

HDL-MDT0203.433 2CH 3A Trailing Edge Dimming Actuator
2路3A调光模块

buspro

Datasheet

产品说明书

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Edition V1.0.0



Figure 1. 2CH 3A Trailing Edge Dimming Actuator
图 1. 2路3A调光模块

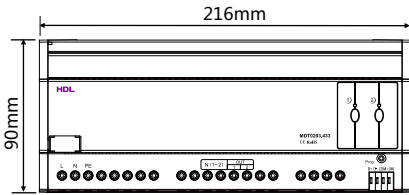


Figure 2. Dimensions - Front View
图 2. 尺寸图 - 正面

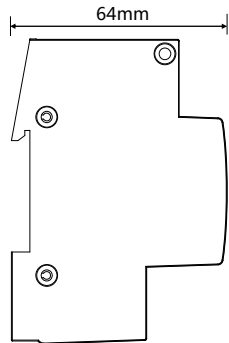


Figure 3. Dimensions - Side View
图 3. 尺寸图 - 侧面

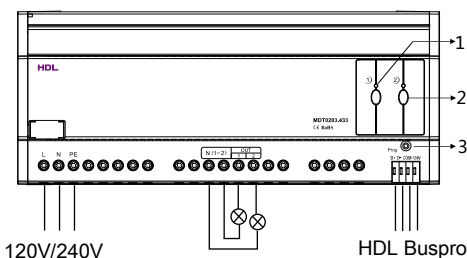


Figure 4. Wiring
图 4. 接线图

Overview

2CH 3A Trailing Edge Dimming Actuator (See Figure 1) is designed based on the MOSFET dimming technology. It has 2 output channels and each channel has a bypass button for manual control. Trailing edge and Leading edge dimming modes are optional in HDL programming software for each channel, which is applicable to different types of loads. The dimmer supports short circuit protection and over heat protection.

Functions

- LED status indicator and manual switch for each output channel are available;
- Up to 2 separate zones, and up to 12 scenes can be set for each zone;
- Up to 6 sequences, and 12 steps for each sequence;
- Low Threshold, High Threshold, Maximum Threshold are all available for each channel;
- Selected scene or scene before power off can be activated automatically when the device restarts
- Trailing edge and leading edge dimming modes are optional in HDL programming software for each channel;
- Short circuit and over heat protection;
- 4 dimming curves;
- Supports online update.

Important Notes

- Buspro cable - Dedicated HDL Buspro cable
- Buspro connection - Series connection (hand-in-hand recommended)
- The PE terminal should be connected.
- Connection checking - Check all connections after installation
- Output channel - The current of each channel can not exceed 3A, maximum current in total can not exceed 6A
- Dimmable electronic transformer, LED driver, other electronic driver are recommended to work in leading edge mode.
- Load types - Incandescent light, low-voltage halogen light, dimmable LED light, etc.
- Trailing edge mode is not allowed when the inductive load is connected.
- Make sure the working temperature of the dimmer does not exceed 45°C.

Product Information

Dimensions - See Figure 2 - 3

Wiring - See Figure 4

- LED indicator, indicates the status of the channel
- Manual switch
- Programming button & module indicator

Programming button & indicator: The indicator will flash when the device is in working mode. Keep pressing the button for 3 seconds, the ID can be read and modified via HDL Buspro Setup Tool.

Installation - See Figure 5 - 7

Step 1. Fix the DIN rail with screws.

Step 2. Buckle the bottom cap of the 2CH 3A Trailing Edge Dimming Actuator on the edge of the DIN rail.

Step 3. Press the device on the DIN rail, slide it and fix it up until an appropriate position is adjusted.

Safety Precautions

- The installation and commissioning of the device must be carried out by HDL or the organization designated by HDL. For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.
- The device should be installed with Din rail in DB box. HDL does not take responsibility for all the consequences caused by installation and wire connection that are not in accordance with this document.
- Please do not privately disassemble the device or change components, otherwise it may cause mechanical failure, electric shock, fire or body injury.
- Please resort to our customer service department or designated agencies for maintenance service. The warranty is not applicable for the product fault caused by private disassembly.
- It is not allowed to exceed the range.
- CAUTION - Risk of Electric Shock - More than one disconnect switch may be required to de-energize the equipment before servicing.
- The marking appears on the device, shown below shall be used to indicate that the device is for use with copper wire. The marking shall be legible with letters at least 2.4 mm high. "Use copper wire only", "Cu wire only" or equivalent wording, or a marking containing both the symbols as the illustrations.



Package Contents

HDL-MDT0203.433*1 / Buspro connector*1 / Label*5 / Datasheet*1

产品概述

2路3A调光模块（见图1）是一款基于MOSFET技术的调光设备，有2个输出回路，每回路具有手动按键，每个回路可以单独可以选择前沿调光或后沿调光模式，适应不同的负载。具有短路保护，过热保护功能。

功能说明

- 每回路输出设有LED状态指示灯及手动按钮；
- 最多可有2个独立区域，每个区域可具有12个场景；
- 最多6个序列，每个序列有12步；
- 每回路具有低阈限幅，高阈限幅，最大限幅设定；
- 设备断电重启后可选择断电时的场景或指定的场景；
- 每个回路可以单独选择前沿调光；
- 输出短路保护及过热保护；
- 内置4条调光特性曲线；
- 支持HDL Buspro在线升级。

注意事项

- 总线 - HDL Buspro专用电缆
- 总线连接 - 推荐手拉手的连接方式
- 接地端子（PE）需要接地保护
- 连接检查 - 安装后，检查所有的连接是否正确连接
- 输出回路 - 每回路的电流不能超过3A，总电流不超过6A
- 可调光电子变压器、LED驱动器、其他电子驱动器推荐使用前沿调光模式工作
- 负载类型 - 白炽灯、低压卤素灯、可调光LED灯等
- 感性负载禁止使用后沿调光模式工作
- 保持调光器环境温度低于45度

产品信息

产品尺寸 - 见图 2 - 3

产品接线 - 见图 4

- LED指示灯，显示回路的状态
- 手动按钮
- 编程按钮 & 模块指示灯

编程按键 & 模块指示灯：当模块正常工作时，指示灯闪烁，按该键约3秒，则可以在HDL Buspro软件中读取或修改本模块地址。

设备的安装 - 见图 5 - 7

步骤1. 用螺丝固定导轨。

步骤2. 将2路3A调光模块底座的一端扣到导轨的边上。

步骤3. 将整个模块压到导轨上，并滑动模块直至调整到合适的位置则固定下来。

安全警告

- 本设备的安装及调试工作必须由我司或我司指定的机构进行。其电气安装的计划和施工，必须遵守当地相关的安全标准和法规。
- 该产品需以导轨安装方式，安装在电箱里，未按照本说明书进行安装及接线方式的，所造成的一切后果皆与我司无关。
- 请不要私自拆装或更换零部件，否则可能会导致机械故障、电击、火灾或身体伤害。
- 请将一切维修工作交由我司售后部门或指定机构进行，本产品的保修范围不适用于因用户拆卸产品而导致的故障。
- 不得超量程使用。
- 警告 - 为防止触电 - 在维修设备前，需要一个以上的断路开关来断开设备电源。
- 设备上的标识，如下图所示，应用来指示设备配合铜线使用。标记应以至少2.4毫米高的字母书写。“只可使用铜线”、“仅使用铜线”或等效的措辞，或包含两个符号的标记作为插图说明。



装箱清单

HDL-MDT0203.433*1 / 总线端子*1 / 标签纸*5 / 说明书*1

Technical Data

Basic Parameters

Working voltage	12~30V DC Class 2
Working current	15mA/24V DC
Input voltage	120V/240V AC (50/60Hz)
Output channel	2CH/3A
Total output current	6A Max.
Dimming mode	Leading edge, trailing edge
Dimming curves	Linear, 1.5 exponent, 2.0 exponent, 3.0 exponent

External Environment

Working temperature	-5℃~45℃
Working relative humidity	≤90%
Storage temperature	-20℃~60℃
Storage relative humidity	≤93%

Specifications

Dimensions	216mm×90mm×64mm
Net weight	852g
Housing material	Nylon, PC
Installation	35mm DIN rail installation (See Figure 5 - 7)
Protection rating (Compliant with EN 60529)	IP20

Name and Content of Hazardous Substances in Products

Components	Hazardous substances					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Chromium VI (Cr (VI))	Poly-brominated biphenyls (PBB)	Poly-brominated diphenyl ethers (PBDE)
Plastic	o	o	o	o	o	o
Hardware	o	o	o	o	-	-
Screw	o	o	o	x	-	-
Solder	x	o	o	o	-	-
PCB	x	o	o	o	o	o
IC	o	o	o	o	x	x

The symbol "-" indicates that the hazardous substance is not contained.

The symbol "o" indicates that the content of the hazardous substances in all the homogeneous materials of the component is below the limit requirement specified in the Standard IEC62321-2015.

The symbol "x" indicates that the content of the hazardous substance in at least one of the homogeneous materials of the part exceeds the limit requirement specified in the Standard IEC62321-2015.

HDL Buspro Cable Guide

HDL Buspro	HDL Buspro Cable
DATA+	Yellow
DATA-	White
COM	Black
24V DC	Red

技术参数

基本参数

工作电压	12~30V DC Class 2
工作电流	15mA/24V DC
输入电压	120V/240V AC (50/60Hz)
输出回路	2CH/3A
总输出电流	6A Max.
调光方式	前沿调光, 后沿调光
调光曲线	线性, 1.5 次方, 2.0 次方, 3.0 次方

外部环境

工作温度	-5℃~45℃
工作相对湿度	≤90%
储存温度	-20℃~60℃
储存相对湿度	≤93%

产品规格

尺寸	216mm×90mm×64mm
净重	852g
外壳材料	尼龙, PC
安装方式	35mm丁导轨安装 (见图5-7)
防护级别 (符合 EN 60529)	IP20

产品中有害物质的名称及含量

部件名称	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
塑胶组件	o	o	o	o	o	o
五金铜件	o	o	o	o	-	-
螺丝组件	o	o	o	x	-	-
焊锡	x	o	o	o	-	-
PCB组件	x	o	o	o	o	o
IC	o	o	o	o	x	x

- : 表示不含有该有害物质。

o : 表示该有害物质在该部件所有均质材料中的含量均在IEC62321-2015规定的限量要求以下。

x : 表示该有害物质至少在该部件的某一均质材料中的含量超出IEC62321-2015规定的限量要求。

总线定义

HDL Buspro	HDL Buspro 电缆
DATA+	黄
DATA-	白
COM	黑
24V DC	红



Figure 5 / 图 5

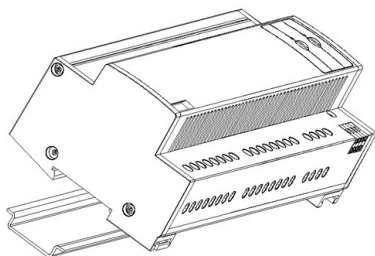


Figure 6 / 图 6

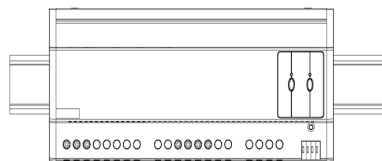


Figure 7 / 图 7

Figure 5 - 7. Installation
图 5 - 7. 安装图

技术支持

服务热线 : 020-85820195

(工作时间 : 9:00-12:00, 13:00-18:00, 星期一至星期五)

邮箱 : kfb@hdlchina.com.cn

网址 : http://www.hdlchina.com

Technical support

E-mail: support@hdlautomation.com

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