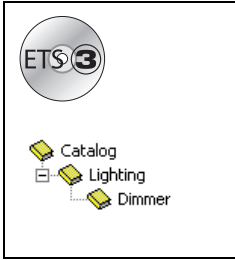
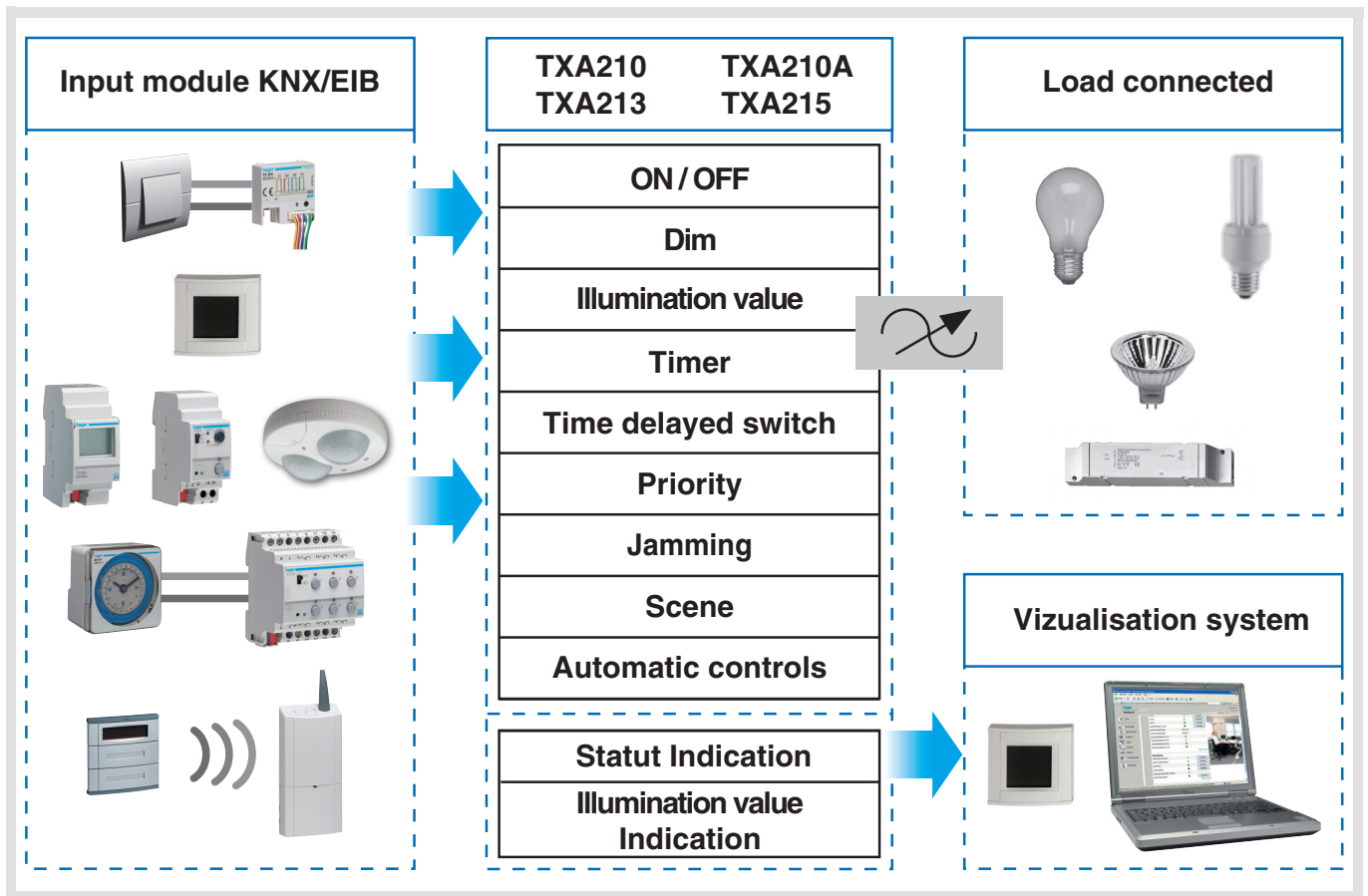


Tebis application software



TL210B V 3.x Dim
 TL213A V 3.x Dim
 TL215A V 3.x Dim

	Product reference	Product designation
	TXA210 / TXA210A TXA213 TXA215	Dimmer 1 x 600W / 1 x 300 W Dimmer 3 x 300W Dimmer 1 x 1000W



Summary

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1. Presentation of the Dimming functions of the TL210B-TL213A-TL215A applications

The TL210B-TL213A-TL215A application softwares allow each output to be individually configured for Dimming applications. The main functions are the following:

■ ON/OFF

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

- ON: switching ON at the lighting level defined by parameters. Switching ON can be gradual or instantaneous.
- OFF: switching OFF. Switching OFF can be gradual or instantaneous.

The command may come from pushbuttons.

■ Relative or absolute dimming (Illumination value)

The relative dimming allows increasing or decreasing the lighting level as long as a pushbutton is pressed down. The dimmer speed is settable.

The absolute dimming allows defining in % the lighting level to reach by means of the Lighting level object.

■ 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. An adjustable cut-OFF pre-warning indicates the end of the delay time by dividing the lighting level by two. The timer can be interrupted before the end of the delay time.

■ Time-limited toggle switch

The Time delayed switch function combines a toggle function and a cut-off delay.

Pressing briefly a pushbutton inverts the output. If the output is ON, it switches automatically to OFF after a programmable delay time (energy savings).

Applications: Lighting of attics, cellars, sheds, etc..

■ Priority

The Priority function allows overriding an output to an adjustable lighting level.

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.

The dimmer speed to reach these lighting levels are adjustable.

■ Setting of minimum and maximum dimming range limits

This function allows defining minimum and maximum dimming levels for each output. These values can be defined by ETS parameterisation or directly on the front of the product.

■ Selection of the number of outputs used *

The product enables controlling 1, 2 or 3 lighting circuits. The maximum power available by output depends on the number of outputs used. The cumulated power is limited to 900W:

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

■ Manual mode

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

In this mode, the brightness of the lighting circuits can be forced locally. These parameters can also be set in ETS. Local settings on the device override the last downloaded values.

- references TXA215

In this mode, the following local settings are also possible:

- Switch ON speed
- Cut OFF speed
- Relative dimmer speed
- Minimum dimming value
- Maximum dimming value
- Brightness value and dimming speeds for the first scenes (see product user's instructions)

* only reference TXA213.

2. Dimming function configuration and parameters

2.1 General parameters

■ ETS version selection

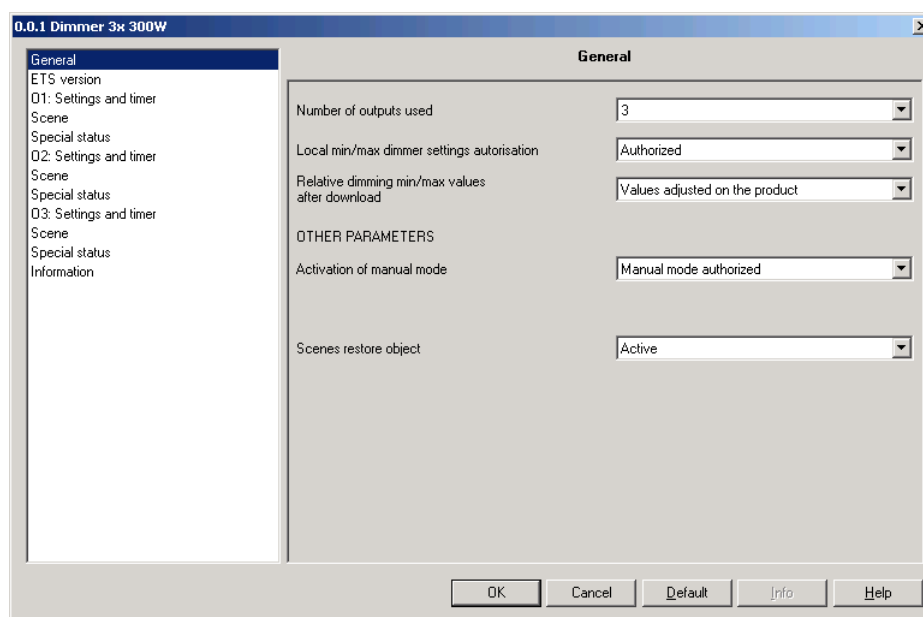
This parameter allows the presentation of the parameters to be optimised according to the ETS version used. Go to the ETS Version screen and select the required version: ETS2 or ETS3.

Default value: ETS3.

■ Selection of the number of outputs *

This parameter allows selecting the number of outputs used.

→ Parameters



Screen 1

Designation	Description	Values
Number of outputs used *	This parameter allows selecting the number of outputs used.	1, 2, 3 Default value: 3
Activation of manual mode **	This parameter enables or disables the 2 position switch 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.	Manual mode authorized, Manual mode inhibited, Manual mode time limited. - Manual mode authorized: the manual mode can be activated at any time. - Manual mode inhibited: the switch is permanently disabled. Switching to manual mode is impossible. - Manual mode time limited: the manual mode can be activated for a limited duration. Default value: Manual mode authorized.
Duration of manual mode activation***	This parameters defines the duration of activation of the manual mode.	15, 30, 60 min. Default value: 15 min.
Scene restore object (see also Scene function)	If the value is Authorized, the values associated to the scenes at the last download are restored upon reception of this object.	Not active, Active. Default value: Not active

* only reference TXA213.

** When the position of the switch is not in line with the status of the product, the indicators associated with the outputs light up sequentially.

*** This parameter only is visible if the Manual mode activation parameter has the value: Manual mode time limited.

■ **Setting of the minimum and maximum dimming values.**

The relative dimming range can be defined on the product or via an ETS parameter.

A. Local settings

A 4-position switch on the front of the product provides access to the following modes:

TXA210-210A	TXA213	TXA215
Auto Min Max Manual	Auto Min Max Manual	Auto Manual

The Min and Max position allows setting the minimum and the maximum lighting level of the outputs. These can be set by storing the output's current lighting level after a long key-press on the output pushbutton on the front of the product.*

* For the reference TXA215, the minimum and maximum dimming values can be set on the device.

B. ETS parameters

In the case of ETS downloading, you can:

- Not modify the limits set locally.
- Replace the limits set locally by the parameter values.

→ Parameters

Designation	Description	Values
Local min./max. dimmer limit settings authorization	This parameter authorizes or forbids taking into account the switch's Min. and Max. positions.	Inhibited, Authorized. Default value: Authorized.
Relative dimming min/max values after download	This parameter allows or not taking into account the dimming range limits defined with ETS.	Values adjusted on the product, Values settings in ETS Default value: Values adjusted on the product.

* Only for the references TXA210-210A-213.

2.2 Objects List

Number	Name	Object Function	Length	C	R	W	T	U	Priority
0	Output 1	ON/OFF	1 bit	C	R	W	-	U	Low
1	Output 1	Dimming	4 bit	C	R	W	-	U	Low
2	Output 1	Brightness value	1 Byte	C	R	W	-	U	Low
3	Output 1	Timer	1 bit	C	R	W	-	U	Low
4	Output 1	Priority	2 bit	C	R	W	-	U	Low
5	Output 1	Scene	1 Byte	C	R	W	-	U	Low
6	Output 1	Status indication	1 bit	C	R	-	T	U	Low
7	Output 1	Brightness value ind...	1 Byte	C	R	-	T	U	Low
8	Output 2	ON/OFF	1 bit	C	R	W	-	U	Low
9	Output 2	Dimming	4 bit	C	R	W	-	U	Low
10	Output 2	Brightness value	1 Byte	C	R	W	-	U	Low
11	Output 2	Timer	1 bit	C	R	W	-	U	Low
12	Output 2	Priority	2 bit	C	R	W	-	U	Low
13	Output 2	Scene	1 Byte	C	R	W	-	U	Low
14	Output 2	Status indication	1 bit	C	R	-	T	U	Low
15	Output 2	Brightness value ind...	1 Byte	C	R	-	T	U	Low
16	Output 3	ON/OFF	1 bit	C	R	W	-	U	Low
17	Output 3	Dimming	4 bit	C	R	W	-	U	Low
18	Output 3	Brightness value	1 Byte	C	R	W	-	U	Low
19	Output 3	Timer	1 bit	C	R	W	-	U	Low
20	Output 3	Priority	2 bit	C	R	W	-	U	Low
21	Output 3	Scene	1 Byte	C	R	W	-	U	Low
22	Output 3	Status indication	1 bit	C	R	-	T	U	Low
23	Output 3	Brightness value ind...	1 Byte	C	R	-	T	U	Low
26	Output 1	Jamming	1 bit	C	R	W	-	U	Low
29	Output 1	Time limited toggle s...	1 bit	C	R	W	-	U	Low
30	Output 2	Jamming	1 bit	C	R	W	-	U	Low
33	Output 2	Time limited toggle s...	1 bit	C	R	W	-	U	Low
34	Output 3	Jamming	1 bit	C	R	W	-	U	Low
37	Output 3	Time limited toggle s...	1 bit	C	R	W	-	U	Low
39	All outputs	Maintenance	2 Byte	C	R	-	T	U	Low

2.3 Function descriptions

■ ON/OFF, Status indication and Brightness value indication functions

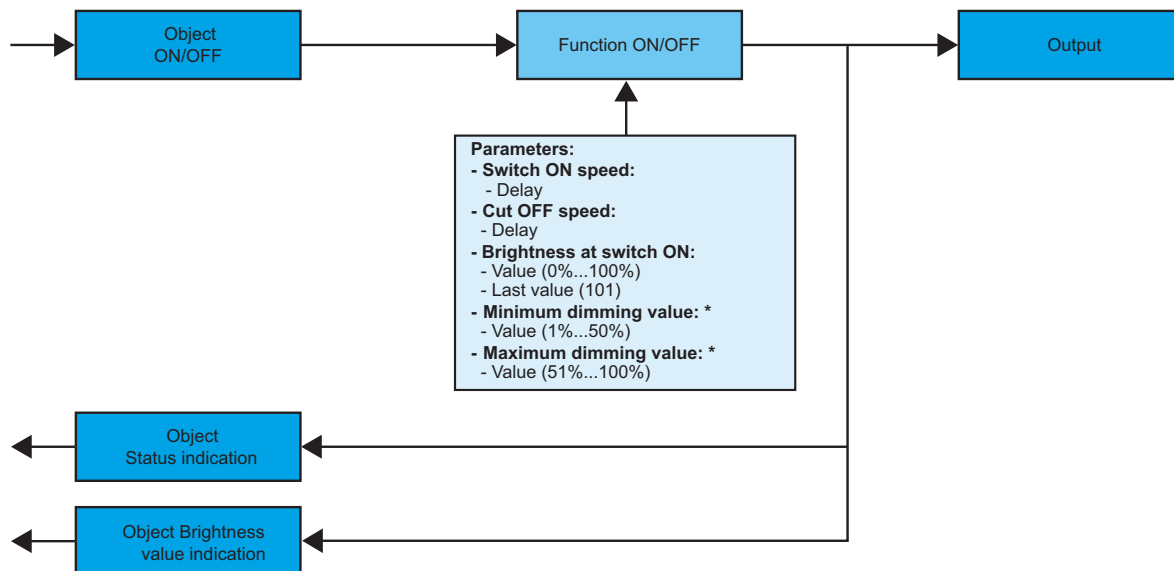
The ON/OFF function is used to switch the output ON or OFF using the ON/OFF object.

- ON: switching ON at the lighting level defined by parameters. Switching ON can be gradual or instantaneous.
- OFF: switching OFF. Switching OFF can be gradual or instantaneous.

The dimmer speed is settable.

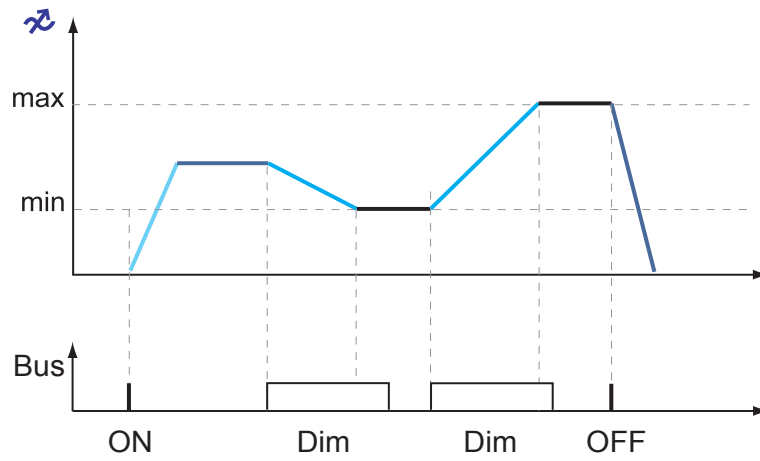
The switching ON and switching OFF speed are defined by parameter for the ON/OFF function, the value of the parameters will also be used for the absolute dimming, timer and priority.

The output status and the lighting level are indicated on the bus by the Brightness value indication object.



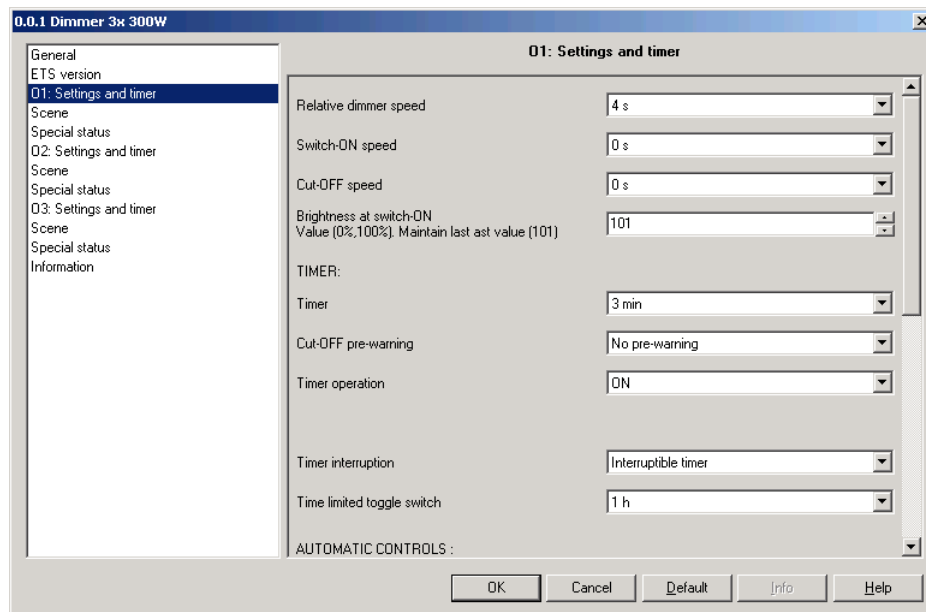
* These parameters are only visible if the parameter Relative dimming min/max values after download has the value: Values settings in ETS.

→ Operating principle



	Switching-ON speed
	Relative dimmer speed
	Switching-OFF speed
	Brightness when switched ON
	Min. and max. brightness

→ Parameters



Screen 2

Designation	Description	Values
Switch-ON speed	This parameter defines the dimming speed to reach the brightness level at switching ON.	0 s, 1 s, 2 s, 3 s, 4 s, 5 s, 6 s, 9 s, 15 s, 30 s, 60 s, 2 min, 5 min, 10 min, 20 min, 30 min. Default value: 0 s.
Switch Cut-OFF speed	This parameter defines the dimming speed at switching OFF.	0 s, 1 s, 2 s, 3 s, 4 s, 5 s, 6 s, 9 s, 15 s, 30 s, 60 s, 2 min, 5 min, 10 min, 20 min, 30 min. Default value: 0 s.
Brightness at switch ON	This parameter defines the brightness level when switched ON.	0% to 100% in 1% steps, 101 (last value). Default value: 101 (last value).
Minimum dimming value*	This parameter defines the minimum brightness level for dimming.	1% to 50% in 1% steps. Default value: 1%.
Maximum dimming value*	This parameter defines the maximum brightness level for dimming.	51% to 100% in 1% steps. Default value: 100%.

* These parameters are only visible if the parameter Relative dimming min/max values after download has the value: Values settings in ETS.

■ Dimming function

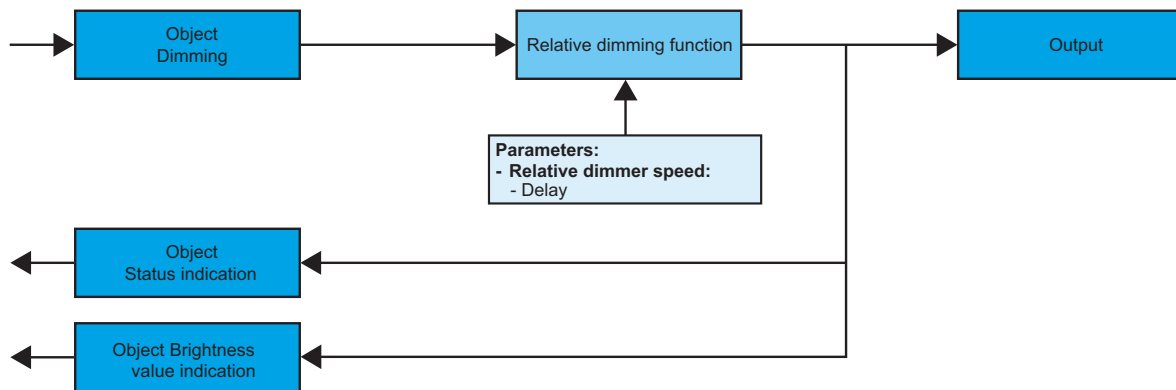
The dimming can be relative or absolute.

A. Relative dimming

The relative dimming allows increasing or decreasing the lighting level of the lighting circuit as long as a pushbutton is pressed down.

The relative dimming function is started by the Dimming object.

The dimmer speed is settable.



→ Parameter Setting screen: See "Screen 2".

→ Parameter

Designation	Description	Values
Relative dimmer speed	This parameter defines the dimming speed to go from 0% level to 100% level.	1 s, 2 s, 3 s, 4 s, 5 s, 6 s, 9 s, 15 s, 30 s, 60 s. Default value: 4 s.

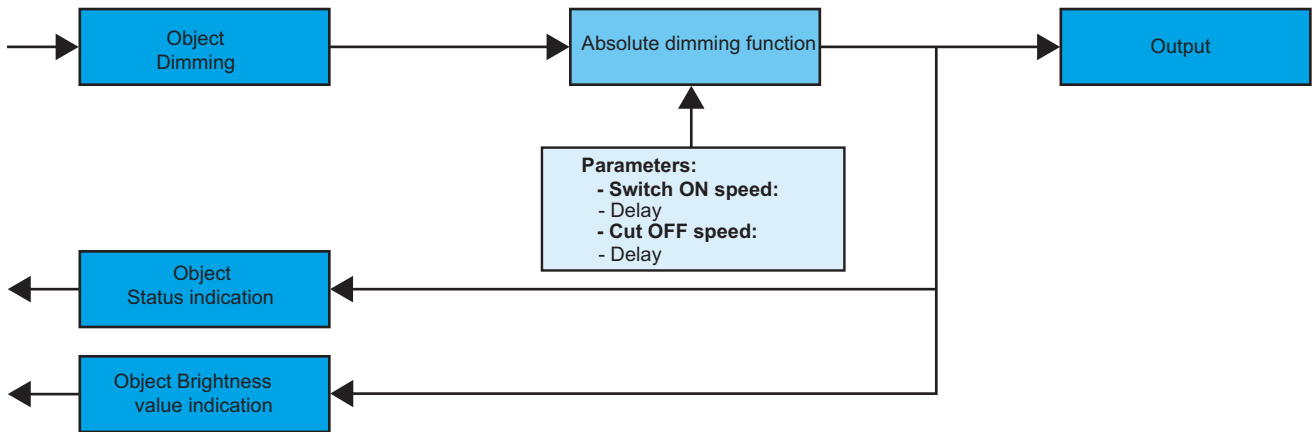
B. Absolute dimming

The parameters set in the ON/OFF function also apply to the Absolute dimming function. No specific setting is required.

The Absolute dimming function allows applying a brightness level to the lighting circuit when switching it on or off.

The absolute dimming function is started by the Brightness value object.

The dimmer speed is settable (same values as for the ON/OFF function).



- Parameter Setting screen: See "Screen 2".
- Parameters

Designation	Description	Values
Switch-ON speed (similar to ON/OFF function)	This parameter defines the dimming speed to reach the brightness level at switching ON.	0 s, 1 s, 2 s, 3 s, 4 s, 5 s, 6 s, 9 s, 15 s, 30 s, 60 s, 2 min, 5 min, 10 min, 20 min, 30 min. Default value: 0 s.
Cut-OFF speed (similar to ON/OFF function)	This parameter defines the dimming speed at switching OFF.	0 s, 1 s, 2 s, 3 s, 4 s, 5 s, 6 s, 9 s, 15 s, 30 s, 60 s, 2 min, 5 min, 10 min, 20 min, 30 min. Default value: 0 s.

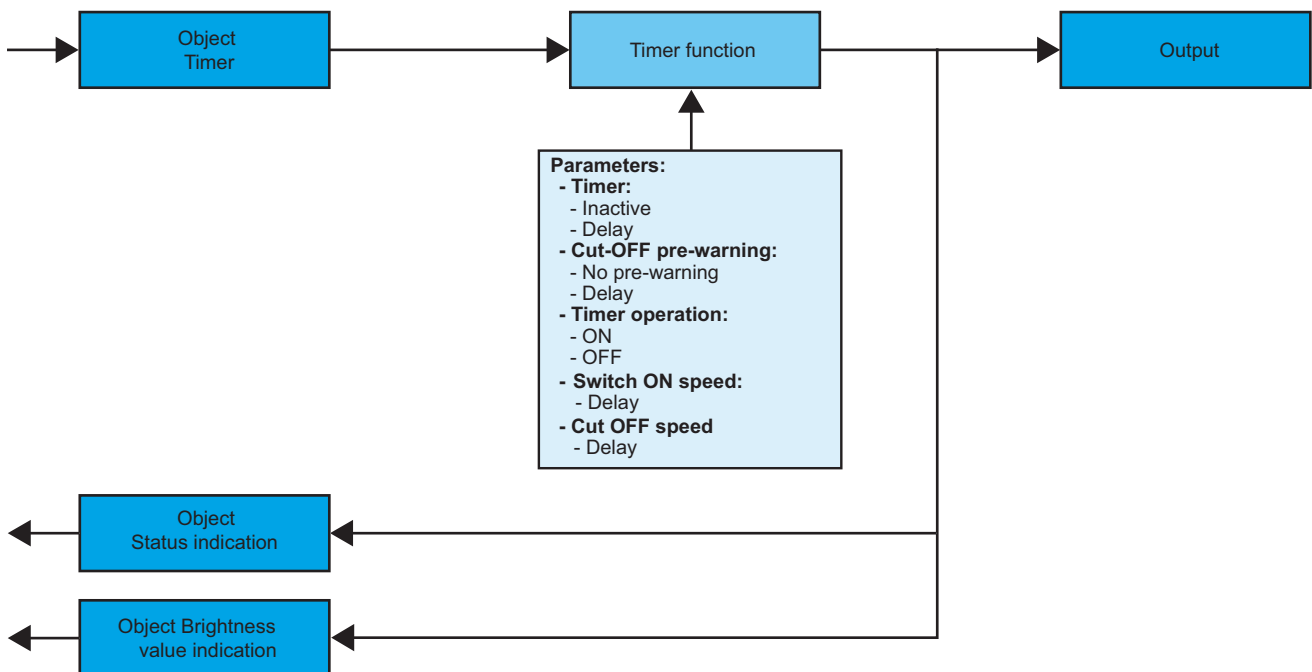
■ Timer function

The Timer function is used to switch a lighting circuit ON or OFF for an adjustable time. The function is started by the Timer object. The dimmer speed is settable (same values as for the ON/OFF function).

Cut-OFF pre-warning (for ON operation):

An adjustable cut-OFF pre-warning indicates the end of the delay time by dividing the lighting level by two.

The Cut-OFF pre-warning parameter value defines the time before the end of the delay time, when the pre-warning will be applied.



- Parameter Setting screen: See "Screen 2".

→ Parameters

Designation	Description	Values
Timer	This parameter defines the length of the delay time.	Inactive, Range [1 s 24 h]* Default value: 3 min.
Cut-OFF pre-warning	The parameter value defines the time before the end of the delay time, when the pre-warning will be applied.	No pre-warning, 15 s, 30 s, 1 min. Default value: No pre-warning.
Timer operation	This parameter defines whether the delay time triggers an ON or an OFF status.	ON, OFF Default value: ON.
Swich-ON speed (similar to ON/OFF function)	This parameter defines the dimming speed to reach the brightness level at switching ON.	0 s, 1 s, 2 s, 3 s, 4 s, 5 s, 6 s, 9 s, 15 s, 30 s, 60 s, 2 min, 5 min, 10 min, 20 min, 30 min. Default value: 0 s.
Cut-OFF speed (similar to ON/OFF function)	This parameter defines the dimming speed at switching OFF.	0 s, 1 s, 2 s, 3 s, 4 s, 5 s, 6 s, 9 s, 15 s, 30 s, 60 s, 2 min, 5 min, 10 min, 20 min, 30 min. Default value: 0 s.
Timer interruption	This parameter allows or not the interruption of the timer when the associated pushbutton is pressed for a long time.	Interruptible timer, Non-interruptible timer. Default value: Interruptible timer

* Setting range [1 s 24 h]

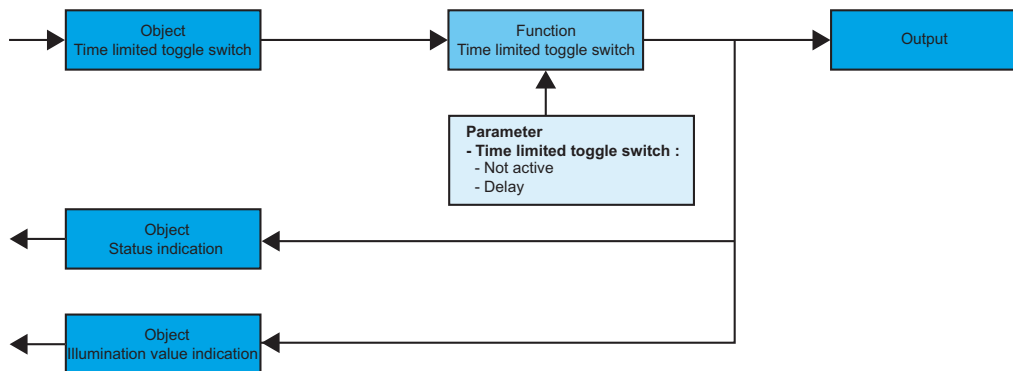
1 s, 2 s, 3 s, 5 s, 10 s, 15 s, 20 s, 30 s, 40 s, 45 s, 50 s, 1 min, 1 min 15 s, 1 min 30 s, 2 min, 2 min 30 s, 3 min, 4 min, 5 min, 6 min, 7 min, 8 min, 9 min, 10 min, 11 min, 12 min, 13 min, 14 min, 15 min, 20 min, 30 min, 40 min, 50 min, 1 h, 1 h 30 min, 2 h, 2 h 30 min, 3 h, 3 h 30 min, 4 h, 5 h, 6 h, 12 h, 24 h.

Note:

- 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.
- Timer commands repeated n times within 10 seconds after the beginning of the delay time restart the timer only once.

■ Time limited toggle switch function

The Time limited toggle switch function allows a toggle with a settable switch-off delay time to be created (energy savings). This function is started by the Time limited toggle switch object.



→ Parameter Setting screen: See "Screen 2".

→ Parameter

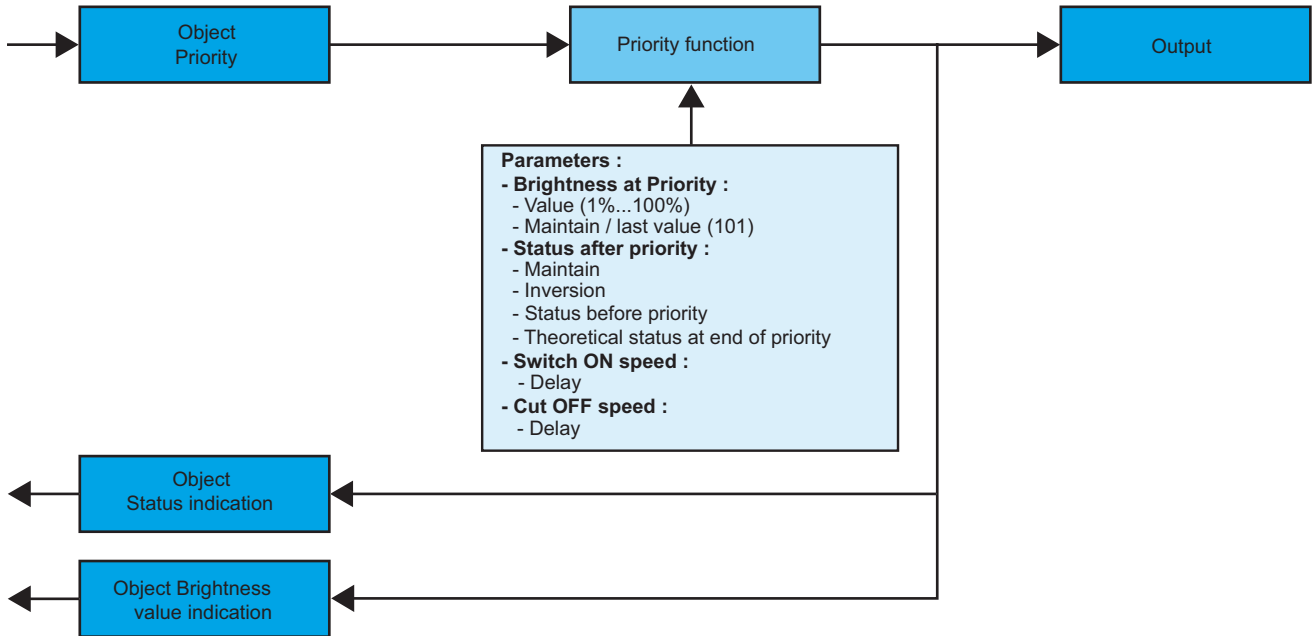
Designation	Description	Values
Time-limited toggle switch	This parameter defines the duration of the switch-off delay time.	Not active, Range [0.5 s 24 h]* Default value: 1 h.

* Setting range [0.5 s 24 h]

0.5 s, 1 s, 2 s, 3 s, 5 s, 10 s, 15 s, 20 s, 30 s, 40 s, 45 s, 50 s, 1 min, 1 min 15 s, 1 min 30 s, 2 min, 2 min 30 s, 3 min, 4 min, 5 min, 6 min, 7 min, 8 min, 9 min, 10 min, 11 min, 12 min, 13 min, 14 min, 15 min, 20 min, 30 min, 40 min, 50 min, 1 h, 1 h 30 min, 2 h, 2 h 30 min, 3 h, 3 h 30 min, 4 h, 5 h, 6 h, 12 h, 24 h.

■ Priority function

The Priority function allows the outputs to be forced and maintained at a definite ON or OFF status imposed by the input. This function is started by the Priority object. The brightness for priority ON is settable. The dimmer speed is settable (same values as for the ON/OFF function). 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.



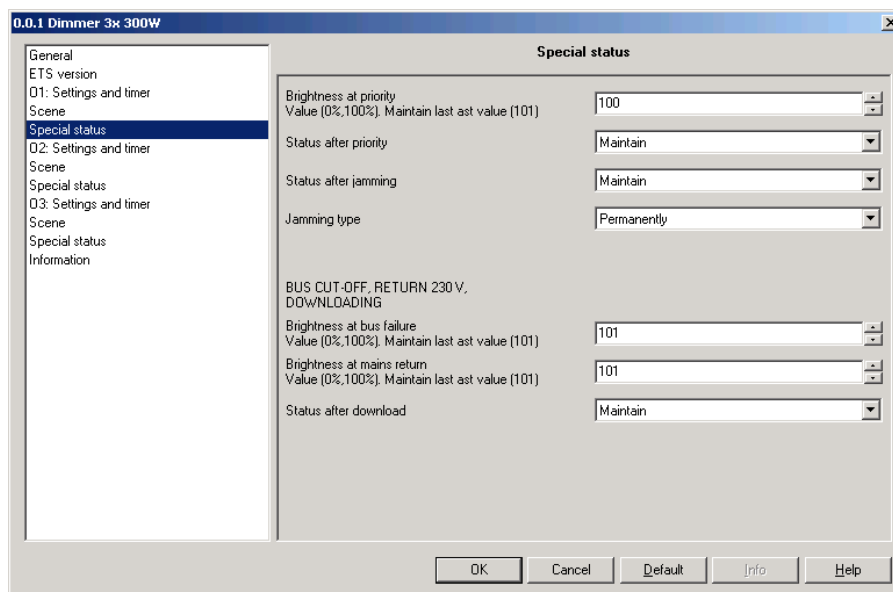
→ Parameter Setting screen: See "Screen 3".

→ Description of the Priority object.

Bit 1	Bit 0
Output behaviour	

Output behaviour	00 = Priority-end 01 = Priority-end 10 = Priority OFF 11 = Priority ON
------------------	---

→ Parameters



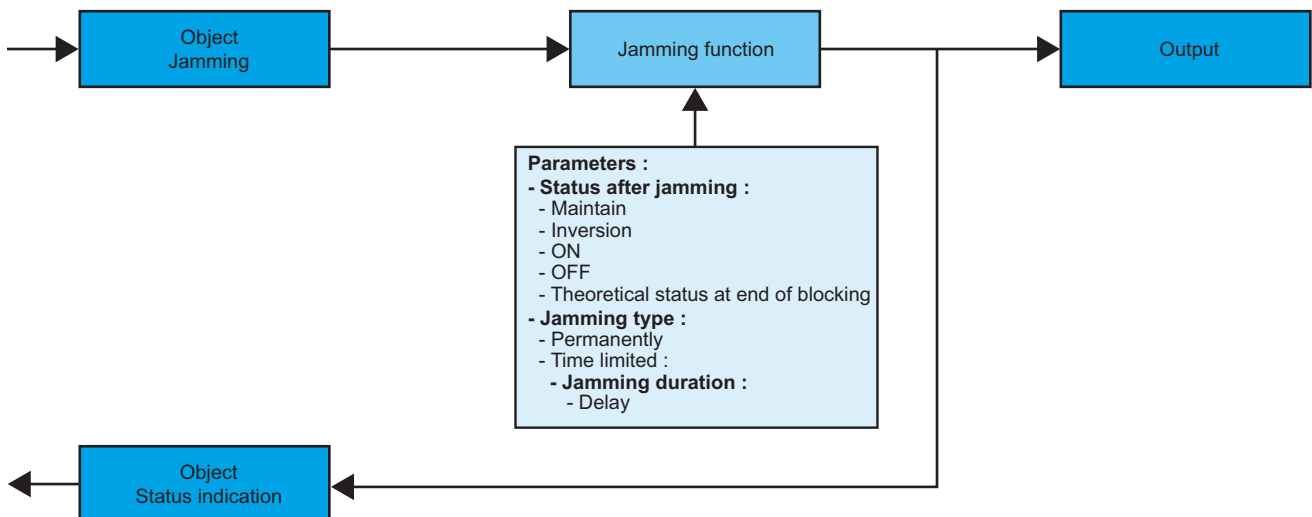
Screen 3

Designation	Description	Values
Brightness at priority	This parameter defines the brightness level at priority.	1% to 100% in 1% steps, 101. 101: - If the output is OFF: restoring the lighting level defined by the parameter Brightness at switch ON. - If the output is ON: upholding the level before priority. Default value: 100%.
Status after priority	This parameter defines the brightness level to be applied at the end of the Priority.	Maintain, Inversion, Status before priority, Theoretical status at end of priority. - Maintain: maintains the output at the status active during Priority. - Inversion: inversion of the output status with regards to the status active during Priority (ON to OFF and OFF to ON). - ON: switches the output to ON - OFF: switches the output to OFF - Status before priority: switches the output to the status active before the Priority command. - Theoretical status at end of priority: switches the output to the status that would be active if no Priority command had occurred. Default value: Maintain.
Switch-ON speed (similar to ON/OFF function)	This parameter defines the dimming speed to reach the brightness level at switching ON.	0 s, 1 s, 2 s, 3 s, 4 s, 5 s, 6 s, 9 s, 15 s, 30 s, 60 s, 2 min, 5 min, 10 min, 20 min, 30 min. Default value: 0 s.
Cut-OFF speed (similar to ON/OFF function)	This parameter defines the dimming speed at switching OFF.	0 s, 1 s, 2 s, 3 s, 4 s, 5 s, 6 s, 9 s, 15 s, 30 s, 60 s, 2 min, 5 min, 10 min, 20 min, 30 min. Default value: 0 s.

■ Jamming function

The Jamming function allows the outputs to be locked in their current status.

This function is started by the Jamming object. The Jamming function is the function with the second highest priority after Priority. A Jamming end command ends the jamming and allows again taking the commands from the bus into consideration. A Priority command ends the Jamming.



→ Parameter Setting screen: See "Screen 3".

→ Parameters

Designation	Description	Values
Status after jamming	This parameter defines the output status to be applied at the end of the Jamming.	Maintain, Inversion, ON, OFF, Theoretical status at end of blocking. Maintain: maintains the output at the status active during Jamming. Inversion: inversion of the output status with regards to the status active during Jamming (ON to OFF and OFF to ON). ON: switches the output to ON. OFF: switches the output to OFF. Theoretical status at end of blocking: switches the output to the status that would be active if no Jamming command had occurred. Default value: Maintain.
Jamming type	This parameter defines whether Jamming is permanent or time-limited.	Permanently, Time limited. Time limited: Jamming is active for a parameterisable limited duration. Default value: Permanently.
Jamming duration **	This parameter defines the Jamming duration.	Range [0 s 24 h]* Default value: 1 h.

* Setting range [0 s 24 h]

0 s, 1 s, 2 s, 3 s, 5 s, 10 s, 15 s, 20 s, 30 s, 40 s, 45 s, 50 s, 1 min, 1 min 15 s, 1 min 30 s, 2 min, 2 min 30 s, 3 min, 4 min, 5 min, 6 min, 7 min, 8 min, 9 min, 10 min, 11 min, 12 min, 13 min, 14 min, 15 min, 20 min, 30 min, 40 min, 50 min, 1 h, 1 h 30 min, 2 h, 2 h 30 min, 3 h, 3 h 30 min, 4 h, 5 h, 6 h, 12 h, 24 h.

** This parameter is only visible when the Jamming type parameter has the value: Time limited.

■ Scene function

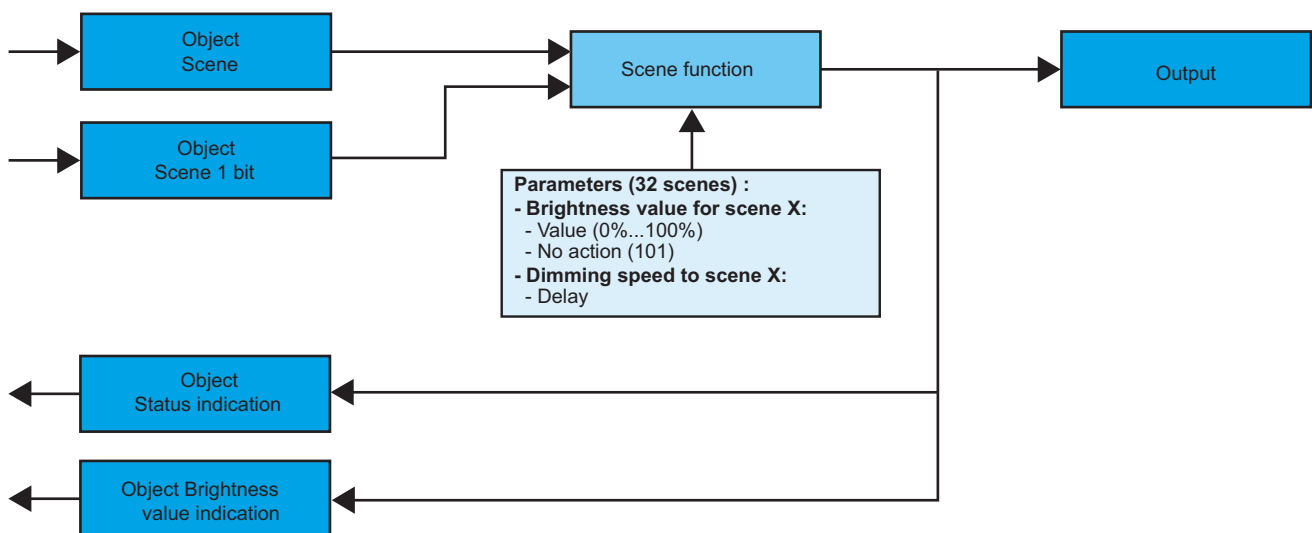
A scene is used to control a group of outputs. Each of the outputs in the group will be set to a status pre-defined for the scene. A scene is started by the Scene object.

For each scene, the brightness level and the dimming speed to reach it can be defined.

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. Each output may be integrated into 32 different scenes.

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.

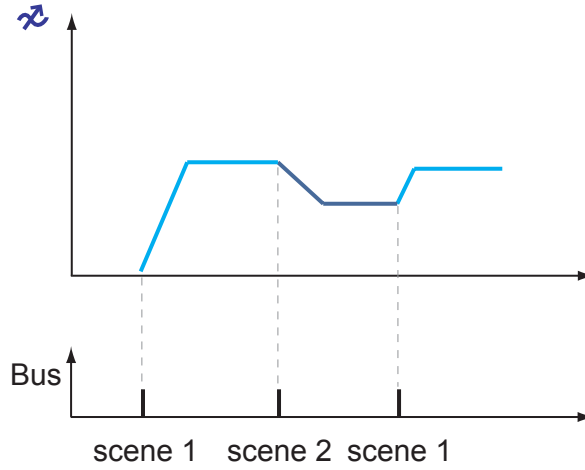
A. Configuration and storing by parameterisation



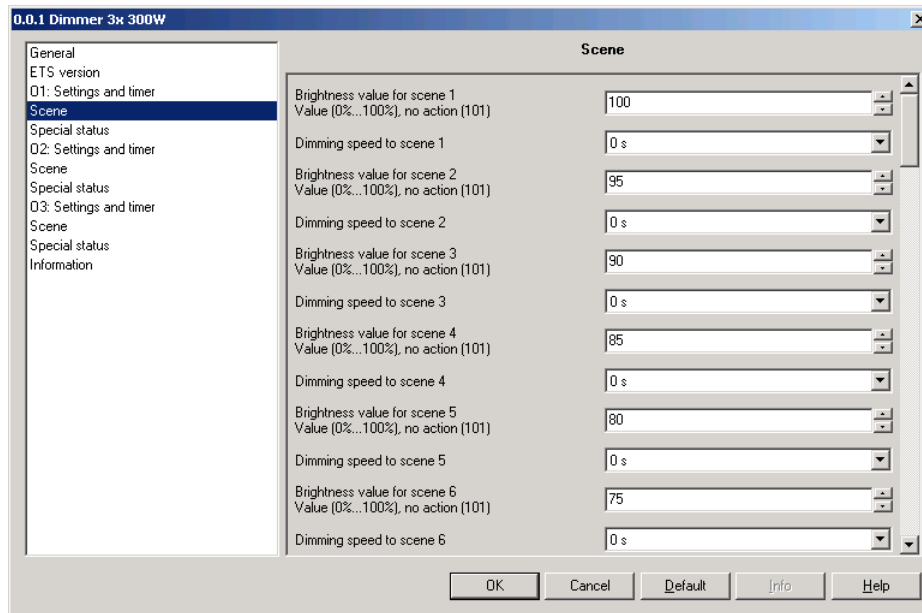
→ Description of the Scene object (1 byte)

7	6	5	4	3	2	1	0
Learn	X	Scene number					

→ Operating principle



→ Parameters



Screen 4

Designation	Description	Values																																
Brightness value for scene X	This parameter defines the status of the output associated to scene X.	0% to 100% in 1% steps, 101 (No action). Default value: depends on the scene number. <table border="0"> <tr> <td>Scene 1: 100</td> <td>Scene 17: 20</td> </tr> <tr> <td>Scene 2: 95</td> <td>Scene 18: 15</td> </tr> <tr> <td>Scene 3: 90</td> <td>Scene 19: 10</td> </tr> <tr> <td>Scene 4: 85</td> <td>Scene 20: 5</td> </tr> <tr> <td>Scene 5: 80</td> <td>Scene 21: 0</td> </tr> <tr> <td>Scene 6: 75</td> <td>Scene 22: 100</td> </tr> <tr> <td>Scene 7: 70</td> <td>Scene 23: 90</td> </tr> <tr> <td>Scene 8: 65</td> <td>Scene 24: 80</td> </tr> <tr> <td>Scene 9: 60</td> <td>Scene 25: 70</td> </tr> <tr> <td>Scene 10: 55</td> <td>Scene 26: 60</td> </tr> <tr> <td>Scene 11: 50</td> <td>Scene 27: 50</td> </tr> <tr> <td>Scene 12: 45</td> <td>Scene 28: 40</td> </tr> <tr> <td>Scene 13: 40</td> <td>Scene 29: 30</td> </tr> <tr> <td>Scene 14: 35</td> <td>Scene 30: 20</td> </tr> <tr> <td>Scene 15: 30</td> <td>Scene 31: 10</td> </tr> <tr> <td>Scene 16: 25</td> <td>Scene 32: 0</td> </tr> </table>	Scene 1: 100	Scene 17: 20	Scene 2: 95	Scene 18: 15	Scene 3: 90	Scene 19: 10	Scene 4: 85	Scene 20: 5	Scene 5: 80	Scene 21: 0	Scene 6: 75	Scene 22: 100	Scene 7: 70	Scene 23: 90	Scene 8: 65	Scene 24: 80	Scene 9: 60	Scene 25: 70	Scene 10: 55	Scene 26: 60	Scene 11: 50	Scene 27: 50	Scene 12: 45	Scene 28: 40	Scene 13: 40	Scene 29: 30	Scene 14: 35	Scene 30: 20	Scene 15: 30	Scene 31: 10	Scene 16: 25	Scene 32: 0
Scene 1: 100	Scene 17: 20																																	
Scene 2: 95	Scene 18: 15																																	
Scene 3: 90	Scene 19: 10																																	
Scene 4: 85	Scene 20: 5																																	
Scene 5: 80	Scene 21: 0																																	
Scene 6: 75	Scene 22: 100																																	
Scene 7: 70	Scene 23: 90																																	
Scene 8: 65	Scene 24: 80																																	
Scene 9: 60	Scene 25: 70																																	
Scene 10: 55	Scene 26: 60																																	
Scene 11: 50	Scene 27: 50																																	
Scene 12: 45	Scene 28: 40																																	
Scene 13: 40	Scene 29: 30																																	
Scene 14: 35	Scene 30: 20																																	
Scene 15: 30	Scene 31: 10																																	
Scene 16: 25	Scene 32: 0																																	
Dimming speed to scene X	This parameter defines the dimming speed to reach the brightness level to be applied for the scene X.	0 s, 1 s, 2 s, 3 s, 4 s, 5 s, 10 s, 15 s, 20 s, 30 s, 45 s, 1 min, 2 min, 3 min, 4 min, 5 min, 10 min, 15 min, 20 min, 30 min, 45 min, 1 h, 1 h 30 min, 2 h, 2 h 30 min, 3 h, 3 h 30 min, 4 h. Default value: 0 s.																																
Storing	This parameter authorizes or forbids scene storing.	Authorized, Inhibited. Default value: Authorized.																																
1-bit scene activation	This parameter allows 2 of the 32 possible scenes to be activated, with the help of the 1-bit scene object.	Inactive, Active. Default value: Inactive.																																
Scene A (0) activation / Scene B (1) activation*	When the parameter Scene activation 1 bit has the value Active, the parameters Scene activation A and Scene activation B must be set. These parameters define the scenes to be activated for the two values of the Scene 1 bit object.	No active scene, Scene 1 to Scene 32. Default value: No active scene.																																

* These parameters only are visible if the Scene activation 1 bit parameter has the value: Active.

B. 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.

C. 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 (Not involved).

- 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 the status inversion of the involved outputs for 3 sec.
- 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 0%.
 - Red and continuously ON if the value selected for the scene is equal to or higher than 1 %.
 - 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.

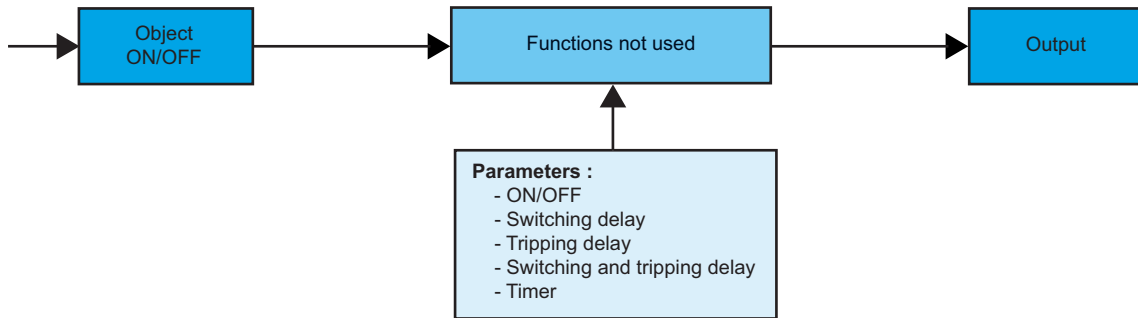
■ **Timer and Automatic controls functions**

The Timer and automatic controls function allow the outputs to be controlled by:

- Timer functions: Timer/toggle change over, Timer, Switching delay, Tripping delay, Switching and tripping delay.
- Automatic control functions: Authorization, logical AND or OR combinations.

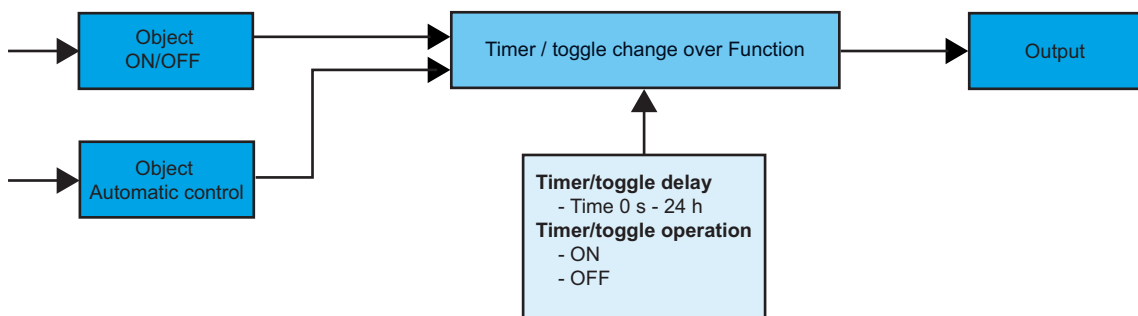
→ **Parameters**

The status of the output depends on the combination of the parameters Type of automatic control and Control type.

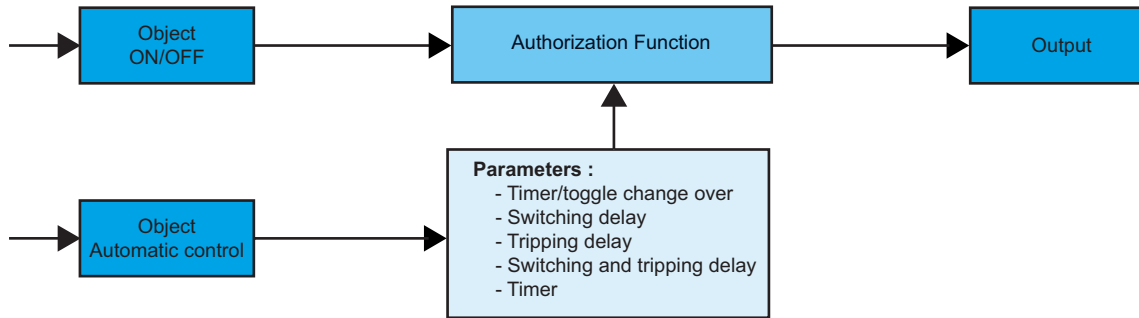


→ Parameter Setting screen: See "Screen 2"

Type of automatic control	Control type	Operation	Parameters
Not used (default value)	ON/OFF (default value)	The output is controlled directly. The Automatic control object is ignored.	
	Switching delay	The output is delayed when switching. The Automatic control object is ignored.	Switching delay: [0.5 s 24 h]* Default value: 3 min
	Tripping delay	The output is delayed when tripping. The Automatic control object is ignored.	Tripping delay : [0.5 s 24 h]* Default value: 3 min
	Switching and tripping delay	The output is delayed when switching and when tripping. The Automatic control object is ignored. The switching and tripping delay times may be different.	Switching delay: [0.5 s 24 h]* Default value: 3 min Tripping delay : [0.5 s 24 h]* Default value: 3 min
	Timer	The output is delayed for ON or for OFF. The Automatic control object is ignored.	Time switch delay: [0.5 s 24 h]** Not active, range Default value: 3 min Timer Operation: ON, OFF Default value: ON

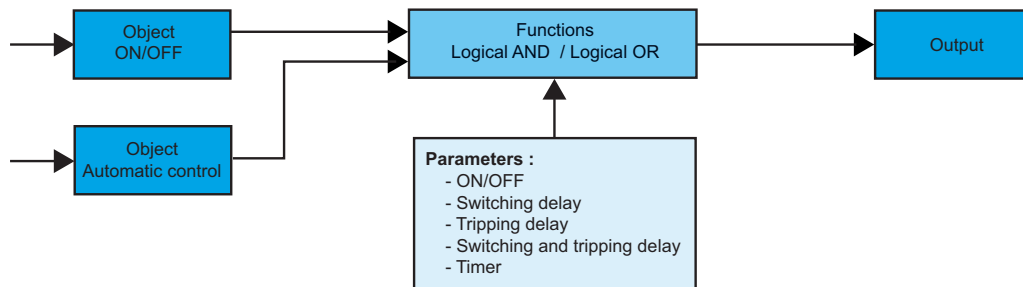


→ Parameter Setting screen: See "Screen 2"



→ Parameter Setting screen: See "Screen 2"

Type of automatic control	Control type	Operation	Parameters
Authorization	Timer/toggle change over	The output is controlled directly by the ON/OFF object if the value of the Automatic control object is 1. The output is delayed for ON or for OFF if the value of the Automatic control object is 0.	Timer/toggle delay: [0 s 24 h]** Default value: 3 min Timer/toggle operation: ON, OFF Default value: ON
	Switching delay	The output is delayed when switching if the value of the Automatic control object is 1. The commands are not taken into consideration if the value of the Automatic control object is 0.	Switching delay: [0.5 s 24 h]* Default value: 3 min
	Tripping delay	The output is delayed when tripping if the value of the Automatic control object is 1. The commands are not taken into consideration if the value of the Automatic control object is 0.	Tripping delay: [0.5 s 24 h]* Default value: 3 min
	Switching and tripping delay	The output is delayed when switching and when tripping if the value of the Automatic control object is 1. The commands are not taken into consideration if the value of the Automatic control object is 0.	Switching delay: [0.5 s 24 h]* Default value: 3 min Tripping delay: [0.5 s 24 h]* Default value: 3 min
	Timer	The output is delayed if the value of the Automatic control object is 1. The commands are not taken into consideration if the value of the Automatic control object is 0.	Time switch delay: [0 s 24 h]** Default value: 3 min Timer Operation: ON, OFF Default value: ON



→ Parameter Setting screen: See "Screen 2".

Type of automatic control	Control type	Operation	Parameters
Logical AND	ON/OFF	The output is the result of the logical AND between the value of the ON/OFF object and the value of the Automatic control object.	
	Switching delay	The output is the result of the logical AND between the value of the ON/OFF object delayed when switching and the value of the Automatic control object.	Switching delay: [0.5 s 24 h]* Default value: 3 min
	Tripping delay	The output is the result of the logical AND between the value of the ON/OFF object delayed when tripping and the value of the Automatic control object.	Tripping delay: [0.5 s 24 h]* Default value: 3 min
	Switching and tripping delay	The output is the result of the logical AND between the value of the ON/OFF object delayed when switching and when tripping, and the value of the Automatic control object.	Switching delay: [0.5 s 24 h]* Default value: 3 min Tripping delay: [0.5 s 24 h]* Default value: 3 min
	Timer	The output is the result of the logical AND between the value of the delayed ON/OFF object and the value of the Automatic control object.	Time switch delay: [0 s 24 h]** Default value: 3 min Timer Operation: ON, OFF Default value: ON
Logical OR	ON/OFF	The output is the result of the logical OR between the value of the ON/OFF object and the value of the Automatic control object.	
	Switching delay	The output is the result of the logical OR between the value of the ON/OFF object delayed when switching and the value of the Automatic control object.	Switching delay: [0.5 s 24 h]* Default value: 3 min
	Tripping delay	The output is the result of the logical OR between the value of the ON/OFF object delayed when tripping, and the value of the Automatic control object.	Tripping delay: [0.5 s 24 h]* Default value: 3 min
	Switching and tripping delay	The output is the result of the logical OR between the value of the ON/OFF object delayed when switching and when tripping, and the value of the Automatic control object.	Switching delay: [0.5 s 24 h]* Default value: 3 min Tripping delay: [0.5 s 24 h]* Default value: 3 min
	Timer	The output is the result of the logical OR between the value of the delayed ON/OFF object and the value of the Automatic control object.	Time switch delay: [0 s 24 h]** Default value: 3 min Timer Operation: ON, OFF Default value: ON

*Setting range [0 s 24 h]

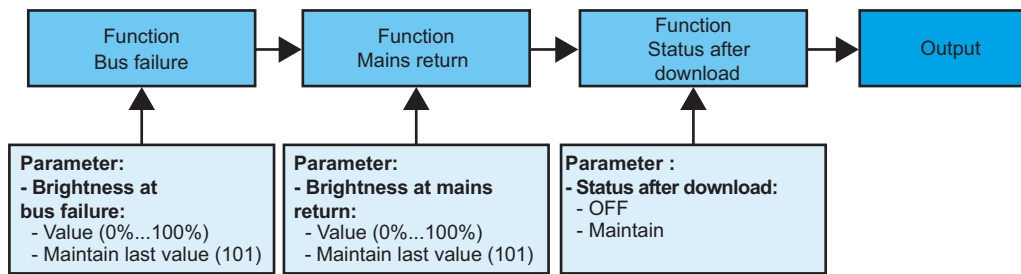
0.5 s, 1 s, 2 s, 3 s, 5 s, 10 s, 15 s, 20 s, 30 s, 40 s, 45 s, 50 s, 1 min, 1 min 15 s, 1 min 30 s, 2 min, 2 min 30 s, 3 min, 4 min, 5 min, 6 min, 7 min, 8 min, 9 min, 10 min, 11 min, 12 min, 13 min, 14 min, 15 min, 20 min, 30 min, 40 min, 50 min, 1 h, 1 h 30 min, 2 h, 2 h 30 min, 3 h, 3 h 30 min, 4 h, 5 h, 6 h, 12 h, 24 h.

**Setting range [0 s 24 h]

0 s, 0.5 s, 1 s, 2 s, 3 s, 5 s, 10 s, 15 s, 20 s, 30 s, 40 s, 45 s, 50 s, 1 min, 1 min 15 s, 1 min 30 s, 2 min, 2 min 30 s, 3 min, 4 min, 5 min, 6 min, 7 min, 8 min, 9 min, 10 min, 11 min, 12 min, 13 min, 14 min, 15 min, 20 min, 30 min, 40 min, 50 min, 1 h, 1 h 30 min, 2 h, 2 h 30 min, 3 h, 3 h 30 min, 4 h, 5 h, 6 h, 12 h, 24 h.

■ Special statuses

The parameters grouped in this section define the output behaviour in some special cases.



→ Parameter Setting screen: See "Screen 3".

→ Parameters

Designation	Description	Values
Brightness at bus failure.	This parameter defines the brightness level to be applied at bus return.	0% to 100% in 1% steps, 101 (Maintain last value). Default value: 101 (Maintain).
Brightness at mains return.	This parameter defines the brightness level to be applied at mains return.	0% to 100% in 1% steps, 101 (Maintain last value). Default value: 101 (Maintain last value).
Status after download	This parameter defines the output status applied after download.	OFF, Maintain. Default value: Maintain.

3. Main characteristics

Produit	TXA210-TXA210A	TXA213	TXA215
Max. number of group addresses	254	254	254
Max. number of links	255	255	255
Objects	14 12	38 12	14 12

4. Physical addressing

To perform physical addressing or to check for bus presence, press the lighted pushbutton located above the label holder on the right of the product.

Indicator on = bus presence and product in physical addressing.

The product remains in physical addressing until the physical address has been transmitted by ETS. Press again to exit physical addressing mode.

Physical addressing may be performed in Auto or Manual (↔) mode.

