

M/S48.1  
KNX 48CH Dry Contact Module  
Hardware Version: A



Datasheet

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Figure 1. KNX 48CH Dry Contact Module

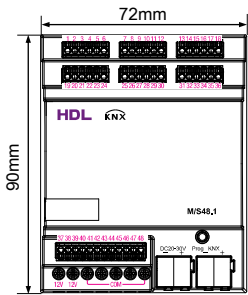


Figure 2. Dimensions - Front View

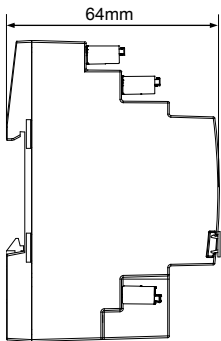
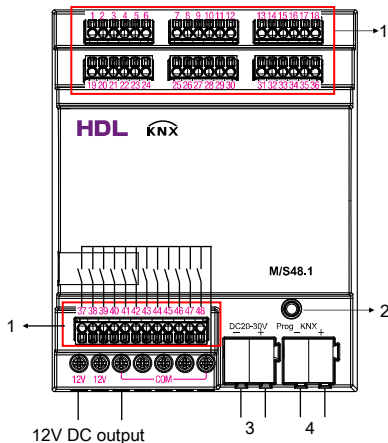


Figure 3. Dimensions - Side View



Take the connection of dry contact CH37-48 as an example

Figure 4. Wiring

## Overview

KNX 48CH Dry Contact Module (See Figure 1) is a KNX standard protocol module with 48 dry contact channels, which enables control of lights, curtains, scenes, etc.

Its main features include:

- 48 dry contact channels, which enable to switch dry contact input and output
- Can be used to detect dry contacts, and can control switches, scenes, curtains, etc. when as input channel
- Output pulse signal to drive an LED status indicator when as output channel
- Supported dry contact types: mechanical switch and electronic switch
- Control types: switch control, curtain control, scene control, percentage control, logic control
- Supports up to 10 scenes, and up to 10 output targets can be set for each scene
- Logical relationships include: AND, OR, NAND, NOR, XOR.

## Components

Dimensions - See Figure 2 - 3

Wiring - See Figure 4

1. 48 dry contact channels
2. Programming button & LED indicator
3. 20-30V DC power input
4. KNX interface

## Installation

Installation - See Figure 5 - 7

- Step 1. Fix the DIN rail with screws.
- Step 2. Buckle the bottom cap of the KNX 48CH Dry Contact Module 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



## 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 contact our after-sales departments or our designated service agencies for your maintenance service. Product failures caused by private disassembly are not subject to this warranty.

## Package Contents

M/S48.1\*1 / Label\*5 / Datasheet\*1



Figure 5

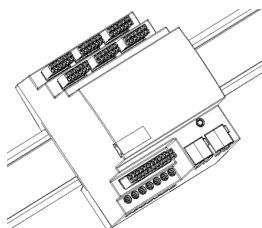


Figure 6

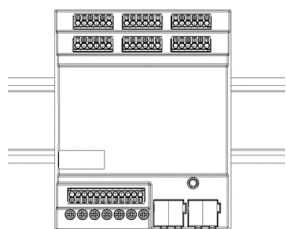


Figure 7

Figure 5 - 7. Installation

## Technical Data

### Basic Parameters

Working voltage	21~30V DC
Working current	3mA/30V DC
Auxiliary voltage	20-30V DC
Auxiliary current	10mA/24V DC
Dry contact channel	48 channels
Communication	KNX
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	72mm×90mm×64mm
Net weight	143g
Housing material	PA66
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	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.

## KNX Cable Guide

KNX	KNX cable
-	Black
+	Red

#### Technical support

E-mail: [hdtickets@hdlautomation.com](mailto:hdtickets@hdlautomation.com)

Website: <https://www.hdlautomation.com>