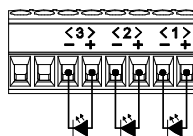




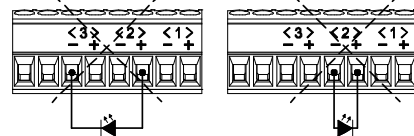
**Important warning:** the following rules when not considered may result in load or device irreversible damages



**Right load wiring**



**Wrong load wiring**



## FEATURES

- Control of constant current RGB LED loads or 3 independent channels.
- Output currents: 220mA, 300mA, 350mA, 500mA, 550mA, 630mA, 700mA, 750mA, 900mA and 1A.
- External power supply required (12-30 VDC).
- LED test function.
- KNX BCU integrated.
- CE directives compliant.

- |                    |                          |                            |
|--------------------|--------------------------|----------------------------|
| 1. KNX connector   | 2. Programming button    | 3. Test button             |
| 4. Output channels | 5. Test LED              | 6. Current selector switch |
| 7. Programming LED | 8. External power supply |                            |

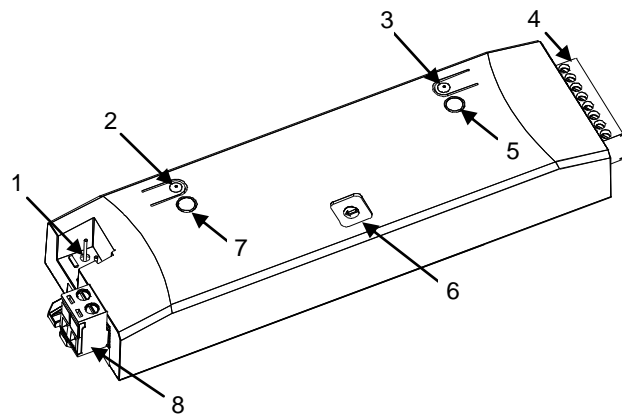


Figure 1: LUMENTO C3

## GENERAL SYSTEM SPECIFICATIONS

Type of device			Electric operation control device	
KNX supply	Voltage (typical)		29VDC	
	Voltage range		21...31VDC	
	Maximum consumption	Voltage	mA	mW
		29VDC (typical)	8	232
		24VDC	10	240
Bus connection		Typical bus connector TP1, 0.50mm2 section		
External power supply			from 12 to 30VDC	
Power supply cable section			1.5 mm² to 2.5 mm²	
Type of control			Current control	
Ambient temperature			0°C to +45°C	
Storage temperature			-5°C to +50°C	
Ambient humidity			3 to 95% RH (no condensation)	
Storage humidity (relative)			3 to 95% RH (no condensation)	
Complementary characteristics			Class B	
Safety class			III	
Operation type			Continuous operation	
Device action type			Type 1	
Electrical solicitations period			Long	
Protection class			IP20, clean environment	
Assembly			Independent control assembly device. Connect LUMENTO as near as possible to both, the load to dimmer and the external power supply	
Bus power failure response			Data saving	
Response when restarting bus			Data recovery	
PCB CTI index			175 V	
Enclosure			PC FR V0 halogen free	
Size			Without terminal blocks: 159x44x22.7mm / With terminal blocks: 162x44x22.7mm	
Weight			85g.	
Operation indication			Programming LED: programming mode (red lighting), safe mode (red blinking). Test LED: in test mode, red, test channel 1 (R); green, test channel 2 (G); blue, test channel 3 (B). Reverse polarity of external power supply is indicated by the test LED in orange light. If there is not an external power supply connected it blinks in orange. If the currents selected by parameter and by selector switch don't match it blinks in white. Overheating protection: the test LED lights in red (continuous level1 of protection, blinking with level 2 of protection).	

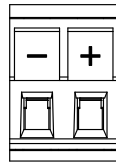
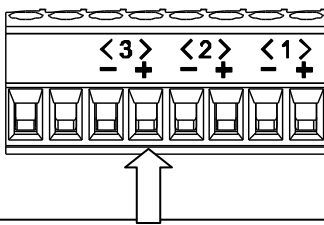
## OUTPUT SPECIFICATIONS AND CONNECTIONS

Maximum current per channel	1A @ 25°C ambient temperature
Number of channels	3
Output currents	220mA, 300mA, 350mA, 500mA, 550mA, 630mA, 700mA, 750mA, 900mA or 1A
Connection type	Terminal block (screw)
Cable section	1.5 mm <sup>2</sup> to 2.5 mm <sup>2</sup>
Load type	Load with positive and negative terminals.
Shortcut protection	Yes
Overheating protection	Yes

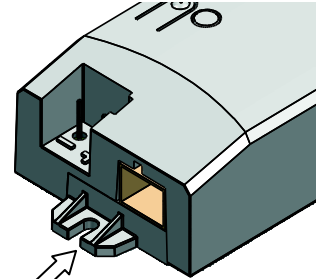
## INPUT SPECIFICATIONS AND CONNECTIONS

Voltage range	12 to 30VDC
Connection type	Terminal block (screw)
Cable section	1.5 mm <sup>2</sup> to 2.5 mm <sup>2</sup>

## WIRING AND ASSEMBLY DIAGRAMS



**External power supply:**  
+ and - terminals of external power supply from 12 to 30 VDC. It is recommended to use the closest external power supply value to the load working voltage.



**Assembly:**  
Screw mounting, 2 holes of 3.5 mm diameter. Screws not included.

### Correspondence:

1: Red channel 2: Green channel 3: Blue channel +: Positive terminal -: Negative terminal



Connecting load terminals to different output channels may result in **load or device irreversible damages**.

## TEST AND PROGRAMMING BUTTON AND LED

**Programming button:** short button press to set the programming mode. If this button is held while plugging the device into the KNX bus, it goes into safe mode.

**Programming LED:** programming mode indicator (red). When the device goes into safe mode, it blinks (red) every half second.

**Test button:** if this button is held during 3 seconds when the load is connected, it goes into test mode.

**Test LED:** it indicates which channel (red=channel 1/R, green=channel 2/G, blue=channel 3/B) is being tested during test mode. In addition, it shows errors in the installation and/or parameterization (see section "test LED error identification").

## OUTPUT CURRENT SELECTOR SWITCH

I Out*:	Switch Position	I Out*:
220 mA	0	5
300 mA	1	6
350 mA	2	7
500 mA	3	8
550 mA	4	9
		1 A



\*it is mandatory that the output current chosen by ETS parameter and the current selected with the switch match. On the contrary, the load cannot be controlled and the test LED will blink in white.

## TEST LED ERROR IDENTIFICATION

Depending on the color, the test LED indicates different errors:

Color	Error
Blinking white	Output current selection
Blinking orange	No auxiliary power supply detected
Continuous orange	Wrong auxiliary power supply polarization
Blinking red	Overheating level 1
Continuous red	Overheating level 2



## SAFETY INSTRUCTIONS

- Do not connect mains voltage (230V) or any other external voltages to any point of the KNX bus. Connecting an external voltage might put the entire KNX system at risk.
- Make sure during the installation that there is always sufficient insulation between the mains voltage 230V and the bus or the extension inputs.
- When overheating protection is active, the device will switch off the load and will ignore any order from the KNX bus. For further information, please read the user manual.
- The output current selected in the LUMENTO C3 should never exceed the current required for the load, which is specified by the manufacturer. Not following this recommendation could damage the load.