HDL-MPR0116-E.40

1CH 16A Flush-mounted Switching Actuator (EU)

HDL-MPR0210-E.40

2CH 10A Flush-mounted Switching Actuator (EU)

buspro

Datasheet

Issued: November 30, 2020

File Edition: A

Figure 1. HDL-MPR0116-E.40

Figure 2. HDL-MPR0210-E.40

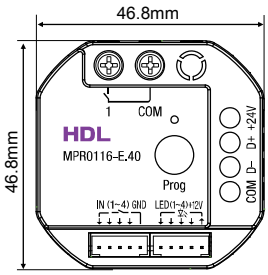


Figure 3. Dimensions - Front View

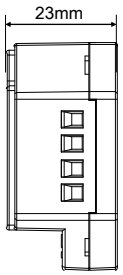


Figure 4. Dimensions - Side View

1CH 16A Flush-mounted Switching Actuator (EU)

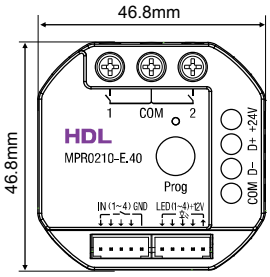


Figure 5. Dimensions - Front View

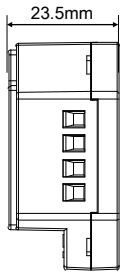
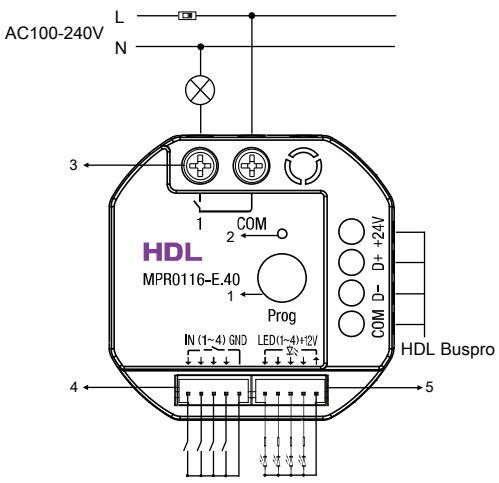


Figure 6. Dimensions - Side View

2CH 10A Flush-mounted Switching Actuator (EU)



Take the connection of HDL-MPR0116-E.40 as an example

Figure 7. Wiring

Overview

1CH 16A(2CH 10A) Flush-mounted Switching Actuator (EU) (See Figure 1-2) is a smart relay executive module installed in the wall box of the European standard panel. It has the characteristics of exquisite structure and rich circuits. The actuator adopts HDL Buspro protocol 485 Bus communication control, with 1CH 16A/2CH 10A relay control channel(s), 4 dry contact signal input channels and 4 LED signal output channels. In conjunction with the corresponding dry contact panel, the actuator enables smart control of electrical devices, for example, home lighting, curtain, fan, sockets, etc.

Its main features include:

- With 1CH 16A/2CH 10A relay switch control channel(s)
- With 4 dry contact switch signal input channels, 4 LED switch signal output channels
- With programming button and programming indicator, short press the programming button to control all relay channels on/off

Components and Operation

Dimensions - See Figure 3 - 6

Wiring - See Figure 7

1. Programming button: short press the programming button to control all relay channels on/off
2. Programming button indicator
3. Connection terminal of relay channels
4. Dry contact input interface
5. LED output interface

Installation

Installation - See Figure 8 - 9 (Take HDL-MPR0116-E.40 as an example)

Step 1. Mount the EU wall box in the wall and draw the AC power cable and Buspro cable.

Step 2. Make correct wiring for AC power cable and Buspro cable.

Step 3. Put the actuator in wall box with facing outward, and bend the AC power cable and Buspro cable into the wall box.

Step 4. Plug in the cable between the actuator and the dry contact panel.

Step 5. Mount the panel on the wall box with screws.

Note(s)

- Buspro cable - CAT5E or HDL dedicated Buspro cable
- Buspro connection - Hand-in-hand recommended
- Installation - EU Wall box. If the actuator is installed with the panel, it is recommended to install in the wall box at the edge (not hand-in-hand connection position), and the back of the panel should not thicker than 25mm. The specific use is determined according to the actual wiring plan.
- Please ensure correct wiring and connection.
- To protect the actuator and loads, it is recommended to connect a 10A/16A circuit breaker to each relay channel.
- Each LED output channel needs to be connected a resistor in series to the LED (680Ω-1kΩ resistor is recommended).
- If a resistive load is connected to the relay channel, the maximum load is 16A, and if a capacitive load is connected to the relay channel, the maximum load is 10A. (HDL-MPR0116-E.40)
  If a resistive load is connected to the relay channel, the maximum load is 10A, and if a capacitive load is connected to the relay channel, the maximum load is 6A. (HDL-MPR0210-E.40)
- Please use the actuator according to technical data.

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.
- 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

HDL-MPR0116(0210)-E.40*1 / Cable*2 / Datasheet*1

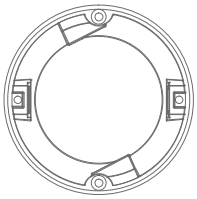


Figure 8

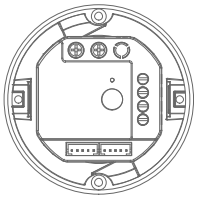


Figure 9

Figure 8 - 9. Installation

Technical Data

Basic Parameters	
Working voltage	15~28V DC
Working current	HDL-MPR0116-E.40: 95mA/24V DC HDL-MPR0210-E.40: 65mA/24V DC
Relay channel	HDL-MPR0116-E.40: 1CH, 16A/CH (AC100-240V, 50/60Hz) HDL-MPR0210-E.40: 2CH, 10A/CH (AC100-240V, 50/60Hz)
Dry contact	4CH dry contact input
LED	4CH LED output, 12mA/CH
Communication	HDL Buspro
Cable diameter of Buspro 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	HDL-MPR0116-E.40: 46.8mm×46.8mm×23mm HDL-MPR0210-E.40: 46.8mm×46.8mm×23.5mm
Net weight	HDL-MPR0116-E.40: 45g HDL-MPR0210-E.40: 46g
Housing material	Flame retardant PC
Installation	Wall box (Figure 8 - 9)
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.

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: hdltickets@hdlautomation.com
Website: https://www.hdlautomation.com