HDL KNX Datasheet | Switch 16A Actuator (V1.1)

Parameters

Electrical Parameters

Working Voltage	21~30VDC
Communication	KNX/EIB
DC current	＜15mA
KNX terminals	KNX Bus Terminal – 0.6 – 0.8mm Diameter single-core copper cable
Rated switch voltage	250V AC/440VAC Supply
Rated switch current	16A lighting load, Max inrush 500A
Operation times	>1000000
Output Terminals	Line In, Line Out for each channel 2.5-4mm²
Output Current	4CH/16A,8CH/16A,12CH/16A,16CH/16A
capacity	<300μF

Environmental Conditions

Working temperature	-5℃~45℃
Working relative Humidity	Up to 90%
Storage temperature	-25℃~+55℃
Storage relative humidity	Up to 93%
Approved	
CE, RoHS	
KNX	

Product information

Dimensions	H90mm x W72mm x D 66mm(M/R4.16.1)
	H90mm x W144mm x D 66mm(M/R8.16.1)
	H90mm x W216mm x D 66mm(M/R12.16.1)
	H90mm x W288mm x D 66mm(M/R16.16.1)
Housing material	Flame-retarded nylon
IP class	IP 20

Safety attentions ⚠ WARNING

- The screw down strength should not exceed 0.4Nm.
- Connect a breaker or fuse into 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
- Do not get AC voltage into KNX/EIB Bus wire , it will damage all devices in the system.
- Ensure good ventilation.
- Avoid contact with the liquids and aggressive gases.

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 50A High-current magnetic relay, zero power consumption and long life are some of the key features.
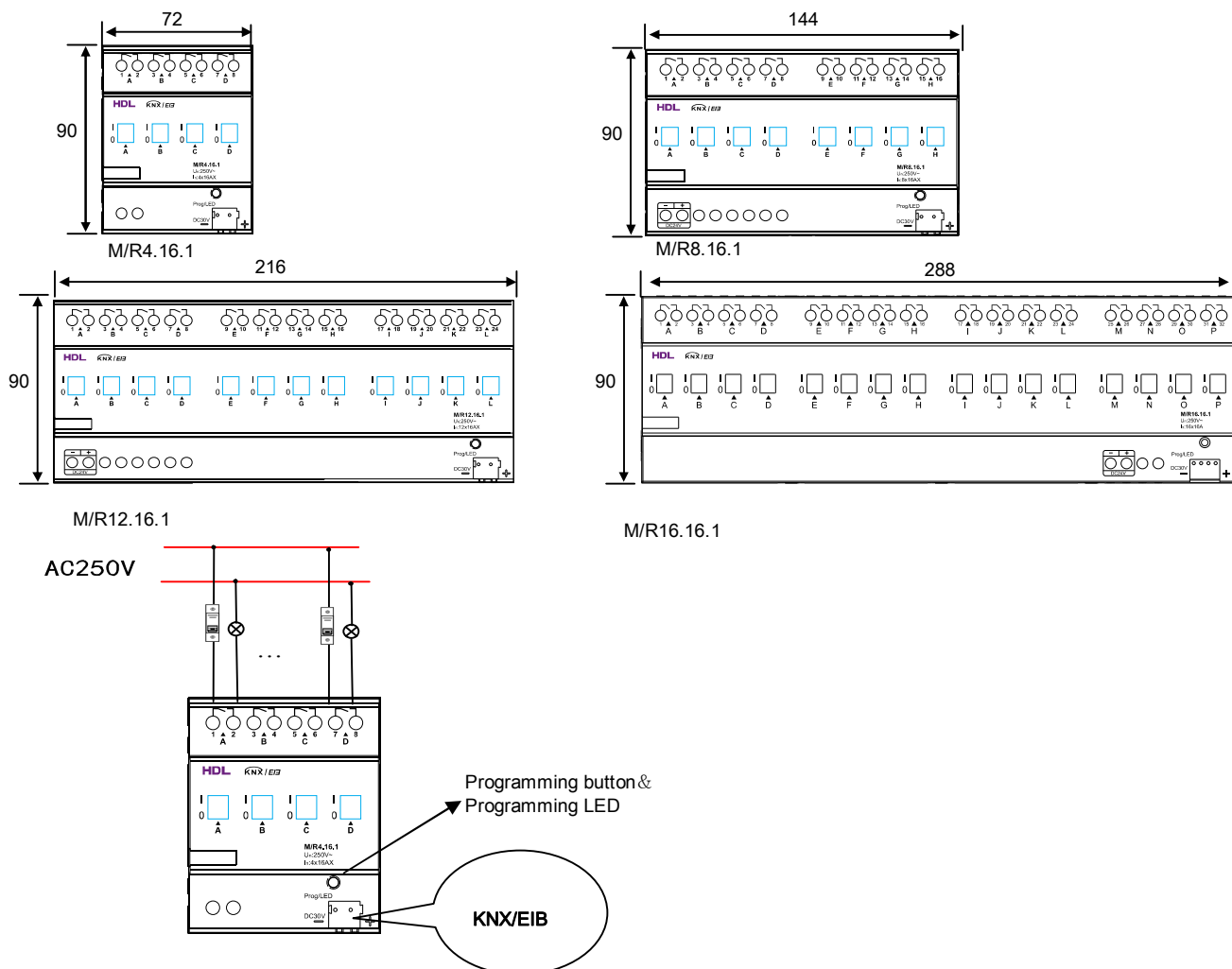
Functions

- The switch Actuators can drive for 4, 8 ,12and 16 channels loads.
- The maximum 16 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.

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Layout and Wiring

M/R4.16.1

M/R8.16.1

M/R12.16.1

M/R16.16.1

AC250V

Programming button & Programming LED

KNX/EIB

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 16A, these circuits should be fed via a 16A 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
- **Recommend load type and watt (@240VAC) as below**

Motors:	3KW	Incandescent lamp load:	3500W
Inductive transformer :	1800 W	Electronic transformer:	2000 W
Halogen lamp 230 V :	3500 W	Uncompensated luminaire:	2800 W
Parallel compensated :	2800 W	Uncompensated luminaire:	3500 W
Parallel compensated :	2000 W	DUO lamp :	2000 W
Uncompensated luminaire :	1500 W	Parallel compensated :	1500 W

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