Lumento DX4



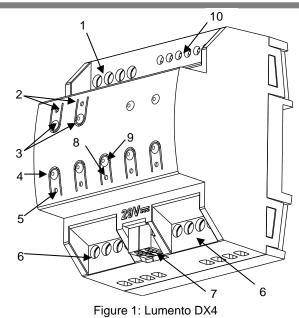
4-channel constant voltage PWM dimmer in DIN rail for DC LED loads with 6 binary/analogue inputs

ZDI-RGBDX4

TECHNICAL DOCUMENTATION

FEATURES

- 4 constant voltage channels configurables (independent channels, RGBW channels and RGB+W channels).
- 6 analog/digital inputs.
- Master Light control.
- External 12-30VDC power supply.
- Manual output operation with push button and LED status indicator.
- Total data saving on KNX bus failure.
- Integrated KNX BCU.
- Dimensions 60 x 90 x 79mm (4,5 DIN units).
- DIN rail mounting (EN 50022), through pressure.
- Conformity with the CE directives (CE-mark on the right side).



1. External power supply	 Colour shift status LED[*] 	3 . Colour shift control buttons*	4. Channel control button	5. Channel status LED
6. Output channels	7. KNX connector	8. Programming/Test LED	9. Programming/Test button	10. Inputs

Programming/Test button: short press to set programming mode. If this button is held while plugging the device into the KNX bus, it enters the safe mode. If this button is held for more than 3 seconds, the device enters the test mode.

Programming/Test LED: programming mode indicator (red). When the device enters the safe mode, it blinks (red) every half second. The manual mode is indicated by the green color. During the start-up (reset or after KNX bus failure) and if the device is not in safe mode, it emits a red flash. A blue blink represents an error.

GENERAL SPECIFICATIONS					
CONCEPT		DESCRIPTION			
Type of device		Electric operation control de	Electric operation control device		
Voltage (typical)		al)	29VDC SELV		
KNX supply	Voltage range		2131VDC	2131VDC	
	Maximum consumption	Voltage	mA	mW	
		29VDC (typical)	6.5	188.5	
	consumption	24VDC ¹	10	240	
	Connection ty	ре	Typical TP1 bus connector	Typical TP1 bus connector for 0.80mm Ø rigid cable	
External powe	r supply		12-30VDC	12-30VDC	
Operation tem	perature		0°C +55°C	0°C +55°C	
Storage tempe	erature		-20°C +55°C	-20°C +55°C	
Operation hun	nidity		5 95%	595%	
Storage humic	dity		5 95%	5 95%	
Complementa	ry characteristic	S	Class B	Class B	
Protection class					
Operation type	Operation type		Continuous operation	Continuous operation	
Device action type		Type 1	Type 1		
Electrical stress period		Long			
Degree of protection		IP20, clean environment			
Installation			Independent device to be mounted inside electrical panels with DIN rail (EN		
		50022)	50022)		
	Minimum clearances		Not required		
Response on	KNX bus failure			Data saving according to parameterization	
Response on	KNX bus restart			Data recovery according to parameterization	
			The programming LED ind	The programming LED indicates programming mode (red), test mode	
Operation indicator		(green) and error (blue blinking). Colour shift LEDs show the current colour.			
		Each output LED indicates its status.			
Weight		184g			
PCB CTI index		175V			
Housing material		PC FR V0 halogen free	PC FR V0 halogen free		

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

OUTPUTS SPECIFICATIONS AND CONNECTIONS		
CONCEPT	DESCRIPTION	
Number of outputs	4	
Output type	Solid state switching device	
Maximum load per output	6A	
Load type	LED strip (monochrome, RGB or RGBW) with common anode (+)	
Short-circuit protection	YES	
Overload protection	YES	
Overheating protection	YES	
Connection method	Screw terminal block	
Cable cross-section	0.5-4mm ² (IEC) / 10-30AWG (UL)	

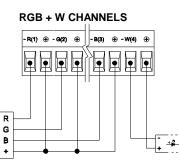
EXTERNAL POWER SUPPLY SPECIFICATIONS AND CONNECTIONS

CONCEPT	DESCRIPTION	
Voltage	12-30VDC (voltage in concordance with voltage LED strips to be connected)	
Current	Depending upon the load to be controlled up to a maximum of 24A	
Connection method	Screw terminal block	
Cable cross-section	0.5-4mm ² (IEC) / 10-30AWG (UL)	

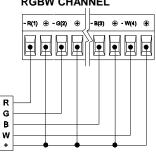
INPUTS SPECIFICATIONS AND CONNECTIONS

CONCEPT	DESCRIPTION
Number of inputs	6
Inputs per common	6
Operation voltage	+3.3VDC in the common
Operation current	1mA @ 3.3VDC (per input)
Switching type	Dry voltage contacts between input
Switching type	and common
Connection method	Screw terminal block
Cable cross-section	0.5-2.5mm ² (IEC) / 26-12AWG
Cable cross-section	(UL)
Maximum cable length	30m
Maximum response time	10ms

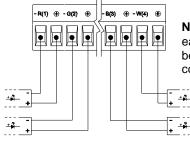
WIRING DIAGRAMS



RGBW CHANNEL



INDEPENDENT CHANNELS



NOTE: The \oplus pole of each channel in use must be mandatorily connected.

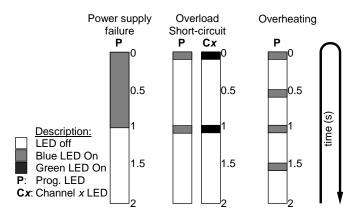
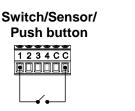


Figure 2: Error notification LED codes

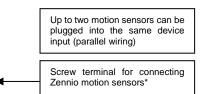
Attaching Lumento DX4 to DIN rail:

INPUTS CONNECTION

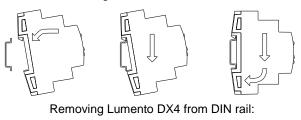
Any combination of the next **accessories** is allowed on the inputs:

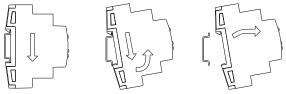


Motion Sensor



 * En el caso del sensor ZN1IO-DETEC-P, colocar su micro interruptor 2 en posición Type B.





SAFETY INSTRUCTIONS

• Installation should only be performed by qualified professionals according to the laws and regulations applicable in each country.

- Do not connect the mains voltage nor any other external voltage to any point of the KNX bus; it would represent a risk for the entire KNX system. The facility must have enough insulation between the mains (or auxiliary) voltage and the KNX bus or the wires of other accessories, in case of being installed.
 - The facility must be equipped with a device that ensures the omnipolar sectioning. Installation of a 10A mini-circuit-breaker is recommended. To prevent accidents, it must remain open in case of manipulation of the device.
 - Once the device is installed (in the panel or box), it must not be accessible from outside.
 - Keep the device away from water (condensation over the device included) and do not cover it with clothes, paper or any other material while in use.
 - The WEEE logo means that this device contains electronic parts and it must be properly disposed of by following the instructions at http://zennio.com/weee-regulation.

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Further information www.zennio.com