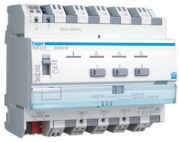



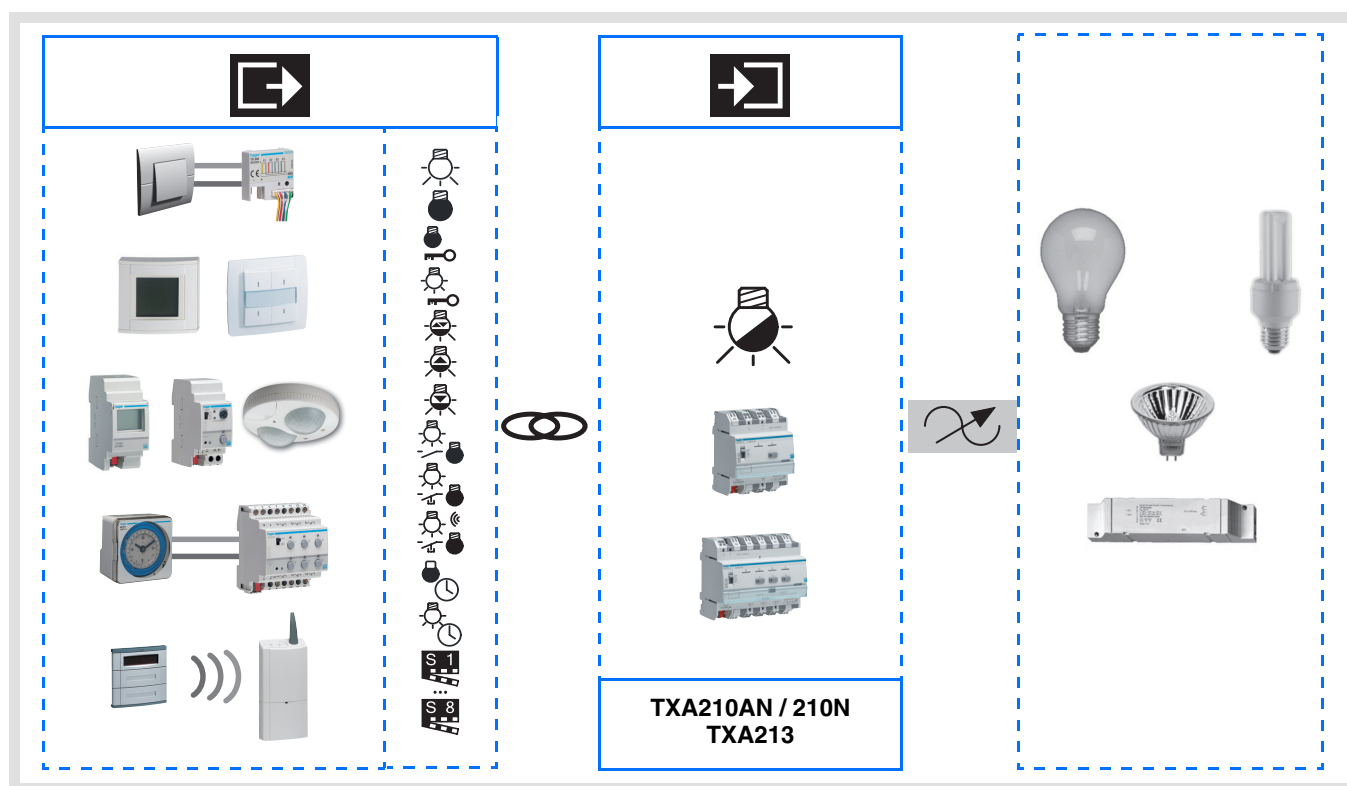
Tebis TX100 Configurator

Dimmer Lighting functions

Electrical / Mechanical characteristics: see product user manual



	Product reference	Product designation	TX100 version	TP device 
	TXA210AN	Dimmer 1 x 300W	V2.6	
TXA210N	Dimmer 1 x 600W	V2.6		
TXA213N	Dimmer 3 x 300W	V2.6		



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1. Presentation of the functions

The main functions of the dimming lighting application are as follows.

■ Function ON / OFF

The ON / OFF function is used to switch a lighting circuit ON or OFF:

ON: switching on at the last level memorised.

OFF: switching OFF.

The control can come from push buttons.

■ Dimming

The dimming enables the level of lighting to be increased or decreased progressively by a long key-press on the push button.

■ 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.

■ Priority

The Priority function enables the output to be forced to 100% 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 push button activates a scene. Each output may be integrated into 8 different scenes.

■ Adjustment of the minimum and maximum limits of the dimming range

This function is used to fix the minimum and maximum relative dimming limits for the output. These limits can be adjusted locally on the front of the product (see product information).

■ Manu Mode



Manu Mode is used to isolate the product from the bus. In this mode it is possible to force the level of lighting of the lighting circuits locally.

■ Functions specific to the TXA213N

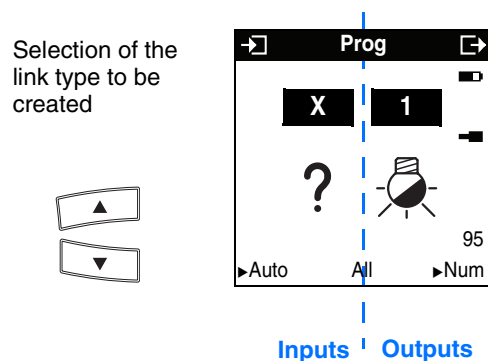
It is possible to select 1 to 3 dimming outputs on the TXA213. The maximum available power per output depends on the number of outputs used. The total power is limited to 900W.

- 1 output used: 900W
- 2 outputs used: one 600W output and one 300W output
- 3 outputs used: 300W per output







2. Dimming functions configuration and setting (creation of links in Standard mode)






After learning the product , a dimmer output is represented by the symbol  in the right-hand part of the TX100 screen. After numbering the outputs, the available inputs appear in the left-hand part of the screen.

Screen of the TX100



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.	Closure of the input contact → the light switches ON at the last level stored Repeated closures maintain lighting at the last level stored.
	OFF	The OFF function switches the lighting circuit OFF.	Closure of the input contact → Switching OFF the light at 0% Repeated closures maintain the lighting OFF.
	Toggle switch	The Toggle switch function allows inverting the status of the lighting circuit.	Closure of the input contact → Toggle between switching ON at the last level stored and switching OFF at 0% Repeated closures invert the status of the output contact each time.
	1 push button dimmer	The 1-push button Dimmer function allows dimming the light with one single push button.	Brief closure of the input contact → Toggle between switching ON at the last level stored and switching OFF at 0% Prolonged closure of the input contact → Increase or reduction of the lighting level
	2 push buttons dimmer: Increase	The Increase Function allows increasing the output level.	Brief closure of the input contact → the light switches ON at the last level stored Prolonged closure of the input contact → Increase of the lighting level
	2 push buttons dimmer: Decrease	The Reduction function allows decreasing the output level.	Brief closure of the input contact → Switching OFF of the light Prolonged closure of the input contact → Reduction of the lighting level
	Switch	The Switch function switches the lighting circuit ON or OFF.	Closure of the input contact → the light switches ON at the last level stored Opening of the input contact → Switching OFF the light at 0%

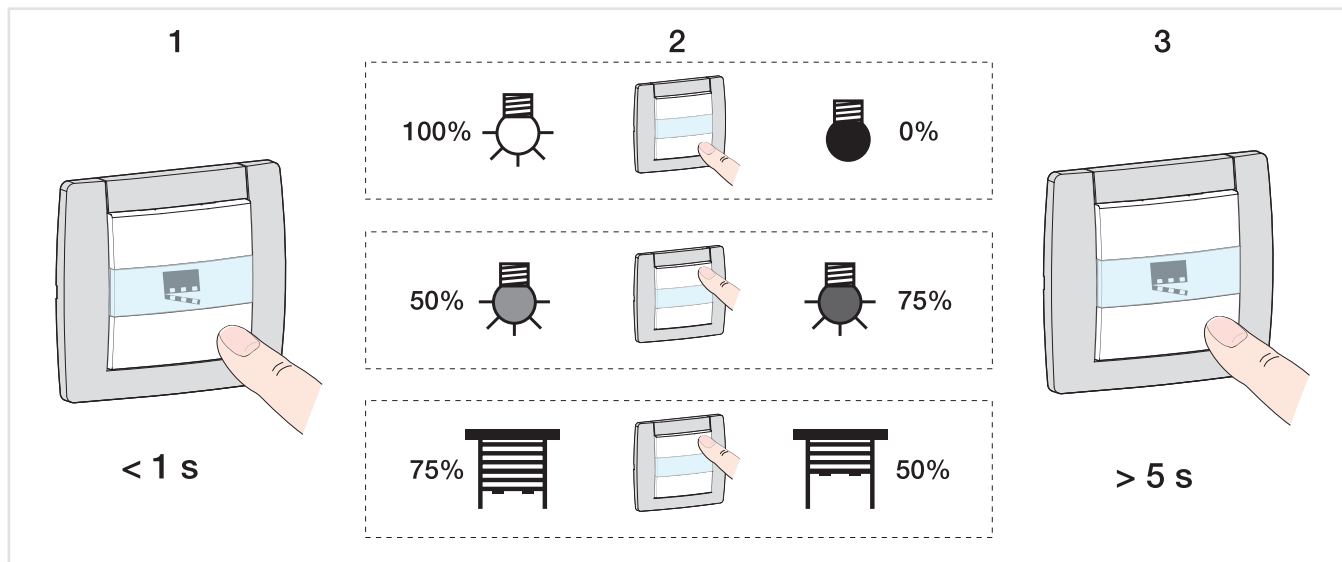
Possible link type	Link description	Output operation
 Timer ON	<p>The Timer ON function switches the lighting circuit ON for an adjustable time.</p> <p>Select the time delay after confirming the link: Setting range [0 s - 24 h]</p> <p>Not active, 1 s, 2 s, 3 s, 5 s, 10 s, 15 s, 20 s, 30 s, 45 s, 1 min, 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>Brief closure (<1 s) of the input contact → Lighting comes on for an adjustable time(at last level stored).</p> <p>Interruption of the time delay: Prolonged closure (>1 s) of the input contact → Stop of the current delay and switching OFF at 0% (OFF)</p>
 Timer OFF	<p>The Timer OFF function switches the lighting circuit off for an adjustable time.</p> <p>Select the time delay after confirming the link: Setting range [0 s - 24 h]</p> <p>Not active, 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>Brief closure (<1 s) of the input contact → Delayed switching OFF of the light</p> <p>Interruption of the time delay: Prolonged closure (>1 s) of the input contact → Stop of the current delay and switching ON of the light at the last level stored.</p>
 Priority ON	<p>The Priority ON function forces the lighting circuit ON and maintains it ON.</p>	<p>The ON priority switches the light ON to 100%, whatever the level stored.</p> <p>The OFF priority causes the light to switch down to 0%.</p>
 Priority OFF	<p>The OFF Priority function forces the lighting circuit OFF and maintains it OFF.</p>	<p>Priority is the function with the highest priority. Only a cancellation command for the priority can end the priority and authorise the bus commands to be followed again.</p> <p>After confirming the link, select the end of priority behaviour:</p> <ul style="list-style-type: none"> • Maintain: the output is maintained in the same status as during Priority, • Inversion: the output is inverted in relation to the status active during Priority.
 Scene 1 to 8	<p>The Scene function groups a set of outputs.</p> <p>These outputs can be set to an adjustable predefined status.</p> <p>Pressing a push button activates a scene. Each output may be integrated into 8 different scenes.</p>	<p>The group of outputs is created beforehand by establishing the link between the outputs that must belong to the scene and the push button that will trigger the scene.</p> <p>The status of each output may be defined by parameterising, by learning in the room using the push buttons of the installation or on the product.</p>

■ Learning and memorisation of scenes

A. Learning and storing in the room

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

- Activate the scene by pressing briefly on the room push button that triggers the scene,
- Set the outputs to the desired status using the push buttons that control them individually,
- Store the output statuses by pressing the room push button that triggers the scene for longer than 5 s. Storage is indicated by the inversion of the status of the outputs concerned for 3s.



■ Learning and storing on the product

This procedure allows a scene to be modified by local action on the push buttons on the front of the products.

- Activate the scene by pressing briefly on the room push button that triggers the scene,
- Set the dimmer to Manu mode and switch the outputs to the desired status by pressing the push buttons associated with the outputs,
- Return to Auto mode,
- Store the scene by a long press lasting over 5 s on the push button which triggers the scene,
- Storage is indicated by the inversion of the status of the outputs concerned for 3s.

■ Default value

Designation	Description	Values
Status during bus failure	This parameter defines the status of the output applied when the bus is cut off.	Last mode stored
Status at bus return	This parameter defines the status of the output applied to the bus return.	Last mode stored
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 push button is pressed for a long time.	Interruptible timer

3. Mode + Info

The mode +Info can be accessed in the Prog and Visu modes of the TX100. This display mode is active for the installation products until it is deactivated.



The +Info mode allows the status indication to be linked from an output to a viewing product: Area controller, LED output, etc. The status indication sends the current status over the network each time the status changes.

The status indication is represented by the symbol .

The status indication adds itself to the list of inputs on the left of the TX100 screen with the same number as the output.

4. Expert mode and Creation of specific links

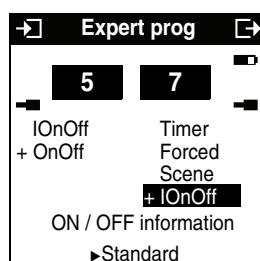
■ General points

The Expert mode allows:

- KNX products that cannot be configured by ETS (viewing 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	Designation ETS	Function	Format	Description
OnOff	On/Off	ON / OFF	EIS1 1 bit	Allows an ON / OFF command to be transmitted.
IOOff	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.
DimVal	DimmingValue	Absolute dimming	EIS2	Used to establish the output level of a dimmer in %.
IDimVal	InfoDimmingValue	Absolute dimming info	EIS2	Used to know the lighting level of the output in %.
Timer	TimedStartstop	Timer	EIS1 1 bit	Allows you to activate or interrupt the timer.
Forced	Forced	Priority	EIS2 2 bit	Forces an output.


Designation TX100	Designation ETS	Function	Format	Description
Scene	SceneNumber	Scene	1 byte	Activates the scene by its number.

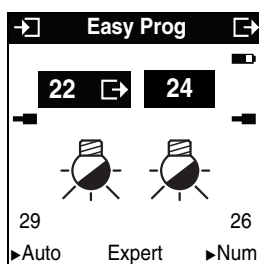
■ Specific links


Expert mode is used to display the objects linked to the inputs and outputs that are compatible amongst each other to create specific links. To establish a link simply attribute the same group address to the objects.

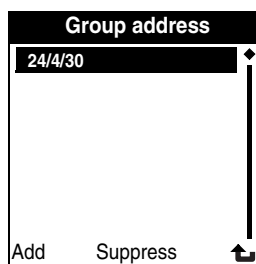
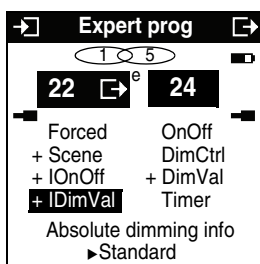
For example:

You wish to create a system where a TXA210N dimmer operates as a slave to a TXA215 dimmer and displays the lighting level of the 2 outputs:

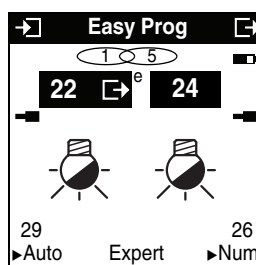
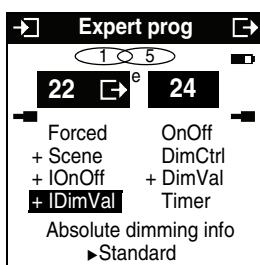
- Enter the TX100 Expert Configuration mode (Menu/ExpertStandard mode on the TX100),
- Select the TXA210N dimmer output in the left-hand part of the screen (Output 22 with symbol ) ,
- Select the TXA215 dimmer output in the right-hand part of the screen (Example output 24).



- Enter Expert mode to display the objects available (touch the Expert screen),
- Go to the left-hand part of the screen,
- Select the **IDimVal** object of output 22 and create any group address that is free (Short press on  to go to the Group Add. screen),



Exit and go to the right-hand part of the screen (press Num). Select the **DimVal** object of output 24, allocating the same group address to it.



The link thus created is used to operate the output of dimmer TXA210N as a slave of the TXA215 and show the lighting level value common to the 2 outputs on the TXA215 LCD display.

5. Restore Factory Configuration function

This function enables the device to be returned to its initial configuration (configuration when it came out of the factory). After a device reset, the device can be re-used in a new installation. 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 Install. product outside of system from Reset menu,
 - Press ,
 - Select TP,
 - Press ,
 - Press on the physical addressing 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.

6. Auto / Manu mode

The Auto/Manu switch is located on the front of the product. This switch is used to select Manu or Auto mode.

- In Manu mode, the outputs can be controlled using the push buttons on the front of the product,
- In Auto mode, the orders from the bus control the outputs.

7. Characteristics

Max. number of group addresses	252
Max. number of links	254
Objects	8 per output, 2 for the location <ul style="list-style-type: none"> • 26 in total (TXA213N) • 10 in total (TXA210AN, TXA210N)

8. Bus presence test

To check the presence of the bus or reset to factory configuration, press the lighted physical addressing push button 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 can be run in Auto or in Manu mode ().

