



# CATALOGUE

1006



SHENZHEN TOPMOST LIGHTING TECHNOLOGY CO.,LTD

深圳讯茂时代科技有限公司

# JUNCTION BOX



**PT Shimano Sinergi Indonesia**  
Mechanical • Electrical • Instrument Supply & Services

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Create Excellent Light Environment



## Introduction

Shenzhen **Topmost Lighting** Technology Co.,Ltd is one of the leading company in designing & manufacturing of explosion-proof/weatherproof LED lightings, junction boxes, cable glands, and other accessories for hazardous and industrial areas.

**TOPMOST** - Leading the way in global explosion-proof lighting solutions.

As a trailblazer, we transcend boundaries, offering unmatched explosion-proof and industrial lighting solutions that resonate across industries worldwide. Our commitment is crystal clear: to illuminate the path to efficiency and security in even the most challenging environments.

### Advantages:

- **Certified Assurance:** ISO 9001, ATEX, IECEx, ISO 14001, ISO 45001.
- **Product Certification:** ATEX, IECEx, CNEx, CE, RoHS.
- **Exceptional Capacity:** over 1500 units luminaires per day.
- **Excellent Technical Support:** a R&D team with more than 20 years rich experience in explosion-proof field, which can provide the most professional technical support rapidly.
- Providing customized products and services.
- Providing complete lighting solutions.
- Continuous innovation, continuously creating unique value for clients.
- Approved by various international giant companies in oil&gas industry, mining industry and power sector, such as ADNOC, Pertamina, Petronas, POD, OXY, NPCC, CNPC, Sinopec, PowerChina, Anglo American, Repsol, Shell, SWCC, Marafiq, TotalEnergies, etc.

**T**echnological  
**O**utstanding  
**P**rofessional  
**M**astery  
**O**ptimal  
**S**afe  
**T**rustworthy



## Classification of Explosive Dangerous Gas

Class I: Mine Methane  
 Class II: Explosive mixture gases(include vapor and mist )  
 Class II: Explosive dust and fiber

## Gas Explosive Area Classification

According to the using environment of explosion-proof equipment, it's divided to Class I and Class II(used in the explosion-proof gas environment except mines) electrical equipment.

The Zone below is defined to Class II electrical equipment.

Zone 0	A place in which an explosive atmosphere consisting of a mixture with air of flammable substances in the form of gas, vapor or mist is present continuously or for long periods or frequently.
Zone 1	A place in which an explosive atmosphere consisting of a mixture with air of flammable substances in the form of gas, vapor or mist is likely to occur in normal operation occasionally. Zone 1 is the typical application area for explosion proof electrical equipment.
Zone 2	A place in which an explosive atmosphere consisting of a mixture with air of flammable substances in the form of gas, vapor or mist is not likely to occur in normal operation, but if it does occur, it will persist for a short period only. Generally "short period" means no longer than 2hrs.

## Explosion-proof Electrical Equipment Class, Group and Divison

Divided into three levels according to the environment:

Class I: Mine using  
 Class II: Factory using  
 Class II: Explosive dust and fiber using

Class II equipments are divided by Group and Division:

Group: Groups A, B, C  
 Division: Division T1-T6

It's the highest surface temperature, which related to explosion-proof type.

Class I and Class III are not divided to group or division, but Class III is divide to Group A and Group B.

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Equipment Temperature Group	Gas Ignite Temperature	Allowed Highest Surface Temperature
T1	>450°C	≤450°C
T2	>300°C	≤350°C
T3	>200°C	≤200°C
T4	>135°C	≤135°C
T5	>100°C	≤100°C
T6	>85°C	≤85°C

## Example of Class and Group for Explosive Gas

Class	Temperature Group of Explosive Gas					
	T1	T2	T3	T4	T5	T6
I	Methane					Ethyl nitrite
IIA	Ethane, propane, acetone, styrene, benzene, toluene, benzene, ammonia, formaldehyde, carbon, monoxide	Butane, methanol, ethanol, propylene, vinyl chloride, butyl acetate	Pentane, ethane, heptane, octane, gasoline, hydrogen sulphide	Ether, acetaldehyde		
IIB	Coke oven gas, cyclopropane	Ethylene oxide, propylene oxide, butadiene, ethylene	Dimethyl ether, hydrogen sulfide, acrolein	Tetrafluoroethylene, diethyl ether		
IIC	Water gas, hydrogen	Ethyne			Sifar dioxide	Nitric acid, ethyl ester

## Main Explosion-proof Technology

Ex-proof Type	Symbol	International Electrotechnical Commission ( IEC) European Standard (EN)	China Standard (GB)	Application Area
Flameproof	d	IEC 60079-1 EN 60079-1	GB 3836.2	Zone 1
Increased Safety	e	IEC 60079-7 EN 60079-7	GB 3836.3	Zone 1
Intrinsic Safety	I	IEC 60079-11 EN 60079-11	GB 3836.4	ia-Zone 0
Purged and Pressurized	p	IEC 60079-2 EN 60079-2	GB 3836.5	Zone 1
Oil Immersion	o	IEC 60079-6 EN 60079-6	GB 3836.6	px, py-Zone 1 pz-Zone 2
Powder Filling	q	IEC 60079-5 EN 60079-5	GB 3836.7	Zone 1
Type of Protection "n"	n	IEC 60079-15 EN 60079-15	GB 3836.8	Zone 2
Encapsulation	m	IEC 60079-18 EN 60079-18	GB 3836.9	mb-Zone 1
Combustible Dust Explosion-proof	†D DIP A DIP B	IEC 61241-0 IEC 61241-1 EN 6124-0 EN6124-1	GB 12476.1	GB 12476.1

# Explosion-proof Junction Box



- ◆ Explosion-proof junction box
- Explosion-proof distribution panel
- Explosion-proof switch box
- ◆ ATEX certification
- ◆ Housing material: stainless steel, aluminum alloy, GRP, etc
- ◆ Working temperature:  
Static:  $-50^{\circ}\text{C} \leq T_a \leq +55^{\circ}\text{C}$   
 $-50^{\circ}\text{C} \leq T_a \leq +75^{\circ}\text{C}$   
Dynamic:  $-25^{\circ}\text{C} \leq T_a \leq +80^{\circ}\text{C}$
- ◆ IP 66, IK 10, WF 2&marine grade
- ◆ "eb", "db", "tb", IIA IIB IIC
- ◆ Zones 1 & 21, Zones 2 & 22
- ◆ Class I, Division 1, Groups A B C D; Class II, Division 1, Groups E F G; Class III
- ◆ Products can be customized as per requirements



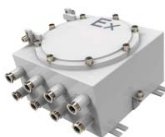
## Ex-BJB-C Group



Model No.	Explosion-proof Type	Cable Entries		Cable Diameter (mm)	Material	External Dimension (mm)
		Thread Size	Numbers			
Ex-BJB-C110-A	Ex db IIC	M20,NPT1/2",G1/2" M25,NPT3/4",G3/4" M32,NPT1",G1"	1~7	Max. Φ27	Al Alloy	Φ126*68
Ex-BJB-C110-B	Ex db IIC	M20,NPT1/2",G1/2" M25,NPT3/4",G3/4"	1~5	Max. Φ20	Al Alloy	Φ96*58

II 2 G Ex db IIC T4/T5/T6 Gb  
II 2 D Ex tb IIIC T80/95/130°C Db IP66  
For Zones 1 & 21, Zones 2 & 22

## Ex-BJB-S Group



Model No.	Explosion-proof Type	Cable Entries		Cable Diameter (mm)	Material	External Dimension (mm)
		Thread Size	Numbers			
Ex-BJB-S****-dbIIC	Ex db IIC	M20,NPT1/2",G1/2" M25,NPT3/4",G3/4" M32,NPT1",G1" ... .. M63,NPT2",G2"	As per requirements		Al alloy SS304 SS316	200*200*130 230*230*130 300*300*150 300*400*150 400*400*200 450*450*200
Ex-BJB-S****-dbIIB	Ex db IIB	M20,NPT1/2",G1/2" M25,NPT3/4",G3/4" M32,NPT1",G1" ... .. M63,NPT2",G2" M75,NPT2-1/2" G2-1/2" M90,NPT3",G3" M90,NPT4",G4"	As per requirements		Al alloy SS304 SS316	200*200*130 230*230*130 200*300*150 300*300*150 300*400*150 400*400*200 400*500*250 500*600*250 Other dimensions can be customized (stainless steel only)
Ex-BJB-S****-ebIIC	Ex eb IIC	M20,NPT1/2",G1/2" M25,NPT3/4",G3/4" M32,NPT1",G1" ... .. M63,NPT2",G2" M75,NPT2-1/2" G2-1/2" M90,NPT3",G3" M90,NPT4",G4"	As per requirements		Al alloy SS304 SS316	120*120*90 200*200*100 230*230*110 200*300*150 300*300*150 300*400*150 400*400*150 400*500*150 Other dimensions can be customized (stainless steel only)
Ex-BJB-S****-ebIIC	Ex eb IIC	M20,NPT1/2",G1/2" M25,NPT3/4",G3/4" M32,NPT1",G1" ... .. M50,NPT1-1/2" G1-1/2"	As per requirements		GRP	130*130*86 225*150*120 300*220*120 360*360*170 420*300*190

II 2 G Ex db IIB T4/T5/T6 Gb  
II 2 G Ex db IIC T4/T5/T6 Gb  
II 2 D Ex tb IIIC T80/95/130°C Db IP66  
For Zones 1 & 21, Zones 2 & 22

Remark: 1. Rated voltage: 110 Vac ~6000Vac; 2. Rated Conductor: Max. 300mm<sup>2</sup>

## Ex-BJB-DP Group



Model No.	Explosion-proof Type	Cable Entries		Cable Diameter (mm)	Material	External Dimension (mm)
		Thread Size	Numbers			
Ex-BJB-DP****-dbIIB/IIC	Ex db IIB/IIC	M20,NPT1/2",G1/2" M25,NPT3/4",G3/4" M32,NPT1",G1" ... .. M63,NPT2",G2" M75,NPT2-1/2" G2-1/2" M90,NPT3",G3" M90,NPT4",G4"	As per requirements		Al alloy SS304 SS316	200*200*130 230*230*130 200*300*150 300*300*150 300*400*150 400*400*200 400*500*250 500*600*250 Other dimensions can be customized (stainless steel only)
		MCCBs&MCBs	Switches & Buttons	Ammeters & Voltmeters	Relay	Contactor switch
	Numbers, poles, rated currents as per requirements	As per requirements	As per requirements	As per requirements	As per requirements	

II 2 G Ex db IIB T4/T5/T6 Gb  
II 2 G Ex db IIC T4/T5/T6 Gb  
II 2 D Ex tb IIIC T80/95/130°C Db IP66  
For Zones 1 & 21, Zones 2 & 22

Worldwide Customers



ADNOC Vendor ID  
20013343

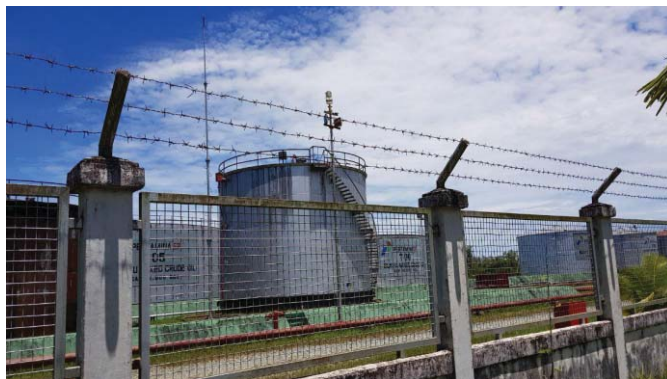


## Typical Projects

Project name: Oil tank  
Owner: Total  
Country: Morocco



Project name: No.5 Refinery  
Owner: Pertamina  
Country: Indonesia





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