

# PRIMUS LED OPERATING INSTRUCTIONS

#### Dear Customer,

Thank you for the confidence you have bestowed on our company by choosing to purchase one of our devices. Prior to its use, for the sake of your own safety, please review carefully information about the product provided below.

## PRIMUS LED EMERGENCY POWER SUPPLY KIT

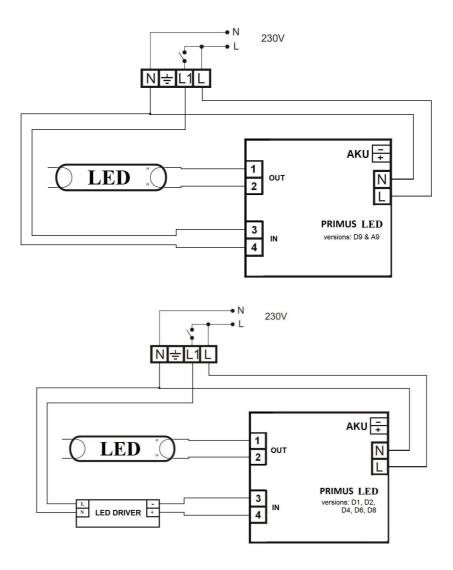
Primus LED is intended for installation in lighting fittings equipped with LED light source powered directly from 230V mains (versions A9 and D9) or through an external constant current or constant voltage LED driver (versions D1, D2, D4, D6 and D8). The emergency module features compact dimensions for mounting in small lighting fittings. The kit features a DC powered electronic ballast and a battery pack with mounting brackets. When installed, the kit enables to adapt any lighting fitting to operate in emergency as well as mains - emergency mode.

## **OPERATION PRINCIPLE**

The emergency module detects a failure of 230V/50Hz power and using the power stored in the battery it begins to generate high relevant voltage, necessary for power supply of LED lamps. The duration of emergency operation depends on LED light source power rating and the capacity of battery used. The converter reaches its full efficiency after 24 hours from connection to or restore of normal voltage. In the event of a failure of 230V/50Hz power before those 24h, the duration of emergency operation of the device will depend on the level of battery charge. Under normal conditions, i.e. when supplied with 230V/50Hz power, the converter charges the attached pack of high temperature batteries in a continuous mode. Battery charging as well as presence of 230V/50Hz AC power in signalled by the green LED of the module.

## CONNETION DIAGRAM

The connection diagram presented below is of illustrative nature. If in doubt, please contact a qualified electrician or the distributor from whom you purchased the unit, or directly with our technical department.



<u>CAUTION!</u> Never operate the emergency module without load!

Before starting up the device, check that the LED light source has been properly connected to the system!

#### **GUIDANCE FOR USER**

- Factory packed converter is disconnected from the battery. In this state it must not be stored in subzero temperatures as it may cause a rapid discharge. During storage make sure the battery is not excessively discharged. The voltage of a battery pack cell should not drop below its nominal value (e.g 3.6V for a 3-cell pack). Recharge by connecting the battery to the converter and connecting the lighting fitting to 230V/50Hz for at least 24 hours.
- It is recommended to run battery pack charging cycle during the first start up of the emergency power supply, the cycle should be at least 24 hours long. Furthermore, it is worthwhile to format the batteries in order to increase their life. Formatting is achieved by performing three cycles of full charge and discharge of the batteries. Discharge the battery pack by disconnecting the mains power. The lighting fitting will then switch to emergency mode.
- To avoid unnecessary discharge of the battery pack, connect it to the emergency module only after installing the LED lamp and connecting it to the mains power. Test of the emergency lighting operation is done by disconnecting the mains power and measuring the duration of emergency operation. If it is too short, replace the batteries after checking the electrical system for proper operation.
- Regardless of the degree of wear of the batteries, it is recommended to replace them every four years.
- The lighting fitting should work in the emergency mode only with fully charged battery. Never disable periodically the charging voltage.
- Intelight Sp. z o.o. reserves the right to change the design of the product.

#### **GUARANTEE**

Intelight Sp. z o.o. provides free removal of faults resulting from defects in material and workmanship by repairing or replacement of the device, for a period of two years from the date of purchase. In case of malfunction, please deliver the product to the place of purchase along with a warranty tag. The guarantee shall not cover wearing parts as well as defects resulting from improper operation of the device, in particular mechanical damage or malfunction caused by temperature or chemical agents. Please also note that the costs of unjustified complaint shall be charged to the customer. For complete guarantee details please visit our website at: www.intelight.eu.

# **DECLARATION OF CONFORMITY**

The products described herewith meet the requirements of the following EU Directives:

- Low Voltage Directive (LVD 73/23/EEC);
- Electromagnetic Compatibility Directive (EMC Directive 89/336/EEC).

#### TECHNICAL SPECIFICATIONS:

- Power supply voltage: AC 230V/50Hz
- Operating frequency: 20kHz 40kHz
- Mains power consumption: max. 4W
- Time needed to switch to emergency mode: 0.2 0.8s
- Ambient temperature (Ta): 5 +50°C
- Operating temperature (Tc) 70°C
- Battery used: maintenance free, high temperature Ni-Cd HT batteries as a standard and Ni-Mh HT batteries as an option.
- Battery pack voltage: 3.6V or 4.8V
- Battery capacity: 1h 1,5Ah, 2h 2,5Ah, 3h 4Ah
- Maximum battery charging duration: 24h
- Mounting: in the lighting fitting, with crews
- Lighting fitting colour: white
- Dimensions (H/W/L): 32/42/152









This symbol indicates selective collection of electrical and electronic equipment. Obsolete equipment must be returned to appropriate WEEE collection point.