

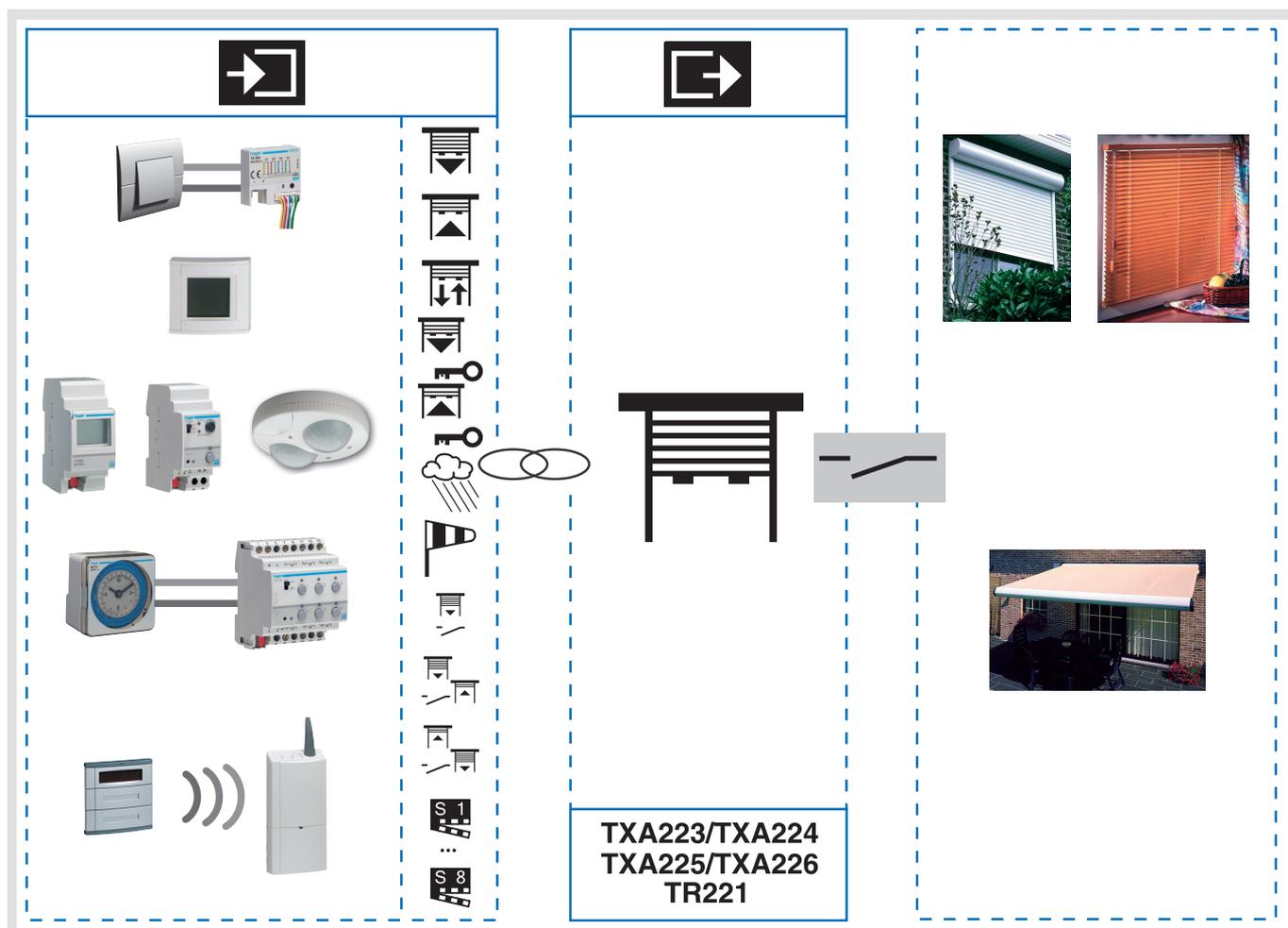
Configurator Tebis TX100

Shutters / Blinds control function

Electrical / Mechanical characteristics : see product user's instructions



Product reference	Product designation	Version TX100	TP device  RF device 
TXA 223	4 output device for shutters 230V~	≥ 1.5	
TXA 224	4 output device for shutters / blinds 230V~	≥ 1.5	
TXA 225	4 output device for shutters 24V DC	≥ 1.5	
TXA 226	4 output device for shutters / blinds 24V DC	≥ 1.5	
TXA 227	8 output device for shutters 230V~ with manual override without bus	≥ 1.8	
TXA 228	8 output device for shutters / blinds 230V~ with manual override without bus	≥ 1.8	
TR 221	1 flush mounted output for shutters	≥ 1.1	



Summary

1. Presentation of the Shutter / Blind functions.....	3
2. Links and description of the Blinds/Shutters functions in Standard mode	4
3. +info mode	9
4. Expert mode.....	9
5. Factory setting function (Reset).....	10
6. Auto/Manu mode.....	10
7. Characteristics	11
8. Bus presence test	11

1. Presentation of the Shutter / Blind functions

The main functions of the Shutter/Blind application are the following :

■ Up / Down

The Up/Down Function allows moving up or down a shutter, a blind with inclinable slats, an awning, a Venetian blind, etc
This function also allows opening and closing electric curtains.

The command may come from pushbuttons (long hold-down), switches or automatic controls.

■ Slat angle/Stop

The Slat angle/Stop function allows inclining the slats of a blind or stopping its current movement. This function allows modifying the occultation or the direction of the light beams coming from outside.

The command comes from pushbuttons : Press briefly the Up/Down pushbutton.

■ Wind alarm and rain alarm

The Alarm functions allow putting a shutter or a blind in a parameterisable predefined status.

These functions have the highest priority. No other command is taken into consideration if an Alarm is active. Only the end of the alarm enables again the other commands.

■ Priority

The Priority function allows forcing a shutter or a blind into a predefined position.

This command has priority, but at a lower level than the alarms. No other command is taken into consideration if a priority is active. Only end of priority or alarm commands will be taken into consideration.

■ Scene

The Scene function allows grouping a set of outputs. These outputs can be put in a parameterisable predefined status.

Pressing one single pushbutton activates a scene.

Each output may be integrated in 8 different scenes.

■ Status indication

The Status indication function allows sending on the bus :

- the position of the shutter or the blind
- the current operating mode of the output (Alarm, Priority, Jamming, Normal)

■ Manual mode

The Manual mode isolates the product from the bus.

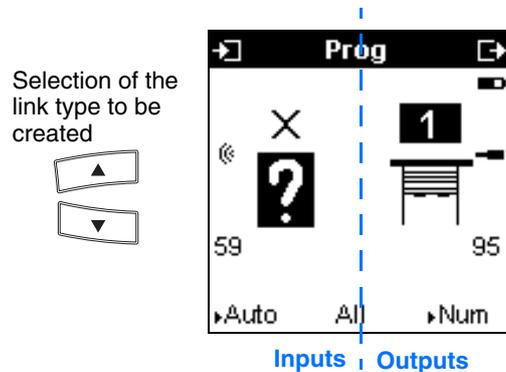
In this mode, it is possible to override manually each output.

2. Links and description of the Blinds/Shutters functions in Standard mode

After product learning , the outputs are symbolized by the icon  on the right part of TX100 display. After numbering the inputs, the available inputs will appear on the left part of the display.

The function of a product output is defined by the type of link established between input and output. Each product output can be associated with an input with a particular type of link. The link type is chosen individually on the input, on the left side of the screen of the TX100.

TX100 display :



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

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"> - Closing of the input contact by pressing the Up pushbutton for a long time → Delayed closing of the Up output contact**. <p>In Blinds mode* :</p> <ul style="list-style-type: none"> - Closing of the input contact by pressing the Up pushbutton briefly → Brief closing of the Up output contact. - Closing of the input contact by pressing the Up pushbutton for a long time → Delayed closing of the Up output contact**. <p>When a delay is running, closing the input contact by pressing briefly the pushbutton → Opening of the contact (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"> - Closing of the input contact by pressing the Down pushbutton for a long time → Delayed closing of the Down output contact**. <p>In Blinds mode* :</p> <ul style="list-style-type: none"> - Closing of the input contact by pressing the Down pushbutton briefly → Short closing of the output contact Down. - Closing of the input contact by pressing the Down pushbutton for a long time → Delayed closing of the Down output contact. <p>When a delay is running, closing the input contact by pressing briefly the pushbutton → Opening of the contact (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.	Closing of the input contact by pressing the pushbutton → Shutter mode-type operation according to Up, Stop, Down cycles.
	Down by means of a switch	The Down function allows moving a shutter or a blind down using a switch.	Closing of the input contact → Delayed closing of the Down output contact.** Opening of the input contact → No action.
	Up by means of a switch	The Up function allows moving a shutter or a blind up using a switch.	Closing of the input contact → Delayed closing of the Up output contact.** Opening of the input contact → No action.
	Down/Up by means of a switch	The Down/Up function allows moving a shutter or a blind up or down using a switch.	Closing of the input contact → Delayed closing of the Down output contact.** Opening of the input contact → Delayed closing of the Up output contact.**
	Up/Down by means of a switch	The Up/Down function allows moving a shutter or a blind up or down using a switch.	Closing of the input contact → Delayed closing of the Up output contact.** Opening of the input contact → Delayed closing of the Down output contact.**
	Up priority	The Up priority function allows forcing the up movement of a shutter or a blind.	Closing of the input contact → Activation of the priority and delayed closing of the Up output contact**. No other command is taken into consideration if a priority is active. Only end of priority or alarm commands will be taken into consideration. Opening of the input contact → Priority end. The status after the end of a priority is defined by a parameter when programming the link***.
	Down priority	The Down priority function allows forcing the down movement of a shutter or a blind.	Closing of the input contact → Activation of the priority and delayed closing of the Down output contact**. No other command is taken into consideration if a priority is active. Only end of priority or alarm commands will be taken into consideration. Opening of the input contact → Priority end. The status after the end of a priority is defined by a parameter when programming the link***.
	Wind alarm	The Wind Alarm function allows placing the shutter or the blind in a defined position when the alarm is activated.	Closing of the input contact → Activation of the Wind alarm : - The position of the shutter or blind is defined by a parameter when programming the link***. - No other command is taken into consideration if an Alarm is active. Only end of alarm commands will be taken into consideration. Opening of the input contact → Alarm end.

Possible link type		Link description	Output operation
	Rain alarm	The Rain Alarm function allows placing the shutter or the blind in a defined position when the alarm is activated.	Closing of the input contact → Activation of the Rain alarm : <ul style="list-style-type: none"> - The position of the shutter or blind is defined by a parameter when programming the link***. - No other command is taken into consideration if an Alarm is active. Only end of alarm commands will be taken into consideration. Opening of the input contact → Alarm end.
	Scene 1 to 8	The Scene function allows grouping a set of outputs. These outputs can be put in a parameterisable predefined status. Pressing one single pushbutton activates a scene. Each output may be integrated in 8 different scenes.	The group of outputs is created previously by establishing the link between the outputs that must belong to the scene and the pushbutton that will trigger the scene. The status of each output may be defined by parameterising, by learning in the room using the pushbuttons of the installation or on the product.

* The modes are parameterisable (see general parameters).
 ** The durations of the delays are parameterisable (see general parameters).
 *** See the Links Action parameters.

■ Parameterising

A. General parameters

The general parameters are defined in Device management/Product information of the TX100 and apply to all outputs.

Designation	Description	Values
Command Duration	This parameter allows selecting a channel for : <ul style="list-style-type: none"> - defining the durations of the up and down movements - selecting a Shutter or Blind type operation. 	Channel 1 to channel 4. Default value : Channel 1.
Duration up contact	This parameter defines the closing time of the contact for a complete Up movement.	from 1 s to 20 s by steps of 1 s, from 20 s to 2 min by steps of 5 s, from 2 min to 8 min by steps of 15 s. Default value : 2 min.
Duration down contact	This parameter defines the closing time of the contact for a complete Down movement.	from 1 s to 20 s by steps of 1 s, from 20 s to 2 min by steps of 5 s, from 2 min to 8 min by steps of 15 s. Default value : 2 min.
Mode	This parameter allows selecting a Shutter or Blind type operation.	Blind, Shutters. Default value : Blind.

B. Additional parameters for Priority and Alarms

These parameters are defined when programming the Priority and Alarm links.

Link	Description of the Action parameter	Actions
 Up priority	This parameter defines the position of the shutter or blind at the end of Priority Up.	Maintain, Inversion. Default value : Maintain.
 Down priority	This parameter defines the position of the shutter or blind at the end of Priority Down.	Maintain, Inversion. Default value : Maintain.
 Wind alarm	This parameter defines the position of the shutter or blind when the Alarm function is activated.	Inactive, Up, Down. Default value : Inactive.
 Rain alarm	This parameter defines the position of the shutter or blind when the Alarm function is activated.	Inactive, Up, Down. Default value : Inactive.

C. Default values

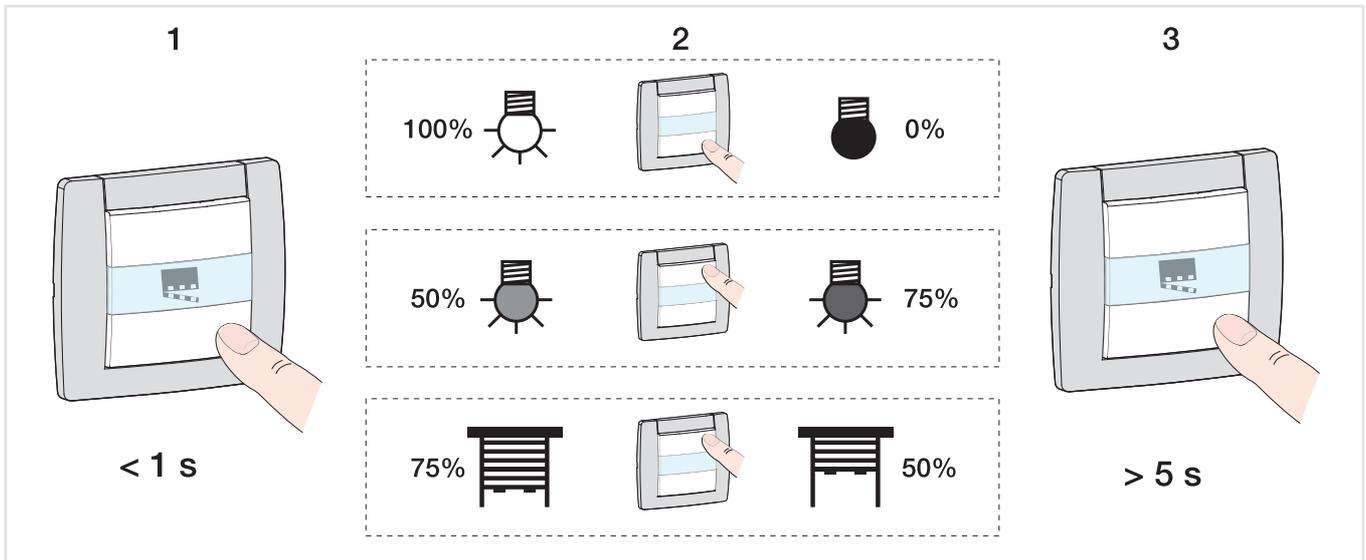
Parameter	Description	Non modifiable default value
Secured down	This procedure allows controlling a down movement as long as a pushbutton is pressed down.	Inactive.
Time delay for inverting motion direction	This parameter defines the stopping time of the shutter or blind before reversing the direction of rotation : the 2 output contacts are open.	600 ms.
Relay closing time for slat angle	This parameter allows defining the closing time of the contacts to carry out one slat step : 50 ms x multiplier.	Multiplier : 3.
Total number of slat angles	This parameter defines the total number of slat steps to go from the position inclined downwards to the position inclined upwards.	Total number : 12.
Position after wind alarm	This parameter defines the position of the shutter or blind at the end of the Wind alarm.	Maintain.
Position after rain alarm	This parameter defines the position of the shutter or blind at the end of the Rain alarm.	Maintain.
Status during bus failure	This parameter defines the output status to be applied during Bus failure.	Maintain.
Status at bus return	This parameter defines the position of the shutter or blind at the bus return.	Maintain.
Status after download	This parameter defines the position of the shutter or blind after a download.	Maintain.

■ Learning and storing the scenes

A. Learning and storing in the room

This procedure allows modifying and storing a scene by means of local action on the pushbuttons located in the room.

- Activate the scene pressing briefly on the room pushbutton that triggers the scene.
- Set the outputs to the desired status using the pushbuttons that control them individually.
- Store the status of the outputs pressing for more than 5 sec the room pushbutton that triggers the scene. The storage is indicated by an alternate movement of 6 s of the shutters and blinds controlled by the outputs involved. The storage is indicated on the product by the return of the blinking of the indicators associated with the outputs.



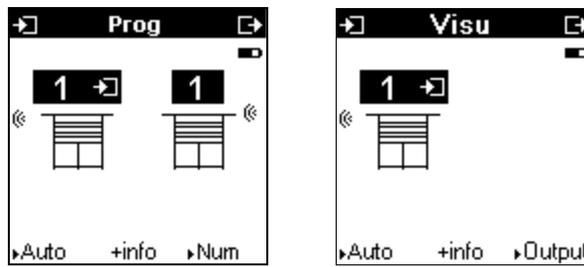
B. Learning and storing on the product

This procedure allows modifying and storing a scene by means of local action on the pushbuttons located on the front side of the products. This procedure also allows an output to be removed from a scene.

- Activate the scene pressing briefly on the room pushbutton that triggers the scene.
- Store the status of the outputs pressing for more than 5 sec the room pushbutton that triggers the scene. The switching to the learning mode is indicated by an alternate movement of 6 s of the shutters and blinds controlled by the outputs involved.
- As soon as the indicators associated with the outputs blink slowly, press briefly and repeatedly the pushbuttons linked with the outputs to set the outputs to the desired status. The indicators associated with the outputs show the status chosen :
 - OFF if the value selected for the scene is Low position.
 - Red and continuously ON if the value selected for the scene is High position.
 - Red and quickly blinking if the value selected for the scene is Not involved.
- Store the status selected for this scene pressing for a time longer than 3 sec the pushbutton associated with the output. The storage is indicated by the return of the slow blinking of the indicators associated with the outputs.
- Repeat the previous step for each of the outputs of the scene.

3. +info mode

The +info mode can be reached from the Prog and Visu modes of the TX100. This display mode is active for all products of the Installation up to its deactivation.



The +info mode allows linking the status indication of an output with a display device : room controller, indicator light-type output, etc.

At each status change, the status indication emits the real status of the output on the system.

The status indication is represented by the  symbol.

The status indication is added to the inputs list on the left side of the TX100 screen, with the same number as the output.

4. Expert mode

■ General points

The Expert mode allows :

- EIB products which are not configurable by ETS (visualisation 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

Designation TX100	Function	Format	Description
UpDown	Up / Down	1 Bit	The UpDown object allows switching the output to move the shutter or the blind up or down.
StepStop	Slat angle/stop	1 Bit	The StepStop object allows switching the output to incline the slats of a blind, or to stop the up or down movement.
Forced	Priority	2 Bit	The Forced object allows forcing an output.
WindAlm	Wind alarm	1 Bit	The WindAlm object allows activating the Wind alarm.
RainAlm	Rain alarm	1 Bit	The RainAlm object allows activating the Rain alarm.
Scene	Scene	1 Byte	The Scene object allows activating or storing a scene
IUpDown	Output status indication	1 Byte	The IUpDown object allows outputting the status of the output : position of the shutter or of the blind and current operating mode of the output (Alarm, Priority, Jamming, Normal).

5. Factory setting function (Reset)

This function allows resetting the product to its original configuration (factory settings). After a device reset, the product can be re-used in a new installation.

This function is accessible through the menu Device Management/Reset of the TX100.

There are 2 different cases :

- The product belongs to the installation : it appears in the list of the Reset menu, this is a list of all products that can be reset to factory configuration. Select the product in the list, press  and confirm the cancellation.
- The product does not belong to the installation :
 - Press the  key.
 - Select TP.
 - Press the  key.
 - Press the physical addressing lighted pushbutton to detect the product.
 - Press the screen key .

After the device reset operation, the product is configured in lighting mode.

After a device reset, the installation must be learnt again in order to find again the products reset to factory configuration.

6. Auto/Manu mode

The Auto/Manu switch is located on the front side of the product.

This switch allows selecting the Manual mode or the Auto mode.

- In Manual mode, the outputs may be controlled using the pushbuttons on the front side of the product.
- In Auto mode, the outputs are controlled by the instructions coming from the bus.

7. Characteristics

Max. number of group addresses	254
Max. number of links	255
Product starting time	10 s
Max. simultaneous switching frequency of all outputs of the product	≥ 2 s
Max. number of outputs per installation	 : 254  : 254

8. Bus presence test

To check for the presence of the bus or carry out a device reset, press the physical addressing lighted pushbutton located above the label holder on the right of the product.

Indicator on = bus presence.

Press a second time to exit this mode.

The test may be performed in Auto mode or in Manual () mode.

