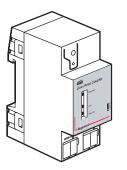


# KNX line/area coupler

#### Catalogue number(s): 0 035 16



## 1. USE

This device links the data on two different BUS/KNX lines and isolates BUS lines from one another to allow independent local operation on a BUS line.

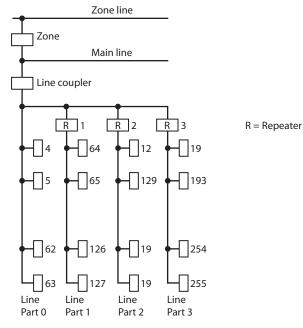
- The line coupler can be used as a:
- Line coupler
- Zone coupler

- Or a repeater on either existing BUS networks or new BUS/KNX networks It has a filtering function that can be used either to block telegrams from the BUS on one of the two lines, or transmit them to another BUS line, thus reducing the load on the BUS. The filtering function is automatically created by the ETS (EIB Tool Software) when the system is commissioned. Since the hardware configuration for the line coupler, the zone coupler and the repeater is identical, they are listed under the same catalogue number. The coupler function is automatically defined when the physical addresses are assigned. Depending on the coupler function, the following terminology is used:

Coupler function	Primary line	Secondary line
Zone coupler	Zone line	Main line 1- 15
Line coupler	Main line 1- 15	Line 1- 15
Repeater	Line 1- 15	Segment (Part) 1-3

To be used in conjunction with modular power supply Cat. No. 0 035 12.

Connecting repeaters on a BUS line.



# CONTENTS

### Page

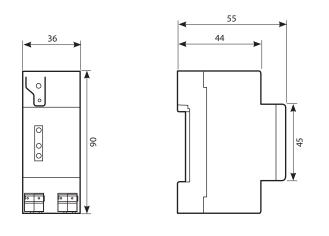
1. Use1
2. Technical features1
3. Dimensions2
4. Connection2
5. Operation2
6. Standards and approvals2
7. Maintenance2
8. Communication objects2

#### **2. TECHNICAL FEATURES**

Red LED: Addressing mode; on receiving the physical address, the device automatically reverts to normal operating mode Green LED: Operating mode; on receiving the physical address, the device automatically reverts to normal operating mode Yellow LED: Data reception on the secondary BUS line Yellow LED: Data reception on the primary BUS line Primary BUS line	Information button: Switch from normal operating mode to addressing mode to assign the physical address		
KNX/BUS power supply	2014		
Primary line	29 V		
Secondary line	29 V		
KNX/BUS absorption			
From the primary line	6 mA		
From the secondary line	8 mA		
KNX connection	2 KNX connectors (red/black)		
Terminal type	automatic		
Terminal capacity	4 x (Ø 0.6 mm < < Ø 0.8 mm)		
Degree of protection			
Penetration by solid	IP20		
and liquid matter	(installation in an enclosure)		
Impact resistance	ІК04		
Number of modules	2		
Operating temperature	-5°C to +45°C		
Storage temperature	-25°C to +70°C		
Weight	90 g		

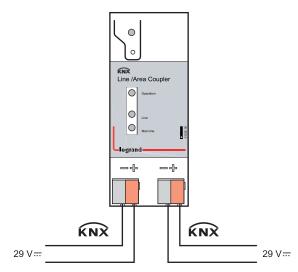
Technical data sheet: S000065973EN-3

## **3. DIMENSIONS**



#### 4. CONNECTION

All the wiring must be carried out with the mains power off.



#### **5. OPERATION**

The product is connected to both BUS lines (primary BUS and secondary BUS) via the KNX connection blocks.

The coupler is supplied by the primary BUS line. This allows a voltage fault in the secondary BUS line to be detected and signalled.

The coupler can be used in one of 3 modes:

- Line coupler: this groups the lines with the main line

- Zone coupler: this groups the function zones with the main zone line

- Repeater: this enables up to 64 additional products to be connected to the BUS line A maximum of 3 repeaters can be mounted, i.e. a total of 252 products + 3 repeaters on one BUS line.

## 6. STANDARDS AND APPROVALS

Electrical safety

- Degree of pollution (in accordance with CEI 60664-1) : 2
- Protection type (in accordance with EN 60529) : IP 20
- Protection class (in accordANCE to IEC 61140): III
- Overvoltage class (in accordance to IEC 60664-1): III
- BUS : safety extra-low voltage SELV DC 24 V
- Devices complies with EN 50090-2-2 et EN 60669-2-

EMC requirements complies with EN 61000-6-1, EN 61000-6-3 and EN 50090-2-2

# Marking

• KNX, CE



## 7. MAINTENANCE

Do not use: acetone, tar-removing cleaning agents or trichloroethylene. Resistant to the following products: - Hexane (En 60669-1)

- Methylated spirit
- Soapy water
- Diluted ammonia
- Bleach diluted to 10%
- Window-cleaning products

Caution: An initial test is required for the use of other special maintenance products.

#### 8. COMMUNICATION OBJECTS

The line coupler can be programmed with ETS software using version ETS3. It will then be used as a line coupler/zone coupler or as a repeater, depending on which program is chosen.

#### Parameters

Configuration

evice: 1.1.19 Line / backbone coupler 003516 Configuration

Group telegrams main line->line	filter	-
Group telegrams line->main line	filter	-
Main group 14/15	let through	-
Repetitions if errors on main line	Yes	•
Repetitions if errors on line	Yes	•
Telegram confirmation on main line	always	•
Telegram confirmation on line	always	•

#### Note:

The settings printed in bold correspond to the factory settings (default values).

# 8. COMMUNICATION OBJECTS (CONTINUED)

Parameters	Settings
Repetitions if errors on line in assigning physical address	Yes No
Repetitions if errors on line in group telegrams	<b>Yes</b> No
Repetitions if errors on segment in assigning physical address	Yes No
Repetitions if errors on segment in group telegrams	Yes No

A repeater receives telegrams via its line interface and transmits these telegrams via its segment interface or vice versa.

It is possible to specify separately for telegrams with assignment of a physical address and for group telegrams whether they should be sent again or not to the line or to the segment side if a telegram sent from the repeater was not answered by an acknowledgement.