

Parameters

Electrical parameters	
Working Voltage	21~30VDC Class 2
Communication	KNX/EIB
Dynamic current	< 15mA
KNX terminals	KNX Bus Terminal – (Red /Grey) 0.6 – 0.8mm Diameter Single Core
Rated switch voltage	250V AC Supply
Rated switch current	10A lighting load, Max inrush 500A
Operation times	>1000000
Output Terminals	Line In, Line Out for each channel 2.5-4mm ²
Output Current	4CH/10A,8CH/10A,12CH/10A
capacity	<300μF

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

KNX

Product information

Dimensions	H90mm x W72mm x D 66mm(M/R4.10.1)
	H90mmx W144mm x D 66mm(M/R8.10.1)
	H90mmxW216mmx D 66mm(M/R12.10.1)
Net weight	256g (M/R4.10.1)
	576g (M/R8.10.1)
	822.6g (M/R12.10.1)
Housing material	Flame-retarded nylon
IP rating	IP 20

Safety Precautions



- Screw down strength is less than 0.4Nm
- Connect a breaker or fuse into each channel
- Current in each channel is less than 10A
- Installation Position: Distribution Box (DB)
- Do not make wrong connection on Bus interface, it will damage the Bus interface this module
- Do not get AC220V voltage into KNX/EIB Bus wire , it will damage all of devices in system
- Assure a good ventilation circumstances
- Rain, liquid, and aggressive gas are not allowed to close to it
- **CAUTION - Risk of Electric Shock - More than one disconnect switch may be required to de-energize the equipment before servicing**

Overview



HDL/KNX-EIB BUS relay series products are fully compliant with European safety standards and protocols for High-power switching KNX equipment, internal use of 10A High-current magnetic relay, zero power consumption and long life are some of the key features.

Functions

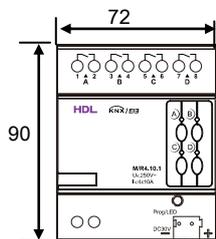
- The switch Actuators can drive for 4, 8 and 12 channels loads.
- The maximum 10 A on every output channel, also can manually operation.
- The module functions : Statistical ON time ,Status response ,Status Recovery , Staircase light, Flashing ,ON/OFF delay, Protection delay ,Scene Control, Threshold Function , Curtain Control and so on.
- Logic Function: AND, OR, XOR, Gate
- Heating Function: PWM(1bit/1byte) control output

Installation Steps

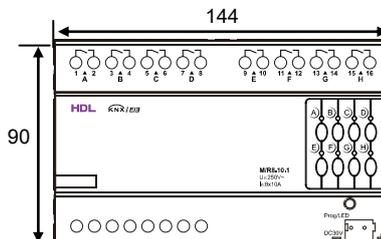
- Mount MCB for circuit short and overload protection on each channel
- Labeling for AC power wires, loads wires and KNX Bus wire
- Mount the device on a DIN rail of DB
- Connect wires for loads and AC power .
- Make sure there is no circuit short or open.
- Make sure the KNX cable type is correct and has no circuit short
- Connect bus cables. Make sure the color of wire same as definition of Bus
- Tidy the all Wire and separate Bus wire from AC power wire



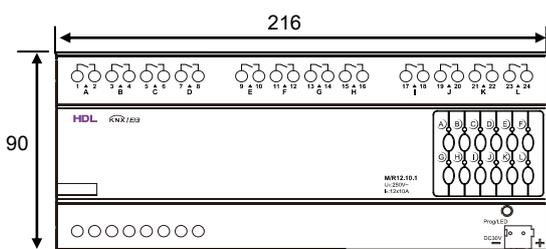
Layout and Wirings



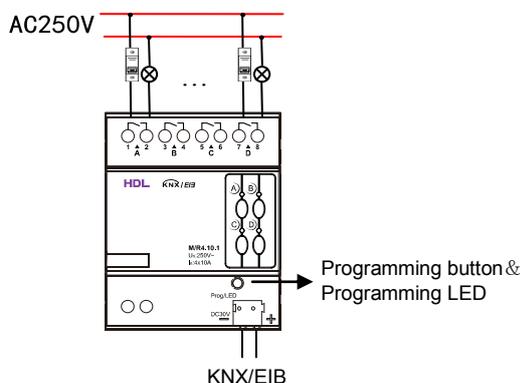
M/R4.10.1



M/R8.10.1



M/R12.10.1



Important Notes

- **Special Programming** – This device is designed for professional KNX installation. It can only be programmed by ETS software.
- **Check Connections** – Re-tighten all connections after installation.
- **Output Circuit** – The load on the switched circuits must not exceed the specified capacity of 10A, these circuits should be fed via a 10A fuse/circuit breaker.
- **Three Phase Connection** – this Relay module support 3 phase input, channel 1,4,7 for L1. channel 2,5,8 for L2. channel 3,6 for L3
- **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;