

Isolated LED Emergency Converter Metal

Model: PL-EMMA-4W000M1050VF

Product Features

- 1, LED Emergency converter that can transfer standard LED fitting into emergency LED fitting
- 2, Used with LiFePO4 battery, The battery is supplied separately depending on the operating time like in Table with Emergency Characteristics.
- 3, Suits for LED fitting with external LED driver
- 4, Accessory test switch and charge indicator
- 5, Isolated
- 6, Emergency power: 4W

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		80		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

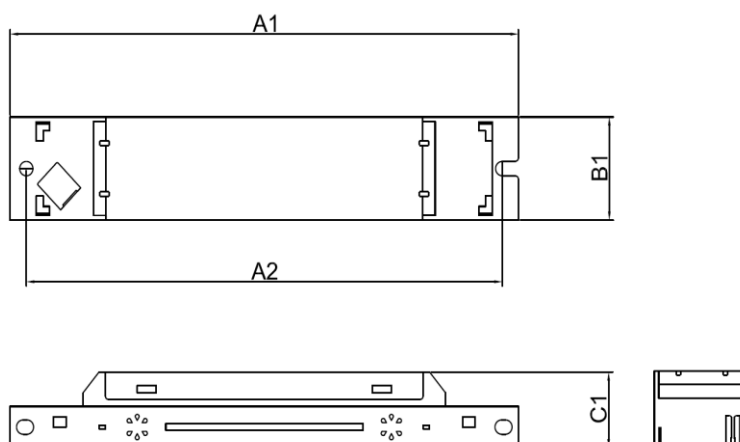
	Symbol	Remarks	Min.	Typical	Max.	Unit
Emergency Power		@230Vac, full load		4		W
Recharge Time				24		Hours
Emergency Periods and battery		@LiFePO4 18650 6.4V 1.5Ah	90			Min
Emergency Periods and battery		@LiFePO4 18650 6.4V 2.0Ah	120			Min
Self-testing				Without		

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 specifiacion as per the product datasheet
 - 8) The battery needs to be replaced every 12 months, the Customer must install a battery purchased from OSSDAT .

7) Mechanical properties	Symbol	Remarks					Unit
Dimensions			L	W	H	M	
			160(A1)	30(B1)	22(C1)	149.8(A2)	mm
Housing Material			Metal				



8) Physical properties	Symbol	Remarks	Unit
Weight		100	gram
Qty to Carton		100	pcs
Carton Size:		30.5*16*25	cm
G.W:		10.5	kgs
Potting Raw materials		without	
Printing		printing can be changed by customer's email confirmation	

size:90*27mm

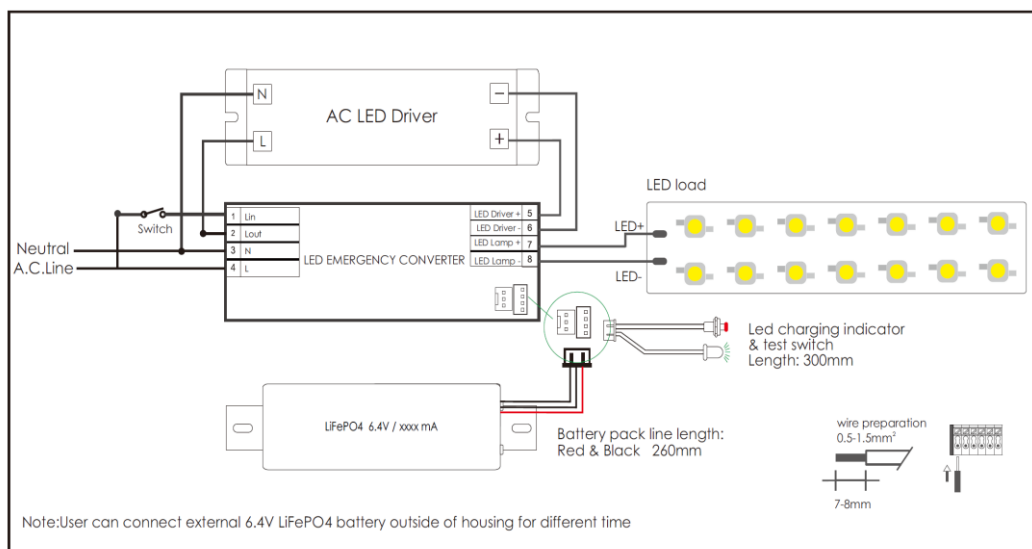
		  	LED Control gear 50V 1.5A Max	+
PL-EMMA-4W000M1050VF LED Emergency Converter		• tc Made in China NingBo Luxdator Electrical Co., Ltd.	Output Leds 10-50V 4W	+
L _{in}	220-240VAC 50-60Hz	LiFePO4 6.4V 1.5Ah - 90min duration	LED Indicator Test Switch (Normally open)	S1
L _{out}	Max Current:60mA	LiFePO4 6.4V 2.0Ah - 120min duration		S2
N	Max Power:4W	The battery is supplied separately		S3
L	Power Factor:>0.6 Ta: 0...50°C Tc: 70°C			S4

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

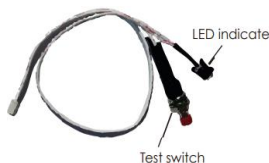
Connection Marking

Connection Method



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



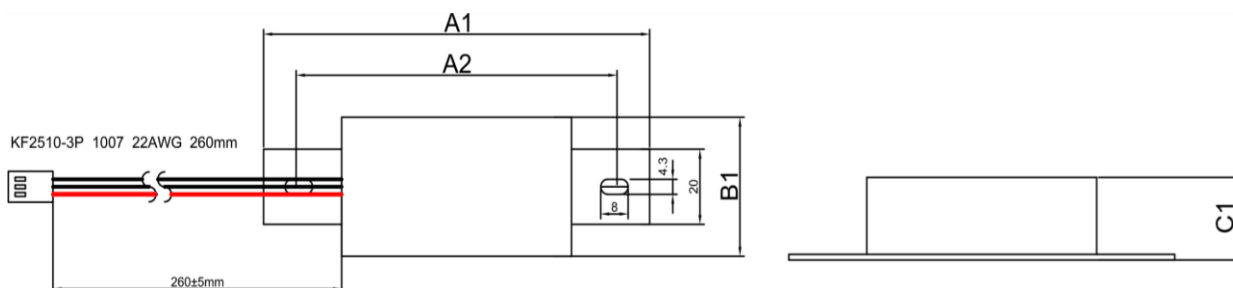
- Off: Battery disconnected or mains supply disconnected
- Green stable: AC input is OK

Test Switch

Mounting hole	Dia	
wire Length	Battery charging	

7	mm
300	mm

10) Battery	Symbol	Remarks					Unit
Dimensions			L	W	H	M	
			112(A1)	37(B1)	22(C1)	92(A2)	mm
Weight			95				gram
Qty to Carton			100				pcs
Carton Size:			43*23*14.5				cm
G.W:			10.5				kgs



LiFePO4 6.4V 1.5Ah

LiFePO4 6.4V 2.0Ah

Remark

- LiFePO4 18650 battery core
- Battery voltage 6.4V
- Rated 1500 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

12) 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.
- Do not forget to connect the battery to check the operation.

13) 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