



KNX R1-B4 compact 16 A Switching Actuator

Item number 70574



elsner

Installation and Adjustment

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This manual is amended periodically and will be brought into line with new software releases. The change status (software version and date) can be found in the contents footer. If you have a device with a later software version, please check **www.elsner-elektronik.de** in the menu area "Service" to find out whether a more up-to-date version of the manual is available.

Clarification of signs used in this manual



Safety advice.



Safety advice for working on electrical connections, components, etc.

DANGER!

... indicates an immediately hazardous situation which will lead to death or severe injuries if it is not avoided.

WARNING!

... indicates a potentially hazardous situation which may lead to death or severe injuries if it is not avoided.

CAUTION!

... indicates a potentially hazardous situation which may lead to trivial or minor injuries if it is not avoided.



ATTENTION! ... indicates a situation which may lead to damage to property if it is not avoided.

ETS

In the ETS tables, the parameter default settings are marked by underlining.

1. Safety and usage instructions



Installation, testing, operational start-up and troubleshooting should only be performed by an authorised electrician.



DANGER!

Risk to life from live voltage (mains voltage)!

- Inspect the device for damage before installation. Only put undamaged devices into operation.
 - Comply with the locally applicable directives, regulations and provisions for electrical installation.
 - Immediately take the device or system out of service and secure it against unintentional switch-on if risk-free operation is no longer guaranteed.
-

Use the device exclusively for building automation and observe the operating instructions. Improper use, modifications to the device or failure to observe the operating instructions will invalidate any warranty or guarantee claims.

Operate the device only as a fixed-site installation, i.e. only in assembled condition and after conclusion of all installation and operational start-up tasks, and only in the surroundings designated for it.

Elsner Elektronik is not liable for any changes in norms and standards which may occur after publication of these operating instructions.

1.1. Safety notice for automatic functions



WARNING!

Risk of injury from automatically moving components!

Parts of the system can be started by the automatic controls and be a danger to persons.

- No persons may remain in the travelling range of parts driven by an electric motor.
 - Adhere to the relevant building regulations.
 - Ensure that the return path/access to the building is not blocked if spending time outside the building (danger of being locked out).
 - Correctly decommission the system for maintenance and cleaning work.
-

If there is a power outage, the system does not work. Therefore, shadings should be moved to a save position if there are anticipated weather conditions, for example, if this has not already been done by the automatic function (product protection).

If the power supply is removed, the connected drive switches off. When the power is restored, the consumer remains switched off until a new movement command is received by the actuator.

For information on installation, maintenance, disposal, scope of delivery and technical data, please refer to the installation instructions.

2. Description

The potential-free output of the **Actuator KNX R1-B4 compact 16 A** switches one consumer. Time functions such as an on/off delay or a staircase lighting function can be configured in the device application.

4 digital inputs are available for the connection of normally open contacts like push-buttons.

Functions:

- **Free of potential relay output for a consumer load**
- **Timer functions:** on and/or off delay, staircase lighting timer switch with adjustable pre-warning (light blinks prior to switch-off)
- **Scene control** for switching state with 8 scenes
- **4 binary inputs**

3. Start-up

Configuration is made using the KNX software as of ETS 5. The **product file** can be downloaded from the ETS online catalogue and the Elsner Elektronik website on www.elsner-elektronik.de.

After the bus voltage has been applied, the device will enter an initialisation phase lasting approx. 5 seconds. During this phase no information can be received or sent via the bus.

In the ETS it is set whether the relay is closed, opened or remains in the current state in the event of bus voltage failure and reset/ETS download.

3.1. Addressing of the device at the bus

The equipment is delivered with the individual address 15.15.255. This can be changed via the ETS. A button and a control LED are located on the unit for this purpose.

4. Transfer protocol

4.1. List of all communication objects

Abbreviations:

R Read

W Write

K Communication

T Transfer

No	Text	Function	Flags	DPT type	Size
0	Software version	Readable	R-C-	[217.1] DPT_Version	2 Bytes
1	Channel A1 - Switching	Input	-WC-	[1.1] DPT_Switch	1 Bit
2	Channel A1 - Feedback	Output	R-CT	[1.1] DPT_Switch	1 Bit
3	Channel A1 - Status	Readable	R-C-	[1.1] DPT_Switch	1 Bit
4	Channel A1 - Blocking object	Input	-WC-	[1.1] DPT_Switch	1 Bit
5	Channel A1 - Start staircase light function	Input	-WC-	[1.10] DPT_Start	1 Bit
6	Channel A1 - Start/stop staircase light function	Input	-WC-	[1.10] DPT_Start	1 Bit
7	Channel A1 - Linking	Input	-WC-	[1.2] DPT_Bool	1 Bit
8	Channel A1 - Call up / saving scenes	Input	RWC-	[18.1] DPT_SceneControl	1 Byte
9	Input 1 - Extended	Input / Output	RWCT	[1.8] DPT_UpDown	1 Bit
10	Input 1 - Short	Output	R-CT	[1.8] DPT_UpDown	1 Bit
11	Input 1 - Switching	Input / Output	RWCT	[1.1] DPT_Switch	1 Bit
12	Input 1 - Relative dimming	Input / Output	RWCT	[3.7] DPT_Control_Dimming	4 Bit
13	Input 1 - Encoder 8 Bit	Output	R-CT	[5] 5.xxx	1 Byte
14	Input 1 - Temperature encoder	Output	R-CT	[9.1] DPT_Value_Temp	2 Bytes
15	Input 1 - Brightness encoder	Output	R-CT	[9.4] DPT_Value_Lux	2 Bytes
16	Input 1 - Scene	Output	R-CT	[18.1] DPT_SceneControl	1 Byte
17	Input 1 - Blocking object	Input	-WC-	[1.1] DPT_Switch	1 Bit
18	Input 2 - Extended	Input / Output	RWCT	[1.8] DPT_UpDown	1 Bit
19	Input 2 - Short	Output	R-CT	[1.8] DPT_UpDown	1 Bit
20	Input 2 - Switching	Input / Output	RWCT	[1.1] DPT_Switch	1 Bit

No	Text	Function	Flags	DPT type	Size
21	Input 2 - Relative dimming	Input / Output	RWCT	[3.7] DPT_Control_Dimming	4 Bit
22	Input 2 - Encoder 8 Bit	Output	R-CT	[5] 5.xxx	1 Byte
23	Input 2 - Temperature encoder	Output	R-CT	[9.1] DPT_Value_Temp	2 Bytes
24	Input 2 - Brightness encoder	Output	R-CT	[9.4] DPT_Value_Lux	2 Bytes
25	Input 2 - Scene	Output	R-CT	[18.1] DPT_SceneControl	1 Byte
26	Input 2 - Blocking object	Input	-WC-	[1.1] DPT_Switch	1 Bit
27	Input 3 - Extended	Input / Output	RWCT	[1.8] DPT_UpDown	1 Bit
28	Input 3 - Short	Output	R-CT	[1.8] DPT_UpDown	1 Bit
29	Input 3 - Switching	Input / Output	RWCT	[1.1] DPT_Switch	1 Bit
30	Input 3 - Relative dimming	Input / Output	RWCT	[3.7] DPT_Control_Dimming	4 Bit
31	Input 3 - Encoder 8 Bit	Output	R-CT	[5] 5.xxx	1 Byte
32	Input 3 - Temperature encoder	Output	R-CT	[9.1] DPT_Value_Temp	2 Bytes
33	Input 3 - Brightness encoder	Output	R-CT	[9.4] DPT_Value_Lux	2 Bytes
34	Input 3 - Scene	Output	R-CT	[18.1] DPT_SceneControl	1 Byte
35	Input 3 - Blocking object	Input	-WC-	[1.1] DPT_Switch	1 Bit
36	Input 4 - Extended	Input / Output	RWCT	[1.8] DPT_UpDown	1 Bit
37	Input 4 - Short	Output	R-CT	[1.8] DPT_UpDown	1 Bit
38	Input 4 - Switching	Input / Output	RWCT	[1.1] DPT_Switch	1 Bit
39	Input 4 - Relative dimming	Input / Output	RWCT	[3.7] DPT_Control_Dimming	4 Bit
40	Input 4 - Encoder 8 Bit	Output	R-CT	[5] 5.xxx	1 Byte
41	Input 4 - Temperature encoder	Output	R-CT	[9.1] DPT_Value_Temp	2 Bytes
42	Input 4 - Brightness encoder	Output	R-CT	[9.4] DPT_Value_Lux	2 Bytes
43	Input 4 - Scene	Output	R-CT	[18.1] DPT_SceneControl	1 Byte
44	Input 4 - Blocking object	Input	-WC-	[1.1] DPT_Switch	1 Bit

5. Setting parameters

The parameter defaults are underlined.

5.1. Behaviour on power failure/ restoration of power

Behaviour following a failure of the bus power supply:

The device sends nothing.

Behaviour on bus restoration of power and following programming or reset:

The device sends all outputs according to their send behaviour set in the parameters with the delays established in the "General settings" parameter block.

5.2. General settings

First set the general parameters for the bus communication (message rate, transmission delays). In addition, you can specify whether all or only the changed settings are transferred to the bus when programming scenes.

Transmission delay of switching and status outputs after power restoration	5 s ... 2 h
When using scenes:	
Transfer when programming	All parameters • only changed parameters

The **label for objects** is placed in front of all the objects of **Actuator KNX R1-B4 compact 16 A**, making their assignment more recognisable in the ETS.

Object labelling	[Free text max. 20 characters]
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Activate the switch function

Channel A	Do not use • switch function
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Input 1 can be used as actuator button or bus button. The **inputs 2-4** are bus buttons.

Operating mode	
Use input 1	<ul style="list-style-type: none"> • <u>No</u> • as a bus button • as an actuator button
Use input 2 (3 / 4)	<u>No</u> • Yes

5.3. Switch function

The **label for channel objects** is placed in front of all the objects of this channel, making their assignment more recognisable in the ETS.

Label for channel objects	[Free text max. 20 characters]
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The **Scenes** menu is activated here.

Use scenes (see the Scenes chapter)	<u>No</u> • Yes
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Select the appropriate **relay operation** for the connected device.

Relay operation	<u>Closer</u> • Opener
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Set the **behaviour** for bus voltage drop and after reset/download.

Behaviour following a bus voltage drop	<ul style="list-style-type: none"> • <u>no change</u> • opened • closed
Behaviour after reset and ETS download	<ul style="list-style-type: none"> • no change • <u>opened</u> • closed

If necessary, activate the **status object** that outputs the relay status.

Use status object	<ul style="list-style-type: none"> • <u>No</u> • as an active feedback object • as a passive status object
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If necessary, activate the **link** menu that enables a link with AND or OR.

Use linking function	<u>No</u> • Yes
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Activate the required **time function**. Here either the switch-on and/or switch-off can be delayed or a staircase timer switch can be set up.

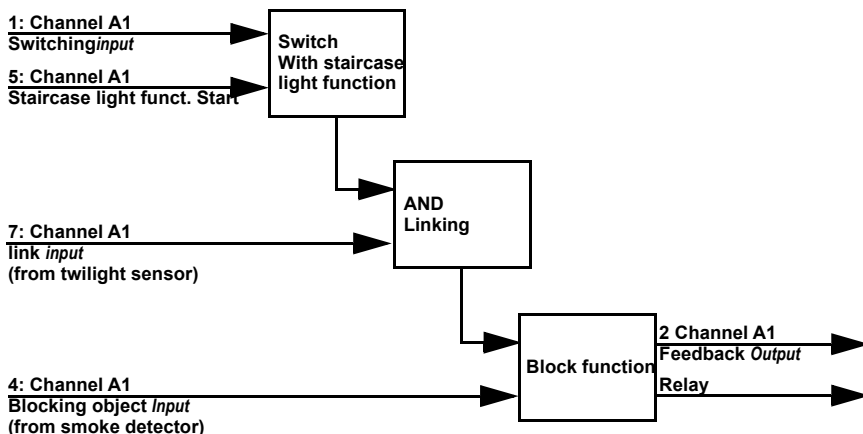
Use time function	<ul style="list-style-type: none"> • <u>No</u> • as a switch on delay • as a switch off delay • as a switch on and off delay • as a staircase time switch
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If required, activate the **Block function** menu in which you can define a block.

Use blocking object	<u>No</u> • Yes
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5.3.1. Relationship between logic operation – timer switch – Block

Application example: Staircase light that is only to be switched at twilight/night (link) and that is switched on in the event of a fire alarm (block).



When switching via the "Switch channel A1" (1) communication object, the light is switched on or off normally. When switching via the "Channel A1 Staircase lighting function Start" object (5), the staircase lighting time function is activated. The time function has priority, i.e. the status triggered by normal switching is overwritten.

5.3.2. Linking

The "Link" menu item only appears if "Use linking functions" is selected in the settings for the switch function channel: yes' is selected.

In the logic object ("Channel X link"), various communication objects can be linked with AND or OR. Z. B. a light can only be switched on if button input active AND twilight active.

Link type	AND • OR
Value of the linking object after resumption of bus power	0 • 1

5.3.3. Switch on and off delay

The menu item only appears if a switch on or switch off delay is selected in the settings for the switch function channel. The menu item has the same name as the selected function.

With the switch on and switch off delay, for example, a switch for ventilation device and light can be used. However, due to the switch on delay, the ventilator does not start until the light has been on for a few minutes. The switch off delay causes the ventilator to run after the switch has been pressed again and the light is already off.

Switch on delay

The switch on delay is set with time base and time factor (e.g. 1 min × 4 corresponds to 4 minutes). In addition, it is determined whether the time span is extended when a switch on telegram is received again ("can be retriggered", e.g. by pressing the switch again) and what happens if a switch off telegram arrives from the bus.

Switch on delay:	
Time basis	0,1 s ... 1 h; <u>1 min</u>
Time factor	4 ... 255; <u>10</u>
Switch on delay is	cannot be retriggered • <u>can be retriggered</u>
Off telegram during switch on delay causes	<ul style="list-style-type: none"> • <u>nothing</u> • cancellation of the switch on delay

Switch off delay

The switch off delay is set with time base and time factor (e.g. 1 min × 4 corresponds to 4 minutes). In addition, it is determined whether the time span is extended when a switch off telegram is received again ("can be retriggered", e.g. by pressing the switch again) and what happens if a switch on telegram arrives from the bus.

Switch off delay:	
Time basis	0,1 s ... 1 h; <u>1 min</u>
Time factor	4 ... 255; <u>10</u>
Switch off delay is	Cannot be retriggered • <u>can be retriggered</u>
On telegram during switch on delay causes	<ul style="list-style-type: none"> • <u>nothing</u> • cancellation of the switch off delay

5.3.4. Staircase time switch

The menu item only appears if the staircase light function is selected in the settings for the switch function channel. The staircase light time function ensures, for example, that light is on for a while and then switches itself off.

With staircase light timer switching, the time base and time factor are used to set how long the light remains on (e.g. 1 s × 10 corresponds to 10 seconds). In addition, it is determined whether the time span is extended when a switch on telegram is received again ("can be retriggered", e.g. by pressing the switch again) and what happens if a switch off telegram arrives from the bus.

Time basis	0,1 s • 1 s • <u>1 min</u> • 1 h
Time factor	4...255; <u>10</u>
Staircase light time	cannot be retriggered • <u>can be retriggered</u>
Off telegram during staircase light time causes	<u>nothing</u> • direct switch off

In **Switch-off warning** you can set a "flashing" which starts shortly before the switch off. Define the warning time and the on/off rhythm.

Switch-off warning	<u>inactive</u> • active
Warning time in seconds	4 ... 255; <u>10</u>
Off in 0.1 seconds	1 ... 31; 2
On in 0.1 seconds	1 ... 31; 8

5.3.5. Block function

The "Block function" menu item only appears if "Use blocking object" is selected in the settings for the switch function channel: yes' is selected.

The output channel can be blocked by a blocking telegram. Here it is defined what happens during the block, when bus voltage is restored and after the block. Manual operation is not possible when the block is active.

The function can be used, for example, for a light that switches on when a "panic button" (= trigger for blocking function) is pressed and can no longer be switched off.

Block function blocks at	0 • <u>1</u>
Blocking object value After restoration of bus voltage	<u>0</u> • 1
Response when blocking	no change • <u>opened</u> • closed
Response at release	<u>Follows the switch command</u> • opened • closed

5.3.6. Scenes

A group address for scenes must be filed in the KNX system to control the scenes. The input object 'Channel - call/save scenes' of the actuator is linked to this group address.

A scene is **called**, then the **scene number** is communicated to the actuator. The state stored in the actuator for this scene number is switched.

If the scene **saving** function is used, then the switch state is saved for this scene number in the actuator.

The "Scenes" menu item of the actuator only appears if "Use scenes" is selected in the settings for the switch function: yes' is selected. The actuator has **8 scene memories** for switch states.

Activate a scene save point.

Use scene save point X	<u>no</u> • yes
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Assign a scene number to the scene save point. The switch state stored in the actuator is retrieved/stored via this scene number. Make sure that every scene number is used only once per drive channel.

Scene number	<u>0</u> ...127
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Specify a switch state. If it is allowed to save scenes via the bus, this state only applies after the ETS download until the first manual saving. Afterwards, the new switch state saved in the actuator is used.

Switch state	<u>inactive</u> • active
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5.4. Inputs

5.4.1. Input As a bus button

Input 1 can be defined as bus or actuator button. The inputs 2-4 are bus buttons.

If the input is used as a free bus button, it sends a previously set value to the bus when activated. Various parameters for frequently used bus functions are integrated in the program file of the actuator. The inputs can be configured very easily as switches, drive controls, dimmers, for sending values and for scene recall.

Bus function	<ul style="list-style-type: none"> • <u>Switch</u> • Changeover switch • Shutter • Blinds • Awning • Window • Dimmer • 8-bit encoder • Temperature encoder • Brightness encoder • Scenes
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Input as switch:

If a button with switching function is assigned to the input, select the bus function "Switch" and define which value is sent when the button is pressed/released and when it is sent.

Function	Switch
Command when pressing the button	<ul style="list-style-type: none"> • send 0_ • send 1 • <u>Do not send message</u>
Command when releasing the button	<ul style="list-style-type: none"> • send 0 • send 1 • <u>Do not send message</u>
Send value	<ul style="list-style-type: none"> • <u>on change</u> • on change to 1 • on change to 0 • on change and periodically • on change to 1 and periodically • on change to 0 and periodically

Cycle (if sent periodically)	5 s • 10 s • 30 s • 1 min • 2 min • 5 min • 10 min • 20 min • 30 min • 1 h • 2 h
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The input can be disabled with a blocking object. Set what is sent to the bus when the block is (de)activated.

If the block is active, there is *no* cyclic transmission.

Use blocking object	<u>No</u> • Yes
When activating the block once	<ul style="list-style-type: none"> • send 0 • <u>send 1</u> • Do not send message
When deactivating the block once	<ul style="list-style-type: none"> • <u>send 0</u> • send 1 • Do not send message • send current state

Input as changeover switch:

If a key with a changeover function is assigned to the input, select the "Changeover" bus function and determined whether the changeover takes place when the key is depressed or when it is released.

Function	Changeover switching
Command when pressing the button	<ul style="list-style-type: none"> • <u>Changeover switching</u> • Do not send message
Command when releasing the button	<ul style="list-style-type: none"> • Changeover switching • <u>Do not send message</u>

The input can be disabled with a blocking object. For active blocking there is *no bus communication*.

Use blocking object	<u>No</u> • Yes
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Input for shutter, blind, awning or window control:

If the input is used to control a drive via the bus, select the bus function "shutter", "awning", "blind" or "window" and define the button function and the control mode.

Function	Shutter/blind/awning/window	
Command (button function)	<ul style="list-style-type: none"> Up • Down Up • Down • Up/Down On • Off • On/Off Open • Close • Open/Close 	<ul style="list-style-type: none"> (Shutter) (Blind) (Awning) (Window)
Control mode*	<ul style="list-style-type: none"> • <u>Standard</u> • Standard inverted • Comfort mode • Dead man's switch 	

*A detailed description of the setting options for the individual control modes can be found in chapter *Control modes for drive control*, page 16.

The input can be disabled with a blocking object. For active blocking there is *no bus communication*.

Use blocking object	<u>No</u> • Yes
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Input as dimmer

If the input should be used as a dimmer, select the bus function "Dimmer" and define the button function, time interval (switching/dimming) and if required, the repeat interval for extended pressing of the button.

Function	Dimmer
Command (button function)	<u>Brighter</u> • darker • Brighter/darker
Time between switching and dimming (in 0.1 s)	1...50; <u>5</u>
Repetition of the dimming command	<u>No</u> • Yes
Repetition of the dimming command on long button press (if dimmer command is repeated)	every 0.1 s... • every 2 s; <u>every 1 s</u>
Dimming by (if dimmer command is repeated)	1.50% • 3% • <u>6%</u> • 12,50% • 25% • 50%

The input can be disabled with a blocking object. For active blocking there is *no bus communication*.

Use blocking object	<u>No</u> • Yes
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Input as 8 bit encoder:

If the input is to be used as an 8-bit encoder, select the bus function "8-bit encoder" and define which value is to be transmitted.

Function	8 bit encoder
Value	<u>0</u> ...255

The input can be disabled with a blocking object. For active blocking there is *no bus communication*.

Use blocking object	<u>No</u> • Yes
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Input as temperature encoder:

If the input is to be used as a temperature encoder, select the bus function "Temperature encoder" and define which value is to be transmitted between -30°C and +80°C. By sending a temperature value, for example, the set point of the temperature control can be changed.

Function	Temperature encoder
Temperature in 0.1?	-300...800; <u>200</u>

The input can be disabled with a blocking object. For active blocking there is *no bus communication*.

Use blocking object	<u>No</u> • Yes
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Input as brightness encoder:

If the input is to be used as a brightness encoder (e.g. limit value of a sun sensor), select "Brightness encoder" and define which value is to be transmitted.

Function	Brightness encoder
Brightness in kLux	0...100; <u>20</u>

The input can be disabled with a blocking object. For active blocking there is *no bus communication*.

Use blocking object	<u>No</u> • Yes
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Input for scene control:

If scenes are retrieved and saved using the input, select the bus function "Scenes" and specify the storage, time difference (call/storage) and scene number.

Function	Scenes
Button operation	<ul style="list-style-type: none"> • <u>without saving</u> • with saving
Time between call and storage in 0.1 seconds <i>(If 'with saving' was selected)</i>	1...50; <u>20</u>
Scene no.	<u>0</u> ...127

The input can be disabled with a blocking object. For active blocking there is *no bus communication*.

Use blocking object	<u>No</u> • Yes
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5.4.2. Input as actuator

Input 1 can be defined as bus or actuator button. The inputs 2-4 are bus buttons.

Input as switch:

If a button with switching function is assigned to the input, select the bus function "Switch" and define which value is sent when the button is pressed/released and when it is sent.

Button function	Switch
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Command when pressing the button	<ul style="list-style-type: none"> • Switch off • <u>Switch on</u> • nothing
Command when releasing the button	<ul style="list-style-type: none"> • <u>Switch off</u> • Switch on • nothing

The input can be disabled with a blocking object. Set what is sent to the bus when the block is (de)activated.

If the block is active, there is *no* cyclic transmission and no operation is possible.

Use blocking object	<u>No</u> • Yes
When activating the block once	<ul style="list-style-type: none"> • send 0 • <u>send 1</u> • Do not send message
When deactivating the block once	<ul style="list-style-type: none"> • <u>send 0</u> • send 1 • Do not send message • send current state

Input as changeover switch:

If a key with a changeover function is assigned to the input, select the "Changeover" bus function and determined whether the changeover takes place when the key is depressed or when it is released.

Button function	Changeover switching
Command when pressing the button	<ul style="list-style-type: none"> • <u>Changeover switching</u> • nothing
Command when releasing the button	<ul style="list-style-type: none"> • Changeover switching • <u>nothing</u>

The input can be disabled with a blocking object. If the block is active, there is *no bus communication* and no operation is possible.

Use blocking object	<u>No</u> • Yes
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5.4.3. Control modes for drive control

If inputs are being used as switches to operate shades or windows, then various control modes can be set.

Control mode	<ul style="list-style-type: none"> • <u>Standard</u> • Standard inverted • Comfort mode • Dead man's switch
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Standard:

If briefly operated, the drive will move incrementally or stops. If operated longer, the drive will move up to the end position. The time difference between "short" and "long" is set individually.

Control mode	Standard
Behavior during button operation: short = stop/increment long = Up or Down	
Time between short and long in 0.1 seconds	1...50; <u>10</u>

Standard inverted:

When pushed shortly, the drive moves up to the end position. When pushed for longer, the drive moves incrementally or stops. The time difference between "short" and "long" and the repeat interval is set individually.

Control mode	Standard inverted
Behavior during button operation: short = Up or Down long = Stop/Step	
Time between short and long in 0.1 seconds	1...50; <u>10</u>
Repeat the step command for a long button press	every 0.1 s • every 2 sec; <u>every 0.5 sec</u>

Comfort mode:

In the **comfort mode** actuating the button briefly, a bit longer and long will trigger different responses of the drive. The time intervals are set individually.

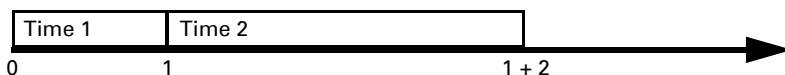
Short actuation (shorter than Time 1): The drive is positioned step-wise and stopped.

Holding it slightly longer (longer than Time 1, but shorter than Time 1+2): Drive running. Drive stops when the button is released.

Long holding (release after Time 1+2 runs out): Drive moves independently to the end position. The movement can be interrupted by a short tap.

Abb. 1

Time interval comfort mode diagram



Point in time 0:	Actuate of button, start of time 1
Release before time 1 expired:	step (or stop if drive is moving)
Point in time 1:	End of time 1, start of time 2 Moving command
Release after time 1 expired but before time 2 expires:	Stop
Release after time 1 + 2 expired:	Move into end position

Control mode	Comfort mode
Behavior during button operation: Button is pushed and released before time 1 expired = stop/step held longer than time 1 = Up or Down released between time 1 and 1-2= stop released after time 1 +2 = no more stop	
Time 1	0.0s ... • 2 s; <u>0.4 s</u>
Time 2	0 s • 2 s; <u>2 s</u>

Dead man's switch:

The drive moves as soon as the button is actuated and stops as soon as the button is released.

Control mode	Dead man's switch
Behavior during button operation: Push button = Up or Down command Release button = Stop command	

Questions about the product?

You can reach the technical service of Elsner Elektronik under
Tel. +49 (0) 70 33 / 30 945-250 or
service@elsner-elektronik.de

We need the following information to process your service request:

- Type of appliance (model name or item number)
- Description of the problem
- Serial number or software version
- Source of supply (dealer/installer who bought the device from Elsner Elektronik)

For questions about KNX functions:

- Version of the device application
- ETS version used for the project

elsner

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