DALC NET

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DLC1248 multi channel

EASY RGB / EASY TW

Device Manual



FW3.0+

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FEATURES

- SEQUENCER+FADER+DIMMER+DRIVER
- DC Input 12-24-48 Vdc
- · Command: N.O. push button
- Tunable white control or RGB color control
- · Current outputs or voltage outputs for LED strip
- Typical efficiency > 95%
- · Adjusting the brightness up to completed off
- · Soft start and stop
- · Optimized output curve
- · Extended temperature range
- 100% Functional test 5 Years warranty

→ For the whole and updated Device Manual refer to producer's website: http://www.dalcnet.com

Constant current variants (common anode)

Application: (2 channels output): tunable white Application: (3 channels output): RGB colour

CODE	Supply voltage	Output	Channels	Command	
DLC1248-2CC350	12÷48V DC	2 x 350mA	2	N.O. push button	
DLC1248-2CC500	12÷48V DC	2 x 500mA	2	N.O. push button	
DLC1248-2CC700	12÷48V DC	2 x 700mA	2	N.O. push button	
DLC1248-3CC350	12÷48V DC	3 x 350mA	3	N.O. push button	
DLC1248-3CC500	12÷48V DC	3 x 500mA	3	N.O. push button	
DLC1248-3CC700	12÷48V DC	3 x 700mA	3	N.O. push button	

Constant voltage variants (common anode)

Application (2-channels output): tunable white Application (3-channels output): RGB colour

CODE	Supply voltage	Output	Channels	Command	
DLC1248-2CV	12÷48V DC	2 x 1,6A max.	2	N.O. push button	
DLC1248-3CV	12÷48V DC	3 x 1,6A max.	3	N.O. push button	

Protections

ОТР	Over temperature protection				
OVP	Over voltage protection				
UVP	Under voltage protection				
RVP	Reverse polarity protection				
IFP	Input fuse protection				
SCP	Short circuit protection				
OCP	Open circuit protection				
CLP	Current limit protection				



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Reference standards

Lamp controlgear - Part 1: General and safety requirements
Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)
Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection
DC or AC supplied electronic control gear for LED modules - Performance requirements
Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
Equipment for general lighting purposes - EMC immunity requirements
Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

Technical Specifications

			Variants			
		Constar	nt current	Constant voltage		
		2 channels	3 channels	2 channels	3 channels	
Supply voltage			DC min: 10.8 Vdc m	ax: 52,8 Vdc		
Input current ¹⁾		max 1,4A max 2,1A		max 3,2A	max 4,8A	
Output voltage		min: Vin/4 m	nax: Vin-0,9V	= Vin		
Output current ¹⁾		350/500/7	700 mA/ch	Max 1.6	6 A/ch 1)	
		max 1,4A	max 2,1A	max 3,2A	max 4,8A	
Nominal power 1)	@12V	8,4/12/16,8 Wmax	12,6/18/25,2 Wmax	38,4 Wmax	57,6Wmax	
	@24V	16,8/24/33,6 Wmax	25,2/36/50,4 Wmax	76,8 Wmax	115,2 Wmax	
	@48V	33,6/48/67,2 Wmax	50,4/72/100,8 Wmax	153,6 Wmax	230,4 Wmax	
Thermal shutdown	·	150) °C	150 °C		
D-PWM dimming frequency		250Hz				
D-PWM resolution		16 bit				
D-PWM range		0,1 – 100 %				
Storage Temperature		min: -40 max: +60 °C				
Ambient Temperature 1)		min: -10 max: +40 °C				
Protection grade		IP20				
Wiring		2.5mm² solid - 1.5mm² stranded - 30/12 AWG				
Mechanical dimensions		44 x 44 x 25 mm				
Packaging dimensions		68 x 56 x 35 mm				
Weight		40g				

maximum value, dependent on the ventilation conditions

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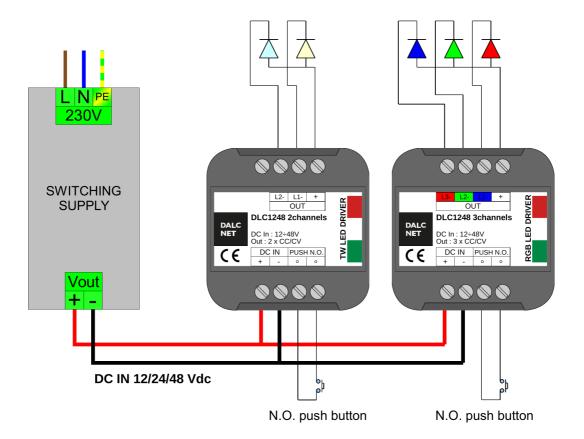
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Installation

Connect the switching supply, connect the N.O. push button, connect leds.



 DLC1248-2CC350
 DLC1248-3CC350

 DLC1248-2CC500
 DLC1248-3CC500

 DLC1248-2CC700
 DLC1248-3CC700

 DLC1248-2CV
 DLC1248-3CV



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Color temperature UP/DOWN

DLC1248-3CC700



DLC1248-3CV

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Function

The outputs status is memorized and reloaded in the case of supply interruptions.

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DLC1248-3CC500

TUNABLE WHITE

Tunable White is managed by a N.O. push button in the following variants:

	DLC1248-2CC350		DLC1248-2CC500	DLC1248	3-2CC700	DLC1248-2CV	
Key	Function	Function					
		Click Double Clic Long pressi	k ure (>1s) from OFF		mum Intensity	then dimmer UP/DOWN	

RGB COLOUR

RGB colours are managed by a N.O. push button in the following variants:

Long pressure (>1s) from ON

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	Key	Function				
,						
- 1						

Key	Function		
		Click Long pressure (>1s) from OFF Long pressure (>1s) from ON	ON/OFF Change rotation speed* Start/stop color rotation

^{*}Color rotation speed is selectable from 4 predefined levels.

- 10 flash/s for the rotation of 6 seconds
- 5 flash/s for the rotation of 30 seconds

DLC1248-3CC350

- 2 flash/s for the rotation of 6 minutes
- 1 flash/s for the rotation of 30 minutes

Technical Notes

Installation:

- Installation and maintenance must be performed only by qualified personnel in compliance with current regulations.
- The product must be installed inside an electrical panel protected against overvoltages.
- The product must be installed in a vertical or horizontal position with the cover / label upwards or vertically; Other positions are not permitted. It is not permitted to bottom-up position (with the cover / label updown).
- Keep separated the circuits at 230V (LV) and the circuits not SELV from circuits to low voltage (SELV) and from any connection with this product. It is absolutely forbidden to connect, for any reason whatsoever, directly or indirectly, the 230V mains voltage to the bus or to other parts of the circuit.

Power Supply:

• For the power supply use only a SELV power supplies with limited current, short circuit protection and the power must be dimensioned correctly.

In case of using power supply with ground terminals, all points of the protective earth (PE = Protection Earth) must be connected to a valid and certified protection earth.

- The connection cables between the power source "low voltage" and the product must be dimensioned correctly and they should be isolated from every wiring or parts at voltage not SELV. Use double insulated cables.
- · Dimension the power supply for the load connected to the device. If the power supply is oversized compared with the maximum absorbed current, insert a protection against over-current between the power supply and the device.
- · For the constant current output, the voltage of LED module (Vf) must be less of 5V at the voltage of power supply.

Command:

- The length of the connection cables between the local commands (N.O. Push button or other) and the product must be less than 10m; the cables must be dimensioned correctly and they should be isolated from every wiring or parts at voltage not SELV. Use double insulated shielded and twisted cables.
- · All the product and the control signal connect at the local command (N.O. Push Button or other) must be SELV (the devices connected must be SELV or supply a SELV signal)

Outputs:

• The length of the connection cables between the product and the LED module must be less than 10m; the cables must be dimensioned correctly and they should be isolated from every wiring or parts at voltage not SELV. Is preferable to use shielded and twisted cables.

The selected speed is visualized with a white strobo output: