Luminaire For Hazardous Locations

THT-EX

Installation and Maintenance Manual

Model L1811

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1. General Information

Model L1811 LED 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 1, Groups B, C, D
- Class II, Division 1, Groups E ,F, G
- Class III, Division 1
- Wet Locations

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

Model L1811 LED Luminaire is designed for using in indoors and outdoors environment.

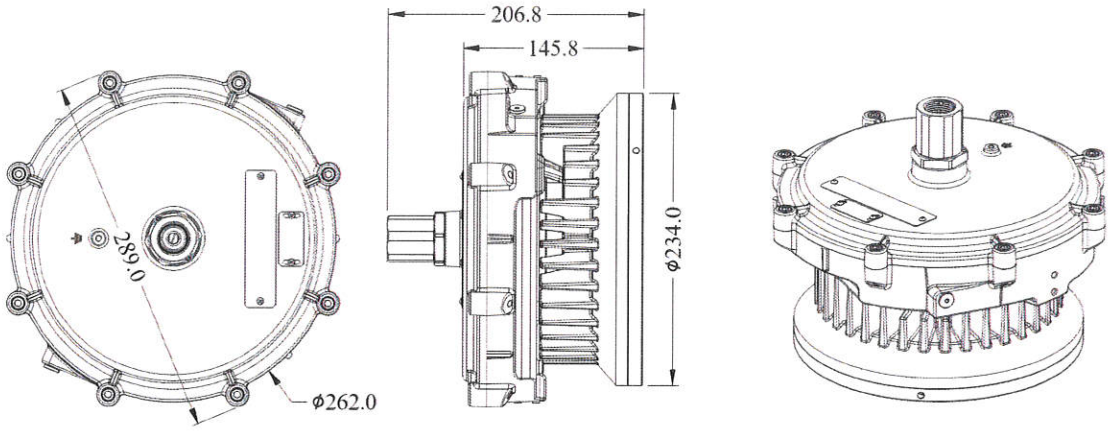
L1811A
Rated Voltage: 100~277 Vac, 50 & 60 Hz
Rated Wattage: 120W

L1811B
Rated Voltage: 110、120、220、277 Vac, 50 & 60 Hz
Rated Wattage: 100W
Ambient Temperate Range: -20°C ~ +40°

⚠ WARNING

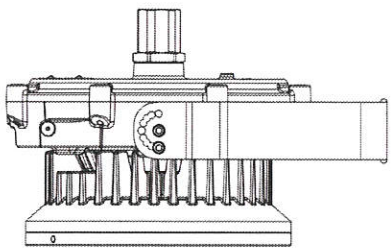
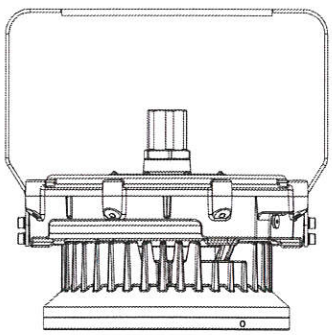
- **"Luminaire has not been investigated for compliance with the performance criteria of Article 700 of NFPA 70, "National Electrical Code", NFPA 101, "Life Safety Code", and Section 46 of CAN/CSA-C22.1, "Canadian Electrical Code, Part I", for emergency lighting equipment"**
- **To avoid the risk of 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.**
  - ✓ **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 dismounting, 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 fixtures.**
- **The battery remains ignition capable and should only be removed when the area is known to be non-hazardous.**
- **CAUTION - This equipment has more than one power supply connection point. To reduce the risk of electric shock, disconnect both the branch circuit-breakers or fuses and backup power supplies (battery) before servicing.**
- **"WARNING: To prevent ignition of explosive atmospheres conduit runs must have a sealing fitting connected within 9 inches of the luminaire"**

2. **Dimensions** (All Dimensions in mm)



3. **Technical Data**

Item	Description
Rated Voltage	THTE1811ACA*HL0 – 100-277 Vac, 50/60 Hz THTE1811BCA*1J0 – 110 Vac, 50/60 Hz THTE1811BCA*6J0 – 120 Vac, 50/60 Hz THTE1811BCA*2J0 – 220 Vac, 50/60 Hz THTE1811BCA*9J0 – 277 Vac, 50/60 Hz
Total System Power Consumption	THTE1811ACA*HL0 – 120W THTE1811BCA**J0 – 100W
Color of LED light	Warm White / Cool White
LED Wattage	80W
Emergency mode LED Wattage	THTE1811ACA*HL0 – 80W THTE1811BCA**J0 – 40W
Charging time	48 hr.
Runtime of emergency mode	120 minute
CRI	> 80
Power Factor	cos φ ≧ 0.9
Ambient Temperate Range	-20°C ~ +40°C
Material Enclosure Glass	 Aluminum alloy Heat and impact resistant tempered glass
LED Service Life	60,000 hrs
Mounting Type / Weight	Three-position (wall/hanging) adjustable trunnion, each position with three aiming angles (25° /45° /90° adjustable)

	
8.6 kg	8.6 kg
Wall Mounting	Hanging Mounting

4. Model code

THTE1811①CA②③④

① : A = A type, Two sets of batteries
B = B type, One set of battery

② : C = Cool white / W = Warm white

③ : H = 100~277V
1 = 110V / 6 = 120V / 2 = 220V / 9 = 277V
*A type is full range voltage, code =H
B type is single voltage, code =1 ,2 ,6 ,9

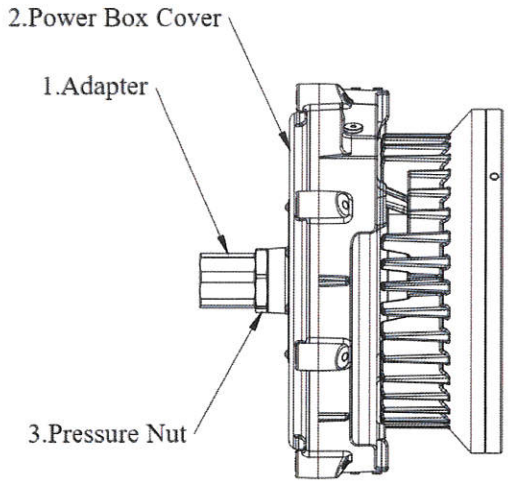
④ : L0 = 120W (A type only)
J0 = 100W (B type only)

5. Assembly and Installation

5.1 Electrical Connection

Overview of Adapter Assembly

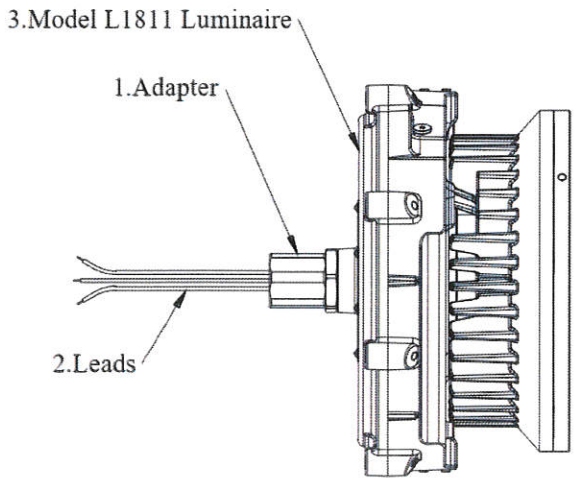
1: Adapter	2: Power Box Cover	3: Pressure Nut



The Power Box Cover is equipped with the adapter (1) with 3/4 in. NPT internal threads for supply connections.

Overview of Electrical Connection

1: Adapter	2: Leads (Length: min, 18 inches)	3: Model L1811 Luminaire



1. Insert the wiring leads (2) through the conduit (not shown, provided in the field).
2. Connect conduit to 3/4 in, NPT internal 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; Black-wire connects to Live; Green-wire connects to Ground.)

5.2 Mounting Bracket Installation

5.2.1 Two Position (wall/hanging) Adjustable Trunnion Mounting Bracket

- The mounting bracket is for the use of wall and hanging mounting.
- Position the bracket holders and secured to mounting surface by means of the provided M6 screws, Torque value M6=24.5 kgf-cm. (Figures 1 and 2)
- Secure the mounting bracket to the structure by using four fasteners (not provided). (Figure 3)
- Mounting Orientation – Lens horizontal Facing Down (Figures 4 and 7) or Lens Facing Down 25°(Figures 5 and 8) or Lens Facing Down 45°(Figures 6 and 9) from vertical.

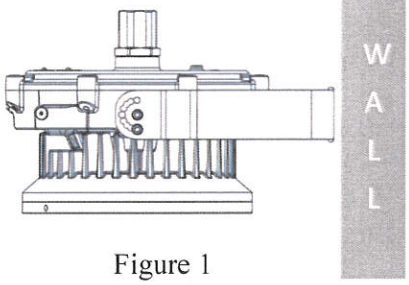


Figure 1

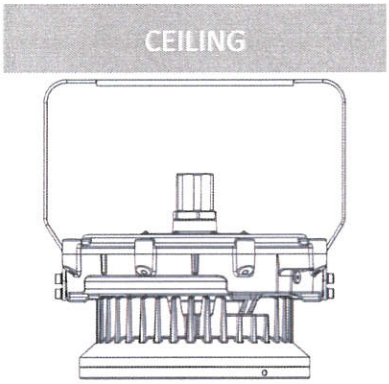


Figure 2

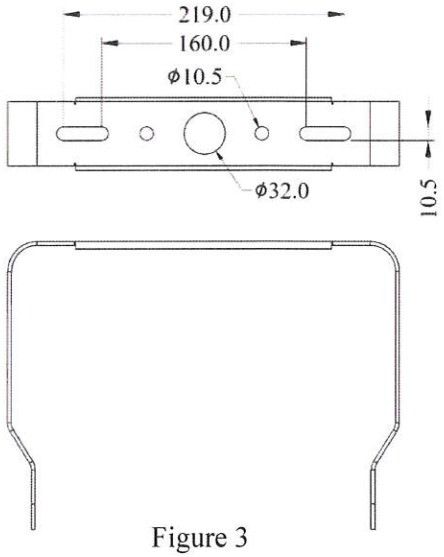


Figure 3

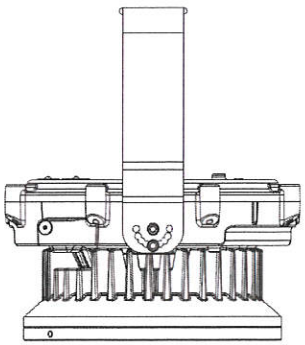


Figure 4

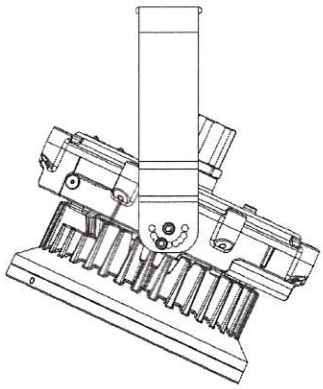


Figure 5

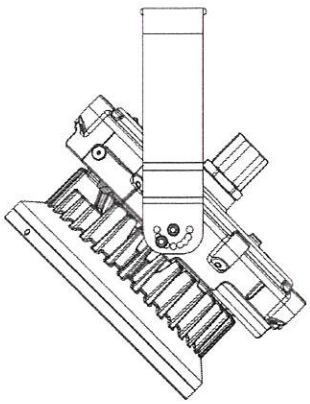


Figure 6

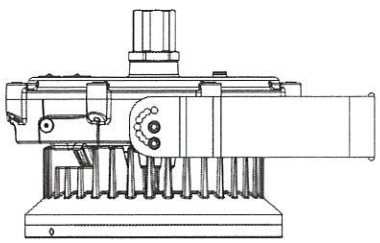


Figure 7

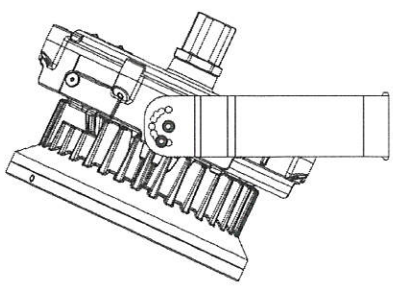


Figure 8

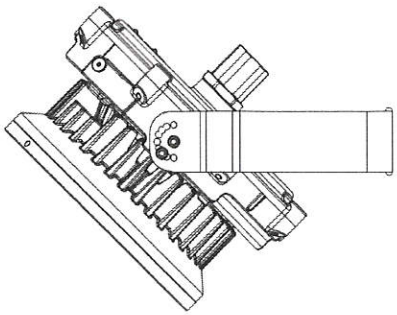
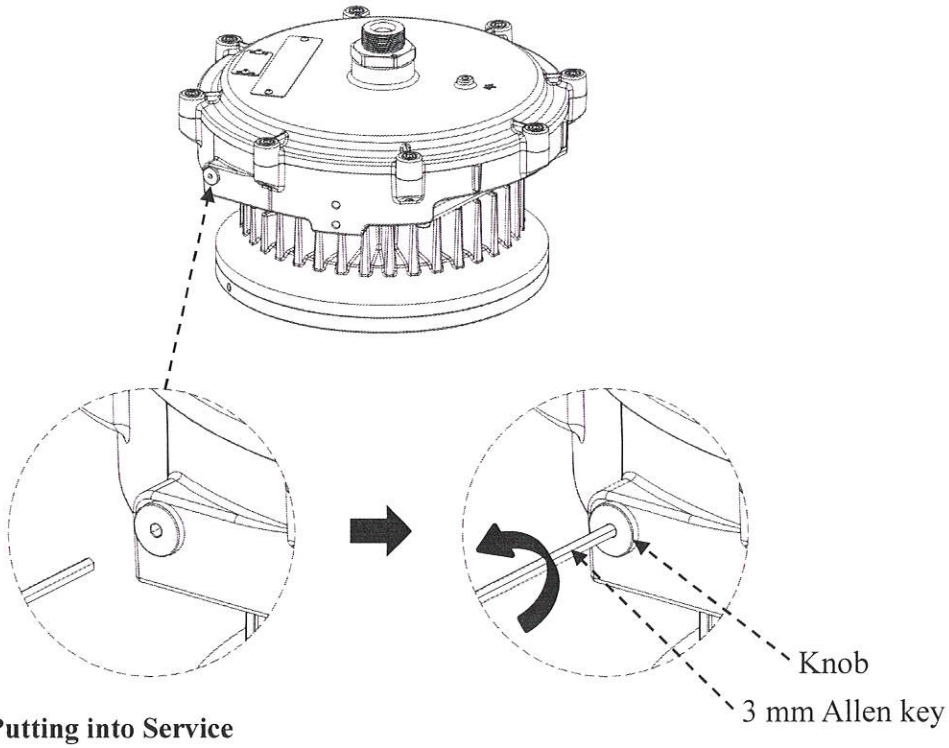


Figure 9

5.3 Wake up the lighting fixtures

☞ Before put the lighting into operation; please turn the knob to the left with a tool for two turns so as to turn off sleep mode.

Attention: Please do not turn the knob for more than two turns; otherwise the knob might be damaged.



5.4 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 cable has been inserted correctly.
☞ the voltage is correctly.
☞ the lighting fixture needs to be charged for 48 hours and it can provide 120 minutes illumination after fully charged.
☞ Continuously charge the Product for 48 hours before first time installation.
☞ It may result damage and/or inactive to the battery in case the Product continuously discharges over 30 days. Continuously charge the Product for 48 hours when the Product has continuously discharged for 30 days.

6. 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. The unit uses a sealed, Li-ion battery which requires no maintenance. For replacement, contact the factory.

7. 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.