## MAIN FEATURES

- Control of RGBW LEDs or 4 independent channels.
- External power supply required (12-24 VDC).
- LEDs test function
- KNX BCU integrated
- KNX and CE mark

SIZE AND DESCRIPTION

N	Element
1	KNX Connector
2	KNX Programming button
3	KNX Programming and internal test LED
4	Test button
5	Test LED and Reversed polarity indicator
6	External power supply terminal block
7	LEDs control terminal block
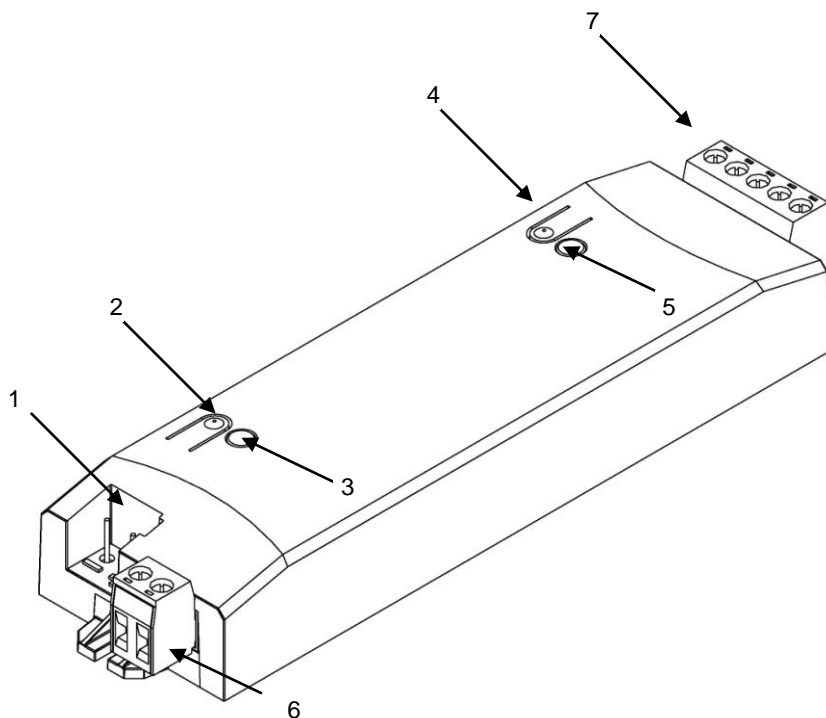
KNX Programming button: a push button to set the programming mode. If this button is held while plugging the device into the KNX bus, it goes into secure mode.

KNX Programming and internal test LED: the red LED indicates programming mode. When the device goes into secure mode, it blinks red every 0.5 seconds. The blinking blue LED indicates internal test.

Test button: it tests the functioning of channels connected to the device. Push and hold for 3 seconds to get in/out of the testing mode.

Test LED and polarity: tricolored LED that indicates which channel (red=channel 1/R, green=channel 2/G, blue=channel 3/B, white=channel 4/W) is being tested. Orange light indicates reverse polarity in external power supply.

GENERAL SYSTEM SPECIFICATIONS		
Type of device		Electric Operation Control Device
KNX Supply	Voltage	29V DC SELV
	Voltage range	20…31V DC
	Power consumption	145 mW
	Bus connection	Typical BUS connector TP1, 0.50mm2 section
External Power Supply		12 – 24V DC
Power Supply cable section		1.5 mm² to 2.5 mm²
Type of control		PWM (150, 300, 488 ó 600 Hz)
Ambient Temperature		0ºC to +45ºC
Storage Temperature		-5ºC a +50ºC
Ambient Humidity		30 to 85% RH (no condensation)
Storage Humidity (relative)		30 to 85% RH (no condensation)
Complementary Characteristics		Class B
Safety Class		II
Operation Type		Continuous operation
Device Action Type		Type 1
Electrical solicitations period		Long
Type of Protection		IP20
Assembly		Independent control assembly device Connect Lumento as near as possible to both, the LED to dimmer and the external power supply
Power Failure response (bus)		Data saving
Response when restarting (bus)		Data saving

RGB CONTROLLER

ZN1DI-RGBX4　　　　　　　　　　　　　　　　　　　　**Technical Documentation**

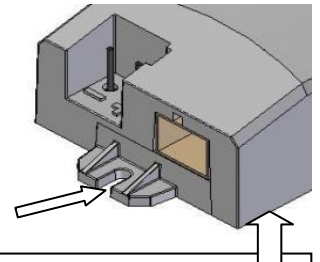|	
Operation indication	Programming/internal test LED indicates: programming mode (red lighting), safe mode (red blinking) and internal test (blue blinking). Test LED indicates: White, test channel 4 (W); Red, test channel 1 (R); Green, test channel 2 (G); Blue, test channel 3 (B). Reverse polarity of external power supply is indicated by the Test LED with orange light.
PCB CTi index	175 V
Enclosure	PC-ABS, flammability category Class D
Size	Without terminal blocks: 144x44x22mm / With terminal blocks: 157x44x22mm
Weight	102 g.
OUTPUT SPECIFICATIONS AND CONNECTIONS	
Maximum current per channel	2.5A @ 25ºC ambient temperature
Number of channels	4
Total power connected	120 (12V DC) or 240W (24V DC)
Connection Type	Terminal block (screw)
Cable Section	1.5 mm² to 2.5 mm²
Load type	Common anode
Shortcut protection	Yes
Overheating protection	Yes

WIRING AND ASSEMBLY DIAGRAMS
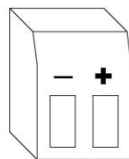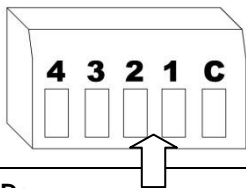
External power supply:
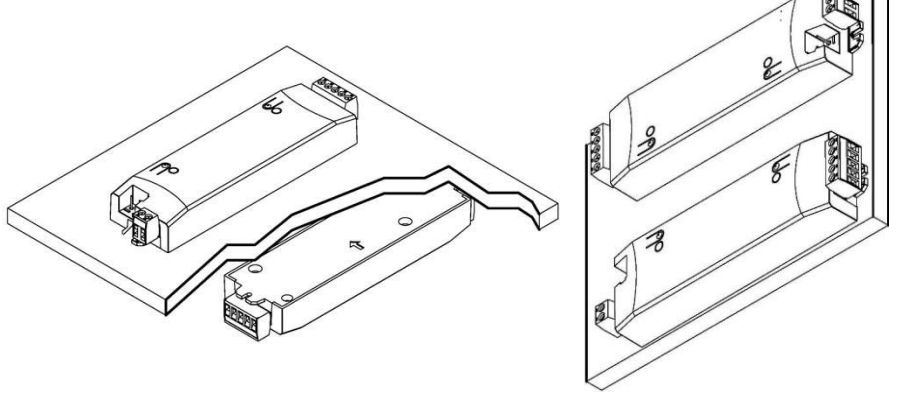+ and - terminals of external power supply 12-24 VDC

LEDs
The LEDs load is connected to the terminal block, matching the anode or the anode common terminal of the LED stripes with C (anode)

Correspondence
C: Anode　　**1**: Red　　**2**: Green　　**3**: Blue　　**4**: White

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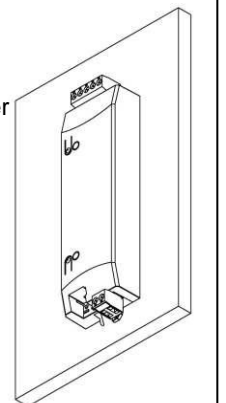
Recommended installation:

NOT recommended:
Vertical position.

If there is not any other possibility, install terminal block up (see fig.)

SAFETY INSTRUCTIONS

- Do not connect Mains Voltage (230 V) or any other external voltages to any point of the 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 decrease the luminosity level (50%) and control frequency. For further information, please read manual.

- The voltage of the power supply connected to Lumento will never exceed the voltage required for the load, which is specified by the manufacturer. Not following this recommendation would mean a risk for the installation.