


**Product Features**

- 1, Constant current output
- 2, High Quality of light
- 3, High Reliability
- 4, Low Output Current Ripple
- 5, Isolated
- 6, Internal usage
- 7, Emergency power: 3W
- 8, Emergency periods: 1.5hrs

**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
Rated mains voltage	Vin	Nominal range	195	-	264	Vdc
<b>Input Current</b>						
Input current	lin	@230Vac, full load		0.09		A
Input inrush current		@264Vac, 50% width		14.1A,228us		A, us
Power Factor	PF	@230Vac, full load	0.95			
Total Harmonic distortion	THD	@230Vac, full load			20	%
System Efficiency	η	@230Vac, full load		83		%
<b>Input Power</b>						
Input Power	Pin	@230Vac, full load			17	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
<b>Output Voltage</b>						
Output voltage range	Vo	measured at end of wire	12		40	Vdc
Output voltage @no load	Vo.max	open load		60		Vdc
<b>Output Current</b>						
Output Current	Io			350		mA
Output Current tolerance			-5		5	%
Current Ripple		@230Vac (Imax-Imin)/(Imax+Imin)		1		%
<b>Output Power</b>	Po	output performance power			14	W
<b>Isolation</b>	In-Out	3000Vac. for 1min			10	mA

**4) Emergency Characteristics**

	Symbol	Remarks	Min.	Typical	Max.	Unit
Emergency Power		@230Vac, full load		3		W
Recharge Time				24		Hours
Emergency Periods				1.5		Hours
Battery		LiFePO4		18650 6.4V 1.5Ah		
Self-testing				Without		

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			0.5		kV
Surge	L/N-PE			1		kV
<b>Environment Operation</b>						
Ambient temperature	Ta		0		45	°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	%
<b>Abnormal Condition</b>						
Input Over Voltage		Protected, no damage to driver <sup>①</sup>		Without		Vac
Output Short Circuit		Protected, no damage to driver <sup>②</sup>		With		
Output Open load		Output voltage limited to Vo.max <sup>③</sup>		50		Vdc
Too High Ambient Temperature		Protected by built-in thermal protection in controller IC <sup>④</sup>		With		
Input Over Power		Input power should be limited and no damage to driver <sup>⑤</sup>			16	W

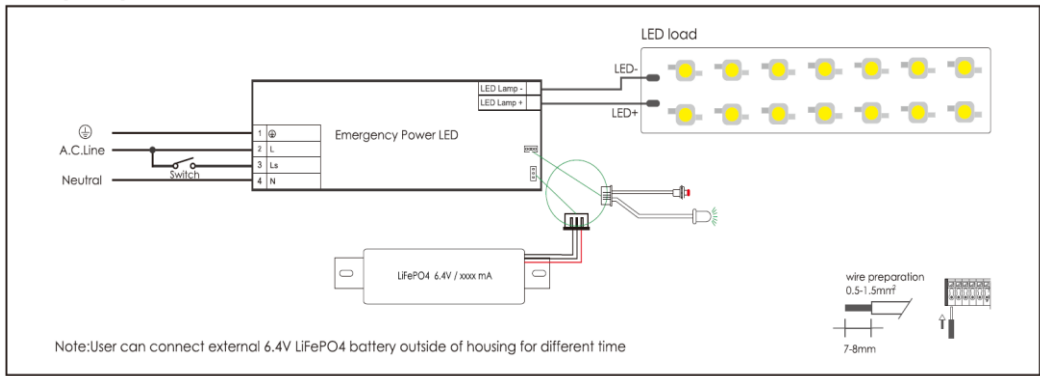
- ① If the LED driver connects to Input Voltage 380Vac, then the protection Turn On and the Led driver is switched off until its connect to Input voltage 220-240Vac. In this protection mode, the led driver does not blink and can be not damage more than 48 hours
- ② Auto Recovery
- ③ Auto Recovery
- ④ The output current decreases
- ⑤ There is risk to damage the LED driver or decreses the life time.

## 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

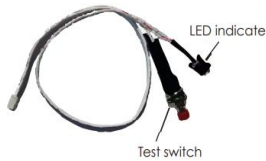


**Connection Method**



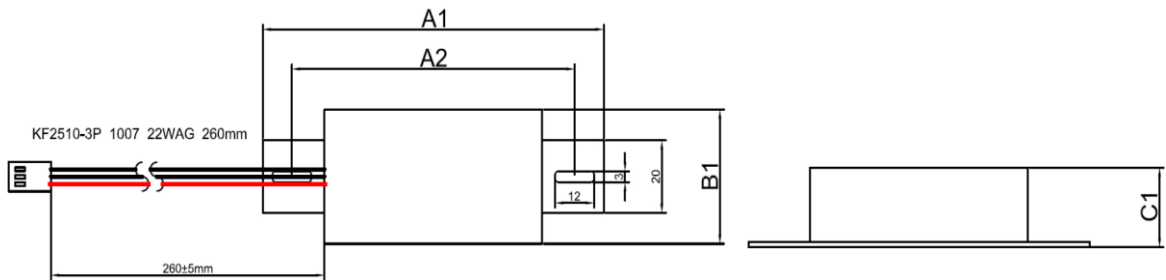
**9) Test Switch**

<b>LED indicator</b>	indicate that charging status		
Mounting hole	Dia	6.5	mm
wire Length		300	mm
<b>LED indicator status</b>			
		Off: Battery disconnected or mains supply disconnected	
		Green stable: Battery charging or fully charged	
<b>Test Switch</b>	:checking the device function		
Mounting hole	Dia	7	mm
wire Length		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 18
- 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**

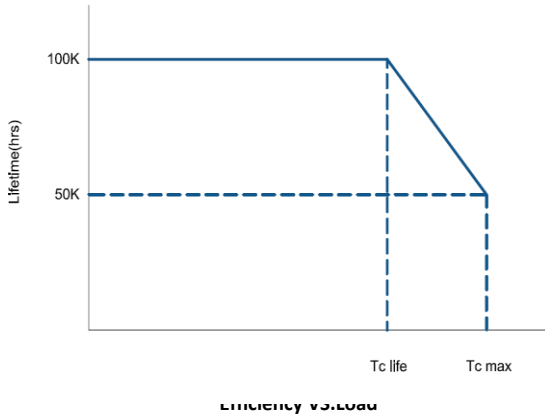
<b>Safety</b>	IEC61347-1、IEC61347-2-7、IEC61347-2-13、IEC60598-2-22
<b>EMC</b>	EN55015、CISPR15、EN61000-3-2、EN61547、EN61000-4-2、EN61000-4-3、EN61000-4-4、EN61000-4-5、EN61000-4-6、EN61000-4-11

**12) 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
- Note that when using input DC, the live wire is connected to the positive pole and the neutral wire is connected to the negative pole.

**13) Performance**

**Lifetime vs. Temperature Curve**



**Operating window**

