LCN-BU4L

Push button converter or 4-way binary input 6-24V

The LCN-BU4L is either used as a 4-way binary sensor or key signal converter for floating contacts on low voltage (max. 24V AC/DC) for all LCN-modules built since July 2010 (version 140719).

Description:

In its function as key converter conventional switches can be evaluated.

As binary sensor permanent contacts such as timer or window contacts can be evaluated. In its function as key converter the commands short, long and loose are triggered in the A-table, in its function as binary sensor the commands long and loose are triggered in the B-table. By DIP-switch the LCN-BT4H can be switched from key converter to binary sensor and vice versa.

The four inputs evaluate signals to ground (blue terminal). The inputs are galvanically isolated from the I-port.

In its function as key converter the commands short, long and loose are triggered in the A-table, in its function as binary sensor the commands long and loose are triggered in the B-table.

Hardware equipment:

4 binary inputs

DIP-switsch

I-Port ribbon cable with I-port connector

4 status LEDs

Field of application:

Can be used for all modules built since year 2010 (firmware 140719). The LCN-BU4L is detected automatically.

Function as key converter: The sensors can be operated simultaneously with any I-port periphery, but not more than 5 I-peripheral devices at once at one I-port.
Important: The following old periphery MUST NOT be connected at once: LCN TU4x, -T8 & -TEx!

Function as binary sensor: The following sensors can be used at once: LCN-TS, -GRT, GT4D, GT10D, -GT2, -GT3L,-ULT, -UT and -RR. Again, not more than 5 of peripheral devices at one I-port.

Restriction: In mode "binary sensor 5-8" the modules LCN B3I (B6-B7) must not be operated; either one of LCN-GBL (B4, B5, B6, B7) or one of BMI (B4, B5, B6, B7) may be operated, otherwise the signals overwrite each other.

Restriction: In mode "binary sensor 1-4" the modules LCN B3I (B6-B7) may be operated without any restrictions, LCN-GBL (B4, B5, B6, B7) or BMI (B4, B5, B6, B7) are limited to a maximum of three, otherwise the signals overwrite each other.
Important: The following periphery MUST NOT be connected: -B8H & B8L!

The commands and status messages are only transmitted once during potential alteration. If the signals to the sensor are static, the module transmits neither message nor command. As an example: After a long period of voltage loss a panel transmits "Repeated binary sensor status message" to retrieve "its" binary sensors' status.

Note:
The ribbon cable is a signal cable. It is to lead separated from mains cable and power conductor:-is not to be bind to230V cable harness!
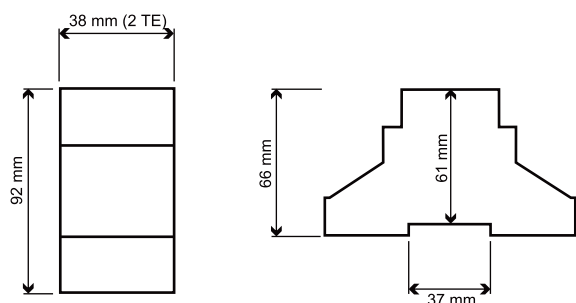
For detailed information please refer to the installation manual.

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Push button converter or 4-way binary input 6-24V

Dimensions:

(L x W x H): 38 mm x 92 mm x 66 mm

38 mm (2 TE)

92 mm

66 mm

61 mm

37 mm

Height: 66mm
61mm via DIN rail

Space requirement: 2TE

Assembly:
REG on 35 mm mounting rail (DIN 50022)

General details:
Operating temperature:	-10℃ bis +40℃
Humidity:	max. 80% rel., no condensation
Environmental conditions:	stationary installation according to VDE632, VDE637
Safety classification:	IP 20

Technical data

Connection

power supply:	230V AC ±15%, 50/60Hz (110V AC version available)
inputs:	20-30V DC (optional with external power supply)
	10-30V AC (optional with external power supply)
terminals/wire type (power side):	screwless, solid max. 2,5mm^2 orfine wire with wire end-sleeves max 1,5mm^2, loop, amp. max.16A
terminals/wire type (input side):	screwless, solid or fine wire 0,5 -1,5mm²

Function

inputs/push-button function:	potential free through optocoupler 4 / Hit, LONG, RELEASE (with 4 control LED´s), push-button converter table A, key 1-4 or 5-8 table B, key 1-4 or 5-8
	SO-interface →
	variables can be freely chosen
	alarm sensor →
	table B, keys 1-4 or 5-8
On-level:	10V AC, >14V DC
Off-level:	6V AC, <8V DC
query current:	1mA
debouncing time:	25ms (push-button converter), 25-
alarm sensor:	500ms (binary sensor)
	resistance value 1Ω -30kΩ 3 functions for contact open, closed & resistance
S0-impulse input:	max. 30.000 pulses/h (9Hz)
LCN-connection:	I-connecting cable length 300mm (plugged), over LCN-IVH extendable up to max. 50m.
cable length (inputs):	max. 100 metres each input (use twisted pair cable), Use twisted, shielded cable, Connect the shield to the circuit ground (M)

Schaltplan

... as push button converter   ... as binary input

Perfection.