

# Lighting: Signaling Products

## SBDB Series: Beacon and Strobe Lighting Units – Flameproof



Strobe Lighting



Beacon Lighting

### Compliance Data:

ATEX - IECEx:



Zone 1 & 2 – 21 & 22	ATEX	II 2 GD	IECEx	CE
Ex de IIC	T6 to T3	Ex td A21	T80°C to 195°C	IP66/67 – Ik08

Lamp Type:

Static Beacon	Static Beacon	Rotating Beacon	Strobe Beacon	
100 W Incandescent	18 W Compact Fluorescent	40 W Incandescent	5 Joules	

Operating Temperature:

-40°C to +55°C (Strobe Beacon)
-20°C to +50°C (Rotating Beacon)

# Lighting: Signaling Products

## SBDB Series: Beacon and Strobe Lighting Units – Flameproof

Zone 1 & 2 - 21 & 22

Ex II 2 GD

ATEX / IEC

IP66/67 - IK08

### Applications:

- For use in hazardous locations in a wide range of plants.
- In areas where audible signals cannot be heard.
- To warn of unsafe conditions and other communication needs.

### Features:

- Fixtures operate in any position.
- Mounting strap for surface mounting supplied.
- High temperature internal wiring.
- Threaded flame path.
- Stainless steel fastenings.
- Closed by screwing on bezel.
- Connection through an increased safety Exe compartment with terminal block
  - Two 2 x 6 mm<sup>2</sup> and two earth terminal 1 x 4 mm<sup>2</sup>.
- External earth terminal 1 x 4 mm<sup>2</sup>.
- Two side M20 threaded entries supplied with:
  - 1 x M20 plastic cable-gland for unarmored cable (sealing dia. 6.5 to 14.5 mm).
  - 1 x M20 blanking plug.

#### Static Beacon:

- E27 lamp holder.
- Permissible lamps not supplied:
  - 100 W incandescent max.
  - 18 W compact fluorescent.
- Globe available in four colors:
  - Red, amber, green and clear (to be ordered separately).

#### Rotating Beacon:

- E14 lamp holder.
- 40 W incandescent lamp supplied.
- Rotating speed: approximately 170 rotations per minute.
- Beaten mirror to reinforce bright effect.
- Globe available in four colors:
  - Red, amber, green and clear (to be ordered separately).

#### 5 Joules Strobe Beacon:

- Xenon lamp supplied.
- Instantaneous illuminance: 50,000 candles.
- Strobe 60 flashes per minute.
- Operating factor 100%.
- Life duration: 70% efficiency after 8 million flashes.
- Internal red colored lens supplied as standard.
- Other lenses available in five colors:
  - Amber, blue, green, yellow and clear (factory installed).

### Standard Material of Fixtures:

- Gray painted marine aluminum body and bezel.
- Colorless sealed shock resistant glass.
- Internal aluminum reflector for static beacon.
- Gray painted aluminum mounting strap.

### Standard Material of Accessories:

- Colored Polymethacrylate globe.
- Zinc plated steel protective guard.

### Options:

- Other lens colors for strobe beacon.

### Catalog Number Logic:

**SBDB**

Series

**X**

Type:

S = Static  
F = Flashing  
R = Rotating

**X**

Color:

C = Clear  
R = Red  
A = Amber  
G = Green  
B = Blue  
Y = Yellow

**XX**

Wattage/Joules:

40 = 40 W  
10 = 100 W  
05 = 5 Joules

**XXX**

Voltage:

02D = 24 Vdc  
02A = 24 Vac 50/60 Hz  
04D = 48 Vdc  
04A = 48 Vac 50/60 Hz  
11A = 110 Vac 50/60 Hz  
11D = 110 Vdc  
24A = 230/240 Vac 50/60 Hz

### Ordering Information:

#### Lighting Units:

Type	Supply		Rating (amps)	Weight (kg)	Volume (dm <sup>3</sup> )	Catalog Number	Old Catalog Number	Pack	
<b>Clear Static Beacon</b>									
100 W Maximum				7.5	30	SBDBSC	095117	1	
<b>Clear Rotating Beacon</b>									
40 W	48 Vac	+10%	50/60 Hz	1A	8.5	30	SBDBRC4004A	095122	1
40 W	48 Vdc	+10%	-	1A	8.5	30	SBDBRC4004D	095123	1
40 W	110 Vac	+10%	50/60 Hz	0.5A	8.5	30	SBDBRC4011A	095124	1
40 W	230/240 Vac	+10%	50/60 Hz	0.23A	8.5	30	SBDBRC4024A	095125	1

# Lighting: Signaling Products

## SBDB Series: Beacon and Strobe Lighting Units – Flameproof

Zone 1 & 2 - 21 & 22

II 2 GD





ATEX / IECEx

IP66/67 - IK08

### Ordering Information – Continued:

Type	Supply			Rating (amps)	Weight (kg)	Volume (dm <sup>3</sup> )	Catalog Number	Old Catalog Number	Pack
<b>Red Strobe Beacon</b>									
5 joules	24 Vac	20-30 V	50/60 Hz	220 mA	8.5	30	SBDBFR0502A	095116	1
5 joules	24 Vdc	18-35 V		230 mA	8.5	30	SBDBFR0502D	095120	1
5 joules	48 Vac	40-54 V	50/60 Hz	180 mA	8.5	30	SBDBFR0504A	095115	1
5 joules	48 Vdc	40-60 V		150 mA	8.5	30	SBDBFR0504D	095119	1
5 joules	110 Vac	90-135 V	50/60 Hz	110 mA	8.5	30	SBDBFR0511A	095114	1
5 joules	110 Vdc	88-132 V		90 mA	8.5	30	SBDBFR0511D	095118	1
5 joules	230/240 Vac	185-255 V	50/60 Hz	55 mA	8.5	30	SBDBFR0523A	095121	1

### Accessories:

Type	Catalog Number	Old Catalog Number	Pack
<b>Polymethacrylate Globe</b>			
 Red	SBDGR	095084	1
Green	SBDGG	095085	1
Amber	SBDGA	095089	1
Clear	SBDGC	095090	1
<b>Zinc Plated Steel Protective Guard</b>			
 Using without colored globe	LDPG1Z	094773	1
<b>Zinc Plated Steel Hinged Bracket</b>			
 Bracket for installation on flat surface	LDMHBZ	095079	1
<b>Zinc Plated Steel M10 Eyebolt</b>			
 Eyebolt for suspension	LDRBM10Z	095081	1

### Compliances:

Hazardous Area	Gas	Dust
<b>Certified Type</b>	LTd (model LT1d)	
<b>Zones</b>	1 – 2	21 – 22
<b>Conforming to ATEX 94/9/CE</b>	CE 0081 II 2 G	CE 0081 II 2 D
<b>Symbol of Protection ATEX</b>	Ex de IIC	Ex tD A21
<b>Symbol of Protection IEC</b>		
<b>T Rating</b>	See table 1	NA
<b>Surface Temperature</b>	NA	See table 2
<b>Ambient Temperature</b>	-40°C to +55°C (Strobe) -20°C to +50°C (Rotating Beacon)	
<b>CE Declaration of Conformity</b>	50246	
<b>ATEX Certificate</b>	LCIE 02 ATEX 6165	
<b>IECEx Certificate</b>	IECEx LCI Ex 04.0019	
<b>Other Certifications</b>	GOST	
<b>Index of Protection (solid &amp; liquid)</b>	IP 66/67	
<b>Impact Resistance (shock)</b>	IK08	

Table 1: Gas

Power and Source	Ambient Temperature					
	Lighting Downwards			Lighting Upwards		
	Ta = +40°C	Ta = +50°C	Ta = +55°C	Ta = +40°C	Ta = +50°C	Ta = +55°C
18 W Fluo Compact	T6	T6	T6	T6	T5	T5
100 W Incandescent	T4	T3	T3	T3	T3	T3
40 W Rotating	T5	T4	T4	T5	T4	T4
Strobe 5 joules	T6	T6	T6	T6	T6	T6

Table 2: Surface Temperature for Dust

Power and Source	POSITIONS	
	Lighting Downwards	Lighting Upwards
	Ta = +55°C	Ta = +55°C
18 W Fluo Compact	T80°C	T95°C
100 W Incandescent	T195°C	T195°C
40 W Rotating	T130°C	T130°C
Strobe 5 joules	T80°C	T80°C

### Standards:

<b>Ex standards</b>	EN / IEC 60079-0; 60079-1; 60079-7; 61241-0; 61241-1
<b>Product standards</b>	EN / IEC 60598-1
<b>EMC standards</b>	EN / IEC 55015; 61547
<b>Other standards</b>	EN / IEC 60529 (IP); 62262 (IK)

### Dimensions (mm):

