M/DRGBW4.1

KNX 4CH 7A RGBW Driver

Hardware Version: A

Datasheet

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Figure 1. KNX 4CH 7A RGBW Driver

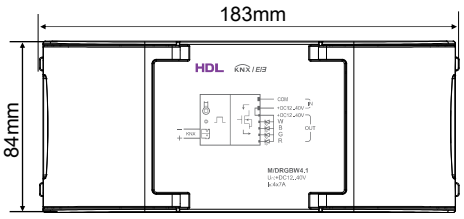

Figure 2. Dimensions - Front View

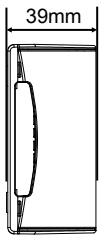

Figure 3. Dimensions - Side View

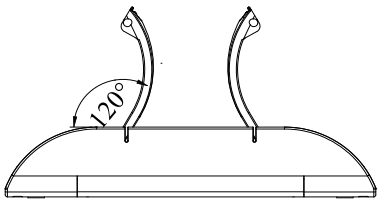

Figure 4. Dimensions - Side View

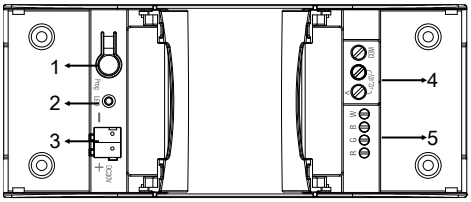

Figure 5. Components - Front View

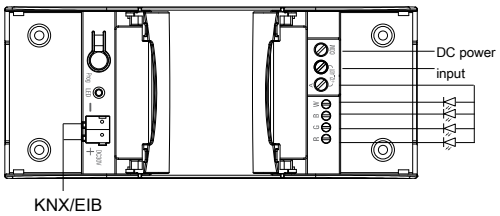

Figure 6. Wiring

Overview

KNX 4CH 7A RGBW Driver (See Figure 1) has 4 RGBW driving channels, each channel has the output capacity of 7A.The four channels can be controlled separately or using RGBW combination control. PWM linear dimming can set the dimming response time and the upper and lower limits of the dimming. The dimming is stable and diversified to meet the needs of different occasions.

Functions

- PWM liner dimming
- Dimming lower / upper limit setting
- Dimming fade time setting
- 1 bit switch state response
- 1 byte brightness state response
- 3 bytes RGB color response *
- State recovery after power on
- Staircase light
- Flashing light
- Scene function (10 scenes supported for each channel)
- Logic function
- Threshold value
- Up to 5 sequences, with 24 steps for each
- Custom on/off *
- Color selection and transformation for combination mode *
- The polarity protection function of DC power supply will prevent from destroy the device when the positive and negative electrodes are connected in reverse.

Note: * Only for RGBW combination mode.

Important Notes

- Programming: The device is compliant with the KNX standard and the parameters are set by the Engineering Tool Software (ETS).
- KNX Bus voltage: 21~30V DC, no AC power supply allowed.
- LED type: Common anode RGBW LED.
- Output current up to 10A if only one channel is used.

Product Information

Dimensions: See Figure 2 - 4

Components: See Figure 5

Wiring: See Figure 6

1. Programming button
2. LED indicator
3. KNX Bus voltage: 21-30V DC
4. DC power input: Provides 12-40V DC voltage for LED
5. Common anode RGBW output

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.
- 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.

Package Contents

M/DRGBW4.1*1 / Datasheet*1 / Screw*4

Technical Data

Basic Parameters	
Working voltage	21~30V DC
Working current	10mA/30V DC
Communication	KNX/EIB
Output type	Constant voltage PWM output
Output channel	R, G, B,W 4channels
Output current	7A/CH (total 28A)
LED type	Common anode RGBW LED strip or single LED
Cable diameter of KNX terminal	0.6-0.8mm
Input power (for LED)	12~40V DC
External Environment	
Working temperature	-5℃~45℃
Working relative humidity	≤90%
Storage temperature	-20℃~60℃
Storage relative humidity	≤93%
Specifications	
Dimensions	183mm×84mm×39mm
Net weight	212g
Housing material	ABS, PC, Aluminum
Installation	Fixed with screws
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	×	-	-
Solder	×	o	o	o	-	-
PCB	×	o	o	o	o	o
IC	o	o	o	o	×	×

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 “×” 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.

KNX Cable Guide

KNX	KNX Cable
+	Red
-	Black

Technical support
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