



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: 4W
- 7, Emergency periods: 3.0hrs
- 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	
Input Voltage						
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
Input Current						
Input current	lin	@230Vac, full load			0.06	A
Power Factor	PF	@230Vac, full load	0.6			
Input Power						
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	
Output Voltage						
Output voltage range	Vo	measured at end of wire	50		200	Vdc
Output voltage @no load	Vo.max	open load		230		Vdc
Output Current						
Output Current	Io	Suits for LED driver's Output current			1500	mA
Isolation	In-Out	3000Vac. for 1min			10	mA

4) Emergency Characteristics

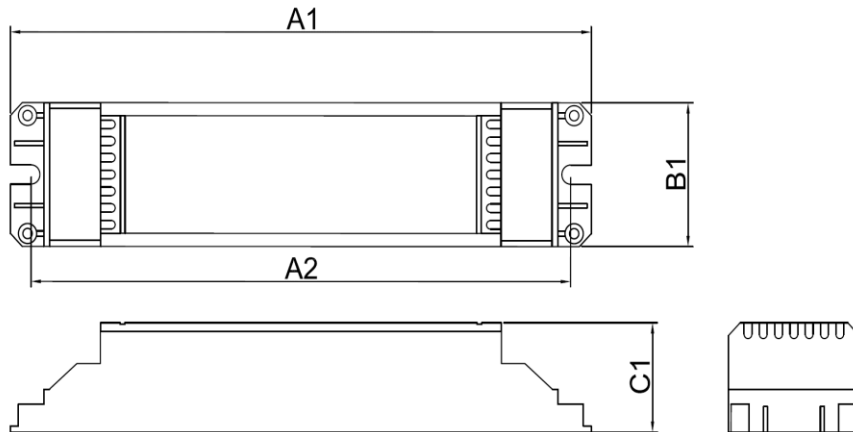
Symbol	Remarks	Min.	Typical	Max.	Unit
Emergency Power	@230Vac, full load		4		W
Recharge Time			24		Hours
Emergency Periods			3		Hours
Battery	LiFePO4		18650 6.4V 2.0Ah		
Self-testing			With		

5) Robustness	Symbol	Remarks	Min.	Typical	Max.	Unit
General						
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
Reliability						
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
Environment Operation						
Ambient temperature	Ta		0		50	°C
Maximum Tcase	Tc.max				70	°C
Tc life	Tc.life				60	°C
Operation Humidity	H.op		10		75	%
Environment Storage						
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 specifiaction as per the product datasheet
 - 8) The battery needs to be replaced every 12 months

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

OSSDAT LED Emergency Converter		DALI 2	CE	EAC	tc	+	-
L	PL-EMPA-4W180M5020VF-DALI					LED Control gear 200V 1.5A Max	
N	For use with LiFePO4 6.4V2.0Ah Battery					Output Leds 50-200V 4W	
Lout	3 hours duration	Made in China					
Lin	Mains Supply AC 220-240V 50-60Hz 60mA 6W max	charge time: <24 hours charge current: 0-500mA Do not use high voltage test instrument!	EL	Battery	Red + Black -	LED indicator Test switch (Normally open)	
DA1	Power Factor: >0.6	Output voltage: 50-200V				S1	
DA2	Ta: 0...50°C Tc: 70°C	Umax(open circuit voltage): 230V				S2	
						S3	
						S4	

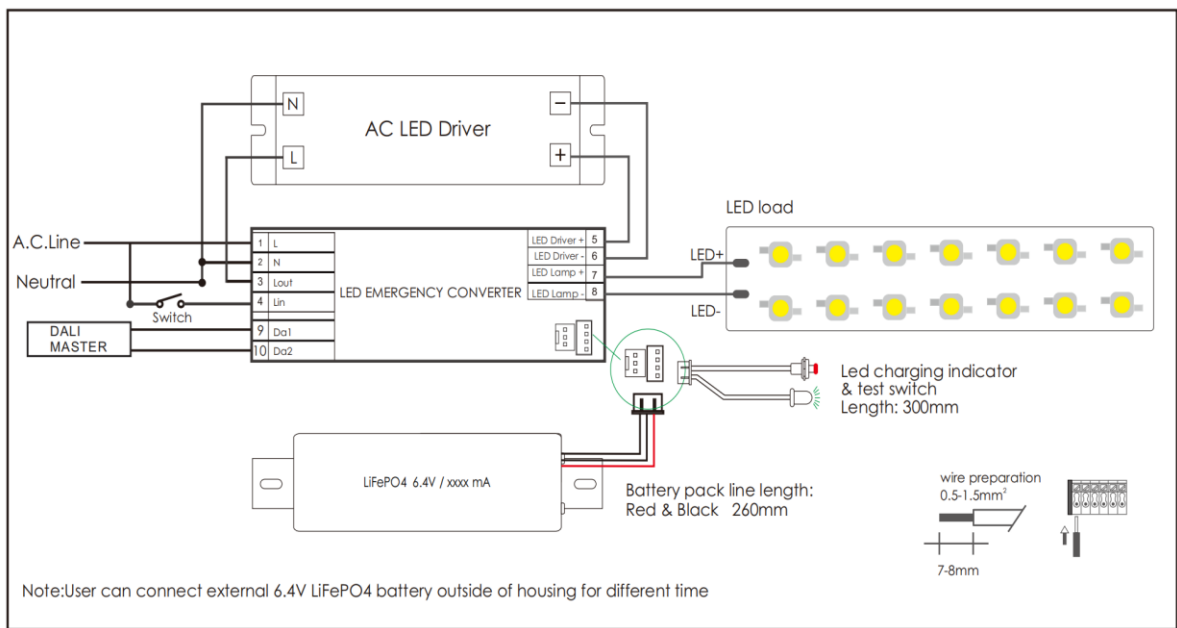
Connection

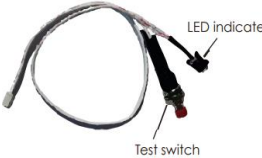
	Signal	Cable Description	Remark
Input	L	0.5-0.75mm ²	grey, push-in terminal
	N	0.5-0.75mm ²	grey, push-in terminal
	Lout	0.5-0.75mm ²	grey, push-in terminal
	Lin	0.5-0.75mm ²	grey, push-in terminal
	DA	0.5-0.75mm ²	grey, push-in terminal
	DA	0.5-0.75mm ²	grey, push-in terminal
Output	+	0.5-0.75mm ²	red,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

Connection Marking

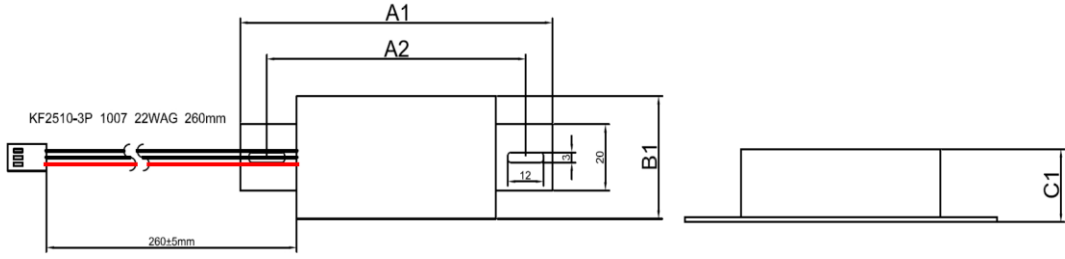
Connection Method

Yes



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

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

Safety	IEC61347-1、IEC61347-2-7、IEC61347-2-13、IEC60598-2-22、IEC62386、IEC62386-101、IEC62386-102
EMC	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