

M/DM02.1 KNX 2CH 3A MOSFET Dimming Actuator
 M/DM04.1 KNX 4CH 1.5A MOSFET Dimming Actuator
 M/DM06.1 KNX 6CH 1.5A MOSFET Dimming Actuator
 Hardware Version: B



Datasheet

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File Edition: A

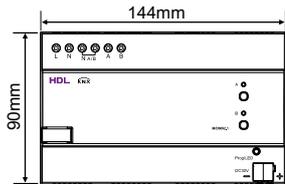


Figure 1. KNX 2CH 3A MOSFET Dimming Actuator

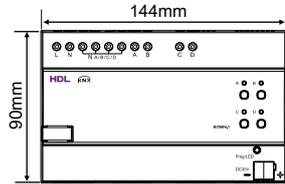
Figure 2. KNX 4CH 1.5A MOSFET Dimming Actuator



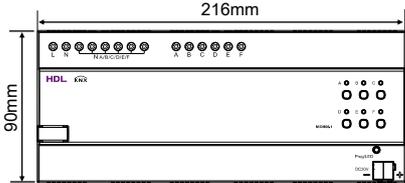
Figure 3. KNX 6CH 1.5A MOSFET Dimming Actuator



KNX 2CH 3A MOSFET Dimming Actuator
 Figure 4. Dimensions - Front View



KNX 4CH 1.5A MOSFET Dimming Actuator
 Figure 5. Dimensions - Front View



KNX 6CH 1.5A MOSFET Dimming Actuator
 Figure 6. Dimensions - Front View

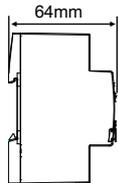
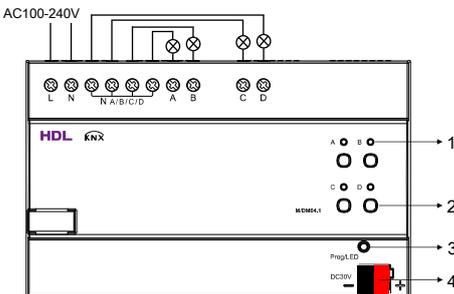


Figure 7. Dimensions - Side View



Take the connection of KNX 4CH 1.5A MOSFET Dimming Actuator as an example

Figure 8. Wiring

Overview

KNX MOSFET Dimming Actuator (See Figure 1-3) has 3 types (2CH 3A, 4CH 1.5A, and 6CH 1.5A) of output circuits, which supports multiple application functions. This series of dimming actuators are in full compliance with European Safety Standards and KNX standard protocol.

Its main functions include:

- 3 types of output circuits: 2, 4 and 6 channels of dimming actuator.
- Supports leading and trailing edge mode. It is recommended to adopt the leading edge dimming mode for inductive loads, and the trailing edge dimming mode is recommended for other load types.
- Parallel channels can form heavy current output.
- Manual control: Manual switching, dimming for each channel.
- Application functions: Statistics ON time, Status response, Status recovery, Short-circuit protection, Overload protection, Overheat protection, Staircase light, Flashing light, Scene control, Scene dimming, Read temperature, Overheat alarm, Dimming higher limit control, Dimming lower limit control, Sequence control, Heating control (PWM).

Components

Dimensions - See Figure 4 - 7

Wiring - See Figure 8

1. LED indicator, indicates the status of the channel
2. Manual control button
3. Programming button/indicator:
Red LED indicates programming mode.
4. KNX interface.

Note(s)

- Programming - The device is compliant with the KNX standard and the parameters are set by the Engineering Tool Software (ETS).
- Load types - Incandescent light, halogen light, dimmable LED light, etc.
- Check connections - Re-tighten all connections after installation.
- Output current - Total current of KNX 2CH 3A(4CH 1.5A) MOSFET Dimming Actuator: Less than 6A.
Total current of KNX 6CH 1.5A MOSFET Dimming Actuator: Less than 9A.

Safety Precautions

- The installation and testing for the product must be carried out by HDL Automation Co., Ltd. or its appointed service agencies. The electric construction shall comply with local laws and safety regulations.
- The device should be installed with DIN rail in DB box. HDL will not be responsible for any consequence caused by the inexpert or faulty installation and wiring methods, which are not in accordance with the instructions contained in this operating instruction.
- Please do not privately disassemble or replace any parts of the product. Otherwise, it may cause mechanical fault, electric shock, fire or personal injuries.
- 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/DM02(4/6).1*1 / Label*5 / Datasheet*1



Figure 9

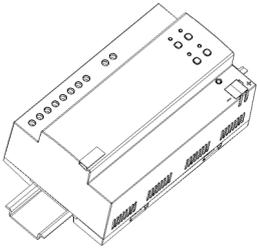


Figure 10

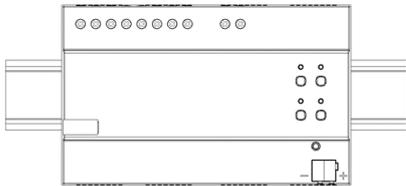


Figure 11

Figure 9 - 11. Installation

Technical Data

Basic Parameters

Working voltage	21~30V DC
Working current	M/DM02.1: 20mA/30V DC M/DM04.1: 20mA/30V DC M/DM06.1: 25mA/30V DC
Input voltage	AC100-240V (50/60Hz)
Communication	KNX
Cable diameter of KNX terminal	0.6 - 0.8mm
User control	Manual operation for each channel
Line in/Line out terminals	2.5 - 4mm ²
Output channel	M/DM02.1: 2CH, 3A/CH M/DM04.1: 4CH, 1.5A/CH M/DM06.1: 6CH, 1.5A/CH
Total output current	M/DM02.1: 6A Max. M/DM04.1: 6A Max. M/DM06.1: 9A Max.

External Environmental

Working temperature	-5°C~45°C
Working relative humidity	≤90%
Storage temperature	-20°C~60°C
Storage relative humidity	≤93%

Specifications

Dimensions	M/DM02.1: 90×144×64(mm) M/DM04.1: 90×144×64(mm) M/DM06.1: 90×216×64(mm)
Net weight	M/DM02.1: 405g M/DM04.1: 412g M/DM06.1: 521g
Housing material	Flame-retardant nylon
Installation	35mm DIN rail installation (See Figure 9 - 11)
Protection rating (Compliant with EN 60529)	IP20

Approved

CE, RoHS

KNX

KNX Cable Guide

KNX	KNX Cable
-	Black
+	Red

Installation

Installation - See Figure 9 - 11 (Take HDL-M/DM04.1 as an example)

Step 1. Fix the DIN rail with screws.

Step 2. Buckle the bottom cap of MOSFET Dimming Actuator 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.

Technical support

E-mail: hdtickets@hdlautomation.com

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

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