

Datasheet

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Figure 1. 2CH 3A Trailing Edge Dimming Actuator

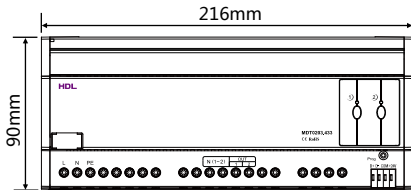


Figure 2. Dimensions - Front View

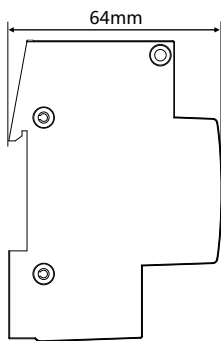


Figure 3. Dimensions - Side View

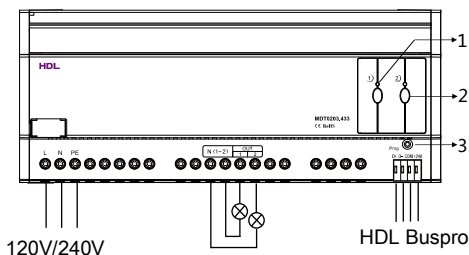


Figure 4. Wiring

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 - CAT5E or 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

1. LED indicator, indicates the status of the channel
2. Manual switch
3. Programming button & module indicator

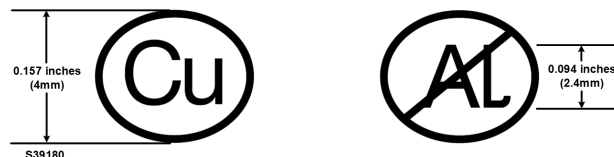
Programming button & indicator: The indicator will flash when the device is in working mode. Keep pressing the button for 3 seconds, the ID can be read and modified via HDL Buspro Setup Tool.

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 2.4mm 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



Figure 5

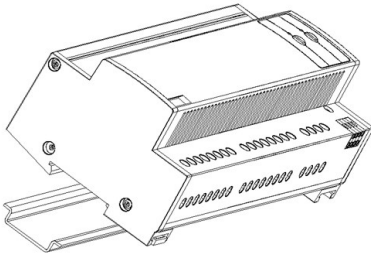


Figure 6

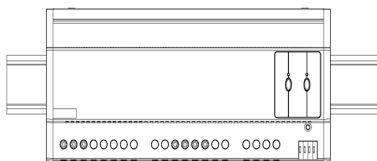


Figure 7

Figure 5 – 7. Installation

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°C~45°C
Working relative humidity	≤90%
Storage temperature	-20°C~60°C
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	CAT5/CAT5E
DATA+	Yellow	Blue/Green
DATA-	White	Blue white/Green white
COM	Black	Brown white/Orange white
24V DC	Red	Brown/Orange

Technical support

E-mail: support@hdlautomation.com

Website: <https://www.hdlautomation.com>

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