

## Area/Line Coupler

Order no.: 1023 00

## System Information

This device is a product of the Instabus-EIB system and complies with KNX directives.

Detailed technical knowledge obtained in Instabus training courses is a prerequisite to proper understanding.  
The functionality of this device depends on the software.

Detailed information on loadable software and attainable functionality as well as the software itself can be obtained from the manufacturer's product database.

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.gira.de](http://www.gira.de).

## Function

The coupler connects two KNX/EIB data lines and ensures the electrical separation of these lines from one another.

The definite functions of the device are defined by addressing and parameterization. See figures B and C.

**Line coupler LK:** physical address X.Y.0

Connection of a line with a main line (HL). Alternatively with or without filter function. The coupler belongs logically to the subordinate line.

**Area coupler BK:** 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.

**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).

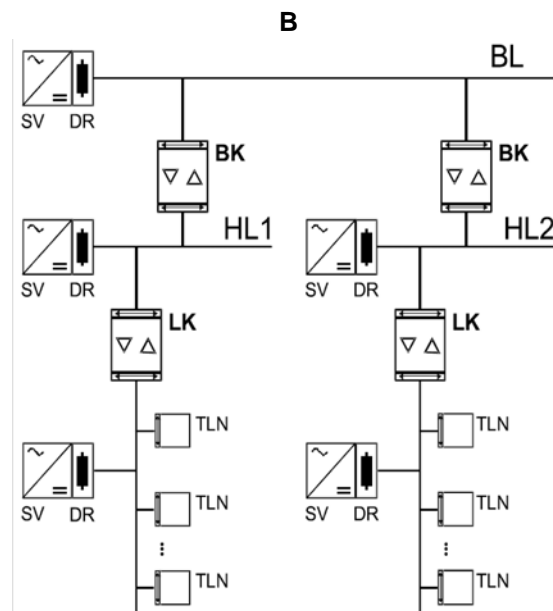
Each line segment requires a separate power supply (SV) including a choke (DR).



## Safety instructions

**Attention: Electrical equipment must be installed and fitted only by qualified electricians and in strict observance of the relevant accident prevention regulations.**

**Failure to observe any of the installation instructions may result in fire and in other hazards.**

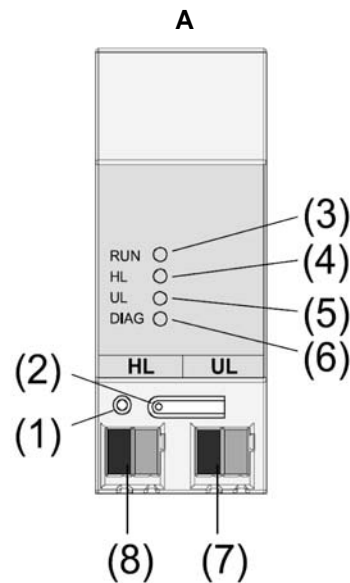
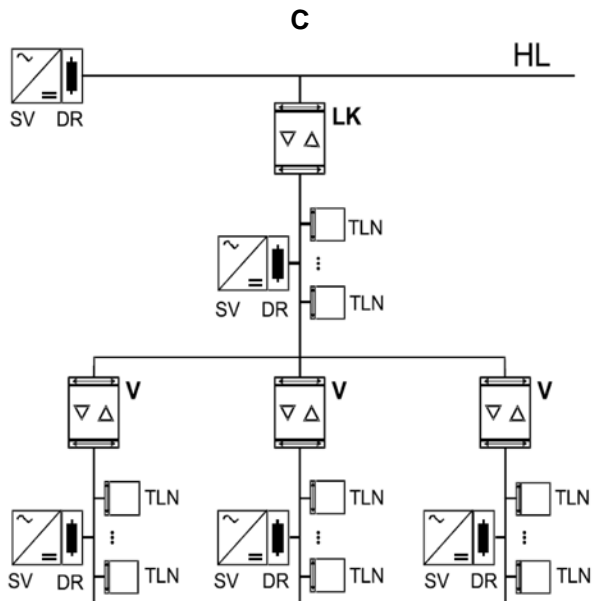


## Schematics of an KNX/EIB system

FIG. B: Use as area and line coupler (BK and LK)

FIG. C: 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.



### Function of diagnosis LED („DIAG“) red

LED off: Telegrams are filtered or blocked (both directions)  
LED on: Telegrams are retransmitted without being filtered (at least one direction)

### Function of operation LED („RUN“) green

LED off: device off, no voltage on superordinate line  
LED on: device on, voltage on both lines  
LED flashing: no voltage on subordinate line

## Controls and indicators (FIG. A)

- (1) programming button
- (2) programming LED, red
- (3) operation LED, green
- (4) LED yellow, incoming data on superordinate line (HL)
- (5) LED yellow, incoming data on subordinate line (UL)
- (6) diagnosis LED, red
- (7) connecting terminal for superordinate line (UL)
- (8) connecting terminal for subordinate line (HL)

## Installation

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

## Connection

The superordinate line is connected with the left-hand terminal (FIG. A, (8), terminal „HL“).

This terminal supplies power to the device electronics so that it is possible to report a bus voltage failure of the subordinate via the superordinate line.

The subordinate line is connected to the right-hand terminal (FIG. A, (7), terminal „UL“).

**Removal info:** Do not lever out the connecting terminal from below. Risk of shorting the bus voltage which is not available during the short-circuit.

## Allocation of the physical address

Press the programming button (2) → the programming LED (1) lights up. The LED goes out on taking over of the physical address.

## Technical data

Supply	
KNX/EIB:	21 – 30 V DC from superordinate line
Current consumption	
superordinate line:	approx. 6 mA
subordinate line:	approx. 8 mA
Connection:	KNX/EIB terminal for superordinate and subordinate line
Fitting:	snap-fastening on DIN rail
Ambient temperature:	-5 °C ... +45 °C
Storage temperature.:	-25 °C ... + 70 °C
Type of protection:	IP 20 in acc. with EN 60529
Safety class:	III in acc. with EN 61140
Installation width:	36 mm (2 modules)
Weight: approx.	90 g

---

**Acceptance of guarantee**

We accept the guarantee in accordance with the corresponding legal provisions.

**Please return the unit postage paid to our central service department giving a brief description of the fault:**

Gira  
Giersiepen GmbH & Co. KG  
**Service Center**  
Dahlienstrasse 12  
D-42477 Radevormwald

---

Gira  
Giersiepen GmbH & Co. KG  
Postfach 1220  
D-42461 Radevormwald

Telefon: +49 / 21 95 / 602 - 0  
Telefax: +49 / 21 95 / 602 - 339  
Internet: [www.gira.de](http://www.gira.de)