Technical **Documentation**



Product name:	Push button 3gang standard
Design:	flush-mounted device (uP)
ETS search path:	Push button / Push button 3gang / Push button 3gang standard

Functional description:

The push button 3gang standard is plugged onto a flush-mounted bus coupling unit (BCU) (cf. connection diagram). After a press on the key, the push button sensor will transmit software-dependent telegrams to the KNX / EIB. These may be telegrams for switching, push button operation, dimming or for shutter control. It is also possible to program value transmitter functions such as dimming value transmitter or light-scene extension units. A white operation LED can serve as orientation lighting.

Layout **Dimensions** Width: 70 mm A Height: 55 mm (position: left / right) В Depth: 13 mm (without PEI) T2 | **IT**3 T4 | **IT**5 T6 I

Controls

A: 3 rockers or 6 push

buttons

B: 3 x 2 status-LED (red)

C: 1 x Operation-LED (white)

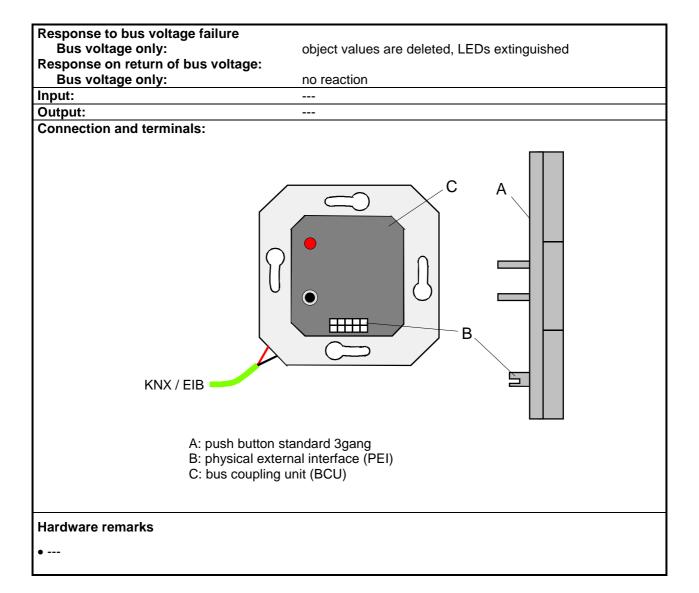
Technical Data	
Type of protection	IP 20
Safety class	III
Mark of approval	KNX / EIB
Ambient temperature:	-5 ℃ +45 ℃
Storage / transport temperature	-25 ℃ +70 ℃ (storage above +45 ℃ reduces the lifetime)
Mounting position	any
Minimum distances:	none
Type of fastening	plugging onto flush-mounted BCU
KNX / EIB supply	
Voltage	21 – 32 V DC (SELV) via flush-mounted BCU
Power consumption:	typically 150 mW
Connection:	2 x 5 pole pin contact strip

External supply

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Software description							
ETS search path						ETS symbo	ol
Push button / Push button 3gang / Push button 3gang standard							n ()
PEI t	уре	04 _{Hex}	4 _{Dez}		2 inputs / 2 outputs		
App	lications:						
No.	Summarized descr	iption:		Na	me:		Version:
1	Switching, status			Sw	itching, status 107901		0.1
2	Switching, acknowle	edge		Sw	itching, acknowledgemer	nt 107A01	0.1
3	Dimming			Din	nming 107C01		0.1
4	Shutter			Sh	utter 107B01		0.1
5	Value transmitter			Va	ue transmitter 107D01		0.1
							•

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App	licat	tion:	1. Switching, status 107901					
Exe	cuta	ble from mask version:	1.0					
Nun	nber	of addresses (max):	13		dynamic table har	ndling:	Yes 🗷	No □
Number of assignments (max):		13		maximum length	of table:	26		
Con	nmu	nication objects:	3					
Obje	ect	Function		Name		Type	F	Flag
₽	0	Switching		Push bu	ittons 1 and 2	1 bit	C,	W, T
₽	1	Switching	•	Push bu	ittons 3 and 4	1 bit	C,	W, T
⊒⊢	2	Switching	•	Push bu	ittons 5 and 6	1 bit	C,	W, T

Object description

Objects:

□ 0 - 2 Switching: 1-bit object for the transmission of switching telegrams (ON, OFF)

Scope of functions

- Function of operating LED and of status LED parameterizable
- Command on key press parameterizable (ON, OFF)

Parameters	Parameters						
Description:	Values:	Remarks:					
General General							
Function of the operating LED	OFF ON	Defines the status of the operation LED.					
Function of the status LEDs	OFF ON	Defines the status of the status LED.					
Command at operation the left push buttons	OFF ON	Defines the command transmitted on pressing the left push buttons (key 1/3/5).					
Command at operation the right push buttons	OFF ON	Defines the command transmitted on pressing the right push buttons (key 2/4/6).					

Software remarks

• The status LED indicates the current status of the switching object. If a key is pressed (e.g. ON) and if the push button sensor does <u>not</u> get a positive acknowledgement (IACK) from an addressed actuator, the object status is updated, but the corresponding status LED is not lit up.

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App	lica	tion:	2. Switching, acknowledge 107A01					
Exe	cuta	ble from mask version:	1.0					
Nun	nber	of addresses (max):	10		dynamic table handli	ng:	Yes 🗷	No □
Number of assignments (max): 10			10		maximum length of ta	able:	20	
Con	ımu	nication objects:	3					
Obje	ect	Function		Name		Type	Fla	ag
⊒⊢	0	Switching		Push bu	ittons 1 and 2	1 bit	C, V	V, T
₽	1	Switching	•	Push bu	ittons 3 and 4	1 bit	C, V	V, T
□ +	2	Switching		Push bu	ittons 5 and 6	1 bit	C, V	V, T

Object description

Objects:

 \bigcirc 0 – 2 Switching: 1-bit object for the transmission of switching telegrams (ON, OFF)

Scope of functions

- Function of operating LED and of status LED parameterizable
- Command on key press parameterizable (ON, OFF)

Parameters	Parameters								
Description:	Values:		Remarks:						
General									
Function of the operating LED	OFF ON		Defines the status of the operation LED.						
Function of the status LEDs	OFF ON		Defines the status of the status LED.						
Light duration of the status LEDs (push button 1 6)	0.75 s 1.5 s 2.25 s 3.0 s	4.5 s 6.0 s 10 s 15 s	Defines the time during which the status LED is on in case of a positive acknowledgement of receipt from an addressed actuator.						
Command at operation the left push buttons	OFF ON	l	Defines the command transmitted on pressing the left push buttons (key 1/3/5).						
Command at operation the right push buttons	OFF ON				Defines the command transmitted on pressing the right push buttons (key 2/4/6).				

Software remarks

• The status LED is on for a parameterizable time in case of a positive acknowledgement from an addressed actuator. If a key is pressed (e.g. ON) and if the push button sensor does <u>not</u> get a positive acknowledgement (IACK) from an addressed actuator, the object status is updated, but the corresponding status LED is <u>not</u> lit up.

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App	lica	tion:	3. Dimming 107C01				
Exe	cuta	ble from mask version:	1.0				
Nun	nber	of addresses (max):	12		dynamic table hand	ling:	Yes 🗷 No 🗆
Nun	nber	of assignments (max):	12		maximum length of	table:	24
Con	nmu	nication objects:	6				
Obj	ect	Function		Name		Type	Flag
ⅎ	0	Switching		Push bu	ittons 1 and 2	1 bit	C, W, T
₫	1	Switching		Push bu	ittons 3 and 4	1 bit	C, W, T
₫	2	Switching		Push bu	ittons 5 and 6	1 bit	C, W, T
	4	Dimming		Push bu	ittons 1 and 2	4 bit	C, T
	5	Dimming		Push bu	ittons 3 and 4	4 bit	C, T
	6	Dimming		Push bu	ittons 5 and 6	4 bit	C, T

Object description

Objects:

□ 0 - 2 Switching: 1-bit object for the transmission of switching telegrams (ON, OFF)
□ 1 4 - 6 Dimming: 4-bit object for change of relative brightness between 0 and 100 %

Scope of functions

• Function of operating LED and of status LED parameterizable

Parameters						
Description:	Values:	Remarks:				
☐ General						
Function of the operating LED	OFF ON	Defines the status of the operating LED.				
Function of the status LEDs	OFF ON	Defines the status of the status LED.				

Software remarks

• The status LED indicates the current status of the switching object. If a key is pressed (e.g. ON) and if the push button sensor does <u>not</u> get a positive acknowledgement (IACK) from an addressed actuator, the object status is updated and the corresponding status LED is lit up.

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App	licat	tion:	4. Shutte	r 107B01			
Exe	cuta	ble from mask version:	1.0				
Nun	nber	of addresses (max):	12		dynamic table handlir	ng: Yes 🛚	☑ No □
Nun	nber	of assignments (max):	12		maximum length of ta	ble: 24	
Con	nmu	nication objects:	6				
Obj	ect	Function		Name		Type	Flag
₽	0	Step operation		Push bu	ittons 1 and 2	1 bit	C, W, T
₽	1	Step operation		Push bu	ittons 3 and 4	1 bit	C, W, T
□ +	2	Step operation		Push bu	ttons 5 and 6	1 bit	C, W, T
□₊	4	Move operation		Push bu	ittons 1 and 2	1 bit	C, W, T
<u>_</u>	5	Move operation		Push bu	ttons 3 and 4	1 bit	C, W, T
<u>_</u>	6	Move operation		Push bu	ttons 5 and 6	1 bit	C, W, T

Object description

Objects:

□ 0 - 2 Step operation: 1-bit object for step (short-time) operation of a shutter 1-bit object for move (long-time) operation of a shutter 1-bit object for move (long-time) operation of a shutter

Important: Unused communication objects must be projected with dummy group addresses. Otherwise

risk of malfunctions.

Scope of functions

- Function of operation LED parameterizable
- Time between two telegrams (time between STEP and MOVE) presettable

Parameters	Parameters							
Description:	Values:	Remarks:						
General	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1101101101						
Function of the operating LED	OFF ON	Defines the status of the operating LED.						
Push buttons 1 and 2	<u> </u>							
Time between two telegrams, base	130 ms (fixed)	Defines the time base between two telegrams. (time between STEP and MOVE)						
		Time = base • factor						
Time between two telegrams, factor (3127)	3 127; 3	Defines the time factor between two telegrams. (time between STEP and MOVE)						
		Time = base • factor						
		Presetting: 130 ms • 3 = 390 ms						
Push buttons 3 and 4		,						
See push buttons 1 and 2								
Push buttons 5 and 6								
See push buttons 1 and 2								

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Applica	tion:	5. Value transmitter 107D01			
Executa	ble from mask version:	1.0	·		
Number	of addresses (max):	1	dynamic table handling	g: Yes	No □
Number	of assignments (max):	1	maximum length of tal	ole: 2	
Commu	nication objects:	1			
Object	Function		Name	Type	Flag
□ I 0	Value / light-scene		Rockers	1 byte	C, T
Object o	lescription				
Objects	:				
□ [0					
Scope o	Scope of functions				

- Function of operating LED and of status LED parameterizable
- Mode of operation (value transmitter / light-scene recall with / without storage function) freely selectable
- Values (1 byte) or light-scene numbers (1...8) for all keys individually parameterizable

Parameters			
Description:	Values:	Remarks:	
☐ General			
Function of the operating LED	OFF ON	Defines the status of the operation LED.	
Function of the status LED	OFF ON	Defines the status of the status LED.	
Operating mode	Value transmitter Recall light-scene without	Defines the function of the push button sensor.	
	memory function Recall light-scene with memory function		
Push buttons 1 and 2 with "Operating mode = value transmitter"			
Left push button value (0255)	0 255; 1	Defines the value transmitted when the left push button is pressed.	
Right push button value (0255)	0 255; 4	Defines the value transmitted when the right push button is pressed.	
Push buttons 1 and 2 with "Operating mode = recall light-scene with / without memory function"			
Left push button Light scene (18)	1 8; 1	Defines the value transmitted when the left push button is pressed.	
Right push button Light scene (18)	1 8; 4	Defines the value transmitted when the right push button is pressed.	
Push buttons 3 and 4 with "Operating mode = value transmitter"			
Left push button value (0255)	0 255; 1	Defines the value transmitted when the left push button is pressed.	

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Right push button value (0255)	0 255; 4	Defines the value transmitted when the right push button is pressed.	
Push buttons 3 and 4 with ""Operating mode = recall light-scene with / without memory function"			
Left push button Light scene (18)	1 8; 1	Defines the value transmitted when the left push button is pressed.	
Right push button Light scene (18)	1 8; 4	Defines the value transmitted when the right push button is pressed.	
Push buttons 5 and 6 with "Operating mode = value transmitter"			
Left push button value (0255)	0 255; 2	Defines the value transmitted when the left push button is pressed.	
Right push button value (0255)	0 255; 5	Defines the value transmitted when the right push button is pressed.	
Push buttons 5 and 6 with ""Operating mode = recall light-scene with / without memory function"			
Left push button Light scene (18)	1 8; 2	Defines the value transmitted when the left push button is pressed.	
Right push button Light scene (18)	1 8; 5	Defines the value transmitted when the right push button is pressed.	

Software remarks

• Light-scene extension unit:

When a key is pressed for more than 1 s, the parameterized light-scene is recalled and the pertaining status LED switched on for about 1 s. If a key is pressed during a light-scene recall with storage function for more than 5 s, a storage telegram corresponding to the parameterized light-scene will be transmitted and the status LED is lit up for 4 s. Pressing a key with storage function for a time between 1 s and 5 s is without effect.

The status LED lights up after a key-press only in conjunction with a positive acknowledgement (IACK) from an addressed actuator.

• Value transmitter:

The status LED lights up after a key-press only in conjunction with a positive acknowledgement (IACK) from an addressed actuator.

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