

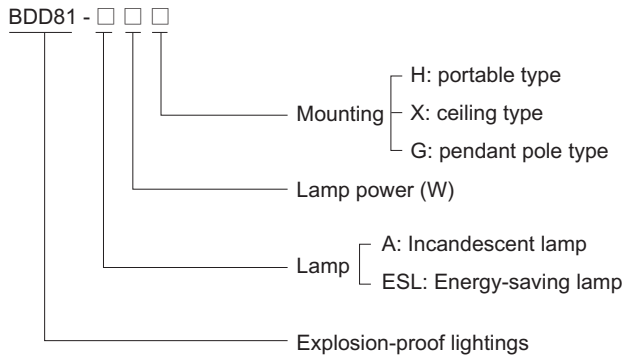


## Energy-saving Lightings

### BDD81 Series Explosion-proof Lightings

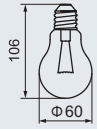
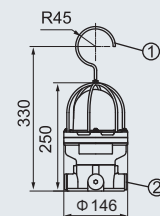
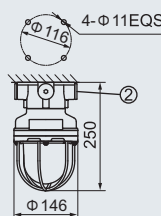
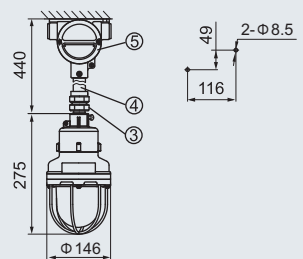
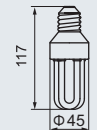
- ◆ Explosion protection to
  - CENELEC
  - IEC
  - NEC
- ◆ Can be used in
  - Zone 1 and Zone 2
  - Zone 21 and Zone 22
  - Class I, Zone 1 and Zone 2
  - Class I, Division 1, Groups A, B, C, D
- ◆ Available lamp and power:
  - Low power incandescent lamp (max.100W)
  - Compact energy-saving lamp (max.11W)
- ◆ Enclosure in copper-free aluminium, powder coated surface, yellow (RAL1021).
- ◆ The light fittings are supplied without lamp. PHILIPS lamps are recommended.

### Catalogue number logic



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

#### Installation reference

	H: portable type	X: ceiling type	G: pendant pole type
 106 Φ60 100W Incandescent lamp	 R45 330 250 Φ146 ① ②	 4-Φ11EQS Φ116 250 Φ146 ②	 440 275 Φ146 49 2-Φ8.5 116 ③ ④ ⑤
 117 Φ45 11W Energy-saving lamp	<b>Weight:</b> 2.70kg <b>Accessories supplied with the light fittings:</b> ①.Hook ②.4 x M25 x1.5 Plug; Ex d cable gland (optional): DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20-25.	<b>Weight:</b> 2.50kg <b>Accessories supplied with the light fittings:</b> ②.4 x M25 x1.5 Plug; Ex d cable gland (optional): DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20-25.	<b>Weight:</b> 4.50kg <b>Accessories supplied with the light fittings:</b> ③.BGJ-III explosion-proof connector M25 x 1.5(M)/M25 x 1.5(F), carbon steel. ④.Straight pipe(M25 x 1.5),300mm long. ⑤.BHD51-F (Ex d IIC, copper-free aluminium), see P3/6.

## Zones 1&2; 21&22

**Technical data**

**Explosion-proof lightings BDD81 - □ □ □**

**Explosion protection**

Gas explosion protection  
Dust explosion protection

⊕ II 2 G Ex d IIC T4 Gb  
⊕ II 2 D Ex t IIIC T130°C Db IP66

**Certificates**

LCIE 11 ATEX 3110X; IECEx QCM 12.0036X; FM (USA); GOST.R (Russia)

**Conformity to standards**

EN 60079-0: 2009, EN 60079-1: 2007, EN 60079-31: 2009  
IEC 60079-0: 2007, IEC 60079-1: 2007, IEC 60079-31: 2008

**Material**

Enclosure  
Transparent cover  
Wire guard (optional)  
Exposed fastener

Copper-free aluminium, powder coated surface, yellow (RAL1021)  
Toughened glass, stands 4J impact  
Powder coated carbon steel (white) or stainless steel  
Stainless steel

**Lamp**

Lamp holder  
Available lamp and lamp power (W)

E27  
Incandescent lamp: 25W, 40W, 60W, 100W  
Energy-saving lamp: 9W, 11W (for sealed atmosphere)

**Rated voltage**

220~240V AC 50/60Hz

**Earthing protection**

M5 (internal & external earth bolts)

**Degree of protection**

IP66

**Ambient temperature**

-40°C~+55°C

**Terminal**

3 x 1.5~4mm<sup>2</sup> (L+N+PE)

**Mounting**

Portable type, ceiling type, pendant pole type

**Cable entries**

4 x M25 x 1.5 for ceiling type and portable type, 1 x M25 x 1.5 for pendant pole type

**Cable gland (optional)**

DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20~25.

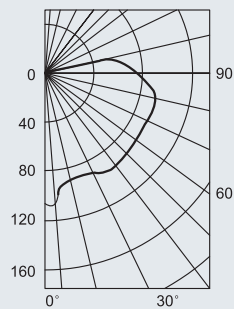
**Applicable cable outer diameter**

Φ 10~Φ 14 (mm)

**Photometric data**

**Photometric data of 100W incandescent lamp**

Rated luminous flux:1025lm;  
The data from PHILIPS lamp;  
Luminous intensity distribution cd/1000lm

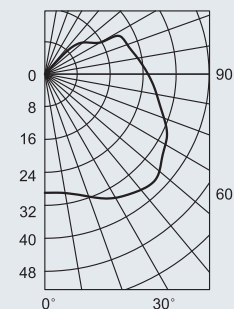


Angle	CP	Angle	CP	Angle	CP
0	104	60	88	120	3
5	85	65	85	125	2
10	108	70	86	130	2
15	91	75	88	135	2
20	88	80	84	140	2
25	90	85	77	145	1
30	94	90	68	150	1
35	89	95	66	155	1
40	92	100	67	160	0
45	90	105	51	165	0
50	89	110	15	170	0
55	82	115	5	175	0
				180	0

25W Incandescent lamp\*0.2  
40W Incandescent lamp\*0.27  
60W Incandescent lamp\*0.49

**Photometric data of 11W energy-saving lamp**

Rated luminous flux:600lm;  
The data from PHILIPS lamp;  
Luminous intensity distribution cd/1000lm



Angle	CP	Angle	CP	Angle	CP
0	20	60	19	120	10
5	19	65	19	125	9
10	18	70	17	130	6
15	20	75	16	135	3
20	20	80	15	140	2
25	21	85	15	145	0
30	22	90	14	150	0
35	22	95	14	155	0
40	23	100	13	160	0
45	23	105	13	165	0
50	21	110	12	170	0
55	20	115	12	175	0
				180	0

9W Energy-saving lamp\*0.7

