

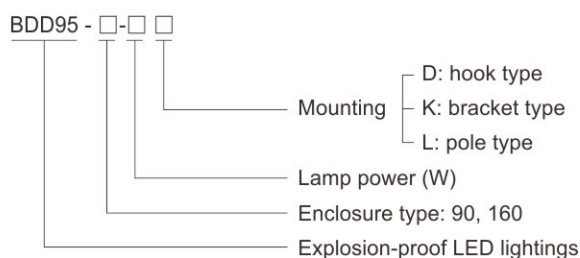
LED Light Fittings

BDD95 Series Explosion-proof LED Lightings



- ◆ Explosion protection to
 - CENELEC
 - IEC
 - NEC
- ◆ Can be used in
 - Zone 1 and Zone 2
 - Zone 21 and Zone 22
 - Class I, Zone 1 and Zone 2
 - Class I, Division 2, Groups A, B, C, D
- ◆ Two enclosure types: 90, 160
- ◆ Applicable lamp and power (max. 160W)
 - LED: 60W, 90W, 120W, 160W
- ◆ Isolated LED lamp compartment, CC-CV (constant current - constant voltage) power controller compartment and terminal compartment; Wind-convection heat dissipation structure.
- ◆ New COB technology, large power and white light LED array, power of single LED can reach 20W~40W, high lighting efficiency, long service life.
- ◆ Two types of light distribution: spotlight and floodlight, which can be selected on request.
- ◆ 160 type lightings adopt light fitting integrated two lamps, the power of whole machine is of 2x120W, 2x160W
- ◆ Low-maintenance due to long service life is up to 100,000 operating hours.

Catalogue number logic



Selection table

Type / Ordering code	Lamp power(W)	Weight (kg)	Type / Ordering code	Lamp power(W)	Weight (kg)	Type / Ordering code	Lamp power(W)	Weight (kg)
BDD95-90-60K	60	8.50	BDD95-90-60D	60	8.10	BDD95-90-60L	60	8.10
BDD95-90-90K	90	8.50	BDD95-90-90D	90	8.10	BDD95-90-90L	90	8.10
BDD95-160-120K	120	12.20	BDD95-160-120D	120	11.60	BDD95-160-120L	120	11.70
BDD95-160-160K	160	12.20	BDD95-160-160D	160	11.60	BDD95-160-160L	160	11.70

Note: 1. The product is supplied according to "Type/Ordering code" in the table with mounting accessories.
 2. Two types of light distribution: spotlight and floodlight. The light fittings are supplied without lens. Lighting distribution is of floodlight. If required, please specify when ordering.

Zones 1&2; 21&22

LED Light Fittings

BDD95 Series Explosion-proof LED Lightings

Technical data

Explosion-proof LED lightings BDD95-90-□□

Explosion protection

Global (IECEX)

Gas and dust

Europe (ATEX)

Gas and dust

IECEX CQM 15.0047X;

Ex db eb op is IIC T□¹⁾ Gb

Ex tb op is IIIC T□¹⁾ Db

EPT 15 ATEX 2315X

Ex II 2 G Ex db eb op is IIC T□¹⁾ Gb

Ex II 2 D Ex op is tb IIIC T□¹⁾ Db

¹⁾ See Selection Table

Certificates

Conformity to standards

IECEX; ATEX; CU-TR; UL

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-31

IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31

CSA C22.2 NO.137-M1981; UL 844; UL 8750; UL 1598

CSA C22.2 NO.250.0-08; CSA C22.2 NO.250.13-14

Material

Enclosure

Glass cover

Exposed fastener

LED driver

Copper-free Aluminium Alloy, powder coated surface, yellow (RAL1021)

Toughened glass, stands 4J impact

Stainless steel

Wide voltage input, CC-CV (constant current - constant voltage) output, power factor ≥ 0.95, with function of distributed current, constant current, surge-proof and anti-electromagnetic interference, and protection against overcurrent, open circuit, and short circuit

Lamp

Lamp specification

Lamp power (W)

Colour rendering index (Ra)

Colour temperature (CCT)

Integrated LED, Multiple LED

60W, 90W

≥ 80

5700K

Note: cool white is available in general. Warm white or nature white is optional, please specify when ordering.

Rated voltage

Earthing protection

Degree of protection

Ambient temperature

Terminal

Mounting

Cable entries

Cable gland

100~300V AC 50/60Hz

M5 (internal & external earth bolts)

IP66

-40°C~+55°C

3 x 1.5~4mm² (L+N+PE)

bracket type, hook type, pole type

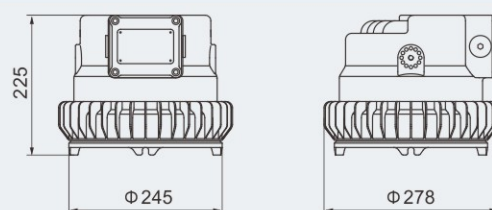
2 x M25 x 1.5 plugs

DQM-I (Ex e) is recommended. Please see P7/17~19.

Selection table

Rated power(W)	Temperature classification			
	-40°C ≤ Ta ≤ +40°C		-40°C ≤ Ta ≤ +55°C	
	Gas	Dust	Gas	Dust
60	67°C (T6)	62°C	82°C (T6)	77°C
90	87°C (T5)	82°C	102°C (T4)	97°C

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



BDD95-90



LED Light Fittings

BDD95 Series Explosion-proof LED Lightings

Technical data

Explosion-proof LED lightings BDD95-160-□□

Explosion protection

Global (IECEX)

Gas and dust

Europe (ATEX)

Gas and dust

IECEX CQM 15.0047X

Ex db eb op is IIC T□¹⁾ Gb

Ex tb op is IIIC T□¹⁾ Db

EPT 15 ATEX 2315X

Ex II 2 G Ex db eb op is IIC T□¹⁾ Gb

Ex II 2 D Ex op is tb IIIC T□¹⁾ Db

¹⁾ See Selection Table

Certificates

Conformity to standards

IECEX; ATEX; CU-TR; UL

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-31

IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31

CSA C22.2 NO.137-M1981; UL 844; UL 8750; UL 1598

CSA C22.2 NO.250.0-08; CSA C22.2 NO.250.13-14

Material

Enclosure

Glass cover

Exposed fastener

LED driver

Copper-free Aluminium Alloy, powder coated surface, yellow (RAL1021)

Toughened glass, stands 4J impact

Stainless steel

Wide voltage input, CC-CV (constant current - constant voltage) output, power factor ≥ 0.95, with function of distributed current, constant current, surge-proof and anti-electromagnetic interference, and protection against overcurrent, open circuit, and short circuit

Lamp

Lamp specification

Lamp power (W)

Colour rendering index (Ra)

Colour temperature (CCT)

Integrated LED, Multiple LED

120W, 160W

≥ 80

5700K

Note: cool white is available in general. Warm white or nature white is optional, please specify when ordering.

Rated voltage

Earthing protection

Degree of protection

Ambient temperature

Terminal

Mounting

Cable entries

Cable gland

100~300V AC 50/60Hz

M5 (internal & external earth bolts)

IP66

-40°C~+55°C

3 x 1.5~4mm² (L+N+PE)

bracket type, hook type, pole type

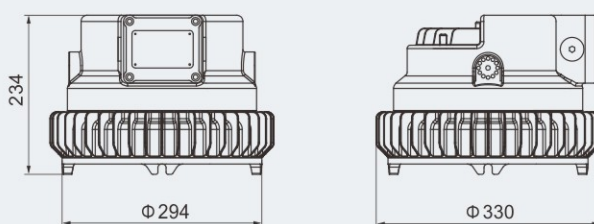
2 x M25 x 1.5 plugs

DQM-I (Ex e) is recommended. Please see P7/17~19.

Selection table

Rated power(W)	Temperature classification			
	-40°C ≤ Ta ≤ +40°C		-40°C ≤ Ta ≤ +55°C	
	Gas	Dust	Gas	Dust
120	72°C (T6)	67°C	87°C (T5)	82°C
160	92°C (T5)	87°C	107°C (T4)	102°C

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



BDD95-160



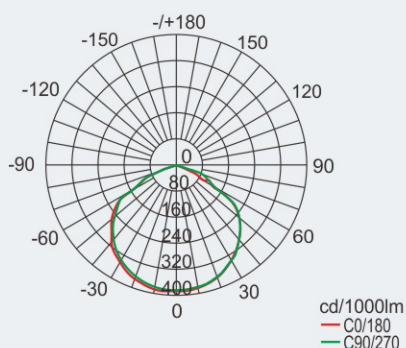
LED Light Fittings

BDD95 Series Explosion-proof LED Lightings

Photometric data Note: LED luminous flux is from the standard product of which colour temperature is 5700K (cool white).

BDD95-90-□□

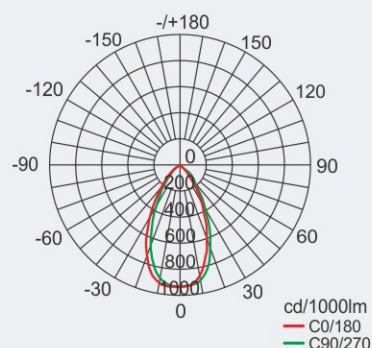
Lamp power (W)	Luminous flux	Wattage
60	7200lm	61W
90	10450lm	90W



BDD95-90-□□

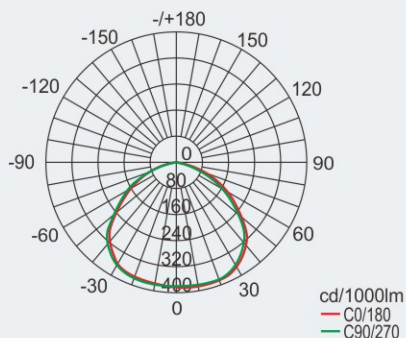
Lamp power (W)	Luminous flux	Wattage
60	7200lm	61W
90	10450lm	90W

Note: Lens of 45° and 30° can be provided on request.



BDD95-160-□□

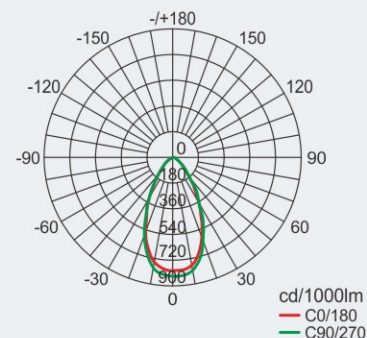
Lamp power (W)	Luminous flux	Wattage
120	13200lm	120W
160	19250lm	160W



BDD95-160-□□

Lamp power (W)	Luminous flux	Wattage
120	13200lm	120W
160	19250lm	160W

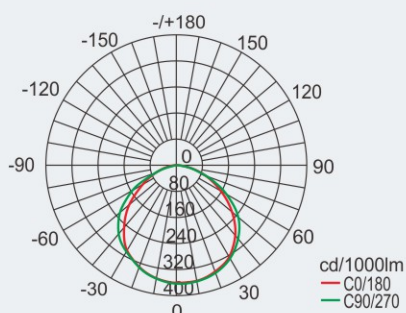
Note: Lens of 45° and 30° can be provided on request.



BDD95-160-□□

Note: Measuring parameters of light fitting integrating two lamps

Lamp power (W)	Luminous flux	Wattage
2 x 120	26400lm	240W
2 x 160	38500lm	320W

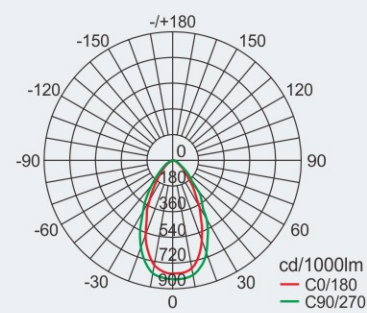


BDD95-160-□□

Note: Measuring parameters of light fitting integrating two lamps

Lamp power (W)	Luminous flux	Wattage
2 x 120	26400lm	240W
2 x 160	38500lm	320W

Note: Lens of 45° and 30° can be provided on request.



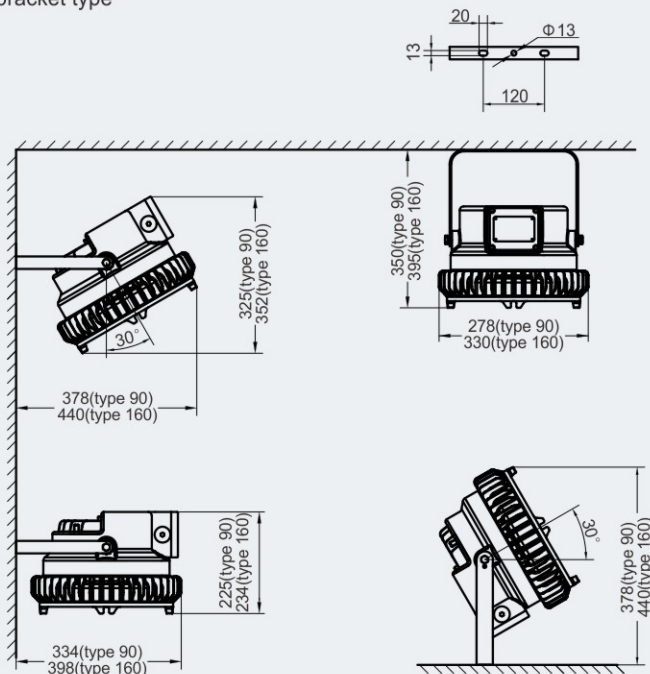
We can provide lighting design and data by professional lighting software DIALUX based upon simulated site situation on request.

LED Light Fittings

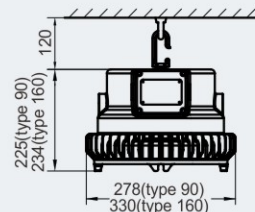
BDD95 Series Explosion-proof LED Lightings

Mounting type (all dimensions in mm) - subject to alteration

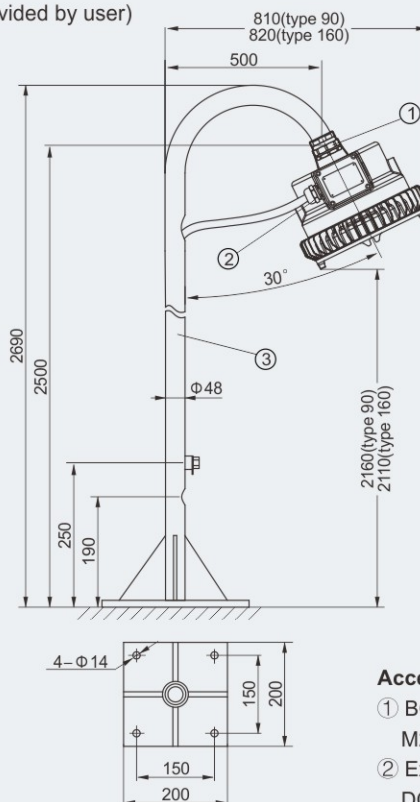
K: bracket type



D: hook type



L: pole type (the pole is provided by user)



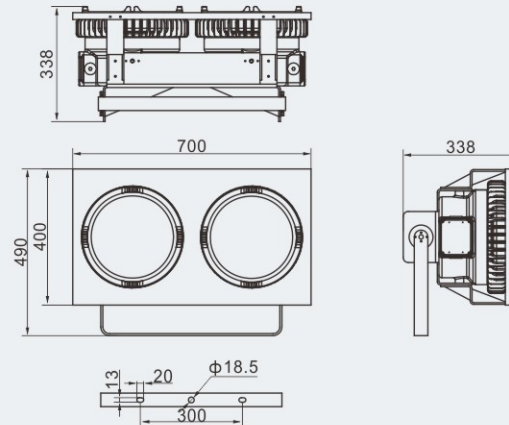
Accessories supplied with the light fittings:

- ① BGJ-III explosion-proof connector M25x 1.5(M) / M25x 1.5(M), Stainless steel.
- ② Explosion-proof cable glands are provided by user.
DQM-I (Ex e) is recommended, please see P7/17~19.
- ③ Pole shall be provided by user.

LED Light Fittings

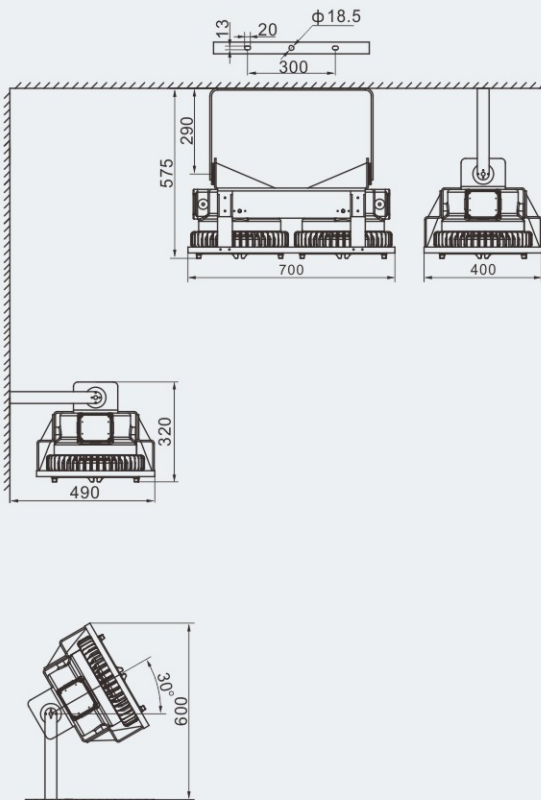
BDD95 Series Explosion-proof LED Lightings

The description of light fitting integrated two lamps (2x120W, 2X160W)



Mounting types

Bracket type



Street lamp type

