2D1B Light and Blind Controller



APPLICATION AND USE

The 2D1B device is designed to control light and blind/shutter motor in a single space in the building. The device is dedicated to control two separate DALI light areas with up to 32 DALI ballasts. Two, built-in special inputs and two digital inputs are dedicated to connect presence detectors and light switches. Dedicated CFG DIP switch allows to activate a predefined inputs configuration. Out of the box, the device allows to control DALI ballasts by a common light switch and presence detector without the need of programming, which makes 2D1B a unique plug&play type device, dedicated to the DALI network control. In addition, 2D1B has a blind/shutter control function implemented, which allows to control a blind/shutter motor by a double-switch. The controller is factory-equipped with the RS485 interface, which is a physical layer for the most popular open communication protocol, Modbus RTU/ASCII.

FEATURES

- 230 V AC power supply
- Built-in 24 V DC for external equipment .
- Fast processor with ARM core
- Modbus RTU/ASCII for connecting to higher level system over RS485
- 2 DALI interfaces: built-in power supply for up to 16 ballasts each
- Dedicated CFG DIP switch for inputs configuration
- Addressing from 0 to 254 by DIP switch
- Special and digital inputs for presence detectors and light and blind switches connection
- 2 power supply outputs for ballasts (fuse-protected)
- Power supply output for blind motor (fuse-protected)

TECHNICAL SPECIFICATION

DESCRIPTION		2D1B(-WD)	
Power supply	Voltage	230 V AC	
	Number of inputs	2	
Special inputs	Voltage input	Measurement accuracy: 50 mV Measurement resolution: 6 mV	
	Current input	Measurement accuracy: 250 uA Measurement resolution: 30 μA	
	Dry contact	Output current ~0.2 mA	
Digital inputs	Number of inputs	4	
	Туре	Dry contact	
	Maximum input frequency	100 Hz	

The performances stated in this sheet can be modified without any prior notice.

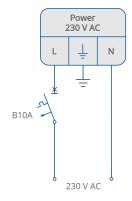




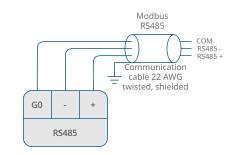
DESCRIPTION		2D1B(-WD)		
Light outputs (relay)	Number of outputs	2		
	Resistive load (AC1)	Max. 4 A a	Max. 4 A at 230 V AC	
Blind output	Number of outputs	1		
	Туре	Tri	Triac	
	Resistive load (AC1)	Max. 1.5 A at 230 V AC		
Power supply output	Voltage	24 V DC, max. 80 mA		
	RS485 interface	Up to 128 devices		
COM1		Half-duplex		
	Communication protocol	Modbus RTU/ASCII		
	Ports	2 RJ12 ports + screw connector		
	Baud rate	2400-115200		
	DALI interface	Up to 16 ballasts		
DALI1 –	Built-in power supply	Max. 40 mA		
	DALI interface	Up to 16 ballasts		
DALI2 -	Built-in power supply	Max. 40 mA		
USB1	mini USB	Туре В		
Ingress protection	IP rating	IP 40 for indoor installation		
Temperature –	Storage	-40°C to +85°C (-40°F to +185°F)		
	Operating	0°C to +50°C (32°F to 122°F)		
Humidity	Relative	5 to 95% RH (without condensation)		
Screw connectors	Туре	Removable screw terminals		
	Maximum cable size	2.5 mm ² (1812 AWG)		
Wieldand connectors (optional)	Туре	Plug/socket Wieland GST15 series		
Housing -	Material	Self-extinguishing plastic (PC/ABS)		
	Mounting	DIN (DIN EN 50022 norm)		
Dimensions		2D1B	2D1B-WD	
	Width	123.60 mm/4.87 in	123.60 mm/4.87 in	
	Length	136.20 mm/5.36 in	135.80 mm/5.34 in	
	Height	54.50 mm/2.15 in	54.50 mm/2.15 in	

WIRING DIAGRAMS

Power Supply



Communication

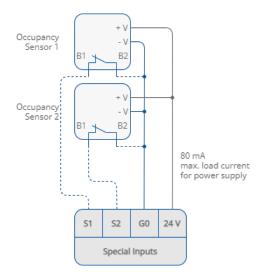


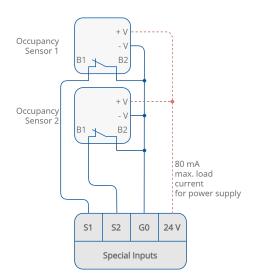




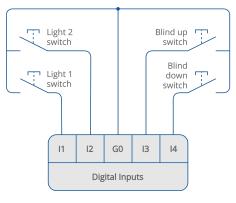
Special Inputs

24 V DC Power Supply Output

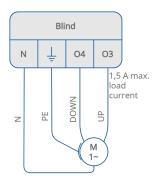




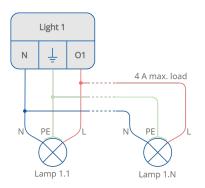
Digital Inputs

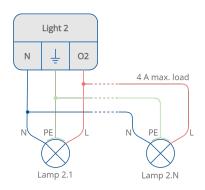




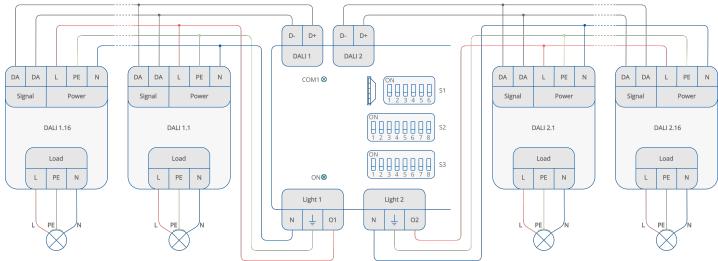


Light Outputs



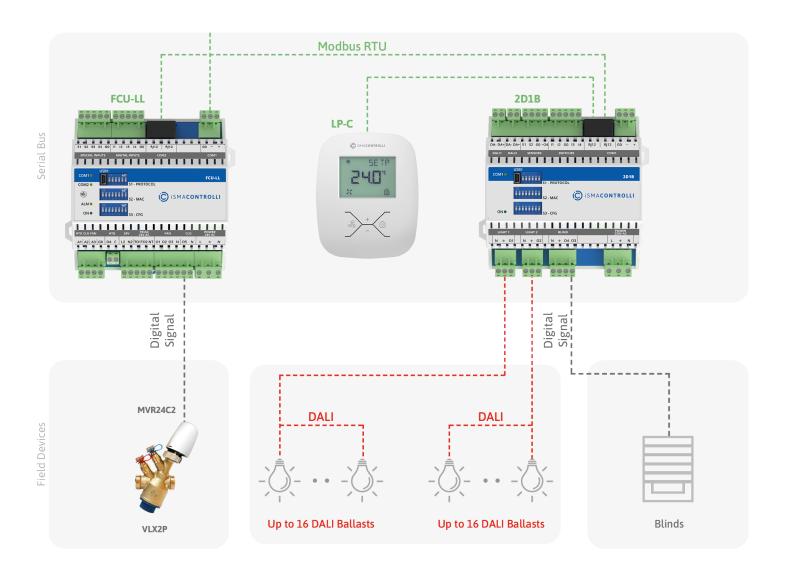


Connection of ballasts and lamps









DEDICATED SOFTWARE

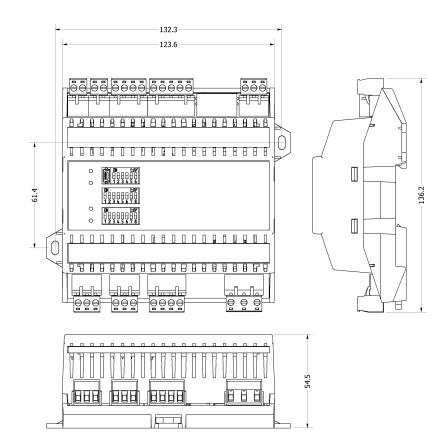


iSMA Configurator - configuration tool for non-programmable iSMA CONTROLLI devices

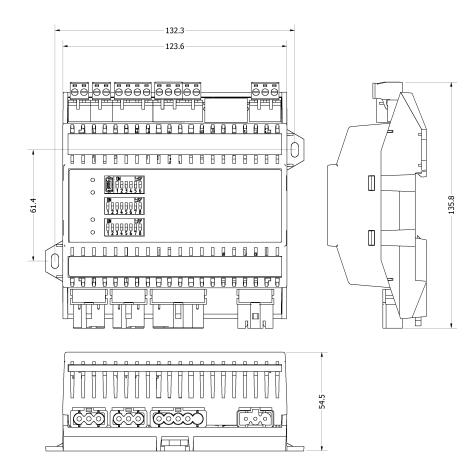
www.qlsol.com



2D1B



2D1B-WD



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