



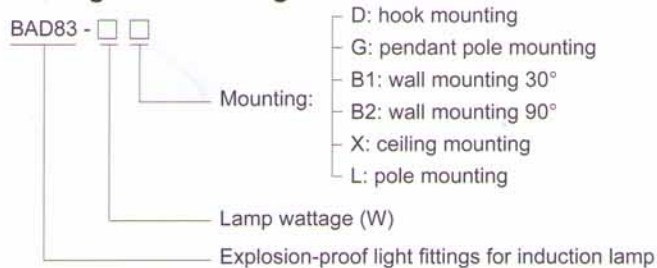
BAD83-□□ Series

Explosion-proof light fittings for induction lamp

- ◆ Explosion protection to
 - CENELEC
 - IEC
- ◆ Can be used
 - in Zone 1 and Zone 2
 - in Zone 21 and Zone 22
- ◆ Induction lamp inside the light fittings, long service life, energy-saving, high light efficiency, no flash, good performance in start and restart, instant ignite, etc.
- ◆ The enclosure can be divided into I Type, II Type, III Type
- ◆ Light source: induction lamp 30W, 50W, 85W, 135W, 165W

BAD83-□□ series Explosion-proof light fittings for induction lamp is usable for lighting in the petrochemical factory, where is filled with II A, II B, II C explosive gas mixture and flammable and explosive dust.

■ Catalogue number logic



■ Selection table

Type/Ordering code	Lamp wattage (W)	Enclosure
BAD83-30 □	30W	I Type
BAD83-50 □	50W	II Type
BAD83-85 □	85W	II Type
BAD83-135 □	135W	III Type
BAD83-165 □	165W	III Type

■ Ordering note

1. Specify all data at request of "catalogue number logic".
2. Select the accessories in "accessories table" or order at the guide of "ordering code".

Zones 1&2 ; 21&22

BAD83 Explosion-proof light fittings for induction lamp

Features



- ◆ The lamp has long service life and its average service life is 60000 to 80000 hours.(With 15 hours per day, it can be worked of 10 years).
- ◆ The air convection hole between light source cavity and electric apparatus cavity can give out the heat of light source to ensure the long life of lamps. (see accessories)
- ◆ The special terminals can make the conductors connect with terminals effectively and reliably.
- ◆ Suitable for the input of wide voltage. And the luminous flux of output is invariable. The terminals can be connected reliably.

Description of energy-saving

◆ Compare the performance of BAD83 and other lamps

Lamps	Advantage	Shortage
Mercury lamps	Low installation and purchase cost, proper service life	Low efficiency, low color display. The strong light will stab the eyes. Along with the times' running, the brightness will become dark. It has the disproduct (mercury).
High-pressure sodium lamps	High efficiency, wide application, proper service life	Orange yellow, low color display, can not quick start.
Metal halide lamps	Good color display, high lighting intensity, wide application	Short service life, high maintenance cost. And the high temperature will burn the ballast.
Induction lamps	High efficiency, high energy-saving, white light good color display, quick start, no flash and long service life	High initial cost.

◆ Compare the energy-saving

Product	General explosion-proof lamp(HIE 100W)	BAD83-85	General explosion-proof lamp(HME 250W)	BAD83-165
Item				
Rated power(W)	100	85	250	165
Working current(A)	1.1	0.38	2.0	0.67
Rated luminous flux(lm)	8000	8100	12700	13000
Energy consumption(kwh) (With 13 hours per day, 100 lamps can be worked of 1 year)	114829kwh	39668kwh	208780kwh	66941.3kwh
Efficiency of energy-saving	Can save more than 60% energy and the BAD83 lamps can be worked for 5 years without maintenance.			

Technical Data

BAD83 Explosion-proof light fittings for induction lamp

BAD83-I

Explosion protection

Gas explosion protection
Dust explosion protection

Ex II 2G Exd II CT6
Ex ID A21 IP65 T85°C

Certificates

For gas explosion protection
For dust explosion protection

PCEC (China)
PCEC (China)

Conformity to standards

IEC 60079-0:2004; IEC 60079-1:2003
IEC 61241-0:2004; IEC 61241-1:2004

Material

Housing
Guard
Transparent cover
Reflector

Aluminum alloy, powder-coated, yellow
Stainless steel
Toughened glass
Pure aluminum

Lamps

Lamp wattage

Induction lamp(QL)

Working frequency

30W Rated luminous flux:3500lm;
50W Rated luminous flux:5600lm;

Power factor

2.65MHz

Start duration

≥ 0.98

Average life

< 0.5S

Rated voltage

60000h

Earthing protection

AC 180V ~ 230V 50/60Hz

Degree of protection

M5 (earthing bolt inside and outside the light fittings)

Ambient temperature

IP65

Connection

-20°C ~ +55°C

Hub

Terminals 3 x 1.5 ~ 2.5mm² (L+N+PE)

Cable gland

M25 x 1.5

Available cable outer diameter

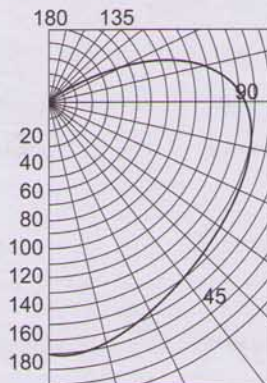
With a cable seal and plastic nut, the plastic nut used to protect the connection thread when ex-works, but it is not used when the user install the equipment.

Weight

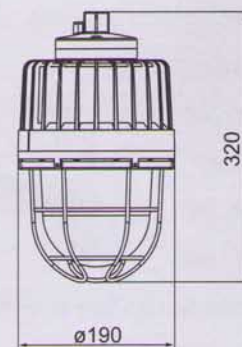
ø10 ~ ø14 (mm)

6 kg

Luminous intensity distribution (cd/1000lm)



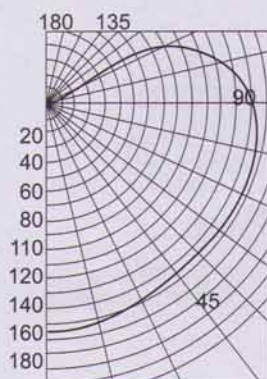
Dimension drawings (all dimensions in mm)-subject to alteration



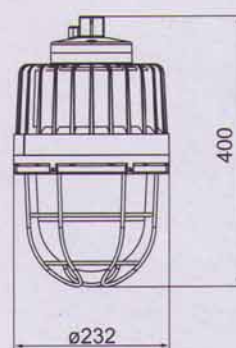
BAD83 Explosion-proof light fittings for induction lamp

Technical Data	
BAD83 Explosion-proof light fittings for induction lamp	BAD83-II
Explosion protection	
Gas explosion protection	Ex II 2G Exd II CT6
Dust explosion protection	Ex tD A21 IP65 T85°C
Certificates	
For gas explosion protection	PCEC (China)
For dust explosion protection	PCEC (China)
Conformity to standards	IEC 60079-0:2004 ; IEC 60079-1:2003 IEC 61241-0:2004 ; IEC 61241-1:2004
Material	
Housing	Aluminum alloy, powder-coated, yellow
Guard	Stainless steel
Transparent cover	Toughened glass
Reflector	Pure aluminum
Lamps	
Lamp wattage	85W Rated luminous flux:8100lm;
Working frequency	2.65MHz
Power factor	≥ 0.98
Start duration	< 0.5S
Color index (Ra)	≥ 80
Average life	60000h
Rated voltage	AC 180V~230V 50/60Hz
Earthing protection	M5 (earthing bolt inside and outside the light fittings)
Degree of protection	IP65
Ambient temperature	-20°C ~ +55°C
Connection	Terminals 3 x 1.5~2.5mm ² (L+N+PE)
Hub	M25 x 1.5
Cable gland	With a cable seal and plastic nut, the plastic nut used to protect the connection thread when ex-works, but it is not used when the user install the equipment.
Available cable outer diameter	ø10~ø14 (mm)
Weight	7.5 kg

Luminous intensity distribution (cd/1000lm)



Dimension drawings (all dimensions in mm)-subject to alteration



Technical Data

BAD83 Explosion-proof light fittings for induction lamp

BAD83-III

Explosion protection

Gas explosion protection

Ex II 2G Exd II CT4

Dust explosion protection

Ex tD A21 IP65 T135°C

Certificates

For gas explosion protection

PCEC (China)

For dust explosion protection

PCEC (China)

Conformity to standards

IEC 60079-0:2004 ; IEC 60079-1:2003

IEC 61241-0:2004 ; IEC 61241-1:2004

Material

Housing

Aluminum alloy, powder-coated, yellow

Guard

Stainless steel

Transparent cover

Toughened glass

Reflector

Pure aluminum

Lamps

Lamp wattage

135W Rated luminous flux:11000lm;

165W Rated luminous flux:13000lm;

Working frequency

2.65MHz

Power factor

≥ 0.98

Start duration

< 0.5S

Color index (Ra)

≥ 80

Average life

60000h

Rated voltage

AC 180V~230V 50/60Hz

Earthing protection

M5 (earthing bolt inside and outside the light fittings)

Degree of protection

IP65

Ambient temperature

-20°C ~ +55°C

Connection

Terminals 3 x 1.5~2.5mm² (L+N+PE)

Hub

M25 x 1.5

Cable gland

With a cable seal and plastic nut, the plastic nut used to protect the connection thread when ex-works, but it is not used when the user install the equipment.

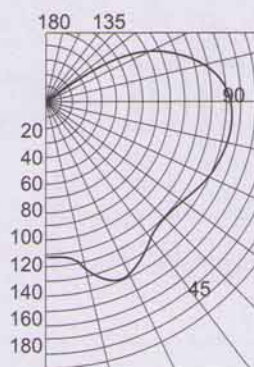
Available cable outer diameter

ø10~ø14 (mm)

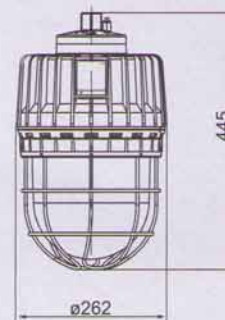
Weight

13.5 kg

Luminous intensity distribution (cd/1000lm)



Dimension drawings (all dimensions in mm)-subject to alteration

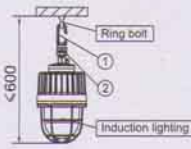


Energy-saving Lighting BAD83 Explosion-proof light fittings for induction lamp

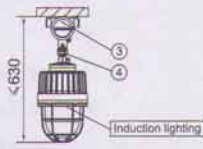
Mounting versions

As a reference to the installation on the site

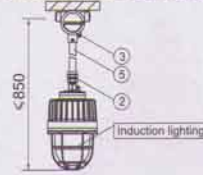
D: hook mounting



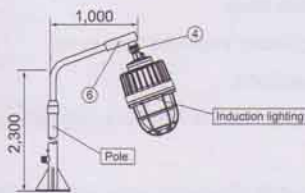
X: ceiling mounting



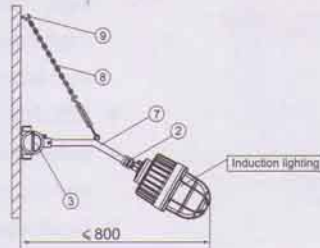
G: pendant pole mounting



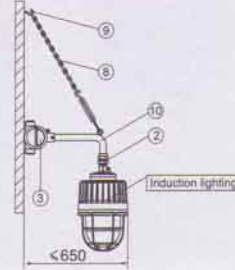
L: pole mounting



B1: wall mounting 30°






B2: wall mounting 90°



Installation accessories and spare parts table

Supplied according to the mounting version

Mounting version	Accessories supplied with the light fittings			Ordering code	Weight
	Name	Qty	Remark		
D: hook mounting	①.Hook, stainless steel	1		61020	0.200 kg
	②.BGJ-03 explosion-proof connector (female M25 x 1.5, male G3/4")	1	Carbonate steel	81D02	0.301 kg
X: ceiling mounting	③.BHD explosion-proof pendant light Junction box(II C)	1	See page 3/16	BHD-F/G	0.964/2.166 kg
	④.BGJ-03 explosion-proof connector	1	M25 x 1.5 male/G3/4" male	81X01	0.285 kg
G: pendant pole mounting	②.BGJ-03 explosion-proof connector	1	The same as hook mounting	81D02	0.301 kg
	③.BHD explosion-proof pendant light Junction box(II C)	1	The same as ceiling mounting	BHD-F/G	0.964/2.166 kg
	⑤.Straight pipe (M25 x 1.5)	1	300mm	81G01	0.500 kg
L: pole mounting	④.BGJ-03 explosion-proof connector	1	The same as ceiling mounting	81X01	0.285 kg
	⑥.Casted iron	1		81L01	1.010 kg
B1: Wall mounting 30°	②.BGJ-03 explosion-proof connector		The same as hook mounting	81D02	0.301 kg
	③.BHD explosion-proof pendant light Junction box(II C)	1	The same as ceiling mounting	BHD-F/G	0.964/2.166 kg
	⑦.Bent pipe 30°(M25 x 1.5)	1	290mm	51021	0.474 kg
	⑧.Chain fittings	1	580mm	80B11	0.206 kg
	⑨.Hook expansion bolt	1		51017	0.060 kg
B2: wall mounting 90°	②.BGJ-03 Explosion-proof connector	1	The same as hook mounting	81D02	0.301 kg
	③.BHD explosion-proof pendant light Junction box(II C)	1	The same as ceiling mounting	BHD-F/G	0.964/2.166 kg
	⑧.chain fittings	1	The same as wall mounting 30°	80B11	0.206 kg
	⑨.hook expansion bolt	1	The same as wall mounting 30°	51017	0.060 kg
	⑩.bent pipe 90°(M25 x 1.5)	1	400mm	51022	0.648 kg

Note: 1. Accessories not in the table should be supplied by user.

2. The quantity in the table is for one set of light fittings.