

Low Temperature Emergency LED Driver



FEATURES

- UL Listed for US and Canada
- Listed to UL924 and tested to CSA C22.2 NO.141 field or factory installation
- Low energy consumption CEC Title 20 compliance
- High output voltage
- Constant output power
- Self-testing
- pBattery: Over charge Protection over discharge protection
- Malfunction indicate function
- For wiring to the led driver's DC output

SPECIFICATIONS

- Input Voltage: 100-347Vac, 50/60Hz
- Input Current: 100mA max
- Recharge Power: 5W max
- Output Voltage: 10-58/50-300Vdc
- Emergency Power: 8W
- Recharge Time: 24Hrs
- Discharge Time: 1.5Hrs
- Warranty: 5 Years
- Battery: LiFePO₄
- Ambient Temp: -22~140°F (-30-60°C)
- Weight: 0.88 lbs (0.4kg) max.
- Surge Protection: Live-neutral 3KV

SPECIFICATION CHART

Models	Emergency Power	Output Voltage
EMX-08058DO-HC	8 Watts	10~58Vdc
EMX-08300DO-HC	8 Watts	50~300Vdc

NOTE: Power of the **EMX** selected must not exceed the power of the A.C. driver from the LED fixture.

SELF-TESTING

The integrated self-diagnostic circuitry will automatically conduct monthly and annual 30-second long discharge tests to verify proper emergency capability per Life Safety Code requirements.

- **Monthly-** During AC mode, the system conducts a (30) second self-discharge test of the emergency led driver every 30 days and automatically restores to normal charging state after (30)seconds.
- **Annually-** During AC mode, the system conducts a (90) minute self-discharge test of the emergency led driver every 365 days and automatically restores to normal charging after fully discharging.

INSTALLATION MANUAL

!!! IMPORTANT SAFEGUARDS !!!

WHEN USING ELECTRICAL EQUIPMENT, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED, INCLUDING THE FOLLOWING

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. **CAUTION-** This emergency driver provides more than one power supply output source. To reduce the risk of electrical shock, disconnect both the normal and emergency source by turning off the A.C. branch circuit and by disconnecting the battery on/off connector.
2. **CAUTION-** Servicing of this equipment should be performed by qualified personnel only.
3. **CAUTION-** Do not attempt to service the battery. A sealed, no-maintenance battery is used that is not field replaceable. Replace the entire unit when necessary.
4. **CAUTION-** The use of accessory equipment not recommended by the manufacturer may cause unsafe conditions, void warranty, and result in non-compliance with specifications.
5. **CAUTION-** The emergency driver requires an un-switched AC power source of **100-347Vac**, 50/60Hz. Verify the correspondent electrical rating of the **LED fixture before servicing**. Both electrical ratings will supply power under an output voltage of 10-58/50-300VDC in emergency mode for at least 90 minutes.
6. **CAUTION-** Battery pack should be charged for 24 hours every 6 months during storage.
7. **CAUTION-** Disconnect the battery pack before shipping and storing.
8. The battery in this unit may not be fully charged. After electricity is connected to the unit for at least 24 hours, normal operation of this unit can take effect.
9. For use in -20°C minimum, 60°C maximum ambient temperatures.
10. When using the soft panel test button with glue on the backside, apply paste to the visible area with a smooth and clean surface.
11. The emergency driver should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
12. For use with LED fixture power higher than or equal to rating of the emergency driver emergency battery pack.
13. Do not use this equipment for anything other than its intended use. Only for LED Lighting emergency backup.
14. Do not mount near gas or electric heaters. Do not let power supply cords touch hot surfaces.
15. Do not make or leave any other open holes in the wiring enclosure or electrical component enclosure during installation.
16. The equipment is intended for ordinary locations and for permanent installation into one or more listed emergency luminaires.
17. Do not use outdoors.



Caution: Before Installation, Make Certain The A.C. Power is Off!

STEP 1: INSTALLING THE EMERGENCY LED DRIVER

- > Make certain the A.C. power is off.
- > Indicator light and test button should be mounted where it can be seen by maintenance personnel.
- > Determine an appropriate location for the emergency driver in the fixture. Install the emergency driver to the fixture using existing mounting holes in the fixture. The installation instructions of the LED luminaire may provide guidance on mounting location.

STEP 2: WIRING

- > Select the appropriate wiring diagram as reference. For other diagrams, consult the manufacturer.
- > Make sure all connections are in accordance with any local regulations.
- > Connect the mounting holes to the A.C. driver and LED load in accordance with the manufacturer's installation instructions.

STEP 3: TESTING

- > After wiring is completed, switch the A.C. power on. Then the charging indicator light should be illuminated, which indicate the battery is charging.
- > The battery in this unit may not be fully charged. A short-term discharge test may be conducted after the mounting holes have been charging for 1 hour. Charge for 24 hours before conducting a long-term discharge test.



THIS PRODUCT CONTAINS A RECHARGEABLE LITHIUM-ION BATTERY. THE BATTERY MUST BE RECYCLED OR DISPOSED OF PROPERLY TO PREVENT FIRE.

WIRING DIAGRAM

FIG. A

10V~58Vdc: FOR LED LUMINAIRE <80W AND <1.5A LED DRIVER CURRENT.

50V~300Vdc: FOR LED LUMINAIRE <80W AND <1A LED DRIVER CURRENT.

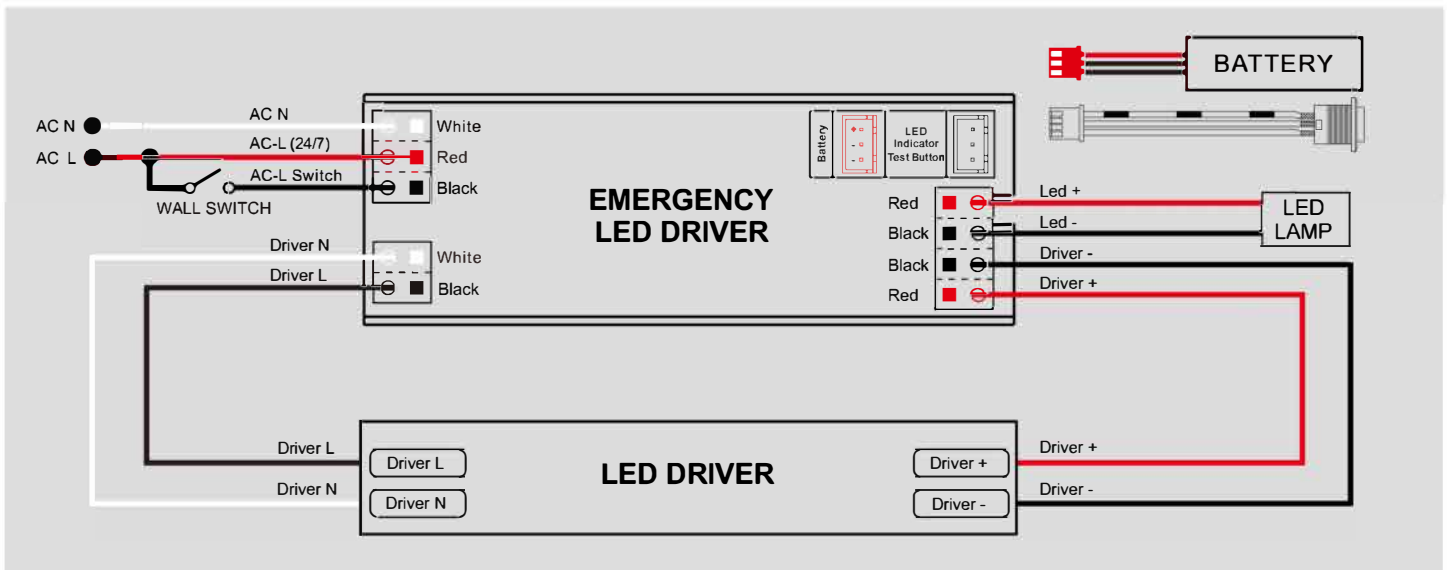
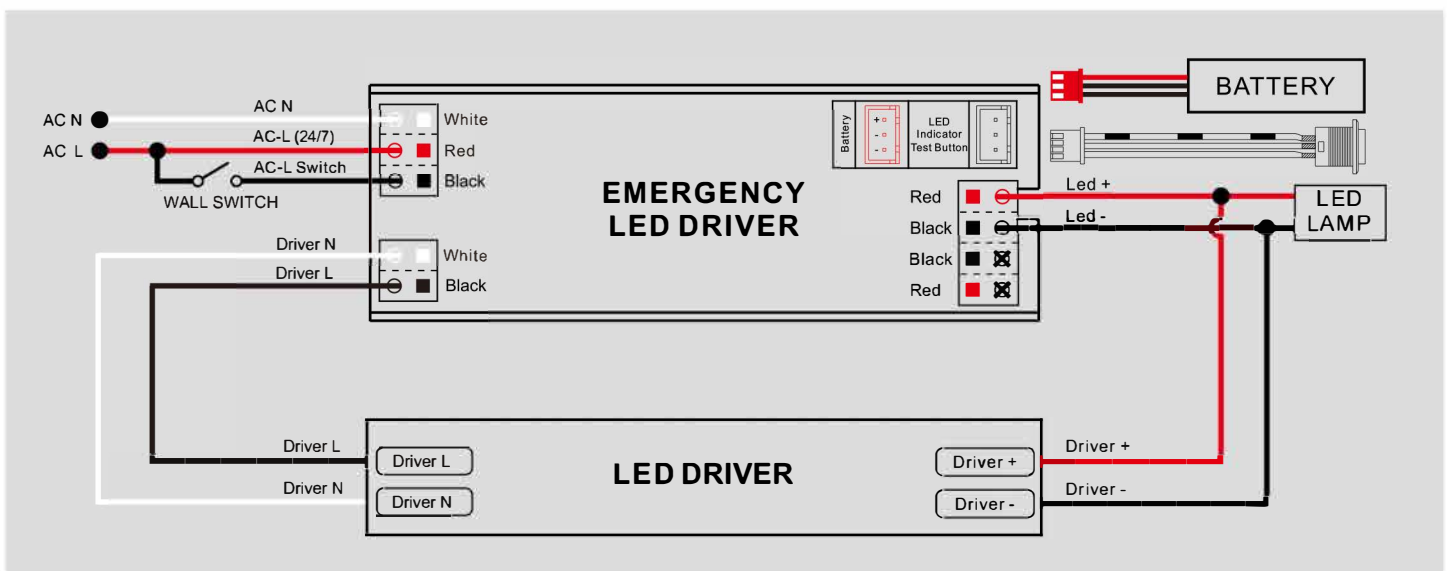


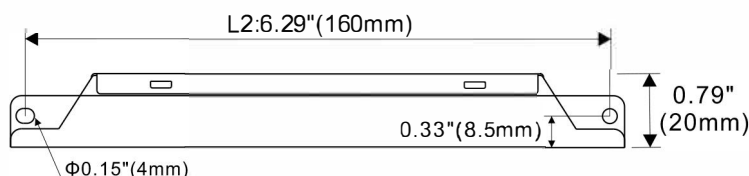
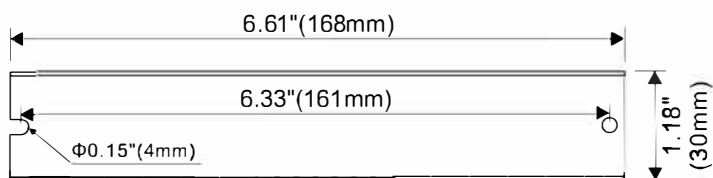
FIG. B

80W < LED LUMINAIRE ≤ 200W

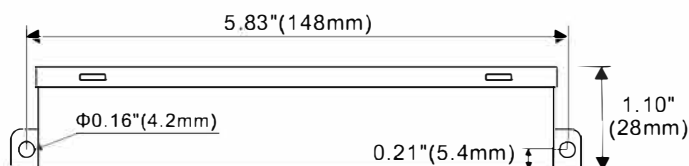
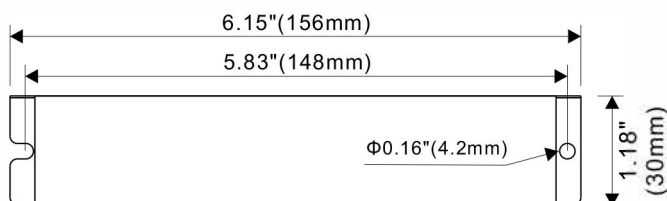


DIMENSIONS

DRIVER: L 6.61"(168mm)*W 1.18"(30mm) *H 0.79"(20mm)



BATTERY: L 6.15"(156mm)* W 1.18"(30mm)* H 1.10"(28mm)

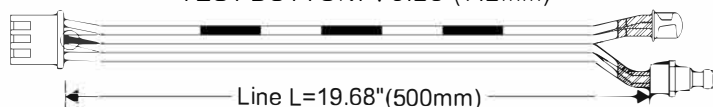


ACCESSORIES

Indicator Light & Test Switch

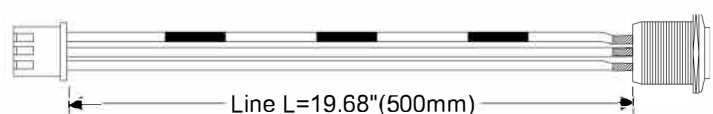
A: Separate

Mounting: INDICATOR LIGHT: Φ0.27"(6.8mm)
TEST BUTTON: Φ0.28"(7.2mm)



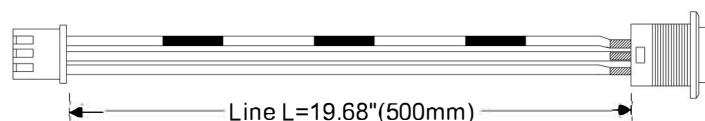
B: Metal Integrated

Mounting: Φ0.63"(16.2mm) / 0.48"(12.2mm)



C: Plastic Integrated

Mounting: Φ0.63"(16.2mm)



D: FPC

0.55"(14mm)



OPERATION(INDICATOR STATUS)

Mode	Test Button	Indicator Status	Comment & Solutions
AC MODE 1	NO Press	ON	Emergency driver is charging
AC MODE 2	Holding Press	OFF	Emergency driver is conducting an emergency test. Release test button to restore to normal charging mode.
EMERGENCY MODE 1	NO Press	OFF	Emergency driver is conducting a long-term emergency test until battery is fully discharged
WARNING Risk of Electric Shock 		Note: Please press the test button once to make certain the battery is turned off before installation, maintenance, storage or shipping.	