

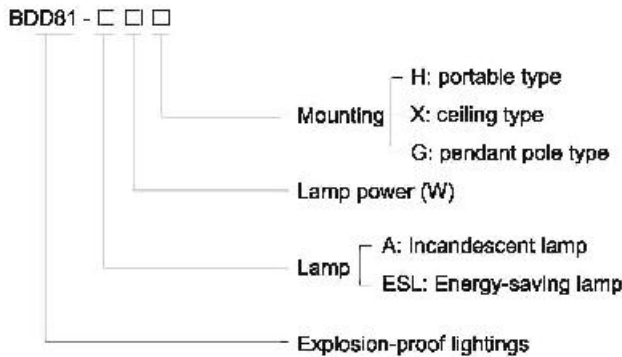


Energy-saving Lightings

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
<p>100W Incandescent lamp</p> <p>11W Energy-saving lamp</p>	<p>Weight: 2.70kg Accessories supplied with the light fittings: ①. Hook ②. 4 x M25 x 1.5 Plug; Ex d cable gland (optional): DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20-25.</p>	<p>Weight: 2.50kg Accessories supplied with the light fittings: ②. 4 x M25 x 1.5 Plug; Ex d cable gland (optional): DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20-25.</p>	<p>Weight: 4.50kg Accessories supplied with the light fittings: ③. BGG-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.</p>

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 III C T130°C Db IP66

Certificates

LCIE 11 ATEX 3110X; IECEx CQM 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 1.5~4mm² (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

Φ10~Φ14 (mm)

Photometric data

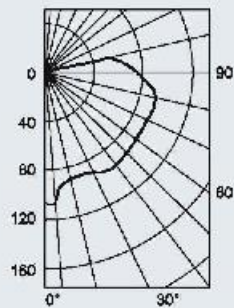
Photometric data of 100W

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	86	65	85	125	2
10	108	70	86	130	2
15	91	75	88	135	2
20	86	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

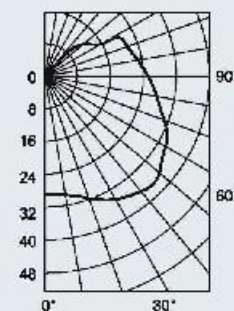
Photometric data of 11W

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	80	19	120	10
5	19	85	19	125	9
10	18	90	17	130	6
15	20	95	16	135	3
20	20	100	15	140	2
25	21	105	16	145	0
30	22	110	14	150	0
36	22	115	14	155	0
40	23	120	13	160	0
45	23	125	13	165	0
50	21	130	12	170	0
55	20	135	12	175	0
				180	0

9W Energy-saving lamp*0.7

