

## Products Description

- This emergency lighting conversion kit enables 3~20 W LED tubes, equipped with either internal or external drivers, to operate in full-power emergency mode. It is designed for upgrading existing luminaires to emergency operation. Constant Power Emergency LED Driver.

## Instruction

It is recommended that luminaires be installed by a qualified electrician to ensure compliance with current wiring regulations. These instructions should be read carefully and retained for future reference and maintenance.

## Typical Applications

- Commercial Lighting like Linear/Panel/Down light
- Industrial lighting like UFO/Low Bay
- Panel light
- LED Tube light
-AC110/220V Strip Light
-Connect AC input of lamp directly
-etc

## ❖ Model List

| Model Number | Article No | Input Voltage | Emergency Output Power | Output Voltage | Emergency Time | Warranty |
|---|---|---|---|---|---|---|
| EUA-020N220M301 | 204021333 | 100~240Vac | 3~20W | 220Vdc | 1~3hrs | 3 years |

## ❖ Electrical Characteristics

| Item | Testing Condition | Min | Typical | Max | Unit |
|---|---|---|---|---|---|
| Normal AC Input Voltage | | 100 | 220 | 240 | V |
| Input wattage | @Rated Input Voltage & Battery full discharge | | <5 | | W |
| Input Current | @Rated Input Voltage & Battery full discharge | | | 28 | mA |
| AC Input Frequency | | 47 | 50 | 63 | Hz |
| Battery Charging current | | 0 | | 350 | mA |
| Battery Charging time | | | | ≥24 | hour |
| Emergency Output Voltage | | 180 | 220 | 240 | DC |
| Emergency Power | | 3 | | 20 | W |
| Power Factor | @Rated Input Voltage & Battery full discharge | | 0.8 | | |
| Emergency Conversion Time | @230Vac | | 2 | | S |
| Emergency time | | 1.5 | | 3 | Hour |
| Electric Strength | 2750Vac 5mA(Input to Output) | | 2750 | | Vac |
| IP Rating | | | IP20 | | |
| Maximum shell Temperature | | | | 65 | ℃ |
| Relevant Standard | IEC 621347-2-7 / IEC 61347-1 / EN55015 | | | | |

## ❖ Conditions Of Operating & Storage

| Item | Min | Max | Remark |
|---|---|---|---|
| Operating Temperature | 0℃ | 50℃ | Cold start @ 230V/50Hz Input & Max Output Power |
| Storage Temperature | -10℃ | 55℃ | This is the ambient temperature |
| Operating Humidity | 10%RH | 75% RH | Not Condensing |
| Storage Humidity | 10%RH | 90% RH | Not Condensing |

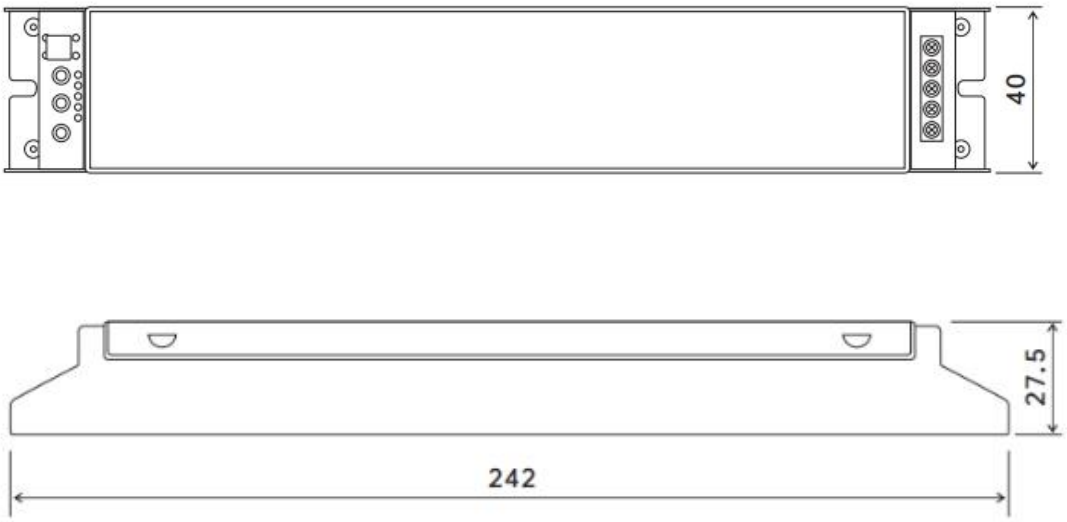
## ❖ Packaging Information

| Items | Parameter | Unit | Remark |
|---|---|---|---|
| Inner Box size | 245x44x30 | mm | |
| Carton size | 440x260x170 | mm | |
| Quantity/CTN | 50 | Pcs | |
| Net weight/PCS | 355 | g | |
| N.W / CTN | 17.8 | kg | |
| G.W / CTN | 18.4 | kg | |
| Packaging include | 1piece led emergency led driver | | |

## ❖ Housing Outlines & Material

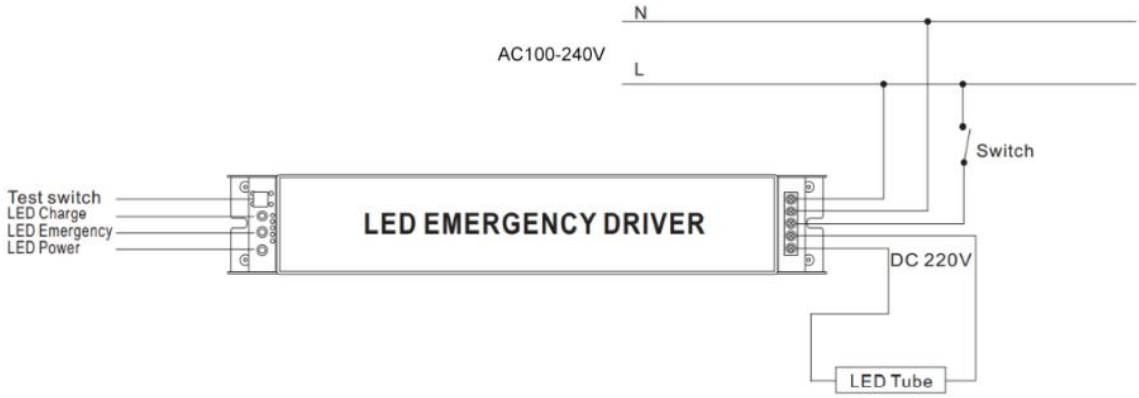
| Item | Parameter | Unit | Remark |
|---|---|---|---|
| Outlines | 242x40x27.5 | mm | |
| Fix Hole Size | 235x20 | mm | |
| Housing Material | Aluminum Alloy | | |
| Housing Colour | Silver / Black | | |
| IP Scale | IP20 | | |
| Fix Screw | M4 | mm | |

## ❖ Mechanical Parameters

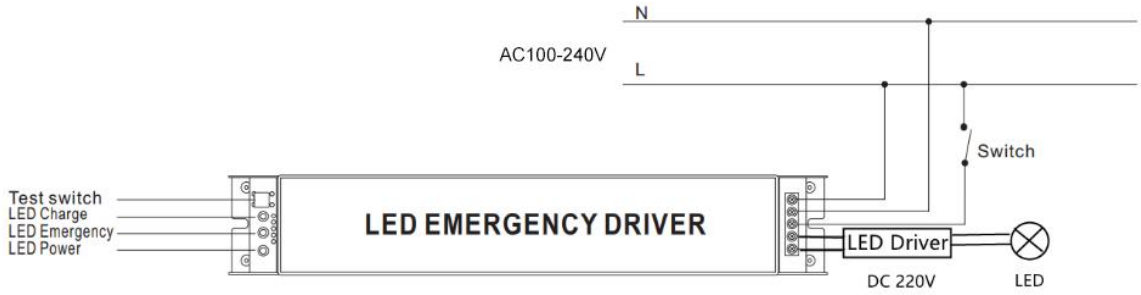


## ❖ Wiring diagram

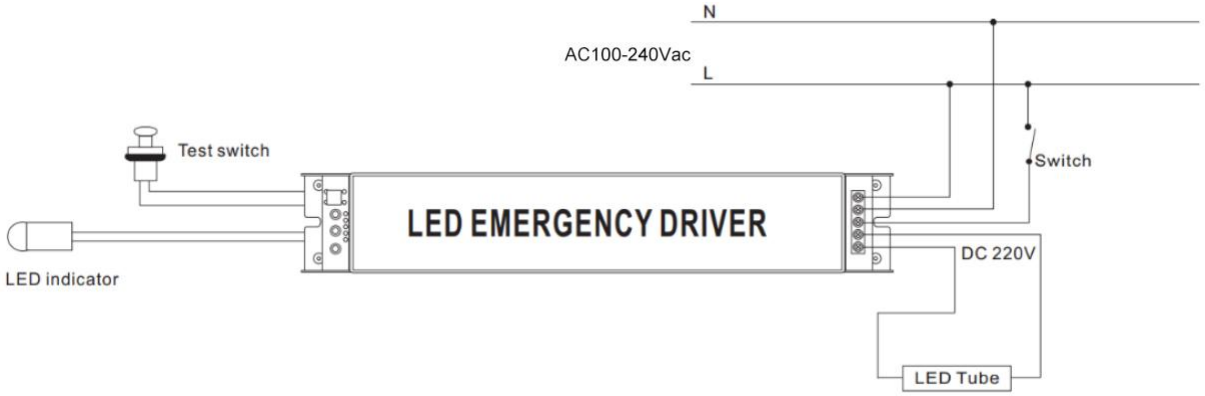
### Wiring 1: connect LED tube with internal driver




### Wiring 2: connect LED tube with external driver




### Wiring 3: connect LED tube with LED indicator



## ❖ LED indicator status and test button

Green LED: illuminates to indicate main power is on; turns off during emergency mode.

Red LED: illuminates while the battery is charging and turns off when fully charged.

Blue LED: Indicates emergency mode is active.

Test Button: Press and hold for 3 seconds to exit emergency mode

## ❖ Self test: N/A

## ❖ Installation & Wiring Diagram

Connecting method: Please refer to the wiring diagram printed on the emergency driver label.

Note:Installation must be performed by a qualified electrician to ensure safety.

1. Isolate Power: Disconnect the mains power supply before starting any wiring.
2. Connect Wiring: Following the diagram on the driver and data sheet wire diagram, connect the emergency driver to the LED fixture.
3. Verify Connections: Restore power briefly to check all wiring connections are secure.
4. Test Function: Turn on the LED via its switch. To test the emergency function, cut off the mains supply; the LED should switch to emergency mode immediately.

## ❖ Safety Instructions

When using electrical equipment, basic safety precautions should always be followed, including the following:

1. Indoor Use Only: Do not use outdoors.
2. Location: Do not mount near gas or electric heaters.
3. Security: Mount equipment at a height and location inaccessible to unauthorized personnel to prevent tampering.
4. Accessories: Use only accessories recommended by the manufacturer. Unauthorized accessories may create unsafe conditions.
5. Intended Use: Do not use this equipment for purposes other than its intended function.
6. Air-Handling Spaces: This unit is not suitable for installation in air-handling fixtures or heated air outlets.
7. Battery Maintenance:
   7.1 Replacement Condition: Replace the battery if the emergency runtime drops below 100 minutes after a full 24-hour charge, or if leakage occurs.
   7.2 Procedure: Always disconnect mains power before replacing the battery. Remove the old battery and install a new one of the same specification, ensuring correct polarity.

7.3 Warning: Do not reverse polarity or short-circuit the battery terminals. Using mismatched batteries may cause explosion. Dispose of old batteries according to local regulations.

8. Light Source: This unit supports 3~20W LED tubes (internal/external driver). If the light source fails or dims, replace it with a tube of the same type.
9. Wiring: The emergency driver must be wired so that the main power supply is controlled by the luminaire's switch and is not affected by other circuits.

## ❖ Storage

If the emergency driver has not been used for more than 6 months, it must undergo a full charge-discharge cycle (until the LED indicator turns off). Afterward, keep the unit powered by mains for 24 hours before storing it in a dry, well-ventilated location.

## ❖ Indicator:

- Green LED indicator is on that shows main power is on, when emergency function, green light is off;
- Red LED indicator shows battery is on charging, When battery full charged, Red LED indicator off.
- Blue LED indicator: emergency function

## ❖ Shipment

| Items | Details |
|---|---|
| Humidity Level | Humidity forbid |
| Swing | Forbid strong swing /Moving softly |

## ❖ Others

| | |
|---|---|
| 1 | Unless otherwise specified, all typical technical parameters and curves are tested under the following conditions: AC 230V/50Hz input, full load, and ambient temperature (Ta) of 25°C. |
| 2 | The product datasheet is subject to change based on product updates and market requirements. Please consult our sales team to confirm specifications and select the most suitable product for your application. |

## ❖ Revision History

| Revision | Date | Subjects (major changes since last revision) |
|---|---|---|
| 1.0 | 2025/2/10 | Release of final version |
| 2.0 | | |