

Luminaire For Hazardous Locations

Installation and Maintenance Manual

Model THTE1815A

THT-EX

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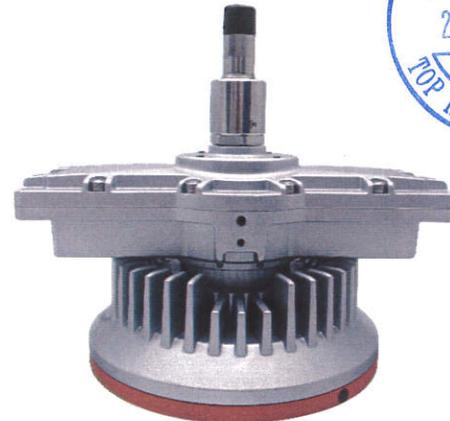
1. General Information

Model THTE1815A 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 THTE1815A LED Luminaire is designed for using in indoors and outdoors environment.



Rated Voltage: 120~277 Vac, 50 & 60 Hz
Total System Power Consumption: 60W
Ambient Temperature Range: -20°C ~ +40°C

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.
 - ✓ 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 fixtures.
- ▶ This equipment has not been evaluated for compliance with Article 700 of the National Electrical Code, ANSI/NFPA 70.
- ▶ This equipment has two sources of supply, the area must be verified to be non-hazardous (unclassified) before disconnecting the battery supply during servicing

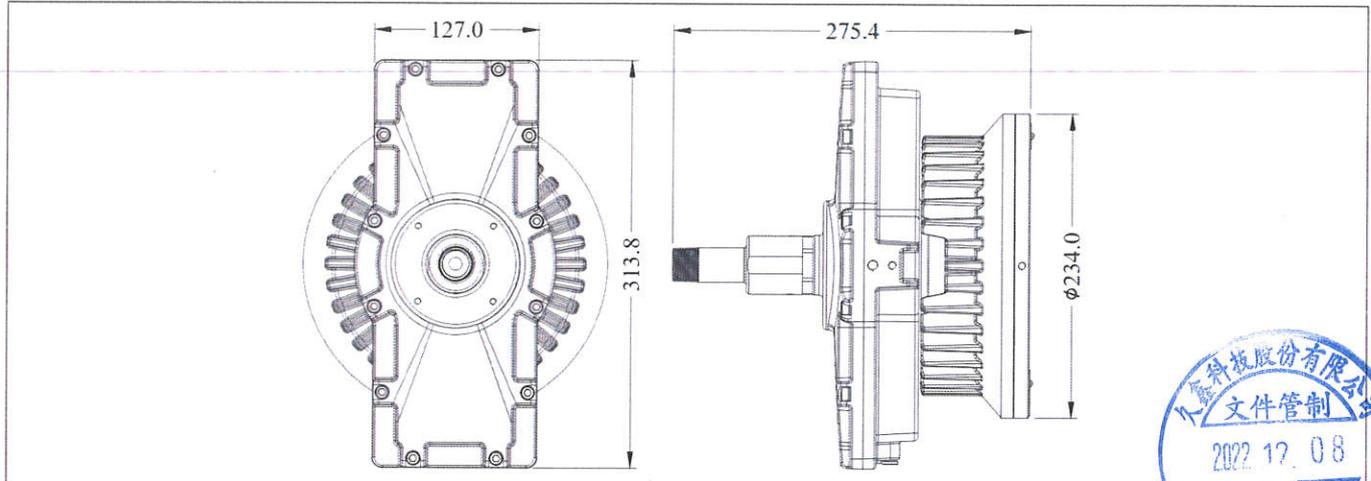
2. Model Code

THTE1815ACK①HF0

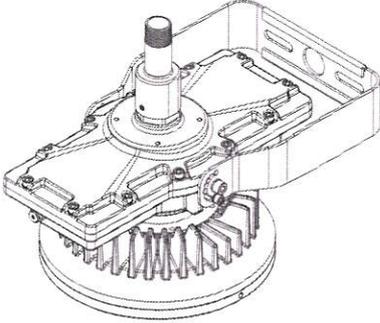
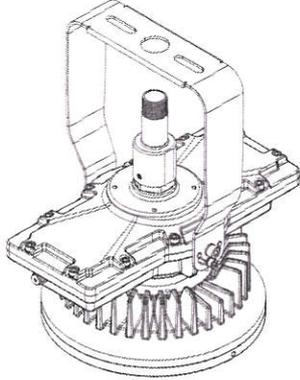
① : C= Cool white / W= Warm white

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3. Dimensions (All Dimensions in mm)



4. Technical Data

Item	Description	
Rated Voltage	120 Vac~277 Vac, 50 & 60 Hz (Note information on type label)	
Total System Power Consumption	60W	
LED Wattage	40W	
Charging time	48 hr.	
Runtime of emergency mode	120 min.	
Color of LED light	3000K (Warm White) / 5000K (Cool White)	
CRI	> 80	
Power Factor	$\cos \varphi \geq 0.9$	
Ambient Temperate Range	-20°C ~ +40°C	
Material		
Enclosure	Aluminum alloy	
Glass	Heat and impact resistant tempered glass	
Degree of Protection	IP67	
LED Service Life	60,000 hrs	
Mounting Type / Weight	Two-position (wall/ceiling) adjustable trunnion, each position with two aiming angles (25° and 90° adjustable)	
		
	8.6 kg	8.6 kg
	Wall Mounting	Ceiling Mounting

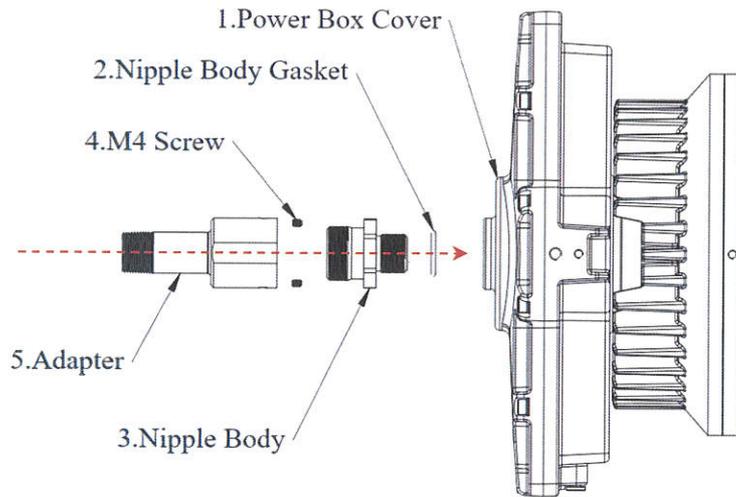
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5. Assembly and Installation

5.1 Electrical Connection

Overview of Nipple Assembly

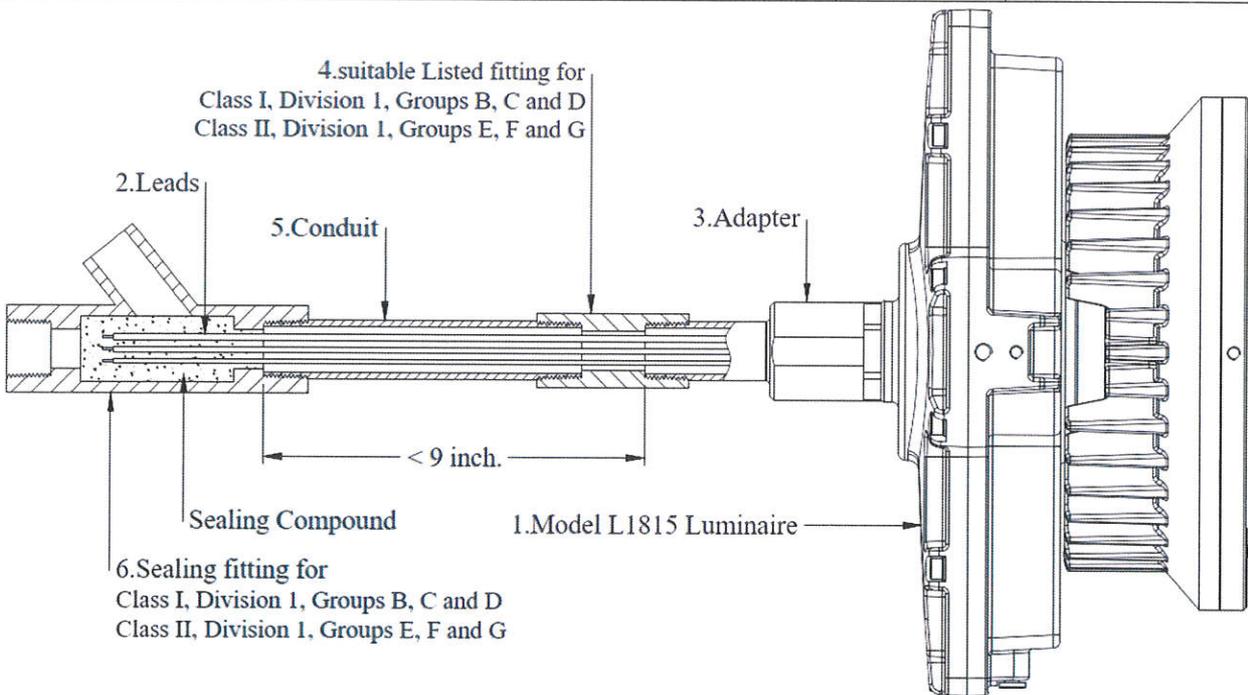
1: Power Box Cover	2: Nipple Body Gasket	3: Nipple Body	4: M4 Screw	5: Adapter
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The Top Cover is equipped with the adapter (5) with 3/4 in. NPT external threads for supply connections.

Overview of Electrical Connection

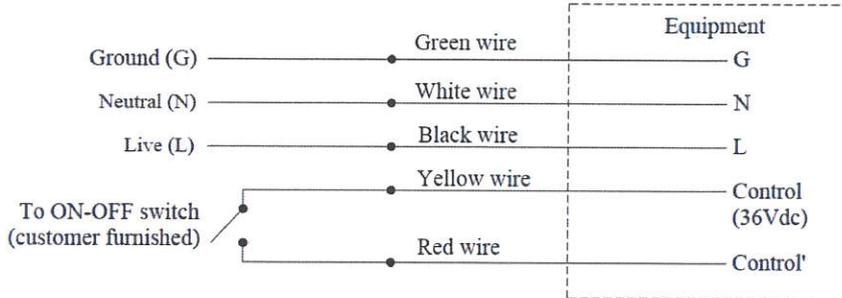
1: Model THTE1815A Luminaire	2: Leads (Length: min, 24 inches)	3: Adapter	4: Suitable Listed fitting
5: Conduit	6: Sealing fitting		



- ☞ Insert the wiring leads (2) through the conduit (provided in the field).
- ☞ Use the suitable Listed fitting for Class I, Division 1, Groups B, C and D and Class II, Division 1, Groups E, F and G to connect the 3/4" NPT external threads of Nipple/Adapter to field connection in accordance NEC (National Electrical Code).
- ☞ Connect branch conduit wires to luminaire wiring necessary raceway component, boxes and fitting required per NEC and CEC.
- ☞ Sealing fitting no more than 9 inches from lead wire exiting point of conduit opening.
- ☞ Connect the wires of luminaire to the terminal block of Junction Box.
- ☞ White-wire connects to Neutral;

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- Black-wire connects to Live;
- Green-wire connects to Ground;
- Red-wire and Yellow-wire connect to ON-OFF switch.
- The luminaire could be controlled to turn ON or OFF when the Red-wire and Yellow-wire connecting to the external switch, the battery will also keep charging for the emergency purpose.
- The ON-OFF function of the lighting fixture needs to be charged for 48 hours before it can be used.
- The voltage of the connecting switch needs to above 220V.
- Warning: If interchange the wire connection may cause the damage to the luminaire.



5.2 Mounting Bracket Installation

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

- The mounting bracket is for the use of wall and ceiling mounting.
- Position the bracket holders and secured to mounting surface by means of the provided M8 and M6 screws, Torque value M8=61.0 kgf-cm, M6=24.5 kgf-cm. (Figures 1 and 2)
- Secure the wall mounting bracket to the structure by using two fasteners (not provided). (Figure 3)
- The lighting can be adjusted by 25° (Lens facing down 25° from vertical) or 90° (Lens facing down 90° from vertical). (Figure 4)

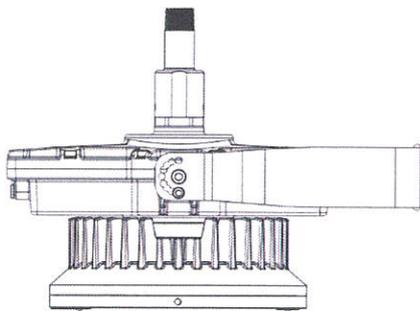


Figure 1

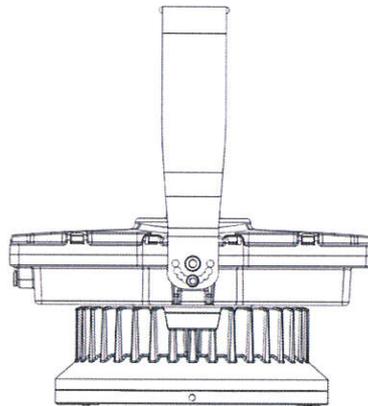


Figure 2

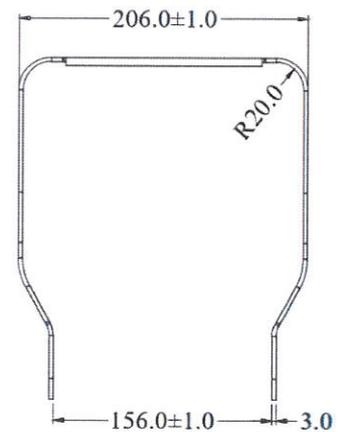
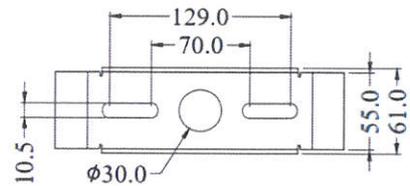
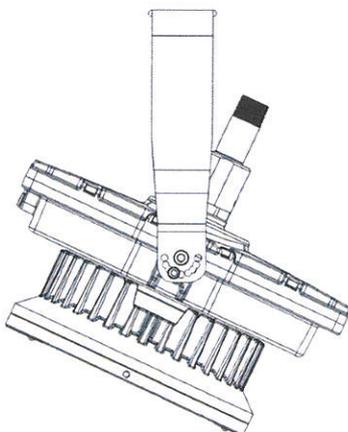
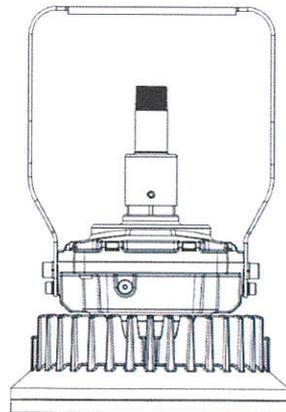


Figure 3



Ceiling 25°



Ceiling 90°

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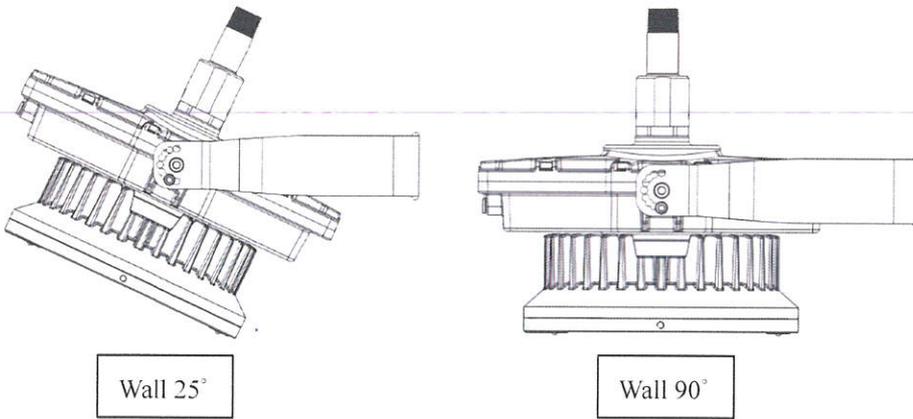


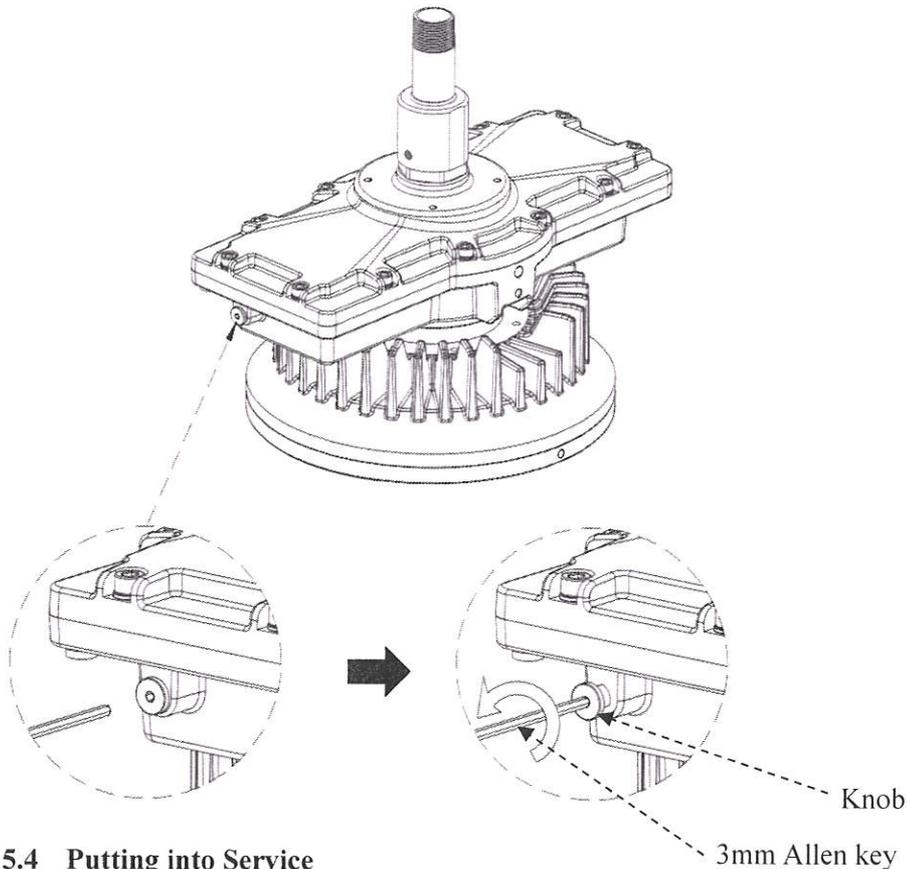
Figure 4



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.

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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.

