

LED EMERGENCY CONVERSION KIT
Model: U-LED



Universal emergency conversion kit for LED luminaires. Equipped with a microcontroller it regulates automatically the output voltage and current to any LED luminary with working voltage from 8-33V, providing approximate power of 3.5W and max current of 350mA to the luminary in Emergency stage. The kit can be connected as MAINTAINED/NON MAINTAINED (in maintained mode connected to the DRIVER of the luminary max 2A) and is adapted for constant current & constant voltage drivers. It automatically configures the parameters the 1st time it enters in emergency stage (during less than 5secs).

The light output in emergency mode will vary from 90-10% depending on the power of the luminary, in models with low power the output will be high and it will decrease as the power of the luminary increases.

We recommend not connect to luminaries of more than 48W due to low efficiency.

Characteristics:

- Supply 230 V 50/60Hz
- Input current: (U-LED-1) -> 10mA / (U-LED-3) -> 28mA
- Control via microcontroller.
- Maintained/Non Maintained.
- Led indicating the battery charge
- Output voltage: 8-33V automatically regulated.
- Output current: 350ma max automatically regulated.
- Output power in emergency mode 3.5 W automatically regulated.
- Maximum output current of driver connected:2A
- Battery: (U-LED-1) -> Ni-MH de 6V-1,1Ah / (U-LED-3) -> Ni-Cd 6V-2,5Ah
- Autonomy: (U-LED-1) -> 1 hour / (U-LED-3) -> 3 hours
- Protection against Overloading and end of Battery Discharge
- Open circuit protection 38 V.(LED lamp)
- Grade IP20
- Class II device
- Ambient temperature:0-50°C
- Verification test via test button or Telemando TM
- Stand by and re-start via Telemando.
- Battery charging 24 hours
- Max cross section of cable to be connected 1,5mm
- Max distance to led lamp 2m
- Installation in artificial ceiling or inside the luminary.
- Manufactured in accordance to norms UNE-EN 61347-2-13

Table of working parameters in emergency mode in different LED luminaires:

LED Luminary	Output voltage (lamp)	Output current (lamp)	Output power W	Battery	Battery discharge current.
Luminary 3 LED x 1W	9,65 VDC	349 mA	3,37 W	6 VDC	738 mA
Luminary 4 LED x 1W	12,51 VDC	283 mA	3,54 W	6 VDC	780 mA
Luminary 7 LED x 1W	20,82 VDC	170 mA	3,54 W	6 VDC	805 mA
Luminary LED 15W	11,51 VDC	309 mA	3,56 W	6 VDC	778 mA
Luminary LED 20W	16,48 VDC	214 mA	3,53 W	6 VDC	776 mA
Luminary LED 25W	32,78 VDC	98 mA	3,21 W	6 VDC	788 mA
Luminary LED 60W	18,27 VDC	192 mA	3,51 W	6 VDC	795 mA

Working:

Power presence: The device charges permanently the battery and the Green led indicating the charging process in ON. In maintained mode, the driver of the luminary connected to the kit lights the lamp and in non maintained mode the luminary is OFF.

Power failure: In case of power failure or low voltage, the kit enters in emergency mode, the green led indicating the battery charge goes OFF,

En maintained mode, the kit disconnects the driver and illuminates the led lamp with battery power regulating automatically the power to max 3.5W and current to 350mA.

En non maintained mode: The Kit illuminates the luminary, regulating automatically the power to max 3.5W and current to 350mA.

In Emergency mode if the Green LED is blinking, it means that LED Lamp of the luminary is disconnected or LED Lamp is inadequate for the KIT (LED Lamp 8-33V), To solve this, switch Power OFF connect or replace the LED lamp, Power ON & press TEST button to check.

Verification Test: By connecting a TEST PUSH button & pressing it or Via TELEMANDO. Pressing ON button on TELEMANDO, the kit enters in emergency model during power presence, its returns to normal mode as soon as the On button is released (delay aprox 2seconds) please refer to connection diagram.

Standby/Restart: In emergency Stage if you press the TEST BUTTON for 3 seconds or by pressing ON button of TELEMANDO during 3 seconds, the kit enters in Standby mode, switching OFF the LED luminary and saving the battery power and it returns to emergency mode switching ON the LED luminary by pressing again the ON button for 3 seconds. Pls refer to connection diagrams.

Installation:

- Please refer to the connection diagrams on this page for connection and follow the following steps.
- Switch OFF the power to make the installation.
- Connect the LED luminary to the connectors of the KIT (Led LAMP) make sure the polarity.
- Connect the output of the external Driver of the Luminary to the KIT, make sure the polarity indicated (Maintained mode)
- Connect the power line (L1) to the external driver of the luminary through the KIT as indicated in the connection diagram (Maintained mode)
- Connect the Power line of the KIT, this line should be permanent, if disconnected the KIT will enter in emergency mode.
- Connect the cable with LED indicated the battery charging to the connector in KIT, This LED should be installed in the Luminary or near the luminary so that the charging process indication is visible. Drill hole of 6.5 mm to locate the LED support.
- Connect the battery to the connector of KIT verifying the correct polarity. It is advisable to install the battery inside the luminary.
- Switch ON the main power and verify that the LED indicating the battery charging is ON.

Maintenance:

The manipulation and the installation of the kit should be done by qualified technicians.

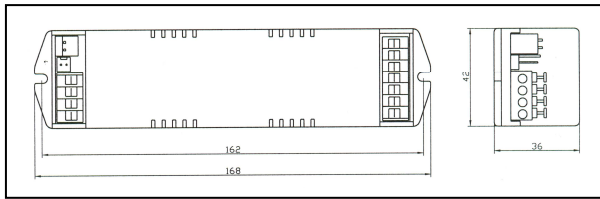
Always verify that the Voltage of the Mains is adequate to the input voltage of KIT.

Before installation make sure the mains is OFF and the battery is disconnected.

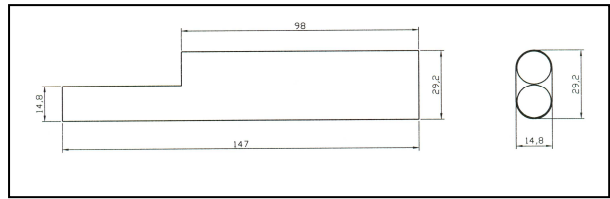
The Ni-Mh battery has a life cycle of 4 years or 400 charging cycles, after this, it should be substituted and date of substitution should be notified.

The old battery should be recycled in a proper way, as it can be harmful for the environment.

Dimensions:

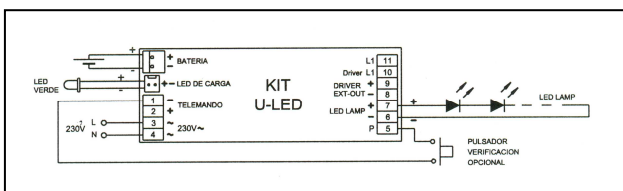


Weight: 192gr.

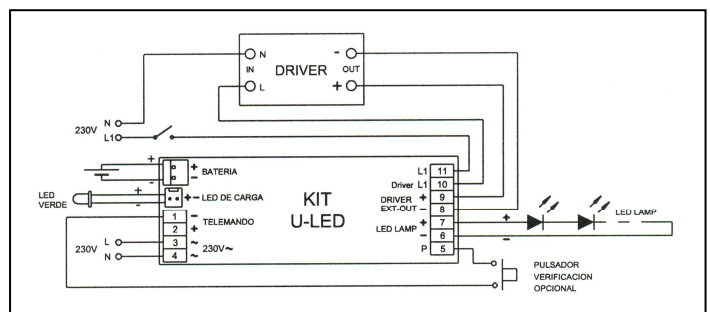


Weight: 125gr.

Connection diagrams:



Non maintained



Maintained

TELEMANDO Connection:

