HDL®

CE RoHS

M/KRS232/485.1

KNX<->RS232/RS485 Converter

Hardware Version: B

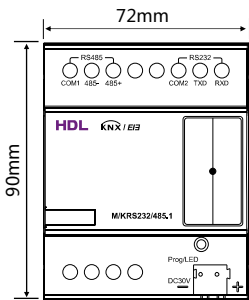**KNX®**

Figure 1. KNX<->RS232/RS485 Converter

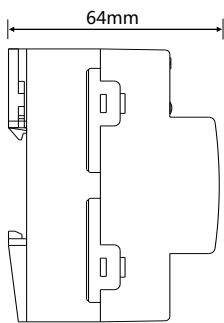Figure 2. Dimensions - Front View

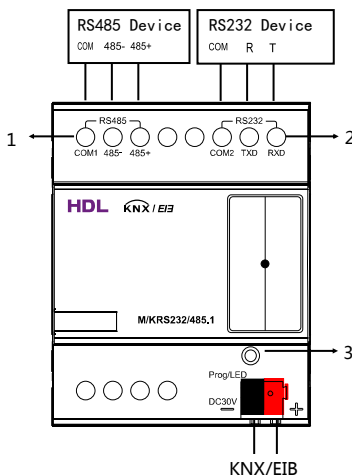Figure 3. Dimensions - Side View

Figure 4. Wiring

Overview

KNX<->RS232/RS485 Converter (See Figure 1) is used for bidirectional data exchange between KNX and RS232, KNX and RS485.

The main function includes:

- 3 working modes: String mode, Hexadecimal mode, Data mode
- RS232 interface work in all baud rates: 600,1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200bps. Users can choose baud rates according to their requirements.
- Gateway between KNX and RS232 or RS485 and KNX, only one communication method can be selected from RS232 and RS485 at the same time.
- Gateway between KNX and RS232: RS232 (string mode or hexadecimal mode, data mode) <-> KNX/EIB.
- Gateway between KNX and RS485: RS485 (string mode or hexadecimal mode, data mode) <-> KNX/EIB.
- Supports up to 100 control targets
- Up to 200 characters for each target
- 24 sequences supported

Components

Dimensions - See Figure 2 - 3

Wiring - See Figure 4

1. RS485 connector
2. RS232 connector
3. Programming button & LED indicator

Installation

Installation - See Figure 5 - 7

Step 1. Fix the DIN rail with screws.

Step 2. Buckle the bottom cap of the KNX<->RS232/RS485 Converter 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.

Note(s)

- Installation - Distribution box
- Programming - The device is compliant with the KNX standard and the parameters are set by the Engineering Tool Software (ETS).
- KNX Bus voltage - 21~30V DC, no AC power supply allowed
- Check connection - Re-tighten all connections after installation.
- Make sure the RS485 cable is in correct connection to the module connector 485+, 485-, COM1.
- Make sure the RS232 cable is in correct connection to the module connector RX,TX, COM2.

⚠ 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.
- The device should be installed with Din rail in DB box. 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
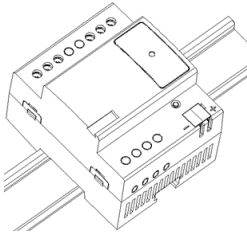
M/KRS232/485.1*1 / Label*5 / Datasheet*1
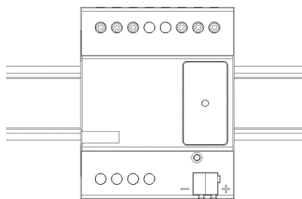
Figure 5

⇩ 1

Figure 6

⇩ 2

Figure 7

Figure 5 - 7. Installation

Technical Data

Basic Parameters

Working voltage	21~30V DC
Working current	10mA/30V DC
Communication	KNX/EIB, RS232, RS485
Data bit	7 bits, 8 bits, 9 bits
Stop bit	0.5 bit, 1 bit, 1.5 bits, 2 bits
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	72mm×90mm×64mm
Net weight	111g
Housing material	Flame retardant nylon
Installation	35mm DIN rail installation (See Figure 5 - 7)
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
-	Black
+	Red