

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

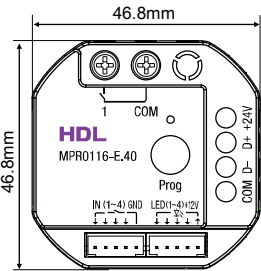


Figure 3. Dimensions - Front View

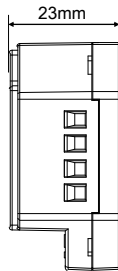


Figure 4. Dimensions - Side View

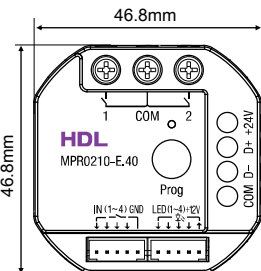


Figure 5. Dimensions - Front View

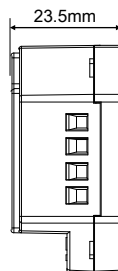
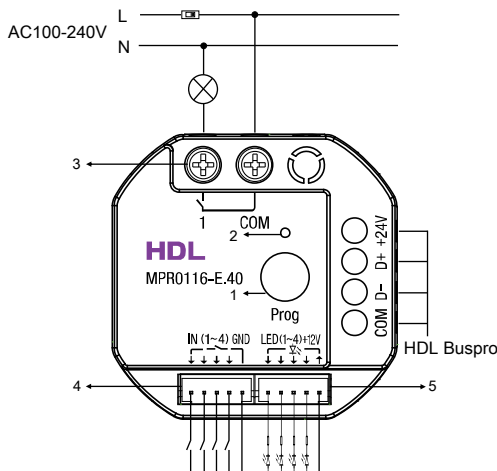


Figure 6. Dimensions - Side View



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 be 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

Technical Data

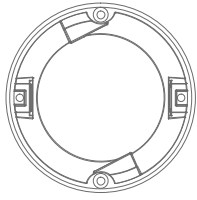


Figure 8

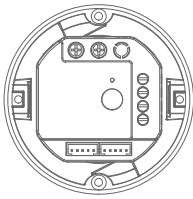


Figure 9

Figure 8 - 9. Installation

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°C~45°C |
| Working relative humidity | ≤90% |
| Storage temperature | -20°C~60°C |
| 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 | 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.

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

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