

# Operating Instructions

## Hazloc LED Lighting

### Model L2004

# THT-EX

Top Hi-Tech Co., Ltd.  
9F, No. 1, Zhongshan Rd,  
Tucheng District, New Taipei City,  
236 Taiwan  
Website: [www.tht-ex.com](http://www.tht-ex.com)

TEL: +886 2 22689570  
FAX: +886 2 22689571  
e-mail: [sales@tht-ex.com](mailto:sales@tht-ex.com)  
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## 1. General Safety Instructions

### WARNING

This manual contains basic safety instructions to be observed during installation, operation and maintenance of the apparatus, and for properly and safety run of the apparatus according to its performance data. Any damage of the apparatus may result explosion protection null and void. This manual represents the most relevant information about the product, applicable codes and regulations shall supplement it. Non-observance will endanger persons, plant and the environment. The person in charge is required to secure its employment in the industrial unit. Any improper usage, as well as non-compliance with the rules under this manual, shall release the manufacturer's all responsibilities.

WARNING - Potential Electrostatic Charging Hazard. Please wipe with a damp cloth when cleaning.

WARNING - The luminaire shall not be opened.

WARNING - The luminaire does not have a test port fitted.

WARNING - The gasket not to be replaced in the field.

### 1.1 Before assembly/commissioning:

- ☞ Read through the operating instructions.
- ☞ Give adequate training to the assembly and operating personnel.
- ☞ Ensure that the contents of the operating instructions are fully understood by the personnel in charge.
- ☞ The national installation and assembly regulations (e.g. IEC/EN 60079-14) apply.

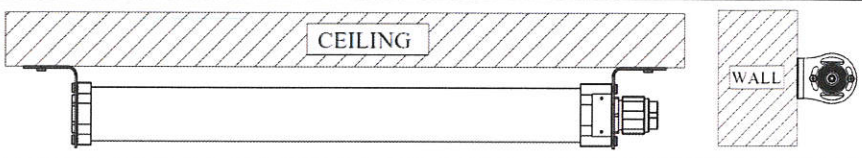
### 1.2 When operating the device:

- ☞ Ensure the operating instructions are made available for the person in charge on location at all times.
- ☞ Observe these instructions, other working instructions and national safety regulations.
- ☞ Verify the implementation of safety instructions.

## 2. Intended Field of Application

The Hazloc LED Lighting, Model L2004 is intended for using in gas explosive atmospheres (Zone 2 according to IEC60079-10-1) and dust explosion hazards (Zone 21 according to IEC60079-10-2). The use in other potentially explosive atmospheres does not correspond to the designated use and is therefore not allowed. The apparatus is designed for using in indoor and outdoor environments.

## 3. Technical Data

Item	Description
Explosion Protection IECEX Gas Explosion Protection Dust Explosion Protection	IECEX UL 21.0001X Ex nR IIC T5...T6 Gc Ex tb IIIC T100°C...T85°C Db
ATEX Gas Explosion Protection Dust Explosion Protection	UL 21 ATEX 2500X Rev. 0 (Type Exam) UL 21 ATEX 2499X Rev. 0 (EU Type) CE II 3 G Ex nR IIC T5...T6 Gc CE0035 II 2 D Ex tb IIIC T100°C ...T85°C Db
Power Factor	≥ 0.9
Degree of Protection	IP67
Frequency (Hz)	50/60
Material	Enclosure: Aluminum alloy , Polycarbonate
LED Service Life	60,000 hrs
Luminaire provide with cable gland and cable which assembled at the factory. A torque with 55 N-m shall apply to the Pressure Nut to compress the Tube at the factory. Cable gland is for circular (round), non-metal sheathed cables. The cable type is: SOOW, 18/3C AWG, 105°C, 1-3 m length. Size of Tube: ID Ø9.0 (Fitting Cable: OD Ø9), L=15 mm	
Mounting Type	Wall & Ceiling mounting
	

## Electrical Rating

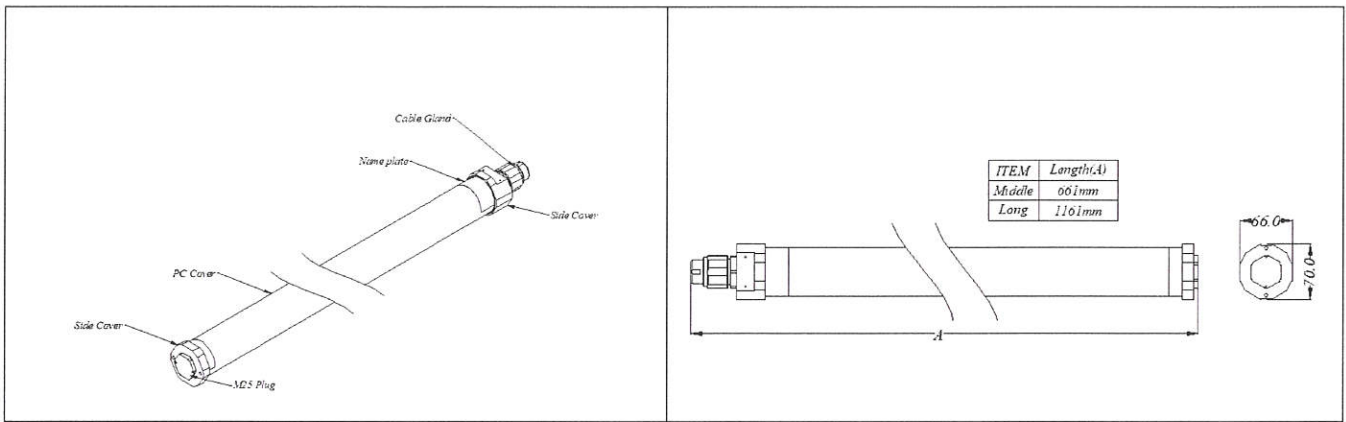
Models	Length	Voltage (Vac)	Wattage (W)
THTH2004E Series	2ft	100/110/200/220/277	20/40W
THTH2004F Series	4ft	100/110/200/220/277	40/60W

## Temperature Code

Models	Ambient Temperature	Gas Temperature	Dust Temperature
THTH2004E Series	-25°C ≤ Ta ≤ +40°C	T5	T100°C
	-25°C ≤ Ta ≤ +55°C	T5	T100°C
THTH2004F Series	-25°C ≤ Ta ≤ +40°C	T6	T85°C
	-25°C ≤ Ta ≤ +55°C	T5	T100°C



#### 4. Dimensions (All Dimensions in mm) – Subject to Alterations



#### 5. Assembly and Installation

##### 5.1 Mounting Bracket Installation (The luminaire shall not be opened during installation)

###### 5.1.1 Wall & Ceiling Mount 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, 61 kgf-cm.
- Secure the Wall/Ceiling mounting bracket to the structure by using four fasteners (not provided).

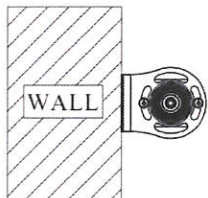


Figure 1

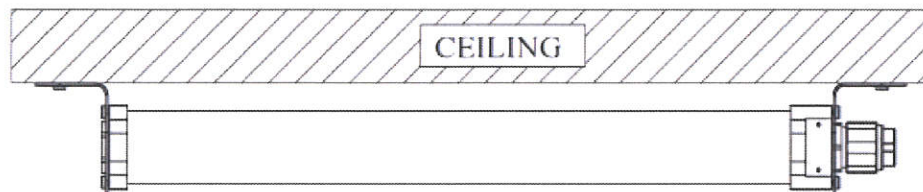
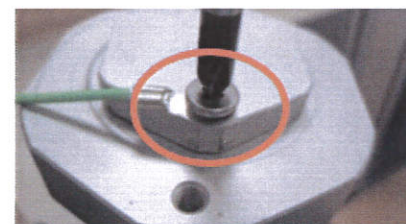


Figure 2



##### 5.2 Ground wire

- External earth screw location as showing in the Red Circle of right pictures.
- The external earth ground wire installation and terminal type as show the right pictures.
- Ground wire cross-sectional area =  $4 \text{ mm}^2$ , 18 AWG, max LED current = 1A; @V = 110Vac-10%.
- Both ground screw and washer material are stainless steel.
- Screw hole Spec: M4,
- Torque requirement: 7 kgf-cm.
- Ensure wire is tied assured.



U Type- O Type-



##### 5.3 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 cable has been inserted correctly.
- The voltage is correctly.

## 6. Maintenance

### WARNING

- ▶ To avoid dangers due to energized parts, all connections and wiring must be disconnected from the power supply. Secure the connections against unauthorized activation.
- ▶ To avoid risk of burn to hands, let the luminaire cool down for approximate 30 minutes before touching them.
- ▶ Repairs are only to be carried out by the manufacturer. Unauthorized repair shall cause the manufacturer's liability and warranty expires.
- ▶ To avoid danger of potential electrostatic charging hazard, please wipe with a damp cloth when cleaning.

### 7.1 Regular Maintenance

- ☞ Consult the relevant national regulations (e.g. IEC/EN 60079-17) to determine the type and extent of inspections.
- ☞ Arrange the plan of regular inspection with the equipment, one time per 3-month at least, so that any defects in the equipment which may be anticipated are promptly detected.

### 7.2 To check as part of the maintenance schedule as following:

- ☞ Cracks or damages on the PC cover and/or on the enclosure.
- ☞ Condition of the connecting cables.
- ☞ Screws of the mounting bracket are tightened.

## 7. Accessories and Spare Parts

### WARNING

Use only original THT-EX accessories and spare parts. For accessories and spare parts, see data sheet at [www.tht-ex.com](http://www.tht-ex.com).

## 8. Transport, Storage and Disposal

- ☞ Transport and storage are 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.

