

SBF6110 –YQL200/300

Operating Instruction

FCC ID: 2AA556110TO300

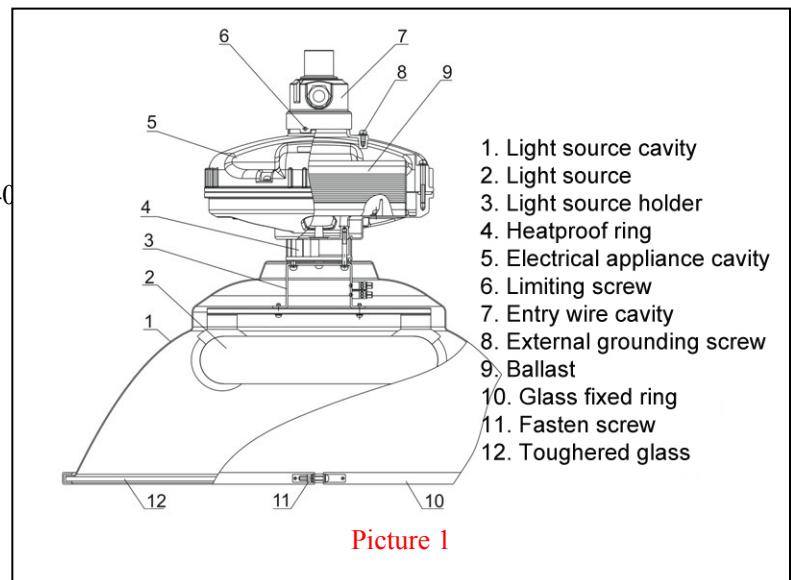
For Model: SBF6110-YQL200, SBF6110-YQL300

Summary and usage

SBF6110 series maintenance free, energy-saving, water proof, dust proof and corrosion proof factory lamp is designed and produced according to GB7000.1-2007 (Fixture's safety requirements and test), GB4208-93 (Electrical appliances shell protection test standard) etc regulations. This series luminaire's light source is induction lamp, and have the high luminous efficiency and long life-span etc characteristic. The luminaire is composed by Aluminum alloy ballast box and Aluminium plate spinning lampshade, the ballast box is sprayed by pure polyester powder, the surface of reflector in lampshade undergoes anodic oxidation treatment, the external surface adopt anodic oxidation treatment or polyester powder spraying. The luminaire had good protection and corrosion proof performance. It is applicable to plant, exhibition building, superstore etc, is special for moist and dusty indoor and outdoor places lighting

Technical Specification

1. Rated Voltage: 220V/50Hz
2. Applicable Light Source: Induction lamp
3. Rated Power: 120W to 300W
4. Applicable Ambient Temperature: -20°C to +40°C
5. Protection class: IP65
6. Corrosion proof class: WF2
7. Cable diameter: G3/4"(Pendant mounting)
8. Size: φ578×492mm (120W & 150W)
φ635×510mm (200W & 300W)
9. Weight: 7 to 8.4 kgs



Performance and structure

1. The luminaire is the waterproof, dustproof and corrosion proof lighting device for factory lighting, have good protection, the performance is reliable. The luminaire appearance and main structure, please see **Picture 1**
2. The luminaire adopts the integrated structure, closed structure, and pendant mounting type, have the independent light source cavity, electrical appliance cavity and connection cavity
3. The luminaire's electrical appliance cavity and connection cavity shell is die-casted by aluminum alloy, the surface is sprayed by pure polyester powder.

4. The light source cavity is spined by pure Aluminium sheet. The reflector is undergone anodic oxidation treatment, High reflectivity, good Oxidation resistance, long life-span. The light source cavity is adopted anodic oxidation treatment or polyester powder spraying, have good corrosion proof performance.

5. The luminarie is equipped with toughened glass transparent plate, high luminousness, good high intensity and good impact resistance

6. The connection cavity and electrical appliance cavity connection is fast dismantling structure, and prevent the trouble operation in aloft work, and is convenient for luminarie installation and maintenance.

7. Induction lamp is selected to be the fixture's light source, and is equipped with high stable frequency and high stable power output ballast, has the advantages, such as, voltage can be widely used, high light efficacy, no visual fatigue, long lifespan etc

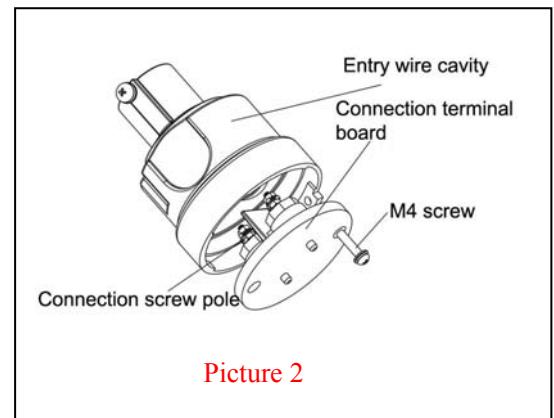
Installation and Maintance

1. Before installation, user should read the manual carefully, and keep the manual well.

2. Luminarie should be avoided to endure the impact of the external force, in order to avoid to affect the performance of explosion-proof and dust-proof

3. The luminarie is entry wire into the tube (applicable to Pendant mounting type) or entry the wire into connection cavity side (applicable to Hook mounting type).

Applicable cable's diameter is $\Phi 9 \sim \Phi 12.5$ mm, and is three core rubber sheath cable inlet wire, guide wire's section is $1 \sim 1.5$ mm 2 . If user mount it by Pendant type and enter into by guide wire, need have three holes metallic gasket and three holes seal ring for replacing use.



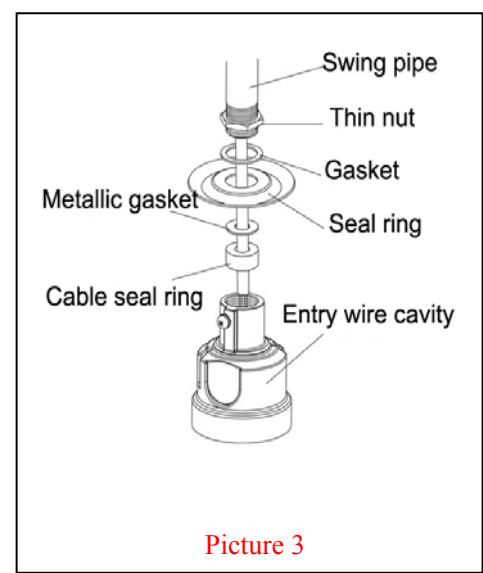
Picture 2

Luminarie's inlet wire guide wire should be multistrand core wires.

4. When the luminarie leave the factory, the connection cavity outlet is connected by power cable, user don't need dismount any parts, and just need mount the connection cavity parts first, then connect the luminarie by following 8. If user need connect the other wire, please operate by following procedures (example entry wire inside of tube)

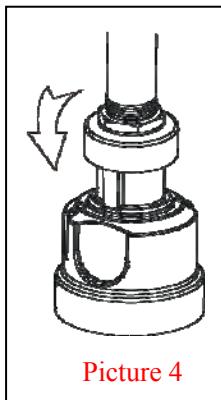
1) Screw off two M4 screws, and dismount the Terminal board (See [picture 2](#))

2) Strip the cable skin about 10cm, and the wire's stripping head is 10-12mm. Following [picture 3](#), enter into the three water proof sets (thin nut, gasket, seal ring) on the swing pipe successively, and then enter the cable into the metallic gasket, cable seal ring and connection cavity line entrance successively. (If choose the hang type mounting without the three water proof sets, user just need to enter the cable into the cable entry device)

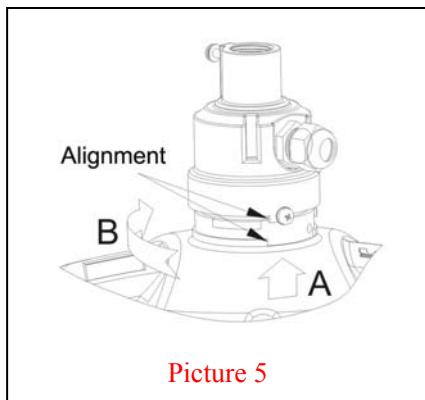


Picture 3

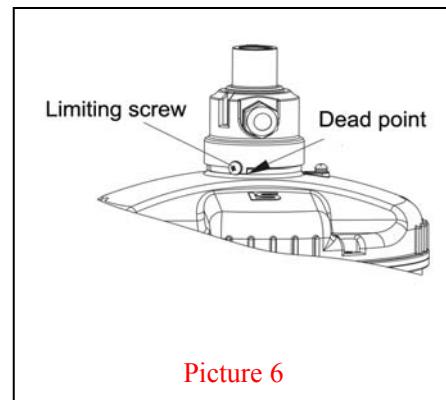
- 3) Screw the swing pipe into the entry wire cavity's interface thread (attention: the length of cylindrical G3/4" pipe tooth should be larger than 30mm), (if choose the hang type mounting, user should screw the gland nut on the entry Device), and compress the cable tightly (the cable not twitch is qualified). The cable (have the intact skin part) should be less than 5mm in cavity
- 4) Tighten the fasten screw in the entry wire cavity thread place. For the hang mounting type, the hook should be hanged on the solid and suitable components
- 5) See **picture 4**, scroll down the seal ring (see the arrow), then screw the thin nut and fasten—
- 6) Connect solidly the power line and zero line on the connection terminal board's two connection screw poles (please see the **picture 2**)



Picture 4



Picture 5



Picture 6

- 7) Fix the connection terminal board on the entry wire cavity. And check the Conductive pole connection's integrity. (The Conductive pole's elasticity is good, connection screw pole have no deactivation phenomenon, now the conductive pole and internal is disconnected)
- 8) Follow the picture 5, aim the electrical appliance cavity (luminaire) to the related place, then push the luminaire into the entry wire cavity following the Arrow A, and then following Arrow B, screw the luminaire to the dead point (please see **picture 6** place (now the Conductive pole is connecting with internal))
5. The luminaire is equipped with external grounding screws, please ground according to the regulation when mount
6. If need change the ballast and light source, user can dismount the luminaire first following above 8) method, then operate it on the operating platform, in order to operate expediently and ensure the safety
7. Before mount, user should check the all of connecting bolt were screw well, in case impact the luminaire's protection performance and safety
8. User should check the luminaire's electric whether it is in good condition regularly. In order to ensure the luminaire's efficiency, safety and life-span, user should clean the luminaire's surface
9. L1/L2/L4 (electric filter)and C1/C2/C7/C8 (EMC Capacitors) is a filter, can prevent to make the noise for Public AC power lines, at the same time, AC voltage will be changed to a stable DC voltage by booster composed by D1/D2/D3/D4 (BRIDGE), Q1(mosfet), L5 (active transformer) and components involved in it, then DC voltage is changed to High AC voltage which the frequency is 250kHz±30kHz by Q3/Q4 (mosfet)

and components involved in it, then is transformed to lamp, then the lamp is lighting. Rated power of the lamp is 200W and rated current of it is 0.92A. Rated power of the lamp is 300W and rated current of it is 1.47 A. The rated power and current of ballast are the same as the lamp.

Failure analysis and elimination

| Fault phenomenon | Fault reason | Handling method |
|---------------------------------|--|--|
| Induction lamp doesn't light | The line is no power | Power on, the ensure the luminarie is powered on |
| | The line is not connected well, and poor contact | Inspect the luminarie connection wire, if loosing, need fasten. Inlet wire guide wire need to use multistrand core wires if use single core wire |
| | Water enter into the cavity, and short circuit | Inspect the luminarie entry wire seal is reliable, or change the sealing elements |
| | ballast damaged | change the ballast |
| | light source glass shell leak | change the light source |
| | coupler break line and burnout | change the light source |
| Induction lamp strobe | the line is poor contact | Inspect the connection wire, if loosing, need fasten |
| | ballast damaged | change the ballast |

Attention

1. In order to ensure explosion proof lamp work and safety regularly, the serviceman should be trained professionally, then can install and maintance. Not-professional person should not open the fixture, and do not demount any fastening parts.
2. All procedure of install and maintance should be corresponded to Country's relevant laws and regulations, prohibit to operate when power on. Before change the light source, the light source should be cool
3. Should have the professional serviceman maintance and repair.

In order to ensure the safety, the serviceman should use the professional working platform, ladder, safety belt etc special equipments, inspect the condition of the explosion proof lamp regularly. If find parts broken and missed, should repair and supply on time, find the seal rubber ring and other plastic parts aged, should change them, and avoid to affect the explosion-proof and safety performance of the fixture

4. Should pay attention to manage the parts demounted, and avoid to miss the parts, and then the missing parts falling from the sky injure the people

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