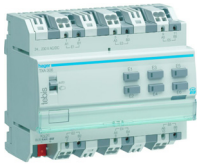
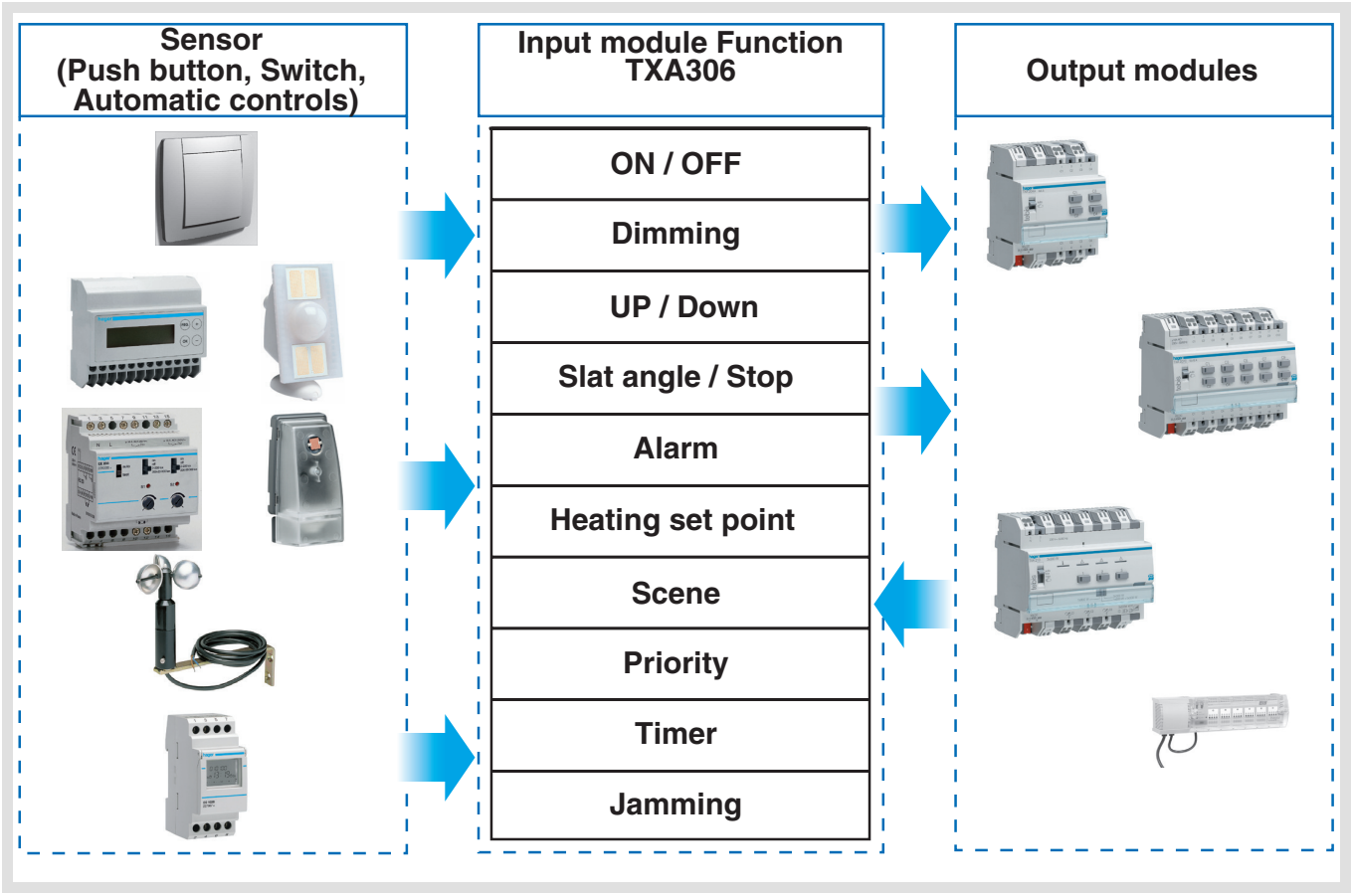
Catalog
Inputs
6-fold input module

Tebis application software

TL306A V 1 x 6 inputs

	Product reference	Description
	TXA306	Modular 6x multivoltage input



Summary

1. Presentation of the functions of the TL306A application

The STXA306 application software is used to configure the individual inputs.
The sensors associated to the inputs (pushbuttons, switches, automatic controls) are used to control lighting, shutters, blinds, heating and scenes.

The main functions are the flollowing:

Toggle switch

The Toggle Switch function changes the status of the controlled output whenever it is operated.
The Time-limited toggle switch function consist of inventing the status of the output after each short key-press. If there is no short key-press, the output will be switched OFF once the delay time has elapsed.
A long push button press restarts the delay time.

ON / OFF

This function is used for switching lighting, blind or heating circuits ON or OFF. The command may come from switches, pushbuttons or automatic controls.

1 or 2 button dimmer

This function is used to control lighting circuits using one or two buttons.
The ON / OFF function transmits the **ON / OFF** object (short key-press).
The Dimming function transmits the **Dimming** object (long key-press).

Shutters / blinds

This function controls a shutter or a blind using one or two push buttons.
The Up / Down function transmits the **Up / Down** object (long key-press).
The Stop / Angle function transmits the **Stop / Angle** object (short key-press).

Alarms

The Alarm 1 and Alarm 2 functions allow alarms coming from automatic controls to be periodically emitted (anemometer, rain detector, light sensitive switch, etc.). Alarm 1 has a higher priority than Alarm 2.

Heating mode selection

This function is used to select a heating or air conditioning setpoint (Comfort, Eco, Frost protection, Absence). The command may come from switches, pushbuttons or automatic controls.

Value

The Value function (2 byte) is used for sending: Percentage %, Temperature °C, Luminosity level Lux, Brightness value % and Value 0-65535.

Metering

The meter function is used for counting pulses. Impuls counting 1 byte, 2 bytes ou 4 bytes.

Scene

This function is used to select and storing scenes. It may concern different output types (lighting, blinds, shutters, heating) to create ambiences or scenarios (leaving home scenario, reading ambience, etc.).

Timer

The Timer function is used to switch ON or OFF a lighting circuit, shutters, heating for an adjustable time. The duration can be retriggered via a short key press. The Timer function can be interrupted via a long key press before the time delay expires. An adjustable cut-off pre-warning indicates the end of the delay time by inverting the output status for 1 sec.

Priority

The Priority function allows an input to be forced to a defined status.
The forcing action depends on the type of application controlled: lighting ON / OFF, shutter, Heating.

2-channel mode

This function allows controlling, with the same pushbutton, two independent circuits having different functions. The difference resides in the duration of operation. Channel A requiring a short key press and Channel B requiring a long key press. The long key press duration is set in the **Duration of long key-press-channel mode** parameter.

Jamming

This function is used to lock an input via an object on the bus. It can be activated separately for each input. No commands or values can be sent to the bus during jamming. Input jamming is indicated by the LED briefly flashing (for 5 seconds) upon key press. Jamming must be deactivated before resending the input status to the bus.

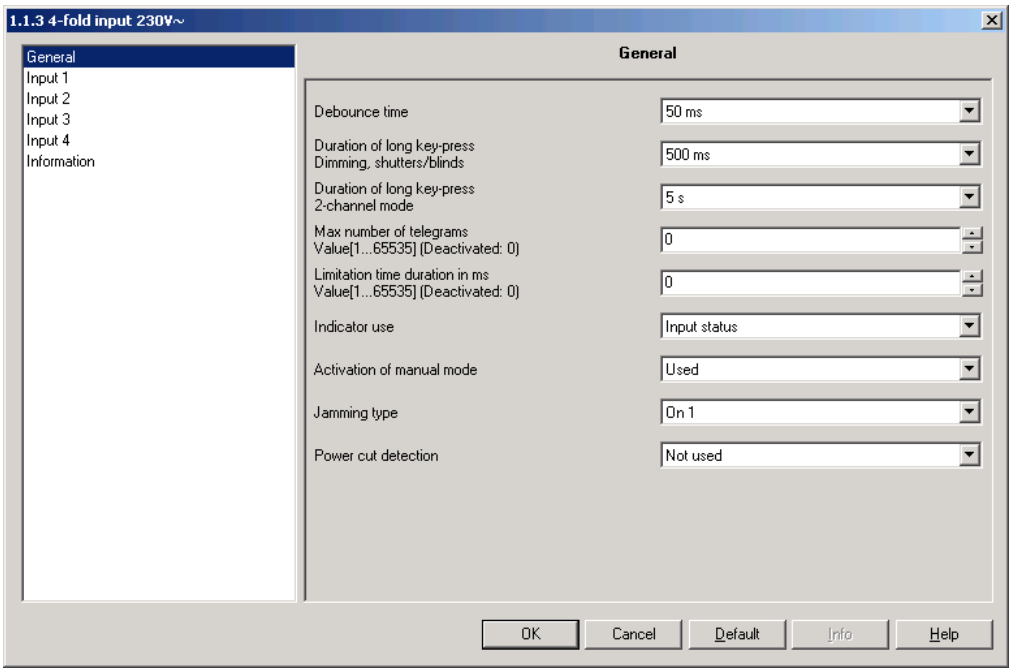
Power cut detection

The power cut detection function is used for specific management of an input during a power cut, taking into account all the status changes which could occur during this period.
For TXA304 / 310, input 1 is a voltage reference for power cut detection.

2. Input configuration and parametering

2.1 General parameters

➜ Parameter Setting screen



Screen 1

➜ Parameter

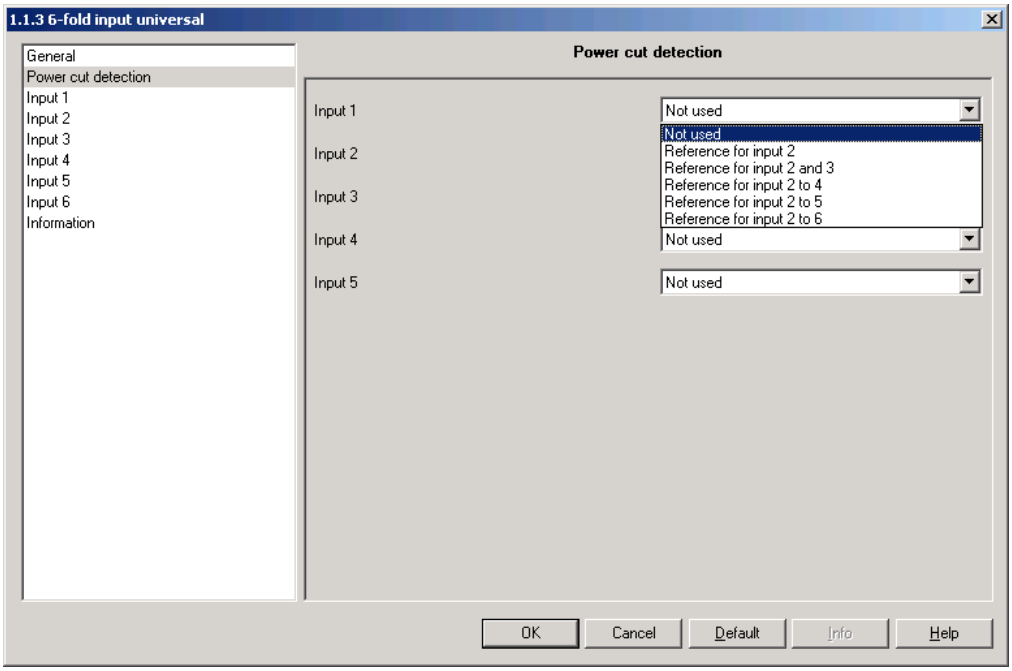
Parameter	Description	Value
Debounce time	This parameter defines for the contacts connected to inputs the minimum closing time before taking into account.	50 ms, 100 ms, 150 ms Default value: 100 ms
Duration of long key-press Dimming, shutters / blinds.	This parameter defines for the Dimmer and Shutter / Blind functions the detection time for a hold-down pressure.	400 ms, 500 ms, 600 ms, 700 ms, 800 ms, 900 ms, 1 s Default value: 500 ms
Duration of long key-press 2-channel mode.	This parameter defines the duration of detection of a long press for the 2 channel value function and 2 channels ON / OFF.	500 ms,1 s, 2 s, 3 s, 4 s, 5 s, 6 s, 7 s, 8 s, 9 s, 10 s, 30 s, 1 min, 2 min, 5 min, 10 min, Default value: 5 s
Max number of telegrams Value [1...65535] (Deactivated: 0).	This parameter defines the maximum number of telegrams which can be transmitted on the bus during the limitation period.	1 - 65535 Default value: 0
Limitation time duration in ms Value [1...65535] (Deactivated: 0)	This parameter defines the period during which the the limitation of the maximum number of telegrams takes effect.	1 - 65535 Default value: 0
Indicator use	This parameter defines indicator utilization. 3 types of utilization are possible: - Permanently OFF or ON - Status indication associated to the **Indication** object - Confirm key	Input status, Always ON, Always OFF, Status indication (ON = 1), Status indication (ON = 0) Default value: Input status

Parameter	Description	Value
Activation of manual mode *	This parameter enables or disables the 2 position switch located on the front side of the product. In manual mode, the inputs can be activated using the keys on the front. In automatic mode, the inputs are activated from the bus.	Used, Not used, Time limited. Default value: Used
Duration of manual mode activation **	This parameters defines the duration of activation of the manual mode.	15 min, 30 min, 60 min, Default value: 15 min
Jamming type	This function is used to lock an input via an object. It can be activated separately for each input. No commands or values can be sent to the bus during jamming. Input jamming is controlled via the **Jamming** object. The parameter defines which value is used to activate jamming.	On 1, On 0 Default value: On 1
Power cut detection	see under (Power cut detection)	see under (Power cut detection)

* If the switch position does not match the device's parameter setting, the input indicator lights will flash.
This parameter is only visible if the **Manual mode activation parameter has following value: Time limited.

Power cut detection

➜ Parameter Setting screen



Screen 2

➜ Parameter

Power cut detection is used to recognize status changes due to a power cut at one or more inputs connected to the same phase as Input 1. Input 1 can be configured as a voltage reference to allow specific management in case of a power cut.

During a power cut, the status changes on the inputs connected to the reference input are ignored.
When the power comes back on, the status of the inputs is assessed and compared to the status before the power cut. If a status change has occured, the corresponding input(s) will be re-emitted.

Inputs 1 - 5 can be configured as the voltage reference to allow specific management in case of a power cut:

- Input 1 can be configured as:
  - Reference for input 2,
  - Reference for input 2 and 3,
  - Reference for input 2 to 4,
  - Reference for input 2 to 5,
  - Reference for input 2 to 6.

- Input 2 can be configured as:
  - Reference for input 3,
  - Reference for input 3 and 4,
  - Reference for input 3 to 5,
  - Reference for input 3 to 6,

- Input 3 can be configured as:
  - Reference for input 4,
  - Reference for input 4 and 5,
  - Reference for input 4 to 6,

- Input 4 can be configured as:
  - Reference for input 5,
  - Reference for input 5 and 6,

- Input 5 can be configured as:
  - Reference for input 6,

During a power cut, the status changes on the inputs connected to the reference input are ignored. When the power comes back on, the status of the inputs is assessed and compared to the status before the power cut. If a status change has occured, the corresponding input(s) will be re-emitted.

Possible values are:
Not used,
Input 1 is reference for input 2,
Input 1 is reference for input 2 to 3,
Input 1 is reference for input 2 to 4,
Input 1 is reference for input 2 to 5,
Input 1 is reference for input 2 to 6,

Example:

Input 2 has the channel function ON / OFF.
Input 1 is reference for input 2.
Contact Input 2 is closed (Object value is "1" or ON).

Voltage at Input 1 (same voltage as Input 2) fails. The ON / OFF status change due to a power cut is ignored.

Case 1: Input 2 remains unchanged during the power cut.
Input 2 is reassessed when the power comes back. A telegram is not emitted.

Case 2: Input 2 switches from ON to OFF during the power cut.
Input 2 is reassessed when the power comes back. The new OFF status is sent to the bus.

2.2 Objects List

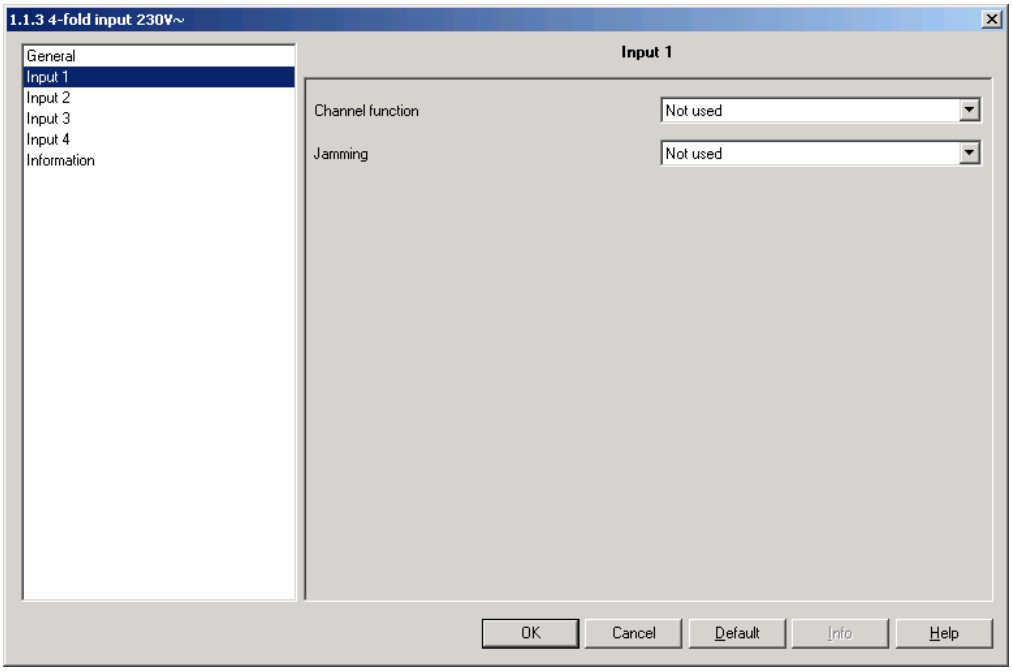
Object \ Function	ON / OFF	Toggle switch	Time limited toggle switch	Timer	1-button dimmer	2-button dimmer	Shutters / blinds	Heating	Priority	Scene	Alarm 1	Alarm 2	Value
ON / OFF	X	X			X	X							
Status indication		X	X		X								
Time limited toggle switch			X										
Timer				X									
Dimming					X	X							
Slat angle / Stop							X						
Up / Down							X						
Set point selection								X					
Priority									X				
Scene										X			
Value													X
Jamming	X	X	X	X	X	X	X	X	X	X			X
Alarm 1											X		
Alarm 2												X	

2.3 Parameter setting

Parameter setting: Channel function

The product allows to control lighting, blinds, shutters, heating and scenes.

➜ Parameter Setting screen



Screen 3

Parameter	Description	Value
Channel function	This parameter allows selecting the function associated with each input.	Not used, Toggle switch, ON / OFF, 1-button dimmer, 2-button dimmer, Shutters / blinds, Alarm 1, Alarm 2, Heating mode selection, Value, Scene, Timer, Priority, 2-channel mode ON / OFF, 2-channel mode value. Default value: Not used

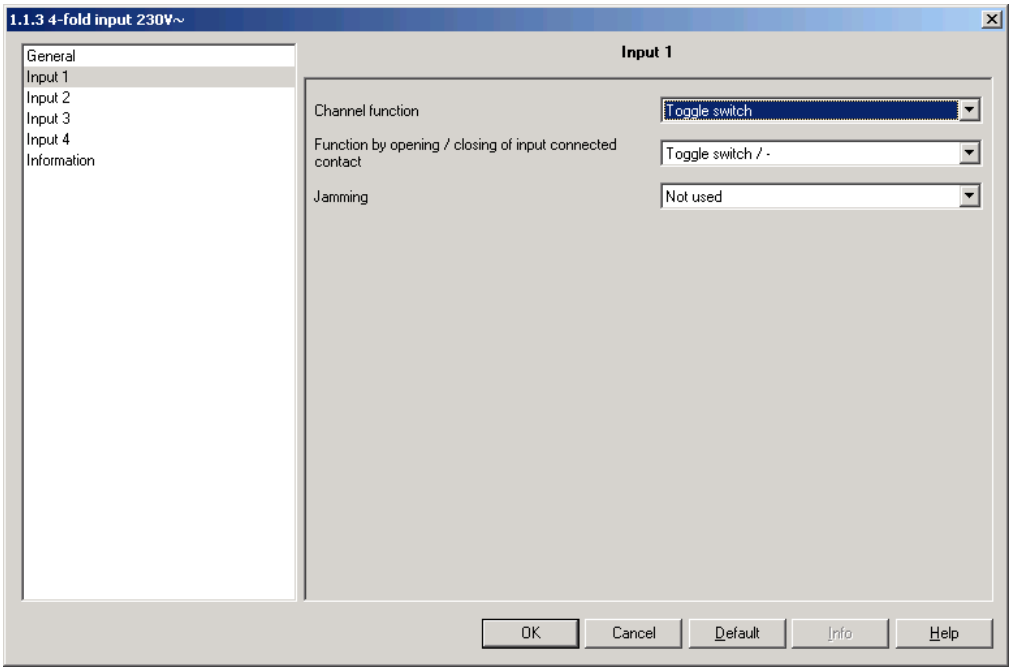
Channel function: Toggle switch

Toggle switch:
This function is used to switch the lighting circuit or any other load ON or OFF.
Each new key-press modifies the output status.
Description:
After pressing the connected pushbutton, depending on the **Status Indication** object, an **ON or OFF** command will be sent to the bus via the **ON / OFF** object.

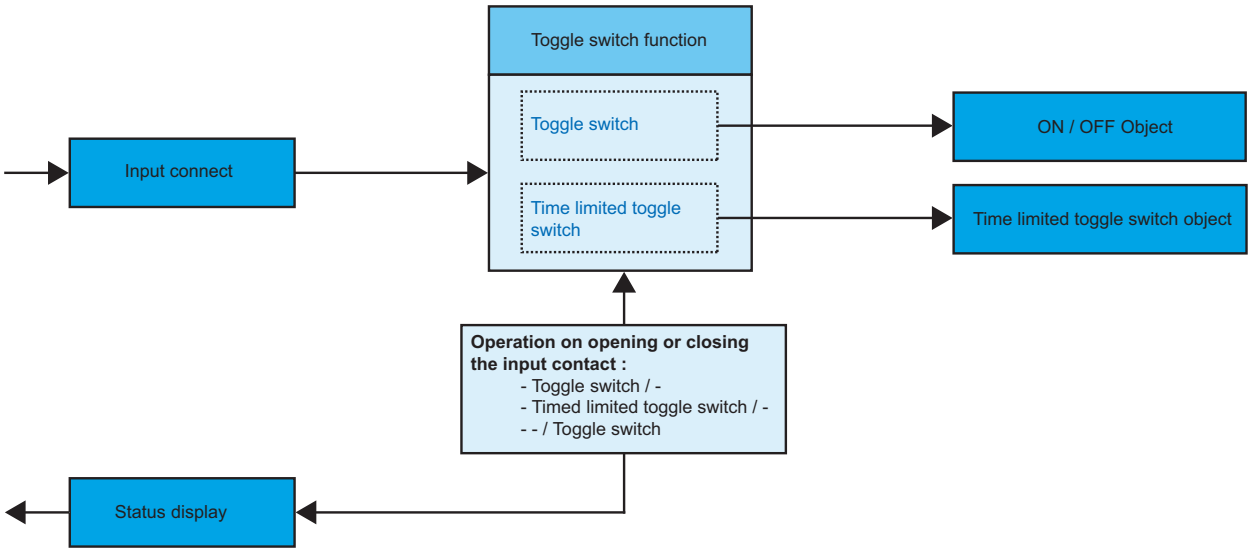
Time limited toggle switch:
A short push button press:
The output status is inverted. The status changes after each short key press. If there is no short key-press, the output will be switched OFF once the delay time has elapsed (Output with **Time-limited toggle switch** parameter). A long push button press restarts the delay time.

Description:
A short key press transmits the **Time-limited toggle switch** object on the bus with the opposite value to that of the **Status indication**. A long press on the pushbutton transmits an ON command via the **Time-limited toggle switch** object.
Upon reception of an ON command from the object **Time limited toggle switch**, TXA-type products switch the output to ON for the set time. An ON command received while the output is still ON will restarts the time delay.

➜ Parameter Setting screen



Screen 4

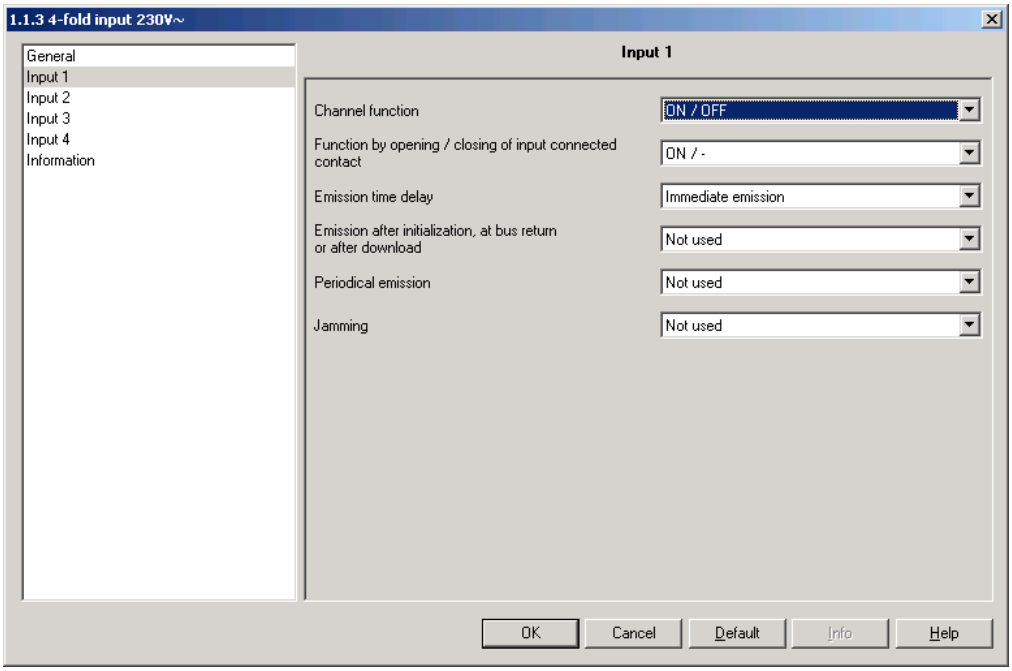


Parameter	Description	Value
Channel function	This parameter defines the function types.	Toggle switch
Function by opening / closing of input connected contact.	This parameter defines the commands transmitted when input status changes occur.	Toggle switch / - , Time limited toggle switch / -, - / Toggle switch, Default value: Toggle switch / - ("-" = No action)
Jamming	This parameter is used to prevent the input from being used. Jamming forbids sending commands.	Not used, Used Default value: Not used

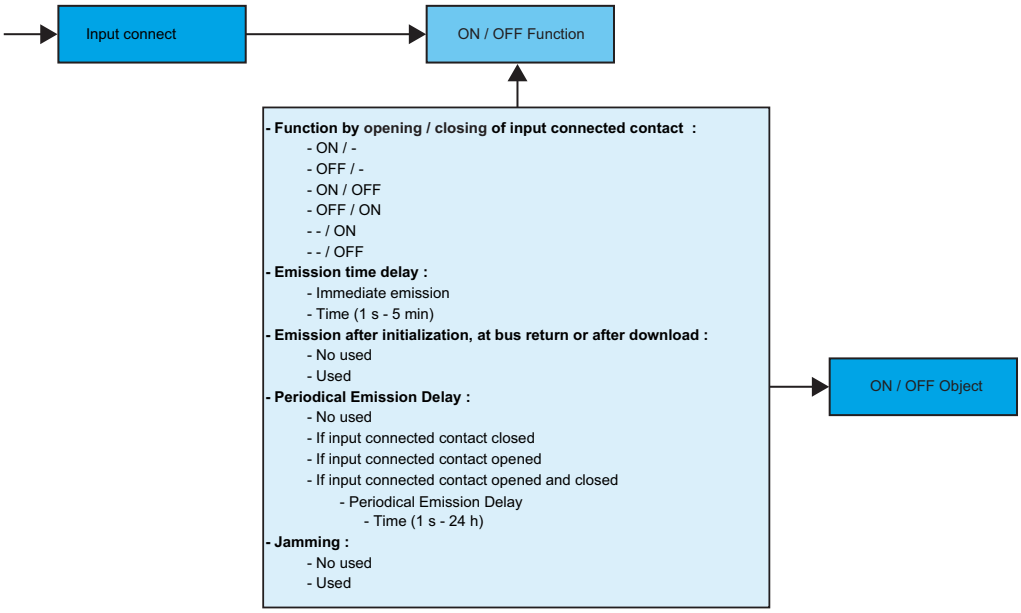
Channel function: ON / OFF

This function is used to switch the lighting circuit or any other load ON or OFF.
The ON or OFF command will be transmitted to the bus via the **ON / OFF** object. The command to be sent (ON or OFF) can be defined in the parameters.

➜ Parameter Setting screen



Screen 5



➜ Parameter

Parameter	Description	Value
Channel function	This parameter defines the function types.	ON / OFF
Function by opening / closing of input connected contact.	This parameter defines the commands transmitted when input status changes occur.	ON / -, OFF / -, ON / OFF, OFF / ON, - / ON, - / OFF Default value: ON / - ("-" = No action)

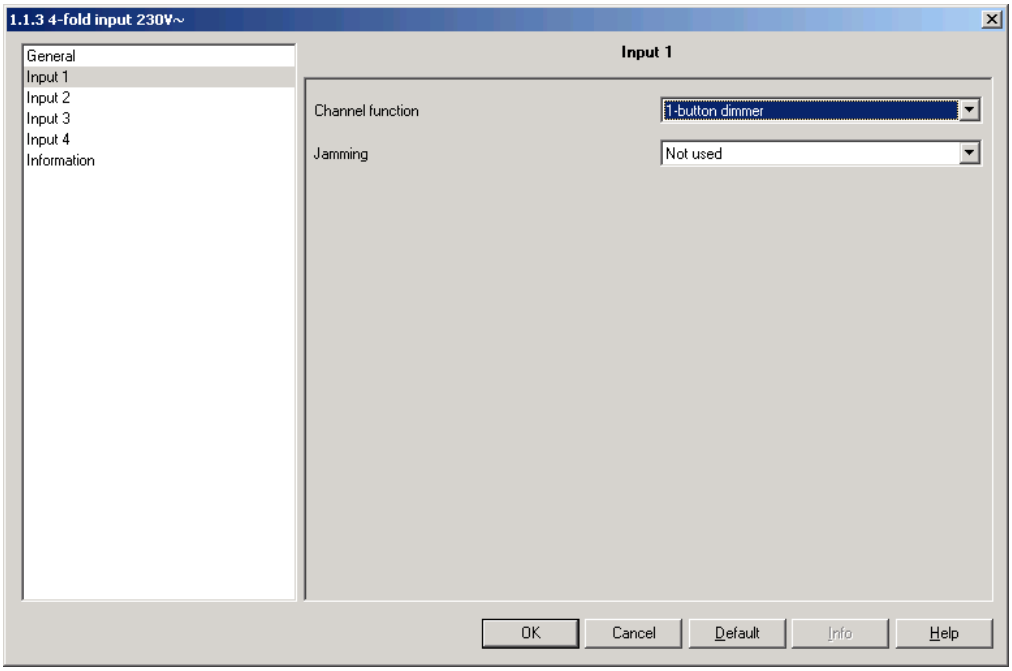
Parameter	Description	Value
Emission time delay	This parameter sends commands with a set delay in relation to pressing or releasing.	Immediate emission, 1 s, 2 s, 3 s, 4 s, 5 s, 10 s, 15 s, 20 s, 25 s, 30 s, 40 s, 50 s, 1 min, 1 min 30 s, 2 min, 2 min 30 s, 3 min, 3 min 30 s, 4 min, 4 min 30 s, 5 min Default value: Immediate emission
Emission after initialization, on bus return or after download.	This parameter defines if the input status is transmitted on the bus when the product is initialised or on bus return.	Not used, Used Default value: Not used
Periodical emission	This parameter defines the condition activating cyclic transmission input status.	Not used, If input connected contact closed, If input connected contact opened, If input connected contact opened and closed Default value: Not used
Periodical emission delay *	This parameter defines the cyclic transmission period	Duration: 1 s, 2 s, 3 s, 4 s, 5 s, 10 s, 20 s, 30 s, 1 min, 2 min, 3 min, 4 min, 5 min, 10 min, 15 min, 30 min, 1 h, 2 h, 3 h, 6 h, 12 h, 24 h. Default value: 30 min
Jamming	This parameter is used to prevent the input from being used. Jamming forbids sending commands.	Not used, Used Default value: Not used

* This parameter is only visible if the **Emission periodicity** parameter has a value other than: Not used

Channel function: Dimming

This function is used to control lighting circuits using one or two buttons.
The 1 button dimmer and 2-buttons dimmer functions send the **ON / OFF** object after a short press.
A long press send the **Dimmer** object.
There are 2 different function types: **1-button dimmer** or **2 -button dimmer**.

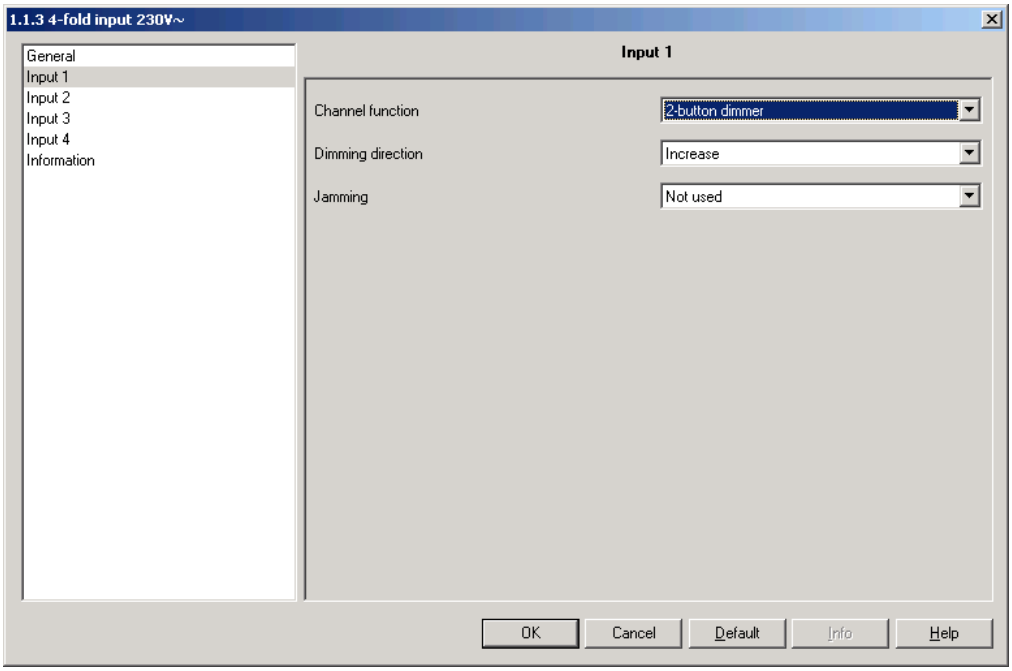
Channel function: 1-button dimmer
This function allows ON / OFF or Increase / Decrease controls using one push button.



Screen 6

Channel function: 2-button dimmer
This function allows ON or Increase controls using one push button, and OFF or decrease controls using a second push button.

➜ Parameter Setting screen



Screen 7

➜ Parameter

Parameter	Description	Value
Channel function	This parameter defines the function types.	1-button dimmer, 2-button dimmer
Dimming direction *	This parameter defines the dimming direction associated to the button.	Increase, Decrease. Default value: Increase
Jamming	This parameter is used to prevent the input from being used. Jamming forbids sending commands.	Not used, Used Default value: Not used

* This parameter is only visible if the **Channel Function** parameter has the following value: **2-button dimmer**.

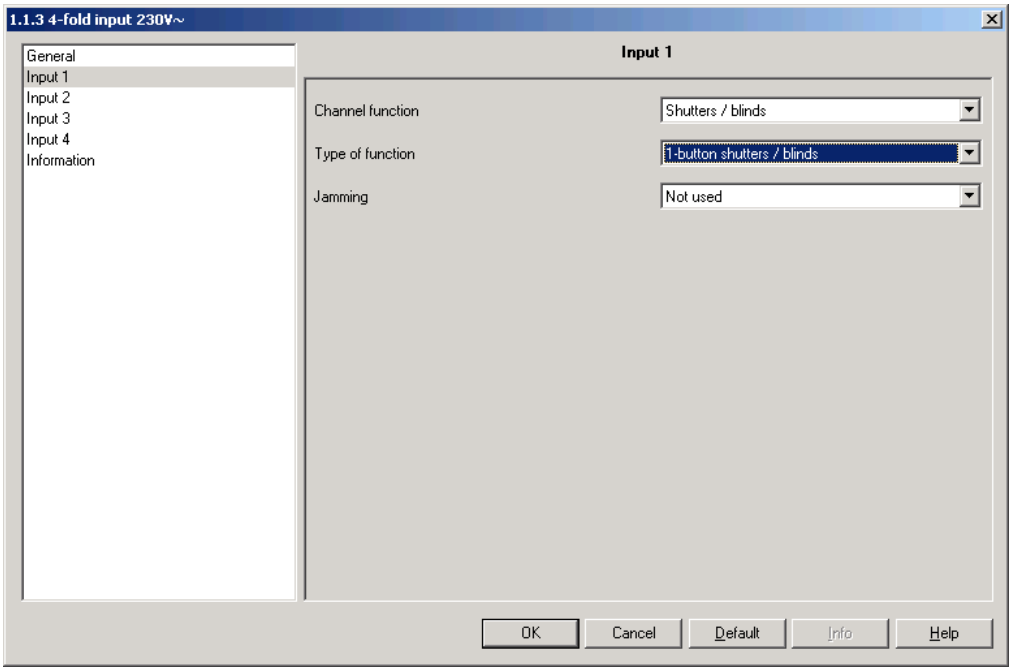
■ Channel function : Shutters / blinds

This function controls shutters and blinds (Up, Down and slat angle adjustment for blinds).

There are 4 different functions:
1-button
2-buttons
2-buttons as long as button pressed
Automatic controls

Type of function: 1-button
This function controls shutters or blinds using one push buttons (Input).
Change of function after each operation (Down, STOP, Up, STOP). Slat angle adjustment is not possible here.

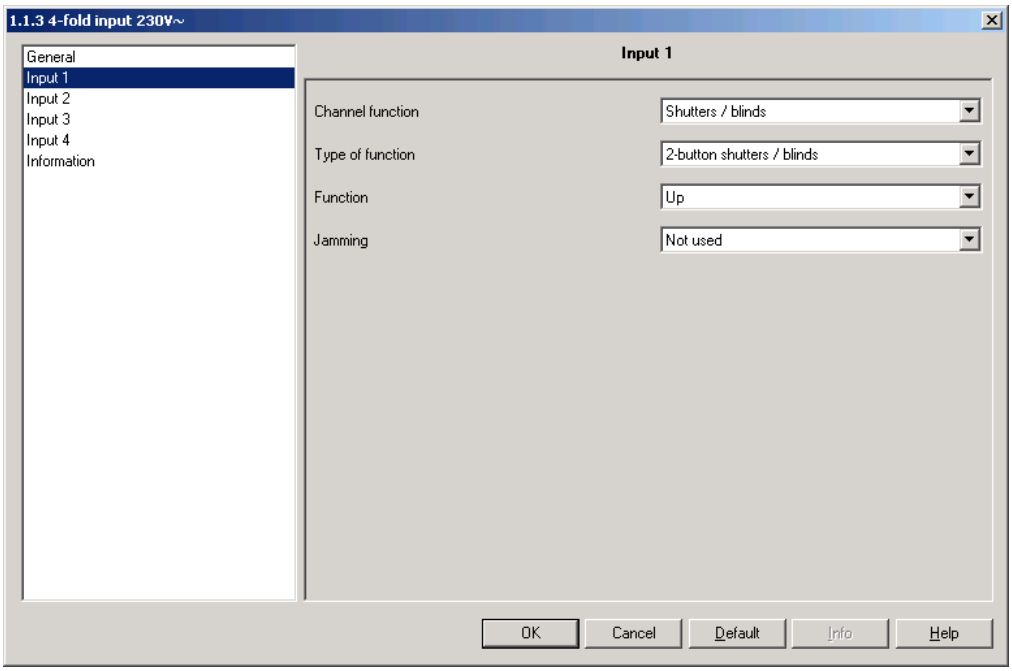
➜ Parameter Setting screen



Screen 8

Type of function: 2-buttons
This function controls shutters or blinds using two push buttons (Inputs). One button for Up and one button for down.
The function transmit the **UP / DOWN** object (long key press) and the **Slat adjustment / Stop** object (short key press).

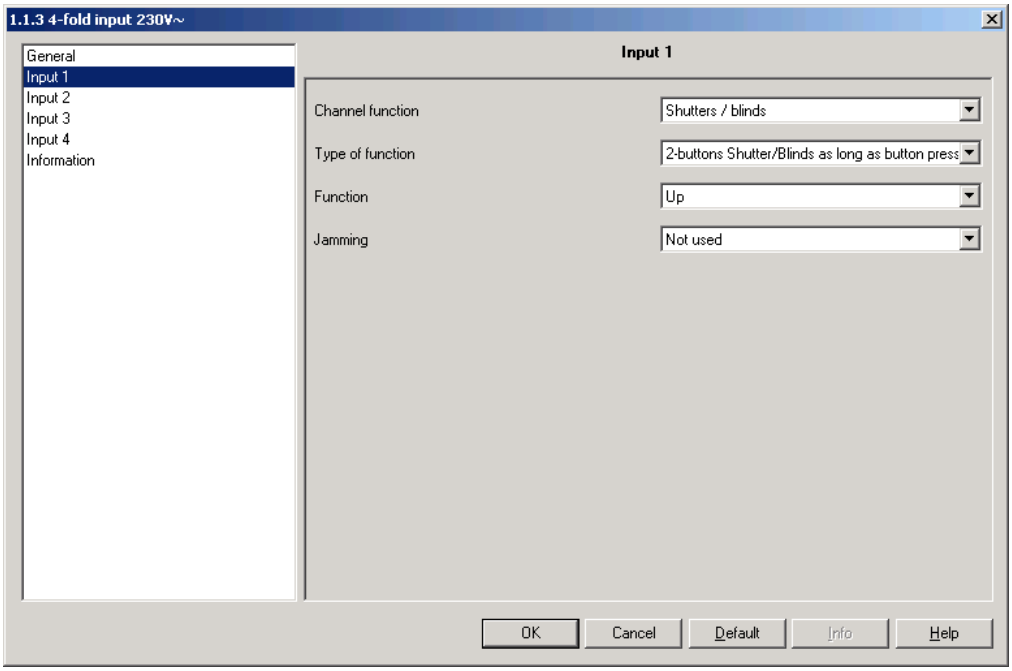
➜ Parameter Setting screen



Screen 9

Type of function: 2-buttons as long as button pressed
When the button is pressed, the input sends a Up or down command to the bus via the **Up / Down** object.
When the button is released, the input sends a stop command to the bus via the **Slat angle / Stop** object.

➜ Parameter Setting screen



Screen 10

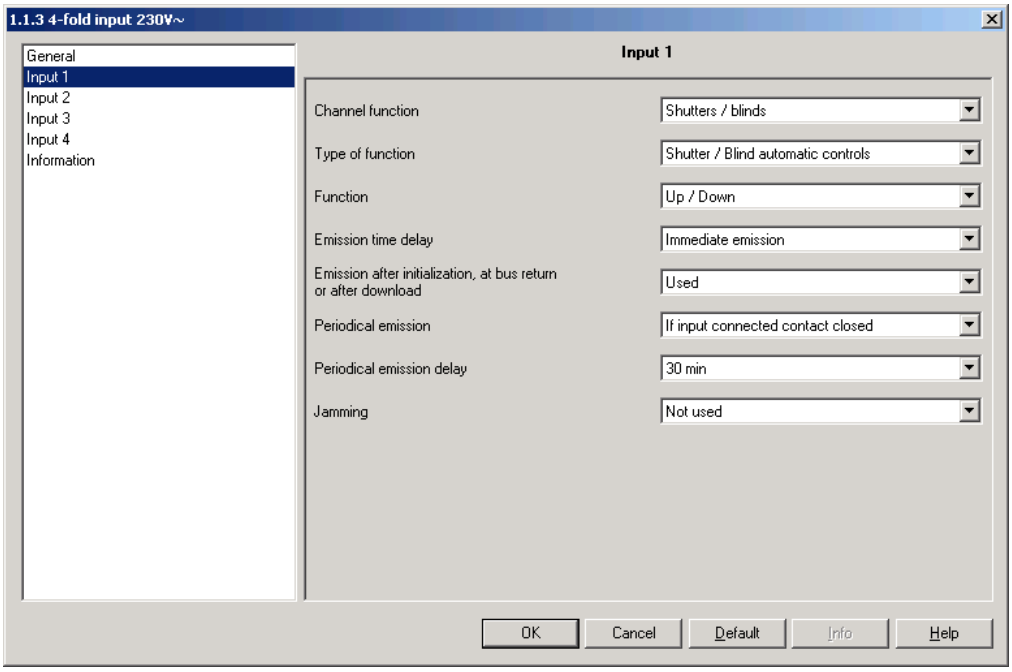
➜ Parameter

Parameter	Description	Value
Channel function	This parameter defines the function types.	Shutters / blinds
Type of function	This parameter defines the function type.	1-button, 2-buttons, 2-buttons as long as button pressed, Automatic controls. Default value: 2-buttons
Function *	This parameter defines the movement direction associated to the button.	Up, Down. Default value: Up
Jamming	This parameter is used to prevent the input from being used. Jamming forbids sending commands.	Not used, Used Default value: Not used

* This parameter is only visible if the **Type of Function** parameter displays the value: **2-buttons, 2-buttons as long as button pressed, Automatic controls.**

Type of function: Automatic controls
This function is used to control shutters or blinds (without slat angle adjustment) using automatic controls (switches, etc.).
The automatic controls transmits the **Up / Down** object.

➜ Parameter Setting screen



Screen 11

➜ Parameter

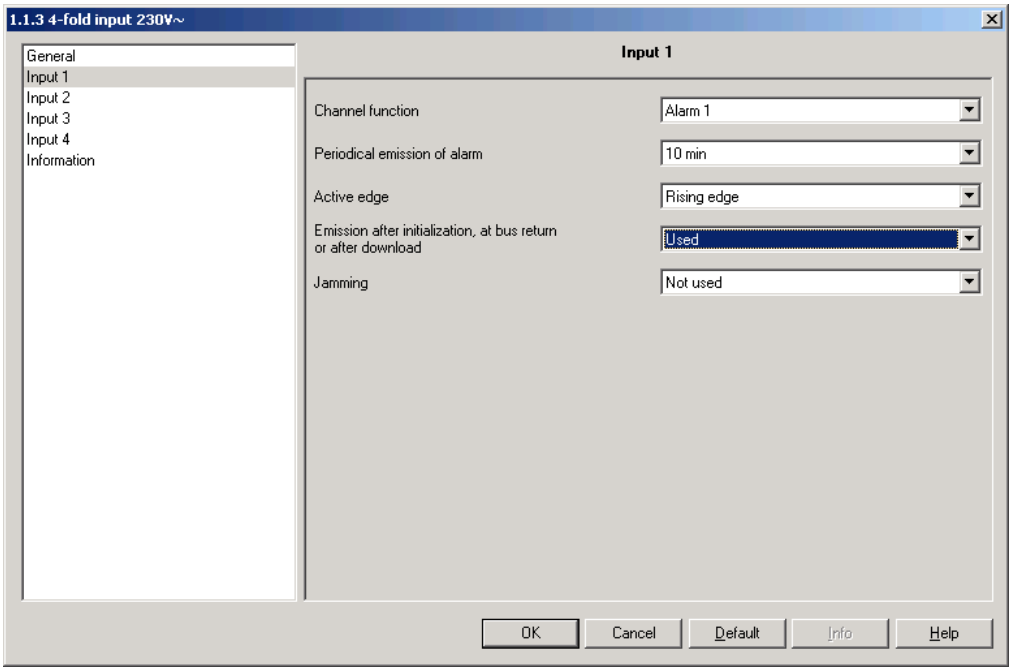
Parameter	Description	Value
Channel function	This parameter defines the operating modes.	Shutters / blinds
Type of function	This parameter defines the function type.	Automatic controls
Function	This parameter defines the movement direction associated to the button.	Up / -, Down / -, Up / Down, Down / Up, - / Up, - / Down Default value: Up / Down
Emission time delay	This parameter sends commands with a set delay in relation to pressing or releasing.	Immediate emission, 1 s, 2 s, 3 s, 4 s, 5 s, 10 s, 15 s, 20 s, 25 s, 30 s, 40 s, 50 s, 1 min, 1 min 30 s, 2 min, 2 min 30 s, 3 min, 3 min 30 s, 4 min, 4 min 30 s, 5 min Default value: Immediate emission
Emission after initialization, at bus return or after download	This parameter defines if the input status is transmitted on the bus when the product is initialised or on bus return.	Used, Not used, Default value: Used
Periodical emission	This parameter defines the condition activating cyclic transmission input status.	Not used, If input connected contact closed, If input connected contact opened, If input connected contact opened and closed Default value: Not used
Periodical emission delay *	This parameter defines the cyclic transmission period.	Duration: 1 s, 2 s, 3 s, 4 s, 5 s, 10 s, 20 s, 30 s, 10 min, 15 min, 30 min, 1 h, 2 h, 3 h, 6 h, 12 h, 24 h. Default value: 30 min
Jamming	This parameter is used to prevent the input from being used. Jamming forbids sending commands.	Not used, Used Default value: Not used

* This parameter is only visible if the **Type of Function** parameter displays the value: **Automatic control** and and the **Periodical emission** parameter has a value other than: Not used.

Channel function: 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.).
To place the shutters in safety position in case of bad weather: link the Alarm 1 and Alarm 2 functions with the **Alarm 1** and **Alarm 2** object of the **Shutter / Blind output modules**.
These functions have the highest priority.Alarm 1 has a higher priority than Alarm 2.

➜ Parameter Setting screen



Screen 12

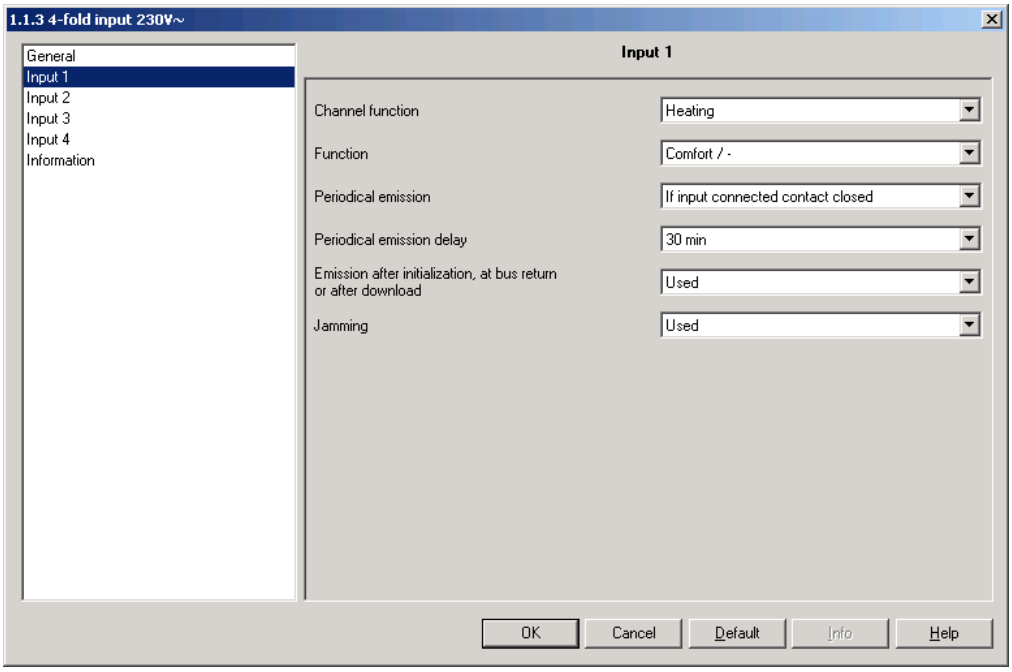
➜ Parameter

Parameter	Description	Value
Channel function	This parameter defines the alarm function.	Alarm 1, Alarm 2
Periodical emission of alarm	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: 10 min,
Active edge	This parameter defines the edge on which the alarm is active.	Rising edge Falling edge Default value: Rising edge
Emission after initialization, at bus return or after download	This parameter defines if the input status is transmitted on the bus when the product is initialised or on bus return.	Not used, Used Default value: Not used
Jamming	This parameter is used to prevent the input from being used. Jamming forbids sending commands.	Not used, Used Default value: Not used

Channel function: Heating mode selection

The Heating mode selection functions allow switching ON or OFF the heating or selecting a set-point.
The Heating mode selection function transmits the **Set-point selection** object.

➜ Parameter Setting screen



Screen 13

➜ Parameter

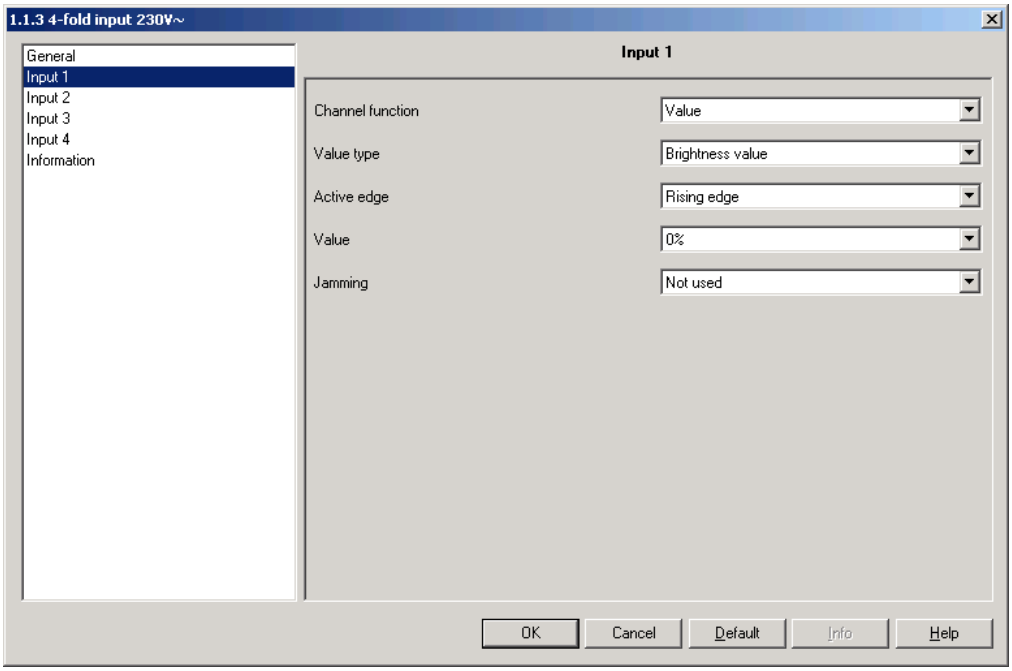
Parameter	Description	Value
Channel function	This parameter defines the operating modes.	Heating mode selection
Function	This parameter allows selecting the set-point associated with the connected input.	Comfort / Night set-point, Comfort / -, Night set-point / -, Frost protection / Auto, Standby / -, Comfort / Standby, Frost protection / -, Night set-point / Comfort, - / Comfort, - / Night set-point, Auto / Frost protection, - / Standby, Standby / Comfort, - / Frost protection. Default value: Comfort / -
Periodical emission	This parameter defines the emission periodicity of the contact status.	Not used, If input connected contact closed, If input connected contact opened, If input connected contact opened and closed Default value: Not used
Periodical emission delay *	This parameter defines the cyclic transmission period	Duration: 1 s, 2 s, 3 s, 4 s, 5 s, 10 s, 20 s, 30 s, 1 min, 2 min, 3 min, 4 min, 5 min, 10 min, 15 min, 30 min, 1 h, 2 h, 3 h, 6 h, 12 h, 24 h. Default value: 30 min
Emission after initialization, at bus return or after download	This parameter defines if the input status is transmitted on the bus when the product is initialised or on bus return.	Not used, Used Default value: Not used
Jamming	This parameter is used to prevent the input from being used. Jamming forbids sending commands.	Not used, Used Default value: Not used

* This parameter is only visible if the **Emission periodicity** parameter has a value other than: Not used.

Channel function: Value

This function is used for sending: Percentage, Temperature, Luminosity level, Brightness value and Values (2 bytes).
This function is used for sending: Percentage, Temperature, Luminosity level, Brightness value and Value (2 byte).

➜ Parameter Setting screen



Screen 14

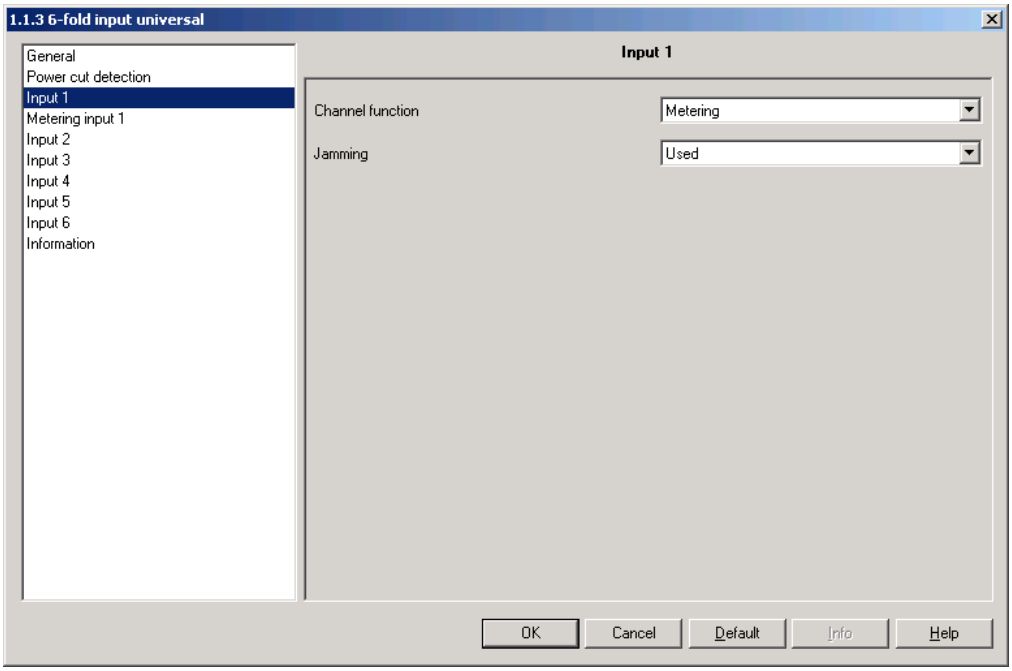
➜ Parameter

Parameter	Description	Value
Channel function		Value
Value type	This parameter defines the type of value sent.	Value in %, Temperature, Luminosity level, Brightness value, Value Default value: Brightness value
Active edge	This parameter defines on which edge the commands are sent on the bus.	Rising edge, Falling edge, Default value: Rising edge
Value	This parameter defines the value to be sent to the bus.	- Value in %, 0% - 100% in 1% steps Default value: 0% - Temperature, 0°C - 40°C in 0.5°C steps Default value: 20°C - Luminosity level, 0 Lux - 1000 Lux in 50 Lux steps Default value: 300 Lux - Brightness value, 0% - 100% in 1% steps Default value: 0% - Value, 0 - 65535 in 1 steps Default value: 1
Jamming	This parameter is used to prevent the input from being used. Jamming forbids sending commands.	Not used, Used Default value: Not used

Channel function: Metering

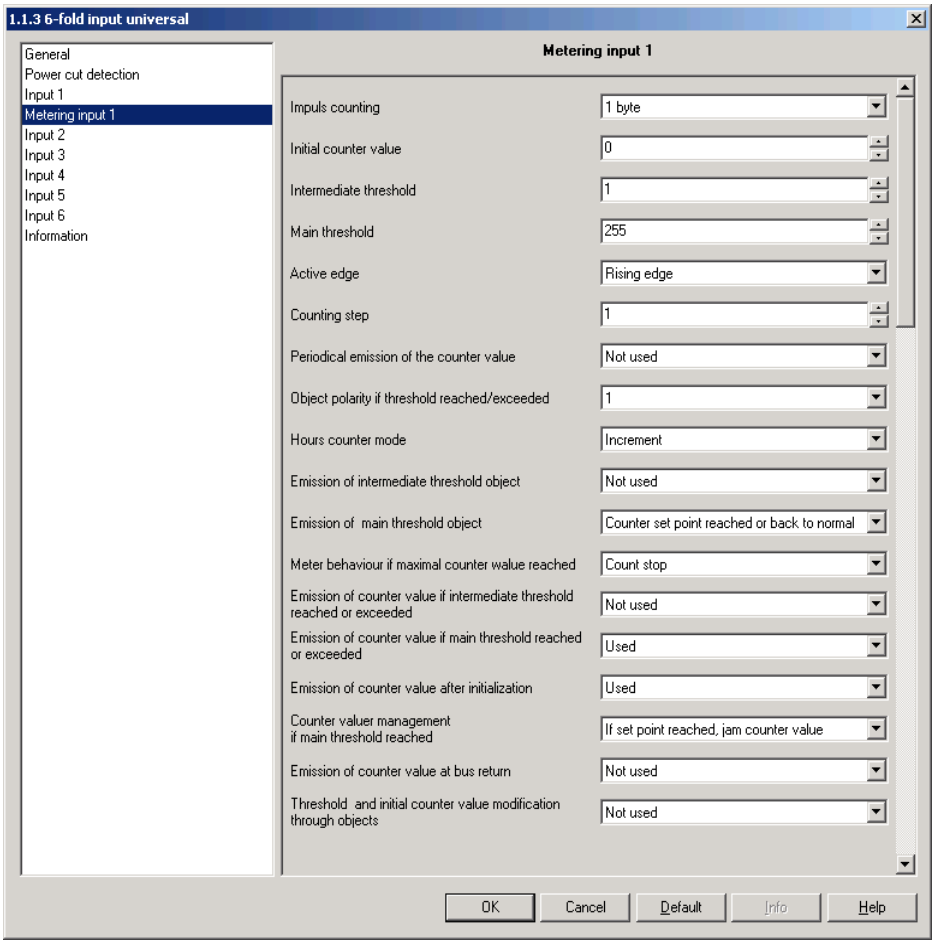
The meter function allows pulses of a maximum frequency of 5 Hz to be counted.

➜ Parameter Setting screen



Screen 15

➜ Parameter settings for the counter function



Screen 16

Impuls counting

➜ Parameter

Parameter	Description	Value
Impuls counting	This parameter defines the counter format.	1 byte: (0 - 255) 2 bytes: (0 - 65535) 4 bytes: (0 - 2147483647) Default value: 1 byte

Initial counter value

➜ Parameter

Parameter	Description	Value
Initial counter value	This parameter defines the starting counter value. This value depends on the selected counter value format.	1 byte: (0 - 255) 2 bytes: (0 - 65535) 4 bytes: (0 - 2147483647) Default value: 0

Intermediate threshold

➜ Parameter

Parameter	Description	Value
Intermediate threshold	This parameter defines the intermediate threshold. This value depends on the selected counter value format.	1 byte: (0 - 255) 2 bytes: (0 - 65535) 4 bytes: (0 - 2147483647) Default value: 1 byte

Main threshold

This parameter defines the value of the final threshold. This value depends on the selected counter value format.

➜ Parameter

Parameter	Description	Value
Main threshold	This parameter defines the value of the final threshold. This value depends on the selected counter value format.	1 byte: 0 - 255 2 bytes: 0 - 65535 4 bytes: 0 - 2147483647 Default value: 255 (1 byte), 65535 (2 bytes:), 2147483647 (4 bytes:)

Active edge

➜ Parameter

Parameter	Description	Value
Active edge	This parameter defines the front of the pulse taken into account for an incrementation or for a decrementation.	Rising edge, Falling edge, Rising and falling. Default value: Rising edge

Counting step

➜ Parameter

Parameter	Description	Value
Counting step	This parameter defines the incremented or decremented value for each active front.	1 byte: 0 - 255, 2 bytes: 0 - 65535 4 bytes: 0 - 2147483647 Default value: 1

Number of impuls(es) for 1 counting step

➜ Parameter

Parameter	Description	Value
Number of impuls(es) for 1 counting step	This parameter defines the number of impuls(es) corresponding to 1 counting step. Example: - Hours counter mode = Increment - Counting step = 2 - Number of impuls(es) for 1 counting step = 5 => The counting value will be increased by 2 after detection of 5 impulses.	0 - 255, Default value: 1

Periodical emission of the counter value

➜ Parameter

Parameter	Description	Value
Periodical emission of the counter value	This paramter is used to select the type of cyclic emission of the counter value.	Not used, Periodical emission (Value), Periodical emission (Time), Default value: Not used
Periodical emission (Value)	This parameter is used to send the **counter value** (in bytes) object to the bus depending on the value interval.	
Value interval	This parameter defines after how many impulsions the counter value is emitted via the counter value object.	1 byte: 0 - 255, 2 bytes: 0 - 65535 4 bytes: 0 - 2147483647 Default value: 1
Periodical emission (Time)	This parameter defines the time after which the counter value is sent to the bus.	
Time interval	This parameter defines after how long the counter value is emitted via the counter value object.	1 s, 2 s, 3 s, 4 s, 5 s, 10 s, 20 s, 30 s, 1 min, 2 min, 3 min, 4 min, 5 min, 10 min, 15 min, 30 min, 1 h, 2 h, 3 h, 6 h, 12 h, 24 h, Default value: 24 h

Object polarity if threshold reached / exceeded

➜ Parameter

Parameter	Description	Value
Object polarity if threshold reached / exceeded.	This parameter defines the value emitted via the **Intermediate threshold reached** and **Main threshold reached** objects when they are reached or exceeded.	0, 1 Default value: 1

Hours counter mode

➜ Parameter

Parameter	Description	Value
Hours counter mode	This parameter defines the Hours counter mode.	Increment, Countdown Default value: Increment

Emission of intermediate threshold object

➜ Parameter

Parameter	Description	Value
Emission of intermediate threshold object	This parameter defines the conditions for emission the **Intermediate threshold reached** object to the bus.	Not used, Counter set point reached, Counter set point reached or back to normal Default value: Not used

Emission of main threshold object

➜ Parameter

Parameter	Description	Value
Emission of main threshold object	This parameter defines the conditions for emission the **Main threshold reached** object to the bus.	Not used, Counter set point reached, Counter set point reached or back to normal Default value: Not used

Meter behaviour if maximal counter walue reached

➜ Parameter

Parameter	Description	Value
Counter valuer management if main threshold reached	This parameter defines processing of the counter value when the counter has reached its maximum value.	STOP, Continue counting, Reset counter value at start value, Default value: STOP

Emission of counter value if intermediate threshold reached or exceeded

➜ Parameter

Parameter	Description	Value
Emission of counter value if intermediate threshold reached or exceeded	This parameter defines whether the counter value is emitted when the intermediate threshold is exceeded.	Not used, Used, Default value: Not used

Emission of counter value if main threshold reached or exceeded

➜ Parameter

Parameter	Description	Value
Emission of counter value if main threshold reached or exceeded	This parameter defines whether the counter value is emitted when the main threshold is exceeded.	Not used, Used, Default value: Not used

Emission of counter value after initialization

➜ Parameter

Parameter	Description	Value
Emission of counter value after initialization	This parameter defines whether the counter value is emitted if the product is restarted.	Not used, Used, Default value: Not used

Counter valuer management if main threshold reached

➜ Parameter

Parameter	Description	Value
Meter behaviour if maximal counter walue reached	This parameter defines how the counter value is processed when the counter has reached the threshold.	If set point reached, jam counter value If threshold reached, reset counter at start value Default value: If set point reached, jam counter value

Emission of counter value at bus return

➜ Parameter

Parameter	Description	Value
Emission of counter value at bus return	This parameter defines whether the counter value is emitted at bus return.	Not used, Used, Default value: Not used

Threshold and initial counter value modification through objects

➜ Parameter

Parameter	Description	Value
Threshold and initial counter value modification through objects	This parameter defines whether the counter value and the threshold values can be modified.	Not used, Used, Default value: Not used

If this value modification is authorised, the following objects appear:
- New initial counter value
- New intermediate threshold
- New main threshold

Reception of a value on these objects will replace the configured value.

Meter reset after download

➜ Parameter

Parameter	Description	Value
Meter reset after download	This parameter defines whether the counter value is reset after a download procedure.	Not used, Used, Default value: Not used

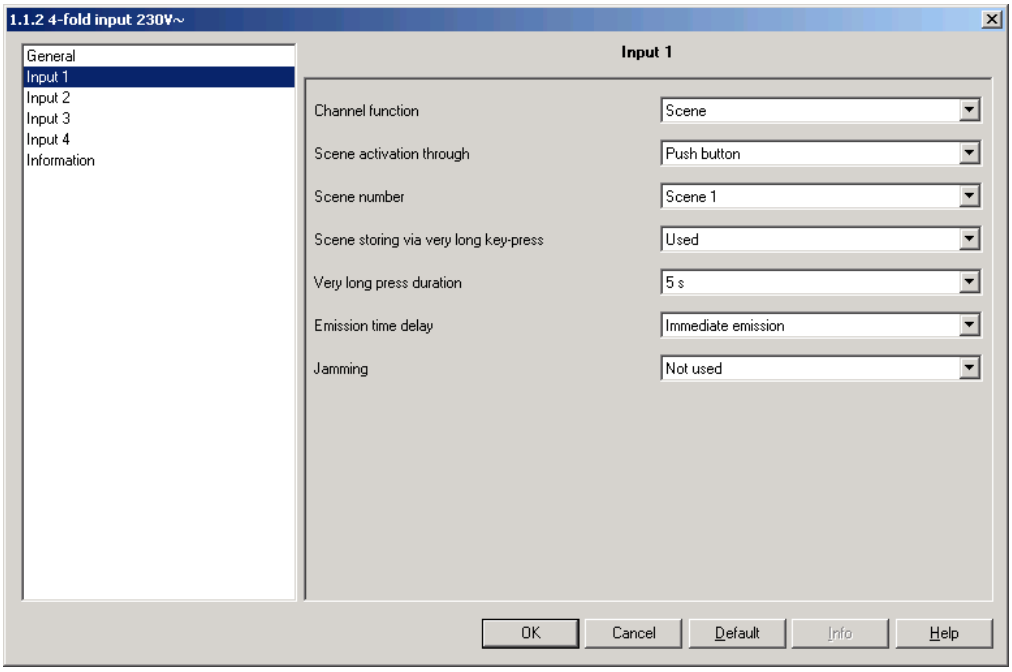
Channel function: Scene

The Scene function sends group controls to different kinds of outputs to create ambiences or scenarios. (Panic switch, Television, etc.).
The value of the **Scene** object is defined by the **Scene number** parameter.

Example: Byte value 0 transmits Scene 1, Byte value 128 corresponds to storing Scene 1.
Byte value 1 transmits Scene 2, Byte value 129 corresponds to storing Scene 2.

Scene activation by push-button (impulse)

➜ Parameter Setting screen



Screen 17

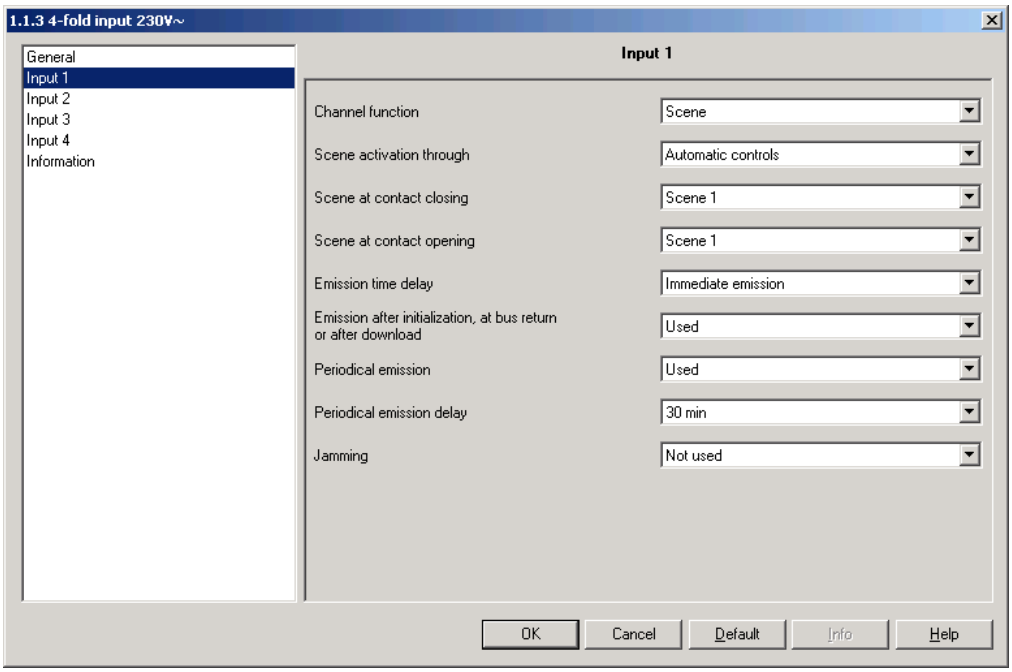
➜ Parameter

Parameter	Description	Value
Channel function		Scene
Scene activation through	This parameter defines the type of product or automation connected to the input to activate a scene.	Push button
Scene number	This parameter defines the number of the scene which will be transmitted when the input contact is closed.	Scene 1 - Scene 32 Default value: Scene 1
Scene storing via very long key-press	This parameter authorizes or forbids scene storing.	Used, Not used Default value: Used
Very long press duration *	This parameter defines the duration after which a scene is stored.	1 s, 2 s, 3 s, 4 s, 5 s, 6 s, 7 s, 8 s, 9 s, 10 s, 15 s, 20 s, 25 s 30 s Default value: 5 s
Emission time delay	This parameter is used to send commands with a configurable delay in relation to input contact closure.	Immediate emission, 1 s, 2 s, 3 s, 4 s, 5 s, 10 s, 15 s, 20 s, 25 s, 30 s, 40 s, 50 s, 1 min, 1 min 30 s, 2 min, 2 min 30 s, 3 min, 3 min 30 s, 4 min, 4 min 30 s, 5 min Default value: Immediate emission
Jamming	This parameter is used to prevent the input from being used. Jamming forbids sending commands.	Not used, Used Default value: Not used

* This parameter is only visible if the **Scene storing via very long key press** parameter has the following value: Used.

Scene activation by automatic controls:

➜ Parameter Setting screen



Screen 18

➜ Parameter

Parameter	Description	Value
Channel function		Scene
Scene activation through	This parameter defines the type of product or automation connected to the input to activate a scene.	Automatic controls
Scene at contact closing	This parameter defines the number of the scene which will be transmitted when the input contact is closed.	Scene 1 - Scene 32 Default value: Scene 1
Scene at contact opening	This parameter defines the number of the scene which will be transmitted when the input contact is opened.	Scene 1 - Scene 32 Default value: Scene 1
Emission time delay	This parameter is used to send commands with a configurable delay in relation to input contact closure.	Immediate emission, 1 s, 2 s, 3 s, 4 s, 5 s, 10 s, 15 s, 20 s, 25 s, 30 s, 40 s, 50 s, 1 min, 1 min 30 s, 2 min, 2 min 30 s, 3 min, 3 min 30 s, 4 min, 4 min 30 s, 5 min Default value: Immediate emission
Emission after initialization, at bus return or after download.	This parameter defines if the input status is transmitted on the bus when the product is initialised or on bus return.	Not used, Used Default value: Not used
Periodical emission	This parameter defines the condition activing cyclic transmission Scene.	Not used, Used Default value: Not used
Periodical emission delay *	This parameter defines the cyclic transmission period.	Duration: 1 s, 2 s, 3 s, 4 s, 5 s, 10 s, 20 s, 30 s, 1 min, 2 min, 3 min, 4 min, 5 min, 10 min, 15 min, 30 min, 1 h, 2 h, 3 h, 6 h, 12 h, 24 h. Default value: 30 min
Jamming	This parameter is used to prevent the input from being used. Jamming forbids sending commands.	Not used, Used Default value: Not used

* This parameter is only visible if the **Emission periodicity** parameter has the following value: Used.

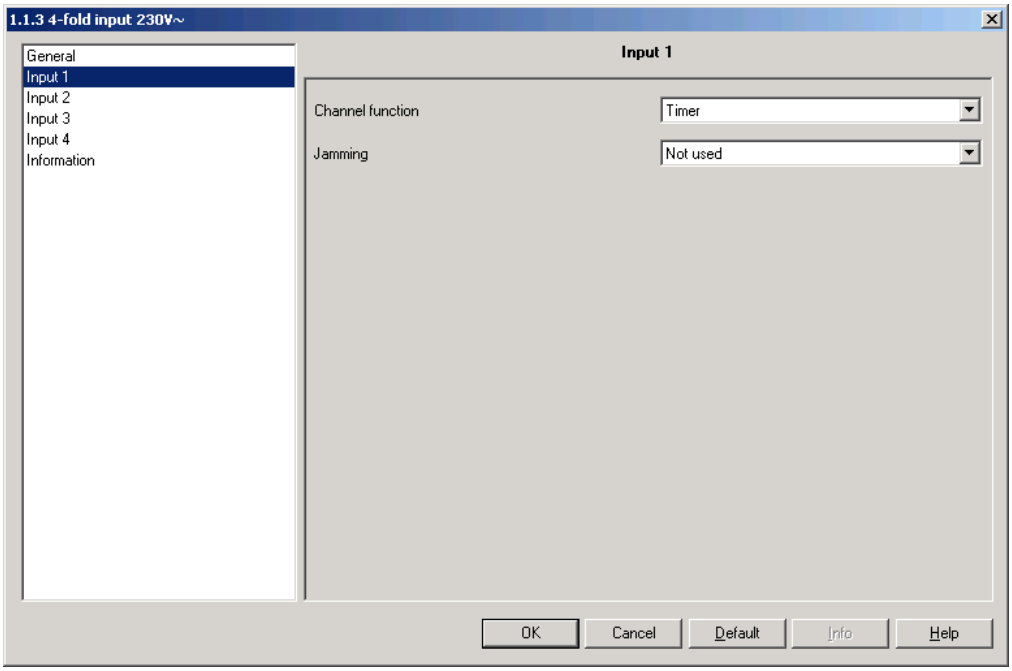
Channel function: Timer

This function operates like a staircase light function. The timer duration is set on the output module (**Timer** parameters **Timer** object).
Feature:
short key-press (Rising edge): Timer start.
long key-press (Falling edge): Timer end.

The time is retriggered in the output by a recurrent short key press.
Feature of TXA products:
If additional ON commands are sent to the **Timer** object within the first 10 s, the output's ON-switching time is then calculated as follows.

ON-switching time = (1 + Number of addiional operations) * Set time.

➜ Parameter Setting screen

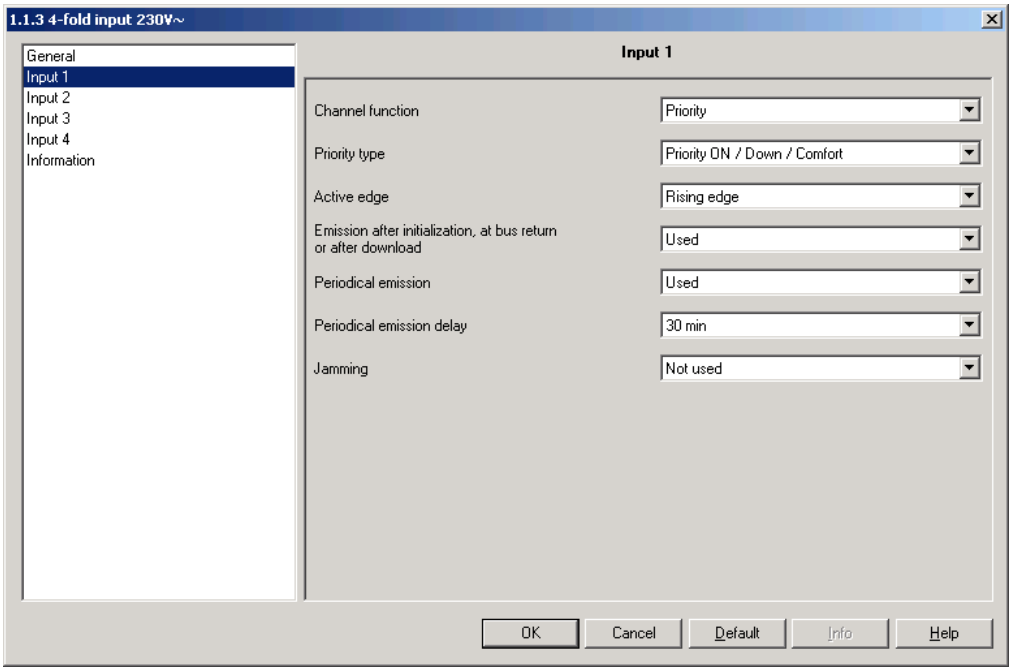


Screen 19

Channel function: Priority

This function sends priority-start or priority-stop commands.
No other command is taken into account if a priority is active. Only end of priority or alarm commands will be taken into consideration.

➜ Parameter Setting screen



Screen 20

➜ Parameter

Parameter	Description	Value
Channel function		Priority
Priority type	This parameter selects a Priority type. It depends on the type of application (Lighting, Shutter, Blind, Heating).	ON / Down / Comfort OFF / Up / Frost protection Default value: ON / Down / Comfort
Active edge	This parameter defines on which edge the commands are sent on the bus.	Rising edge, Falling edge, Default value: Rising edge
Emission after initialization, at bus return or after download	This parameter defines if the input status is transmitted on the bus when the product is initialised or on bus return.	Not used, Used Default value: Not used
Periodical emission	This parameter defines the condition activating cyclic tranmission priority.	Not used, Used Default value: Not used
Periodical emission delay *	This parameter defines the cyclic transmission period.	Duration: 1 s, 2 s, 3 s, 4 s, 5 s, 10 s, 20 s, 30 s, 1 min, 2 min, 3 min, 4 min, 5 min, 10 min, 15 min, 30 min, 1 h, 2 h, 3 h, 6 h, 12 h, 24 h. Default value: 30 min
Jamming	This parameter is used to prevent the input from being used. Jamming forbids sending commands.	Not used, Used Default value: Not used

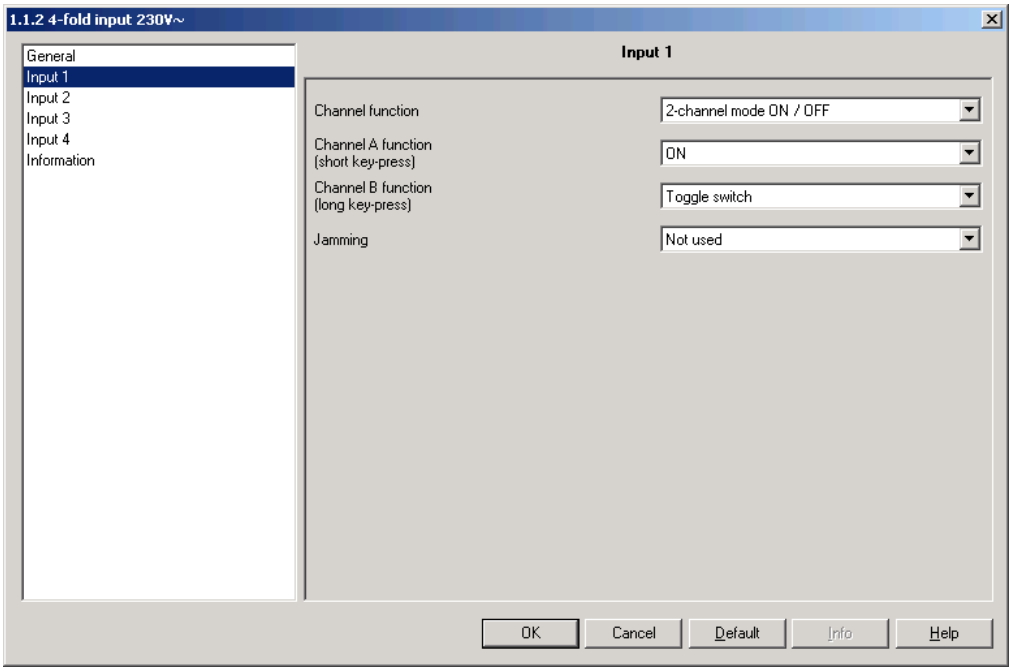
* This parameter is only visible if the **Emission periodicity** parameter has a value other than: Not used.

Channel function: 2-channel mode ON / OFF

This function is used to control two independant circuits with different functions using the same input. This function transmits the **ON / OFF Channel A** and **ON / OFF Channel B** objects. **Channel A** requiring a short key press and **Channel B** requiring a long key press.

The long key press duration is set in the **Duration of long key-press-channel mode** parameter.

➜ Parameter Setting screen



Screen 21

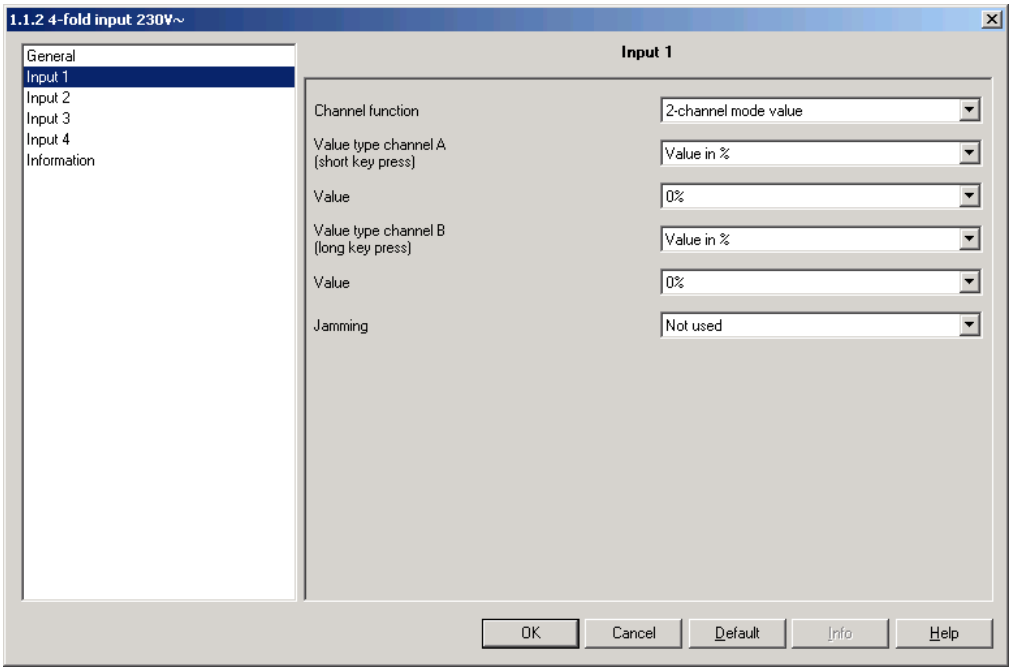
➜ Parameter

Parameter	Description	Value
Channel function		2-channel mode ON / OFF
Channel A function (short key-press)	This parameter defines the command sent by a short key-pres.	Not used, ON, OFF, Toggle switch Default value: ON
Channel B function (long key-press)	This parameter defines the command sent by a long key-press.	ON, OFF, Toggle switch Default value: Toggle switch
Jamming	This parameter is used to prevent the input from being used. Jamming forbids sending commands.	Not used, Used Default value: Not used

Channel function: 2-channel mode value

This function is used to send 2 different values using a single button.
This function transmits the **Value type channel A** and **Value type channel B** objects. **Channel A** requiring a short key press and **Channel B** requiring a long key press.
The long key press duration is set in the **Duration of long key-press-channel mode** parameter.

➜ Parameter Setting screen



Screen 22

➜ Parameter

Parameter	Description	Value
Channel function		2-channel mode value
Value type channel A (short key-press)	This parameter defines the value type and the unit that are sent to the bus for Channel A.	Not used, Value in %, Temperature, Luminosity level, Brightness value, Value Default value: Value in %
Value	This parameter defines the value to be sent to the bus.	- Value in %, 0% - 100% in 1% steps Default value: 0% - Temperature, 0°C - 40°C in 0.5°C steps Default value: 20°C - Luminosity level, 0 Lux - 1000 Lux in 50 Lux steps Default value: 300 Lux - Brightness value, 0% - 100% in 1% steps Default value: 0% - Value, 0 - 65535 in 1 steps Default value: 1
Value type channel B (long key-press)	This parameter defines the value type and the unit that are sent to the bus for Channel B.	Value in %, Temperature, Luminosity level, Brightness value, Value, Default value: Value in %
Value	This parameter defines the value to be sent to the bus.	- Value in %, 0% - 100% in 1% steps Default value: 0% - Temperature, 0°C - 40°C in 0.5°C steps Default value: 20°C - Luminosity level, 0 Lux - 1000 Lux in 50 Lux steps Default value: 300 Lux - Brightness value, 0% - 100% in 1% steps Default value: 0% - Value, 0 - 65535 in 1 steps Default value: 1
Jamming	This parameter is used to prevent the input from being used. Jamming forbids sending commands.	Not used, Used Default value: Not used

3. Main characteristics

Product	TXA306
Max. number of group addresses	252
Max. number of links	254
Parameter	26 per input, 10 global, 166 in total
Objects	112

4. Physical addressing

To perform physical addressing or check for the presence of the bus, press the illuminated pushbutton located on the top right of the device above the label holder.
Programming LED ON = Bus present and the product is in programming mode.
The product remains in programming mode until the physical address has been transmitted by ETS. Press again to exit programming mode.
Physical addressing can be performed in either automatic or manual operation ().