



Figure 1. KNX Line Coupler
图 1. KNX线耦合器

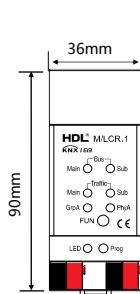


Figure 2. Dimensions - Front View
图 2. 尺寸图 - 正面

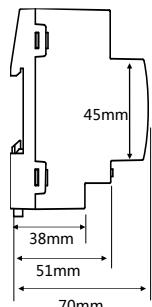


Figure 3. Dimensions - Side View
图 3. 尺寸图 - 侧面

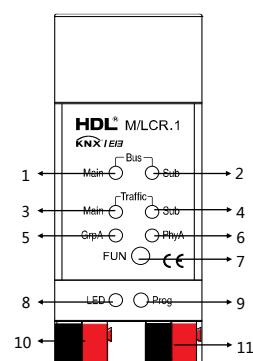


Figure 4. Components - Front View
图 4. 部件 - 正面图

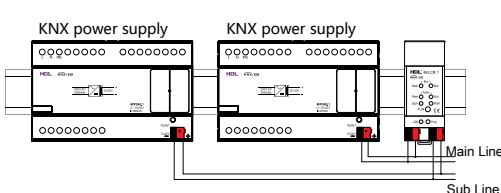


Figure 5. Wiring
图 5. 接线图

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

产品概述

KNX线耦合器(见图1)可以用作线耦合器或中继器(扩展地址),当设备作为线耦合器时,它可以连接一条主线和一条子线。被分隔的线需要不同的KNX电源供电。线耦合器带电流隔离功能,通过线耦合器可以实现在两线之间进行数据包过滤,减少电报量,防止干扰,保持通讯顺畅。

功能说明

- 耦合器连接KNX区/线,实现区/线隔离。同时数据包可以被过滤,减少电报流量,保持通讯顺畅
- 当作为支路耦合器时,可连接支路主干线和支路子线;当作为区域耦合器时,可连接区域主干线和支路总线
- 可以作为线路耦合器/中继器
- 6个LED显示数据传输状态,1个LED显示编程状态

注意事项

- 安装位置-配电箱
- 本设备属于KNX标准设备,使用ETS软件进行编程。
- 不能打开KNX线耦合器外壳。
- KNX总线电压-21~30V DC,不能接入交流电源。

产品信息

产品尺寸 - 见图 2 - 3

产品部件 - 见图 4

1. 主线指示灯
2. 子线指示灯
3. 主线通讯指示灯
4. 子线通讯指示灯
5. 组地址过滤状态指示灯
6. 物理地址过滤状态指示灯
7. 功能按键
8. 编程指示灯
9. 编程按键
10. KNX总线连接: 主线
11. KNX总线连接: 子线

接线图 - 见图 5

设备的安装 - 见图 6-8

- 步骤1. 用螺丝固定丁导轨。
- 步骤2. 将KNX线耦合器底盖的一端扣到导轨的边上。
- 步骤3. 将整个模块压到导轨上,并滑动模块直至调整到合适的位置则固定下来。

安全警告

- 本设备的安装及调试工作必须由我司或我司指派的机构进行。其电气安装的计划和施工,必须遵守当地相关的安全标准和法规。
- 未按照本说明书进行安装及接线方式的,所造成的一切后果皆与我司无关。
- 请不要私自拆装或更换零部件,否则可能会导致机械故障、电击、火灾或身体伤害。
- 请将一切维修工作交由我司售后部门或指定机构进行,本产品的保修范围不适用于因用户拆卸产品而导致的故障。

装箱清单

M/LCR.1*1 / 说明书*1

Technical Data

Basic Parameters

Working voltage	21~30V DC
Communication	KNX/EIB
Bus current	< 30mA
Bus Sub current	3mA
Cable diameter of KNX terminal	0.6 – 0.8mm

External Environment

Working temperature	-5°C~45°C
Working relative humidity	≤90%
Storage temperature	-20°C~ 60°C
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	x	-	-	
Solder	x	o	o	o	-	-	
PCB	x	o	o	o	o	o	
IC	o	o	o	o	x	x	

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 “x” 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.

技术参数

基本参数

工作电压	21~30V DC
总线通讯	KNX/EIB
主线电流	<30mA
子线电流	3mA
KNX端子要求线径	0.6~0.8mm

外部环境

工作温度	-5°C~45°C
工作相对湿度	≤90%
储存温度	-20°C~60°C
储存相对湿度	≤93%

产品规格

尺寸	90mm×36mm×70mm
净重	68.4g
外壳材料	ABS
安装方式	35mm丁导轨安装 (见图6-8)
防护级别 (符合 EN 60529)	IP20

产品中有害物质的名称及含量

部件名称	有害物质						
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)	
塑胶组件	o	o	o	o	-	-	o
五金铜件	o	o	o	o	o	-	-
螺丝组件	o	o	o	x	-	-	-
焊锡	x	o	o	o	o	-	-
PCB组件	x	o	o	o	o	o	o
IC	o	o	o	o	x	x	x

- : 表示不含有该有害物质。

o : 表示该有害物质在该部件所有均质材料中的含量均在IEC62321-2015规定的限量要求以下。

x : 表示该有害物质至少在该部件的某一均质材料中的含量超出IEC62321-2015规定的限量要求。

KNX Cable Guide

KNX	KNX cable
-	Black
+	Red

KNX总线定义

KNX	KNX 电缆
-	黑
+	红



Figure 6 / 图 6

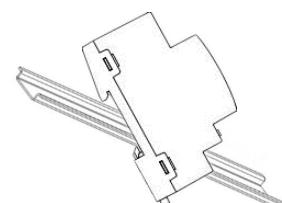


Figure 7 / 图 7

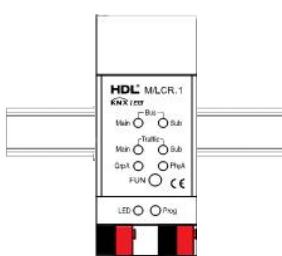


Figure 8 / 图 8

Figure 6 - 8. Installation
图 6 - 8. 安装图

技术支持

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