

**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 EMERGENCY POWER SUPPLY KIT**

It features a DC powered emergency module and a battery pack with mounting brackets. It works with fluorescent lamps, powered by magnetic and electronic ballasts. For lighting fittings fitted with electronic ballast it is recommended to use PRIMUS TEC model.

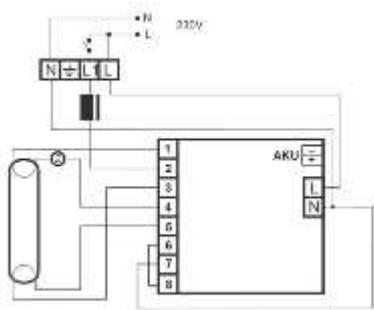
**OPERATION PRINCIPLE**

The emergency module detects a failure of 230V/50Hz power and using the power stored in the battery it begins to generate high frequency voltage, necessary for power supply of fluorescent lamps. The duration of emergency operation depends on fluorescent lamp 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. It is so as 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 is signalled by a green LED. In addition, PRIMUS modules can be equipped with test system and lock system. The test system enables, at any time, a manual test of correct operation of the lighting fitting in emergency mode. The lock system is responsible for disabling the emergency mode of the lighting fitting during repair and maintenance.

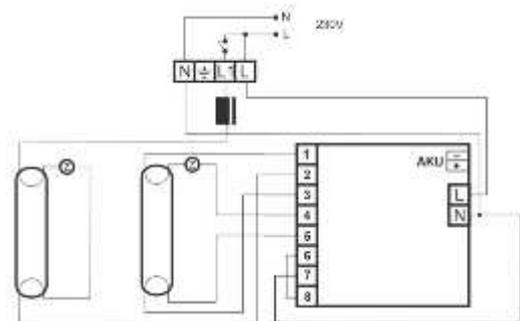
**CONNECTION DIAGRAMS**

The following diagrams are presented for illustration purposes only. They fail to include all possible connections of the emergency module with to electronic ballasts available on the market and are limited to the most common solutions. If in doubt, please contact a qualified electrician or the distributor from whom you purchased the unit, or directly with our technical department.

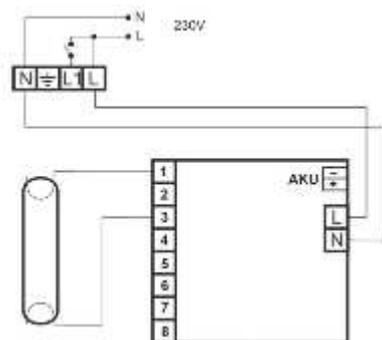
**ALL-PURPOSE CONNECTION DIAGRAMS**



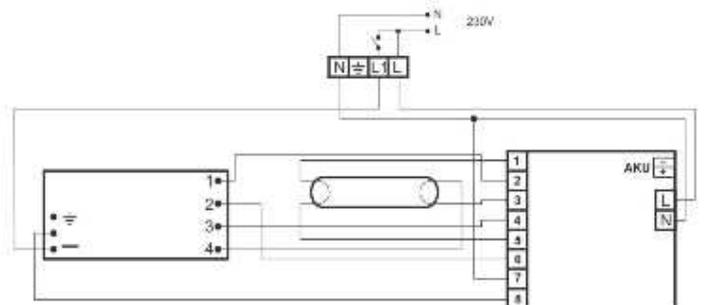
**Connection to inductive ballast**



**Connection to inductive ballast for fluorescent lamps arranged in serial layout**



**Emergency mode connection without ballast**



**Connection to electronic ballast**

## 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 fluorescent lamp 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. Operation when the battery is not fully charged will cause premature wear of the fluorescent lamps.
- High voltage may be present, even as much as 1.4 kV for an open circuit, at the terminals of the converter and lamps as well as elements working with them. Installation must be performed by qualified personnel. Intelight Sp. z o.o. shall not be liable for damages resulting from improper installation or use of improper light source. 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.pl](http://www.intelight.pl).

## 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: 230V/50Hz
- Operating frequency: 20kHz - 40kHz
- Mains power consumption: max. 4W
- Light stream during emergency operation: min 10%
- Time needed to switch to emergency mode: 0.2 - 0.8 s
- Ambient temperature (Ta): 5 +50°C
- Operating temperature (Tc) 70°C
- Open circuit voltage: 1000V
- 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/4.8V
- Battery capacity: 1 h - 1.5 Ah, 2 h - 2.5 Ah, 3 h - 4.0 Ah
- Maximum battery charging duration: 24h
- Dimensions (H/W/L): 32/42/152
- Wire thickness: 1.5mm<sup>2</sup>
- Mounting: in the lighting fitting, with crews
- Lighting fitting colour: white

## LIST OF FLUORESCENT LAMPS SUPPORTED BY PRIMUS 6-36W

T8 - 18/36W  
T5 - 4/6/8/13/14W  
T5C - 22W  
T9C - 22W  
TC-TEL - 13/18/26W  
TC-DEL - 10/13/18/26W  
TC-DD - 10/16/21/28W  
TC-L - 18/24/36W  
TC-SE - 5/7/11W

## LIST OF FLUORESCENT LAMPS SUPPORTED BY PRIMUS 6-58W

T8 - 18/36/58W  
T5 - 4/6/8/13/14/24W  
T5C - 22/40W  
T9C - 22/32W  
TC-TEL - 13/18/26/32W  
TC-DEL - 10/13/18/26W  
TC-DD - 10/16/21/28/38W  
TC-L - 18/24/36/55\*W  
TC-SE - 5/7/11W



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

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