HDL-MR0416.431

4CH 16A High Power Switch Actuator

buspro

Datasheet

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Figure 1. 4CH 16A High Power Switch Actuator

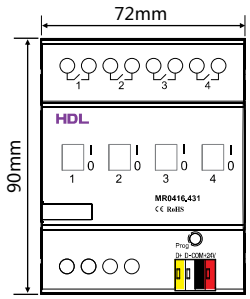


Figure 2. Dimensions - Front View

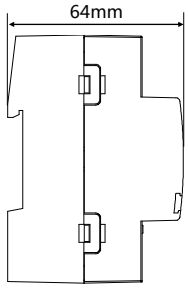


Figure 3. Dimensions - Side View

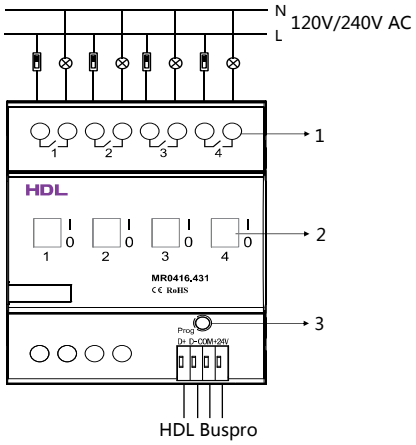


Figure 4. Wiring

Overview

4CH 16A High Power Switch Actuator (See Figure 1) has 4 channels(16A for each channel) and 50A magnetic latching relay. With low power consumption and long lifetime, the module has manual control switches and supports scene and sequence control.

Functions

- 4-channel relay output unit
- Scene control and sequence control
- Up to 4 separate zones
- 8 scenes for each zone, scene running time up to 60 minutes
- 2 sequences for each zone, up to 4 steps for each sequence
- Light protection delay for each channel (0-60 minutes)
- Mass turn-on delay for each channel(0-25 seconds)
- Manual switch for each channel
- Stair lamp function of the channel settable
- Selected scene or scene before power off automatically activated when device restarts
- Specified scene or no operation for options when power off
- HDL Buspro communication
- Supports online upgrade

Important Notes

- Buspro cable - CAT5E or dedicated HDL Buspro cable
- Buspro connection - Series connection (hand-in-hand recommended).
- Maximum current for each output channel: 16A
- One 16A breaker for each channel for protection

Product Information

Dimensions - See Figure 2 - 3

Wiring - See Figure 4

1. Connect to load
2. Direct connection switch
3. Programming button & module indicator

Indicator flashes when device is in normal working mode. Press the button for 3 seconds, then the ID can be read and modified via HDL Buspro Setup Tool.

Installation - See Figure 5 - 7

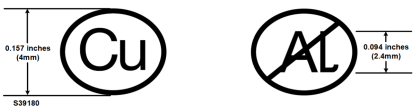
Step 1. Fix the DIN rail with screws.

Step 2. Buckle the bottom cap of the 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.

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.
- It is not allowed to exceed the range.
- CAUTION - Risk of Electric Shock - More than one disconnect switch may be required to de-energize the equipment before servicing.
- The marking appears on the device, shown below shall be used to indicate that the device is for use with copper wire. The marking shall be legible with letters at least 2.4 mm high. “Use copper wire only”, “Cu wire only” or equivalent wording, or a marking containing both the symbols as the illustrations.



Package Contents

HDL-MR0416.431*1 / Buspro connector*1 / Label*5 / Datasheet*1



Figure 5

1

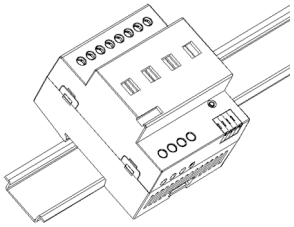


Figure 6

2

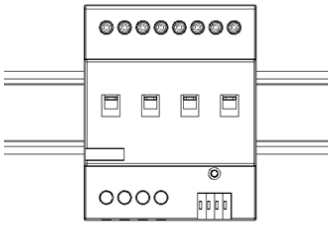


Figure 7

Figure 5 – 7. Installation

Technical Data

Basic Parameters	
Working voltage	24~30V DC Class 2
Working current	35mA/24V DC
Input voltage	120V/240V AC (50/60Hz)
Output channel	4CH/16A
Relay	50A Magnetic latching relay
Maximum current of each channel	16A
Electronic life time of relay	>60000 (Resistance load)
Protection	Connect a breaker in each channel
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	248g
Housing material	Nylon, PC
Installation	35mm DIN rail installation (See Figure 5 - 7)
Protection rating (Compliant with EN 60529)	IP20

Recommended Load Types and Power
240V, 16A, Resistive, 100,000 cycles, 40°C;
240V, 16FLA/96LRA, Motor, 30,000 cycles, 40°C;
240V, 16A, Standard Ballast, 30,000 cycles, 40°C;
240V, 16A, Electronic Ballast, 6,000 cycles, 40°C;
120V, 16FLA/96LRA, Motor, 30,000 cycles, 40°C;
120V, 16A, Electronic Ballast, 6,000 cycles, 40°C;
120V, 16A, Standard Ballast, 30,000 cycles, 40°C;

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.

HDL Buspro Cable Guide

HDL Buspro	HDL Buspro Cable	CAT5/CAT5E
DATA+	Yellow	Blue/Green
DATA-	White	Blue white/Green white
COM	Black	Brown white/Orange white
24V DC	Red	Brown/Orange

Technical support
E-mail: support@hdlautomation.com
Website: https://www.hdlautomation.com

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