

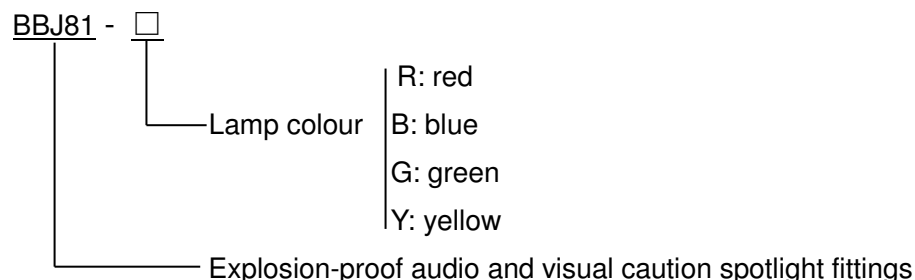
# BBJ81 SERIES EXPLOSION-PROOF AUDIO AND VISUAL CAUTION SPOTLIGHT FITTINGS

## 1. Application

BBJ81 series explosion-proof audio and visual caution spotlight fittings (hereinafter referred to as light fittings) can be used in Zone 1 and Zone 2 hazardous areas (explosive gas atmospheres except coal mine) where IIA, IIB and IIC explosive gas or vapour presents with T1 to T6 classification, and Zone 21 and Zone 22 hazardous areas with combustible dust atmosphere.

It's been widely used for accident signal alarm or signal indication in areas such as chemical plant, stockroom, fueling station, oil drilling platform, oil industry, etc. where presents with 50/60Hz 220~240V AC or 24V DC/AC circuit.

## 2. Catalogue Number Logic



## 3. Compliances

EN 60079-0, EN 60079-1, EN 60079-11, EN 60079-31

IEC 60079-0, IEC 60079-1, IEC 60079-11, IEC 60079-31

## 4. Working Conditions

a. Ambient temperature: -40℃ to +55℃.

b. Normal atmospheric pressure: 80kpa (0.8bar) to 110kpa (1.1bar);

normal oxygen content is 21%v/v.

c. Altitude: ≤ 2000m.

d. Relative humidity: ≤95%.


e. Zone 1, Zone 2; T1 to T6; and Zone 21, Zone 22.

f. Vibration and shake free.

g. Areas without gas or vapour which affects the performance of insulation.

h. Pollution grade: 3.

## 5. Main Technical Parameters

Ex-mark		Rated Voltage
 II 2 GD	Ex d ib IIC T6 Gb	220V~240V AC 50/60Hz
	Ex t IIIC T80℃ Db IP66	24V DC/AC
Inlet Thread	Sound Intensity	Flash Frequency
M25X 1.5	100~120dB (R=1m)	150times/min

Note: M thread is provided. Other thread types on request.

## 6. Main structures

6.1 Die-casting copper-free aluminium enclosure, high-pressure electrostatic powder coated.

6.2 High-strength and borosilicate glass tube, light transmission ≥88%.

6.3 The light fittings are supplied with plugs at the cable entries. Cable glands are on request. DQM-II or DQM-III is recommended.

## 7. Installation

7.1 The light fittings must be installed by licensed professional.

7.2 Confirm whether the key parameters listed on the nameplate are applicable in the field environment before installation.

7.3 Remove the seal plug at the inlet entry, pass cables through the

Ex-cable gland into the light fitting and connect to the terminal. Check if power connection is correct, and screw down lock bolts.

7.4 In Zone 1, only compound barrier cable gland can be used, while in Zone 2, both compound barrier cable gland and rubber seal cable gland are acceptable.

7.5 The light fittings should be earthing internally and externally.

7.6 Details of wiring as follows (Attached Drawing 2).

## 8. Inspection and Maintenance

8.1 Light fittings shall be maintained regularly in order to ensure product performance. Contact us for spare parts if required.

8.2 Light fitting power must be cut off before maintenance.

8.3 Protect flameproof thread properly during maintenance.

8.4 Make sure electrical clearance and creepage distance are according to the standard.

8.5 'Intrinsic safety' buzzer control panel has been debugged and encapsulated by epoxy resin. Disassembling is not permitted. Contact us for purchasing and replace it in time if damaged accidentally.

## 9. Outline Dimension (refer to Attached Drawing 1)

(Dimension unit is mm)-subject to alteration

## 10. Transportation

Weatherproof measures should be taken during transportation.

## 11. Storage

11.1 The light fittings should be stored in ventilated, non-dropping and non-liquid warehouse at the temperature of  $-40^{\circ}\text{C}$  to  $+55^{\circ}\text{C}$  and relative humidity  $\leq 95\%$ .

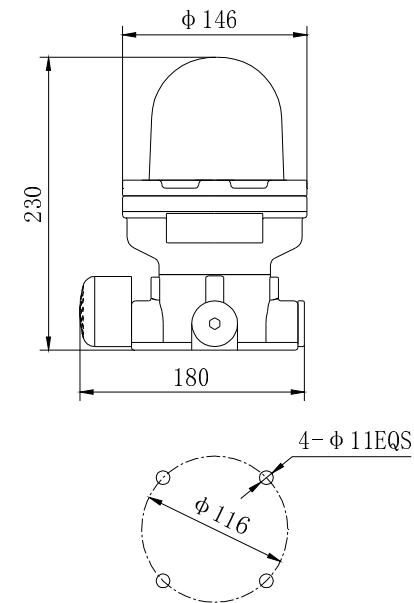
11.2 The surroundings should be kept from corrosive gases which may

damage metal and insulation.

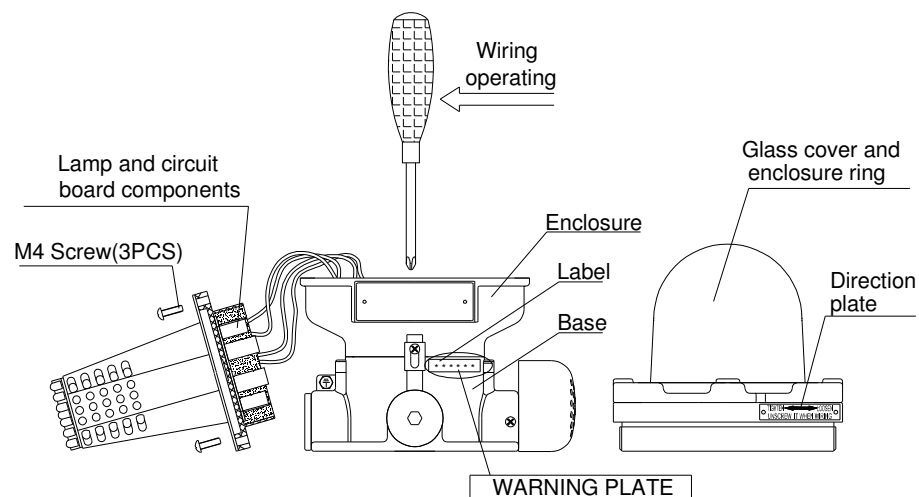
## 12. Ordering Information

Please specify the ordering code and quantity according to catalogue number logic when ordering. Mark special requirement if any.



### Attached Drawing 1



## Attached Drawing 2



## EC Declaration of Conformity

 <b>WAROM TECHNOLOGY INCORPORATED COMPANY</b> Add: 555 BAOQIAN ROAD, JIADING, SHANGHAI, CHINA	<b>Konformitätserklärung</b>  <i>Declaration of conformity</i>  <i>Déclaration de conformité</i>
<p><b>We declare under our sole responsibility that the following products fulfill the relevant directives:</b></p> <p><b>1) ATEX directive 94/9/EC</b>          - Explosion-proof audio and visual caution spotlight fittings: BBJ81          Ex d ib IIC T6 Gb          Ex t IIIC T80 Db IP66</p> <p><b>Standards applied:</b>          - EN 60079- 0 (2009)                      - EN 60079- 1 (2007)          - EN 60079- 11 (2007)                      - EN 60079- 31 (2009)          - EC type certificate: LCIE 11 ATEX 3111X          - Quality notification: PTB 03 ATEX Q082-3</p> <p><b>2) EMC directive 2004/108/EC</b>  <b>Standards applied:</b>          - EN 55015 (2009)</p>	
Place and date: SHANGHAI March 1, 2013	President: 
EC type certificate has been issued by LCIE (Laboratoire Central des Industries Electriques). 33. av du Général Leclerc BP8 92266 Fontenay-aux-Roses cedex France	

**Declaration:**

In order to ensure product performance, please do not change the product structure or replace the accessories without our permission, otherwise our company will not take any responsibility.

# USER'S GUIDE

## BBJ81 SERIES EXPLOSION-PROOF AUDIO AND VISUAL CAUTION SPOTLIGHT FITTINGS



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