Instructions manual

TACTIL 4-button control art. 21840

Installation manual

WELL-CONTACT PLUS

VIMAR

Contents

For all the details about the Well-contact Plus system, refer to the installer manual that can be downloaded from the Software ➡ Product Software ➡ Well-contact Plus section on the website www.vimar.com.

TACTIL 4-button control

General features and functionality

Home automation control device, 4 independently programmable buttons for managing single loads or scenarios, KNX standard, to be completed with a label and Eikon Tactil cover plate - 2 modules

21840

General characteristics
The device consists of 4 independent touch buttons that, via the KNX bus, enable controlling relay actuators, dimmer actuators and roller shutter actuators; they can also be used for calling up scenarios.
The device is to be completed with the glass cover plate; the buttons however react to mechanical pressure even without fitting the cover plate so the configuration and the first operating test can be performed in this condition.

Functions
• **Device settings**:
  - colour
  - button sensitivity (i.e., the amount of pressure required to actuate a command)
  - buzzer on/off
  - behaviour of the LEDs with the device on standby (off or with low brightness)

  Caution: If the device is set to "Switch" mode the icon will light up that is to be pressed to reverse the current state of the load (reverse feedback is given with respect to state-group).

• **Possible functions of the buttons**:
  - sending ON, OFF and timed ON commands
  - ON and OFF switch on the up and on the down side
  - Call up and save scenario
  - Send value
  - Dimmer control
  - Toggle

• **Possible functions of the buttons with 2 associated channels**:
  - ON and OFF switch
  - Dimmer control
  - Roller shutter control

• **Proximity function**:
  - when the user draws her hand near, the device goes into "normal" operation and the LEDs light up brightly.
  - if after 10 seconds no action is carried out, the device will go back onto standby and the LEDs will switch off or reduce their brightness.

• **Cover plate cleaning function**: the device recognizes simultaneously pressing multiple keys due to wiping with a cloth so no actions are carried out unless you dwell too long on the same area of the cover plate.

• **Function removing plaque (available on devices with FW version 2.0 and later):** the device recognizes the removal of plaque and sends a message to the bus via the communication object no. 18 .

• **Indication of the state of the load mode button "Toggle Object " (available on devices with version fw 2.0 and later):** in state Off the signs are:
  a) flashing
  b) color change

Behaviour after bus on/off
Bus power down: no function
Bus power up: no action

Via ETS you can set whether, at rest, the control device will be off or whether all the icons will be on at low brightness (30%) regardless of the state of the loads.

Behaviour after reset
As for bus on.

TACTIL 4-button control

ETS parameters and communication objects

List of existing communication objects and standard settings

No.	ETS name	Function	Description	Length	C	R	W	T	U
LEFT KEYS									
0	Left key top	Send value	If set as "Pushbutton" and "Send value" function to send a value that can be set between 0 and 255	1 byte	X	X		X	
0	Left key top	Scenario	If set as "Pushbutton" and "Scene" function to activate a scenario and save by means of a long button press (press for 2 seconds to activate and stop saving on bus)	1 byte	X	X		X	
0	Left key top	Send forced	If set as "Pushbutton" and "Switching one/two objects" function to send one of the selectable forcing functions as "forced On/ forced Off/forced disable"	2 bit	X	X		X	
0	Left key top	On/Off dimmer control	If set as "Pushbutton" and "Single key dimming" function to turn a dimmed light On/Off	1 bit	X	X		X	
0	Left key top	Send Value - rising	If set as "Pushbutton" and "Switching two objects" function to send one of the selectable "On/Off on rising edge" functions (button pressing)	1 bit	X	X		X	
0	Left keys	On/Off	If set as "Switch" and the "On/Off" function is selected to send "On/Off" messages by pressing respectively the top/bottom of the double button	1 bit	X	X		X	
0	Left keys	On/Off dimmer control	If the buttons are set as "Switch" and "Dimming" function to turn a dimmed light On/Off	1 bit	X	X		X	
0	Left keys	Shutter Up/Down	If the buttons are set as "Switch" and "Roller Shutter" function to move a roller shutter	1 bit	X	X		X	
0	Left key top	Send Value	If set as "Pushbutton" and the "Switching one object" item or the "Toggle object" item is selected; it is used to send On/Off/Timed On messages. If used in "Toggle object" mode you must associate, in the same group as this object, also the KNX object of the button's "On/off status"	1 bit	X	X		X	
1	Left key top	Send value - falling	If set as "Pushbutton" and "Switching two objects" function to send one of the selectable "On/Off on falling edge" functions (button release)	1 bit	X	X		X	
1	Left key top	Dimming	If set as "Pushbutton" and "Single key dimming" function to control a dimmed light	4 bit	X	X		X	
1	Left keys	Dimming	If set as "Switch" and "Dimming" function to control a dimmed light	4 bit	X	X		X	
1	Left keys	Shutters On/Off	If the buttons are set as "Switch" and "Roller Shutter" function to stop a roller shutter	1 bit	X	X		X	
2	Left key top	Status On/Off	If set as "Pushbutton" and "Single key dimming" or "Toggle" function (for the on/off status of a relay)	1 bit	X		X	X	X
2	Left LEDs	Status On/Off	If the buttons are set as "Switch" and "On/Off" or "Dimming" function, for the LED status; when dimming, this object is to be associated in the same group as the KNX object of dimmer "On/ Off" to allow the button to switch ON/OFF and as a result control the light	1 bit	X		X	X	X
3	Lower left key	Send value	If set as "Pushbutton" and "Send value" function to send a value that can be set between 0 and 255 (for the on/off state of a relay)	1 byte	X	X		X	
3	Lower left key	Scenario	If set as "Pushbutton" and "Scene" function to activate a scenario and save by means of a long button press (press for 2 seconds to activate and stop saving on bus)	1 byte	X	X		X	
3	Lower left key	Send forced	If set as "Pushbutton" and "Switching an object" function to send one of the selectable forcing functions as "forced On/forced Off/ forced disable"	2 bit	X	X		X	
3	Lower left key	On/Off dimmer control	If set as "Pushbutton" and "Single key dimming" function to turn a dimmed light On/Off	1 bit	X	X		X	

Continues C = Communication; R = Read; W = Write; T = Transmission; U = Enable update

Continued

No.	ETS name	Function	Description	Length	Flag 1				
					C	R	W	T	U
3	Lower left key	Send Value - rising	If set as "Pushbutton" and "Switching two objects" function to send one of the selectable "On/Off on rising edge" functions (button pressing)	1 bit	X	X		X	
3	Lower left key	Send value	If set as "Pushbutton" and the "Switching one object" item or the "Toggle object" item is selected; it is used to send On/Off/Timed On messages. If used in "Toggle object" mode you must associate, in the same group as this object, also the KNX object of the button's "On/off status"	1 bit	X	X		X	
4	Lower left key	Dimming	If set as "Pushbutton" and "Single key dimming" function to control a dimmed light	4 bit	X	X		X	
4	Lower left key	Send value - falling	If set as "Pushbutton" and "Switching two objects" function to send one of the selectable "On/Off on falling edge" functions (button release)	1 bit	X	X		X	
5	Lower left key	Status On/Off	If set as "Pushbutton" and "Single key dimming" or "Toggle" function	1 bit	X		X		X
RIGHT KEYS									
6	Right key top	Send value	If set as "Pushbutton" and "Send value" function to send a value that can be set between 0 and 255	1 byte	X	X		X	
6	Right key top	Scenario	If set as "Pushbutton" and "Scene" function to activate a scenario and save by means of a long button press (press for 2 seconds to activate and stop saving on bus)	1 byte	X	X		X	
6	Right key top	Send forced	If set as "Pushbutton" and "Switching one/two objects" function to send one of the selectable forcing functions as "forced On/forced Off/forced disable"	2 bit	X	X		X	
6	Right key top	On/Off dimmer control	If set as "Pushbutton" and "Single key dimming" function to turn a dimmed light On/Off	1 bit	X	X		X	
6	Right key top	Send value-up	If set as "Pushbutton" and "Switching two objects" function to send one of the selectable "On/Off on rising edge" functions (button pressing)	1 bit	X	X		X	
6	Right keys	On/Off	If set as "Switch" and the "On/Off" function is selected to send "On/Off" messages by pressing respectively the top/bottom of the double button	1 bit	X	X		X	
6	Right keys	On/Off dimmer control	If the buttons are set as "Switch" and "Dimming" function to turn a dimmed light On/Off	1 bit	X	X		X	
6	Right keys	Shutter up/down	If the buttons are set as "Switch" and "Roller Shutter" function to move a roller shutter	1 bit	X	X		X	
6	Right key top	Send value	If set as "Pushbutton" and the "Switching one object" item or the "Toggle object" item is selected; it is used to send On/Off/Timed On messages. If used in "Toggle object" mode you must associate, in the same group as this object, also the KNX object of the button's "On/off status";	1 bit	X	X		X	
7	Right key top	Send value - falling	If set as "Pushbutton" and "Switching two objects" function to send one of the selectable "On/Off on falling edge" functions (button release)	1 bit	X	X		X	
7	Right key top	Dimming	If set as "Pushbutton" and "Single key dimming" function to control a dimmed light	4 bit	X	X		X	
7	Right keys	Dimming	If set as "Switch" and "Dimming" function to control a dimmed light	4 bit	X	X		X	
7	Right keys	Shutter up/down	If the buttons are set as "Switch" and "Roller Shutter" function to stop a roller shutter	1 bit	X	X		X	
8	Right key top	Status On/Off	If set as "Pushbutton" and "Single key dimming" or "Toggle" function (for the on/off status of a relay)	1 bit	X		X	X	X

Continues   C = Communication; R = Read; W = Write; T = Transmission; U = Enable update

COMMUNICATION OBJECTS

ETS parameters and communication objects

Continued

No.	ETS name	Function	Description	Length	Flag 1				
					C	R	W	T	U
8	RIGHT LEDs	On/Off	If the buttons are set as "Switch" and "On/Off" or "Dimming" function, for the LED status; when dimming, this object is to be associated in the same group as the KNX object of dimmer "On/Off" to allow the button to switch ON/OFF and as a result control the light	1 bit	X	X		X	X
9	Lower right keys	Send value	If set as "Pushbutton" and "Send value" function to send a value that can be set between 0 and 255 (for the on/off state of a relay)	1 byte	X	X		X	
9	Right key bottom	Scenario	If set as "Pushbutton" and "Scene" function to activate a scenario and save by means of a long button press (press for 2 seconds to activate and stop saving on bus)	1 bit	X	X		X	
9	Right key bottom	Send forced	If set as "Pushbutton" and "Switching an object" function to send one of the selectable forcing functions as "forced On/forced Off/forced disable"	2 bit	X	X		X	
9	Right key bottom	On/Off dimmer control	If set as "Pushbutton" and "Single key dimming" function to turn a dimmed light On/Off	1 bit	X	X		X	
9	Right key bottom	Send Value - rising	If set as "Pushbutton" and "Switching two objects" function to send one of the selectable "On/Off on rising edge" functions (button pressing)	1 bit	X	X		X	
9	Right key bottom	Send value	If set as "Pushbutton" and the "Switching one object" item or the "Toggle object" item is selected; it is used to send On/Off/Timed On messages. If used in "Toggle object" mode you must associate, in the same group as this object, also the KNX object of the button's "On/off status"	1 bit	X	X		X	
10	Right key bottom	Dimming	If set as "Pushbutton" and "Single key dimming" function to control a dimmed light	4 bit	X	X		X	
10	Right key bottom	Send value - falling	If set as "Pushbutton" and "Switching two objects" function to send one of the selectable "On/Off on falling edge" functions (button release)	1 bit	X		X		X
10	Right key bottom	Status On/Off	If set as "Pushbutton" and "Single key dimming" or "Toggle" function	1 bit	X		X		X

C = Communication; **R** = Read; **W** = Write; **T** = Transmission; **U** = Enable update

Number of communication objects	Max. number of group addresses	Max. number of associations
12	254	255

TACTIL 4-button control

ETS parameters and communication objects
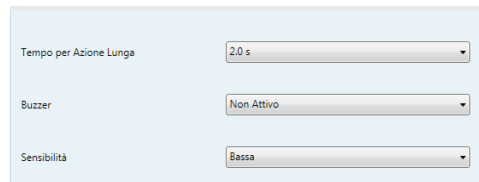
Reference ETS parameters

General

The device can be used in "pushbutton" mode using the 4 keys associated with 4 different functions separately, or by associating the top/bottom keys of the left or right side to a single function (switch function).

In "switch" mode, when the device comes out of Stand-by the icon lights up to be pressed to change the ON/OFF group status (then you have the reverse feedback to the ON/OFF group status).

General parameters

ETS text	Available values [Default value]	Comment
Time for long action [s]	0.5...3 s	Minimum press time to perform the action associated with a long press
	[2]	
Buzzer	Inactive	It is used to activate the buzzer confirming having pressed the TACTIL buttons
	On	
	[Inactive]	
Sensitivity	Low	Defines the sensitivity with which the pressure on the TACTIL buttons is detected
	High	
	[Low]	
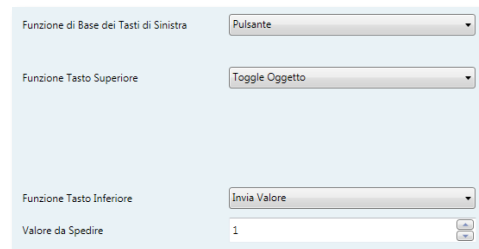
General settings

PUSHBUTTON mode

Identical values for left and right and for top and bottom keys. The following tables show the parameter configurations.

Key parameter configuration

ETS text	Available values [Default value]	Comment
Basic key function (left key, right key)	0 = deactivated	"Button" can be associated with various uses, "Switch" performs only On/Off/Dimmer/Shutters
	1 = button	
	2 = switch	
	[0]	
Function (left key, right key)	255=disabled	
	0 = switching one object	
	1 = switching two objects	
	2 = scene	Identical for top and bottom (left and right) keys
	3 = send value	
	4 = single key dimming	
	5 = toggle object	
	[255]	
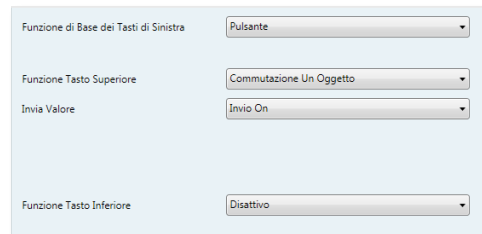
Left key configuration (push-button mode)

TACTIL 4-button control

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ETS parameters and communication objects

Let's look in detail at the **functions that can be associated** with the key when it is set as **"Push button"**.

"1 object switching" parameters

ETS text	Available values [Default value]	Comment
Send value	0 = send On	
	1 = send Off	
	2 = timed On	
	3 = forced On	
	4 = forced Off	
	5 = forced disable	
	[0]	
Time in seconds	0...32000 s	Only if timed
	[0]	
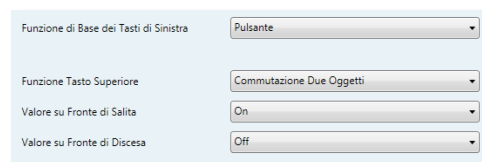
"One object switching" parameter

"2 object switching" parameters
To obtain a "Bell" On/Off and Off/On function.

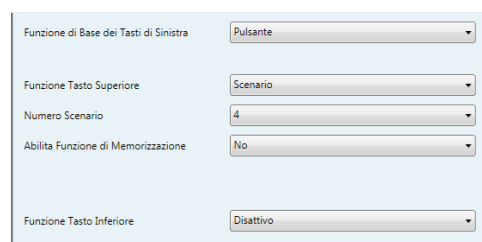| ETS text	Available values [Default value]	Comment
Value on rising edge	0 = send Off	On pressing the button it will send On or Off
	1 = send On	
	[1]	
Value on falling edge	0 = send Off	On releasing the button it will send On or Off
	1 = send On	
	[0]	

"Two object switching" parameter

"Scene" parameter
A scene can be activated or saved.

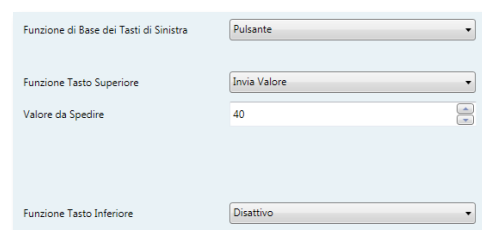| ETS text	Available values [Default value]	Comment
Scene No.	1-64	
	[1]	
Enable save function	0 = No	If enabled, a long button press performs a scene save in the bus
	1 = Yes	
	[0]	

"Scene" parameter

"Send value" parameter
To send a value 0-255 on pressing the button.

ETS text	Available values [Default value]	Comment
Value to send	0-255	Sends a value between "0" and "255" over the bus on pressing the button

"Send value" parameter

TACTIL 4-button control
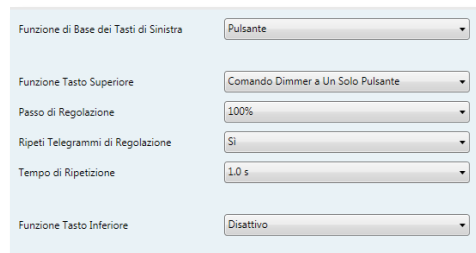
ETS parameters and communication objects

"Single key dimming" parameter
Controls a dimmer with a single key.

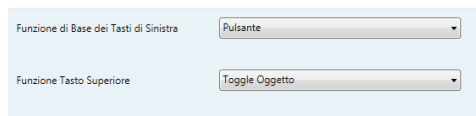| ETS text	Available values [Default value]	Comment
Dimming step	0….100% [100%]	Sets dimming speed
Repeat dimming telegrams	0 = No 1 = Yes [0]	Sets dimming mode (continuous or step-by-step)

"Single key dimming" parameters

"Toggle object" parameter
To send cyclical On/Off messages with button.

ETS text	Available values [Default value]	Comment
Button function	Toggle object	On/Off/On etc. will be sent in sequence with each press of the button. BOTH the "Send value" control object and the button "Status" object must be associated with the group

"Toggle object" parameters

SWITCH mode
Identical values for left and right buttons. The following tables show the parameter configurations.

Switch parameter configuration
To control relays, dimmers, roller shutters (the left upper/lower keys command the same actuator and the same goes for the right upper/lower keys).

ETS text	Available values [Default value]	Comment
Function	0 = On/Off 1 = dimming 2 = shutters [0]	Defines behaviour of key

"Dimming switch" parameter

"Dimming" parameter
Switch: the two top keys perform On/increase, the two bottom buttons Off/decrease.

ETS text	Available values [Default value]	Comment
Dimming step	0...100% [100%]	Sets dimming speed
Repeat dimming telegrams	0 = No 1 = Yes [0]	Sets adjustment mode (continuous or step-by-step)

COMMUNICATION OBJECTS

TACTIL 4-button control

ETS parameters and communication objects

"Shutters" parameters

The two top keys control "Up" with a long press and "Stop" with a short press, the two bottom key perform analogously "Down/Stop".

ETS text	Available values [Default value]	Comment
Function	Shutters	

"Shutters" parameters

"On/Off" parameters

The top buttons will send the ON commands and the bottom ones the OFF commands (both the ON/OFF command and "On/Off status" objects will be displayed.

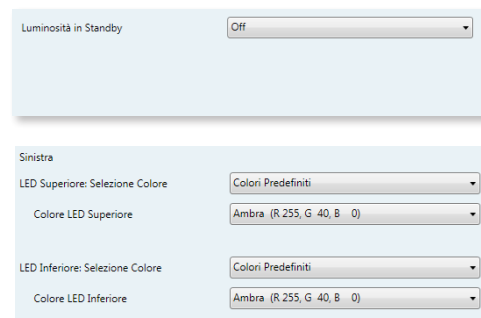| ETS text	Available values [Default value]	Comment
Function	On/ Off	Parameter to be set to send an ON/OFF bit on the bus

"On/Off switch" parameter

LED

The parameters are identical for the 4 LEDs and you can set whether, with the device on standby, the LEDs of the icons will be all off or all on with brightness equal to 30%. The RGB colour that will then be used during operation can be set for each of the LEDs.

LED parameters

ETS text	Available values [Default value]	Comment
Brightness on STBY	On	If on, with the device on standby, all the icons will be lit at 30% brightness (for location in the dark)
	Off	
	[Off]	
LED colour selection top/bottom	Default colours	The default colours are in the traditional RGB (red, green, blue) range; by setting the custom colours you can create the colours you wish by assigning brightness values to the basic red/green/blue colours
	Custom colours	
	[Default colours]	

LED configuration

Note.

If you are using "Switch" mode to control roller shutters/ Venetian blinds, the two LEDs of the movement buttons will remain lit (unless the device is in stand-by mode with brightness disabled).

TACTIL 4-button control

ETS parameters and communication objects

Mode LED BUTTON "Toggle Object "
If the key is configured as "Button" with "Toggle Object" the key LED can provide information on the load status in the mode "Flashing " or "Select Color ".

| ETS text	Available values [Default value]	Comment
Feedback Off state	Not active	No feedback
	Flashing	The LED flashes with the frequency set in parameter "Blink time"
	Different Color	The LED changes color selected with the parameter "Color selection"
	[Not active]	
Blink time	0.5s	Time led flashing of the button when the button state is Off
	0.7s	
	1.0s	
	1.5s	
	2.0s	
	2.5s	
	3.0s	
	3.5s	
	4.0s	
	6.0s	
	8.0s	
	10.0s	
	[1.5s]	
Color selection	Default colors	The default colors fall within the traditional range RGB (red, green , blue); by setting custom colors can be created at will by assigning colors to the colors of red / green / blue intensity at will.
	Custom colors	
	[Default colors]	

LED configuration

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FAQs

1. **Is it possible to control the roller shutters using a single button of the independent push-button control?**

   No. It can be inferred from the KNX parameters associated with the device. The 4 key control **is able to** control **a dimmer** (see figure below) but **not a shutter** with a single button.
   The function to be set for the left and right keys will then be "*Switch*".
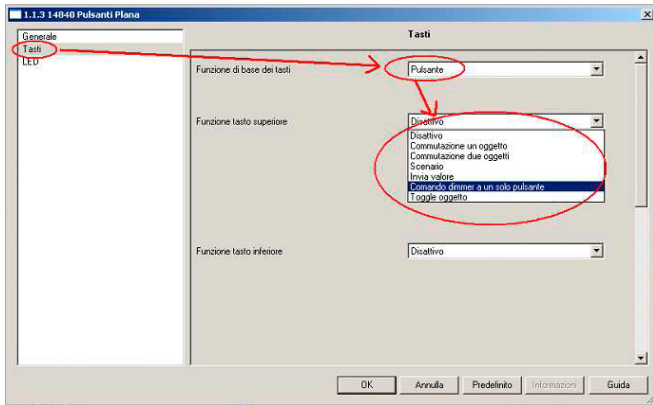
2. **I have configured a push-button in Toggle mode but it only sends ON commands.**

   You must also associate the device's "*Status*" object with a new group so that with each press of the button it knows the group's current status and can send the opposite command.
   By default the first command sent is an "*On*" command, so if the device does not know its status it will continue to send "*On*" commands.

3. **If the parameter "*Long press time = x seconds*" for the buttons, which functions can be associated with a long button press?**

   Dimming and scene save

4. **How can push-button operation be set up so as to send an "On" command when pressing the button and an "Off" command when releasing it?**

   After selecting button operation in the parameters, simply set the "*Switching on two objects*" function determining both on pressing and on release whether to send "*On*" or "*Off*".

5. **"2 key" operation of 4 rocker switches in Toggle mode.**

   Toggle operation means that when the key is pressed once an "*On*" command is sent and when the same key is pressed a second time an "*Off*" command is sent. It is important that along with the "*Send value*" object the "*Status*" object is also inserted in the group.

   To set the top and bottom keys as Toggle, proceed as follows:
   - use the "*Send value*" and "*On/Off Status*" objects of the **top key** on a group to control a relay;
   - use the "*Send value*" and "*On/Off Status*" objects of the **bottom button** on another group to control another relay.

   Note: In the device parameters it is necessary to set "*Push-button*" as the basic function and "*Toggle object*" as a function of the upper/lower keys.

6. **When the device is set in Toggle button mode, why does the light not turn out even though the "Status" object has been associated with the same group as the command object?**

   When a button is programmed, it is important for the relays of the group to be controlled are "*Off*"; this permits having a real synchronism between the first command sent from the button (it will be an "*On*") and the first response state of the relay. If the light is on, the key will only send "*On*" commands.

7. **Which datapoints should be used to raise/lower and stop the shutters?**

   Use objects no. 0 and no. 6 for the up/down movements (with reference to the two left and right keys) and likewise objects no. 1 and no. 7 for the stop commands.

8. **If the button does not control the dimmer, what settings are to be made?**

   The "*LED-Status*" object (see details of ETS objects No. 2, 5, 8 and 11 depending on the parameters set in the device) must be associated to the same group as the "*On/Off State*" object of the dimmer.

9. **Does the device give feedback on the brightness level of the load for the dimmers?**

   No, the device does not provide this kind of visual feedback.

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