



Product Features

- 1, LED Emergency converter that can transfer standard LED fitting into emergency LED fitting
- 2, Used with LiFePO4 battery
- 3, Suits for LED fitting with external LED driver
- 4, Accessary test switch and charge indicator
- 5, Isolated
- 6, Emergency power: 2W
- 7, Emergency periods: 1.5hrs
- 8, DALI2/DT1

**1) Compliances and Approvals**

Approvals	CE EAC
Built-in/independent	Built in
Ingress protection	IP20
Suitable for fixture of protection Class	Class I
Output Safety Level	Isolated
Enviromental	Indoor
Features	Fixed

**2) Electric Input Characteristics**

Symbol	Remarks	Min.	Typical	Max.	Unit	
<b>Input Voltage</b>						
Rated mains voltage	Vin	Nominal range	220	-	240	Vac
Mains voltage range	Vin.op	operational	195	-	264	Vac
Mains frequency nominal	fn	Nominal range	50		60	Hz
<b>Input Current</b>						
Input current	Iin	@230Vac, full load			0.06	A
Power Factor	PF	@230Vac, full load	0.6			
<b>Input Power</b>						
Input Power	Pin	@230Vac, full load			6	W
Input Power@ open load		rated input voltage			0.9	W
Input Power@ standby		rated input voltage		NA		

**3) Electric Output Characteristics**

Symbol	Remarks	Min.	Typical	Max.	Unit	
<b>Output Voltage</b>						
Output voltage range	Vo	measured at end of wire	50		200	Vdc
Output voltage @no load	Vo.max	open load		230		Vdc
<b>Output Current</b>						
Output Current	Io	Suits for LED driver's Output current			1500	mA
<b>Isolation</b>	In-Out	3000Vac. for 1min			10	mA

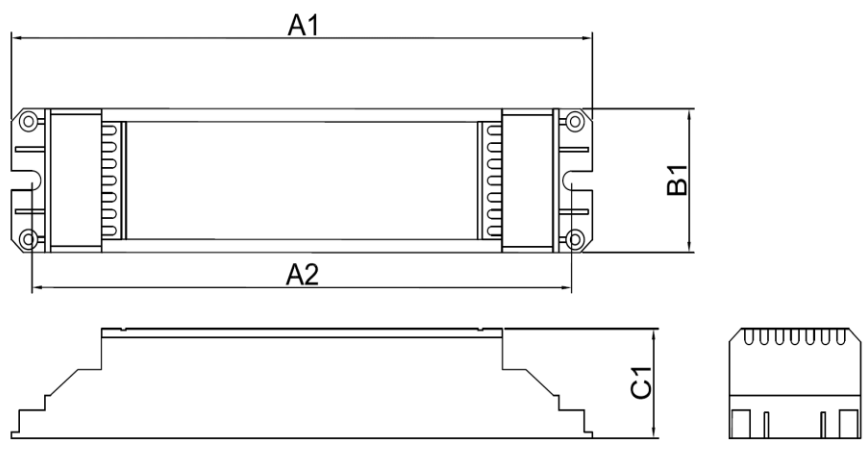
**4) Emergency Characteristics**

Symbol	Remarks	Min.	Typical	Max.	Unit
Emergency Power	@230Vac, full load		2		W
Recharge Time			24		Hours
Emergency Periods			1.5		Hours
Battery	LiFePO4		18650 6.4V 1.5Ah		
Self-testing			With		

5) Robustness	Symbol	Remarks	Min.	Typical	Max.	Unit
<b>General</b>						
Electric strength	Input-Output	50Hz/60Hz and be applied for 1 min		3000		Vrms
	Input-GND			1480		Vrms
Insulation Resistance Test		500Vd.c. for 1min, For SELV part is 100 Vd.c.	2			MΩ
<b>Reliability</b>						
Rated Life@Tc.max		10% failure			50K	Hrs
Rated Life@Tc.life		10% failure			100K	Hrs
Surge	L-N			1		kV
Surge	L/N-PE			2		kV
<b>Environment Operation</b>						
Ambient temperature	Ta		0		50	°C
Maximum Tcase	Tc.max				70	°C
Tc life	Tc.life				60	°C
Operation Humidity	H.op		10		75	%
<b>Environment Storage</b>						
Storage temperature	T.st		-10		45	°C
Storage Humidity	H.st		10		75	%

- 6) Warranty**
- Warranty 5 years
  - Except for the following circumstance:
    - 1) Improper Installation or operation
    - 2) Misuse
    - 3) Abuse
    - 4) Unauthorized or improper repair alteration
    - 5) Accident or negligence in use, storage, transportation.
    - 6) Any natural destroy
    - 7) Exceed the specification as per the product datasheet
    - 8) The battery needs to be replaced every 12 months

7) Mechanical properties	Symbol	Remarks					Unit
<b>Dimensions</b>							
			L	W	H	M	
			148(A1)	33.5(B1)	25.5(C1)	137.5(A2)	mm
<b>Housing Material</b>							
			Plastic				



8) Physical properties	Symbol	Remarks	Unit
Weight			76 gram
Qty to Carton			100 pcs
Carton Size:			35.5*16*30.5 cm
G.W:			8 kgs
Potting Raw materials			without
Printing		printing can be changed by customer's email confirmation	

size:86.7\*27mm

<b>OSSDAT</b> LED Emergency Converter		LED Control gear 200V 1.5A Max	+
<b>DALI 2</b>		Output Leds 50-200V 2W	+
L	PL-EMPA-2W090M5020VF-DALI	CE ENEC	-
N	For use with LiFePO4 6.4V1.5Ah Battery	tc	+
Lout	1.5 hours duration Made in China	EL	-
Lin	Mains Supply AC 220-240V 50-60Hz 60mA 6W max Power Factor:>0.6	Battery	S1
DA1	Ta: 0...50°C Tc: 70°C	Red +	S2
DA2		Black -	S3
	charge time:<24 hours charge current:0-500mA Do not use high voltage test instrument! Output voltage:50-200V Umax(open circuit voltage):230V	LED indicator Test switch (Normally open)	S4

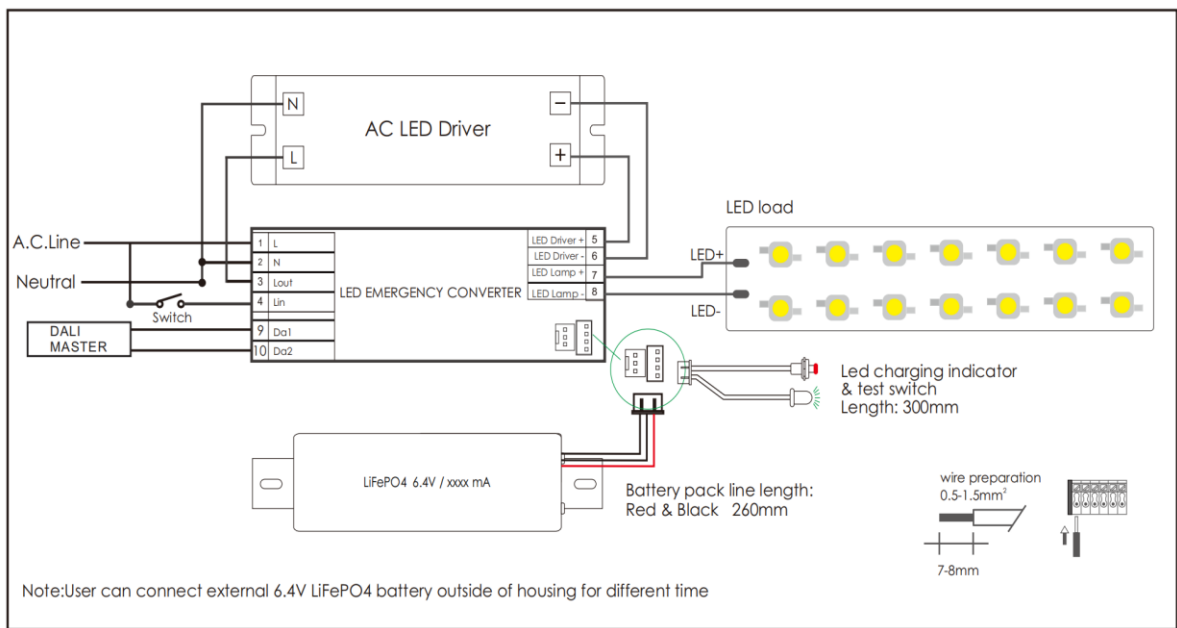
**Connection**

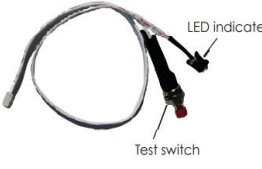
	Signal	Cable Description	Remark
<b>Input</b>	L	0.5-0.75mm <sup>2</sup>	grey, push-in terminal
	N	0.5-0.75mm <sup>2</sup>	grey, push-in terminal
	Lout	0.5-0.75mm <sup>2</sup>	grey, push-in terminal
	Lin	0.5-0.75mm <sup>2</sup>	grey, push-in terminal
	DA	0.5-0.75mm <sup>2</sup>	grey, push-in terminal
	DA	0.5-0.75mm <sup>2</sup>	grey, push-in terminal
<b>Output</b>	+	0.5-0.75mm <sup>2</sup>	red, push-in terminal
	-	0.5-0.75mm <sup>2</sup>	black, push-in terminal
	+	0.5-0.75mm <sup>2</sup>	red, push-in terminal
	-	0.5-0.75mm <sup>2</sup>	black, push-in terminal

**Connection Marking**

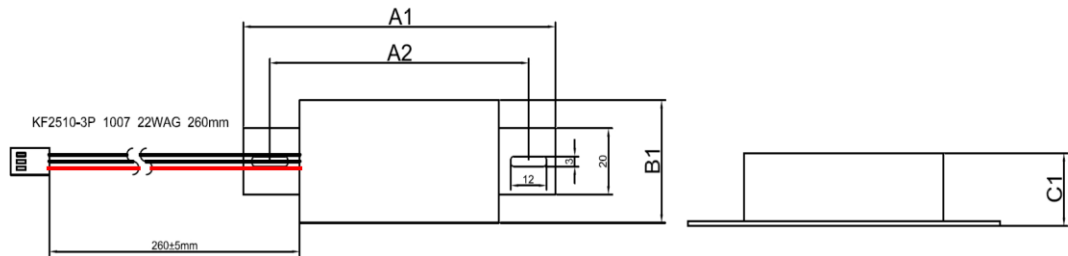
**Connection Method**

Yes



9) Test Switch	Symbol	Remarks	Min.	Typical	Max.	Unit
<b>LED indicator</b>		indicate that charging status				
Mounting hole		Dia		6.5		mm
wire Length				300		mm
<b>LED indicator status</b>						
						
						<ul style="list-style-type: none"> <li><span style="color: black;">○</span> Off: Entering emergency state or circuit not powered on</li> <li><span style="color: green;">●</span> Green stable: The product functions normally</li> <li><span style="color: red;">●</span> Red stable: LED malfunction, load open circuit or short circuit</li> <li><span style="color: red;">●</span> Red light flashing slowly: battery failure</li> <li><span style="color: red;">●</span> Red light flashing rapidly: Insufficient battery discharge test time (insufficient capacity)</li> <li><span style="color: green;">●</span> Green light flashing rapidly: Functional testing and self checking are currently underway</li> <li><span style="color: green;">●</span> Green light flashing slowly: Performing discharge test life self check</li> </ul>
<b>Test Switch</b>		checking the device function				
Mounting hole		Dia		7		mm
wire Length		Battery charging		300		mm

10) Battery	Symbol	Remarks					Unit
<b>Dimensions</b>			L	W	H	M	
			105(A1)	37(B1)	22(C1)	87(A2)	mm
<b>Weight</b>				95			gram
<b>Qty to Carton</b>				100			pcs
<b>Carton Size:</b>				47*24*16			cm
<b>G.W:</b>				11			kgs



- Remark**
- LiFePO4 18650 battery core
  - Battery voltage 6.4V
  - Rated 500 charge/discharge cycle
  - Max. short term battery case temperature 70°C (shorter than 1 month over the battery lifetime)
  - Ambient temperature 0°C to +50°C
  - Two wires: 1 red and 2 black
  - Length: 260mm
  - The battery needs to be replaced every 12 months
  - To guarantee the rated discharge time, please charge the battery for at least more than 12 hours.
  - Charge and discharge cycle needs to be done at least once every three months, and the continuous charging time can not exceed 3 months.

**11) Directives / Test Standards**      **Directives / Test Standards**

<b>Safety</b>	IEC61347-1、IEC61347-2-7、IEC61347-2-13、IEC60598-2-22、IEC62386、IEC62386-101、IEC62386-102
<b>EMC</b>	EN55015、CISPR15

**13) Installation Notice**

- Before installation or maintenance, ensure that the mains supply to the luminaire is switched off and the circuit breaker switched off.
- It is recommended that a qualified electrician is consulted or used for the installation of this product and installed to the current edition of the IEE wiring Regulations and relevant Building Regulations.
- Check that the total load on the circuit including when this product is fitted does not exceed the rating of the circuit cable, fuse or circuit breaker.

**14) Addition Remarks**

- The LED driver used in combination with the end device is one of the accessories of the whole light fixture, and the EMC of the whole light fixture is not only susceptible to the driver itself, but to the LED light fixture and the whole light fixture's wiring. The manufacturer of LED light fixture should re-confirm the EMC of the whole light fixture before the whole light fixture is finished.
- The luminaire manufacturer is responsible for the correct choice and installation of the LED drivers according to the application and product datasheets. Operating conditions of the LED drivers may never exceed the specifications as per the product datasheet.
- All parameters, if not specified, are measured at 230Vac full loading and 25°C ambient temperature