

High efficiency electronic emergency lighting driver, suitable for Power-LED applications in non-maintained operation in Power-LED applications.

Each emergency lighting driver in the LEMY range is designed to drive an LED downlight or luminaire to emergency operation. LEMY drivers are designed in accordance with BS EN 61347-1, BS EN 61347-2-7 and BS EN 61347-2-13 and self-testing (where included) in accordance with BS EN 62034.

LiFePO4 batteries provide emergency power to the connected LED light source.



KEY FEATURES AND BENEFITS

- Basic and Self-Testing options available
- Non-maintained mode of operation
- 3Hr emergency operating time
- Constant power output in emergency mode
- Specific charging regime for LiFePO4 battery technology
- Deep discharge protection
- Suitable for emergency escape lighting and open area lighting
- 5-year warranty

TECHNICAL SPECIFICATIONS

Input voltage	220V – 240Vac ± 10%
Mains input frequency	50 – 60Hz
Ambient temperature <i>ta</i>	<i>ta</i> = 0°C to + 50°C
Unit max. case temperature <i>tc</i>	<i>tc</i> = 65°C
Safety class	II
Protection type	IP20
P emergency	See technical data table
Max output working voltage (Uout / O/C voltage)	16V d.c.
Battery technology	LiFePO ₄
Battery capacity	See battery technical data table
Emergency duration	3 Hours
Battery recharge period	24 Hours for rated duration
Unit case size	L205 x W37 x H21.75mm
Enclosure material	Self-Extinguishing Polycarbonate




Technical Data

Inverter Type	Part No.	Description	Emergency Duration	Pemergency (W)	Light output in emergency mode (Assumption: LED Efficiency = 150lm/W)	Maximum output working voltage (Uout / O/C Voltage)	Total Circuit power (Max)
BASIC	10-91-01-1154-0	LEMY-NMG 1-4/1X1865/180Li	3Hr	0.7W	105Lm	33V	2.0W
	10-91-01-1955-0	LEMY-NMG 1-4/2X1865/180Li	3Hr	1.5W	225Lm	33V	2.0W
SELF-TESTING	10-91-12-1154-0	LEMY-SNM-KMG 1-4/1X1865/180Li	3Hr	0.7W	105Lm	33V	2.0W
	10-91-12-1955-0	LEMY-SNM-KMG 1-4/2X1865/180Li	3Hr	1.5W	225Lm	33V	2.0W

BATTERY TECHNICAL DATA

Part No.	Chemistry	No. of Cells and Format	Cell Type	Nominal Voltage	Capacity	Min / Max battery current at rated d.c. voltage range	Battery charge ratings	Deep discharge protection cut off
14-12-0001	LiFePO4	1-Cell Stick	18650	3.2V	1.5Ah	5mA / 375mA	0.001 - 100mA / 3.1 - 3.5V	2.5V
14-12-0002	LiFePO4	2-Cell Pack	18650	3.2V	3.0Ah	5mA / 755mA	0.001 - 210mA / 3.1 - 3.5V	2.5V
14-13-0003	LiFePO4	2-Cell Stick	18650	3.2V	3.0Ah	5mA / 755mA	0.001 - 210mA / 3.1 - 3.5V	2.5V

Accessories

	Inverter Type	Part No.	Description
LED indicators 	BASIC	10-98-0008	LED INDICATOR GREEN SUPERBRIGHT - 500MM JST 2POLE
		10-98-0015	LED INDICATOR GREEN SUPERBRIGHT - 1000MM JST EHR 2POLE
		10-98-0020	LED INDICATOR GREEN PROJECTION - 1000MM JST EHR 2POLE
		10-98-0003	LED INDICATOR RED/GREEN SUPERBRIGHT - 500MM JST EHR 3POLE
	SELF-TEST & DALI	10-98-0004	LED INDICATOR RED/GREEN SUPERBRIGHT - 1000MM JST EHR 3POLE
		10-98-0013	LED INDICATOR RED/GREEN PROJECTION - 500MM JST 3-POLE
		10-98-0014	LED INDICATOR RED/GREEN PROJECTION - 1000MM JST 3-POLE
		10-98-0018	LED INDICATOR LP RED/GREEN SUPERBRIGHT 450MM JST EHR 3POLE
Indicator holder 	ALL	10-95-0001	LED INDICATOR HOLDER PANEL PLASTIC - BLACK - RTC-51
Indicator Bezel 	ALL	10-95-0002	LED INDICATOR HOLDER - CEILING TILE

STATUS INDICATOR

Visual status indicator for Self-Testing models



LED intermittently flashing green – commissioning/battery regeneration after initial connection.



LED green: no fault/normal state.



LED continuous red: battery fault – either insufficient battery capacity or interrupted connection. The fault indication is reset once the fault is cleared.



LED intermittently flashing red: Lamp fault. Please note that the fault is not indicated (or reset) immediately when it occurs (or is cleared), but after the next self-test.



LED flashing green/momentary red – duration test interrupted and postponed or self- testing failure



LED off: If the LED is still off after more than 5 minutes of switching on the mains, then the mains or the unit is faulty

Visual status indicator for DALI models



LED intermittently flashing green – commissioning/battery regeneration after initial connection. Function test (fast flash 100ms on/off) or duration test (slow flash 1s on/off)



LED regularly flashing green – inhibit



LED green: no fault/normal state.



LED continuous red: battery fault (fast flash 100ms on/off) or test failed (slow flash 1s on/off). The fault indication is reset once the fault is cleared.



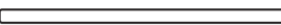
LED luminaire fault



LED flashing green/momentary red – duration test interrupted and postponed or self- testing failure



LED alternately flashing red/green – identification switched on to locate individual unit address (DALI only)



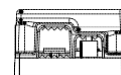
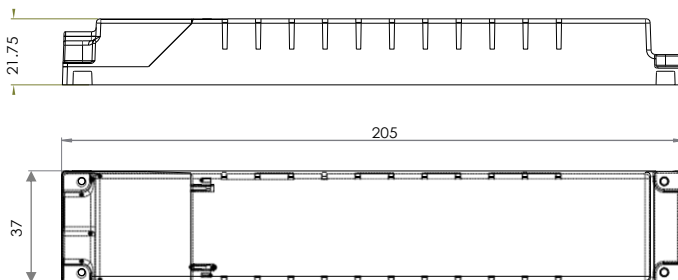
LED off: If the LED is still off after more than 5 minutes of switching on the mains, then the mains or the unit is faulty

STANDARDS & APPROVALS

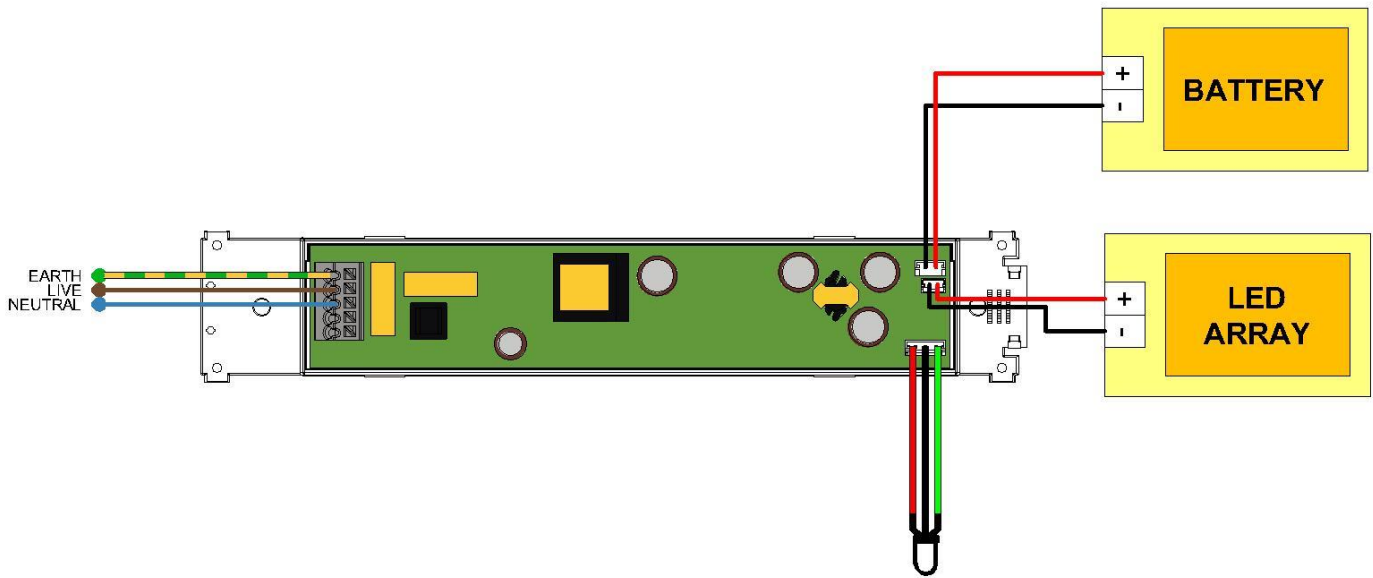
- EN 61347-2-13
- EN 61347-2-7
- EN 60598-2-22
- EN 62384
- EN 55015
- EN 61000-3-2
- EN 61000-3-3
- EN 61547
- EN 61347-1 (Glow wite test with increased temperature of 850°C)



DIMENSIONS



WIRING DIAGRAM



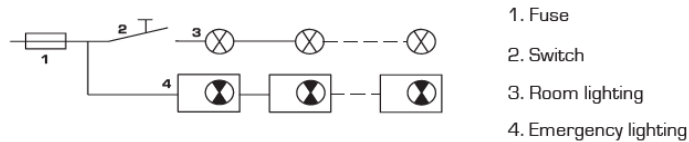
Installation

Mounting

- The emergency lighting units must be mounted in a suitable place withing the luminaire (fixing-hole diameter 4 mm).
- In order to fulfil EMC-requirements, it is recommended to use wires as short as possible between the mains input terminal and the emergency lighting unit.
- The emergency lighting unit should be placed between the mains input terminal and the LED driver
- Mount the battery at the coolest place inside the luminaire for maximum capacity and life. The ambient temperature of the battery must not exceed 50°C
- Emergency lighting units must not be in contact with materials which might ignite, melt or otherwise alter at 60°C

Electrical Installation

- The emergency lights must be installed according to locally applicable rules and regulations for electrical installations and for emergency lighting.
- The installation of emergency lighting units and luminaires must be done only by qualified personnel.
- All covers must be in place before applying mains to the emergency lighting system.
- Emergency lighting units must be connected as shown in the circuit diagram on the unit.
- The terminals are suitable for connecting one wire of 0.5 to 1.5 mm² (with 7-7.5 mm isolation removal).
- After connection of the emergency luminaire to the direct line phase, the line is monitored, and the batteries are continuously charged.
- This line must be connected to the same circuit breaker/fuse as the normal room lighting (see diagram).



Maintenance

- Local legislation and regulations for maintenance and inspection of emergency lighting must be considered.
- Before doing any maintenance work, carry out the following procedure:
 - Disconnect mains of the emergency lighting.
 - Remove covers.
 - Disconnect the battery from emergency lighting unit (plug).
- Emergency lighting units must undergo a visual inspection at regular intervals