

## 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

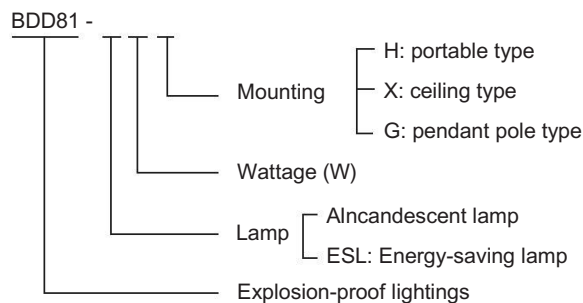
Available lamp and wattage

- Low power incandescent lamp (max. 100W)
- Compact energy-saving lamp (max. 11W)

Enclosure in copper-free aluminium, powder coated external surface, rape yellow (RAL1021).

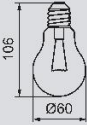
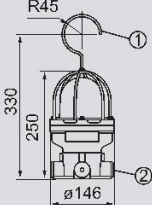
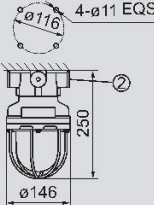
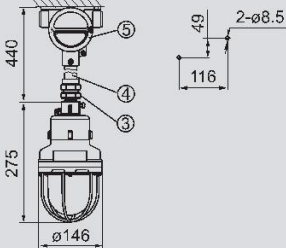
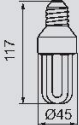
The light fittings are supplied without lamp. LED lamps are recommended.

#### 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>Energy-saving lamp</p>	<p><b>Weight:</b> 2.70kg <b>Accessories supplied with the light fittings:</b> .Hook</p>	<p><b>Weight:</b> 2.50kg <b>Accessories supplied with the light fittings:</b> .4 x M25 x1.5 Plug</p>	<p><b>Weight:</b> 4.50kg <b>Accessories supplied with the lightings:</b></p>

# Zones 1&2; 21&22

**Technical data**

**Explosion-proof lightings**

**BDD81-**

**Explosion protection**

⊕ II 2 GD Ex d IIC T4 Gb / Ex tD A21 T130 IP66

**Certificates**

LCIE 11 ATEX\_\_\_\_; FM (USA); GOST.R (Russia); IECEx

**Conformity to standards**

EN 60079-0:2009, EN 60079-1:2007, EN 61241-0:2006, EN 61241-1:2004  
IEC 60079-0:2007, IEC 60079-1:2007, IEC 61241-0:2004, IEC 61241-1:2004

**Material**

Enclosure

Copper-free aluminium, powder coated external surface, rape yellow (RAL1021)

Transparent cover

Toughened glass, stands 4J impact

Wire guard (optional)

Powder coated carbon steel (white) or stainless steel

Exposed fastener

Stainless steel

**Lamp**

Lamp holder

E27

Available lamp and lamp wattage (W)

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 bolt)

**Degree of protection**

IP66

**Ambient temperature**

-40+55

**Terminal**

3 x 1.54mm (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 P7/2025.

**Applicable cable outer diameter**

Ø10Ø14 (mm)

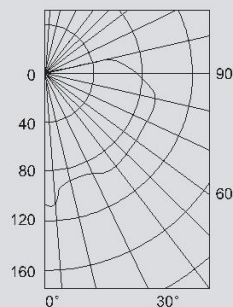
**Photometric data**

**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

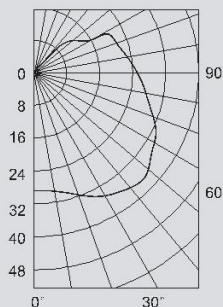
25W Incandescent lamp\*0.2  
40W Incandescent lamp\*0.27  
60W Incandescent lamp\*0.49

**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