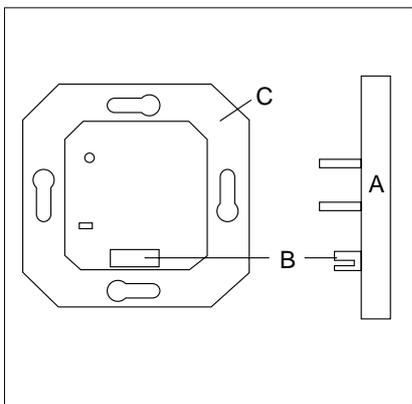
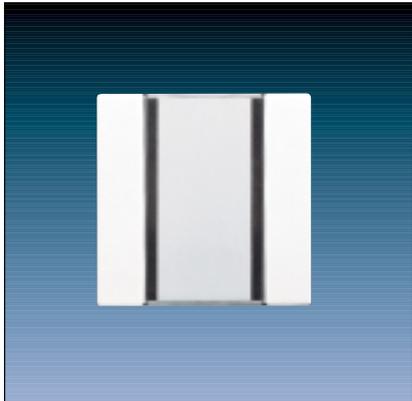


Push-Buttons – Universal

LS 990 / LS plus

Stainless Steel / Aluminium / Anthracite / Gold / Chrome

1



A: Application module (AM)
 B: Application interface (AI)
 C: Bus coupling unit (BCU)

2

	Ref.-No.
KNX push-button, 1-gang	
ETS-product family:	Push-button
Product type:	1-gang universal push-button
ivory	LS 2091 NABS
white	LS 2091 NABS WW
light grey	LS 2091 NABS LG
Metal versions	
stainless steel	ES 2091 NABS
aluminium	AL 2091 NABS
anthracite	AL 2091 NABS AN
gold coloured	GO 2091 NABS
chrome	GCR 2091 NABS
KNX push-button, 2-gang	
ETS-product family:	Push-button
Product type:	2-gang universal push-button
ivory	LS 2092 NABS
white	LS 2092 NABS WW
light grey	LS 2092 NABS LG
Metal versions	
stainless steel	ES 2092 NABS
aluminium	AL 2092 NABS
anthracite	AL 2092 NABS AN
gold coloured	GO 2092 NABS
chrome	GCR 2092 NABS

2	Ref.-No.
KNX push-button, 4-gang	
ETS-product family:	Push-button
Product type:	4-gang universal push-button
ivory	LS 2094 NABS
white	LS 2094 NABS WW
light grey	LS 2094 NABS LG
Metal versions	
stainless steel	ES 2094 NABS
aluminium	AL 2094 NABS
anthracite	AL 2094 NABS AN
gold	GO 2094 NABS
chrome	GCR 2094 NABS

3 The KNX universal push-button is plugged onto a flush mounted bus coupling unit. Its 2 to 8 rockers can be adjusted with different functions in various combinations (switching, dimming, blind sensor or light scene/brightness value sensor).
 With the appropriate parameters, it sends telegrams, for example, to actuators for switching on/off lights, for dimming lights, for recalling and saving light scenes, or for moving blinds/shutters up or down and for adjusting the louvres of blinds and even to send temperature or brightness values (2 Bytes) to the bus.
 Status and operation indication is possible with 3 up to 9 LED's, that means each rocker has its own status LED.

4	Technical data
Supply	
Voltage:	24 V DC (+6 V / -4 V) via BCU
Power consumption:	max. 150 mW
Connection:	2 x 5-pole pin bar
Protection:	IP 20
Insulation voltage:	referring to VDE 0829 part 230
Behaviour at	
Bus voltage drop:	Object values will be set to "0". LED's are going off, no telegram is sent.
Bus voltage return:	Object values remain to "0". LED's remain off, no telegram is sent.
Operation temperature:	-5°C ... +45°C
Storage temperature:	-25°C ... +75°C
Mounting:	plugged onto a flush mounted BCU
Note:	Mechanical theft protection of the application module is provided.

5

Function switching:

- Command at pressing/releasing of the push-button adjustable (ON, OFF, Toggle, no function).

Function dimming:

- Push-button function darker (OFF), brighter (ON) or darker/brighter (Toggle) adjustable.
- Time between dimming and switching and the dimming steps adjustable.
- Telegram repetition and stop telegram possible.

Function shutter/blinds:

- Push-button function (Up, Down) and time between short and long-time operation adjustable.
- Louvres adjustment possible.

Function value transmitter:

- The push-button function, dimming value-, brightness value- or temperature value-transmitter as well as recalling and saving light scenes, can be parameterized.
- Value adjustment via long push operation (dimming-, brightness-, temperature-value).

Notes to software application:**Switching function**

- For a two level operation (toggle function), the objects of the relevant push-buttons must have the same group addresses.

Dimming function:

- For a correct function of the single level operation, the connected dimming actuator must send its status back to the switching object of the push-button, too.
- With the single level operation only the switching object is retriggered internally and externally. The dimming object (dimming direction) is retriggered only internally so that in case of used extensions (2 or more sensors dim one lamp) the dimming direction will not always be changed at a new push action.
- For a two level operation, the objects of the relevant push-buttons must have the same group addresses.

Shutter/blinds function:

- This function supports the two level operation only. Therefore the „Step“ and „Move“ objects of the relevant push-buttons must have the same group addresses.

Value transmitter function:

- At value adjustment via long push operation, the new adjusted values are stored only within the RAM. After bus voltage drop or a bus reset, these values will be exchanged with the values programmed with the ETS.
The value adjustment always is carried out in negative direction. After reaching the minimal value, it will continue automatically with the maximal value.