

# EL SERIES

## COMBINED ELECTRONIC BALLAST AND EMERGENCY LIGHTING MODULE FOR LED: INSTALLATION GUIDE

The combined electronic ballast with emergency lighting module for LED SERIES EL are suitable for power LED (1- 4W) or LED modules (12/24V). They can be used indifferently for maintained (main, 230/240V) or emergency operation.

When there is a decrease in mains voltage the emergency automatically starts working.

All the models have sealed Ni-Cd batteries able to guarantee high efficiency with high temperatures.

The electronic devices can be put on a false ceiling or on a ceiling lamp, module, channel, thus allowing any light spot to be qualified for emergency in a simple and quick way, where needed.

The electronic devices are designed according to EN61347-2-7, EN61547, EN55015, EN60598-2-22, EN61000-3-2, SELV

### Important:

*always read the present instruction leaflet*

- for the wiring please refer to enclosed wiring diagrams
- great attention must be paid to polarity during the installation of the battery
- keep batteries away from heat sources (away from magnetic ballast)
- in order to check the correct functionality we recommend a charging of about 30 hours
- this system is made to be powered only with the supplied batteries: do not connect any external battery charger.
- it is advisable to effect periodically (every 3 months) at least one discharge and charge cycle in order to assure the max efficiency
- replace the batteries every 4 years or after 500 charge/discharge cycles
- before every maintenance operation, disconnect all mains
- this product contains materials which could be toxic if improperly disposed in the environment
- keep this instruction leaflet for any further reference

**ATTENTION:** this unit should only be used for purposes for which it has been intended and should be installed using the instructions which are provided. The manufacturer cannot be held liable for damages to person, animals or objects as a result of improper, unreasonable and wrong usage.

### Technical characteristics:

- supply voltage: 230 ÷ 240V - 50/60Hz
- supply current: 60mA EL1241, 40mA EL2471
- cos φ 0,55
- max case temperature: 70°C
- ambient temperature: 5 ÷ 45°C
- recharging time: 24h
- terminals max connection size: 1.5mm<sup>2</sup>
- charging device with supply is reinforced insulation able to recharge the battery normally after the test in clause

MODEL	LED	BATTERY	EBLF	AUTON.	BATTERY CURRENT
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EL 1241	CONSTANT CURRENT POWER LED				
1 x 350mA	4,8V - 1,6Ah	57%	4 h	190mA	
2 x 350mA	4,8V - 1,6Ah	57%	3 h	380mA	
3 x 350mA	4,8V - 1,6Ah	57%	2 h	560mA	

#### CONSTANT VOLTAGE LED MODULES

12V x 300mA	4,8 - 1,6Ah	66%	1 h	
12V x 150mA	4,8 - 1,6Ah	100%	2 h	
12V x 100mA	4,8 - 1,6Ah	100%	3 h	

EL 2471	CONSTANT CURRENT POWER LED				
1 x 350mA	7,2V - 1,6Ah	57%	8 h	120mA	
2 x 350mA	7,2V - 1,6Ah	57%	6 h	220mA	
3 x 350mA	7,2V - 1,6Ah	57%	4 h	310mA	
4 x 350mA	7,2V - 1,6Ah	57%	3 h	400mA	

#### CONSTANT VOLTAGE LED MODULES

24V x 150mA	7,2V - 1,6Ah	100%	2 h	
24V x 75mA	7,2V - 1,6Ah	100%	3 h	
24V x 50mA	7,2V - 1,6Ah	100%	5 h	

### Mains connection:

please always read the present instruction guide.

Connect the terminals 1 - 2 (L - N) to the mains that must never be disconnected (battery charge).

Connect the terminals 3 - 4 (L' - N') to the interrupted line for maintained operation.

When there is a decrease in mains voltage the emergency automatically starts working.

### Led out:

Connect LED to the OUT terminal (always respect cable polarity).

### Led indicator:

Shows the presence of mains and battery in charge. It must always remain connected to device in a visible place outside near the lamp qualified for the emergency.

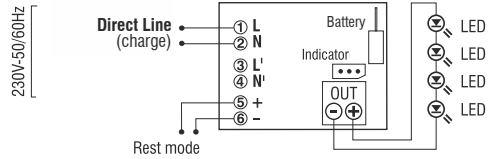
### Battery:

Connect battery to BATT.

### WIRING DIAGRAMS: POWER LED

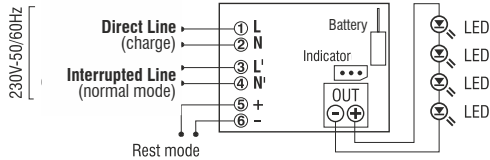
#### Emergency mode only

from 1 to max 4 LED, series connection



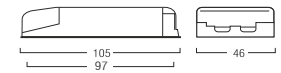
#### Normal mode + Emergency mode

from 1 to max 4 LED, series connection



### DIMENSIONS AND WEIGHT

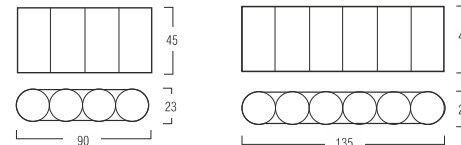
electronic unit (all the models) - 0,07Kg



#### battery:

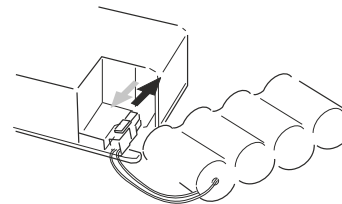
4,8V-1,6Ah | 0,20 Kg  
(EL 1241)

7,2V-1,6Ah | 0,30 Kg  
(EL 2471)



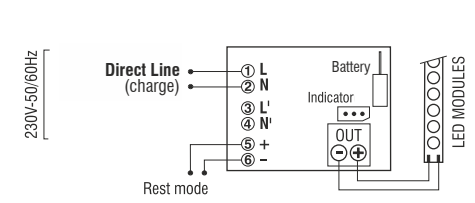
### Battery replacement

Sealed Ni-Cd batteries. To replace batteries follows the instructions. Do not discard in the environment. Return to manufacturer.

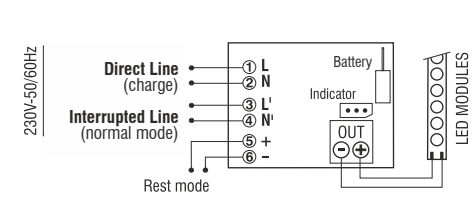


### WIRING DIAGRAMS: LED MODULES

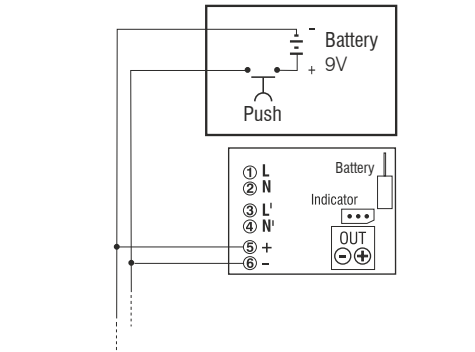
#### Emergency mode only



#### Normal mode + Emergency mode



### REST MODE FACILITY:



WITH REMOTE CONTROL DEVICE (6-12V)  
It allows both to switch off and switch on the emergency lamps during emergency mode. The rest mode is automatically reset when mains voltage is restored.

**ATTENTION:**  
**The installation of the product must be followed by qualified personnel.**

**If the product is used for purposes other than the original ones or if it is connected incorrectly, LEF Lighting S.R.L. will not accept any responsibility for damages caused.**



PRODUCT TO BE DISPOSED  
DIFFERENTLY FROM URBAN WASTE  
AEE Identification nr.IT1804000010321

