 - 1 - 2 *Housing*
TXA304 - 1 - 3 *Housing*
TXA304 - 1 - 4 *Housing*

0 output

■ **TXA306: Modular 6 input multi-voltage module**

Product view:

View of channels:

6 inputs	
	TXA306 - 1 - 1 *Housing*
	TXA306 - 1 - 2 *Housing*
	TXA306 - 1 - 3 *Housing*
	TXA306 - 1 - 4 *Housing*
	TXA306 - 1 - 5 *Housing*
	TXA306 - 1 - 6 *Housing*

0 output

■ **TXA310: Modular 10 input 230 V module**

Product view:

View of channels:

10 inputs	
	TXA310 - 1 - 1 *Housing*
	TXA310 - 1 - 2 *Housing*
	TXA310 - 1 - 3 *Housing*
	TXA310 - 1 - 4 *Housing*
	TXA310 - 1 - 5 *Housing*
	TXA310 - 1 - 6 *Housing*
	TXA310 - 1 - 7 *Housing*
	TXA310 - 1 - 8 *Housing*
	TXA310 - 1 - 9 *Housing*
	TXA310 - 1 - 10 *Housing*

0 output

■ **TXB302: Flush-mounted 2 input module**

Product view:

View of channels:

2 inputs	
	TXB302 - 1 - 1 *Housing*
	TXB302 - 1 - 2 *Housing*

0 output

■ **TXB304: Flush-mounted 4 input module**
Product view:

View of channels:

4 inputs		0 output
	TXB304 - 1 - 1 *Housing*	
	TXB304 - 1 - 2 *Housing*	
	TXB304 - 1 - 3 *Housing*	
	TXB304 - 1 - 4 *Housing*	

■ **TXB322: 2 flush-mounted inputs + 2-fold output LED**
Product view:

View of channels:

2 inputs		2-fold output	
	TXB322 - 1 - 1 *Housing*		TXB322 - 1 - 1 *Housing - Common function*
	TXB322 - 1 - 2 *Housing*		TXB322 - 1 - 2 *Housing - Common function*

■ TXB344: 4 flush-mounted inputs + 4-fold output LED

Product view:

Product	▲	⇄ 4 Inputs	⇆ 4 Outputs

Name:	*TXB344 - 4 In 4 out LED*
Use:	
Place:	House ⌄
Electrical tracking:	*TXB344 - 1*
ⓘ Product :	**TXB344** *4 In 4 out LED*

1	?	TXB344 - 1 - 1 *House*	▶
2	?	TXB344 - 1 - 2 *House*	▶
3	?	TXB344 - 1 - 3 *House*	▶
4	?	TXB344 - 1 - 4 *House*	▶

View of channels:

4 inputs	
?	TXB344 - 1 - 1 *Housing*
?	TXB344 - 1 - 2 *Housing*
?	TXB344 - 1 - 3 *Housing*
?	TXB344 - 1 - 4 *Housing*

4-fold output	
▷	TXB344 - 1 - 1 *Housing - Common function*
▷	TXB344 - 1 - 2 *Housing - Common function*
▷	TXB344 - 1 - 3 *Housing - Common function*
▷	TXB344 - 1 - 4 *Housing - Common function*

■ Available functionalities: Input

Lighting			
☼	ON	🔑	Priority ON
◐	OFF	🔑	Priority OFF
⏻	ON/OFF	☼	General ON
⎓	Toggle switch	◐	General OFF
⏱	Timer	⏻	General ON/OFF
		▦	Scene

Dimming		
Increase dimming/ON		Increase/decrease dimming
Decrease dimming/OFF		Scene

Shutter/blind		
Blinds up		Priority up
Blinds down		Priority down
Toggle switch up/down		Wind alarm
Up/down		Rain alarm
Down/up		General up
Switch up		General down
Down switch		General up/down
		Scene

Heating/Cooling		
Comfort mode		Comfort/standby mode
Eco mode		Protection/Auto mode
Standby mode		Comfort priority
Protection mode		Protection priority
Auto mode		Timed comfort
Comfort/eco mode		Heating/cooling off
		Scene

3.2 Input operation mode

3.2.1 Lighting

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

Available functionalities			
	ON		Priority ON
	OFF		Priority OFF
	ON/OFF		General ON
	Toggle switch		General OFF
	Timer		General ON/OFF
			Scene

*Note: For the **scene** function, see: Scene.*

- **ON**: Switches the lighting circuit on.
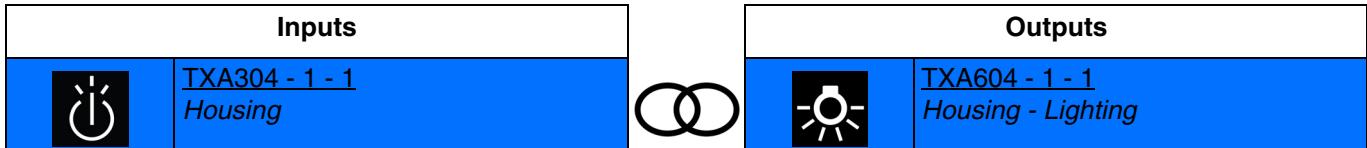
Inputs			Outputs	
	TXA304 - 1 - 1 *Housing*	⬭⬭		TXA604 - 1 - 1 *Housing - Lighting*

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

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

Inputs			Outputs	
	TXA304 - 1 - 1 *Housing*	⬭⬭		TXA604 - 1 - 1 *Housing - Lighting*
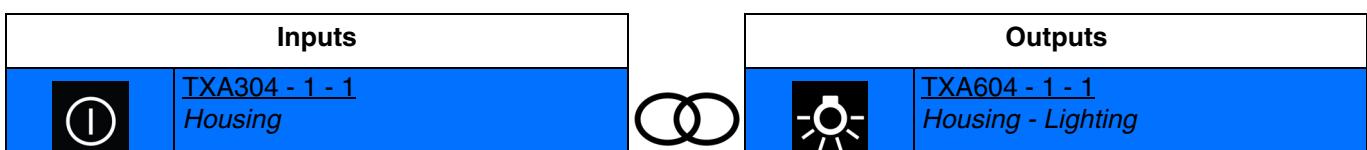
Activating the input switches off the light. Successive activation keeps the light off.

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

Inputs			Outputs	
	TXA304 - 1 - 1 *Housing*	⊙⊙		TXA604 - 1 - 1 *Housing - Lighting*

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

Below are the outputs which can also have these functions:

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

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

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

3.2.1.1 Toggle switch

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

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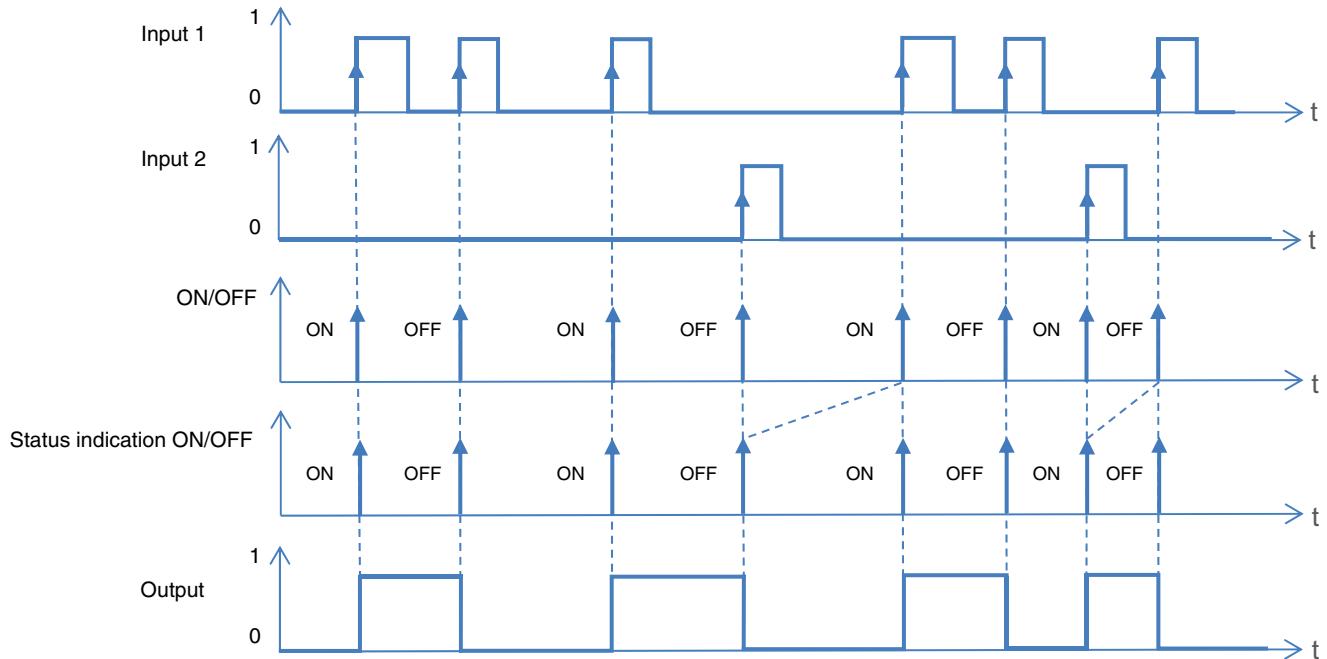
- **Toggle switch**: Inverses the lighting circuit status.

Inputs		Outputs	
	TXA304 - 1 - 1 *Housing*		TXA604 - 1 - 1 *Housing - Lighting*

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

Below are the outputs which can also have these functions:

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

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

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

3.2.1.2 Timer

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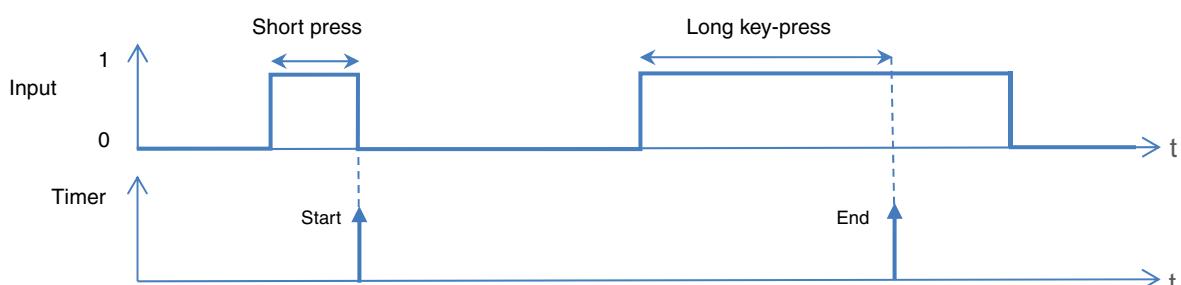
The Timer function is used to switch on a lighting circuit for a programmable period.

Inputs			Outputs	
	TXA304 - 1 - 1 *Housing*			TXA604 - 1 - 1 *Housing - Lighting*
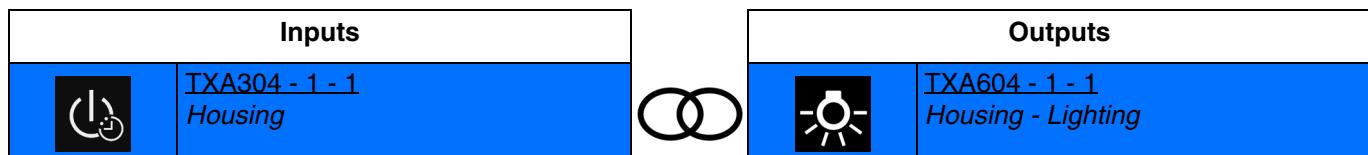
Activating the input by a short press <1 s switches on the light for a length of time.

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

Note: At the time of connection, it is possible to define the timer duration. This duration is defined on the output product.
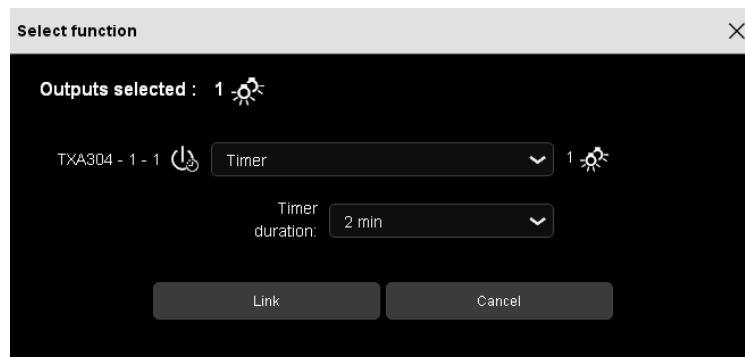
Below are the outputs which can also have these functions:

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

3.2.1.3 Priority

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

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

Inputs		Outputs	
	TXA304 - 1 - 1 *Housing*		TXA604 - 1 - 1 *Housing - Lighting*
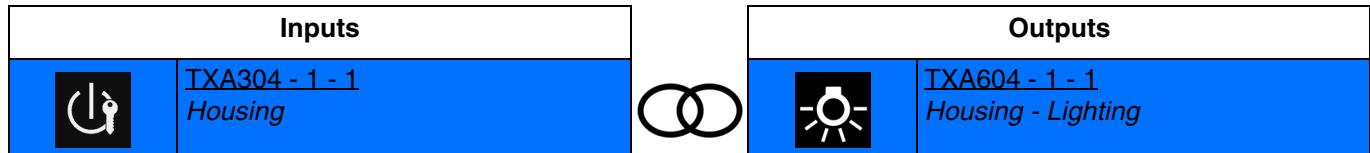
Activating the input forces the output to ON.
Successive activation switches between ON priority and priority cancellation.

- **Priority OFF**: Allows forcing and keeping the lighting circuit off.
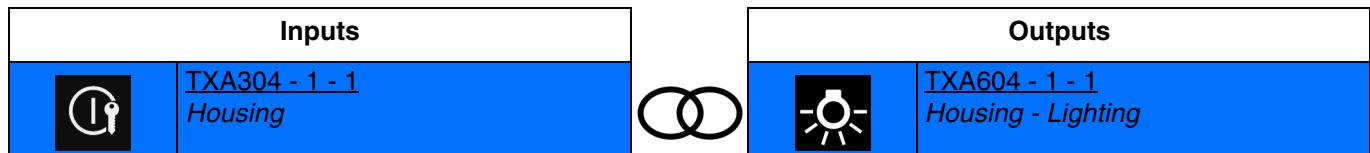
Inputs		Outputs	
	TXA304 - 1 - 1 *Housing*		TXA604 - 1 - 1 *Housing - Lighting*

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

Below are the outputs which can also have these functions:

	Dimming	Forces and keeps the lighting circuit on or off.

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

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

3.2.1.4 General ON/OFF

The general ON/OFF function switches the lighting circuit assembly on or off. Unlike the ON/OFF function, it does not transmit the state feedback of the lighting control.

It is generally used with LED push buttons to prevent a number of links becoming saturated. It is recommended that you use this function for a number of lighting circuits greater than 20.

- General ON: Switches on a lighting circuit assembly.
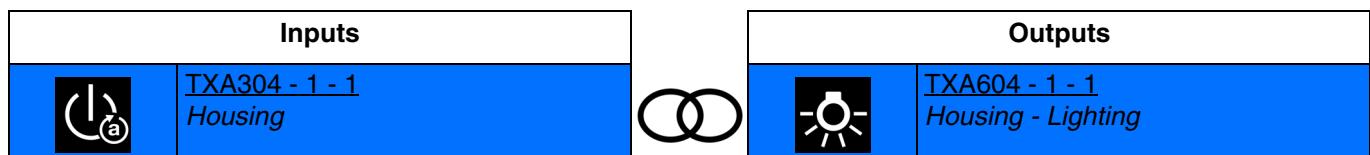
Inputs		Outputs	
	TXA304 - 1 - 1 *Housing*		TXA604 - 1 - 1 *Housing - Lighting*

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

- General OFF: Switches off a lighting circuit assembly.

Inputs		Outputs	
	TXA304 - 1 - 1 *Housing*		TXA604 - 1 - 1 *Housing - Lighting*
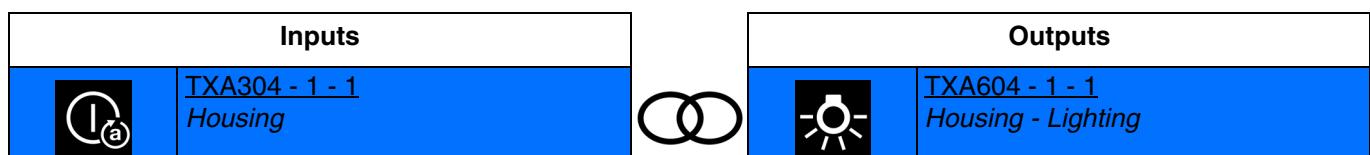
Activating the input switches off the light. Successive activation keeps the light off.

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

Inputs		Outputs	
	TXA304 - 1 - 1 *Housing*		TXA604 - 1 - 1 *Housing - Lighting*

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

Below are the outputs which can also have these functions:

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

3.2.2 Relative variation

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.

Dimming			
	Increase dimming/ON		Increase/decrease dimming
	Decrease dimming/OFF		Scene

*Note: For the **scene** function, see: Scene.*

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

Inputs			Outputs
	TXA304 - 1 - 1 *Housing*		TXA663 - 1 - 1 *Housing - Dimming*
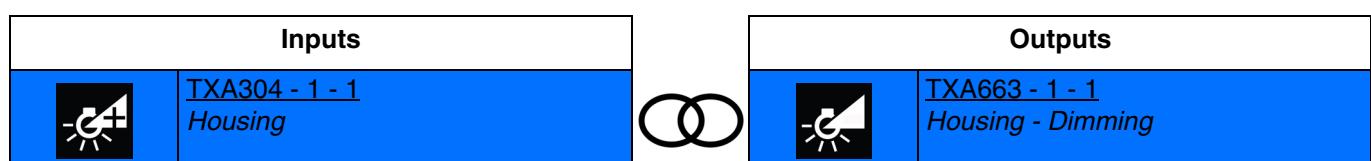
Activating the input by short presses switches on the light to the last level memorised.
Activating the input by long press increases the level of brightness.

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

Inputs			Outputs
	TXA304 - 1 - 1 *Housing*		TXA663 - 1 - 1 *Housing - Dimming*
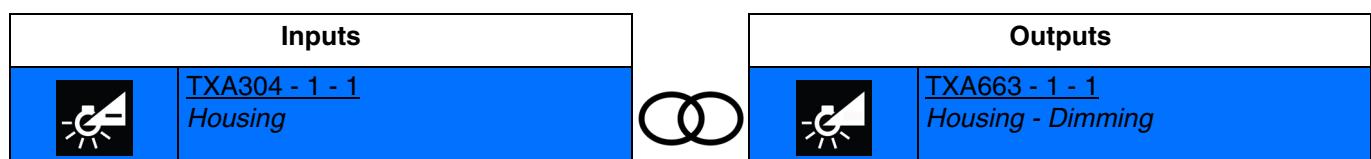
Activating the input by a short press switches off the light.
Activating the input by a long press decreases the level of brightness.

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

Inputs			Outputs
	TXA304 - 1 - 1 *Housing*		TXA663 - 1 - 1 *Housing - Dimming*
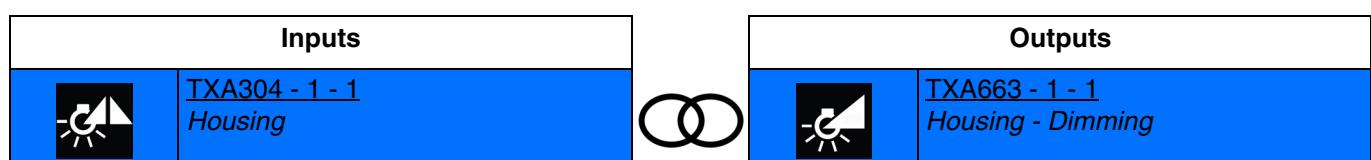
Activating the input by a short press switches between Switching the light on to the last level memorised and Switching the light off.
Activating the input by a long press increases or decreases the level of brightness.

Below are the outputs which can also have these functions:

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

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

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

3.2.3 Shutter/blind

Available functionalities			
	Blinds up		Priority up
	Blinds down		Priority down
	Toggle switch up/down		Wind alarm
	Up/down		Rain alarm
	Down/up		General up
	Switch up		General down
	Down switch		General up/down
			Scene

*Note: For the **scene** function, see: Scene.*

3.2.3.1 Up/down

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

Inputs			Outputs	
▨▲	TXA304 - 1 - 1 *Housing*	⬮⬮	▤	TXA604 - 1 - 1 *Housing - Shutter*
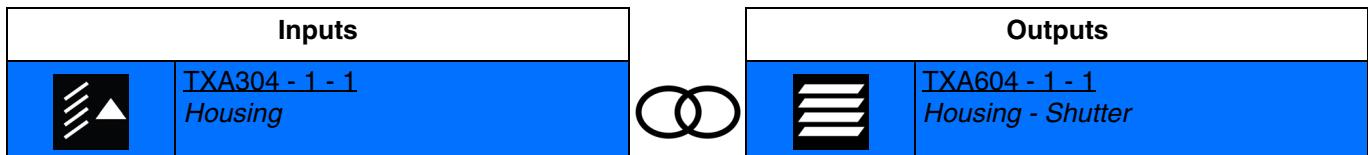
Activating the input by a short press briefly closes the Up output contact (function direction of a blind's slats). Activating the input by a long press closes the Up output contact for a length of time (function raising a rolling shutter or a blind).

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.

Inputs			Outputs	
▨▼	TXA304 - 1 - 1 *Housing*	⬮⬮	▤	TXA604 - 1 - 1 *Housing - Shutter*
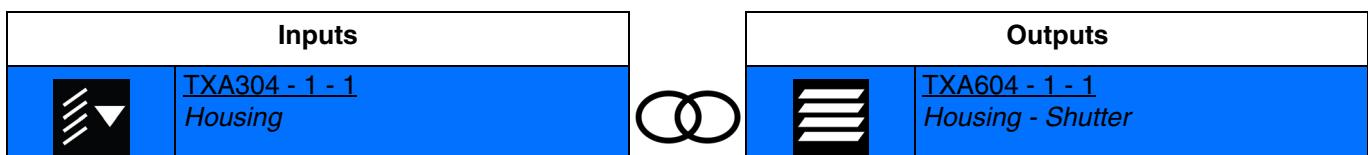
Activating the input by a short press briefly closes the Down output contact (function direction of a blind's slats). Activating the input by a long press closes the Down output contact for a length of time (function lowering a rolling shutter or a blind).

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

- **Toggle switch up/down**: Used to raise, lower or stop a rolling shutter or blind using a single push-button.

Inputs			Outputs	
↑↓	TXA304 - 1 - 1 *Housing*	⬮⬮	▤	TXA604 - 1 - 1 *Housing - Shutter*
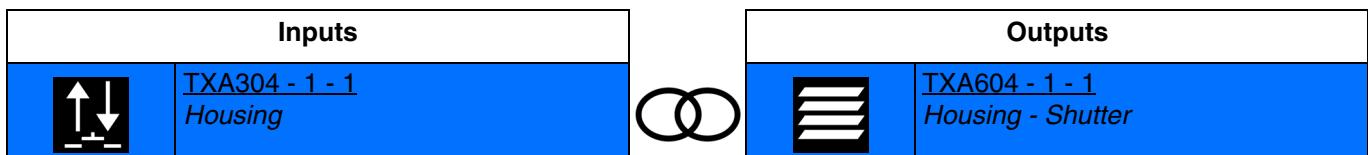
Successive presses of the push-button allows the function to be changed according to the following sequence:
1st press: Down (Delayed closure of the Down output)
2nd press: Stop (Opening of output contacts)
3rd press: Up (Delayed closure of the Up output)
4th press: Stop (Opening of output contacts)

The timer modes and durations can be configured at the shutter output product level.

Note: It is not possible to control the tilting of the slats.

- **Up/down**: Allows to raise or lower a rolling shutter or a blind using a switch.
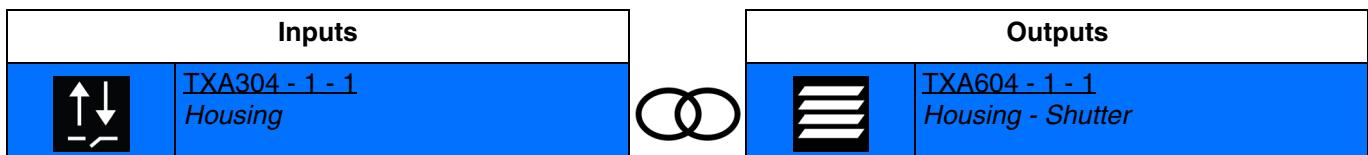
| Inputs		Outputs
TXA304 - 1 - 1 *Housing*		TXA604 - 1 - 1 *Housing - Shutter*

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.
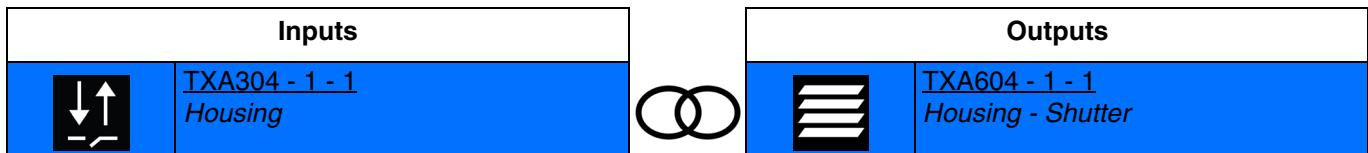
Inputs		Outputs
TXA304 - 1 - 1 *Housing*		TXA604 - 1 - 1 *Housing - Shutter*

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

- **Switch up**: Allows to raise a rolling shutter or a blind using a switch.
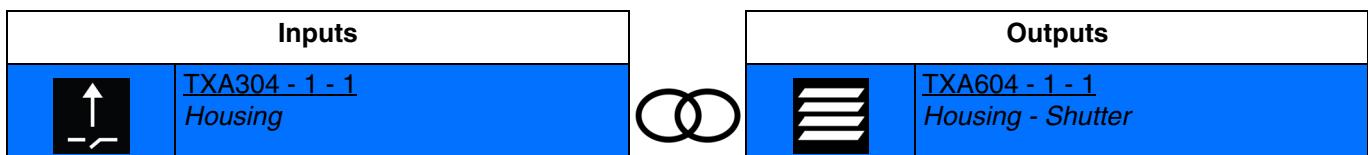
Inputs		Outputs
TXA304 - 1 - 1 *Housing*		TXA604 - 1 - 1 *Housing - Shutter*

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

- **Down switch**: Allows to lower a rolling shutter or a blind using a switch.
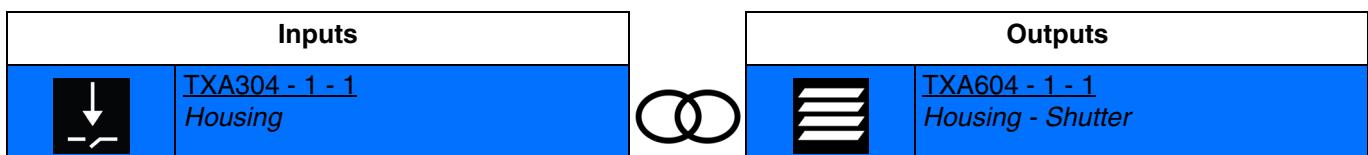
Inputs		Outputs
TXA304 - 1 - 1 *Housing*		TXA604 - 1 - 1 *Housing - Shutter*

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

3.2.3.2 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.

Inputs		Outputs
TXA304 - 1 - 1 *Housing*	⬤⬤	**TXA604 - 1 - 1** *Housing - Shutter*
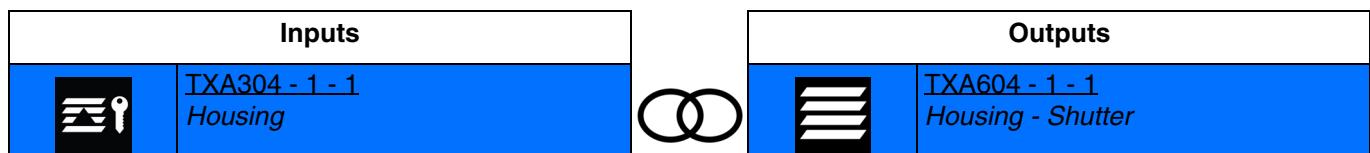
Closing input contact: activation priority and delayed closing of the raise output contact.
Opening input contact: end of the priority.

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

Inputs		Outputs
TXA304 - 1 - 1 *Housing*	⬤⬤	**TXA604 - 1 - 1** *Housing - Shutter*
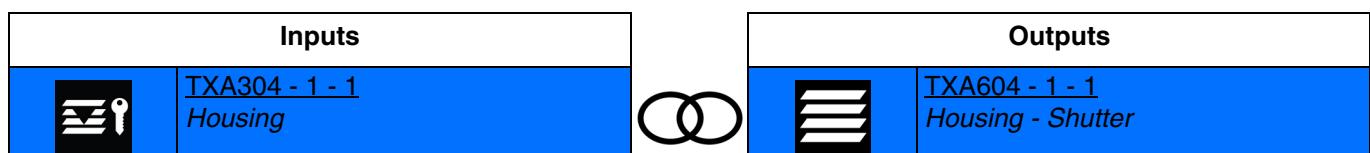
Closing input contact: activation of priority and delayed closing of the lowering output contact.
Opening input contact: end of the priority.

3.2.3.3 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.

Inputs		Outputs
TXA304 - 1 - 1 *Housing*	⬤⬤	**TXA604 - 1 - 1** *Housing - Shutter*
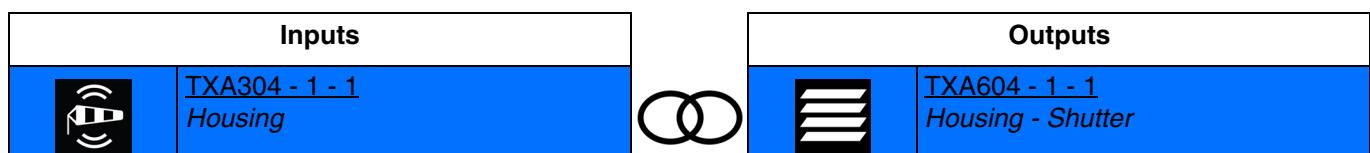
Closing input contact: wind alarm activation.
Opening input contact: alarm end.

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

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

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

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

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

Inputs		Outputs	
	TXA304 - 1 - 1 *Housing*		TXA604 - 1 - 1 *Housing - Shutter*
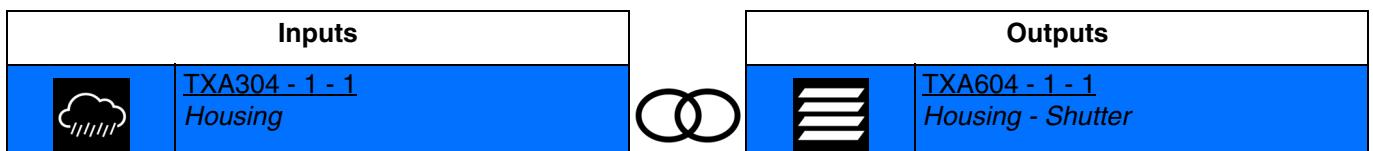
Closing input contact: rain alarm activation.
Opening input contact: alarm end.

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

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

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

3.2.3.4 General up/down

The **general up/down** function is used to open or close all of the shutters or blinds. Unlike the **up/down** function, it does not transmit the status feedback from the shutter or blind control.
It is generally used with LED push buttons to prevent a number of links becoming saturated. It is recommended to use this function when there are more than 20 shutters/blinds.

- **General up**: Used to raise or stop a rolling shutter or blind unit.
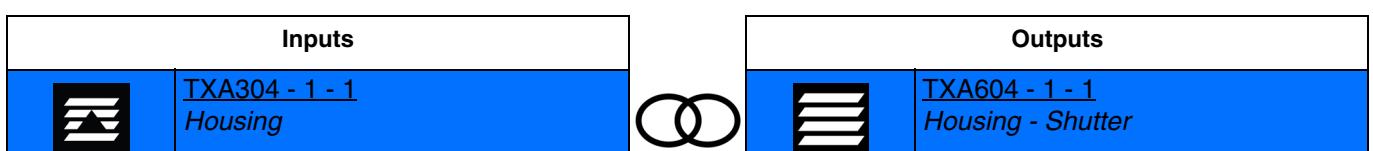
Inputs		Outputs	
	TXA304 - 1 - 1 *Housing*		TXA604 - 1 - 1 *Housing - Shutter*

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

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

- **General down**: Used to lower or stop a rolling shutter or blind unit.
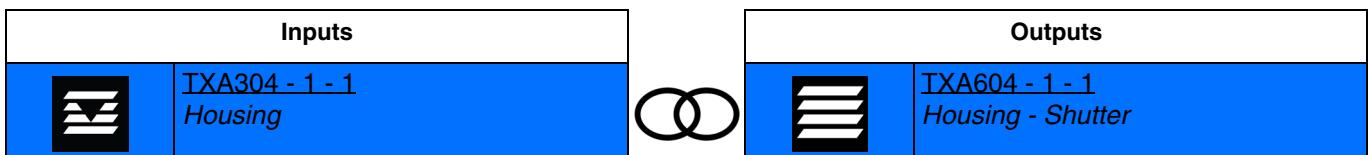
Inputs			Outputs	
	TXA304 - 1 - 1 *Housing*	⬭⬭		TXA604 - 1 - 1 *Housing - Shutter*

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

*Note: If a brief input contact occurs during the delay, the output contact opens (Stop Function).*

- **General up/down**: Used to raise or lower a rolling shutter or blind via a switch.
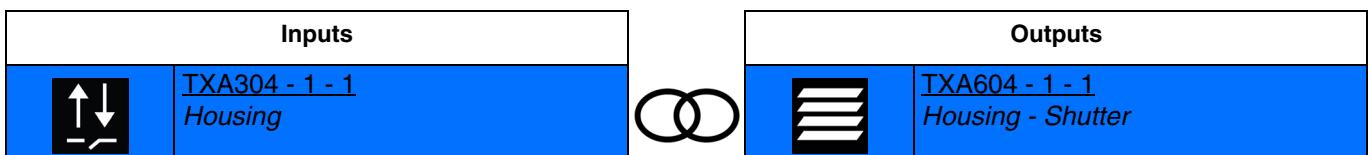
Inputs			Outputs	
	TXA304 - 1 - 1 *Housing*	⬭⬭		TXA604 - 1 - 1 *Housing - Shutter*

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

3.2.4 Heating/Cooling

Available functionalities			
	Comfort mode		Comfort/standby mode
	Eco mode		Protection/Auto mode
	Standby mode		Comfort priority
	Protection mode		Protection priority
	Auto mode		Timed comfort
	Comfort/eco mode		Heating/cooling off
			Scene

*Note: For the **scene** function, see: Scene.*

3.2.4.1 Setpoint selection

The heating command operates according to a heating instruction.

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

Inputs		Outputs	
	TXA304 - 1 - 1 *Housing*		TXA230 - 1 - 1 *Housing - Heating/Cooling*
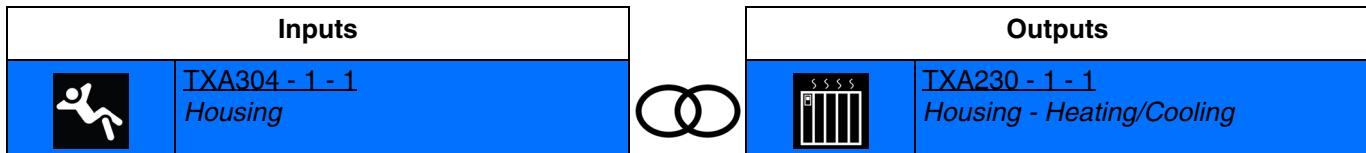
Closing the input contact activates Comfort mode.
The effect of the command is cancelled by any other mode activation command.

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

Inputs		Outputs	
	TXA304 - 1 - 1 *Housing*		TXA230 - 1 - 1 *Housing - Heating/Cooling*
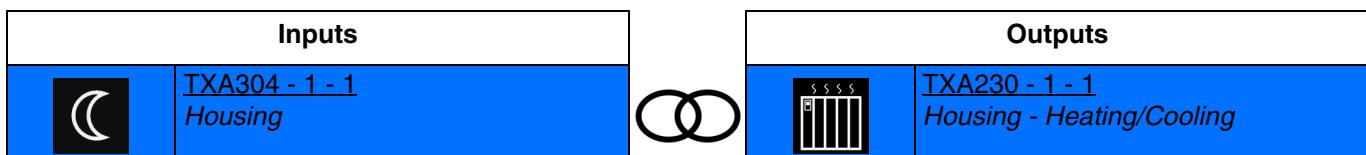
Closing the input contact activates Eco mode.
The effect of the command is cancelled by any other mode activation command.

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

Inputs		Outputs	
	TXA304 - 1 - 1 *Housing*		TXA230 - 1 - 1 *Housing - Heating/Cooling*
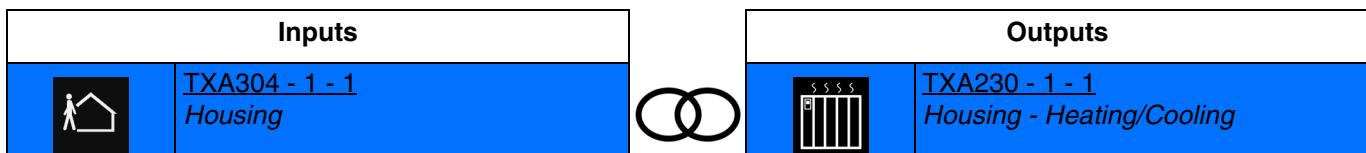
Closing the input contact activates StandBy mode.
The effect of the command is cancelled by any other mode activation command.

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

Inputs		Outputs	
	TXA304 - 1 - 1 *Housing*		TXA230 - 1 - 1 *Housing - Heating/Cooling*
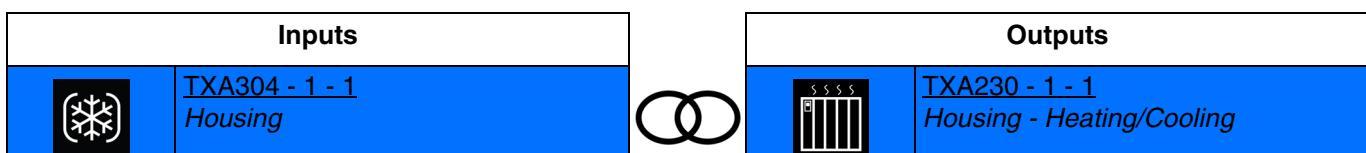
Closing the input contact activates Protection mode.
The effect of the command is cancelled by any other mode activation command.

- **Auto mode**: Used to activate the Auto mode for the heating.
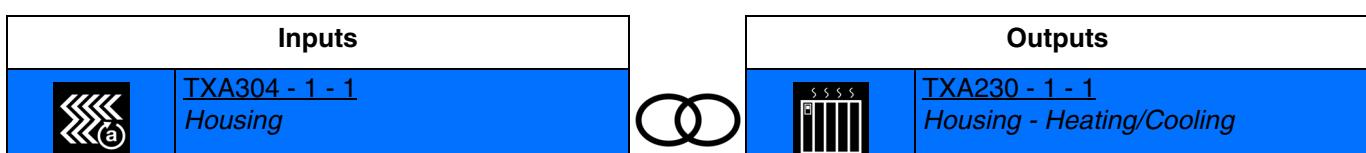
Inputs		Outputs	
	TXA304 - 1 - 1 *Housing*		TXA230 - 1 - 1 *Housing - Heating/Cooling*

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

- **Comfort/eco mode**: Used to toggle between Comfort mode and Eco mode for the heating.
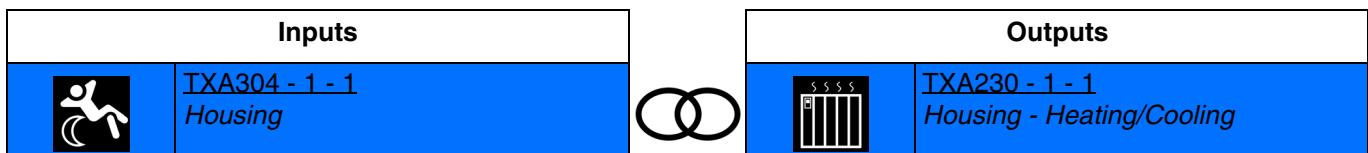
Inputs			Outputs	
	TXA304 - 1 - 1 *Housing*	⬭⬭		TXA230 - 1 - 1 *Housing - Heating/Cooling*

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

- **Comfort/standby mode**: Used to toggle between Confort mode and Standby mode for the heating.
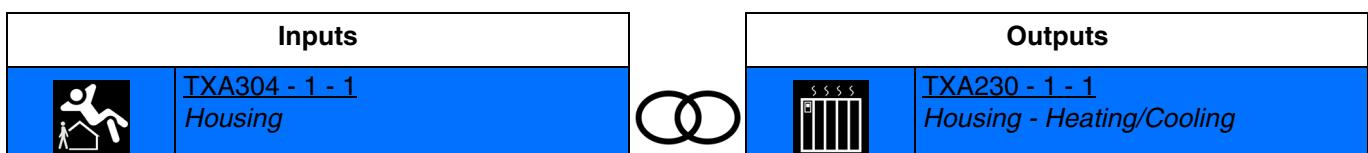
| Inputs			Outputs	
	TXA304 - 1 - 1 *Housing*	⬭⬭		TXA230 - 1 - 1 *Housing - Heating/Cooling*

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

- **Protection/Auto mode**: Used to toggle between the Protection mode and the Auto mode for the heating.

Inputs			Outputs	
	TXA304 - 1 - 1 *Housing*	⬭⬭		TXA230 - 1 - 1 *Housing - Heating/Cooling*
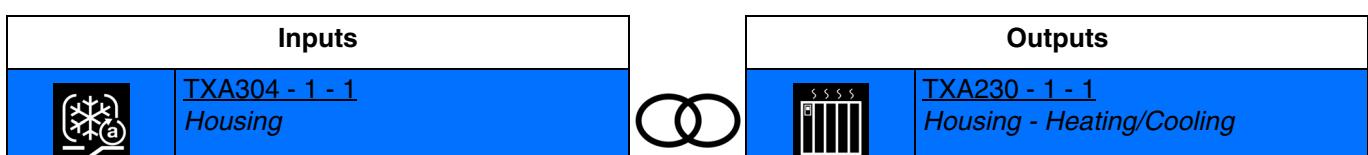
Closing the input contact activates Protection mode.
Opening the input contact activates the Auto mode.
The effect of the command is cancelled by any other mode activation command.

Below are the outputs which can also have these functions:

	HVAC	Enables control of all heating zones.

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

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

3.2.4.2 Priority

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

- **Comfort priority**: Activates and maintains Comfort mode.

Inputs		Outputs	
🖼	TXA304 - 1 - 1 *Housing*	🏠	WKT660 - 1 - 9 *Housing - Heating/Cooling*
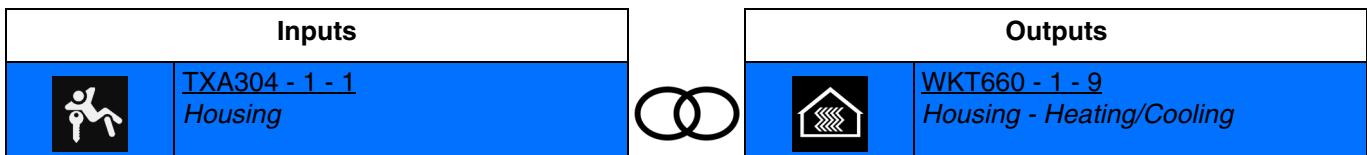
Closing the contact activates and maintains Comfort mode.
Closing the contact cancels the priority and returns to the usually active mode.

- **Protection priority**: Activates and maintains Protection mode.
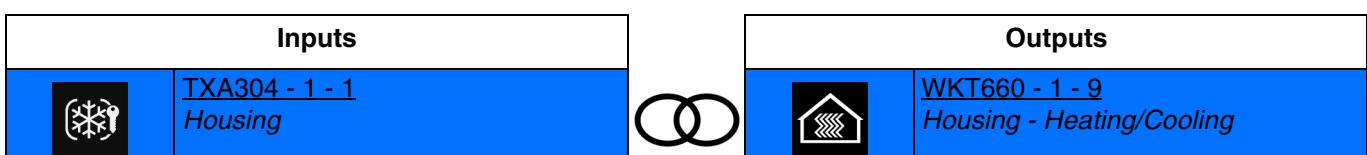
Inputs		Outputs	
❄	TXA304 - 1 - 1 *Housing*	🏠	WKT660 - 1 - 9 *Housing - Heating/Cooling*

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

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

✋	Setpoints heating	Forces the heating mode for the thermostat.

3.2.4.3 Timed comfort

The **timed-controlled comfort** function activates the comfort mode at the thermostat level for a fixed period of time.
This period of time, defined at the thermostat level, is set to 1 h.
A short press on the push-button restarts the timer. The timer can be interrupted before the end with a long press.
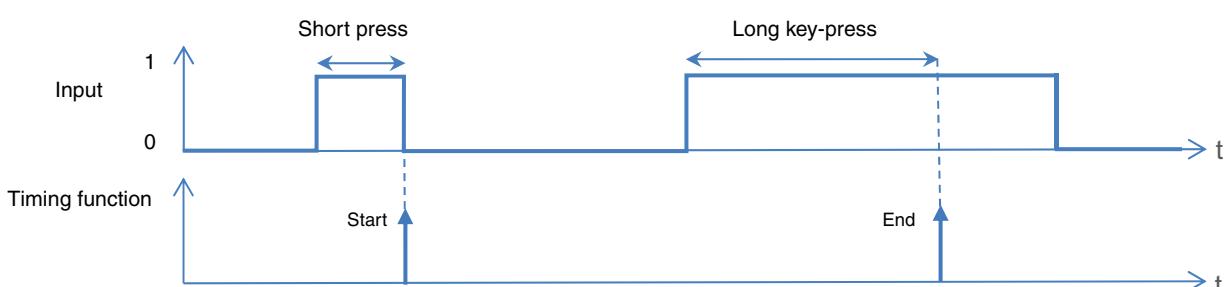
To configure this function, the link is established between 2 inputs:

| Inputs	
	<u>TXA304 - 1 - 1</u> *Housing*
	<u>WYT62x - 1 - 5</u> *Housing*

Activating the input with a short press activates the Comfort mode for a fixed period of time. When the timer is active, activating the input with a long press results in a return to the normally active mode.
At the end of the time delay, the system returns to the normally active mode.
The effect of the command is cancelled by any other mode activation command.

3.2.4.4 Heating/cooling off

The **heating-cooling stop** function activates the protection mode for the heating and cooling according to the mode used.

To configure this function, the link is established between 2 inputs:

Inputs	
	<u>TXA304 - 1 - 1</u> *Housing*
	<u>WYT62x - 1 - 5</u> *Housing*

Closing the input contact activates the protection mode whether in heating or cooling mode.
Opening the input contact results in a return to the normally active mode.

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

3.2.4.5 Scene

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

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

Inputs		Outputs	
	TXA304 - 1 - 1 _Housing_		TXA604 - 1 - 1 _Housing - Lighting_
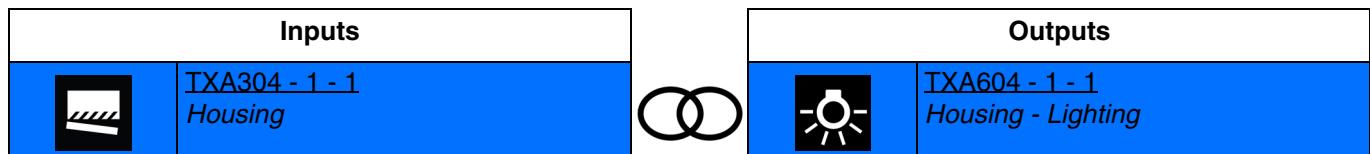
Activating the input activates the scene.

Note: At the time the connection is made, the scene number must be defined for the closing input contact.
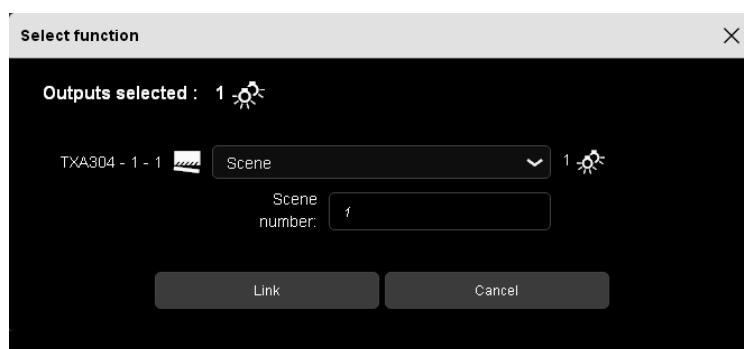
Note: By default, the input operates like an NO contact (Normally open). If the parameter **Inverted** is validated, the input operates like an NC contact (Normally closed).

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

	Lighting		Dimming
	Shutter/blind		CMV

The scene is also possible on the input.

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

3.3 Configuring links for LED output status indications

((TXB322 and TXB344 only))
The LED outputs (status indication) are used to control the switching on of conventional indicator LEDs.
This function makes it possible to choose the circuit shown for each LED output:
- The circuit controlled by the corresponding input,
- Any other installation circuit.

The functions bellow enable links between the LED inputs and outputs as well as links with the usual outputs.
- **ON**: Lights up the output LED indicating the switching on of the lighting circuit.
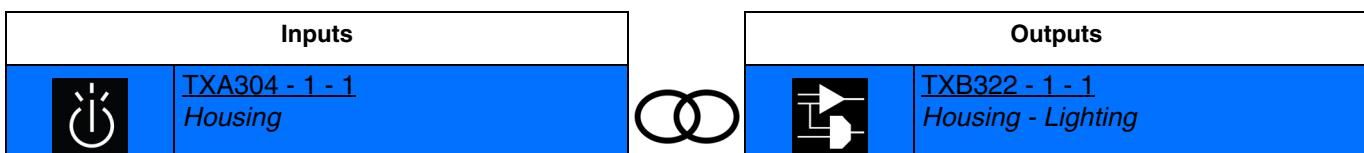
Inputs	Outputs
TXA304 - 1 - 1 *Housing*	TXB322 - 1 - 1 *Housing - Lighting*

Closing input contact: The output LED lights up indicating the switching on of the lighting circuit.
Opening input contact: No action.

- **OFF**: Lights up the output LED indicating the switching off of the lighting circuit.
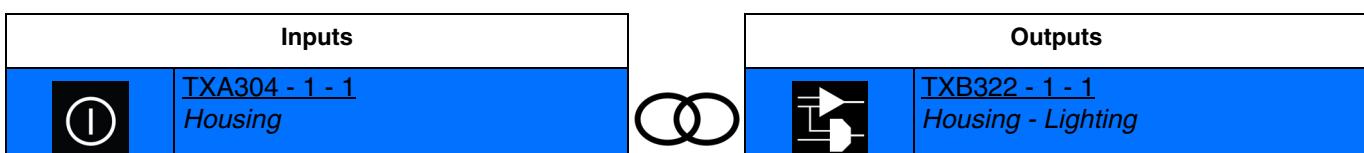
Inputs	Outputs
TXA304 - 1 - 1 *Housing*	TXB322 - 1 - 1 *Housing - Lighting*

Closing input contact: The output LED turns off indicating the switching off of the lighting circuit.
Opening input contact: No action.

- **ON/OFF**: Used to turn on or off the output LED according to the status of the lighting circuit.
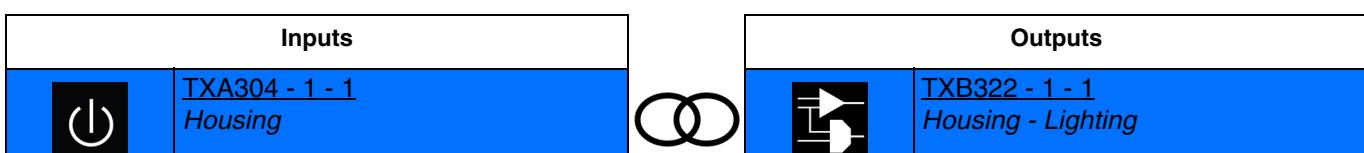
Inputs	Outputs
TXA304 - 1 - 1 *Housing*	TXB322 - 1 - 1 *Housing - Lighting*

Closing input contact: The output LED lights up indicating the switching on of the lighting circuit.
Opening input contact: The output LED turns off indicating the switching off of the lighting circuit.

- **Toggle switch**: Used to inverse the status of the output LED according to the status of the lighting circuit.

Inputs	Outputs
TXA304 - 1 - 1 *Housing*	TXB322 - 1 - 1 *Housing - Lighting*
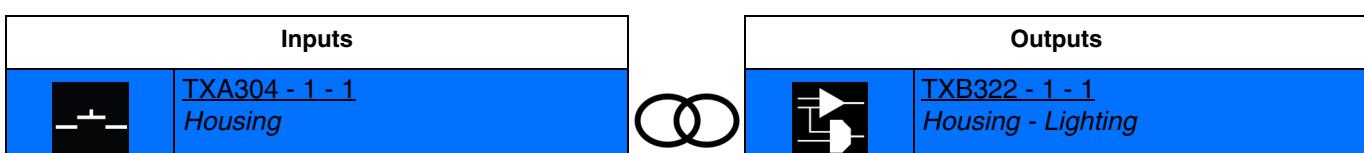
Closing input contact: toggles between turning the output LED and the lighting circuit on and off. Successive closures inverse the status of the output LED and lighting circuit each time.

The functions below can also be used for output LEDs:

	General ON	Switches on a lighting circuit assembly.
	General OFF	Switches off a lighting circuit assembly.
	General ON/OFF	Switches a lighting circuit assembly on or off (switch).

Note: The variation functions can also be linked with output LEDs. In this case, only the ON/OFF function is used.

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

- **Up/down**: Used to display the status of the last movement of the shutter.

Inputs		Outputs	
	TXA304 - 1 - 1 *Housing*		TXB322 - 1 - 1 *Housing - Lighting*
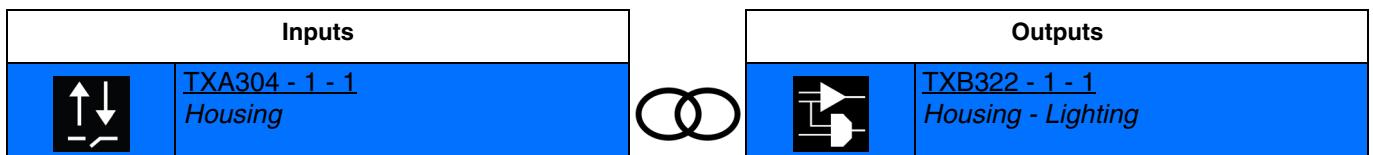
Closing input contact: The output LED lights up indicating the raising of the shutter.
Opening input contact: The output LED turns off indicating the lowering of the shutter.

The functions below can also be used for output LEDs:

Shutter/blind			
	Blinds up		Switch up
	Blinds down		Down switch
	Toggle switch up/down		General up
	Down/up		General down
			General up/down

Note: When the raising or lowering of the shutter is stopped by a stop command for example, the output LED remains unchanged.

- **Heating/cooling off**: Used to display the status of the protection mode for heating and cooling according to the mode used.

Inputs	
	TXA304 - 1 - 1 *Housing*

Outputs	
	TXB322 - 1 - 1 *Housing - Lighting*
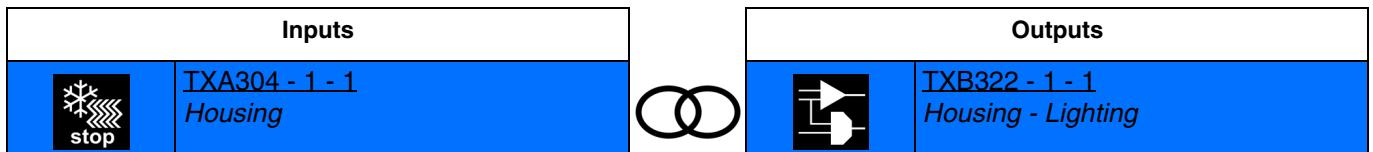
Closing input contact: The output LED lights up indicating the protection mode whether in heating or cooling mode.
Opening input contact: The output LED turns off indicating the return to the normally active mode.

4. Appendix

4.1 Specifications

4.1.1 TXA304

KNX power supply voltage	21 --- ... 32V SELV
Operating altitude	≤ 2000m
Degree of pollution	2
Surge voltage	4KV
Housing protection class	IP20
Housing protection class under the faceplate	IP30
Protection class against mechanical shocks	IK04
Overvoltage category	III
Signal voltage	230V~ 50/60 Hz
Maximum connection distance per input	100 m
Low signal level	0 ... 100 V
High signal level	> 195V
Busline typ. Consumption	3 mA
Busline max consumption	4 mA
Dimensions	4 x 17,5 mm
Operating temperature	-5 ...+ 45°C
Storage temperature	- 20 ...+ 70°C
Connections	0.75 mm²...2.5 mm²

4.1.2 TXA306

KNX power supply voltage	21 ⎓ ... 32V SELV
Operating altitude	≤ 2000m
Degree of pollution	2
Surge voltage	4KV
Housing protection class	IP20
Housing protection class under the faceplate	IP30
Protection class against mechanical shocks	IK04
Overvoltage category	III
Signal voltage	24 ...230V~ (50Hz)/⎓
Maximum connection distance per input	100 m
Busline typ. Consumption	6 mA
Busline max consumption	7 mA
Dimensions	6 x 17,5 mm
Operating temperature	-5 ...+ 45°C
Storage temperature	- 20 ...+ 70°C
Connections	0.75 mm²...2.5 mm²

4.1.3 TXA310

KNX power supply voltage	21 ⎓ ... 32V SELV
Operating altitude	≤ 2000m
Degree of pollution	2
Surge voltage	4KV
Housing protection class	IP20
Housing protection class under the faceplate	IP30
Protection class against mechanical shocks	IK04
Overvoltage category	III
Signal voltage	230V~ 50/60 Hz
Maximum connection distance per input	100 m
Low signal level	0 ... 100 V
High signal level	> 195V
Busline typ. Consumption	9 mA
Busline max consumption	15 mA
Dimensions	6 x 17,5 mm
Operating temperature	-5 ...+ 45°C
Storage temperature	- 20 ...+ 70°C
Connections	0.75 mm²...2.5 mm²

4.1.4 TXB302-TXB304

KNX power supply voltage	30V === SELV
Operating altitude	≤ 2000m
Degree of pollution	2
Surge voltage	4KV
Housing protection class	IP30
Protection class against mechanical shocks	IK04
Overvoltage category	III
Contact current	0,5 mA
Dimensions	38 x 35 x 12 mm
Operating temperature	-5 ...+ 45°C
Storage temperature	- 20 ...+ 70°C

4.1.5 TXB322-TXB344

KNX power supply voltage	30V === SELV
Operating altitude	≤ 2000m
Degree of pollution	2
Surge voltage	4KV
Housing protection class	IP30
Protection class against mechanical shocks	IK04
Overvoltage category	III
Contact current	0,5 mA
LED outputs specifications	I = 850µA U = 1.8V ===
Busline max consumption	15 mA
Dimensions	38 x 35 x 12 mm
Operating temperature	-5 ...+ 45°C
Storage temperature	- 20 ...+ 70°C

4.2 Characteristics

Device	TXA304	TXA306	TXA310	TXB302	TXB304	TXB322	TXB344
Max. number of group addresses	254	254	254	254	254	254	254
Max. number of allocations	255	255	255	255	255	255	255