



#### 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, Accessory test switch and charge indicator
- 5, Isolated
- 6, Emergency power: 4W
- 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

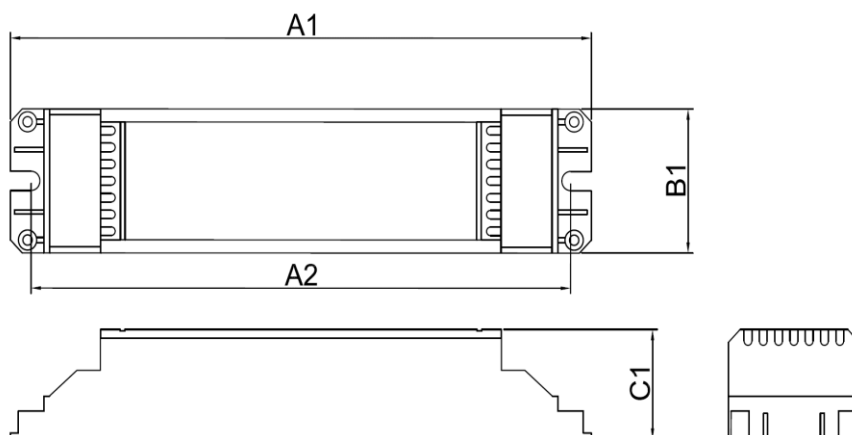
|                   | Symbol | Remarks            | Min. | Typical          | Max. | Unit  |
|-------------------|--------|--------------------|------|------------------|------|-------|
| Emergency Power   |        | @230Vac, full load |      | 4                |      | W     |
| Recharge Time     |        |                    |      | 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 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) |
| 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

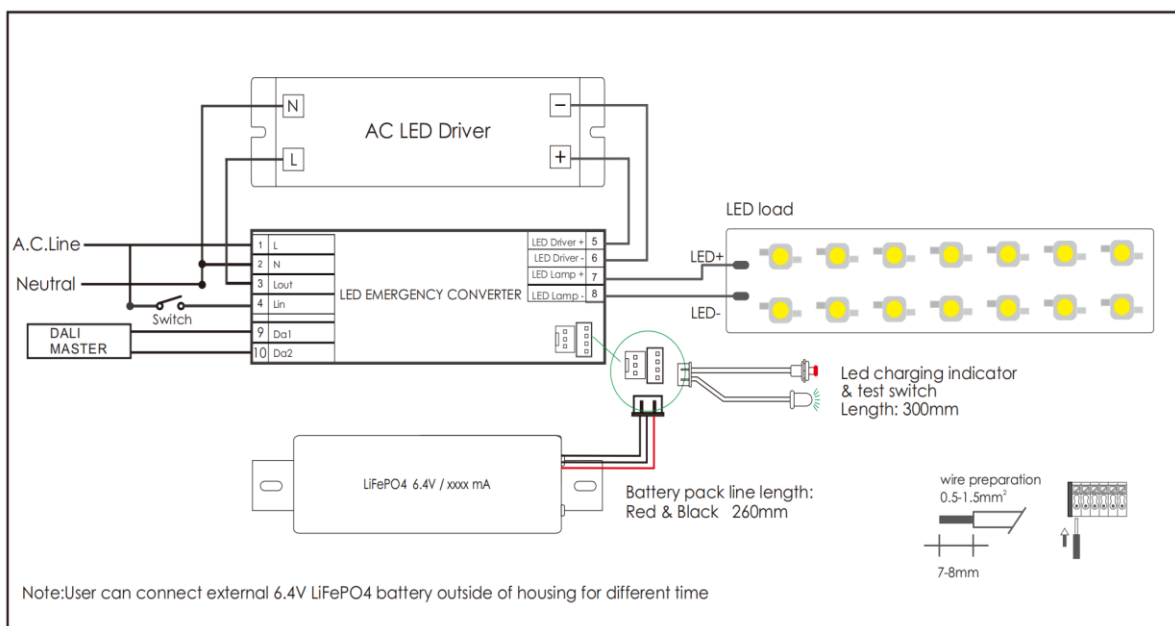
|                                       |                                        |                  |    |
|---------------------------------------|----------------------------------------|------------------|----|
| <b>OSSDAT</b> LED Emergency Converter |                                        | LED Control gear | +  |
|                                       |                                        | 200V 1.5A Max    | -  |
| L                                     | PL-EMPA-4W090M5020VF-DALI              | Output Leds      | +  |
| N                                     | For use with LiFePO4 6.4V1.5Ah Battery | 50-200V 4W       | -  |
| Lout                                  | 1.5 hours duration Made in China       |                  |    |
| Lin                                   | Mains Supply AC                        |                  |    |
| DA1                                   | 220-240V 50-60Hz                       |                  |    |
| DA2                                   | 60mA 6W max                            |                  |    |
|                                       | Power Factor: >0.6                     |                  |    |
|                                       | Ta: 0...50°C Tc: 70°C                  |                  |    |
|                                       | charge time: <24 hours                 |                  |    |
|                                       | charge current: 0-500mA                |                  |    |
|                                       | Do not use high voltage                |                  |    |
|                                       | test instrument!                       |                  |    |
|                                       | Output voltage: 50-200V                |                  |    |
|                                       | Umax(open circuit voltage): 230V       |                  |    |
|                                       |                                        | Battery          |    |
|                                       |                                        | Red +            | +  |
|                                       |                                        | Black -          | -  |
|                                       |                                        | LED indicator    | S1 |
|                                       |                                        | Test switch      | S2 |
|                                       |                                        | (Normally open)  | S3 |
|                                       |                                        |                  | S4 |

## Connection

|        | Signal | Cable Description       | Remark                  |
|--------|--------|-------------------------|-------------------------|
| Input  | 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  |
| Output | +      | 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



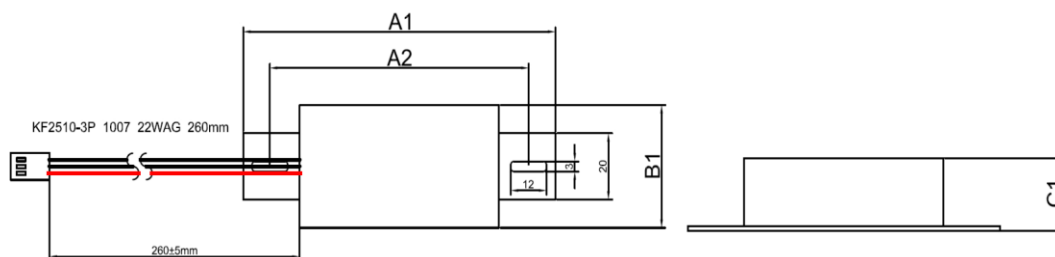


LED indicate

Test switch

- |                              |                                                                  |
|------------------------------|------------------------------------------------------------------|
| 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                        |

| 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  |



- 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、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