Parameters

Electrical Parameters:

Working power	DC15~30V
Static power consumption	15mA/DC24V
Dynamic power consumption	40mA/DC24V
Output channel	16CH/10A
Relay	16A magnetic latching relay
Max current in each channel	10A
Electronic life time of relay	>60000 (Resistance Load)
Protection	Connect a breaker in each channel

Environmental Conditions:

Working temperature	-5℃~45℃
Working relative humidity	Up to 90%
Storage temperature	-20℃~+60℃
Storage relative humidity	Up to 93%

Approved

CE
RoHS

Product information :

Dimensions	216×90×66 (mm)
Net Weight	605g
Housing material	Nylon, PC
Installation	35mm DIN rail installation
Protection degree	IP20
Installation position	Distribution box (DB)

Installation Step

- 35mm DIN rail Installation, inside DB box.
- Mark up for each output connection cable.
- Connect the load and HDL Buspro cable.
- Check if there is any short circuit in output connection cable.
- Check the HDL Buspro connection, avoid any mistake.
- Isolate the high power and low power.
- Tighten the screw again for all of terminal.
- Recommended load type and power.

Motors:	1H（1HP=746W）
Incandescent lamp load:	1600 W
Inductive transformer :	1000 W
Electronic transformer:	800 W
Halogen lamp 230 V	1600 W
Mercury-vapour lamp	
* Uncompensated luminaire:	1000 W
* Parallel compensated :	800 W
Fluorescent lamp T5 / T8	
* Uncompensated luminaire:	1000 W
* Parallel compensated :	800 W
* DUO lamp :	800 W
Dulux lamp	
* Uncompensated luminaire:	1000 W

Overview

HDL-MR1610.433 Intelligent Relay Module, has 16A magnetic launching relay, zero power consumption and high reliability. The communication interface is HDL Buspro Pro , which is based on RS485 protocol.

Functions

- 16-channel relay output unit.
- Scene controller function available.
- Up to 16 separate areas.
- Each area has 32 scenes with maximum running time of 60 minutes.
- Each channel has light protection delay (0-60 minutes).
- Each channel has batch turn-on delay(0-25 seconds).
- Each channel has manual control for relay unit.
- You can select specified scene or scene before power off when the device restarts.
- Supports easy programming and HDL Buspro online upgrading.
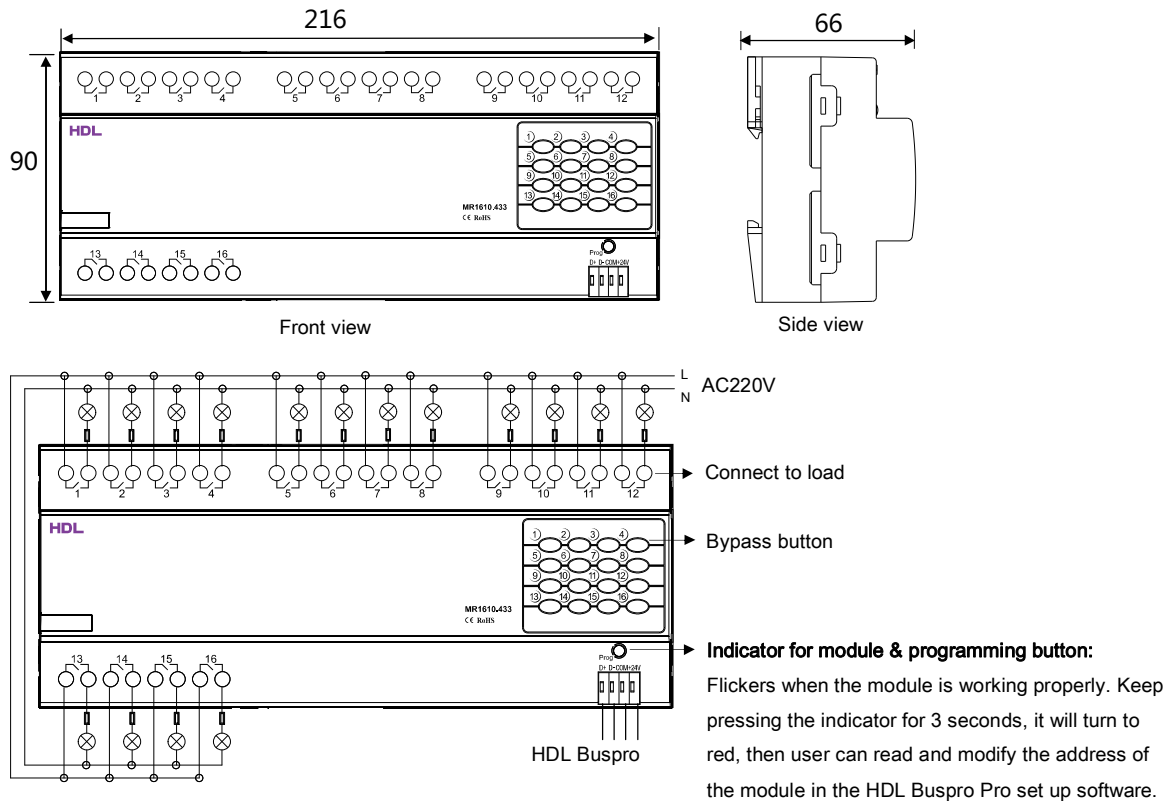- Communication: HDL Buspro.

Important Notes

- Buspro cable - HDL Buspro/KNX cable, 0.8mm single-core copper cable.
- Buspro connection - Series connection (hand-in-hand).
- Output channel - The following list is the recommended load for output channel. To protect the relay, please connect a 10A breaker for each channel.

HDL Buspro Definition for Cable

HDL Buspro	HDL Buspro/KNX
DC24V	Red
COM	Black
DATA-	White
DATA+	Yellow

Professional Home and Building Automation
www.hdlautomation.com(V1.0-150526)

Do you need help? Contact with us
support@hdlchina.com.cn

1/2

Dimensions and Wiring

216

90

Front view

66

Side view

L
N AC220V

→ Connect to load

→ Bypass button

→ **Indicator for module & programming button:**
Flickers when the module is working properly. Keep pressing the indicator for 3 seconds, it will turn to red, then user can read and modify the address of the module in the HDL Buspro Pro set up software.

HDL Buspro

Steps for easy program mode :

1. Press the programming button for about 10s, all output channel will be turned off automatically, the indicator will flicker fast
2. Now the panel shows "programming", then press Button 9, 10 of DLP switch together, the panel will display "external programming".
3. Keep pressing the indicator for 2s, it will change the load, short press the indicator will change the load's status.
   Note: The programming channel is from channel 1 to channel 16, and then it will go back to the channel 1. If you want to set multiple channels, the panel must be set to "Combination mode".
4. Choose a button which is used to control the channel. Keep pressing the button, it will cover the original targets, short press the button, it will add the relay loads.
5. Keep pressing the Indicator for 10 seconds to finish the programming.

This function is to be used in conjunction with the new generation DLP.

Safety Precautions   ⚠ WARNING

- The screw down strength should not exceed 0.4Nm.
- Connect a breaker or fuse with each channel.
- Current in each channel is less than 10A.
- Do not make wrong connection on Buspro interface, it will damage the Buspro interface of this module.
- Never let liquid get into this module, it will damage this device.
- Do not get AC220V voltage into Buspro wire , it will damage all devices in the system.
- Ensure good ventilation.
- Avoid contact with liquids and aggressive gasses.

Packing List

- Datasheet   ×1
- 10A Relay Module (HDL-MR1610.433)   ×1

Professional Home and Building Automation
www.hdlautomation.com(V1.0-150526)

Do you need help? Contact with us
support@hdlchina.com.cn

2/2