![eelectron logo]

Line Coupler / Line Repeater

LC00A01KNX

Product and Applications Description

This device is a product of the KNX/EIB instabus-KNX/ EIB system and complies with KNX directives. Detailed technical knowledge obtained in KNX/EIB training courses is a prerequisite to proper understanding.

LC00A01KNX can be used as a line coupler to connect a line to a main line or as a backbone coupler to connect a main line to a backbone line.
LC00A01KNX supports long messages (up to 250 bytes) and provide a configurable special function activating by a frontal button which is very useful in commissioning / installing phase or during system tuning.

Planning, installation and commissioning of the unit is effected by means of KNX-certified software. An updated version of the product database and the technical descriptions are available in the Internet at www.eelectron.com

Technical Specifications

The coupler connects two instabus KNX/EIB data lines and ensures the electrical (galvanic) separation of these lines from one another. The definite functions of the device are defined by addressing and parameterization.

Line coupler LK:

Physical address X.0.0

Connection of a main line (HL) with an area line (BL). Alternatively with or without filter function. The coupler belongs logically to the subordinate line
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Area coupler BK:

Physical address X.0.0

Connection of a main line with an area line. Alternatively with or without filter function. The coupler belongs logically to the subordinate line.

Amplifier V:

Physical address X.Y.Z

Handling and repetition of telegrams on a line, no filter function. Division of a line into max. 4 independent line segments => max. 3 line amplifiers connected in parallel per line (FIG. C). Each line segment requires a separate power supply (SV) including a choke (DR)

Supply from bus KNX/EIB:

21 - 30 V DC
approx 30 mA from primary line
approx 5 mA from secondary line

Connection:

KNX/EIB instabus terminal for superordinate and subordinate line

Fitting:

Snap-fastening on DIN rail

Ambient temperature:	-5 °C ... +45 °C
Storage temperature.:	-20 °C ... + 60 °C
Relative Humidity:	max 93% not condensing

Electrical Safety:

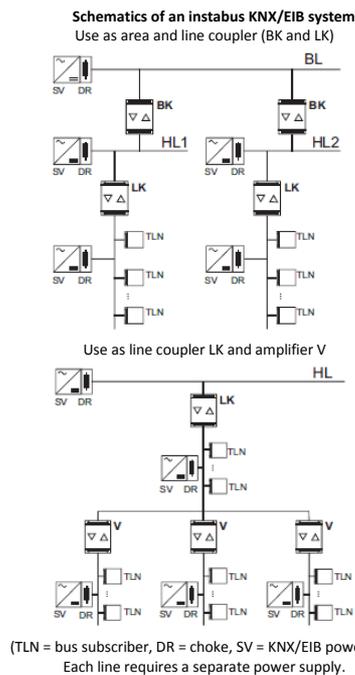|	
Type of protection:	IP 20 in acc. with EN 60529
Safety class:	III in acc. With EN 61140

Device complies with EN 50090-2-2 and IEC 60664-1
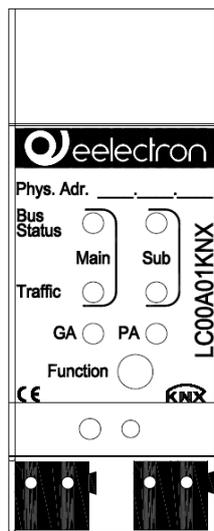
Installation width:

 36 mm (2 modules)

Weight:

Approx. 66 g

Terminals, connections and command/visualisation elements

Schematics of an instabus KNX/EIB system
Use as area and line coupler (BK and LK)

Use as line coupler LK and amplifier V

(TLN = bus subscriber, DR = choke, SV = KNX/EIB power supply)
Each line requires a separate power supply.

Location/Function of the Display and Operating elements

1. LED Bus Stat Main
2. LED Bus Stat Sub
3. LED Traffic Main
4. LED Traffic Sub
5. LED GA (Group Address)
6. LED PA (Physical Address)
7. Function button
8. Programming LED
9. Programming button
10. KNX-Bus connection: Main line
11. KNX-Bus connection: Sub line

LED DESCRIPTION

LED Bus Stat Main green	Off: main line error
	On: main line ok
LED Bus Stat Main red	On: manual overwrite active
LED Bus Stat Sub green	Off: sub line error or not connected
	On: sub line ok
LED Traffic Main green	Blinking: bus traffic on main line
	Off: no traffic on main line
LED Traffic Sub green	Blinking: bus traffic on sub line
	Off: no traffic on sub line
LED Traffic Main red	Blinking: transmission error on main Line
LED Traffic Sub red	Blinking: transmission error on sub line
LED Group Address	Routing of group telegrams
	- Off: main and sub different
	- Green: filter table active
	- Green *and* red: route all
	- Red: block
LED Physical Address	Routing of physical addressed telegrams
	- Off: main and sub different
	- Green: filter table active
	- Green *and* yellow: route all
	- Yellow: block

FUNCTION BUTTON

Long press (3 sec)	Switch to manual override. Default function is set with main line and (sub) line parameter. Manual override functionality is configured in "General parameters".
LED Bus Stat Main red	On: manual override active
	Off: default configuration active

Mounting and Wiring hints

1 - The device is snap-fastened on the DIN rail until the latch is heard to engage, with the connecting terminals pointing downwards

2 - The PRIMARY line is connected with the lefthand terminal This terminal supplies power to the device electronics so that it is possible to report a bus voltage failure of the subordinate via the PRIMARY line.

3 - The secondary line is connected to the right-hand terminal

4 - Load the physical address into the push-button from the ETS via the KNX bus.

5 - Complete the required configuration settings in the ETS, and transfer the configuration via EIB into the coupler.

IMPORTANT

- This device must be installed only by a qualified electrician.
- Install in conformity to SELV installation rules.
- The applicable safety and accident prevention regulations must be observed.
- The device must not be opened. Any faulty devices should be returned to manufacturer.
- For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.

For further information please visit www.eelectron.com

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