# Datasheet

Leading Edge
TRIAC Dimmer
HDI -MD0403 432

#### **Parameters**

Electric Parameters:		
Working power	DC15~30V	
Power consumption	28mA/DC24V	
Output channel	4CH/3A	
Maximum output channel	10A	
current in total	IUA	
Fuse	8A	
TRIAC	25A TRIAC, Minimum Load 40w	
Dimming curves	Linear, 1.5 exponent, 2.0 exponent, 3.0	
	exponent	

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	144×90×66 (mm)
Weight	715(g)
Housing material	nylon
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)
- AC power Make sure input AC voltage match with setting in dimmer module
- Connect checking Check all connection after installation
- Output Channel Current of each channel can not exceed the prescribed current
- Fuse The fuse to replace the broken one must be of the same type(aR type)
- Load type Incandescent light, halogen, LED Light, etc
- The load must be suitable for leading edge dimming
- Make sure the working temperature of the Dimmer does not exceed 50 °C

#### **HDL Buspro Definition for Cable**

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

#### **Overview**



HDL-MD0403.432 4-channel 3A Dimmer , supports AC240V and AC110V power input. It has 4 output channels, each channel has a bypass button for manual control. There is fuse protection for each channel, the Dimmer will be protected in case of short circuit. LED indicator will show you which channel has short circuit

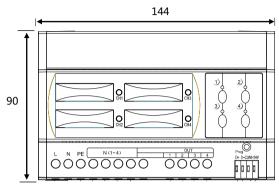
#### **Functions**

- Up to 4 separate areas; max 12 scenes for each area
- Up to 6 sequences and each sequence has 12 steps
- 4 Dimming curves, the dimming accuracy is 512 step
- Low, high, max threshold for each channel
- Bypass button for manual control available for each channel
- It is optional setting of choosing a designated scene or back to previous scene when power on again after power off
- Short circuit and over heat protection
- Max 3A of each channel, 8A fuse of each channel for protection (aR type)
- Supports HDL-Bus Pro online upgrading and easy programming mode

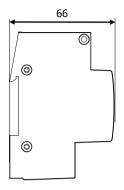
### **Installation Step**

- 35mm DIN rail Installation, inside DB Box
- Mark up each output connection cable
- Connect the load and HDL Buspro
- Check if there is any short circuit in output connection cable
- Check the HDL Buspro connection, avoid any mistake
- Isolate the high voltage and low voltage cable

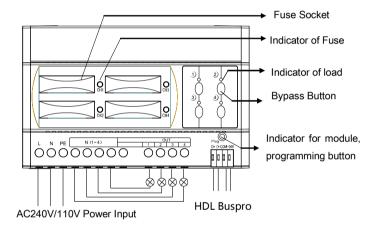
## **Dimensions and Wiring**



MD00403.432



Side view



#### Indicator for module and easy programming mode

**Indicator:** Flickers when the module is working properly. Keep pressing the indicator for 3 seconds, it turns red, then user can read and modify the address of the module in the HDL Bus Pro set up software.

#### Steps for easy programming mode:

- 1 Press the programming button for about 20S, all output channels will be turned off automatically, the indicator will flicker fast.
- 2 Press the 9 and 10 button of DLP switch together to enter programming mode.
- 3 Turn on the channel which needs to program by using the bypass button
- 4 Choose a button which is used to control the channel.
- 5 Press the indicator again, finish the programming.

This function is to be used with the new generation of DLP.

# Safety attention



- Fuse must be aR type, and current of each channel can not exceed the prescribed current
- Turn off the power of Dimmer when replace Fuse
- ( PE ) should be connected
- Make sure the working temperature of the Dimmer does not exceed 50 °C
- Current in each channel should not exceed 3A
- The screw down strength should not exceed 0.4Nm
- Power cable: AC in: 2.5mm<sup>2</sup> ~4mm<sup>2</sup>, Load:1.5mm<sup>2</sup> ~2.5mm<sup>2</sup>
- 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 the module. It will damage this device
- Do not get AC240V voltage into Bus wire , it will damage all devices in the system
- Ensure good ventilation
- Avoid contact with liquids and aggressive gases