



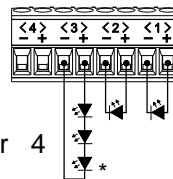
Important warning: the following rules when not considered may result in load or device irreversible damages

FEATURES

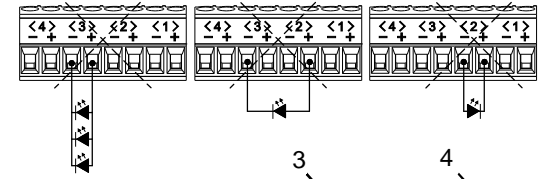
- Control of constant current RGBW LED loads or 4 independent channels.
- Output currents: 220mA, 300mA, 350mA, 500mA, 550mA, 630mA, 700mA, 750mA, 900mA and 1A.
- External power supply required (12-30 VDC).
- LED test function.
- KNX BCU integrated.
- CE directives compliant.



Right load wiring



Wrong load wiring



* Power restriction must be kept (page 2)

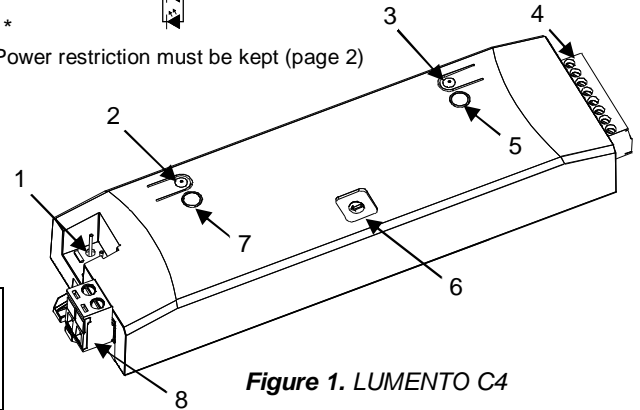


Figure 1. LUMENTO C4

| | | | |
|------------------|----------------------------|--------------------|--------------------------|
| 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, white=channel 4/W) 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 ⁽¹⁾ | 10 | 240 | |
| Bus connection | | Typical bus connector TP1, 0.80mm ² section | | |
| 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); white, test channel 4 (W). 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 | | |

⁽¹⁾ Maximum consumption in the worst case scenario (KNX Fan-In model)

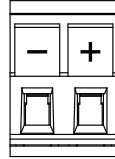
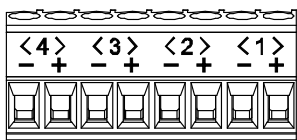
OUTPUT SPECIFICATIONS AND CONNECTIONS

| | |
|-----------------------------|---------------------------------------------------------------------|
| Maximum current per channel | 1A @ 25°C ambient temperature |
| Number of channels | 4 |
| Output currents | 220mA, 300mA, 350mA, 500mA, 550mA, 630mA, 700mA, 750mA, 900mA or 1A |
| Connection type | Terminal block (screw) |
| Cable section | 1.5 mm ² to 2.5 mm ² |
| 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 ² to 2.5 mm ² |

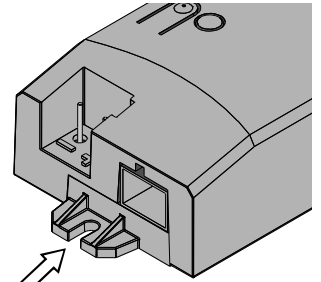
WIRING AND ASSEMBLY DIAGRAMS



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.

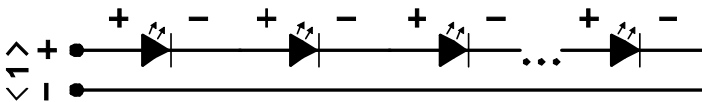
LED

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 4: White +: 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 C4 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>.

