BK002-LC Module

KNX LINE COUPLER/REPEATER

DESCRIPTION

The BK002LC is a KNX modular Line Coupler, provides electrical isolation and accommodating 2 space units that can be used as a line/area coupler or as a repeater.

When used as a line coupler, it connects a line with a main line, and when it used as an area coupler it connects a main line with an area line, additionally it ensures the data flow electrical isolation and indicates any communication errors via LED.
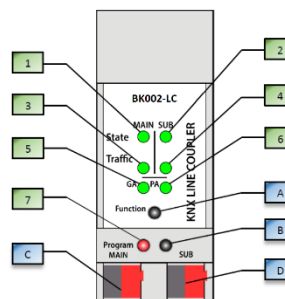
MOUNTING AND SAFETY INSTRUCTIONS

↗ The device should only be installed and put into operation by qualified electrician or authorized person.

↗ Failure to observe the instructions may cause damage to the device and result in fire and other hazards.

↗ Do not connect the main voltage (230 VAC) or any other external voltages to any point of the KNX bus.

↗ Ensure that there is enough insulation and space between the 230 VAC voltage cables and KNX bus.

↗ Installation only in dry locations and on a 35 mm DIN rail (35 mm) and do not expose this device to direct sunlight, rain or high humidity.

↗ Do not use aerosol sprays, solvents or abrasives that might damage the device.

↗ Accessibility of the device for operation and visual inspection must be provided.

MAIN FUNCTIONAL CHARACTERISTICS

↗ line/area coupler or repeater.

↗ Data flow electrical isolation.

↗ Suppress device configuration from the subline.

↗ Suppress device-oriented telegrams.

↗ Trace the subline traffic.

↗ Enable/disable filtering of Group telegrams or Physical telegrams.

↗ Reduced number of retransmissions option available.

↗ Diagnostic functions.

CONNECTION DIGRAM

A: Function button.
B: Program button.
C: KNX TP connector Main line.
D: KNX TP connector Subline.

1	Bus State KNX TP – main line	Green: Main Line OK Red: manual function active
2	Bus State KNX TP	Green: Sub-Line OK
3	Telegram traffic KNX TP	Green blink: Telegram traffic extent. Red blink: Transmission error.
4	Group Address Routing	Green: Filter active Orange: Route all Red: Block all Off: IP / KNX line different
5	Group Address routing	Green: Filter active Orange: Route all Red: Block all Off: Main line / subline different
6	Physical Address routing	Green: Filter active Orange: Route all Red: Block all Off: Main line / subline different
7	Programming	Red: Program Mode

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CONFIGURATION:

The assignment of the physical addresses as well as the parameterization is carried out with KNX Tool (ETS).

TECHNICAL NOTES:

↗ The maximum of 64 bus devices is permitted in a line without repeaters.

↗ Using the Line coupler as a repeater enables the connection of more than 64 bus devices to one bus line.

↗ The repeater transmits telegrams on a line without filter function and the line can be divided into a maximum of 4-independent line segments by using a maximum of 3-line repeaters connected in parallel.

↗ Up to 3-repeaters can be connected to one bus line that enables the connection of a total of 252 bus devices (additionally to the three repeaters) to one bus line, thus the maximum number of bus devices is 256 (including line couplers and repeaters) is permitted in a line with 3 repeaters.

↗ A separate KNX power supply is required for each line segment.

TECHNICAL DATA:

Electrical Parameters	
Device Name	BK002LC
Channels Number	2
Power Supply	2 X KNX BUS Voltage
Current consumption, Bus	>10mA
Environmental parameters	
Operating Humidity	>90 RH
Storage Humidity	Up to 92%
Operating temperature	-5℃ ~ +45℃
Storage Temperature	-15°C ~ +60°C
Transport Temperature	-15°C ~ +65°C
Device Parameters	
Protection type	IP20
Mode of communication	S-Mode
Mounting	(35m) Din-Rail
Flammability	Non-Flammable Product
Dimensions (W x H x D) mm	36 X 94 X 71
KNX Bus Connector	0.6 ~0.8 Ø, solid
Output connectors	Screw terminal, 2.5 mm2 stranded ~ 4 mm2 Solid
Tightening torque	Maximum 0.5 Nm
Available colors	White & Light Gray

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