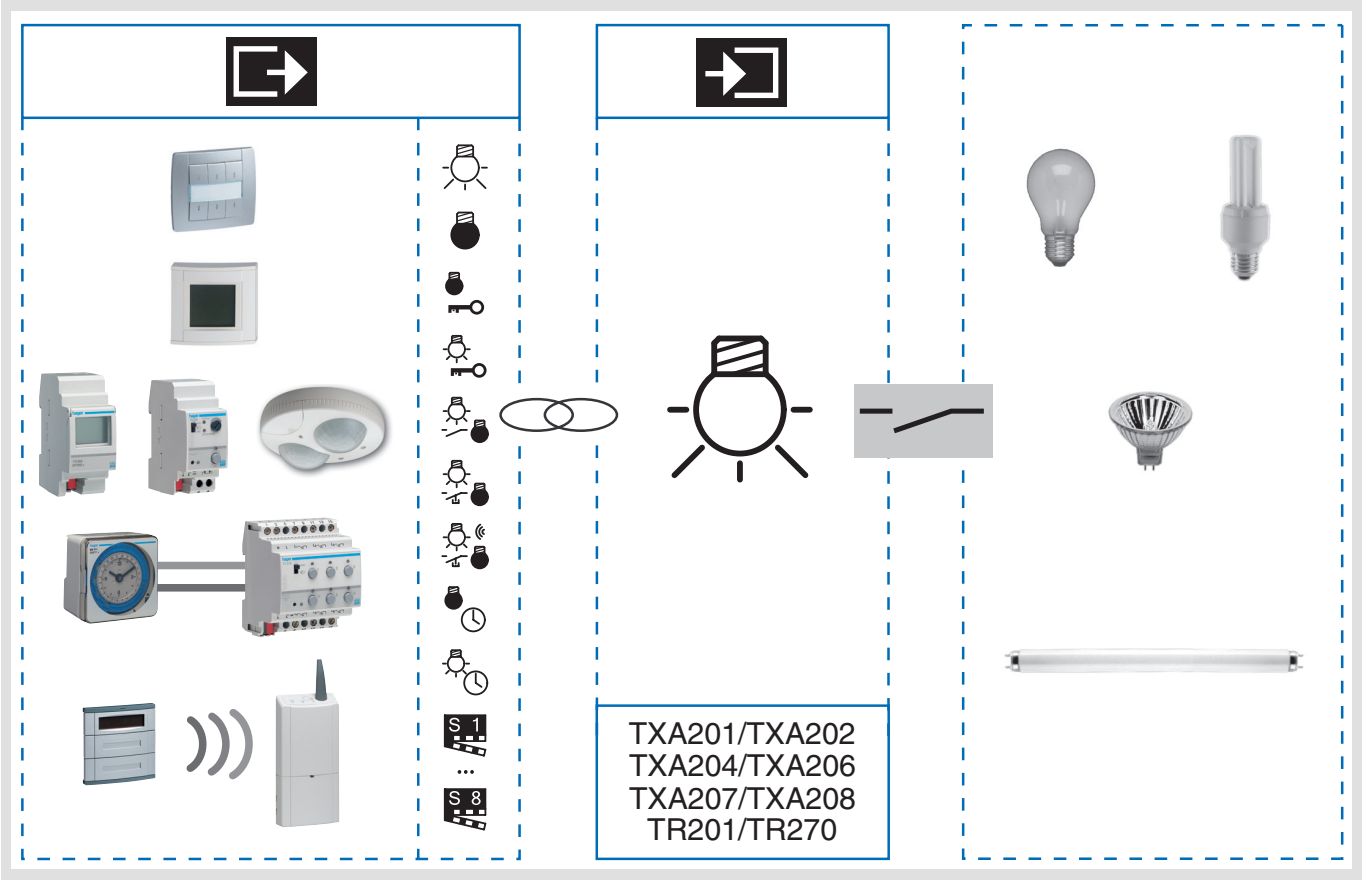
Tebis TX100 Configurator

On/Off Lighting functions

Electrical / Mechanical characteristics: see product user's instructions

Product reference	Product designation	TX100 version	TP device RF device
TXA 201A	1 flush mounted output 4A 230V~	≥ 1.5	▬
TXB 202A	2 flush mounted output 4A 230V~	≥ 1.8	▬
TXA 204 A/B/C	Output module 4-fold 4A/10A/16A 230V~	≥ 1.4	▬
TXA 204 D	Output module 4-fold 16A 230V~ capacitive load	≥ 1.4	▬
TXA 206 A/B/C	Output module 6-fold 4A/10A/16A 230V~	≥ 1.4	▬
TXA 206 D	Output module 6-fold 16A 230V~ capacitive load	≥ 1.4	▬
TXA 207A/B/C	Output module 10-fold 4A/10A/16A 230V~	≥ 1.4	▬
TXA 207D	Output module 10-fold 16A 230V~ capacitive load with local command separated from bus	≥ 1.4	▬
TXA 208A/B/C	Output module 8-fold 4A/10A/16A 230V~ with local command separated from bus	≥ 1.7	▬
TXA 208D	Output module 8-fold 16A 230V~ capacitive load with local command separated from bus	≥ 1.7	▬
TR 201	1 flush mounted output 16A	≥ 1.1	)))
TR 270C/D/F/I	Plug adaptator ON/OFF	≥ 1.1	)))



Summary

1. Presentation of the lighting functions

The main functions of the Lighting application are the following:

■ ON/OFF

The ON/OFF function is used to switch a lighting circuit ON or OFF.
The command may come from switches, pushbuttons or automatic controls.

■ Status display

The Status indication function displays the status of the output contact.
It allows a toggle function to be created by sending the status indication to each pushbutton of the group.

■ Timer

The Timer function is used to switch a lighting circuit ON or OFF for an adjustable time.
Depending on the operation mode selected, the output may be delayed for ON or OFF switching. The timer can be interrupted before the end of the delay time.

■ Priority

The Priority function allows overriding an output to a definite status, ON or OFF.
This command has the highest priority. No other command is taken into account if a priority is active. Only a priority end command re-enables the other commands.
Application: Maintaining lighting ON for safety reasons.

■ Scene

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.

■ Manual mode

The Manual mode is used to isolate the product from the bus.
In this mode, it is possible to override manually each output.

2. Function selection

TXA204/TXA206: The product may be configured for Lighting or Heating applications.
With the default setting, the TX100 recognises the product as a lighting product.
When switching the product on, the output status indicators indicate the configuration of the product:

- lighting: indicators with fixed light ON for 5 s.
- heating: indicators flicker for 5 s.

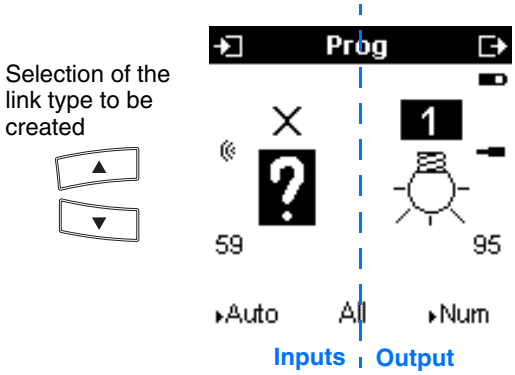
To change the operating mode of the product, refer to the desired function in the TX100 manual.

TR201/TR270/TXA201/TXB202/TXA207/TXA208: The product is configured only for Lighting applications.

3. Links and description of the Lighting 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
	ON	The ON function switches the lighting circuit ON.	Closing of the input contact ➜ Closing of the output contact. Opening of the input contact ➜ Output contact unchanged.
	OFF	The OFF function switches the lighting circuit OFF.	Closing of the input contact ➜ Opening of the output contact. Opening of the input contact ➜ Output contact unchanged.
	Toggle	The Pushbutton function allows inverting the status of the lighting circuit.	Status change of the input contact ➜ Status change of the output contact. Command emitted by a TP input device or a bidirectional RF device.
	Pushbutton for unidirectional RF devices		Status change of the input contact ➜ Status change of the output contact. Command emitted by a unidirectional RF input device. The inputs are not re-synchronised with the outputs: pressing twice may be necessary to set the outputs in the desired status.
	Switch	The Switch function switches the lighting circuit ON or OFF	Closing of the input contact ➜ Closing of the output contact. Opening of the input contact ➜ Opening of the output contact.

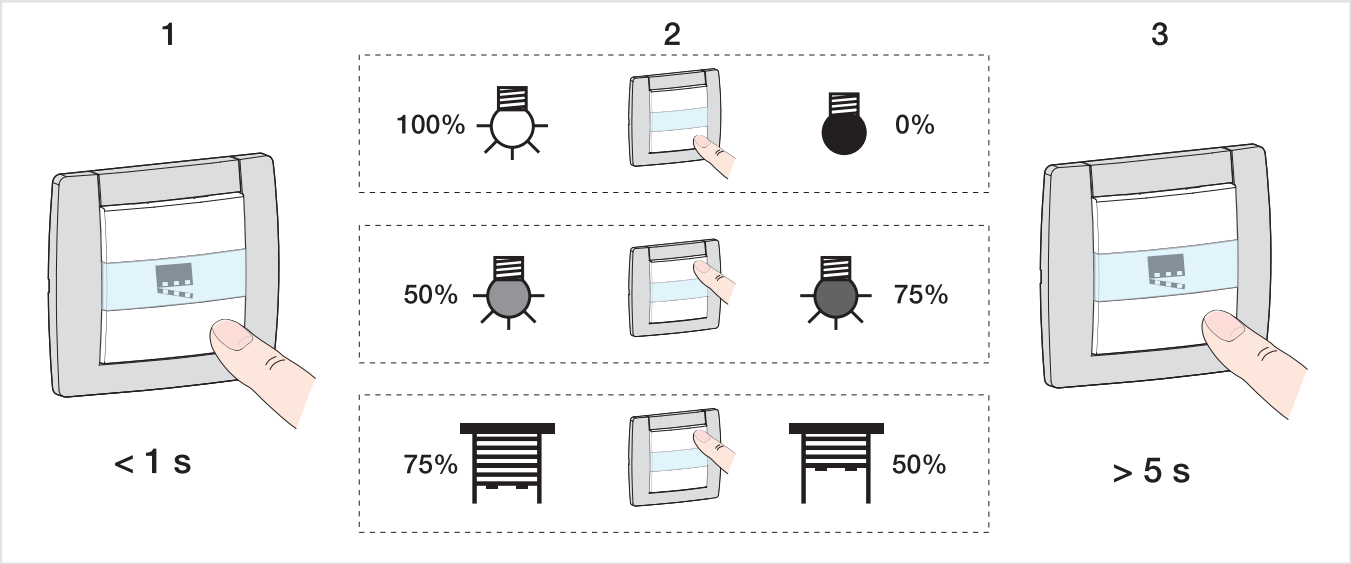
Possible link type		Link description	Output operation
	Timer ON	The Timer ON function switches the lighting circuit on for an adjustable time. Select the delay time after confirming the link: Setting range [0 s 24 h] Not used, 1 s, 2 s, 3 s, 5 s, 10 s, 15 s, 20 s, 30 s, 45 s, 1 min, 1 min 15 s, 1 min 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.	Short closing (<1 s) of the input contact ➜ Delayed closing of the output contact. Timer interruption: Long closing (>1 s) of the input contact ➜ Stop of the current delay and opening of the output contact (OFF). Increase of the duration of the delay time: Timer commands repeated n times during the first ten seconds after the beginning of the delay time multiply the duration of the delay time by n times the value of the Timer parameter. Restart of the timer: A command given 10 sec after the beginning of the delay time restarts the timer only once.
	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.	Short closing (<1 s) of the input contact ➜ Delayed opening of the output contact. Timer interruption: Long closing (>1 s) of the input contact ➜ Stop of the current delay and opening of the output contact (ON). Increase of the duration of the delay time: Timer commands repeated n times during the first ten seconds after the beginning of the delay time multiply the duration of the delay time by n times the value of the Timer parameter. Restart of the timer: A command given 10 sec after the beginning of the delay time restarts the timer only once.
	Priority ON	The Priority ON function forces the lighting circuit ON and maintains it ON.	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 end of priority behaviour: - Maintain: The contact is maintained in the same status as during Priority. - Invert: The contact is inverted in relation to the status active during Priority.
	Priority OFF	The Priority OFF function forces the lighting circuit OFF and maintains it OFF.	
 ... 	Scene 1 to 8	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.	The group of outputs is created beforehand 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.

Learning and storing the scenes

A. Learning and storing in the room

This procedure modifies and stores a scene by local action on the pushbuttons located in the room.

- Activate the scene by 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 output statuses by pressing the room pushbutton that triggers the scene for longer than 5 s. The storage is indicated by the status inversion of the involved outputs for 3 sec. 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.

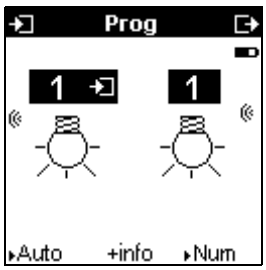
- Activate the scene by pressing briefly on the room pushbutton that triggers the scene.
- Store the output statuses by pressing the room pushbutton that triggers the scene for longer than 5 s.
  The switching to the learning mode is indicated by an alternate movement of 6 s of the shutters and blinds 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 OFF.
  - Red and continuously ON if the value selected for the scene is ON.
  - 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.

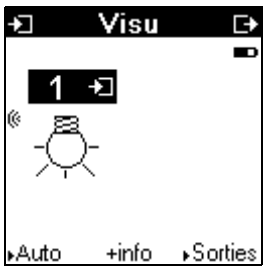
Default values

Designation	Description	Non modifiable default value
Status during bus failure	This parameter defines the output status to be applied during Bus failure.	Storing
Status at bus return	This parameter defines the output status applied at bus return.	Storing
Output contact	This parameter defines the contact type of the output.	Normally open
Timer operation	This parameter defines whether the delay time triggers an ON or an OFF status.	ON
Timer interruption	This parameter allows or not the interruption of the timer when the associated pushbutton is pressed for a long time.	Interruptible timer
Status after priority cancellation	This parameter defines the output status to be applied at the end of the Priority.	Maintain

4. +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 stauts 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.

5. Expert mode

General points

The Expert mode allows:

- EIB products which are not configurable by ETS (vizualisation 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	Function	Format	Description
OnOff	ON/OFF	1 bit	The OnOff object allows switching the output.
Timer	Timer	1 bit	The Timer object allows activating or interrupting a timer.
Forced	Priority	2 bit	The Forced object allows forcing an output.
Scene	Scene	1 byte	The Scene object allows activating or storing a scene.
IOnOff	Status display ON/OFF	1 bit	The IOnOff object allows emitting the status of the output at each status change.

6. 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:

  - Press ✓.
  - Select TP.
  - Press ✓.
  - 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 relocate the devices reset to Factory configuration.

7. 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.

8. 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

9. 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.