OSSDAT

Isolated LED Emergency converter Metal
Model: PL-EMMA-4W180M1050VF

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 esternal LED driver
4, Accessary test switch and charge indicator
5, Isolated
6, Emergency power: 4W
7, Emergency periods: 3.0hrs

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	Iin	@230Vac, full load			0.06	A
Power Factor	PF	@230Vac, full load	0.6			
Input Power						
Input Power	Pin	@230Vac, full load			4	W
Input Power@ open load		rated input voltage			0.8	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	10		50	Vdc
Output voltage @no load	Vo.max	open load		70		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				Without		

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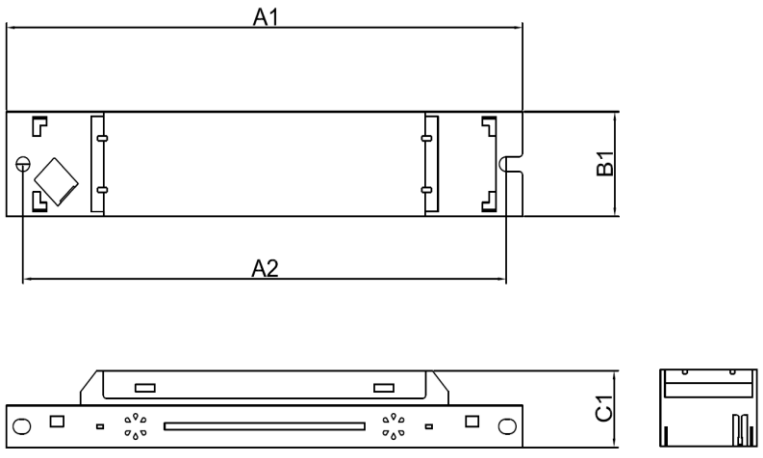
5) Robustness	Symbol	Remarks	Min.	Typical	Max.	Unit
General						
Electric strength	Input-Output	50Hz/60Hz and be applied for 1 min		3000		Vrms
	Input-GND			1480		Vrms
Insulation Resistance Test		500Vd.c. for 1min, For SELV part is 100 Vd.c.	2			MΩ
Reliability						
Rated Life@Tc.max		10% failure			50K	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	℃
Maximum Tcase	Tc.max				70	℃
Tc life	Tc.life				60	℃
Operation Humidity	H.op		10		75	%
Environment Storage						
Storage temperature	T.st		-10		45	℃
Storage Humidity	Hst		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	
			160(A1)	30(B1)	22(C1)	149.8(A2)	mm
Housing Material				Metal			



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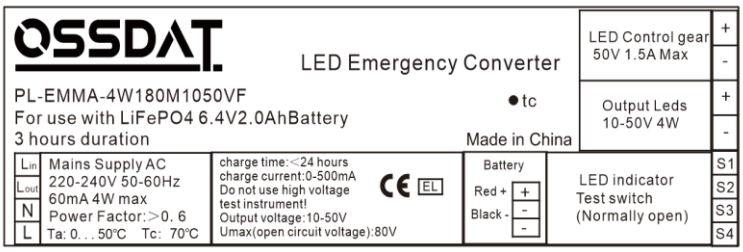
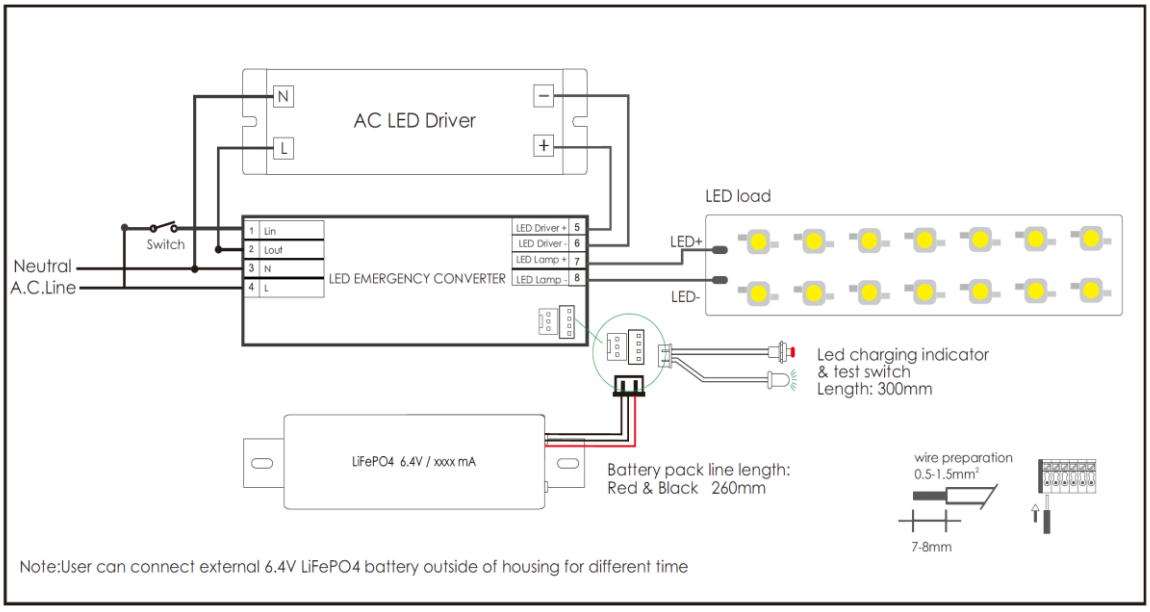
8) Physical properties	Symbol	Remarks		Unit
Weight			100	gram
Qty to Carton			100	pcs
Carton Size:			32*17*27	cm
G.W:			10.5	kgs
Potting Raw materials			without	
Printing		printing can be changed by customer's email confirmation		

size:90*27mm



Connection		Signal	Cable Description	Remark
	Input	Lin	0.5-0.75mm^2	grey, push-in terminal
		Lout	0.5-0.75mm^2	grey, push-in terminal
		N	0.5-0.75mm^2	grey, push-in terminal
		L	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				Yes
Connection Method				



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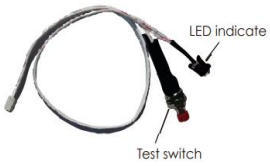
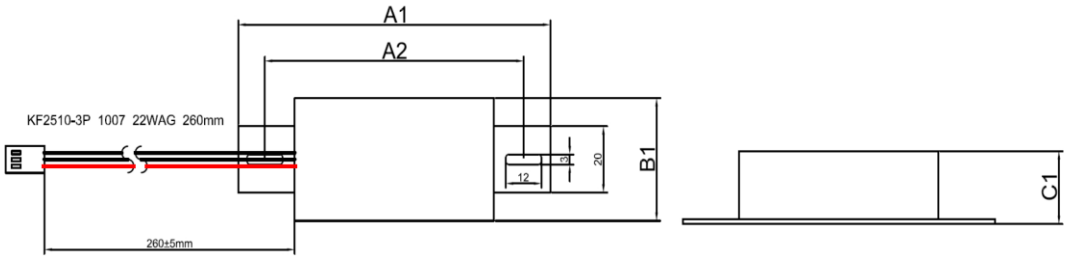
9) Test Switch	Symbol	Remarks	Min.	Typical	Max.	Unit
LED indicator		indicate that charging status				
Mounting hole		Dia		6.5		mm
wire Length				300		mm
LED indicator status						
			○ Off:Battery disconnected or mains supply disconnected			
			● Green stable:AC input is OK			



Test Switch		checking the device function				
Mounting hole		Dia		7		mm
wire Length		Battery charging		300		mm

10) Battery	Symbol	Remarks	L	W	H	M	Unit
Dimensions			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℃（shorter than 1 month over the battery lifetime）
- Ambient temperature 0℃to+50℃
- 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
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 fo 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