

Emergency Luminaire for Hazardous (Classified) Locations

THT-EX

Installation and Maintenance Manual Model E2120

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1. General Information

Model E2120 LED Emergency Luminaires are suitable for use in the following hazardous (classified) areas as defined by the National Electrical Code (NEC) and Canadian Electrical Code (CEC):

- Class I, Division 2, Groups A, B, C, D
- Wet Locations

Refer to the LED Emergency Luminaire nameplate for specific classification information, maximum ambient temperature suitability and corresponding operating temperature (T-Code).

Model E2120 LED Emergency Luminaire is designed for using in indoors and outdoors environment.

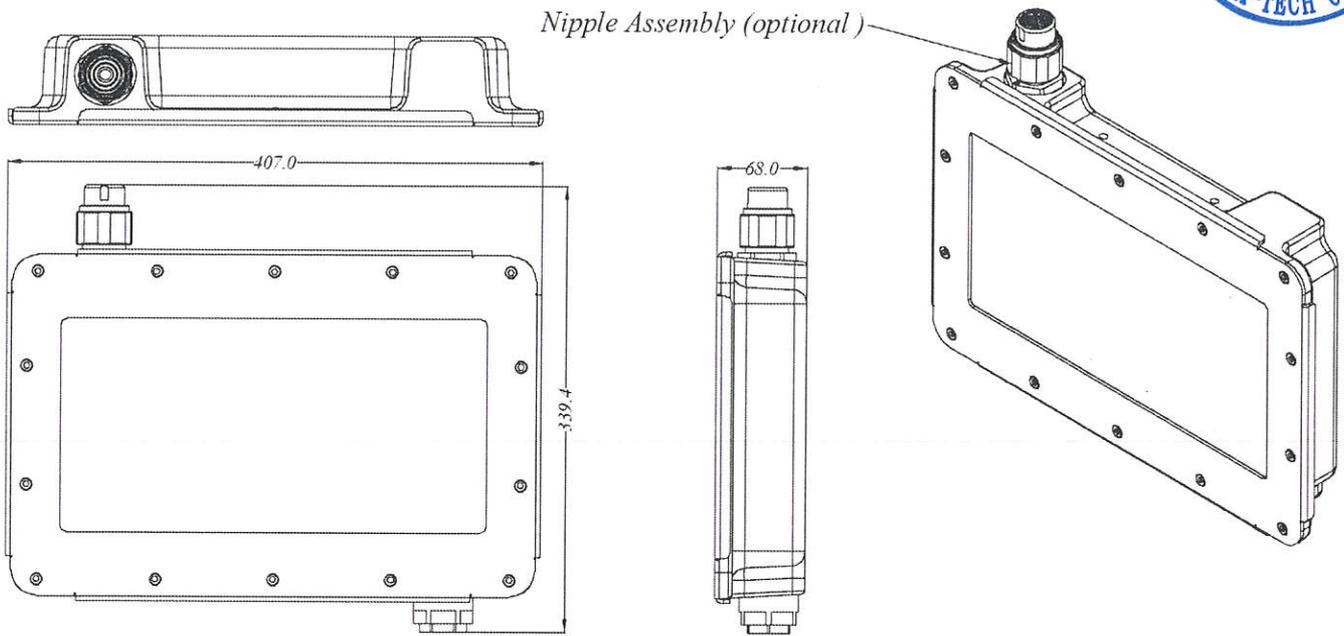


Rated Voltage: 120~277 Vac, 50 & 60 Hz
Rated Input Wattage: 6.5 W
Rated Output Wattage: 20W (Battery discharge)
Ambient Temperature Range: 5°C ~ +45°

WARNING

- ▶ To avoid the risk of fire, explosion or electric shock, this product should be installed, inspected and maintained by a qualified electrician only, in accordance with all applicable codes and regulations.
- ▶ To avoid electric shock:
 - ✓ Be certain electrical power is OFF before and during installation and maintenance.
 - ✓ LED Emergency Luminaire must be supplied by a wiring system with an equipment grounding conductor suitable for the specific hazardous locations in accordance with the NEC and CEC.
- ▶ To avoid explosion:
 - ✓ Make sure that the supply voltage is the same as the luminaire voltage.
 - ✓ Do not install where the marked operating temperatures exceed the ignition temperature of the hazardous atmosphere.
 - ✓ Do not operate in ambient temperatures above those indicated on the luminaire nameplate.
 - ✓ All O-rings and gasket seals must be clean and undamaged.
 - ✓ Before installation and dismantling, electrical power to the luminaire must be turned off. Keep tightly closed when in operation.
- ▶ To avoid burning hands, ensure the luminaire is cool when performing maintenance.
- ▶ Customers should install and charge within one month after receiving the lighting.
- ▶ Do not let power supply cords touch hot surfaces.
- ▶ Do not mount near gas or electric heaters.
- ▶ Equipment should be mounted in locations and at heights where it will not be subjected to tampering by unauthorized personnel.
- ▶ The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- ▶ Do not use this equipment for other than its intended use.

2. Dimensions (All Dimensions in mm)



3. Technical Data

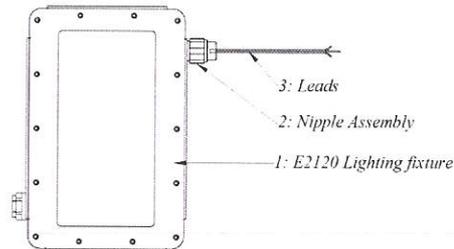
Item	Description	
Rated Voltage	120 Vac~277 Vac ($\pm 10\%$), 50 & 60 Hz (Note information on type label)	
Wattage	Emergency: 20W	
Battery Pack	Li Battery Pack	
Charging time	48 hr.	
Runtime of emergency mode	90 minutes	
Color of LED light	3000K $\pm 10\%$ (Warm White) / 5000K $\pm 10\%$ (Cool White)	
Ambient Temperate Range	5°C ~ +45°C	
Material	Aluminum alloy	
Enclosure	Heat and impact resistant tempered glass	
Glass		
LED Service Life	60,000 hrs	
Mounting Type / Weight	Wall Mounting	Ceiling Mounting
	6.3kg	6.3 kg

4.1 Electrical Connection

Overview of Electrical Connection (With Nipple Assembly)

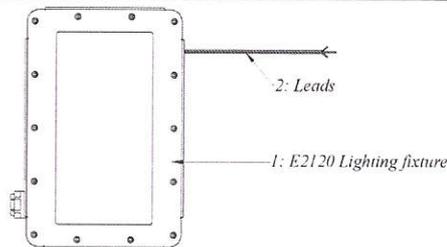
Fix and Introduce the wires of luminaire with the terminal post of Junction Box (White-wire connects to Neutral; Red-wire connects to Live; Green-wire connects to Ground.)

1: E2120 Lighting fixture	2: Nipple Assembly	3: Leads (Length: min, 18 inches)
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Overview of Electrical Connection (Without Nipple Assembly)

1: E2120 Lighting fixture	2: Leads (Length: min, 18 inches)
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1. Insert the field wiring leads (2) through the conduit (not shown, provided in the field).
2. Connect conduit to 3/4 in, NPT external threads of adapter with at least five full threads engaging.
3. Connect branch conduit wires to luminaire wiring necessary raceway component, boxes and fitting required per NEC and CEC. (White-wire connects to Neutral; Red-wire connects to Live; Green-wire connects to Ground.)

4.2 Mounting Bracket Installation(Wall /Ceiling Mounting Bracket)

- ☞ The mount bracket is for the use of both Wall mount (Figure 1) and Ceiling mount (Figure 2).
- ☞ Position the bracket holders and fix it by means of the provided M8 screws,60 kgf-cm.
- ☞ Secure the Wall/Ceiling mounting bracket to the structure by using fasteners (not provided)

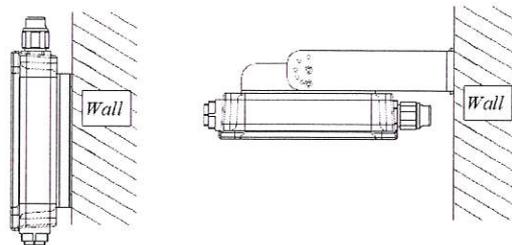


Figure 1

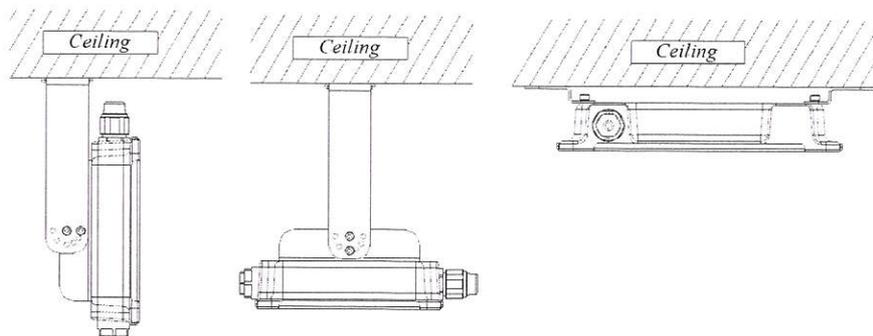


Figure 2

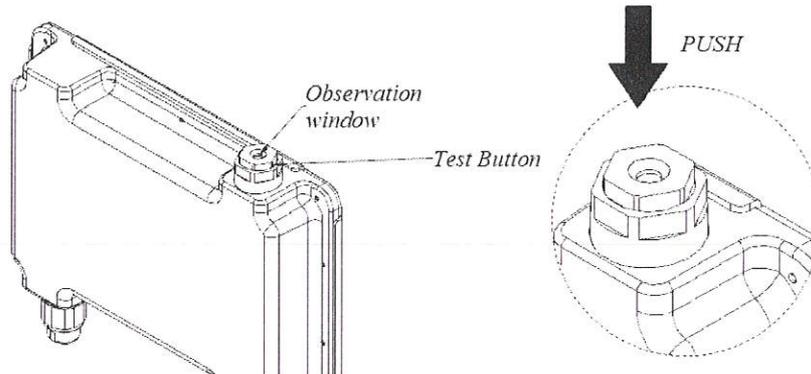
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4.3 Putting into Service

Before putting into operating, it's necessary to ensure that:

- ☞ the lighting is correctly installed.
- ☞ the connection has been correctly made.
- ☞ the field wiring has been made per NEC and CEC requirement.
- ☞ the lighting fixture needs to be charged for 48 hours and it can provide 90 minutes illumination after fully charged

4.4 Test Emergency Lights



Test emergency lighting system for proper operation

- ☞ Indicating light should be operating.
- ☞ Momentarily press the push button and observe - emergency lights should be operating.
- ☞ If emergency lights do not operate initially, allow battery to charge for at least 3 hours or more, then repeat the test procedure.
- ☞ When press the push button, if the light source cannot be illuminated, please contact the factory to replace the LED or Battery or electronic component.

5. Maintenance

- ▶ To avoid personal injury, disconnect power to the light and allow the unit to cool down before performing maintenance.
- ▶ Perform visual, electrical, and mechanical inspections on a regular basis. The environment and frequency of use should determine this. However, it is recommended that checks be made at least once a year. Frequency of use and environment should determine this. It is recommended to follow an Electrical Preventive Maintenance Program as described in the National Fire Protection Association Bulletin NFPA No. 70B: Recommended Practice for Electrical Equipment Maintenance.
- ▶ The lens should be cleaned periodically to ensure continued lighting performance. Clean the lens with a clean, damp, non-abrasive, lint-free cloth. If this is not sufficient, use a mild soap or a liquid cleaner. Do not use an abrasive, strong alkaline or acid cleaner as damage may occur.
- ▶ Inspect the cooling fins on the luminaire to ensure that they are free of any contamination (i.e. excessive dust build-up). Clean with a non-abrasive cloth if needed.
- ▶ Electrically check to make sure that all connections are clean and tight.
- ▶ Mechanically check that all parts are properly assembled.
- ▶ Do not attempt to service the battery. For replacement, contact the factory.

6. Transport, Storage and Disposal

- ▶ Transport and storage is only allowed in the original packaging, on the way pointed out on the carton box.
- ▶ Transport – Shock-free in its original carton, do not drop, and handle carefully.
- ▶ Store – Store in a dry place in its original packaging.
- ▶ Disposal – Ensure environmentally friendly disposal of all components according to the legal regulations.