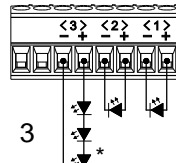




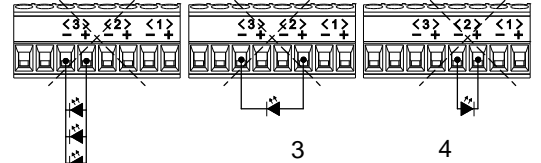
**Important warning:** the following rules when not considered may result in load or device irreversible damages



**Right load wiring**



**Wrong load wiring**



\* Power restriction must be kept (page 2)

## 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.

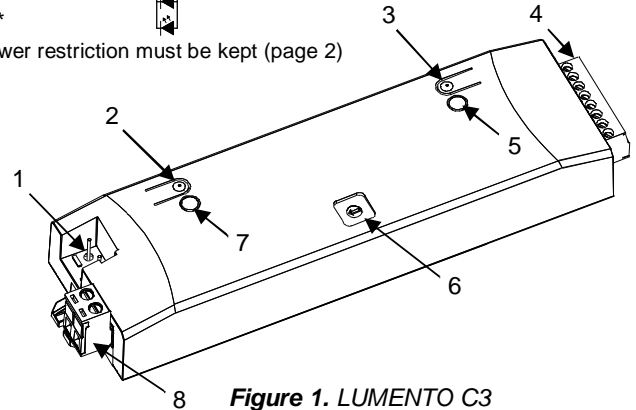


Figure 1. LUMENTO C3

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

**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").

## GENERAL SYSTEM SPECIFICATIONS

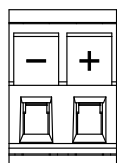
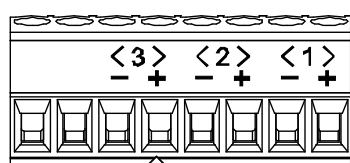
Type of device		Electric operation control device		
KNX supply	Voltage	29VDC typical		
	Voltage range	21...31V DC		
	Maximum consumption	Voltage	mA	mW
		29VDC (typical)	8	232
24VDC <sup>(1)</sup>	10	240		
Bus connection		Typical bus connector TP1, 0.80mm <sup>2</sup> section		
External power supply		from 12 to 30VDC (constant voltage power supply)		
Type of control		600Hz PWM current signal		
Ambient temperature		0°C to +45°C		
Storage temperature		-5°C to +50°C		
Ambient humidity		5 to 95% RH (no condensation)		
Storage humidity (relative)		5 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		
Size		Without terminal blocks: 159x44x22.7mm / With terminal blocks: 162x44x22.7mm		
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).		
Weight		85g.		
PCB CTI index		175 V		
Enclosure		PC FR V0 halogen free		

<sup>(1)</sup> Maximum consumption in the worst case scenario (KNX Fan-In model)

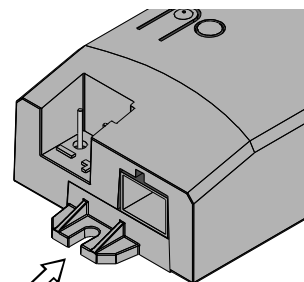
OUTPUT SPECIFICATIONS AND CONNECTIONS	
Maximum current per channel	1A @ 25°C ambient temperature
Number of channels	3
Output currents	220mA, 300mA, 350mA, 500mA, 550mA, 630mA, 700mA, 750mA, 900mA or 1A
Connection type	Terminal block (screw)
Cable section	1.5 mm <sup>2</sup> to 2.5 mm <sup>2</sup>
Load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

INPUT SPECIFICATIONS AND CONNECTIONS	
Voltage range	12 to 30VDC (constant voltage power supply)
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 (**constant voltage**) 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.

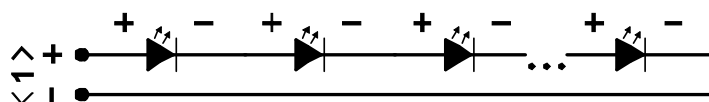
#### LED

Each LED load must be connected according to its positive and the negative terminals. Respect always the maximum current allowed by the loads.

#### Correspondence

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

### SEVERAL LOADS CONNECTED TO THE SAME OUTPUT



**Power restriction:** It is mandatory to fulfil the next restriction regarding the power connected to one output channel:

$$I_{out} \times 30Vdc \geq N_{Loads} \times P_{Load}$$

### OUTPUT CURRENT SELECTOR SWITCH

I Out*:	Switch Position	I Out*:
220 mA	0	5 630 mA
300 mA	1	6 700 mA
350 mA	2	7 750 mA
500 mA	3	8 900 mA
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

- Installation should only be performed by qualified electricians following applicable regulations on preventing accidents, as required by law.
- 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.
- The WEE logo means that this device contains electronic parts and it must be discarded properly following the instructions of <http://zennio.com/weee-regulation>.

