

## OWA ALFA LED



IP20 / IP65

## INSTALLATION AND MAINTENANCE MANUAL

## MOUNTING TYPE

**FL** - (FLUSH MOUNTED) mounting in a suspended ceiling

## SYSTEM VARIANT

**ST** - STANDARD - tests commissioned manually - TEST button

**AT** - AUTOTEST - internal components, battery and light source tests being performed automatically

## OPERATING MODE

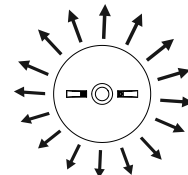
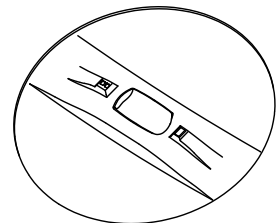
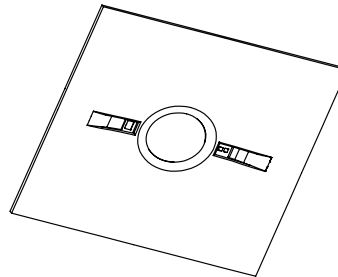
**NM** - NON-MAINTAINED - luminaire operates in emergency mode after power supply failure

## OPTICS

**AP** - AREA PLUS - open area optics for low and medium ceiling altitudes

**AR** - AREA - open area optics for high ceiling altitudes or for the illumination of fire protection equipment

**RP** - ROAD PLUS - evacuation (corridor) optic for low and medium ceiling altitudes



AREA/AREA PLUS



ROAD PLUS

## TESTS

The microcontroller - based control and test unit performs automatically (AT) or by manual execution (ST) two types of tests:

**TEST A** - internal components and light source test lasting 60 seconds - performed every 30 days

**TEST B** - internal components, light source and operation duration test (till the battery is fully discharged) - performed every 360 days

## MANUAL TESTS

press the TEST button and hold in this state until the red and green LED indicators go out. Then the red LED indicates three short

**TEST A** - and fourth long blink. During a long blink release the TEST button. This will start functional test A for about 10 seconds. During the exercise test, the red LED blinks. When the luminaire functional test is completed without errors, the red LED indicator turns off

**TEST B** - run in a similar sequence, but the call occurs during the fifth, longer blink of the red LED indicator. Reset of the test is implemented during the sixth long blink of red LED indicator

## TECHNICAL DATA

Supply voltage	230V AC 50/60Hz			Light source temperature	5700K
Current consumption	17mA			Colour rendering index	70
Power factor	0.7			Light source lifespan	> 50 000h
Protection class	I			Battery type / capacity	Ni-Cd 1.0Ah, 1.5Ah, 2.5Ah
Ingress protection light source/emergency module	IP65 / IP20			Battery voltage	4.8V
Light source type	LED module <sup>*)</sup>			Battery recharging time	24h
Light source power	3W			Emergency operation time	1h; 3h
Luminaire colour	RAL9016 (white)	RAL7042 (gray)	RAL9005 (black)	Ambient temperature range	+5 - +45°C
Luminous flux	AP: 233lm AR: 265lm RP: 238lm	AP: 223lm AR: 254lm RP: 228lm	AP: 202lm AR: 231lm RP: 207lm	Supply cable cross-section area	0.5 - 2.5mm <sup>2</sup>

<sup>\*)</sup> Non-exchangeable but serviceable light source.

## SAFETY

- During the installation and usage of emergency luminaires, follow the national safety rules as well as generally accepted technical rules.
- Supply voltage should never be removed from the permanent phase by any external switches, relays or contactors (BMS, wall switch, etc.).
- During usage of emergency luminaires keep a register of inspection reports. Luminaire installation or maintenance has to be preceded by turning off the power supply and battery.
- Ensure that all foreign bodies are removed before the luminaire power is switched on.
- The luminaire is to be used undamaged and in accordance with specifications.
- The luminaire is designed for use inside the building.

**The above-mentioned luminaire is a fire protection equipment and therefore falls within relevant standards and regulations.**



### NOT OBEYING THE SAFETY INSTRUCTIONS AND RECOMMENDATIONS CAN CAUSE LIFE THREAT OR EVEN DEATH

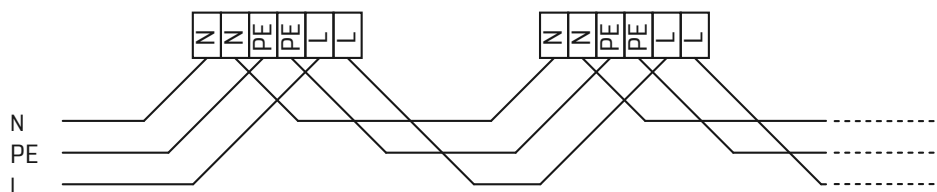
Not obeying this instruction manual can result in luminaire damage and loss of warranty



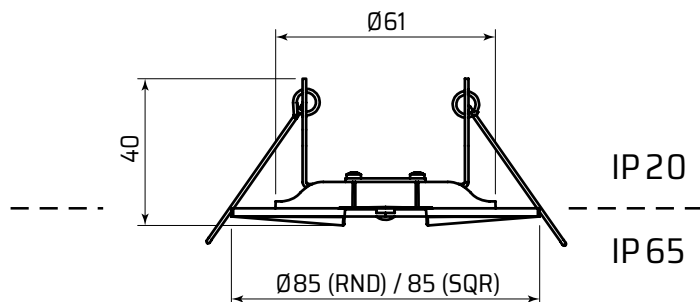
### DO NOT STARE AT THE OPERATING LIGHT SOURCE

The luminaire should be positioned so that prolonged staring into the luminaire at a distance closed than 0.5m is not expected

## WIRING DIAGRAM

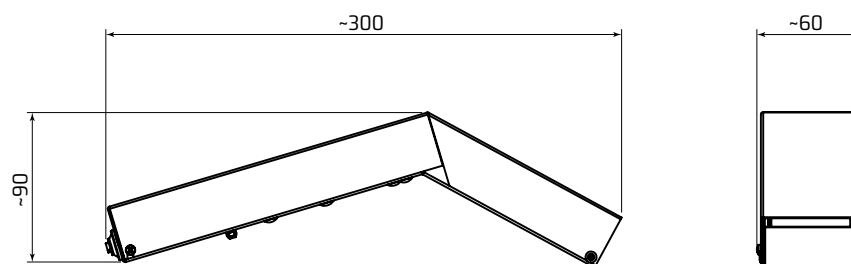


## LIGHT SOURCE DIMENSIONS (mm)

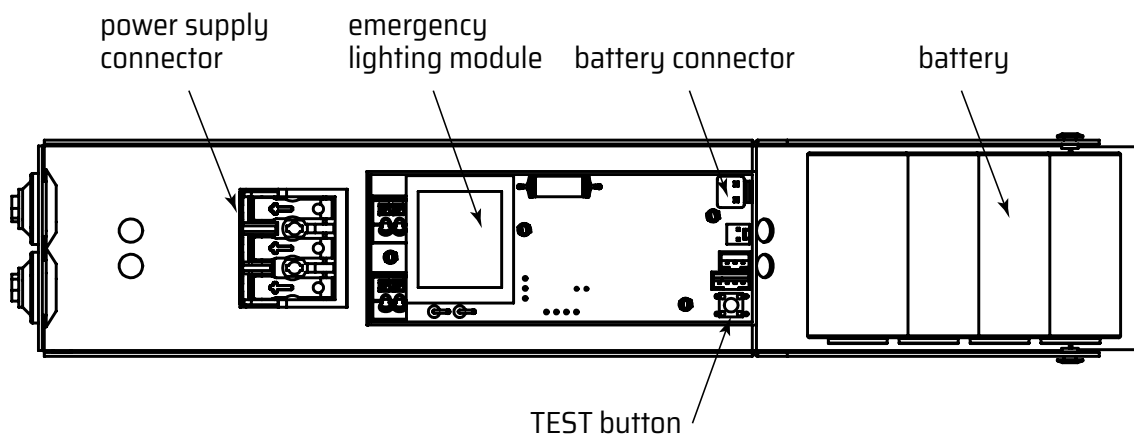


mounting hole diameter: Ø65-75mm; minimal height between a luminaire and a suspended ceiling:  
for the mounting hole Ø65 mm – 170mm, for the mounting hole Ø75mm – 130mm

## EMERGENCY MODULE DIMENSIONS (mm)



## EMERGENCY MODULE CONSTRUCTION



## LUMINAIRE STATE SIGNALLING

green	red	LED indicators
●	○	Luminaire operating properly, battery fully charged
●/●	○	Luminaire operating properly, battery being charged
○	●/●	Test being executed
○	●	Control module malfunction, light source failure, battery disconnected
○	○	Emergency operation

○ – off, ● – on, ●/● – blinks

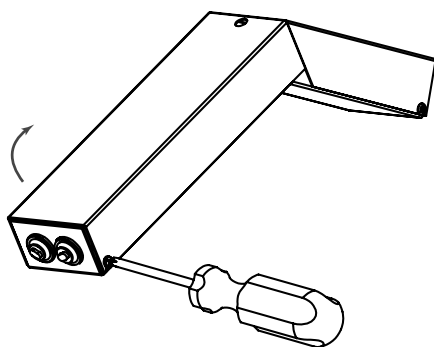


### BEFORE ANY INSTALLATION OR MAINTENANCE OPERATION IS PERFORMED ON THE LUMINAIRE THE POWER SUPPLY SHOULD BE DISCONNECTED

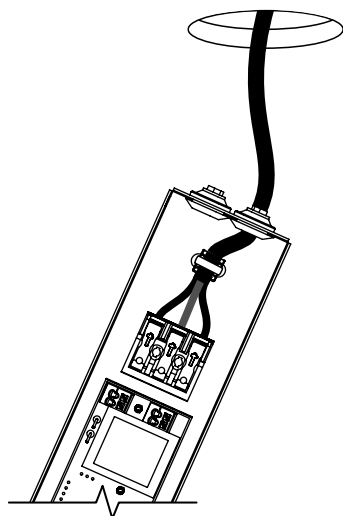
All installation and maintenance procedures can be performed only by qualified, properly trained and if appropriate, certified staff

## INSTALLATION

1. Unpack the luminaire after transport and verify its condition.
2. Cut a hole with the Ø65-75mm diameter in the suspended ceiling.
3. Unscrew the screw that locks the module cover and lift it up.

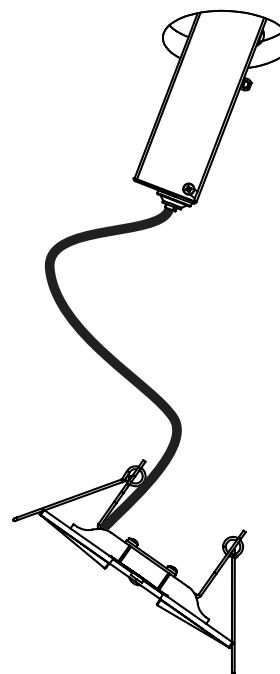


4. Lead the power cables from the hole and connect them to the power supply connector according to the wiring diagram, strip 7-8mm of wire copper insulation. After connecting secure the wires with a cable tie as shown in the drawing below.

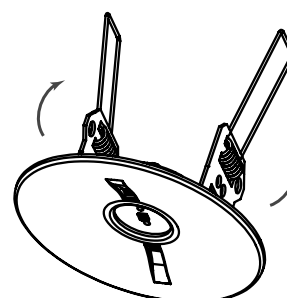


5. Connect the battery plug to the battery socket on the emergency module. Please note that the red wire marks the positive pole of the battery (+). Close the module cover and screw the locking screw.

6. Place the emergency module in the ceiling. Luminaire has a hole in the module housing cover. It allows suspensions luminaire to ceiling.



7. Apply the silicone along the luminaire backside. A sealing is not required when ingress protection IP20 is sufficient. Bend the springs fixing the luminaire upwards and slide the luminaire into previously prepared mounting hole in the ceiling, press it to seal the luminaire. Pay attention to the direction of the luminaire optics (see page 1 - "OPTICS").



8. Perform the commissioning procedure.

## COMMISSIONING

After all installation procedures are finished, the luminaire operation needs to be verified. Follow the instructions below and pay attention to the state of the led indicators:

1. Switch on the luminaire power supply. The battery will be charged. During this period no voltage blackouts should occur.
2. After 36 hours turn off luminaire power supply or run B test. The luminaire will go automatically into emergency operation and will operate for up to few hours over the rated emergency operation time.
3. Switch the power supply back on after the light source turns off.
4. After 24 hours the battery is again fully charged.

## MAINTENANCE

Luminaire should be cleaned with a damp cloth according to building maintenance plan.

Do not use abrasive cleaners, solvents, substances and cleaning agents containing alcohol to clean the light source.

The light source used in this luminaire may only be replaced by the manufacturer, his service agent or a similar qualified person.

### **Battery replacement procedure:**

1. Disconnect the battery from the emergency module.
2. Replace it with a new one of the same types as on the battery label.
3. Connect the battery plug to the battery socket on the emergency module. Perform the commissioning procedure.

## BATTERY FORMING

To ensure the battery long lifespan perform a forming procedure. After installation and commissioning follow below instructions:

1. Switch on luminaire power supply. The battery will be charged. During this period no voltage blackouts should occur.
2. After 36 hours turn off luminaire power supply. The luminaire will go automatically into emergency operation and will operate for up to two hours over the rated emergency operation time.
3. Switch the power supply back on after the light source turns off.
4. After 24 hours the battery is again fully charged.
5. Turn off the power supply, luminaire will switch to emergency operation again and will operate until the battery is fully discharged.
6. Turn the luminaire power supply back on.
7. The luminaire will be ready for operation after 24 hours.

**ATTENTION: If the luminaire does not maintain its rated runtime after a suitable period of charging, the battery should be replaced.**

## STORAGE

The luminaire should be stored no longer than 6 months from the date of purchase, in a dry place with an ambient temperature range of -10 – +30°C.

## WARRANTY

Warranty is valid and enforceable only when manufacturer's recommendations are preserved, and the installation and usage are proper. Warranty is granted for a period of 12 months from the date of sale, unless the luminaire has been sold under different contract conditions. The warranty is excluded in case of misuse, unsuitable use, wrong connection or mechanical defects of the luminaire caused by the client.