M/LCR.1

KNX Line Coupler

Datasheet

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Figure 1. KNX Line Coupler

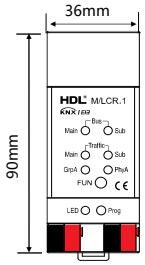

Figure 2. Dimensions - Front View

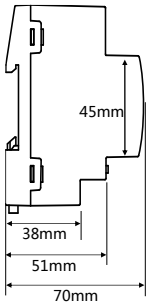

Figure 3. Dimensions - Side View

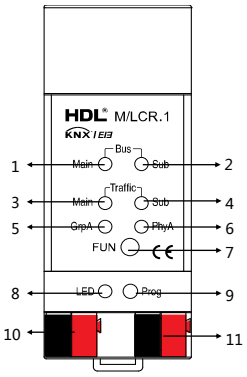

Figure 4. Components - Front View

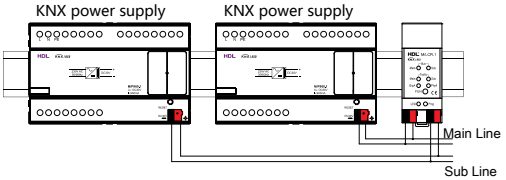

Figure 5. Wiring

Overview

KNX Line Coupler (See Figure 1) can be used as a line coupler or repeater (for address extension), which can be connected to a main line and a sub line when the device works as a line coupler. A separate power supply including a chock is required for each new line segment and each line will be electrically isolated. Through the line coupler, packet filtering can be carried out between the two lines, reducing the amount of telegrams, preventing interference, and maintaining efficient communication.

Functions

- The coupler is connected to KNX zone/line to enable zone/line isolation. Data packets can also be filtered to reduce telegram traffic and maintain good communications.
- When the device works as a branch coupler, the branch main line and branch sub-line can be connected.
  When works as a region coupler, the region main line and branch Bus can be connected.
- The device can be used as a line coupler or repeater.
- 6 LEDs display data transmission status and 1 LED for programming status display

Important Notes

- Installation position - Distribution board
- Programming - The device is complaint with the KNX standard and the parameters are set by the Engineering Tool Software (ETS).
- It is not allowed to open the KNX Line Coupler case shell.
- KNX Bus voltage - 21~30V DC, no AC power supply allowed.

Product Information

Dimensions - See Figure 2 - 3

Components - See Figure 4

1. LED of Bus Main
2. LED of Bus Sub
3. LED of Traffic Main
4. LED of Traffic Sub
5. LED of group address filter status
6. LED of physical address filter status
7. Function button
8. Programming LED
9. Programming button
10. KNX-Bus connection: Main line
11. KNX-Bus connection: Sub line

Wiring - See Figure 5

Installation - See Figure 6 - 8

Step 1. Fix the DIN rail with screws.

Step 2. Buckle the bottom cap of the KNX Line Coupler on the edge of the DIN rail.

Step 3. Press the device on the DIN rail, slide it and fix it up until an appropriate position is adjusted.

Safety Precautions

- The installation and commissioning of the device must be carried out by HDL or the organization designated by HDL. For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.
- HDL does not take responsibility for all the consequences caused by installation and wire connection that are not in accordance with this document.
- Please do not privately disassemble the device or change components, otherwise it may cause mechanical failure, electric shock, fire or body injury.
- Please resort to our customer service department or designated agencies for maintenance service. The warranty is not applicable for the product fault caused by private disassembly.

Package Contents

M/LCR.1*1 / Datasheet*1

Figure 6

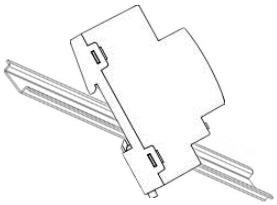

Figure 7

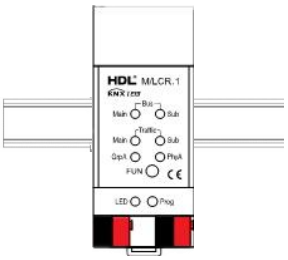

Figure 8

Figure 6 - 8. Installation

Technical Data

Basic Parameters	
Working voltage	21~30V DC
Communication	KNX/EIB
Main line current	< 30mA
Sub line current	3mA
Cable diameter of KNX terminal	0.6 - 0.8mm
External Environment	
Working temperature	-5℃~45℃
Working relative humidity	≤90%
Storage temperature	-20℃~ 60℃
Storage relative humidity	≤93%
Specifications	
Dimensions	90mm×36mm×70mm
Net weight	68.4g
Housing material	ABS
Installation	35mm DIN rail installation (See Figure 6 - 8)
Protection rating (Compliant with EN 60529)	IP20

Name and Content of Hazardous Substances in Products

Components	Hazardous substances					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Chromium VI (Cr (VI))	Poly-brominated biphenyls (PBB)	Poly-brominated diphenyl ethers (PBDE)
Plastic	o	o	o	o	o	o
Hardware	o	o	o	o	-	-
Screw	o	o	o	×	-	-
Solder	×	o	o	o	-	-
PCB	×	o	o	o	o	o
IC	o	o	o	o	×	×

The symbol “-” indicates that the hazardous substance is not contained.
The symbol "o" indicates that the content of the hazardous substances in all the homogeneous materials of the component is below the limit requirement specified in the Standard IEC62321-2015.
The symbol “×” indicates that the content of the hazardous substance in at least one of the homogeneous materials of the part exceeds the limit requirement specified in the Standard IEC62321-2015.

KNX Cable Guide

KNX	KNX Cable
+	Red
-	Black

Technical support
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