

# PRIMOS II LED



## INSTALLATION AND MAINTENANCE MANUAL

### MOUNTING TYPE

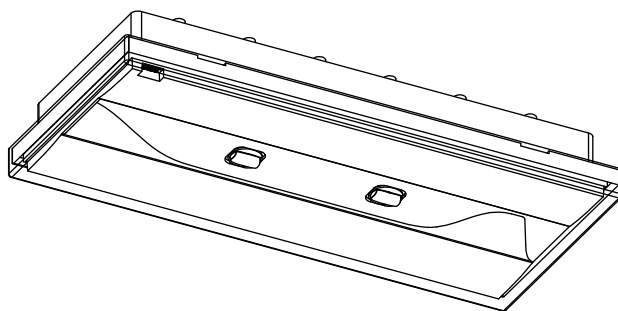
Directly to the wall or ceiling. For other mounting types see: „Mounting accessory for PRIMOS family of luminaires” in product data sheet

### OPERATING MODE

- NM** - NON-MAINTAINED - luminaire operates in emergency mode after power supply failure
- SM** - SWITCHED MAINTAINED - luminaire operates in emergency mode after power supply failure, mains operation controlled by the switched phase L' (L1)
- N** - NIGHT - luminaire operates in emergency mode after power supply failure, mains operation controlled from the main unit of central management system (CT only)

### SYSTEM VARIANT

- ST** - STANDARD - tests commissioned manually
- AT** - AUTOTEST - internal components, battery and light source tests being performed automatically
- CT** - CENTRALTEST - internal components, battery and light source tests being performed on command from the main unit of central management system



### TESTS

The microcontroller-based control and test unit performs automatically (AT) or on order from the central management system (CT) or by manual execution (ST) two types of tests:

- TEST A** - internal components and light source test lasting 60 seconds - performed every 30 days for the AT system variant
- TEST B** - internal components, light source and operation duration test (till the battery is fully discharged) - performed every 360 days for the AT system variant

### TECHNICAL DATA

Supply voltage	230V AC 50/60Hz
Power consumption	< 4VA
Power factor	0,4-0,6
Protection class	II
Ingress protection	IP65
Light source type	LED modules <sup>1)</sup>
Light colour temperature	5700K
Light source power	5W, 7W
Light source lifespan	> 50 000h
Battery type / voltage	Ni-Cd / 4,8V; Ni-MH / 8,4V

Battery capacity	1,5; 1,6; 2,1; 2,5; 4,0Ah
Battery recharging time	< 24h
Emergency operation time	1h; 3h
Ambient temperature range	+5 - +35°C; TE: <sup>2)</sup> -20 - +35°C
Supply cable cross-section area	0,5 - 2,5mm <sup>2</sup>
Supply cable diameter	≤ 13mm
Communication cable diameter	< 7mm
Suitable for through wiring	YES
Suitable for surface wiring	YES

<sup>1)</sup> Non-exchangeable, but serviveable light source; <sup>2)</sup> Extended temperature range version

### 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 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

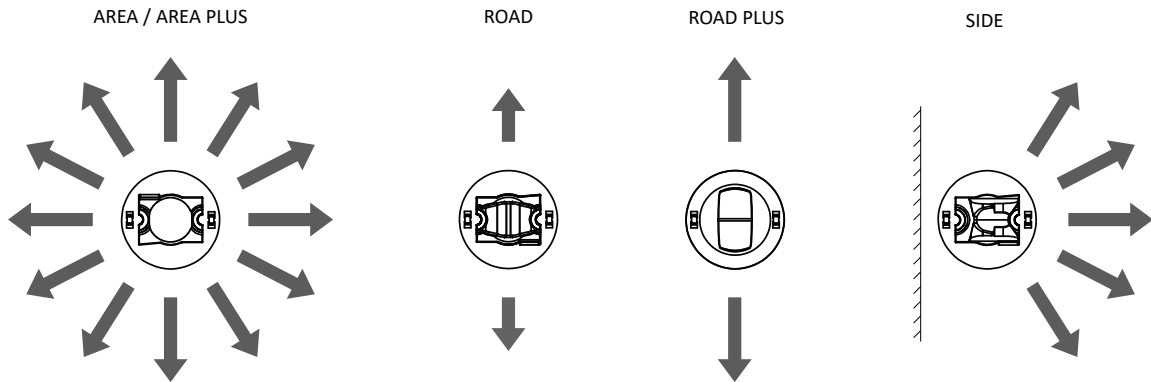


#### DO NOT STARE AT THE OPERATING LIGHT SOURCE

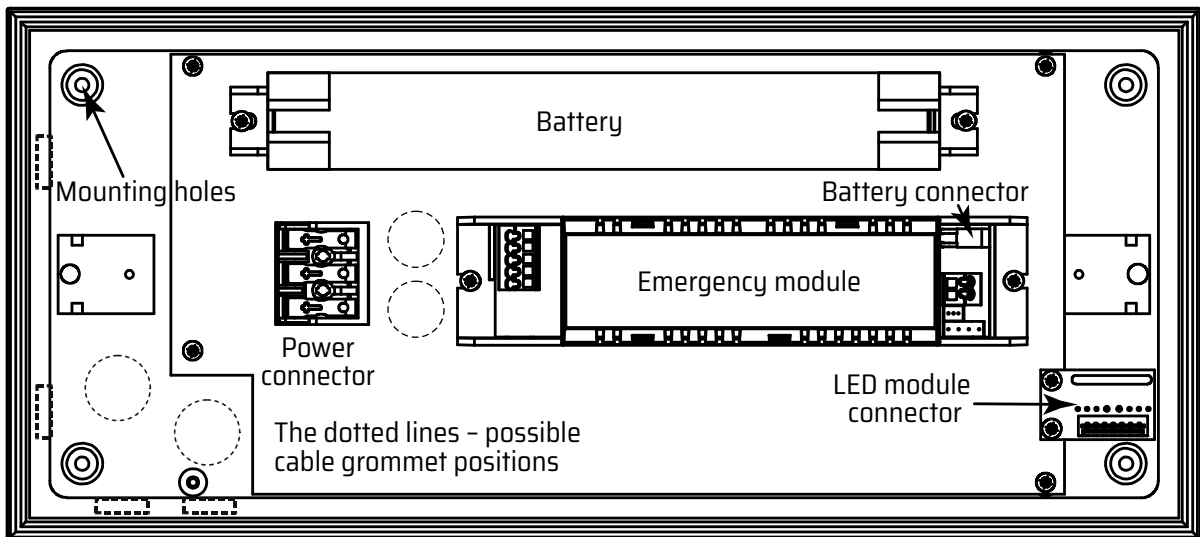
The luminaire should be positioned so that prolonged staring into the luminaire at a distance closed than 0.5m is not expected

## OPTICS

- AREA** - Symmetrical light distribution in all directions, recommended for use in places of considerable height or to illuminate fire points
- ROAD** - Light distribution mainly along the escape route, recommended for use in high corridors
- ROAD PLUS** - Light distribution mainly along the escape route with a much greater range than for the ROAD optics, for small heights
- ROAD PLUS HV** - Used to illuminate escape routes at the point of their intersections
- SIDE** - Light distribution directed to one side, for wall mounting, spot illuminating

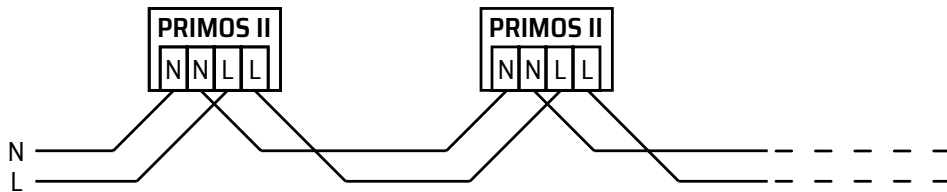


## CONSTRUCTION

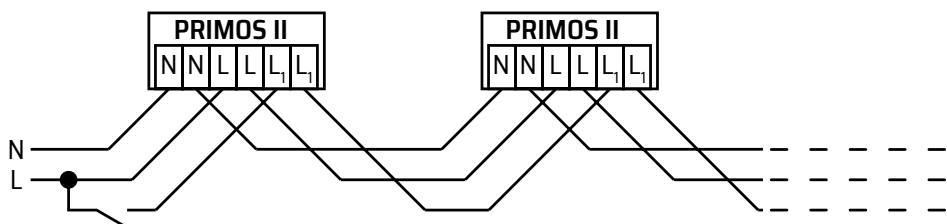


## WIRING DIAGRAM

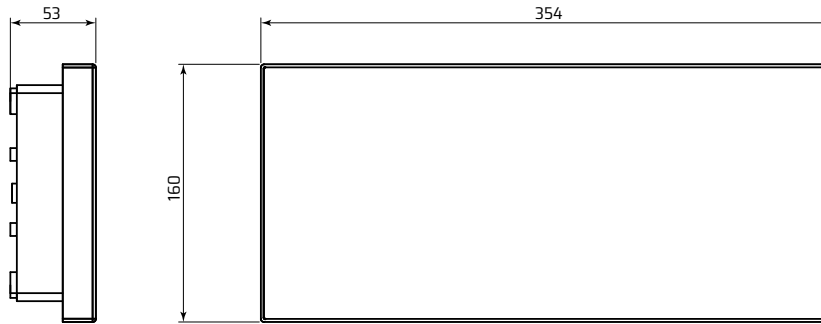
NM/N



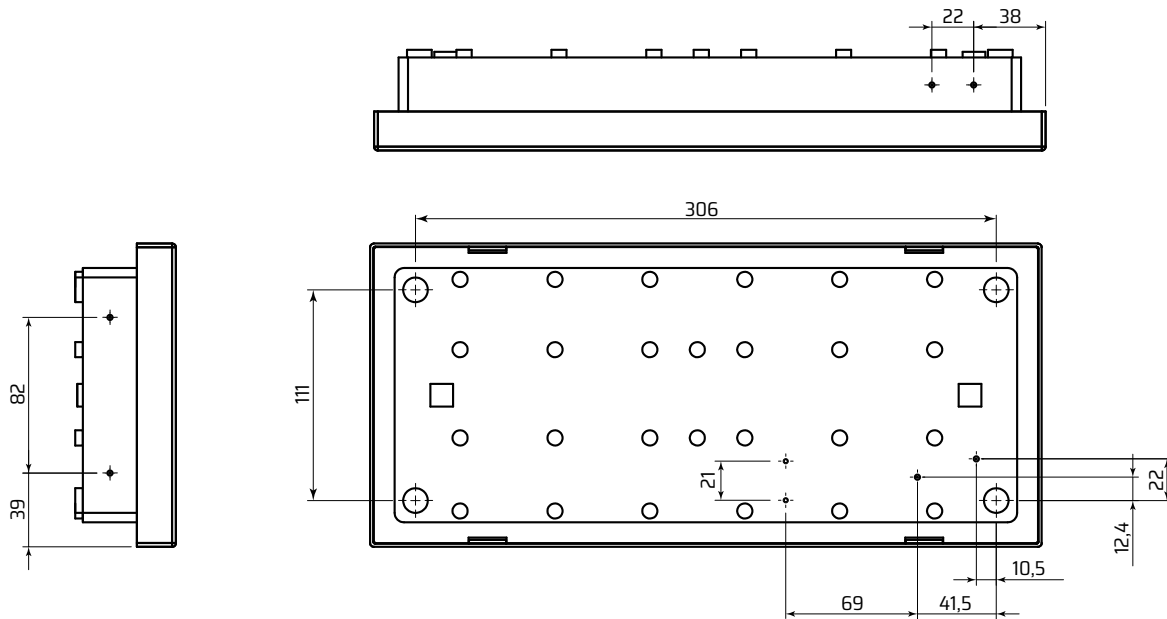
SM



## DIMENSIONS (MM)



## MOUNTING DIMENSIONS (MM)



## FUNCTIONS AND STATE SIGNALLING

Dostęp do funkcji (menu) oprawy poprzez zbliżenie i przytrzymanie magnesu w miejscu oznaczonym TEST. Następuje sygnalizacja wejścia do menu, po czym następują długie mignięcia oznaczające poszczególne funkcje, a następnie sygnalizacja wyjścia z menu. Odjęcie magnesu w trakcie poszczególnych mignięć menu spowoduje uruchomienie odpowiedniej funkcji oprawy. Przerwanie wykonywanego testu uruchomionego ręcznie poprzez jednosekundowe przyłożenie magnesu do miejsca oznaczonego TEST.

### RED AND GREEN LED

**WEJŚCIE:** trzy krótkie naprzemienne mignięcia:  
czerwone, zielone, czerwone;

**WYJŚCIE:** dwa krótkie naprzemienne mignięcia:  
czerwone, zielone;

### MENU:

**długie mignięcia:**

- pierwsze zielone, odjęcie magnesu → start TESTU A
- drugie zielone, odjęcie magnesu → start TESTU B
- trzecie zielone, odjęcie magnesu → prezentacja adresu

**krótkie mignięcia:** czerwone → dziesiątki, zielone → jednostki



### BEFORE ANY INSTALLATION OR MAINTENANCE WORK 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

## 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 lampshade.

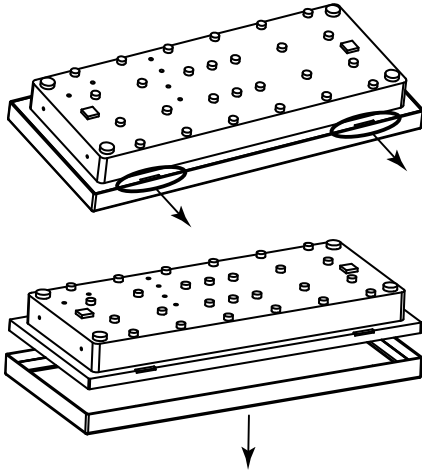
The light source used in this luminaire may only be replaced by the manufacturer, his service agent or a similar qualified person.

**Battery replacement procedure** if nominal emergency operating time isn't met (follow the drawings in installation procedure):

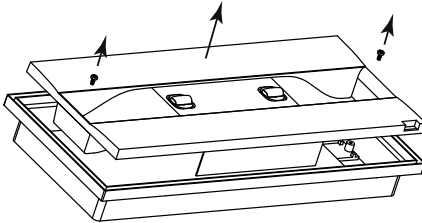
1. Turn off luminaire power supply and remove the lampshade. Disconnect battery from emergency module. In case a thermostat and heater are used on the battery pack (luminaire with extended temperature range), disconnect the blue and brown wires from power supply connectors.
2. Replace battery according to the type specified on battery label.
3. Connect and mount the replaced battery (reverse of step 1).
4. Mount the lamp shade.
5. Perform the commissioning procedure.

## INSTALLATION

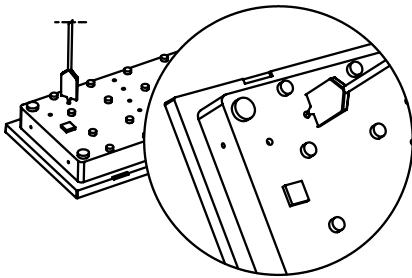
1. Unpack the luminaire after transport and verify its condition.
2. Drill holes in ceiling according to luminaire mounting hole spacing shown on second page, so that cables can be pushed freely into the luminaire through the appropriate grommets. Use dowels and screws appropriate for the material luminaire is being mounted to.
3. Bend the luminaire lampshade on one side and pull down gently and then repeat the same on the other side of luminaire.



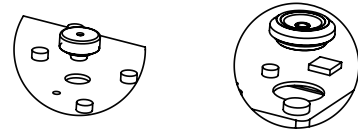
4. Unscrew the two screws holding the masking shade and remove it after disconnect the wiring harness from the LED module connector.



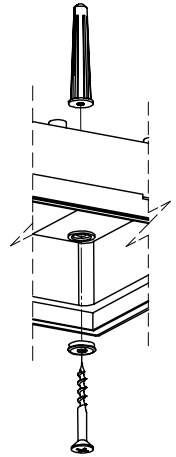
5. Drill grommet holes with a diameter of  $\varnothing 20$  for power supply grommets and with a diameter of  $\varnothing 12$  for communication system cable (see mounting dimensions). Use spade drill bits and do not exceed 600rpm.



6. Mount grommets and remove their inner part using a wire or a small screwdriver.



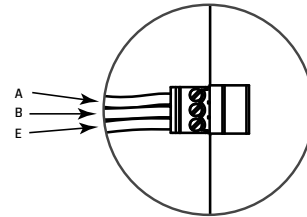
7. Screw the luminaire to ceiling (EPDM rubber of washer should face to luminaire body as shown on the drawing) pushing power supply cables through grommets. Remember that cable jackets should extend beyond the grommet.



8. Connect power supply cables to the power supply connector as shown on the wiring diagram on second page. Conductor insulation should be stripped by 8-9mm. Cables should be carefully arranged so that no shadow is present on pictogram. The luminaire may be through wired.

**WARNING! The L phase has to be the same as the one used for the supply of normal luminaires, where after power loss on it the luminaire goes into emergency operation (permanent phase).**

9. For the CT system variant connect the communication cables according to the "Communication line installation manual". The shielding wire should not touch any metal part of the luminaire.



10. Mark the battery commissioning date on battery label and connect the battery connector to emergency module (in accordance with the CONSTRUCTION section).

11. Connect the LED module. Insert and screw the masking shade (reverse of step 4).

12. Install the lampshade (reverse of step 3). Pay attention that all four hooks clamp on the grooves on the back of luminaire.

13. 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 luminaire should signal battery charging or its charged status.
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 and the luminaire is ready for operation.

## 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  $-10 - +30^{\circ}\text{C}$ .

## 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.