

# Datasheet

#### **Parameters**

Electrical Parameters:		
Working power	15~30V Class 2	
Static power consumption	15mA/DC24V	
Dynamic power consumption	40mA/DC24V	
Output channel	4CH/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°C~45°C	
Working relative humidity	Up to 90%	
Storage temperature	-20°C~+60°C	
Storage relative humidity	Up to 93%	

#### **Approved**

CE, RoHS, UL,CQC

Product Information:		
Dimensions	72×90×66 (mm)	
Net weight	252(g)	
Housing material	Nylon, PC	
Installation	35mm DIN rail installation	
Protection rating	IP20	
Installation position	Distribution box (DB)	

## **Installation Steps**

- 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 mistakes.
- Isolate the high power and low power.
- Tighten the screw again for all of terminal
- Ratings for each output contacts:
  - 250V, 10A, Resistive, 100,000 cycles, 40°C;
  - 250V, 1HP (8FLA/48LRA), Motor, 6,000 cycles, 40°C;
  - 250V, 6A, Tungsten, 6,000 cycles, 40°C;
  - 250V, 6A, Standard Ballast, 6,000 cycles, 40°C;
  - 120V, 0.5HP (9.8FLA/58.8LRA), Motor, 20,000 cycles, 40°C;
  - 120V, 10A, Tungsten, 20,000 cycles, 40°C;
  - 120V, 10A, Electronic Ballast, 20,000 cycles, 40°C;
  - 120V, 10A, Standard Ballast, 6,000 cycles, 40°C;

## Overview



HDL-MR0410.431 Intelligent relay module, has 16A magnetic launching relay, zero power consumption and high reliability. The communication interface is HDL Buspro , which is based on RS485 protocol.

#### **Functions**

- 4-channel relay output unit.
- Scene controller function available.
- Up to 4 separate areas.
- Each area has 8 scenes, maximum running time for scene is 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.
- HDL Buspro online upgrading.
- Communication: HDL Buspro.

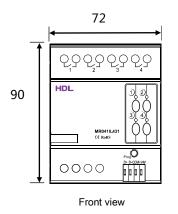
## **Important Notes**

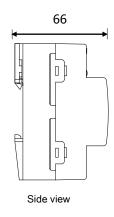
- Buspro cable HDL Buspro/KNX cable, 0.8mm singlecore copper cable.
- Buspro connection Series connection (hand-in-hand).
- Output channel The following list is the recommended load for output channel. To protect the relay, please connect a 10A breaker for each channel.
- Recommended load type and power.

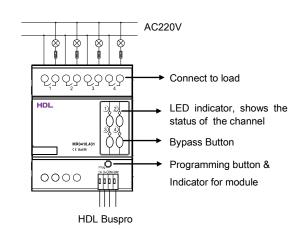
## **HDL Buspro Cable Guide**

CAT5/CAT5E	HDL Buspro	HDL Buspro/KNX
Brown/Orange	DC24V	Red
Brown white/Orange white	COM	Black
Blue white/Green white	DATA-	White
Blue/Green	DATA+	Yellow

## **Dimensions and Wiring**







#### Indicator for module and easy programming mode

Indicator for module: 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.

## **Safety Precautions**



- 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 liquids 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 gases.
- CAUTION Risk of Electric Shock More than one disconnect switch may be required to de-energize the equipment before servicing

## Package Contents

Datasheet \*1 /Device\*1 / Bus terminal \*1