hager

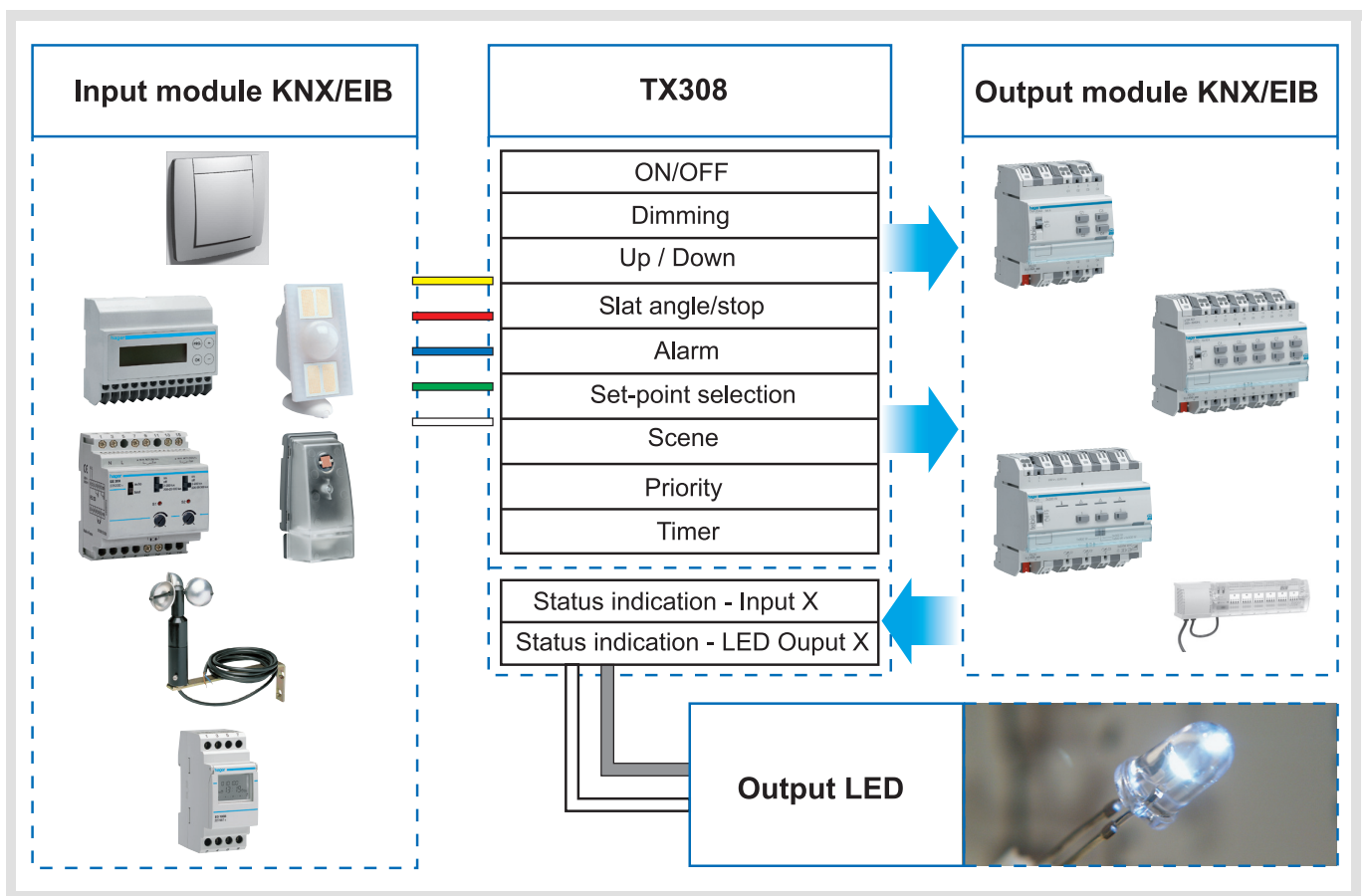# Tebis Application software

TL308 V 1.x 4 inputs/4 LED outputs (status indication)

Product reference	Product designation
TX308	Module flush mounted : 4 inputs/4 LED outputs (status indication)

Input module KNX/EIB	TX308	Output module KNX/EIB
	ON/OFF	
	Dimming	
	Up / Down	
	Slat angle/stop	
	Alarm	
	Set-point selection	
	Scene	
	Priority	
	Timer	

Status indication - Input X

Status indication - LED Ouput X

Output LED

Summary

1. Presentation of the functions of TL308 application

The TL308 application software allows each input and each status indication output to be individually configured.
The main functions are the following :

■ Sending commands
The product allows controls for lighting, blinds and shutters, heating, scenes to be sent.
- Lighting control
Pushbutton, ON, OFF, ON/OFF, Timer.
Dimming on 1 or 2 pushbuttons.
- Control of blinds/shutters
Up, Down, Stop, Blind slat angle.
- Heating control
Comfort, Reduced, Frost protection, Stand-by, Auto.

■ Priority
The priority function allows priority start or priority stop controls to be sent.

■ Scene
The Scene function allows group controls to be sent to different kinds of outputs to create ambiences or scenarios (leaving home scenario, reading ambience, etc.).

■ Active edge selection
The Active edge selection function allows selecting the edge on which the controls are sent on the bus :
- rising edge (closing of input contact)
- falling edge (opening of input contact)

■ Selection of the circuits to be displayed by the LED outputs
The LED outputs (status indication) allow switching ON or OFF the lighting of conventional indication LED's.
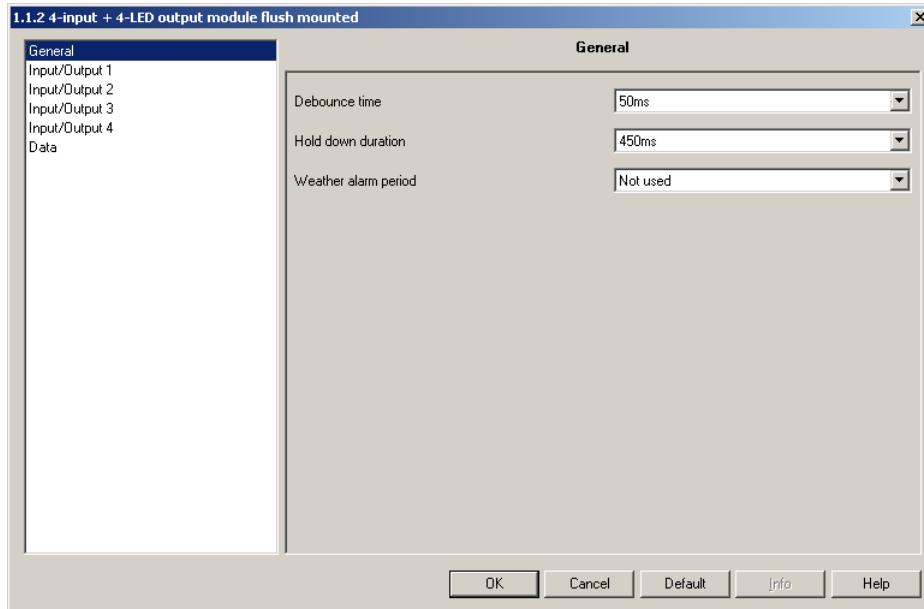This function allows selecting, for each LED output, the circuit displayed :
- the circuit controlled by the corresponding input,
- any other circuit of the installation.

2. Configuration and parameterising of inputs and LED outputs

2.1 General parameters

➜ Parameters

Screen 1

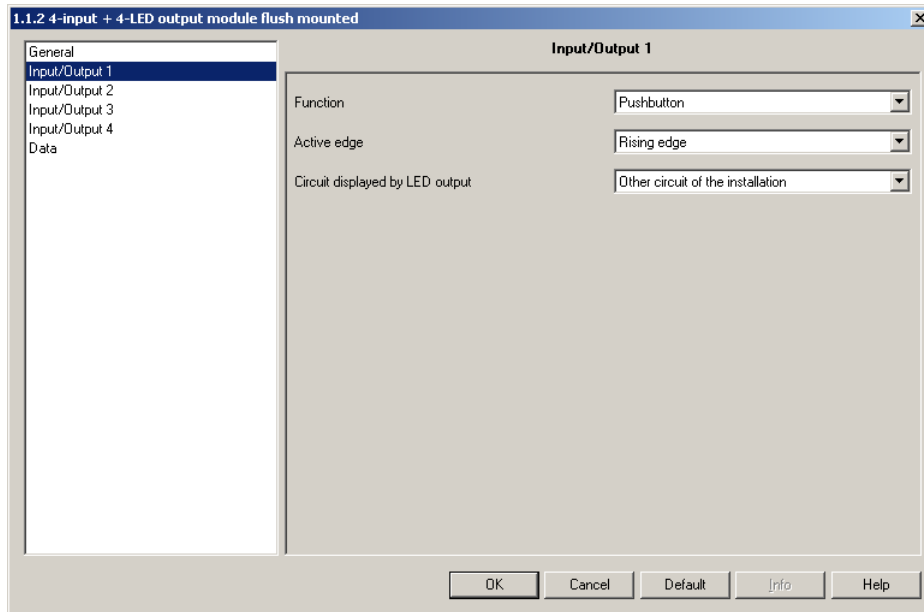| Designation	Description	Values
Debounce time	This parameter defines, for the contacts connected to inputs, the minimum closing time before taking them into account.	25 ms, 50 ms, 100 ms, Default value : 50 ms.
Hold down duration Dimmer type, Shutter/Blind	This parameter defines for the dimmer and shutters/blinds function the detection time of a hold down pressure.	50 ms, 100 ms, 150 ms, 200 ms, 250 ms, 300 ms, 350 ms, 400 ms, 450 ms, 500 ms. Default value : 450 ms.
Weather alarm 1 and 2 period	This parameter defines the emission periodicity of the object Alarm 1 or Alarm 2.	Not used, 5 s, 30 s, 1 min, 5 min, 10 min, 30 min, 1 h, 2 h, 3 h, 5 h. Default value : Not used.

2.2 Objects list

Object name \ Function	None	ON/OFF	Pushbutton	Timer	1 button dimmer	2-buttons dimmer	1-button Shutters / Blinds	2-buttons Shutters / Blinds	Shutter automatic control	Heating mode	Heating ON/OFF	Priority	Scene	Alarm 1	Alarm 2
Not used	X														
ON/OFF		X	X		X	X					X				
Timer				X											
Dimmer type					X	X									
Status indication (Input X)				X	X	X	X								
Status indication (LED output X)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Slat angle/stop							X	X							
Up/Down							X	X	X						
Set-point selection										X					
Priority												X			
Scene													X		
Alarm 1														X	
Alarm 2															X

2.3 Functions description

■ Product function

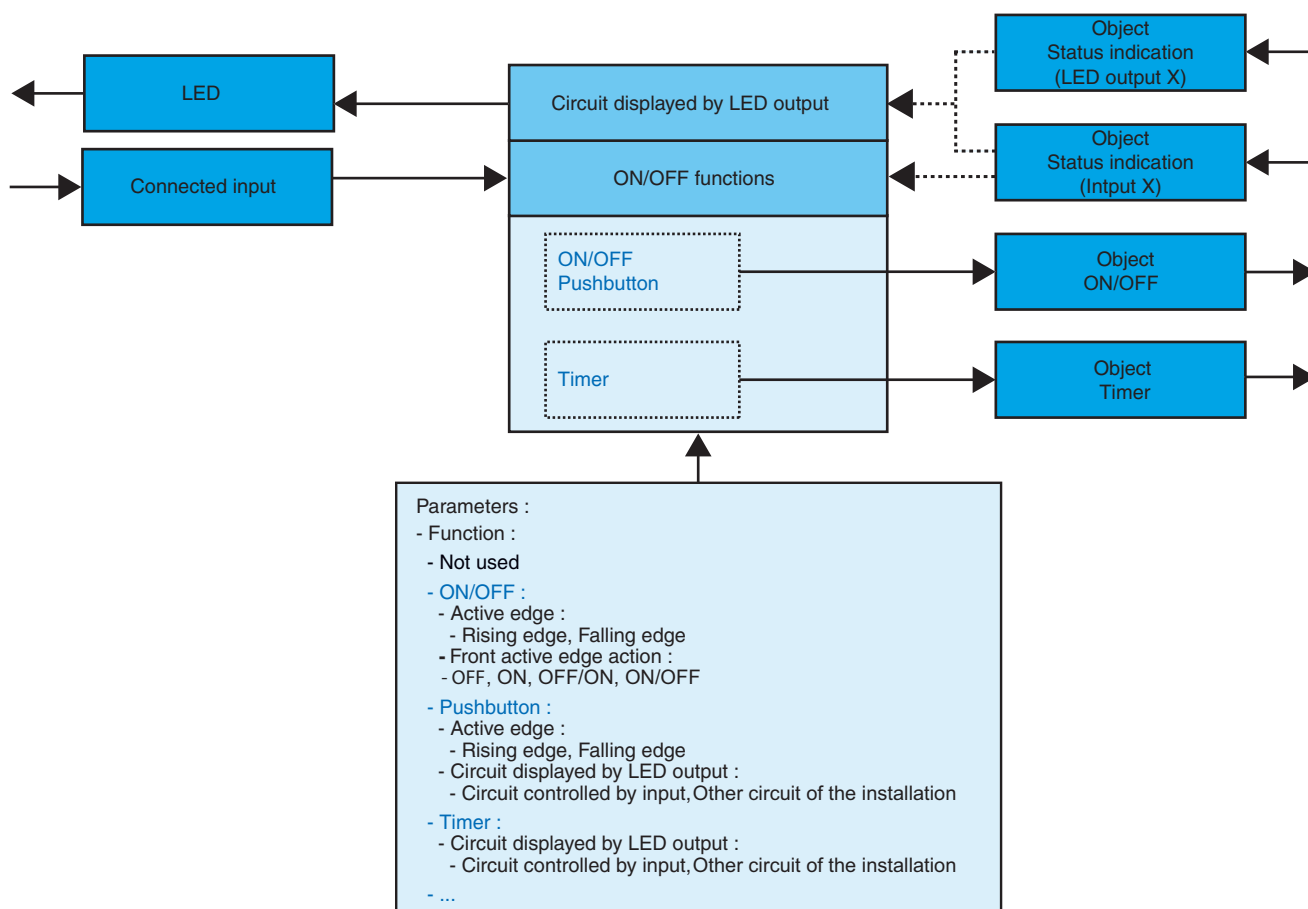The product allows controls for lighting, blinds and shutters, heating, scenes to be sent.

➜ Parameter

Screen 2

Designation	Description	Values
Function	This parameter allows selecting the function associated with each input.	Not used, Pushbutton, 1 button dimmer, 1-button Shutters / Blinds, 2-buttons dimmer, 2-buttons Shutters / Blinds, ON/ OFF, Shutter automatic control, Timer, Scene, Priority, Alarm 1, Alarm 2, Heating mode, Heating ON/OFF. Default value : Pushbutton.

■ ON/OFF functions : ON/OFF, Pushbutton, Timer

These functions allow switching ON or OFF a lighting circuit or any other load.
Different commands are available : Pushbutton, ON, OFF, ON/OFF, Timer.


```
Parameters :
- Function :
   - Not used
   - ON/OFF :
      - Active edge :
         - Rising edge, Falling edge
      - Front active edge action :
         - OFF, ON, OFF/ON, ON/OFF
   - Pushbutton :
      - Active edge :
         - Rising edge, Falling edge
      - Circuit displayed by LED output :
         - Circuit controlled by input, Other circuit of the installation
   - Timer :
      - Circuit displayed by LED output :
         - Circuit controlled by input, Other circuit of the installation
   - ...
```

➜ Parameters setting screen : see "Screen 2".

A. ON/OFF function

The ON/OFF function is performed by sending the ON/OFF object.
With the ON/OFF function, the ON/OFF object sends either the value ON or the value OFF :
- OFF = 0
- ON = 1

The status of an output of the installation may be sent via the object Status indication (Output X).
The status of each LED output is controlled by the object Status indication (Output X).

➜ Parameters

Designation	Description	Values
Active edge	This parameter defines on which edge the commands are sent on the bus.	Rising edge, Falling edge. - Rising edge : closing of input contact - Falling edge : opening of input contact Default value : Rising edge.
Front active edge action	This parameter defines the type of command to be sent on active edge.	OFF, ON, OFF/ON, ON/OFF - OFF : emission of an OFF on the active edge, no action for the opposite edge. - ON : emission of an ON on the active edge, no action for the opposite edge. - OFF/ON : emission of an OFF on the active edge, emission of an ON on the opposite edge. - ON/OFF : emission of an ON on the active edge, emission of an OFF on the opposite edge. Default value : ON/OFF.

B. Pushbutton function

The Pushbutton function is performed by sending the ON/OFF object.

With the Pushbutton function, the ON/OFF object sends in turn the value ON and the value OFF :
- OFF = 0
- ON = 1

The value of the ON/OFF object (Input X) depends on the value of the Status indication object (Input X) :

If the Status indication object (Input X) = 0, then the ON/OFF object (Input X) = 1.

If the Status indication object (Input X) = 1, then the ON/OFF object (Input X) = 0.

The status of the output controlled by input X may be sent to the Status indication object (Input X).

The status of another output of the installation may be sent to the Status indication object (Output X).

The status of each LED output is controlled either by the Status indication object (Input X) or by the Status indication object (Output X). This choice is defined by the parameter Circuit displayed by LED output.

➜ Parameters

Designation	Description	Values
Active edge	This parameter defines on which edge the commands are sent on the bus.	Rising edge, Falling edge. - Rising edge : closing of input contact - Falling edge : opening of input contact Default value : Rising edge.
Circuit displayed by LED output	This parameter defines, for each LED output, the circuit displayed.	Circuit controlled by input, Other circuit of the installation. Default value : Other circuit of the installation.

C. Timer function

The Timer function is performed by sending the Timer object. The timer duration is defined on the output module.

For the Timer function :
- Timer start = press briefly (rising edge)
- Timer end = press for a long time (falling edge, refer to the General parameters section)

The status of the output controlled by input X may be sent to the Status indication object (Input X).

The status of another output of the installation may be sent to the Status indication object (Output X).

The status of each LED output is controlled either by the Status indication object (Input X) or by the Status indication object (Output X). This choice is defined by the parameter Circuit displayed by LED output.

➜ Parameter

Designation	Description	Values
Circuit displayed by LED output	This parameter defines, for each LED output, the circuit displayed.	Circuit controlled by input, Other circuit of the installation. Default value : Other circuit of the installation.

■ Dimming function : 1 button dimmer, 2-buttons dimmer

This function allows dimming a light using one or two pushbuttons.
The 1 button dimmer and 2-buttons dimmer functions send the Dimmer type object after a long pressure and the ON/OFF object after a short pressure.

The status of the output controlled by input X may be sent to the Status indication object (Input X).
The status of another output of the installation may be sent to the Status indication object (Output X).
The status of each LED output is controlled either by the Status indication object (Input X) or by the Status indication object (Output X). This choice is defined by the parameter Circuit displayed by LED output.

➜ Parameters setting screen : see "Screen 2".

➜ Parameters

Designation	Description	Values
Dimmer direction*	This parameter defines the dimming direction associated with the button.	Increase, Reduction. Default value : Increase.
Circuit displayed by LED output	This parameter defines, for each LED output, the circuit displayed.	Circuit controlled by input, Other circuit of the installation. Default value : Other circuit of the installation.

* This parameter only is displayed when the Function parameter is set to 2-buttons Dimmer type.

■ Shutters / Blinds control function : 1-button Shutters / Blinds, 2-buttons Shutters / Blinds, Shutter automatic control, Alarm 1, Alarm 2

The Shutters / Blinds functions allow controlling the up and down movements of shutters and blinds, and the slat angle of blinds..

A. Function 1-button Shutters / Blinds, 2-buttons Shutters / Blinds
This function allows controlling a shutter or a blind using one or two pushbuttons.
The 1-button Shutters / Blinds, 2-buttons Shutters / Blinds functions emit the Up / Down object after a long pressure and the Slat angle / Stop object after a short pressure.
1-button Shutters / Blinds : The status of the output controlled by input X may be sent to the Status indication object (Input X).
2-buttons Shutters / Blinds : The status of another output of the installation may be sent to the Status indication object (Output X).
The status of each LED output is controlled by the object Status indication (Output X).

➜ Parameters setting screen : see "Screen 2".

➜ Parameters

Designation	Description	Values
Control type*	This parameter defines the movement associated with the button.	Up, Down. Default value : Up.

* This parameter is only visible when the Function parameter has the value : 2-buttons Shutters / Blinds.

B. Shutter automatic control function
This function allows controlling a shutter or a blind by means of an automatic control (switch,etc.).
The Shutter automatic control function emits the Up/Down object.
The status of another output of the installation may be sent to the Status indication object (Output X).
The status of each LED output is controlled by the object Status indication (Output X).

Safe Down Application (security) :
This procedure allows controlling a down movement as long as a pushbutton is pressed down :
-   On the concerned shutter outputs : Activate the Safe down function (security).
-   On the control input : select the value Shutter automatic control for the Function parameter.

➜ Parameters setting screen : see "Screen 2".

➜ Parameters

Designation	Description	Values

Active edge	This parameter defines on which edge the commands are sent on the bus.	Rising edge, Falling edge.
		  - Rising edge : closing of input contact
		  - Falling edge : opening of input contact
		Default value : Rising edge.

Front active edge action	This parameter defines the type of command to be sent on active edge.	Up, Down, Up/Down, Down/Up.
		  - Up : Up on active edge, no action for the opposite edge.
		  - Down : Down on active edge, no action for the opposite edge.
		  - Up/Down : Up on active edge, Down on the opposite edge.
		  - Down/Up : Down on active edge, Up on the opposite edge.
		Default value : Up/Down.

C. Functions Alarm 1, Alarm 2
The Alarm 1 and Alarm 2 functions allow alarms coming from automatic controls to be periodically emitted (anemometer, rain detector, light sensitive switch, etc.).
The emission frequency of the alarms is defined by the Weather alarm emission period parameter (refer to the General parameters section).
To place the shutters in safety position in case of bad weather : link the Alarm 1 and Alarm 2 functions with the Wind Safety and Rain Safety objects of the Shutter/Blind output modules.

The Alarm 1 function emits the Alarm 1 object.
The Alarm 2 function emits the Alarm 2 object.
The status of another output of the installation may be sent to the Status indication object (Output X).
The status of each LED output is controlled by the object Status indication (Output X).

➜ Parameters setting screen : see "Screen 2".

➜ Parameter

Designation	Description	Values

Active edge	This parameter defines on which edge the commands are sent on the bus.	Rising edge, Falling edge.
		  - Rising edge : closing of input contact
		  - Falling edge : opening of input contact
		Default value : Rising edge.

■ Heating functions : Heating mode, Heating ON/OFF
The Heating functions allow switching ON or OFF the heating or selecting a set-point.

A. Function heating mode
The Heating set-point function allows selecting a set-point.
The Heating set-point function emits the Set-point selection object.
The status of an output of the installation may be sent via the object Status indication (Output X).
The status of each LED output is controlled by the object Status indication (Output X).

➜ Parameters setting screen : see "Screen 2".

➜ Parameters

Designation	Description	Values
Set-point selection	This parameter allows selecting the set-point associated with the connected input.	Comfort/Reduced, Comfort, Reduced, Frost protection/Auto, Frost protection, Auto, Stand-by, Comfort/Stand-by. - Comfort/Reduced : Comfort on rising edge, Reduced on falling edge. - Comfort : Comfort on rising edge, no action on falling edge. - Reduced : Reduced on rising edge, no action on falling edge. - Frost protection/Auto : Frost protection on rising edge, Auto on falling edge. - Frost protection : Frost protection on rising edge, no action on falling edge. - Auto : Auto on rising edge, no action on falling edge. - Stand-by : Stand-by on risinge edge, no action on falling edge. - Comfort/Stand-by : Comfort on rising edge, Stand-by on falling edge. Default value : Comfort/Reduced.

B. Function Heating ON/OFF
The Heating ON/OFF function allows switching ON or OFF the heating.
The Heating ON/OFF function is performed by sending the ON/OFF object.
Closing of the contact connected with the input : emission of an OFF.
Opening of the contact connected with the input : emission of an ON.
There is no parameter associated with this function.

■ Priority function
The priority function allows priority start or priority stop controls to be sent.
The Priority function emits the Priority object.
The status of an output of the installation may be sent via the object Status indication (Output X).
The status of each LED output is controlled by the object Status indication (Output X).

➜ Parameters setting screen : see "Screen 2".

➜ Parameter

Designation	Description	Values
Priority type	This parameter allows selecting a Priority type. It depends on the type of application.	ON priority, OFF priority. Default value : ON priority.
Active edge	This parameter defines on which edge the commands are sent on the bus.	Rising edge, Falling edge. - Rising edge : closing of input contact - Falling edge : opening of input contact Default value : Rising edge.

■ Scene function

The Scene function allows group controls to be sent to different kinds of outputs to create ambiences or scenarios (leaving home scenario, reading ambience, etc.).
The Scene function emits a Scene object. The value of the Scene object is defined by the Scene number parameter.

The closing time of the contact connected with the input determines the action carried out :

Closing time of the contact connected with the input	Action
< 5 s	Activation of the scene
> or = 5 s	Storing of the current status of the outputs

➜ Parameters setting screen : see "Screen 2".

➜ Parameter

Designation	Description	Values
Scene number	This parameter defines the scene number. The chosen scene will be started by the product or automatic control connected with the input.	Scene 1 to scene 32. Default value : Scene 1.

3. Main characteristics

Max. number of group addresses	30
Max. number of links	25
Parameters	3 per input, 3 global, 15 total
Objects	6 per input, 1 per output, 2 for the localisation, 30 total.

4. Physical addressing

To perform physical addressing or check for the presence of the bus, press the pushbutton located on the bottom right side of the product.
An indicator is located beside this pushbutton :
Indicator on = bus present and product in physical addressing.
The product remains in physical addressing until the physical address is transmitted by ETS. Pressing a second time allows leaving the physical addressing mode. The indicator goes out.