



FEATURES

- BOOSTER
- DC Input: 12/24/48 Vdc
- Command: D-PWM
- D-PWM signal amplifier
- Voltage or Current outputs
- Typical Efficiency > 95%
- Adjusting the brightness up to completed off
- Extended temperature range
- 100% Test functional – 5 Years warranty

Constant voltage variants (common anode)

Application: Booster

CODE	Supply voltage	Output	Command	
LQR1B-V1	12-48V DC	1 x 8A max	D-PWM	BOOSTER

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
OCP	Open circuit protection
CLP	Current limit protection

Reference standards

EN 61347-1:2008+A1:2011+A2:2013	Lamp controlgear - Part 1: General and safety requirements
EN 61000-3-2:2014	Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)
EN 61000-3-3:2013	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
EN 62384:2006+A1:2009	DC or AC supplied electronic control gear for LED modules - Performance requirements
EN 55015:2013+A1:2015	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

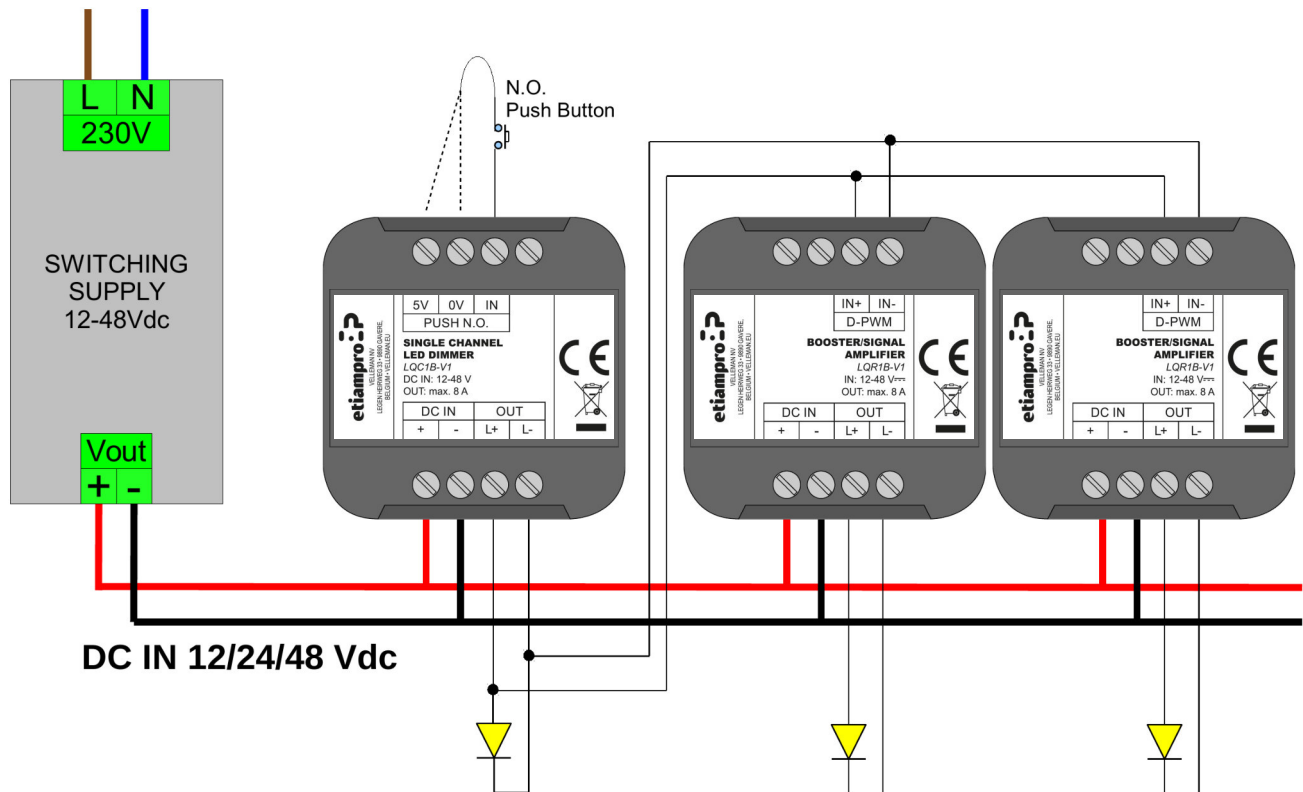
Technical Specifications

		Variants
		Constant voltage
Supply voltage		min: 10,8 Vdc .. max: 52,8 Vdc
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
Input Frequencies Range D-PWM		250 ÷ 500 Hz
Storage Temperature		min: -40 max: +60 °C
Ambient Temperature ¹⁾		min: -10 max: +40 °C
Protection Grade		IP20
Wiring		2.5mm ² solid - 1.5mm ² stranded - 30/12 AWG
Mechanical dimensions		44 x 57 x 25 mm
Packaging dimensions		56 x 68 x 35 mm
Weight		40g

¹⁾ maximum value, dependent on ventilation conditions

Installation

Connect the switching supply (12-48 V), connect the DLA(s) to the D-PWM output, connect the leds.



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 and type of the connection cables between the Master dimmer Dalcnet and input "PWM IN" of the Booster 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 devices and the control signal connect at the product 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.