

KNX Interface - 1 DIN module

Code	Description
DRM-KNX	Module for KNX connection for energy, power V, I, cosφ, freq.

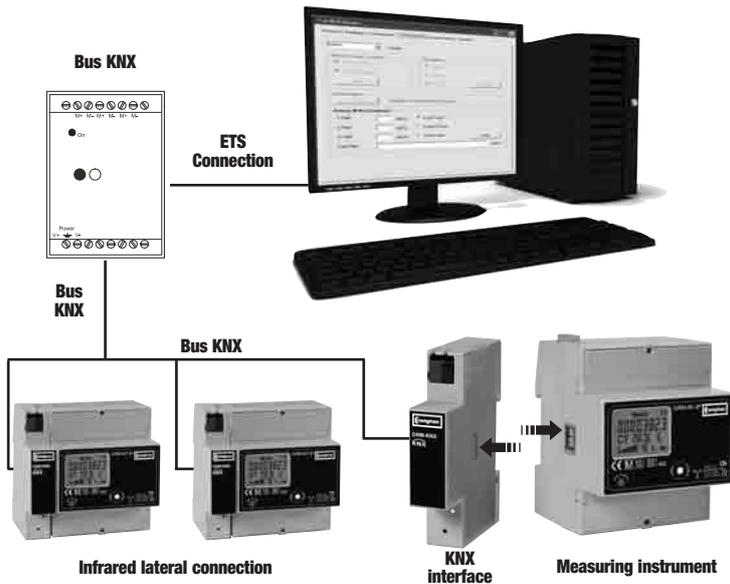


WARNING
Installation must be carried out and inspected by a specialist or under his supervision.

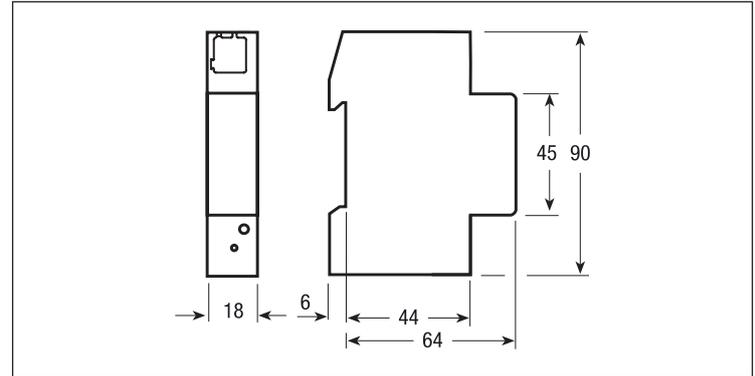
KNX Interface - Shorthand Guide

1) System Architecture

- A typical system is described below. In the picture, the KNX interface communicates with the PC through ETS (Engineering Tool Software).



Dimension



2) Physical Connection

KNX: The connection to the bus line is established via the bus connector terminal (red-black) on the top side.

IR port: put the counter beside the M-Bus interface in a way that the interface IR port lines up with the counter IR port.

3) Supply

- The power supply is obtained directly from the bus. Red = +, Black = -.

4) Available Applications

- KNX Interface for Energy meter, three phase.
- KNX Interface for Energy meter, single phase.

5) Available Support

5.1 Database

- Database for "Three phase application"
- Database for "Single phase application"

5.2 Documentation

- KNX Interface user guide
- KNX Application user guide

6) Quick Start

- Unplug the connection block carefully inserting a small screwdriver in the wire-inserting slot of the black terminal.
- Install the interface on the DIN rail, beside the meter. The infrared port of the KNX interface must line up with the infrared port of the meter. Make sure that the slide clicks, for a stable installation.
- Remove 25 ... 35 mm of the overall insulation of the twisted pair.
- Remove 5 mm of the insulation of each single core wire of the twisted pair. Insert the two single core wires into the bus connection block (Red = +, Black = -)
- Plug the connection block in the KNX interface and press until it stops.
- Following the user guide, download the application corresponding to the meter.

7) Frontal Panel

- A red led reports the interface mode: OFF = normal operating mode, ON = addressing mode.
- A learning button for switching between normal operating mode and addressing mode.

Technical data

Data in compliance with EN 60664-1, EN 50090-2-2, EN 61000-6-2, EN 61000-6-3 and EN 61000-4-2			DRM-KNX
General characteristics			
• Housing	DIN 43880	DIN	1 module
• Mounting	EN 60715	35 mm	DIN rail
• Depth		mm	70
Power supply			
• Power supply		-	through bus connection
Operating features			
• Interface for energy register and power measurements			
• Communication in compliance with KNX standard for home and building control			
• Energy registers transmitted as float values (DPT 13. xxx)			
• Power registers transmitted as float values (DPT 14. xxx)			
• Status bytes available			
• Energy account remote reset available (not active some Energy-meters models)			
• Suitable for both single-phase and three-phase Energy-meter, Network analyzer and Power-meters		-	yes
• Configuration via ETS4			
KNX interface			
• HW interface		-	black/red terminals for connection to Twisted Pair type 1 (TP-1)
• Bitrate		-	9600 bps
Interface to measuring instrument			
• HW interface	optical IR	n°	2 (Tx, Rx)
• SW protocol		-	proprietary
Safety acc. to EN 60664-1			
• Degree pollution		-	2
• Overvoltage category		-	II
• Working voltage range		VDC (max.)	30
• Clearance		mm	≥1.5
• Creepage distance	in equipment	mm	≥2.1
	on printed wiring boards (not coated)	mm	≥1.5
• Test voltage	impulse (1,2/50 µs) peak value	kV	2.5
	50 Hz 1 min	kV	1.35
• Housing material flame resistance	UL 94	class	V0
Environmental conditions			
• Operating temperature		°C	-10 ... +55
• Temperature of storage		°C	-25 ... +70
• Relative humidity		%	≤80
• Vibrations	sinusoidal vibration amplitude at 50 Hz	mm	±0.25
• Protection class	acc.to EN 60664-1	-	II
• Degree of protection	housing when mounted	-	IP20

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