

AirSLC-100/NEMA | Street light controller - NEMA socket



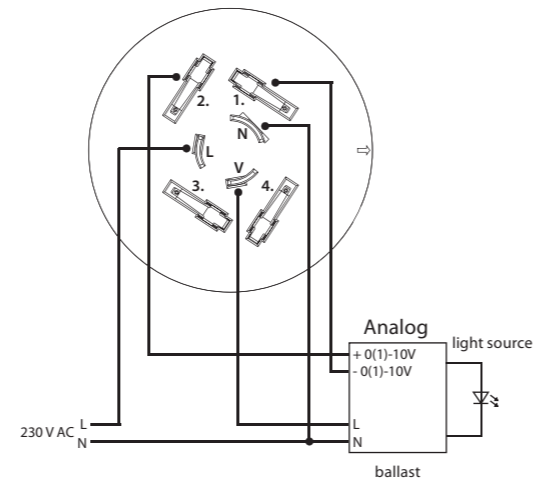
- Used for remote control of the luminaire: ON / OFF / DIMM.
- Measures current flow - fault detection (ballast fault, light source, connecting wires ...)
- Communicates over the wireless LPWAN network (LoRa or NB-IoT).
- Output signal 0 (1) -10V or DALI for direct control of ballast in luminaire.
- Internal digital light intensity sensor, range 5 - 100,000Lx.
- Internal digital temperature sensor in the range -30 ... 70 ° C.
- Power supply: 100-230 V AC, Power 3.5 VA.
- The IP66, UV-resistant, is designed for outdoor mounting in the NEMA socket.
- Update using the RFAF / USB Service Key.
- Connection standard: Standard ANSI C136.41 Dimming Receptacle.

Technical parameters	AirSLC-100L/ NEMA/DALI	AirSLC-100NB/ NEMA/DALI	AirSLC-100L/ NEMA/0-10	AirSLC-100NB/ NEMA/0-10
Supply voltage::	AC 100 - 230 V AC			
Power:	3.5 VA			
Supply voltage tolerance:	-10 /+15 %			
Standby consumption:	0.5 W			
Consumption max.:	at 2 W communication			
Temperature sensor				
Range:	-30 .. 70°C			
Accuracy:	±1°C in the range -10°C .. 70°C ±3°C in the range -30°C .. -10°C			
Light sensor				
Scanned Range:	5 - 100 000 Lx			
Detection angle:	130°			
Indication				
- blue LED:	module power supply			
- green LED:	STATUS module			
- red LED:	LPWAN communications			
Inputs				
Communication Interface:	DALI polarized - active (20 mA)		Analog 0(1)-10 V (20mA)	
Relay				
Power outputs L, N, V:	Load max. 10 A			
Number of contacts:	1x NO AgSnO ₂			
Current rating:	10 A			
Breaking capacity:	2500 VA / 300 W			
Switching voltage:	250 V AC1 / 30 V DC			
Mechanical life:	1x 10 ⁷			
Electrical life:	1x 10 ⁵			
Communication				
Protocol:	LoRa	NB-IoT*	LoRa	NB-IoT*
Transmitter frequency:	868 MHz	LTE Cat NB1**	868 MHz	LTE Cat NB1**
Range in open space:	Approx. 10 km***	Approx. 30 km***	Approx. 10 km***	Approx. 30 km***
Transmission power (max.):	25 mW / 14 dBm	200 mW / 23 dBm	25 mW / 14 dBm	200 mW / 23 dBm
Protocol:	iNELS RF Control			
Transmitter frequency:	866 MHz, 868 MHz, 916 MHz			
Range in open space:	up to 20 m			
Other parameters				
Working temperature:	-30 .. +50 °C			
Storage temperature:	-30 .. +70 °C			
Operation position:	See manual			
Mounting:	in socket			
Protection degree:	IP66			
Overvoltage category:	III.			
Pollution degree:	2			
Dimension:	Ø 88 x 96 mm			
Weight:	160 g			

* nanoSIM / eSIM
 ** Multiple frequency bands of B1 / B3 / B5 / B8 / B20 / B28
 *** Depending on network coverage

Example connection

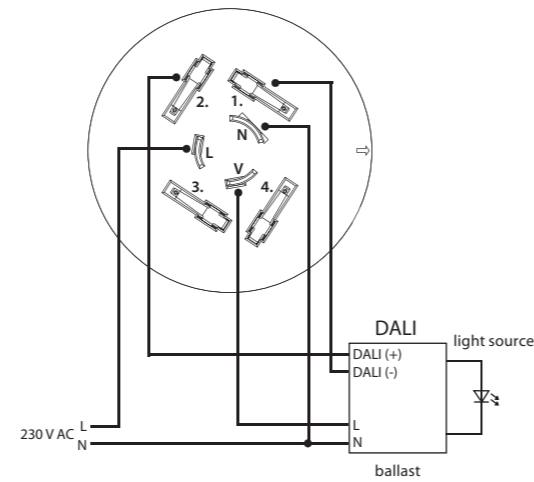
Connection 0 (1) -10V (analog)



Description of wiring contacts:
 1. 0(1) - 10 V (-)
 2. 0(1)-10 V (+)
 3. not connected
 4. not connected

L (LINE)- phase
 N (NEUT) - neutral
 V (LOAD) - switched output

Connection DALI



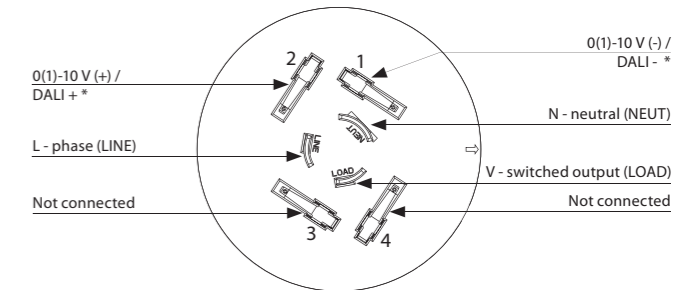
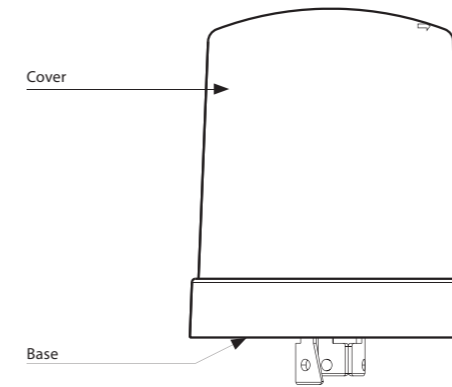
Description of wiring contacts:
 1. DALI -
 2. DALI +
 3. not connected
 4. not connected

L (LINE)- phase
 N (NEUT) - neutral
 V (LOAD) - switched output

For the management of DALI BUS there is not an exact cable type recommended, but it is important to keep some installation conditions. For DALI BUS lines up to 100 m the recommended min. conductor cross section is 0.5 mm². For management between 100 m -150 m a cross section of 0.75 mm² and more than 150 m the recommended min is 1.5 mm². Management of more than 300 m is not recommended. The voltage drop at the end of the installation may not be greater than 2 V.

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Device description



* by module type (analog / DALI)

Function

- When the power is connected, the device sends the initial message containing the measured temperature and light intensity.
- Mode setting (message from server):
- Manual:
 - turn on / off, adjust brightness
 - scanning and data transmission interval of temperature and light intensity data (range)
- Automatic:
 - the on / off is controlled according to the intensity measured by the light sensor
 - sensor senses temperature and intensity of lighting every 2 minutes. After that, it sends a data message of measured values every 60 minutes.

Disintegration

