

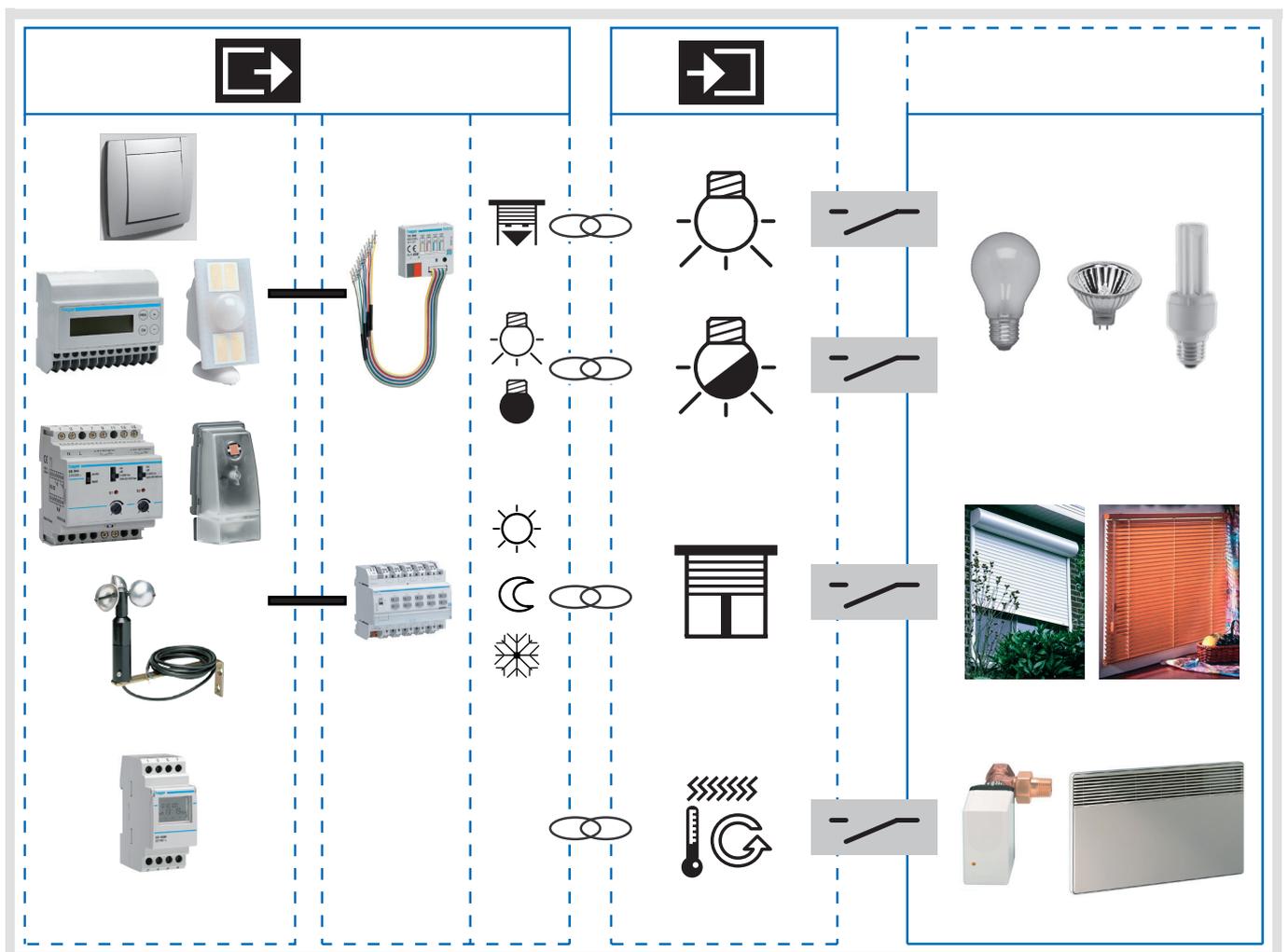


Operation with the Tebis TX TX100 link

Input modules

Electrical / Mechanical characteristics: see user's instructions

	Product reference	Product designation	TX100 version	TP device  RF device 
	TXB302 TXA304	2 input flush-mounted input module 4 input flush-mounted input module	≥ 2.2.0	
	TXA304 TXA310	Modular 230 V~4 input module Modular 230 V~10 input module	≥ 2.2.0	
	TXA306	Modular multi-voltage 6 input module	≥ 2.2.0	



Summary

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1. Presentation of the input module functions

The main functions are the following:

■ Sending commands

The inputs used to transmit commands for lighting, shutters and blinds, heating/air conditioning and scenes.

■ Priority

The priority function sends priority-start or priority-stop commands.

The Priority action depends on the type of application controlled: lighting, Roller shutters, Heating, etc.

■ Scene

The Scene function sends group controls to different kinds of outputs to create ambiances or scenarios (leaving home scenario, reading ambience, etc.).

■ Manual mode*

The Manual mode is used to isolate the product from the bus.

Status changes for the contacts connected to the inputs can be simulated in this mode.

* Concerns only references TXA304, 306 and 310.

2. Configuration and parameterising of the functions (Standard mode)

The inputs allow you to send commands on the bus and perform the following functions:

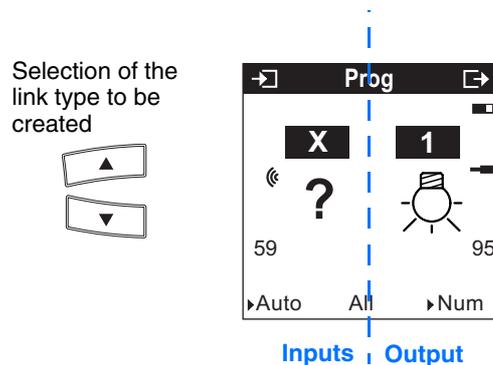
- Lighting control:
 - Toggle, ON, OFF, ON/OFF, Timer.
 - Dimming on 1 or 2 push buttons.
- Roller shutter / Blind control:
 - Up, Down, Stop, Blind slat angle.
- Heating / Air-Conditioning control:
 - Comfort, Economy, Reduced, Frost protection, Timed Comfort, Present/Absent.
- Scene controls.

These functions are available in the TX100's Standard configuration mode by creating links with the appropriate output devices.

2.1 On/Off Lighting functions

The On/Off Lighting functions command the On/Off Lighting outputs symbolized by the  icon on the right part of the display. Refer to the configuration instructions of the various Lighting output products for the installation and configuration of these products.

After numbering the inputs, the available functions and links will appear on the left part of the TX100 display.



The table here after shows all type of links compatible with the product:

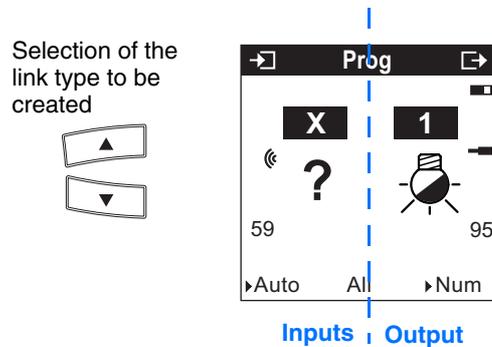
Possible link type		Link description	Output operation
	ON	The ON function switches the lighting circuit ON.	Activation of the input by a short press causes the lighting to switch on at the last level stored. Successive activations maintain the lighting at the last level stored.
	OFF	The OFF function switches the lighting circuit OFF.	Activation of the input causes the light to switch off at 0%. Successive activations maintain the light off.
	Toggle	The Pushbutton function allows inverting the status of the lighting circuit.	Activation of the input by a short press toggles between switching ON at the last level stored and switching OFF at 0%. Successive activation reverses the status of the output contact each time.
	Switch	The Switch function switches the lighting circuit ON or OFF.	Closing the input contact causes the lighting to switch on at the last level stored. Opening the input contact causes the lighting to switch off at 0%.
	Timer ON	The Timer ON function switches the lighting circuit on for an adjustable time. Select the delay time after confirming the link: Setting range [0 s 24 h] Not used, 1 s, 2 s, 3 s, 5 s, 10 s, 15 s, 20 s, 30 s, 45 s, 1 min, 1 min 15 s, 1 min 30 s, 2 min, 2 min 30 s, 3 min, 5 min, 15 min, 20 min, 30 min, 1 h, 2 h, 3 h, 5 h, 12 h, 24 h.	Activation of the input by a short press of <1 s causes delayed switching on of the lighting (at the last level stored). Timer interruption: Activation of the input by a long press of >1 s terminates the time delay currently active and causes the lighting to switch off at 0% (OFF).
	Timer OFF	The Timer OFF function switches the lighting circuit off for an adjustable time. Select the delay time after confirming the link: Setting range [0 s 24 h] Not used, 1 s, 2 s, 3 s, 5 s, 10 s, 15 s, 20 s, 30 s, 45 s, 1 min, 1 min 15 s, 1 min 30 s, 2 min, 2 min 30 s, 3 min, 5 min, 15 min, 20 min, 30 min, 1 h, 2 h, 3 h, 5 h, 12 h, 24 h.	Activation of the input by a short press of <1 s causes the lighting to be switched off after a delay. Timer interruption: Activation of the input by a long press of >1 s terminates the time delay currently active and switches on the lighting at the last level stored.

Possible link type		Link description	Output operation
	Priority ON	The Priority ON function forces the lighting circuit ON and maintains it ON.	<p>Activation of the input forces the output to ON. Successive activation toggles switching between priority ON and priority cancellation. The ON priority switches the light ON to 100%, whatever the level stored.</p> <p>Priority is the function with the highest priority. Only a priority-end command ends the Priority and re-authorizes the bus commands to be taken into consideration.</p> <p>After confirming the link, select the behaviour to follow Priority Cancellation:</p> <ul style="list-style-type: none"> - Maintain: The output is maintained in the same status as during Priority. - Invert: The output is inverted in relation to the status active during Priority. <p>A priority is also cancelled by another Priority command.</p>
	Priority OFF	The Priority OFF function forces the lighting circuit OFF and maintains it OFF.	<p>Activation of the input forces the output to OFF. Successive activation toggles between Priority OFF and Priority cancellation. The OFF priority switches the light off to 0%, whatever the stored level.</p> <p>Priority is the function with the highest priority. Only a priority-end command ends the Priority and re-authorizes the bus commands to be taken into consideration.</p> <p>After confirming the link, select the behaviour to follow Priority Cancellation:</p> <ul style="list-style-type: none"> - Maintain: The output is maintained in the same status as during Priority. - Invert: The output is inverted in relation to the status active during Priority. <p>A priority is also cancelled by another Priority command.</p>
	Timed toggle switch	The timer toggle switch function allows you to reverse the status of the lighting circuit for a pre-set duration.	<p>A short push button press: The output's status is inverted. The status changes after each new short key-press. If there is no short key-press, the output will be switched OFF once the delay time has elapsed. A long push button press restarts the delay time.</p>

2.2 Dimmer Lighting functions

The Dimmer Lighting functions command the Dimmer Lighting output symbolized by the  icon on the right part of the display. Refer to the configuration manuals for the various Dimmer Lighting output devices for information on installing and configuring these devices.

After numbering the inputs, the available functions and links will appear on the left part of the TX100 display.



The table below presents the link types compatible with the device:

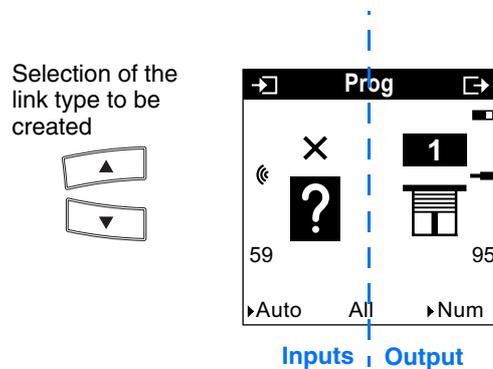
Possible link type		Link description	Output operation
	ON	The ON function switches the lighting circuit ON.	Activation of the input by a short press causes the lighting to switch on at the last level stored. Successive activations maintain the lighting at the last level stored.
	OFF	The OFF function switches the lighting circuit OFF.	Activation of the input causes the light to switch off at 0%. Successive activations maintain the light off.
	Toggle	The Pushbutton function allows inverting the status of the lighting circuit.	Activation of the input by a short press toggles between switching ON at the last level stored and switching OFF at 0%. Successive activation reverses the status of the output contact each time.
	1 button dimmer	The 1-button Dimmer function allows dimming the light with one single pushbutton.	Activation of the input by a short press toggles between switching ON at the last level stored and switching OFF at 0%. Activation of the input by a long press causes the level of lighting to increase or decrease.
	2-buttons dimmer: Increase	The Increase function allows you to increase the level of lighting.	Activation of the input by a short press causes the lighting to switch on at the last level stored. Activation of the input by a long press will increase the level of lighting.
	2-buttons dimmer: Reduction	The Decrease function allows you to reduce the level of lighting.	Activation of the input by a short press causes the lighting to switch off. Activation of the input by a long press causes the lighting level to decrease.
	Switch	The Switch function switches the lighting circuit ON or OFF	Closing the input contact causes the lighting to switch on at the last level stored. Opening the input contact causes the lighting to switch off at 0%.

Possible link type	Link description	Output operation
	<p>Timer ON</p> <p>The Timer ON function switches the lighting circuit on for an adjustable time.</p> <p>Select the delay time after confirming the link: Setting range [0 s 24 h]</p> <p>Not used, 1 s, 2 s, 3 s, 5 s, 10 s, 15 s, 20 s, 30 s, 45 s, 1 min, 1 min 15 s, 1 min 30 s, 2 min, 2 min 30 s, 3 min, 5 min, 15 min, 20 min, 30 min, 1 h, 2 h, 3 h, 5 h, 12 h, 24 h.</p>	<p>Activation of the input by a short press of <1 s causes delayed switching on of the lighting (at the last level stored).</p> <p>Timer interruption: Activation of the input by a long press of >1 s terminates the time delay currently active and causes the lighting to switch of at 0% (OFF).</p>
	<p>Timer OFF</p> <p>The Timer OFF function switches the lighting circuit off for an adjustable time.</p> <p>Select the delay time after confirming the link: Setting range [0 s 24 h]</p> <p>Not used, 1 s, 2 s, 3 s, 5 s, 10 s, 15 s, 20 s, 30 s, 45 s, 1 min, 1 min 15 s, 1 min 30 s, 2 min, 2 min 30 s, 3 min, 5 min, 15 min, 20 min, 30 min, 1 h, 2 h, 3 h, 5 h, 12 h, 24 h.</p>	<p>Activation of the input by a short press of <1 s causes the lighting to be switched off after a delay.</p> <p>Timer interruption: Activation of the input by a long press of >1 s terminates the time delay currently active and switches on the lighting at the last level stored.</p>
	<p>Priority ON</p> <p>The Priority ON function forces the lighting circuit ON and maintains it ON.</p>	<p>Activation of the input forces the output to ON. Successive activation toggles switching between priority ON and priority cancellation. The ON priority switches the light ON to 100%, whatever the level stored.</p> <p>Priority is the function with the highest priority. Only a priority-end command ends the Priority and re-authorizes the bus commands to be taken into consideration.</p> <p>After confirming the link, select the behaviour to follow Priority Cancellation:</p> <ul style="list-style-type: none"> - Maintain: The output is maintained in the same status as during Priority. - Invert: The output is inverted in relation to the status active during Priority. <p>A priority is also cancelled by another Priority command.</p>
	<p>Priority OFF</p> <p>The Priority OFF function forces the lighting circuit OFF and maintains it OFF.</p>	<p>Activation of the input forces the output to OFF. Successive activation toggles between Priority OFF and Priority cancellation. The OFF priority switches the light off to 0%, whatever the stored level.</p> <p>Priority is the function with the highest priority. Only a priority-end command ends the Priority and re-authorizes the bus commands to be taken into consideration.</p> <p>After confirming the link, select the behaviour to follow Priority Cancellation:</p> <ul style="list-style-type: none"> - Maintain: The output is maintained in the same status as during Priority. - Invert: The output is inverted in relation to the status active during Priority. <p>A priority is also cancelled by another Priority command.</p>

2.3 Roller shutters / Blinds function

The Roller shutters / Blind function commands Roller shutters / Blinds outputs symbolized by the  icon in the right part of the display. Refer to the configuration manuals for the various Roller shutters / Blinds output devices for information on installing and configuring these devices.

After numbering the push-buttons, the functions and the links available appear in the left-hand part of the TX100 screen.



The table below presents the link types compatible with the device:

Possible link type	Link description	Output operation
	<p>Up/Stop</p> <p>The Up/Stop function allows moving up or stopping a shutter or a blind, or inclining the slats of a blind.</p>	<p>In shutters mode*:</p> <ul style="list-style-type: none"> - Activation of the input causes the delayed closure of the Up output contact* (Up function for a roller shutter or a blind). <p>In Blinds mode*:</p> <ul style="list-style-type: none"> - Activation of the input by a short press causes the brief closure of the Up output contact (Blind blade orientation function). - Activation of the input by a long press causes the delayed closure of the Up output contact (Up function for a roller shutter or a blind). <p>When a time delay is running, activation of the input by a short press causes the contact to open (Stop function).</p>
	<p>Down/Stop</p> <p>The Down function allows moving down or stopping a shutter or a blind, or inclining the slats of a blind.</p>	<p>In shutters mode*:</p> <ul style="list-style-type: none"> - Activation of the input causes the delayed closure of the Down output contact* (Down function for a roller shutter or a blind). <p>In Blinds mode*:</p> <ul style="list-style-type: none"> - Activation of the output by a short press causes the brief closure of the Down output contact (Blind blade orientation function). - Activation of the input by a long press causes the delayed closure of the Down output contact (Down function for a roller shutter or a blind). <p>When a time delay is running, activation of the input by a short press causes the contact to open (Stop function).</p>

Possible link type		Link description	Output operation
	Up/Down/Stop	The Up/Down function allows moving up, down or stopping a shutter or a blind with one single pushbutton.	Only the rolling shutter mode functions are active. The blind blade orientation function is not accessible. Successive activations cause rolling shutter mode type operation according to the Up cycles (delayed closure of the Up output), Stop (opening of the output contacts), Down (delayed closure of the Down output)*.
	Up priority	The Up priority function forces the Up movement of a roller shutter or a blind.	Activation of the input causes the delayed closure of the Up output contact (Up function for a roller shutter or a blind)*. Priority is the function with the highest priority. Only a priority-end command ends the Priority and re-authorizes the bus commands to be taken into consideration. After confirming the link, select the behaviour to follow Priority Cancellation: <ul style="list-style-type: none"> - Maintain: The output is maintained in the same status as during Priority. - Invert: The output is inverted in relation to the status active during Priority (→ Shutter down). A priority is also cancelled by another Priority command.
	Priority Down	The Down priority function allows forcing the down movement of a shutter or a blind.	Activation of the input causes the delayed closure of the Down output contact (Down function for a roller shutter or a blind)*. Priority is the function with the highest priority. Only a priority-end command ends the Priority and re-authorizes the bus commands to be taken into consideration. After confirming the link, select the behaviour to follow Priority Cancellation: <ul style="list-style-type: none"> - Maintain: The output is maintained in the same status as during Priority. - Invert: The output is inverted in relation to the status active during Priority (→ Shutter Up). A priority is also cancelled by another Priority command.

* The modes and delay durations are parameterisable (see the TX100 configuration manuals for the Roller shutter / Blind output actuators).

The table below presents the link types compatible with the device.

Possible link type		Link description	Output operation
	Up	The Up function raises a roller shutter or a blind.	Closure of the input contact causes the delayed closure of the Up output contact (Up function for a roller shutter or a blind).
	Down	The Down function lowers a roller shutter or a blind.	Closure of the input contact causes delayed closure of the Down output contact (Down function for a roller shutter or a blind).
	Shutters/Blinds	The Up/Down function raises or lowers a roller shutter or a blind.	Closure of the input contact causes the delayed closure of the Up output contact (Up function for a rolling shutter or blind) and opening of the input contact causes the delayed closure of the Down output contact (Down function for a roller shutter or a blind).
	Down/Up	The Down/Up function lowers or raises a roller shutter or a blind.	Closure of the input contact causes the delayed closure of the Down output contact (Down function for a rolling shutter or blind) and opening of the input contact causes delayed closure of the Up output contact (Up function for a roller shutter or a blind).

Possible link type		Link description	Output operation
	Wind alarm*	The Wind alarm function allows alarms from automatic controls to be emitted regularly on the bus.	The status of the input contact is emitted periodically and when the input contact changes. When the input contact closes, the Active alarm (1) data is emitted. When the input contact opens, the Inactive alarm (0) data is emitted. The emission period is 10 minutes.
	Rain alarm*	The Rain Alarm function allows alarms from automatic controls to be emitted regularly on the bus	The status of the input contact is emitted periodically and when the input contact changes. When the input contact closes, the Active alarm (1) data is emitted. When the input contact opens, the Inactive alarm (0) data is emitted. The emission period is 10 minutes.

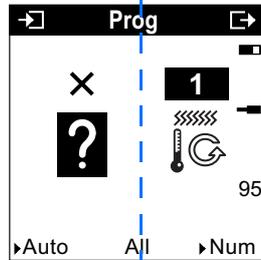
*These functions have the highest priority. The Wind alarm function has a higher priority than the Rain alarm. No other command is taken into consideration if an Alarm is active. Only the end of the alarm enables again the other commands.

2.4 Heating / Air-Conditioning function

The Heating / Air-Conditioning functions command a thermostat or a regulator symbolized by the  icon on the right part of the display. Refer to the thermostat, ambiance controller and regulator configuration manuals for information on installing and configuring these devices.

After numbering the push-buttons, the functions and the links available appear in the left-hand part of the TX100 screen.

Selection of the link type to be created



Inputs | Output

The table below presents the link types compatible with the device:

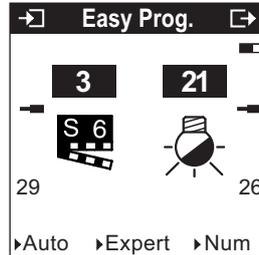
Possible link type	Link description	Output operation
 Override in comfort mode	The function "override in comfort mode" activates the Comfort mode.	Closure of the input contact activates Comfort mode. The effect of this command is cancelled by any other mode activation command.
 Override in Economy mode	The function "override in economy mode" activates the economy mode.	Closure of the input contact activates Reduced mode. The effect of this command is cancelled by any other mode activation command.
 Timed Comfort	The delayed Comfort function activates comfort mode for an adjustable period. Select the delay time after confirming the link: Setting range [0 s 24 h] Not used, 1 s, 2 s, 3 s, 5 s, 10 s, 15 s, 20 s, 30 s, 45 s, 1 min, 1 min 15 s, 1 min 30 s, 2 min, 2 min 30 s, 3 min, 5 min, 15 min, 20 min, 30 min, 1 h, 2 h, 3 h, 5 h, 12 h, 24 h. Default value: 30 min.	The associated input contact is a push-button. Closure of the input contact by a short press activates Comfort mode for the set period. When a time delay is running, activation of the input by a long press returns to the mode normally active. The effect of this command is cancelled by any other mode activation command.
 Economy override	The Economy override functions activates Economy mode.	Closure of the input contact activates Economy mode. The effect of this command is cancelled by any other mode activation command.
 Override in Frost Protection	The function "override in protection mode" activates the Frost Protection mode for heating or the Equipment protection mode for air-conditioning.	Closure of the input contact activates Frost Protection mode (Protection in the case of air conditioning). The effect of this command is cancelled by any other mode activation command.
 Comfort/Reduced	The Comfort/Reduced function allows toggling between Comfort mode and Reduced mode.	The associated input contact is a switch or an output from a programming clock. Closure of the contact activates Comfort mode. Opening of the contact activates Reduced mode. The effect of this command is cancelled by any other mode activation command.

Possible link type		Link description	Output operation
	Komfort/Absence	The Comfort/Absence function toggles between these two modes	Closure of the input contact toggles the set-point value between Comfort and Absence. The set-point value changes each time the input contact is closed. The effect of this command is cancelled by any other mode activation command.
	Comfort priority	The Comfort Priority function activates and maintains Comfort mode.	The associated input contact is a switch or an output from a programming clock. Closure of the contact activates and maintains Comfort mode. Opening of the contact cancels the priority and returns to the mode normally active. The Comfort Priority function has a higher priority than the override or time delay commands. Only a priority-end command ends the Priority and re-authorizes the bus commands to be taken into consideration. The effect of the command is cancelled by any other priority command (Reduced, Frost Protection) or by a Magnetic contact or Stop command.
	Frost Protection Priority	The Frost Protection Priority function activates and maintains Frost Protection mode for heating and Protection mode for air-conditioning.	The associated input contact is a switch or an output from a programming clock. Closure of the contact activates and maintains Frost Protection mode (Protection in the case of air conditioning). Opening of the contact cancels the priority and returns to the mode normally active. The Frost Protection Priority function has a higher priority than the override or time delayed commands. Only a priority-end command ends the Priority and re-authorizes the bus commands to be taken into consideration. The effect of the command is cancelled by any other priority command (Comfort/Reduced) or by a Magnetic contact or Stop command.
	Frost protection / Auto	The Frost Protection/Automatic function toggles between Frost Protection mode and Automatic mode.	The associated input contact is a switch or an output from a programming clock. Closure of the contact activates Frost Protection mode. Opening of the contact returns to Automatic mode. The effect of this command is cancelled by any other mode activation command.

2.5 Scene function

■ Link creation

It is possible to create links between a push-button and the outputs which are to be part of the scene by selecting a Scene function (number 1 to 8).



Possible link type	Link description	Output operation
	<p>Scene 1 to 8</p> <p>The Scene function groups a set of outputs. These outputs can be set to an adjustable predefined status. Pressing a single pushbutton activates a scene. Each output may be integrated into 8 different scenes.</p>	<p>The status of each output can be defined:</p> <ul style="list-style-type: none"> - by parameterising the actuators or regulators, - via learning, with the pushbuttons on the installation or on the front of certain devices.

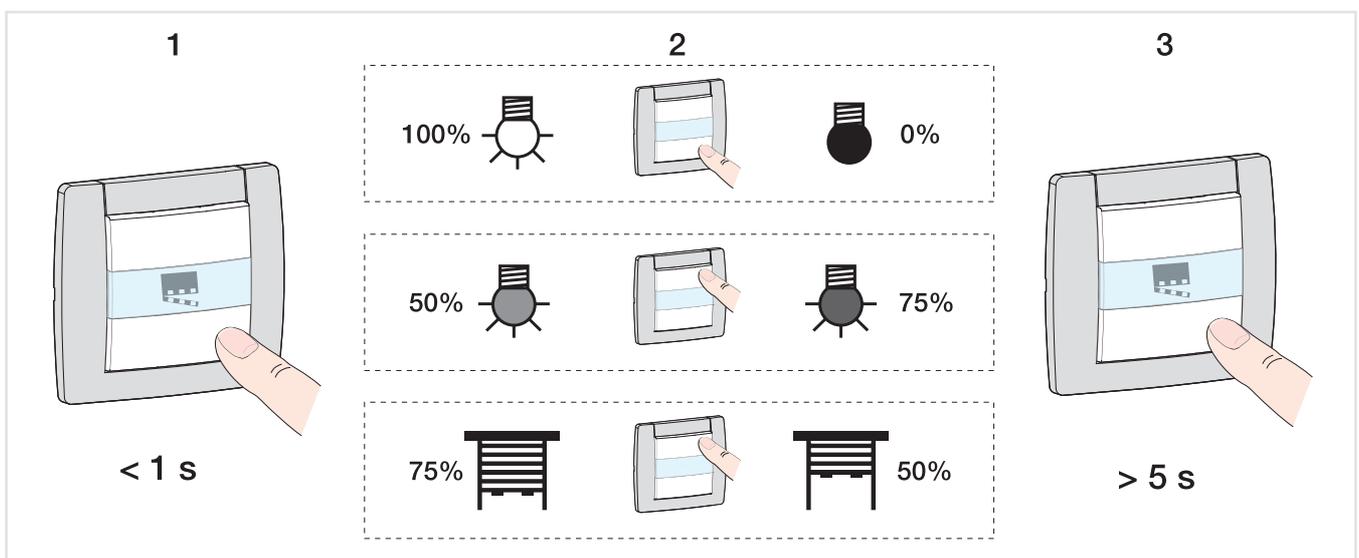
■ Output configuration by parameterisation

Refer to the user instructions for the various actuators.

■ Configuration by learning and scene storing

This procedure allows modifying and storing a scene by local action on the Ambiance pushbuttons or by local action on the pushbuttons situated on the front of certain devices (lighting or roller shutter / blind actuators, ...).

- Activate the scene by pressing briefly on the room pushbutton that triggers the scene.
- Switch the outputs (Lighting, Rolling shutters, Thermostat, etc.) to the desired status using the room push-buttons which control them individually or by directly pressing the buttons on the front of certain products (see the configuration manuals of the concerned devices for more details).
- Store the output statuses and the regulator mode by pressing the scene-triggering Ambiance pushbutton for at least 5. The storage is indicated by temporary activation of the outputs on certain actuators.



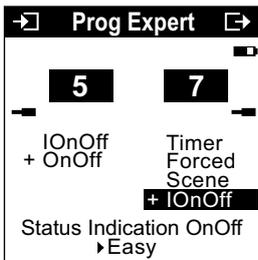
3. Expert mode and Creation of specific links

■ General points

The Expert mode allows:

- EIB products which are not configurable by ETS (vizationalisation tool, Internet gateway) to be integrated into the installation,
- specific links, not available in the Standard configuration mode, to be created.

In Expert mode, the functions are displayed through the communication objects used in the configuration ETS mode. The objects appear as a list located under the input and output numbers.



The Expert mode allows links to be established between objects with the same format by giving them the same group address.

■ List of the available objects

TX100 designation	ETS designation	Function	Format	Description
On/Off and Dimmer Lighting controls				
OnOff	On/Off	ON/OFF	EIS1 1 bit	Sends an ON/OFF command.
IOnOff	InfoOn/Off	ON/OFF information	EIS1 1 bit	Indicates the output's status.
DimCtrl	DimmingCtrl	Dimming command	1 bit	Allows changing the output level of a dimmer.
Timer	TimedStartstop	Timer	EIS1 1 bit	Activates or stops a timer.
Forced	Forced	Priority	EIS2 2 bit	Forces an output.
Roller shutter / Blind control				
StepStop	StepStop	Tilt	1 bit	Sends a slat angle command for a blind.
UpDown	UpDown	Shutters/Blinds	1 bit	Sends an Up or Down command for a roller shutter or a blind.
IUpDown	InfoMoveUpDown	Up/Down information	1 bit	Provides the status of the Up/Down output 1 BP command).
IOnOff	Info On/Off	ON/OFF information	EIS1 1 bit	Indicates the output's status.
Forced	Forced	Priority	EIS2 2 bit	Forces an Up or Down command.
WindAlm		Wind alarm	1 bit	The WindAlm object is used to activate the Wind alarm.
RainAlm		Rain alarm	1 bit	The RaiAlm object is used to activate the Rain alarm.

TX100 designation	ETS designation	Function	Format	Description
Heating / Air-Conditioning control				
HvacMode	HvacMode	Heating mode	1 byte	Activates a heating or air-conditioning mode (Comfort, Reduced, ...).
IOOnOff	InfoOn/Off	ON/OFF information	EIS1 1 bit	Indicates the output's status.
Timer	TimedStartstop	Timer	EIS1 1 bit	Starts a delayed deviation.
Forced	Forced	Priority	EIS2 2 bit	Forces a heating or air-conditioning mode.
Scene				
Scene	SceneNumber	Scene	1 byte	Activates the scene by its number.

4. Restore Factory Configuration function (Reset)

This function resets the device to its original configuration (Factory configuration). After a device reset, the device can be re-used in a new installation. This function is accessible via the TX100's Device Management/Reset menu.

There are 2 different cases:

- The device belongs to the installation: it appears in the Reset menu's list of devices that can be reset to Factory configuration. Select the device from the list, press  and confirm deletion.
- The device does not belong to the installation:
 - Select Not install. device from the Reset menu.
 - Press .
 - Select TP.
 - Press .
 - Press the physical addressing lighted pushbutton to detect the product.
 - Press the screen key .

After a device reset, the installation must be learnt again in order to relocate the devices reset to Factory configuration.

5. Characteristics

Max. number of group addresses	252
Max. number of links	254

6. Bus presence test

To check bus presence or perform a factory reset, press the physical addressing button on the front of the product. Indicator on = Bus presence. Press a second time to exit this mode.

