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Made in Czech Republic

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EN

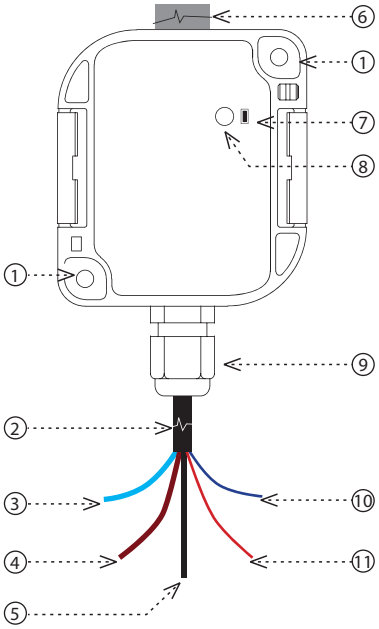
AirSLC-100/DALI

Street light controller (DALI)

Characteristics

- Used for remote control of the luminaire: ON / OFF / DIMM.
- Module measures current flow - fault detection (ballast fault, light source, connecting wires ...).
- The two-directional communication module is intended primarily for monitoring and switching of public lighting in cities,
- Using a monitoring and switching component will help you eliminate financial costs.
- Communicates over the wireless LPWAN network (LoRa).
- Data is sent to the server from which it can be subsequently displayed as a smartphone, application, or Cloud notification.
- Update using the RFAF / USB Service Key.

Description



1. Hole for mounting on the wall Ø 4.3 mm / 0.2”
2. Cable
3. N - Light blue (neutral conductor)
4. L - brown (phase)
5. V - black (switch output)
6. Antenna (length 76mm, Ø 8 mm)
7. Button TEST
8. LED
   - green LED - illuminates when power is applied
   - orange LED - lights up when the output is turned on
9. Cable gommet M16x1.5 for cable max. Ø 10 mm / 0.4”
10. (-) - dark blue DALI
11. (+) - red DALI

Cloud app assignment

It is done in your Smartphone application. Enter the relevant information on the product cover into the application.

Function

When power is applied, the module sends a start message.

It monitors the current flow and sends a data message according to the settings in the application (within 5 min - 24 hrs). In case of a significant change in measurement, it sends the data message immediately.

Controls lighting based on application command.

- The TEST button is for service purposes.
  Long press of the TEST button - adjust the brightness (ascending or descending ramp).
  Briefly press the TEST button to turn on / off the connected device.

General instrucions

Internet of Things (IoT)

- The IOT wireless communications category describes the Low Power Wide Area (LPWA). This technology is designed to provide full-range coverage both inside and outside buildings, energy-saving and low-cost operation of individual devices. Individual networks - LoRa - are available to use this standard.

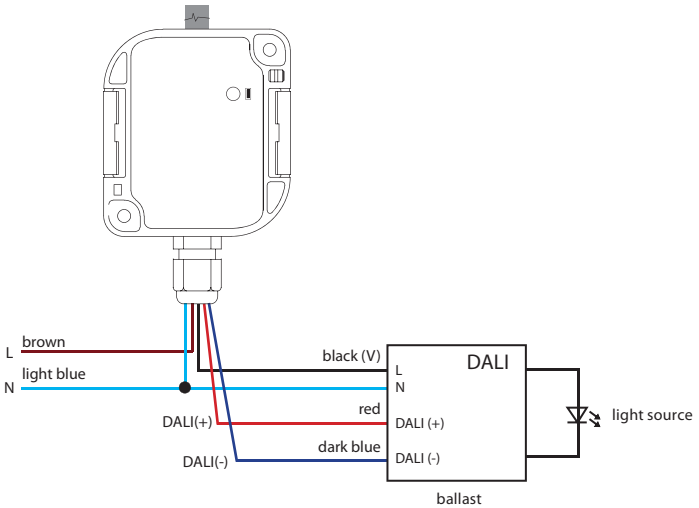
LoRa network information

- The network is bidirectional and its communication uses free frequency band.
  - 865 - 867 MHz India
  - 867 - 869 MHz Europe
  - 902 - 928 MHz North America, Japan, Korea
- The advantage of this network is the possibility of freely deploying individual stations in local locations, thus strengthening their signal. It can therefore be used efficiently in company premises or, for example, in local parts of cities.
- For more information on this technology, please visit www.lora-alliance.org.

Caution for proper operation:

- Products are installed according to the wiring diagram given for each product.
- For proper device functionality, it is necessary to have sufficient coverage of the selected network at the installation site.
- At the same time, the device must be registered in the network. Successful device registration on a given network requires a charge for traffic.
- Each network offers different tariff options - it always depends on the number of messages you want to send from your device. Information on these tariffs can be found in the current version of the ELKO EP pricelist.

Example connection



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 mm^2. For management between 100 m -150 m a cross section of 0.75 mm^2 and more than 150 m the recommended min is 1.5 mm^2. 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.

Technical parameters

	AirSLC-100L/DALI
Supply voltage:	110 - 230 V AC / 50 - 60 Hz
Apparent input:	3 VA
Dissipated power:	1.2 W
Supply voltage tolerance:	+10 /-15 %
Output	
Communication Interface:	active (self-powered) polarized, the ability to connect one device
Output voltage:	20 mA
Relay contacts:	1x $AgSnO_2$, switch the phase conductor
Current rating:	10 A / AC1
Breaking capacity:	2 500 VA / AC1
Switching voltage:	250 V AC1
Mechanical life:	$1x10^7$
Electrical life:	$1x10^5$
Measurement of consumption	
Type:	current flow
Range:	± (20 mA ... 10 A)
Setting	
Setting:	message from the server
Control	
Control:	With a message from the server / button TEST
Output Indication Indicator:	green LED
Indication:	red LED
Communication	
Protocol:	LoRa
Transmitter frequency:	868 MHz
Range in open space:	Approx. 10 km*
Transmission power (max.):	25 mW / 14 dBm
Other parameters	
Working temperature:	-15 ... + 50 °C
Operation position:	any
Mounting:	glue / screws**
Protection degree:	IP44
Overvoltage category:	III.
Pollution degree:	2
Cable	part of the product
- Cross section:	Ø 8 mm
- length:	45 cm
- terminals:	3x 1.5 mm^2, 2x 0.5 mm^2
Length of individual wires:	5 cm
Cable gommet:	M16 x 1.5 for cable ø max. 10 mm
Dimension:	182 x 62 x 34 mm
Weight:	162 g

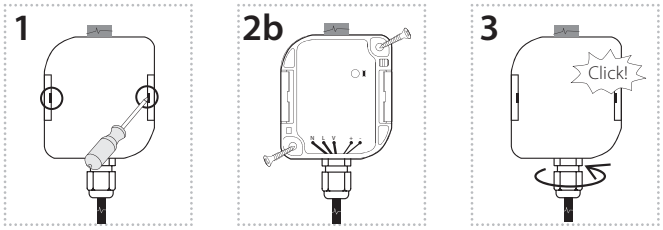
* Depending on network coverage
** Do not enclose in metal switchboards and the like.

Warning

Read the operating instructions before installing the device and putting it into operation. Instruction manual is designated for mounting and also for user of the device. It is always a part of its packing. Installation and connection can be carried out only by a person with adequate professional qualification upon understanding this instruction manual and functions of the device, and while observing all valid regulations. Trouble-free function of the device also depends on transportation, storing and handling. In case you notice any sign of damage, deformation, malfunction or missing part, do not install this device and return it to its seller. It is necessary to treat this product and its parts as electronic waste after its lifetime is terminated.

⚠ Before starting installation, make sure that all wires, connected parts or terminals are de-energized. While mounting and servicing observe safety regulations, norms, directives and professional, and export regulations for working with electrical devices. Do not touch parts of the device that are energized – life threat. To ensure the transmission of the radio signal, make sure that the devices in the building where the installation is installed are correctly located. Unless otherwise stated, the devices are not intended for installation in outdoor and damp areas, they must not be installed in metal switchboards or in plastic cabinets with metal doors - this prevents transmission of the radio frequency signal. iNELS Air is not recommended for controlling life-saving instruments or for controlling hazardous devices such as pumps, heaters without thermostat, lifts, hoists, etc. - radio frequency transmission may be overshadowed by obstruction, interference, transmitter battery may be discharged etc., thereby disabling the remote control.

Assembly



1. Using a flat-blade screwdriver gradually slide it into one groove and the other in the lid and swing open the cover.
2. The product can be attached in two ways:
   a) Directly on a flat surface by gluing * - apply a suitable adhesive to the bottom of the base. Place the base in the desired location and let it dry.
   b) Using a suitable fastener ** by screwing - drill holes into the base with two holes of suitable diameter corresponding to the position of the holes in the bottom of the box. Place the base at the desired location and attach it with suitable bonding material according to the substrate.
3. Replace and snap the front cover. When closing, the handles have to be snapped to their original position. To ensure the degree of protection, tighten the grommet carefully.
4. Connect the cable, see Wiring.

* The glue must meet the optimal conditions for product placement (influence of temperature, humidity ...)

** For example, a screw or screw of max. Ø 4 mm can be used as a suitable fastener material, 13 mm (distance to the partition in the box) must be added to the required length for attachment to the substrate.

Recommendations for installation

- Always install with the supply voltage disconnected.
- The working position is arbitrary but the grommet should not be directed upwards.
- The product does not require special handling and maintenance.

Safe handling

When handling a device unboxed it is important to avoid contact with liquids. avoid unnecessary contact with the components of the device. Do not touch the metal objects inside the unit.