



SHENZHEN KHJ SEMICONDUCTOR LIGHTING CO., LTD.

Operation & Maintenance Manual

KVictoriaHarbour Series -V1



Ex Mark

II 2 G Ex db op is IIC T5 or T6 Gb
II 2 D Ex tb op is IIC T95°C or T80°C Db IP66

Add: : 4-5 Floor, Building 1, Chuangxin industrial park, Xintian community, Guanlan, Longhua new district, Shenzhen, China.

Tel: +86-755-82949977

Fax: +86-755-82949800

Web: www.khjled.com

1. Brief Introduction

1.1. Copper free aluminium enclosure, 3 optional terminal blocks for easy connection, to meet different termination requirements.

2. Application

2.1. The Junction boxes designed to facilitate electrical connection in hazardous areas..
2.2. Ambient temperature from -45°C to +55°C.

3. Executive standard

- 3.1.IEC 60079-0 Electrical apparatus for explosive gas atmospheres--Part 1: General requirements
- 3.2.IEC 60079-1 Explosive atmospheres--Part 2: Equipment protection by flame proof enclosures "d"
- 3.3.IEC 61241-0 Electrical apparatus for use in the presence of combustible dust-- Part 1: General requirements
- 3.4.IEC 60947-7-1 Low-voltage switchgear and controlgear -- Part 7-1: Ancillary equipment -- Terminal blocks for copper conductors
- 3.5.EN 60079-0 Electrical apparatus for explosive gas atmospheres--Part 1: General requirements
- 3.6.EN 60079-1 Explosive atmospheres--Part 2: Equipment protection by flameproof enclosures "d"
- 3.7.EN 61241-0 Electrical apparatus for use in the presence of combustible dust-- Part 1: General requirements
- 3.8.EN 60947-7-1 Low-voltage switchgear and controlgear -- Part 7-1: Ancillary equipment -- Terminal blocks for copper conductors

4. Product certification

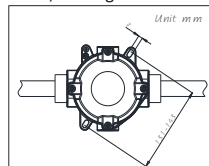
4.1.IECEx, RoHs and CE .

5. Caution

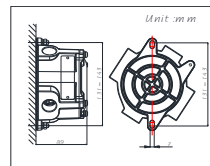
- 5.1.This product should be installed and maintained by qualified electrician only.
- 5.2. Do not operate in ambient temperatures above those indicated on the nameplate.
- 5.3. Repair of the flameproof joint must be made in compliance with the structural specifications provided by the manufacturer.
- 5.4. The assembly should be equipped with certified cable glands with a compatible mode of protection for the intended use. The unused holes should be closed by certified plugs.
- 5.5.Make sure the electrical power is OFF before making installation and maintenance.
- 5.6.Do not open when energized.
- 5.7.After de-energizing, delay 10 minutes before opening.
- 5.8.Typically full discharging and charging once every half a year.

6. Installation method

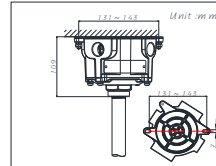
6.1.This series products have 3 Installation methods : Conduit Installation, Stanchion Mount, Ceiling Mount.



Conduit Installation



Stanchion Mount

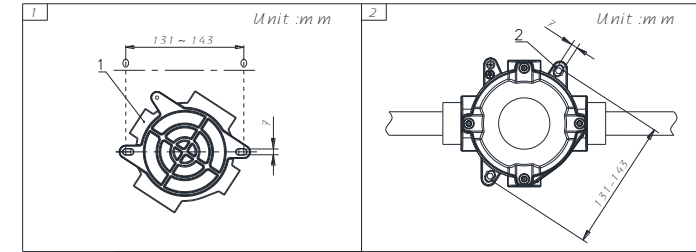


Ceiling Mount

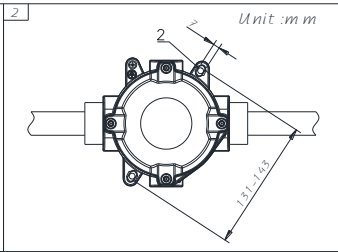
6.2.Select the right installation method as needed.Make related M12 expansion anchor bolts according to different hole location. Installation steps:

6.2.1.Conduit Installation

- a. Fix the installation position according to the mounting holes. (Picture 6.2.1)
- b. Using M6X40 crewed onto the installation surface. (Picture 6.2.1)



1. Junction boxes

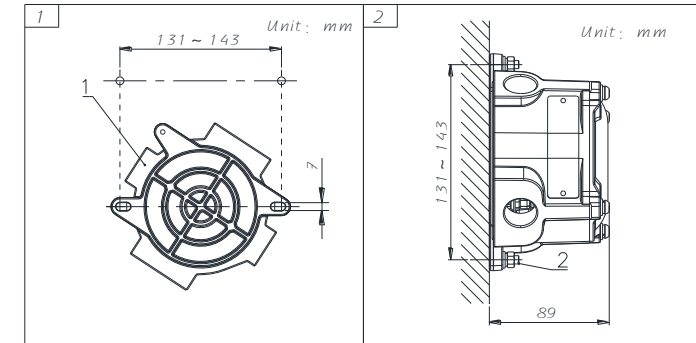


2. (M6×40) Expansion bolts(M6X40)

(Picture 6.2.1)

6.2.2. Stanchion Mount:

- a. Fix the installation position according to the mounting holes. (Picture 6.2.2)
- b. Using M6X40 crewed onto the wall. (Picture 6.2.2)



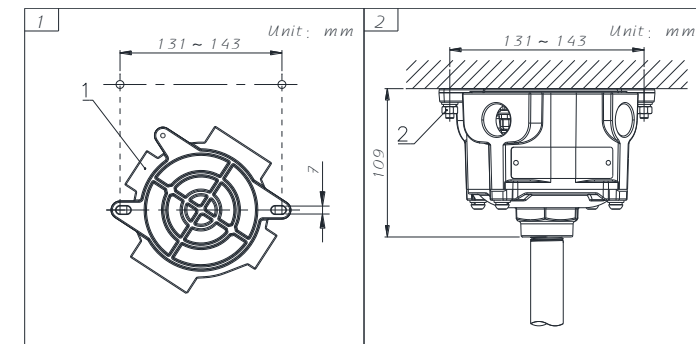
1. Junction boxes

2. (M6×40) Expansion bolts(M6X40)

(Picture 6.2.2)

6.2.3.Ceiling Mount:

- a. Fix the installation position according to the mounting holes. (Picture 6.2.3)
- b. Using M6X40 crewed onto the ceiling. (Picture 6.2.3)



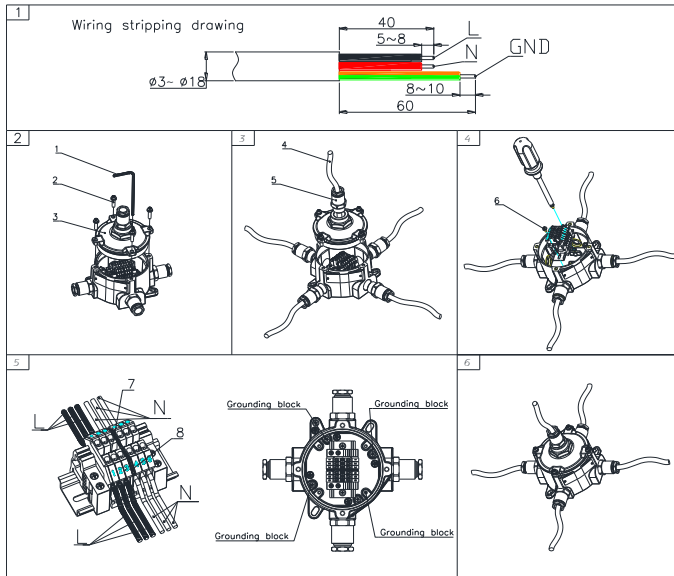
1. Junction boxes

2. (M6×40) Expansion bolts(M6X40)

(Picture 6.2.3)

6.3.Choose suitable 3 core cable(cable size $\Phi 3 \sim \Phi 18$) Wiring steps as below:

- 6.3.1.Finish wire stripping with help of tools. (Picture 6.3.1)
- 6.3.2.Using hexagon wrench unscrew the head cover (Picture 6.3.1)
- 6.3.3.Lead the cable into junction box.
- 6.3.4.Using cross screw driver, unscrew the wire holder. (Picture 6.3.1)
- 6.3.5.Connecting the live and zero wire with terminal block, earth wire with grounding screw. Fixed the wire holder into the junction box. (Picture 6.3.1)
- 6.3.6. Locking the head cover. (Picture 6.3.1)



- 1.4mmHexagon wrench
- 2.Allen screw
- 3.Head cover
- 4.Three-core cable
- 5.Cable entry
- 6.Cross screw
- 7.Terminal block
- 8.Insulation slices.

(Picture 6.3.1)

6.4. Caution;

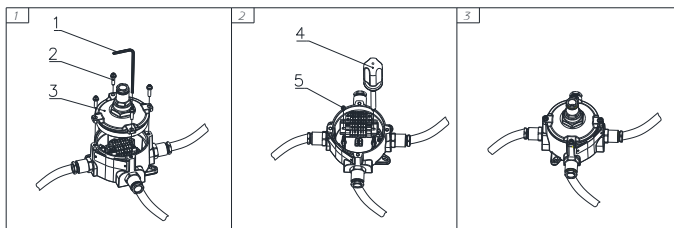
- 6.4.1. Using suitable cable.
- 6.4.2. Make sure live wire, zero wire and earth wire are connected with correct terminal block.
- 6.4.3. Make sure the junction box is earth grounding.

7. Operation

- 7.1. Do not use junction box which lack of parts.
- 7.2. Do not open when energized.

8. Maintenance

- 8.1. Wire holder replacement.
 - 8.1.1. Using 4mm hexagon wrench, unscrew head cover. (Picture 8.1.1)
 - 8.1.2. Using cross screwdriver unscrew the broken wire holder. Replace into new wire holder. (Picture 8.1.1)
 - 8.1.3. After connecting the wire to new wire holder, lock the head cover. (Picture 8.1.1)



- 1.4mmhexagon wrench
- 2.allen screw
- 3.head cover
- 4.cross screwdriver
- 5.cross screw

(Picture 8.1.1)

8.2. Optional Parts;

NO.	Name	Specification	Qty/luminaire	Remarks
1	Terminal block	Rail-type	Depends	
2	Terminal block	Pillar	1	
3	Terminal block	Barrier terminal	1	

8.3. Malfunction Diagnosis and Correction;

Malfunction Diagnosis	Analysis	Correction
Not working	Wrong wiring	Check the wiring
Short circuit	Wrong wiring	Check the wiring
Other problems		Contact service center