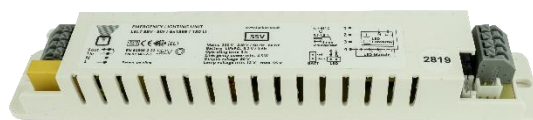


Each emergency lighting driver in the LELT range is designed to add emergency lighting operation to standard mains LED luminaires.

For maintained operation LELT drivers must operate in conjunction with the existing drivers in mains luminaires.

In normal mains operation the LED array is powered from the existing mains driver and in emergency operation by the LELT and associated battery.



KEY FEATURES AND BENEFITS

- Available in 2, 3, 5W versions
- Basic, Selftest and DALI communication options
- Non-maintained or maintained mode of operation
- Maintained mode in combination with luminaire mains driver
- 3Hr emergency operating time (variant upon request)
- Compatible with all dimmable and non-dimmable LED-drivers
- 3-pole technology: LED module changeover and delayed power switching for the LED-driver
- 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

Ordering codes

	10-01-0802	LELT 55V-2W/2X1865/180LI – LED Emergency lighting driver 55V/2W/BASIC/LFP
	10-01-0841	LELT 105V-2W/2X1865/180LI - LED Emergency lighting driver 105V/2W/BASIC/LFP
	10-01-0804	LELT 55V-3W/3X1865/180LI - LED Emergency lighting driver 55V/3W/BASIC/LFP
Basic	10-01-0844	LELT 105V-3W/3X1865/180LI - LED Emergency lighting driver 105V/3W/BASIC/LFP
	10-01-0884	LELT 220V-3W/3X1865/180LI - LED Emergency lighting driver 220V/3W/BASIC/LFP
	10-01-0806	LELT 55V-5W/6X1865/180LI - LED Emergency lighting driver 55V/5W/BASIC/LFP
	10-01-0846	LELT 105V-5W/6X1865/180LI - LED Emergency lighting driver 105V/5W/BASIC/LFP
	10-01-0886	LELT 220V-5W/6X1865/180LI - LED Emergency lighting driver 220V/5W/BASIC/LFP
		10-02-0802
	10-02-0841	LELT-S 105V-2W/2X1865/180LI - LED Emergency lighting driver 105V/2W/SELF TEST/LFP
	10-02-0804	LELT-S 55V-3W/3X1865/180LI - LED Emergency lighting driver 55V/3W/SELF TEST/LFP
Self Test	10-02-0844	LELT-S 105V-3W/3X1865/180LI - LED Emergency lighting driver 105V/3W/SELF TEST/LFP
	10-02-0884	LELT-S 220V-3W/3X1865/180LI - LED Emergency lighting driver 220V/3W/SELF TEST/LFP
	10-02-0806	LELT-S 55V-5W/6X1865/180LI - LED Emergency lighting driver 55V/5W/SELF TEST/LFP
	10-02-0846	LELT-S 105V-5W/6X1865/180LI - LED Emergency lighting driver 105V/5W/SELF TEST/LFP
	10-02-0886	LELT-S 220V-5W/6X1865/180LI - LED Emergency lighting driver 220V/5W/SELF TEST/LFP
		10-04-0802
	10-04-0841	LELT-DALI 105V-2W/2X1865/180LI - LED Emergency lighting driver 105V/2W/DALI/LFP
	10-04-0804	LELT-DALI 55V-3W/3X1865/180LI - LED Emergency lighting driver 55V/3W/DALI/LFP
Dali	10-04-0844	LELT-DALI 105V-3W/3X1865/180LI - LED Emergency lighting driver 105V/3W/DALI/LFP
	10-04-0884	LELT-DALI 220V-3W/3X1865/180LI - LED Emergency lighting driver 220V/3W/DALI/LFP
	10-04-0806	LELT-DALI 55V-5W/6X1865/180LI - LED Emergency lighting driver 55V/5W/DALI/LFP
	10-04-0846	LELT-DALI 105V-5W/6X1865/180LI - LED Emergency lighting driver 105V/5W/DALI/LFP
	10-04-0886	LELT-DALI 220V-5W/6X1865/180LI - LED Emergency lighting driver 220V/5W/DALI/LFP

Technical Matrix

	55 v	105 V	220 V
LELT 2 W	10 – 55v	20 – 105 v	-
LELT 3 W	10 – 55v	20 – 105 v	100 – 300 V
LELT 5 W	10 – 55v	20 – 105 v	100 – 300 V

Technical Specification

Input voltage	220V – 240V/AC ± 10%
Mains input frequency	50 – 60 Hz
Starting time	< 1 seconds
Mains surge capability	L-N : 1kV L-PE : 2kV N-PE : 2kV
Dielectric insulation capability	L-N-PE : 2.5kV
Overvoltage protection	270 V
Ambient temperature t_a	0°C to + 50°C
Unit max temperature t_c	65°C
Safety class	II
Protection type	IP20
Compatible battery technology	1865 LiFePO ₄ battery cells
Emergency duration	3 hours
Battery recharge period	24 hours
Unit case size	L 177 x W 30 x H 21.5mm
Enclosure material	Self-extinguishing polycarbonate

Technical data

	Typ. λ (230 V, 50 Hz)	Typ. Power in EM	Mains current in charging operation		Rated power in charging operation	
			Initial charge	Trickle charge	Initial charge	Trickle charge
LELT 2w 55 V	0.5	2 w	20mA	0.8mA	5VA	0.15VA
LELT 2w 105 V	0.5	2 w	20mA	0.8mA	5VA	0.15VA
LELT 3w 55 V	0.5	3 w	20mA	1.2mA	5VA	0.25VA
LELT 3w 105 V	0.5	3 w	20mA	1.2mA	5VA	0.25VA
LELT 3w 220 V	0.5	3 w	20mA	1.2mA	5VA	0.25VA
LELT 5w 55 V	0.5	5 w	20mA	1.6mA	5VA	0.35VA
LELT 5w 105 V	0.5	5 w	20mA	1.6mA	5VA	0.35VA
LELT 5w 220 V	0.5	5 w	20mA	1.6mA	5VA	0.35VA

- Based on 3 hours duration
- Fast recharge not applicable

Average failure rate and Expected lifetime

Average failure rate per 1000 operating hours <0.2%

Electronic Module	T_c	65°C	70°C	75°C
	Expected service life	8 years	6 years	4 years

Status Indicator

Visual status indicator for Self-Testing models

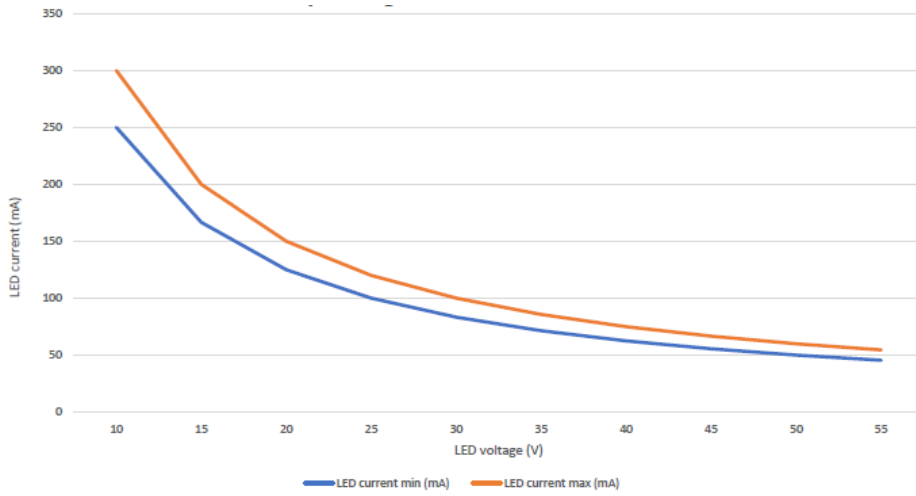
	LED intermittently flashing green – commissioning/battery regeneration after initial connection.
	LED green: no fault/normal state.
	LED continuous red: battery fault – either insufficient battery capacity or interrupted connection. The fault indication is reset once the fault is cleared.
	LED intermittently 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

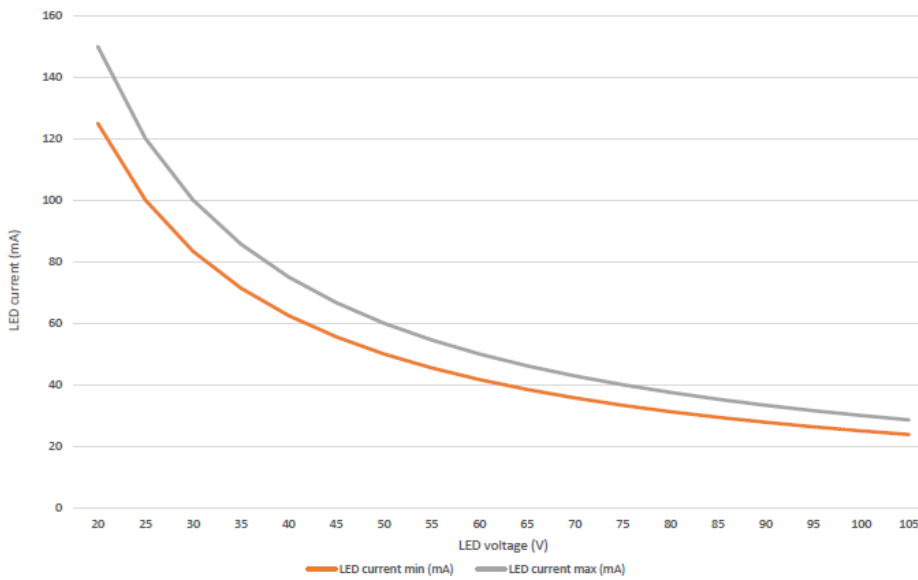
	LED intermittently flashing green – commissioning/battery regeneration after initial connection. Function test (fast flash 100ms on/off) or duration test (slow flash 1s on/off)
	LED regularly flashing green – inhibit
	LED green: no fault/normal state.
	LED continuous red: battery fault (fast flash 100ms 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

LED current – voltage

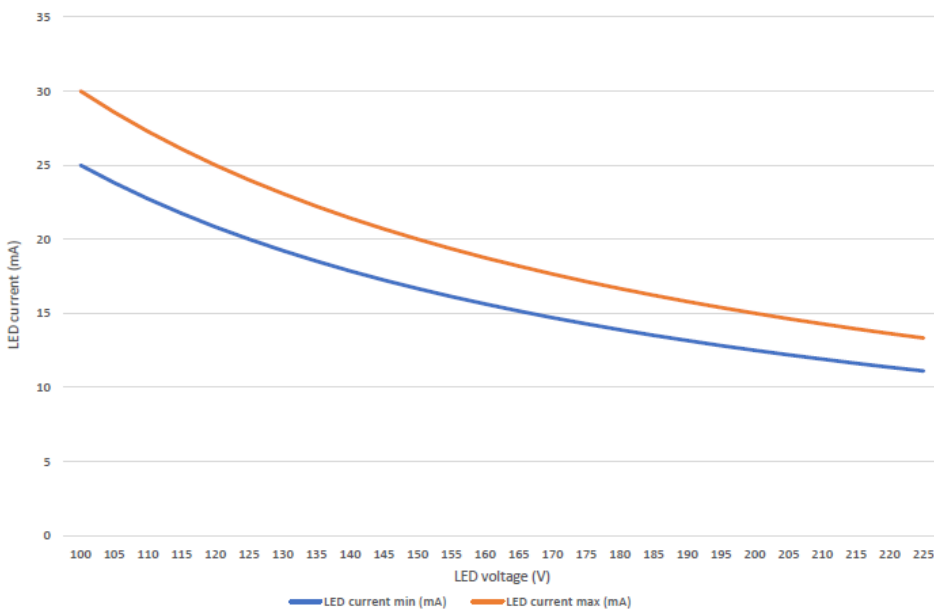
55 V



105 V



220 V



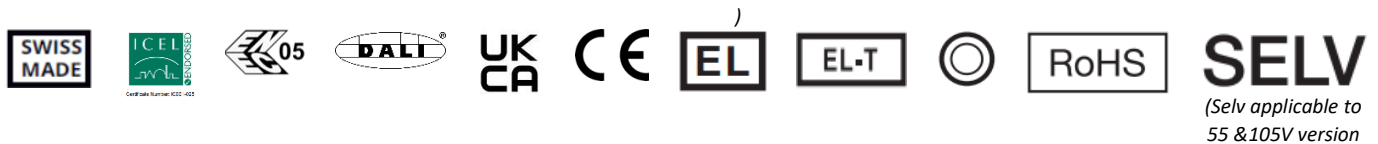
Battery matrix

	14-12-0002	14-12-0003	14-12-0004	14-12-0005
LiFePO ₄ Battery	3.2v 3Ah 2 cell SBS	3.2v 3Ah 2 cell Stick	3.2v 4.5Ah 2 cell SBS	3.2v 4.5Ah 2 cell Stick
LELT 2 W	✓	✓		
LELT 3W			✓	✓
LELT 5 W			✓ (x 2 in parallel)	✓ (x 2 in parallel)

• Refer to battery datasheet for full technical specifications

Standards and 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)
- DALI standard EN 62386-202



Accessories

- LED indicators
- 10-98-0008: led indicator green superbright - 500mm 2 pole
 - 10-98-0015: led indicator green superbright - 1000mm 2 pole
 - 10-98-0020: led indicator green projection - 1000mm 2 pole
 - 10-98-0004: led indicator red/green superbright - 500mm 3 pole
 - 10-98-0003: led indicator red/green superbright - 1000mm 3 pole
 - 10-98-0013: led indicator red/green projection - 500mm 3 pole
 - 10-98-0014: led indicator red/green projection - 1000mm 3 pole
 - 10-98-0018: led indicator red/green superbright 450mm 3 pole – LiteIP compatible



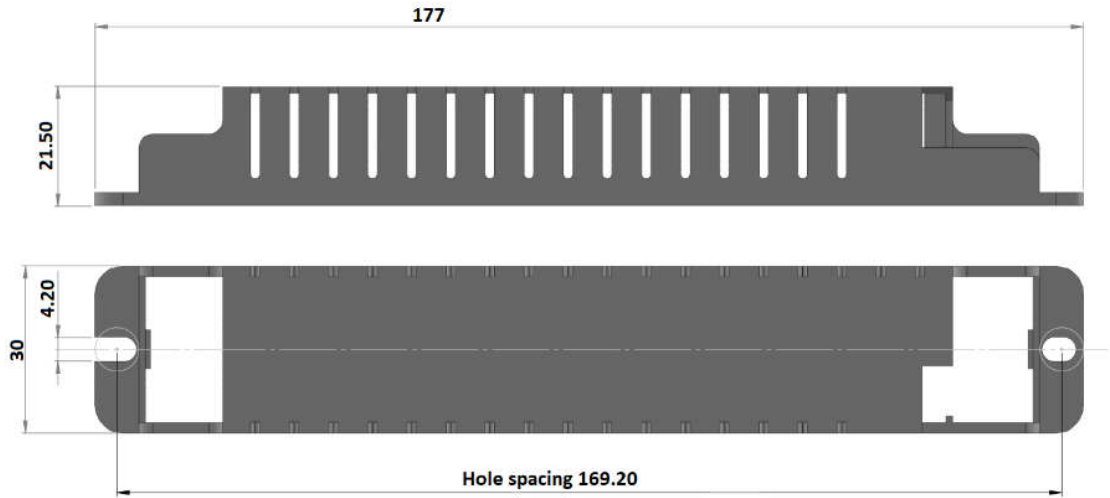
- Indicator holder
- 10-95-0001: LED indicator holder – plastic black – RTC-51



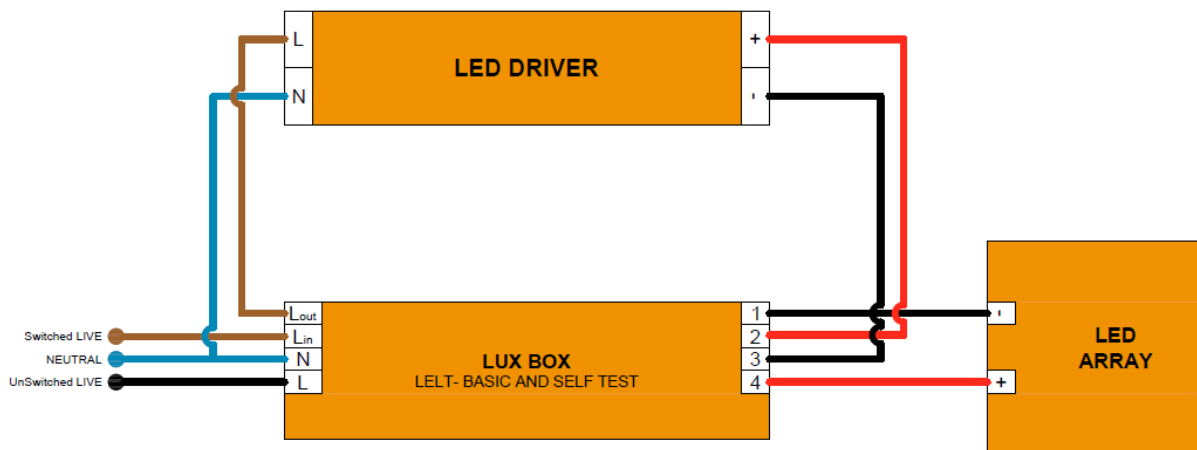
- Indicator Bezel
- 10-95-0002: LED indicator bezel



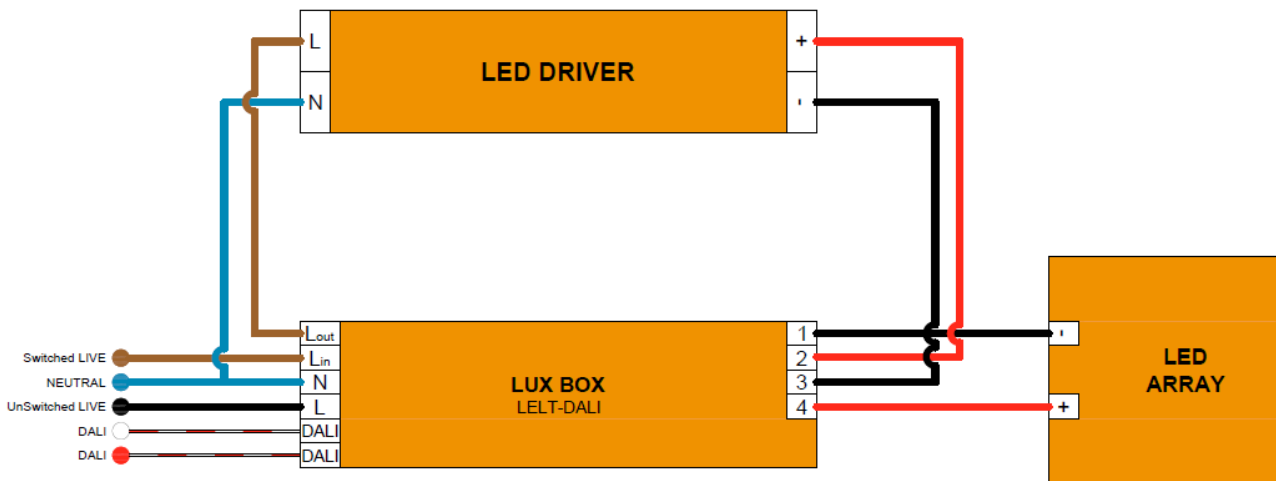
Housing and Wiring diagram



Basic and Self test wiring



Dali wiring



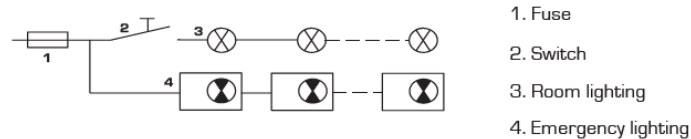
Installation

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