

Coupler REG-K

Operating instructions



Art. no. MTN680204

For your safety

DANGER

Risk of serious damage to property and personal injury, e.g. from fire or electric shock, due to incorrect electrical installation.

Safe electrical installation can only be ensured if the person in question can prove basic knowledge in the following areas:

- Connecting to installation networks
- Connecting several electrical devices
- Laying electric cables
- Connecting and establishing KNX networks

These skills and experience are normally only possessed by skilled professionals who are trained in the field of electrical installation technology. If these minimum requirements are not met or are disregarded in any way, you will be solely liable for any damage to property or personal injury.

Getting to know the coupler

The Coupler REG-K (hereinafter referred to as **coupler**) logically connects two KNX lines with one another and ensures electrical isolation between the lines and areas. The exact function of the device is determined by the addressing and the selected application.

Line coupler (X.Y.0)

- X = 1 to 15 = area
- Y = 1 to 15 = line
- 0 = line coupler

The coupler connects a subordinate line to a superordinate main line either with or without filter function. The coupler is topologically associated with the line. A maximum of 64 bus devices is permitted in a line without repeaters.

Area coupler (X.0.0)

- X = 1 to 15 = area
- 0.0 = area coupler

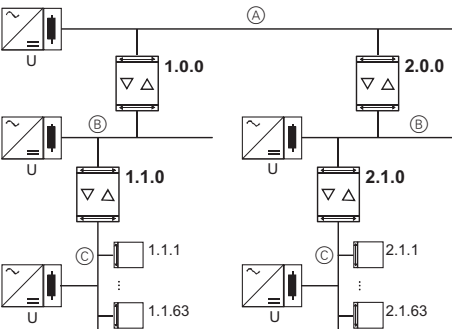
The coupler connects a subordinate main line to a superordinate area line either with or without filter function. The coupler is topologically associated with the main line.

Repeater (X.Y.Z)

- X = 1 to 15 = area
- Y = 1 to 15 = line
- Z = 64, 168, 192 = repeater 1 to 3

The repeater transmits telegrams on a line without filter function. A line can be divided into a maximum of 4 independent line segments by using a maximum of 3 line repeaters connected in parallel. A separate KNX power supply is required for each line segment. A maximum of 256 bus devices (including line couplers and repeaters) is permitted in a line with 3 repeaters.

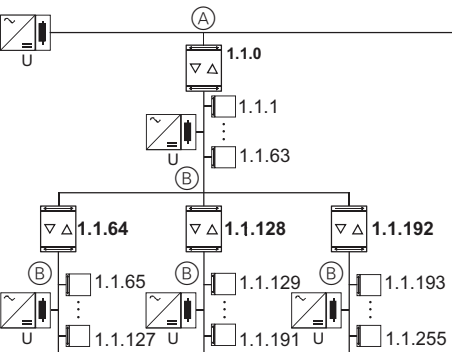
Use as an area coupler and line coupler



Areas 1 and 2 with lines 1.1 and 2.1

- (A) Area line
- (B) Main line
- (C) Line
- 1.0.0, 2.0.0 Area coupler
- 1.1.0, 2.1.0 Line coupler
- X.Y.Z Bus device
- U Power supply

Use as a line coupler and repeater

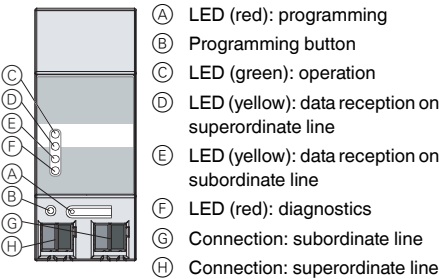


Line 1

- (A) Main line
- (B) Line segment
- 1.1.0 Line coupler
- 1.1.64 1st line repeater
- 1.1.128 2nd line repeater
- 1.1.192 3rd line repeater
- X.Y.Z Bus device
- U Power supply

i Each line and each additional line segment requires a separate power supply!

Connections, displays and operating elements



Operational LED

LED (C)	Function
Permanently off	Device off; no voltage on the superordinate line
Permanently on	Device on; voltage on both lines
Flashing	Device on; no voltage on the subordinate line

Diagnostic LED

LED (F)	Function
Permanently off	Filter table loaded or passage completely blocked
Permanently on	Filter table not loaded: all group addresses are let through

Mounting the coupler

CAUTION

Risk of death from electric shock. The device may become damaged.

The safety clearance must be guaranteed as per IEC 60664-1. A distance of at least 4 mm must be maintained between individual cores of the 230 V cable and the KNX line.

- 1 Connect the superordinate line to connecting terminal (H). The device electronics are powered via this connection. This makes it possible to report a bus voltage failure of the subordinate line via the superordinate line.
- 2 Connect the subordinate line to connecting terminal (G).

Dismantling the coupler

CAUTION

The device could become damaged.

Never prise the connecting terminal out from below because the bus voltage could be short-circuited in the process and could fail for the duration of the short circuit.

Putting the coupler into operation

- 1 Load the physical address from the ETS into the coupler via KNX.
- 2 Perform configuration settings in the ETS and transfer them.

Technical data

Power supply:	via KNX bus DC 21-32 V via the superordinate line
Current consumption:	
superordinate line:	approx. 6 mA
subordinate line:	approx. 8 mA
Ambient temperature	
Operation:	-5 °C to +45 °C
Installation width:	2 modules = approx. 36 mm
Weight:	approx. 90 g

Schneider Electric Industries SAS

If you have technical questions, please contact the Customer Care Centre in your country.
www.schneider-electric.com