BARTEC

Probay

High bay LED Lighting fixture for zone 2/21

The Probay series lighting fixtures are specifically designed for use in potentially explosive areas. High quality electronic components guarantee high efficiency up to 179 lm/W and extremely long lifetime 100 000 h even at high temperatures.

Their IP66 and IK10 protection ratings guarantee reliable performance even in harsh environments. The lightweight and durable body, made of extremely durable aluminium (RAL7043). The cover is made of clear tempered safety glass, further enhances their durability. These fixtures provide versatile mounting options, allowing for flexible installation in various orientations. All in all, these lighting fixtures are a dependable and efficient choice for illuminating environments that may be prone to explosions.

- Extreme high led lifetime L70B50 Ta70 - 100 000 h even at high temperatures
- ATEX certification ZONE 2/21, 22
- Robust housing
- Made in Europe
- High efficiency up to 179 lm/W
- Luminous flux versions from 8 000 up to 43 000 lm
- Option of adjustable installation
- Variability of declared ambient temperatures

Reference standards

Directive 2014/34/EU	
ATEX Ex protection type	⟨Ex⟩ II 3G Ex nR IIC T6...T5 Gc ⟨Ex⟩ II 2D Ex tb op is IIIC T85 °C Db
Rules of compliance	EN/IEC 60079-0: 2018 including amendment; EN 60079-15: 2010 including amendment EN 60079-28: 2016; EN 60079-31: 2014;
IECEx Ex protection type	Ex nR IIC T6...T5 Gc Ex tb op is IIIC T85°C Db
Ingress protection	IP66
Impact Protection	IK10
Temperature range	-40 °C ÷ +70 °C

Electrical characteristics

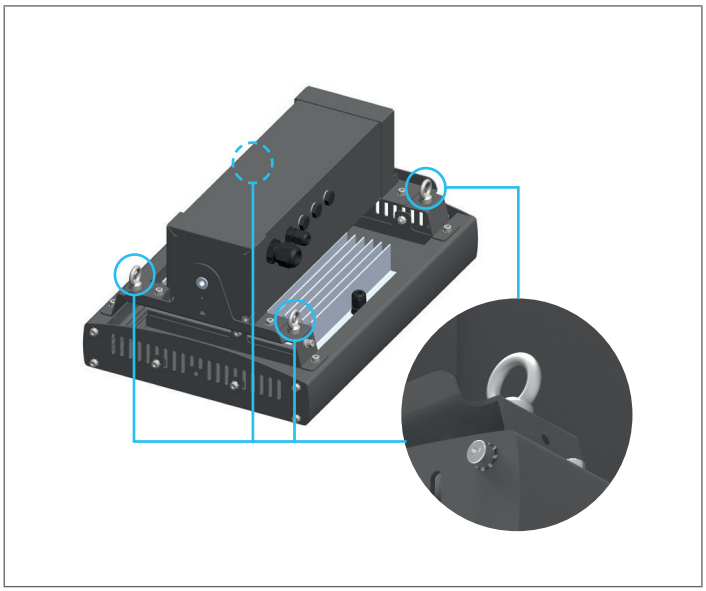
Power supply	EP – electronic - 220–240 V, 50/60 Hz
Lamp source	LED 4000K, CRI +80 Lifetime: > 50.000 hours L90B50 Ta@ 25 °C > 150.000 hours L80B50 Ta@ 25 °C > 170.000 hours L70B50Ta@ 70 °C
Terminals	Screwless three-pole terminal block, maximum diameter of wires 4 mm²

Mechanical characteristics

Body	Aluminium profile RAL 7043
Diffuser	Clear tempered safety glass
Closing clips	2 pcs stainless steel fastening bracket - AISI 304
Cable entry	Standard version equipped with 2,0 m connection cable and plastic cable gland, except for +70 °C version metal cable gland is used.

Standard equipment

4 x stainless steel suspending M5 eye bolts, electrical connection via pre-wired 2,0 m cable (3 x 1,5 mm²)



Installation

hazardous areas - Zone 2 (Gases) - Zone 21 (Dusts)

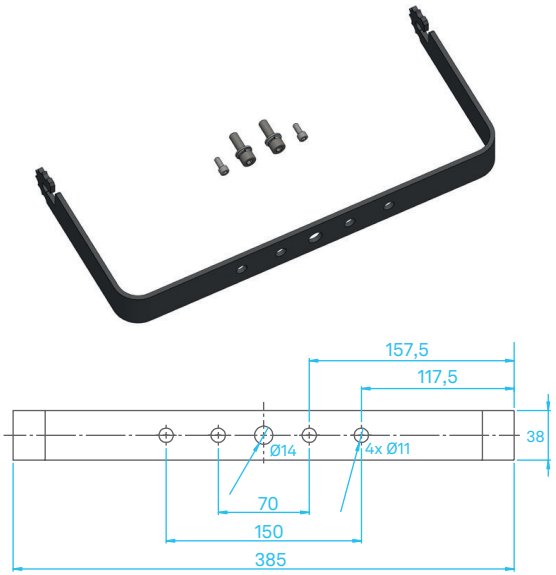
Classification

Group II - Category 3G 2D

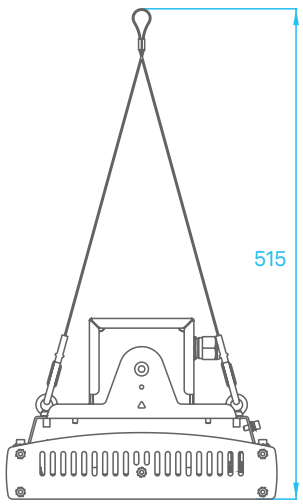
Available on request

- available without or with 30°, 60°,90°, and asymmetric 90° optics
- 3000K / 4000K /5000K / 5700K / 6500 K - color temperature
- dimmable electronic ballast (DALI)
- safe area version
- adjustable bracket (painted steel, colour grey RAL 7043)
- galvanized steel hanger wire 0,3 m

Adjustable bracket available on request



Adjustable bracket Probay available on request

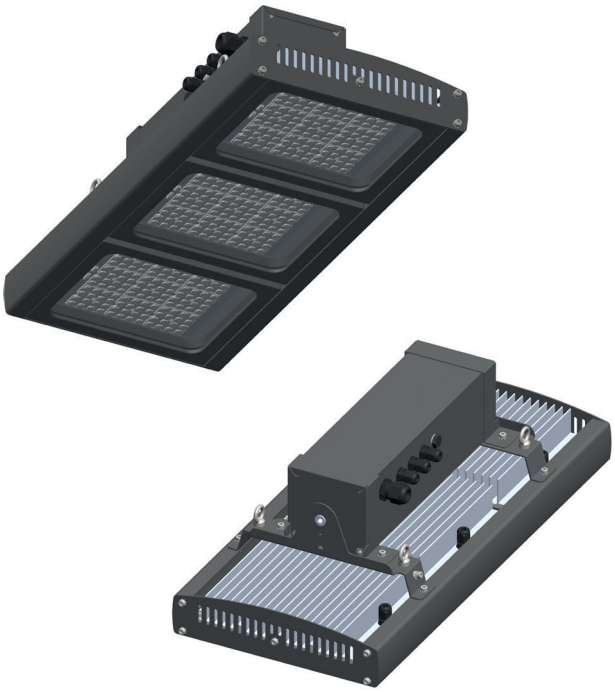


Number of LED modules

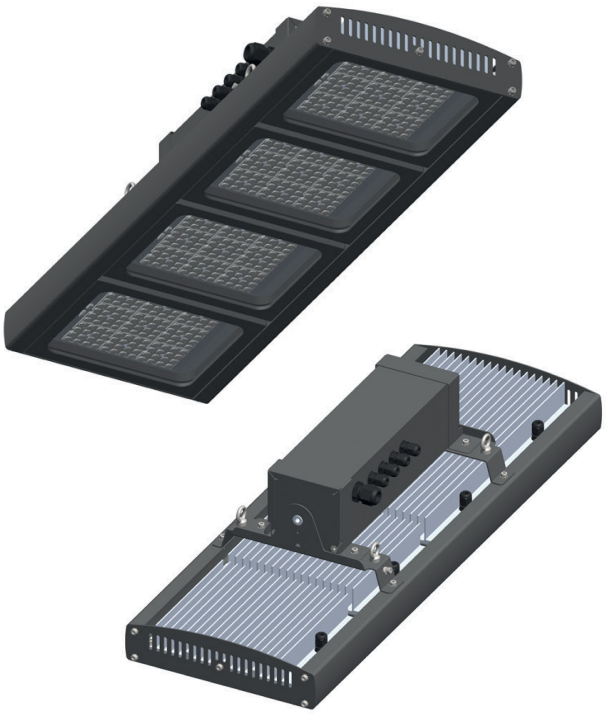
1 Module →

2 Modules →

3 Modules →



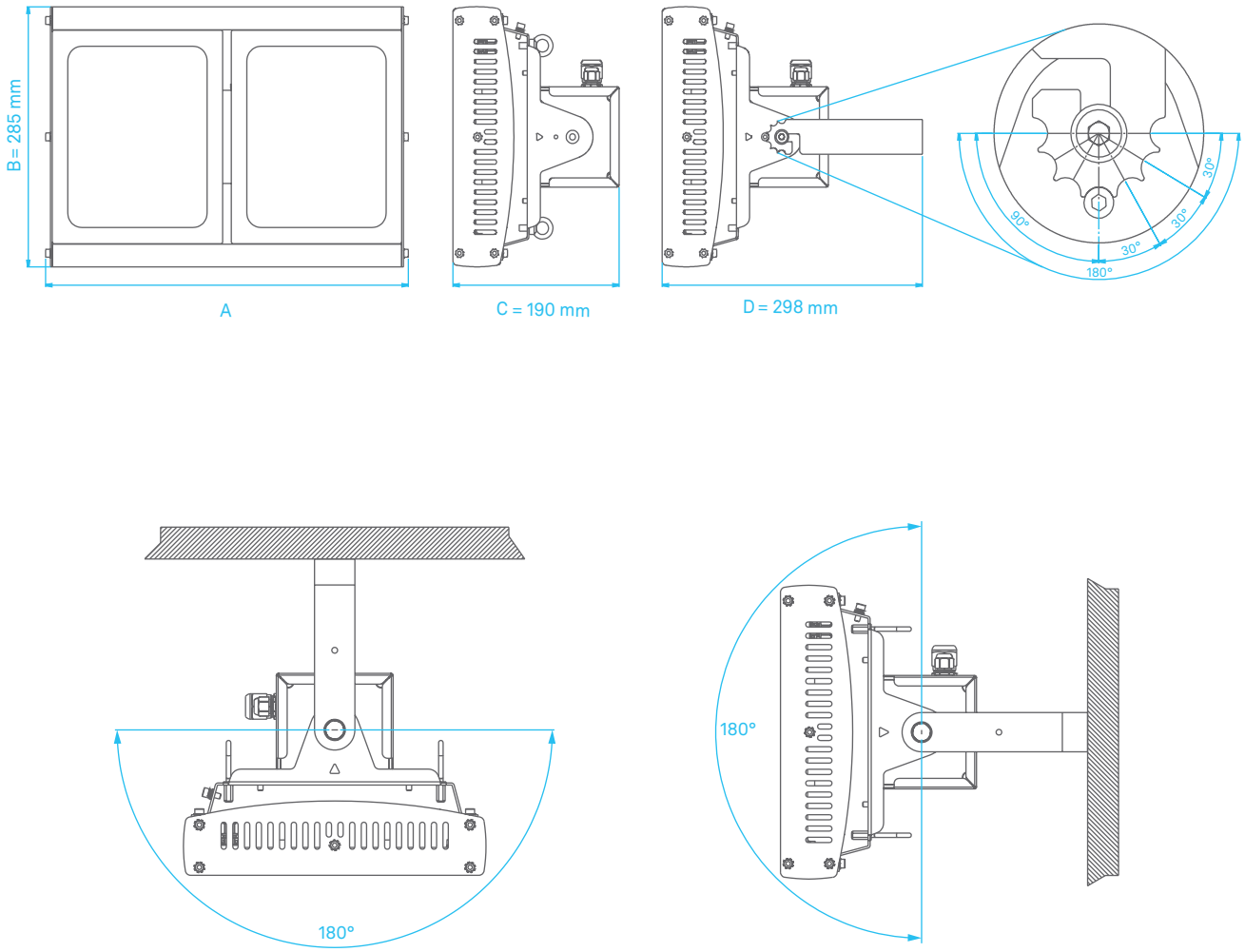
4 Modules →



Technical data

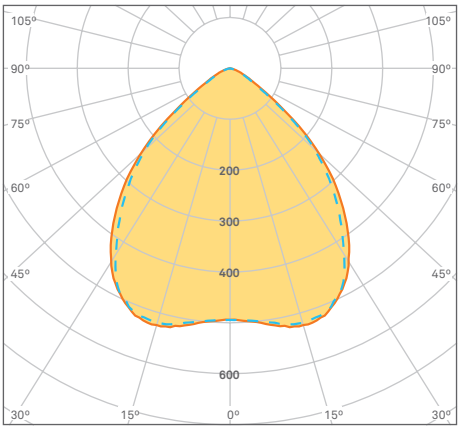
Order number	Lighting fixture luminous flux [lm]	Power input [W]	Number of LED modules	Rated power output [lm/W]	Radiant angle	Length of lighting fixture A [mm]	T-class	Temperature range	Weight [kg]
Standard models, temperature range -20 °C to 50 °C									
PRBZ2151229020NR71P65FE	10922	69	1	158	90°	415	T6	-20 °C / 50 °C	8,5
PRBZ215122WO20NR71P65FE	10566	69	1	153	without	415	T6	-20 °C / 50 °C	8,5
PRBZ2252449020NR71P65FE	21844	136	2	161	90°	415	T6	-20 °C / 50 °C	11
PRBZ225244WO20NR71P65FE	21132	136	2	155	without	415	T6	-20 °C / 50 °C	11
PRBZ2353669020NR71P65FE	32726	204	3	160	90°	620	T6	-20 °C / 50 °C	14
PRBZ235366WO20NR71P65FE	31659	204	3	155	without	620	T6	-20 °C / 50 °C	14
Standard models, temperature range -20 °C to 40 °C									
PRBZ2444889020NR71P65FE	43634	287	4	152	90°	825	T6	-20 °C / 40 °C	17
PRBZ244488WO20NR71P65FE	42212	287	4	147	without	825	T6	-20 °C / 40 °C	17
Low temperature models, range -40 °C to 50 °C									
PRBZ21L0999020NR71P65FE	8933	54	1	165	90°	415	T6	-40 °C / 50 °C	8,5
PRBZ21L099WO20NR71P65FE	8622	54	1	160	without	415	T6	-40 °C / 50 °C	8,5
PRBZ22L1989020NR71P65FE	17866	107	2	167	90°	415	T6	-40 °C / 50 °C	11
PRBZ22L198WO20NR71P65FE	17243	107	2	161	without	415	T6	-40 °C / 50 °C	11
PRBZ23L2629020NR71P65FE	8933	144	3	164	90°	620	T6	-40 °C / 50 °C	14
PRBZ23L262WO20NR71P65FE	8622	144	3	159	without	620	T6	-40 °C / 50 °C	14
PRBZ24L3029020NR71P65FE	27224	163	4	167	90°	825	T6	-40 °C / 50 °C	17
PRBZ24L302WO20NR71P65FE	26391	163	4	162	without	825	T6	-40 °C / 50 °C	17
Increased temperature models, +60 °C									
PRBZ2160999020NR71P65FE	8933	54	2	165	90°	415	T5	-20 °C / 60 °C	8,5
PRBZ216099WO20NR71P65FE	8622	54	2	160	without	415	T5	-20 °C / 60 °C	8,5
PRBZ2261989020NR71P65FE	17866	107	2	167	90°	415	T5	-20 °C / 60 °C	11
PRBZ226198WO20NR71P65FE	17243	107	2	161	without	415	T5	-20 °C / 60 °C	11
PRBZ2362629020NR71P65FE	23622	144	3	164	90°	620	T5	-20 °C / 60 °C	14
PRBZ236262WO20NR71P65FE	22899	144	3	159	without	620	T5	-20 °C / 60 °C	14
PRBZ2463029020NR71P65FE	27224	163	4	167	90°	825	T5	-20 °C / 60 °C	17
PRBZ246302WO20NR71P65FE	26391	163	4	162	without	825	T5	-20 °C / 60 °C	17
Increased temperature models, +70 °C									
PRBZ2176359020NR71M65FE	5764	33	2	175	90°	415	T5	-20 °C / 70 °C	11
PRBZ217635WO20NR71M65FE	5580	33	2	169	without	415	T5	-20 °C / 70 °C	11
PRBZ2271279020NR71M65FE	11528	67	2	172	90°	415	T5	-20 °C / 70 °C	11
PRBZ227127WO20NR71M65FE	11160	67	2	167	without	415	T5	-20 °C / 70 °C	11
PRBZ2371789020NR71M65FE	16130	94	3	172	90°	620	T5	-20 °C / 70 °C	14
PRBZ237178WO20NR71M65FE	15641	94	3	166	without	620	T5	-20 °C / 70 °C	14
PRBZ2472419020NR71M65FE	27224	163	4	167	90°	825	T6	-20 °C / 70 °C	17
PRBZ247241WO20NR71M65FE	26391	163	4	162	without	825	T6	-20 °C / 70 °C	17

Reference details



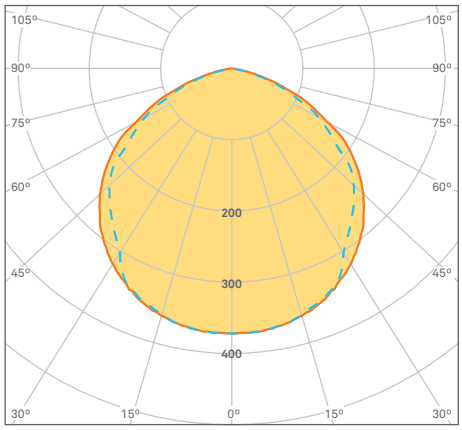
Polar diagrams – photometric data

90 – optics with radiant angle 90°
As a standard



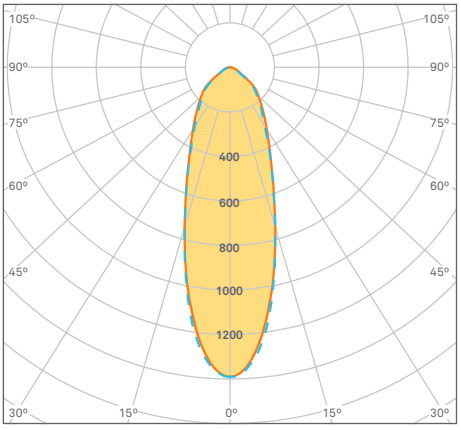
C0-C180 ——— C90-C270

WO – without optics
As a standard



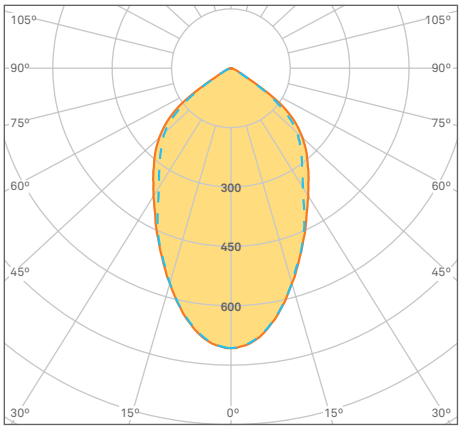
C0-C180 ——— C90-C270

30 – optics with radiant angle 30°
Available on request



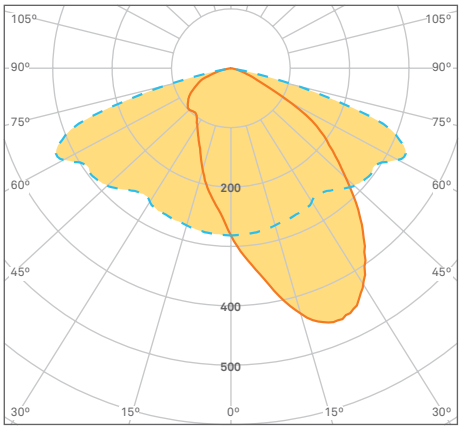
C0-C180 ——— C90-C270

60 – optics with radiant angle 60°
Available on request



C0-C180 ——— C90-C270

AS – asymmetric optics 90°
Available on request



C0-C180 ——— C90-C270

REMARK:
Due to the development of the national and international specifications and of the technology, the above technical characteristics showed on this bulletin can be considered as binding on our confirmation only.