

Parameters

| Electric Parameters: | |
|-------------------------------|-----------------------------------|
| Working power | DC15~30V |
| Static power consumption | 10mA/DC24V |
| Dynamic power consumption | 35mA/DC24V |
| Output channel | 16CH/16A |
| Relay | 50A magnetic latching relay |
| Max current in each channel | 16A |
| 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 | |
| Production Information: | |
| Dimensions | 288×90×66 (mm) |
| Net Weight | 904g |
| Housing material | Nylon, PC |
| Installation | 35mm DIN rail installation |
| Protection degree | IP20 |

Important Notes

- Bus cable - HDL Buspro/KNX cable, 0.8mm single-core copper cable.
- Bus 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 16A breaker for each channel.
- Recommended Load type and Power

| | |
|-------------------------------|-----------------|
| Motors: | 4H (1HP=746W) |
| Incandescent lamp load: | 3500 W |
| Inductive transformer : | 1800 W |
| Electronic transformer: | 2000 W |
| Halogen lamp 220 V | 3500 W |
| Mercury vapor lamp | |
| * Uncompensated lamp : | 2800 W |
| * Parallel compensated lamp : | 2800 W |
| Fluorescent lamp T5 / T8 | |
| * Uncompensated lamp : | 3500 W |
| * Parallel compensated lamp : | 2000 W |
| * DUO lamp : | 2000 W |
| Dulux lamp | |
| * Uncompensated lamp : | 1500 W |
| * Parallel compensated lamp : | 1500 W |

Overview



HDL-MR1616.434 Intelligent Relay Module, has 50A magnetic launching relay, zero power consumption and high reliability. The communication interface is HDL Buspro 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 area has 2 sequences, each sequence has 12 steps.
- 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.

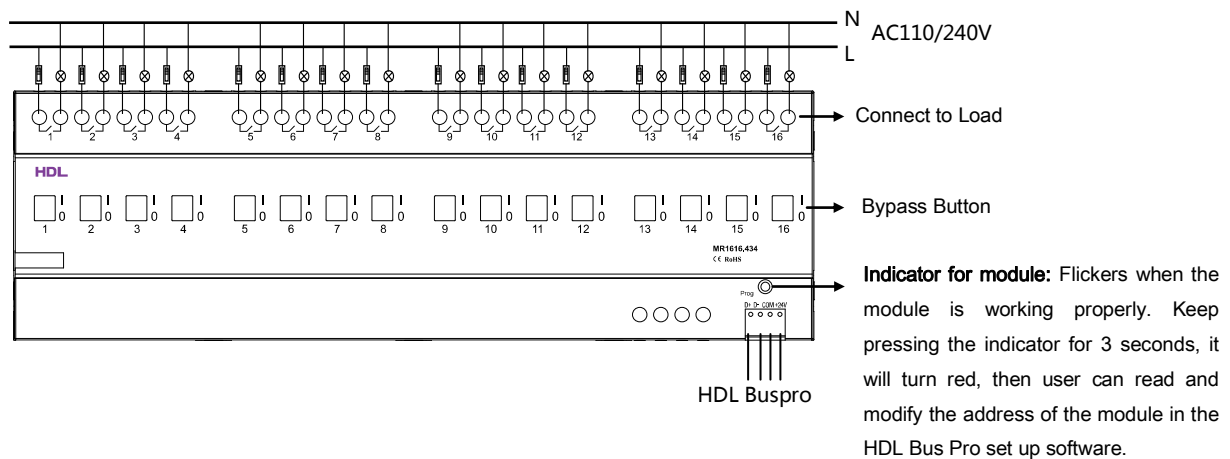
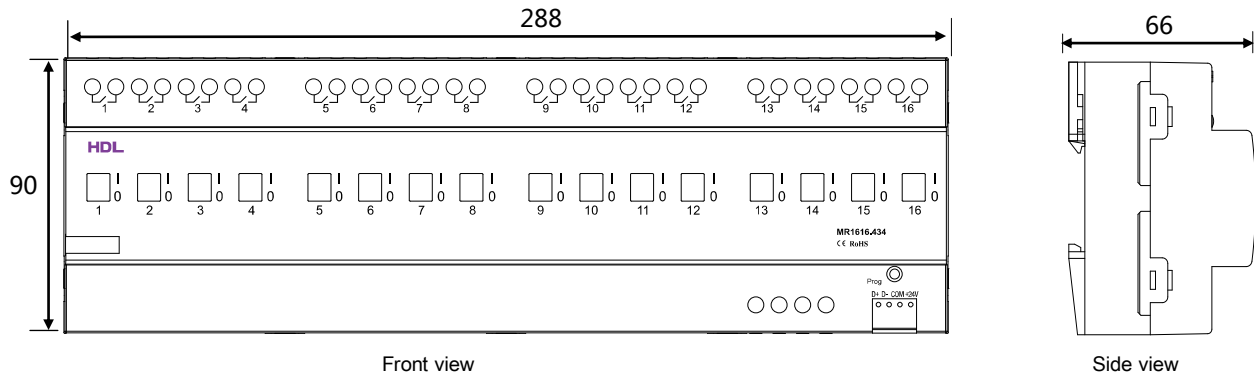
Installation Step

- 35mm DIN rail installation, inside DB Box.
- Mark up 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.

HDL Buspro Definition for Cable

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

Dimensions and Wiring



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 attention



- The screw down strength should not exceed 0.4Nm.
- Connect a breaker or fuse with each channel.
- Current in each channel is less than 16A.
- Installation position: Distribution box (DB).
- Do not make wrong connection on Bus interface, it will damage the Bus interface of this module.
- Never let liquids get into module, it will damage this device.
- Do not get AC voltage into Bus wire, it will damage all devices in the system.
- Ensure good ventilation.
- Avoid contact with liquid and aggressive gases.

