PLE Series LED Luminaire

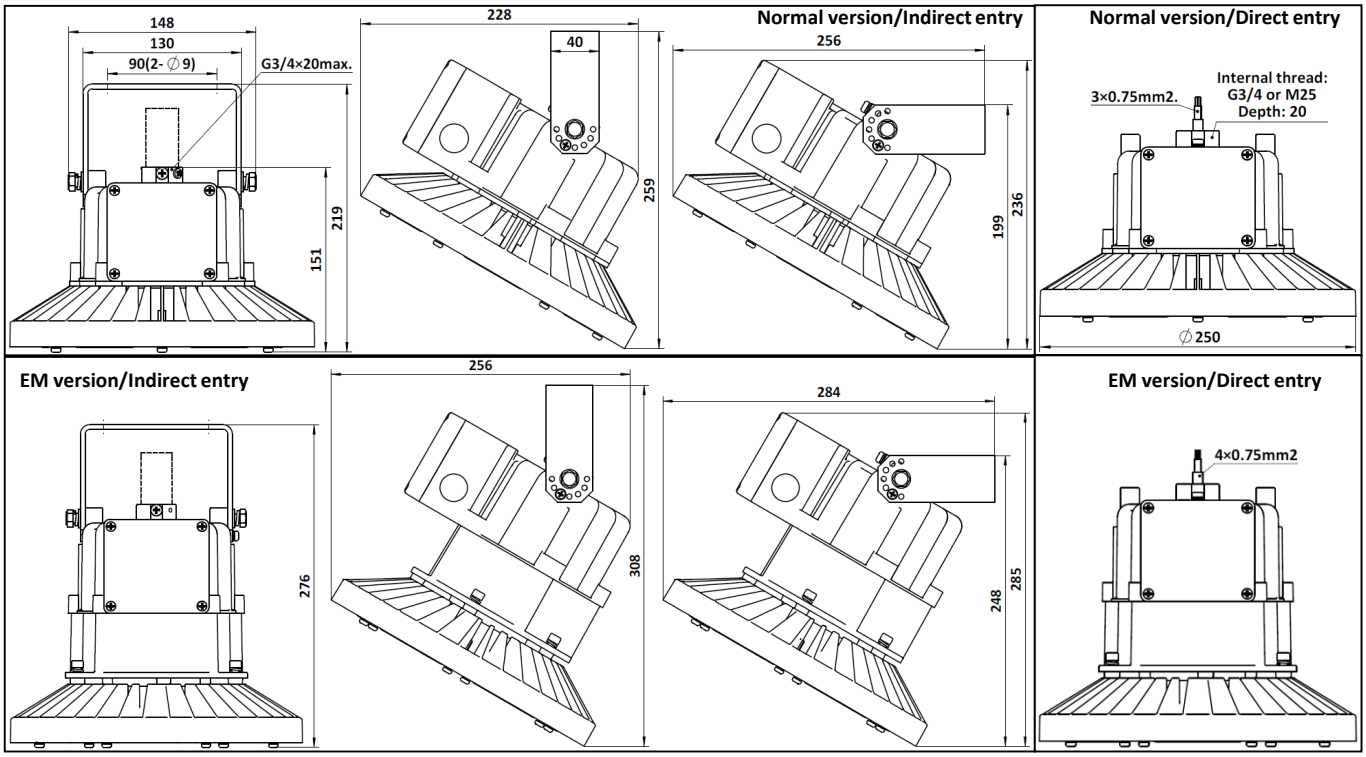
IM0284
Version 5
05/2017

CE

Operating Instructions

Powering Business Worldwide

1. Dimensions



2. Technical data

Enclosure specification	
Material of enclosure:	Aluminum alloy without Cu
Finish:	Painted polyester power coating
Material of globe:	Tempered glass
Mounting bracket:	Stainless steel or Steel painted
Fasteners:	All external fasteners stainless steel
Installation:	Mounting bracket with aiming quadrant
Weight:	4.5Kg(Normal version)/6Kg(EM version)
Ambient temperature:	-40ºC~+55ºC
Degree of protection:	IP 66 acc. to EN60529/IEC60529

Entry specification

Indirect entry: 2×M20×1.5 or 2×M25×1.5 cable entry. One entry is fitted with an stopping plug. **Direct entry**: M25 or G3/4 cable entry.

Electrical specification	
Wattage:	28W/46W/51W/63W/75W
Voltage:	AC: 100V-240V 50/60Hz, DC: 108~250V
Lamp:	LED Arrays
CRI:	70
Insulation class:	I acc. to IEC60598
Terminals capacity:	3 core or 6 core conductor/cable Solid: 0.5~6mm², Flexible: 0.25~4mm²

3. Safety Instructions

This product should be installed, inspected, and maintained by a qualified electrician only, in accordance with national regulation, including the relevant standard and, where applicable. The national safety rules and regulations for prevention of accidents and the following safety instructions in these operating instructions, will have to be observed!

- ***Do not operate in ambient temperatures above those indicated on the luminaire nameplate.***
- ***The luminaires shall be operated as intended and only in undamaged and perfect conditions! And Keep tightly closed when in operation!***
- ***The technical data indicated on the luminaire are to be observed!***
- ***Change of the design and modifications to the luminaire are not permitted!***
- ***Multiple, short-term switching must be observed!***
- ***Only genuine Cooper Crouse-Hinds spare parts may be used for replacement!***

4. Fields of Application

The Luminaire with a separate terminal box and IP66 sealing making it suitable for use for The luminaire is designed for use areas in indoors and outdoors in Marine and Wet locations, where moisture, dirt, corrosion, vibration and rough usage may be present. Application ambient temperature is -40ºC~+55ºC. The enclosure materials used, including any external metal parts, are High quality materials that ensure a corrosion resistance and resistance to chemical substances according to the requirements for use in a "normal" industrial atmosphere. In case of use in an extremely aggressive atmospheres, please refer to manufacture.

5. Installation

5.1 General

The respective national regulations as well as the general rules of engineering which apply to the installation and operation of apparatus will have to be observed!

The improper installation and operation may result in the invalidation of the guarantee.

5.2 Mounting luminaire

5.2.1 Mounting the bracket

Only use the accompanying mounting bracket! Securely fasten the mounting bracket to a suitable base with sufficient load-bearing capacity. The mounting should be secured with M8 bolts and relative lock washers, nuts should be used.

5.2.2 Adjustment of floodlight

The luminaire can be adjust and lock the luminaire to 30-degree intervals. The holes in the bracket gives increments of 30 degree. Loosen the set screw and fixing bolts to rotate the bracket to set the required tilt angle. Re-tighten the set screw and fixing screws. **See Fig.1 for details**.

The minimum distance between the luminaire and illuminated surface, directly in front of the luminaire, is 0.5 meter. The lamp must not be illuminated when at a distance of less than 0.5m from inflammable material.

5.3 Cable entries/Blanking plugs

Unused holes must be closed with certified plug. The cable glands and plugs should be certified and sealing washer **(if required by manual of cable gland/plug) must be used to obtain IP66.** The authoritative mounting guidelines for the cable glands used must be observed. Mounting the selected cable entries acc. type and dimensions of the main connection cable following their manufacturer instructions. The cable temperatures are given as the rise over the max. rated ambient (Tamb). This allows the user to adjust the cable specification for actual maximum site ambient.

Only heat resistant cable according to the data on the type label may be used! The max. conductor size is 4mm². The standard looping cable size is 4mm².

5.4 Opening/closing the luminaire

5.4.1 General

The opening of luminaire always shall be without voltage! All gasket seals must be clean and undamaged before closing the luminaire. Make sure the luminaires is well closed before operation!

5.4.2 Terminal chamber cover

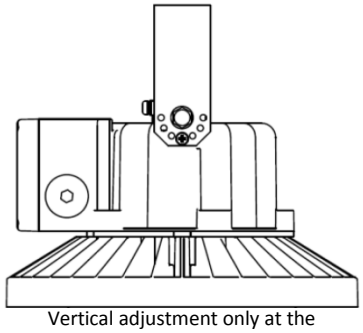
Unscrew the screws and remove the terminal chamber cover. And carry out the steps in reverse order to close the luminaire. Check all screws to ensure a secure fit during operation (Torque for screws: 1.5 Nm).

5.5 Electrical connection

The electrical connection of the lamp must only be established by qualified electricians.

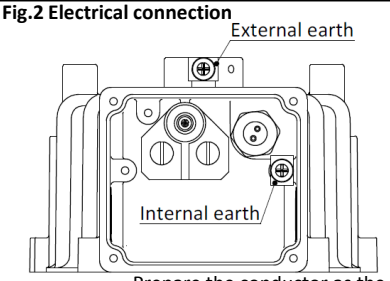
Make sure the supply voltage is the same as the luminaire voltage!

Fig.1 Permissible angle of adjustment



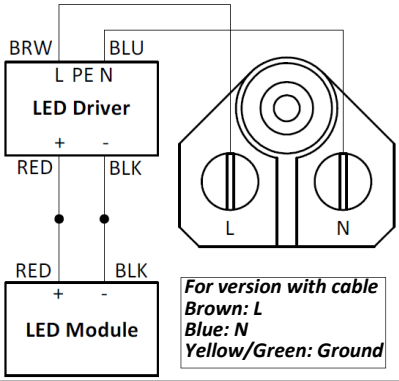
Vertical adjustment only at the desired angle(-90° to +60°)

Fig.2 Electrical connection



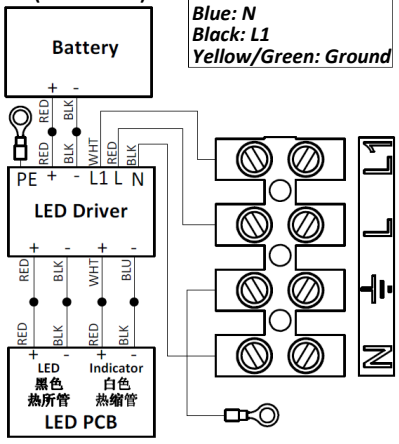
Prepare the conductor as the drawing before connect it to the earth screw.

Fig.3 Wiring diagram(Normal version)



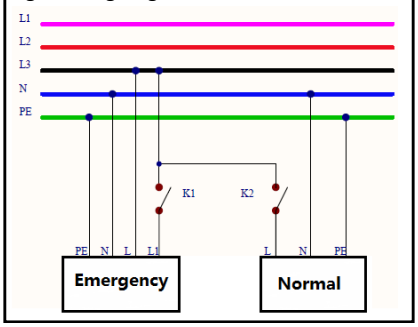
For version with cable
Brown: L
Blue: N
Yellow/Green: Ground

Fig.4 Wiring diagram (EM version)



For version with cable
Brown: L
Blue: N
Black: L1
Yellow/Green: Ground

Fig.5 Wiring diagram



Use proper supply wiring as specified on the nameplate of the luminaire and in this instructions! Excessive tightening may affect or damage the connection.

5.5.1 Wire connection

The conductors shall be connected with special care. The conductor itself shall not be damaged.

The connectible min. and max. conductor cross-sections shall be observed (see technical data). All terminals, used and unused, shall be fully tightened to prevent incorrect selection 2.5Nm for Pillar terminals. Main connection: See wiring diagram.

Note: Set one switch at L1 outside of the lighting, when switch off power, but still charge battery at daytime; The charging conductor L1 and the luminaire's mains connection must always be connected to the same external conductor of the mains supply! if the Emergency luminaire and Normal luminaire use one same supply source, refer to Fig 5.

See Fig.2, Fig.3 Fig.4 and Fig.5 for details.

6. Putting into operation

Prior to putting the apparatus into operation, the tests specified in the relevant national regulations shall be carried out. Insulation measurements may only be carried out between PE and the external conductor L1 (L2, L3) as well as between PE and N.

- Measurement voltage: Max. 1 KV AC/DC
- Measurement current: Max.10 mA
- The luminaire may only be operated when closed.

7. Type configuration

Std. Cat No.	System power	Voltage
PLE-3L*****	28W	AC: 100-240V 50/60Hz; DC: 108~250V
PLE-5L***** PLE-4L**-F** PLE-4L**-W** PLE-3L**-W-F**	35W	
PLE-6L***** PLE-5L**-F** PLE-5L**-W** PLE-4L**-W-F**	51W	
PLE-7L***** PLE-6L**-F**	63W	
PLE-8L***** PLE-7L**-F** PLE-6L**-W** PLE-5L**-W-F**	75W	
PLE-3L****-EM* PLE-4L****-EM* PLE-5L****-EM* Note: EM1—1.5H, 30% output; EM2—3H, 15% output;	46W	

8. Maintenance/Servicing

8.1 General

The relevant national regulations which apply to the maintenance/servicing of electrical apparatus shall be observed. The interval between maintenance depends upon the ambient conditions and the hours of operation.

8.2 Checks

The equipment must be de-energised before opening Visual inspection should be carried out at a minimum of 12 monthly intervals and more frequently if conditions are severe. The time between lamp changes could be very infrequent and this is too long a period without inspection.

8.3 Routine Examination

During maintenance, the parts affecting the level of protection must be checked in particular:

- Ensure the lamp is lit when energised and examine the enclosure and glass for any signs of cracks and damage.
- When de-energised and left to cool, there should be no significant sign of internal moisture. If there are signs of water ingress, the luminaire should be opened up, dried out, and any likely ingress points eliminated by re-gasketing, re-greasing or other replacement.
- Check the gasket of terminal chamber gasket and LED housing for any damage or permanent set and replace as required.
- Terminal, screw glands and blanking plugs for secure fitting.
- To maintain the light output, clean the protective glass periodically with a damp cloth or a mild cleaning fluid.
- If this product is used in the dust area, outside of enclosure must be cleaned on a regular basis to prevent accumulation of dust.
- The terminal chamber should be opened periodically and checked for moisture and dirt ingress. The cable connections should be checked for tightness. The gasket should be checked for cracks or lack of elasticity, and if necessary, replaced. Cover bolt torque: 1.5Nm.
- Check that mountings are secure and the adjusting bolts are tight.
- If it has been suspected that the luminaire has mechanical damage, a stringent workshop overhaul will be required. Where spares are needed, these must be replaced with factory specified parts.

No modifications should be made without the knowledge and approval of the manufacturer.

9. Repair/Overhaul/Modifications

9.1 General

The national regulations have to be observed! Repairs and overhaul may only be carried out with genuine Cooper Crouse-Hinds spare parts.

Before replacing or disassembling individual parts, observe the following:

Disconnect the power supply to the equipment before maintenance/repair.

See section 5.4 for notes on opening and closing the lamp.

Only use original spare parts. If the luminaire was previously in operation then wait to cool enough before opening. Modifications to the device or changes to its design are not permitted.

Assistance may also be obtained through Cooper Electronic Technologies (Shanghai) Co., Ltd. Sales Service department,
955 ShengLi Road, Pudong Shanghai 201201
Phone (86) 21-28993943

10. Disposal/Recycling

When the apparatus is disposed of, the respective national regulations on waste disposal will have to be observed.