

$LQC1B\text{-}V1 \ \text{Single channel}$

EASY DIMMER

Data Sheet

FW 3.0+

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FEATURES

- FADER+DIMMER+DRIVER
- DC Input: 12/24/48 Vdc
- Command: N.O. push button
- Adjusting the brightness of white light
- Current outputs or voltage outputs for R-L-C loads
- Typical efficiency > 95%
- Adjusting the brightness up to completed off
- Soft start and soft stop
- · Optimized output curve
- Extended temperature range
- 100% Functional test 5 Years warranty

Constant voltage variants (common anode)

CODE	Supply voltage	Output	Channel	Command	
LQC1B-V1	12-48V DC	1 x 8A max	1	N.O. push button	

Application: Dimmer

Protections

OTP	Over temperature protection
OVP	Over voltage protection (*)
UVP	Under voltage protection (*)
RVP	Reverse polarity protection (*)
IFP	Input fuse protection (*)
SCP	Short circuit protection
ОСР	Open circuit protection
CLP	Current limit protection

(*) Only control logic protection



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Reference standards

EN 61347-1:2008 +A1:2011+A2:2013	Lamp controlgear - Part 1: General and safety requirements	
	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment	
EN 61547:2009	Equipment for general lighting purposes - EMC immunity requirements	
EN 50581:2012	Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances	

Technical Specifications

		Variants	
		Constant Voltage	
Supply voltage		min: 10,8 Vdc max: 52,8 Vdc	
Input current		max 8 A peak ¹⁾	
Output voltage		= Vin	
Output current		max 8 A peak ¹⁾ max 7,5A @20°C ¹⁾ max 6,5A @40°C ¹⁾	
Nominal power 1)	@12V	78 W	
	@24V	156 W	
	@48V	312 W	
Thermal shutdown		150 °C	
D-PWM dimming frequency		250Hz	
D-PWM resolution		16 bit	
D-PWM range		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		45 x 58 x 25 mm	
Packaging dimensions		68 x 56 x 35 mm	
Weight		40g	

¹⁾ maximum value, dependent on ventilation conditions



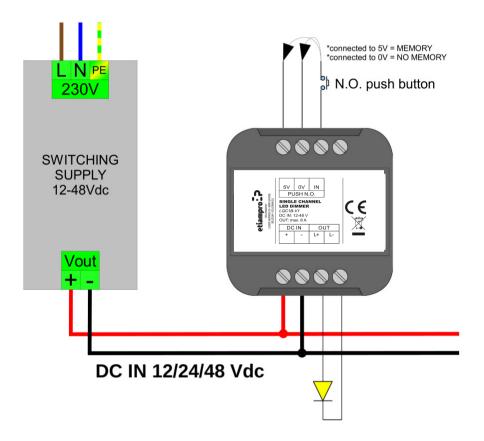
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Installation

Connect the switching supply (12-48V), connect the N.O. push button (to 5 or 0V, with/without memory), connect leds.



Configuration

N.O. PUSH BUTTON

- 1- Memory function: the device stores its state in case of blackout (if N.O. push buttons connected to 5V).
- 2- Eco function: when recovering the power supply the device starts-up from a switched off condition (if N.O. push buttons connected to 0V).
- 3- Preset function: when recovering the power supply the device starts-up from a previously set condition. The preset can be stored by connecting N.O. push buttons to 5V during installation (and to 0V after installation).



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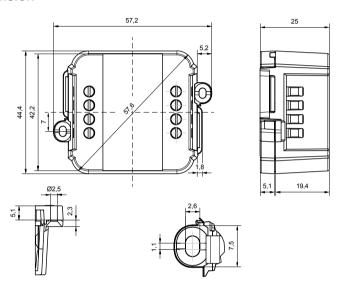
Function

N.O. PUSH BUTTON

The intensity and the status (ON/OFF) is controlled by the N.O. push button.

Button	Function	Intensity	
1		Click Double Click Long pressure (>1s) from OFF Long pressure (>1s) from ON	On/Off Maximum Intensity Turn on at 10% (Nighttime) Dimmer UP/DOWN

Mechanical Dimension



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.

LED DRIVERS