



# Datasheet Switch 10A Actuator

#### **Parameters**

Performance parameter				
Working Voltage	21~30VDC			
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-			
	4mm²			
Output Current	4CH/10A,8CH/10A,12CH/10A,16CH/10A			
	7011/10/1,0011/10/1,12011/10/1,10011/10/1			
capacity	<300µF			

Environmental Condition		
Working temperature	-5°C~45°C	
Working relative Humidity	10%to 98%	
Storage temperature	-40°C~+55°C	
Storage relative humidity	10% to 98%	

#### **Approve**

CE

KNX

Product information			
Dimension	H90mm x W72mm x D 66mm(M/R4.10.1)		
	H90mm x W144mm x D 66mm(M/R8.10.1)		
	H90mm x W216mm x D 66mm(M/		
	R12.10.1)		
	H90mm x W216mm x D 66mm(M/		
	R16.10.1)		
Housing material	Flame-retarded nylon		
IP class	IP 20		

# Safety attention



- 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 AC240V 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

Professional Home and Building Automation

#### 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 16A 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, 12 and 16 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

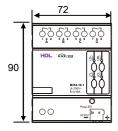
## **Installation Step**

- Mount MCB for circuit short and overload protection on each channel
- Labeling for AC power wires, loads wires and KNX Bus
- 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 cir-
- 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

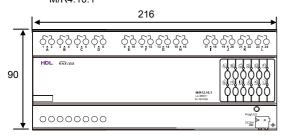




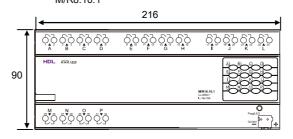
# Layout and Wiring



M/R4.10.1

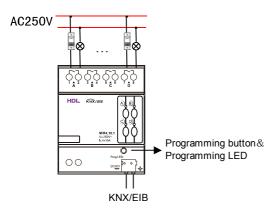


144 90 0000000 M/R8.10.1



M/R12.10.1

M/R16.10.1



### **Important**

- 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
- Recommend load type and watt (@240VAC) as below

Motors:	4HP	Motor:	1HP (1HP=746W)
Incandescent Lamp:	1600W	Inductive Transformer:	1000 W
Electric Transformer:	800 W	230V Halogen Lamp :	1600 W
Mercury Vapor Lamp			
*No Compensation Lamp:	1000 W	*Parallel Compensation Lamp:	800 W
Fluorescent Lamp T5 / T8			
*No Compensation Lamp	1000 W	*Parallel Compensation Lamp:	800 W
*DUO Lamp Series :	800 W	*No Compensation Lamp:	1000 W
*Parallel Compensation Lamp:	800 W		