

ECOBAY

LED lowbay and highbay



LOCALLY
manufactured

ECOBAY



IP 66

Up to
IK 10



6kV



ECOBAY RP MIDI



ECOBAY RP MAXI



ECOBAY RP with skirt



ECOBAY SP

Lowbay and highbay lighting range with a high return on investment

The ECOBAY is the ideal luminaire for lighting industrial facilities to optimise light levels and return of investment. It delivers the best solution for lowbay and highbay applications. We give you best-in-class options to suit your application with a visually pleasing round or square PCB, and an optional additional skirt that can complement any specific application.

The ECOBAY offers substantial energy savings, high performance and is able to operate at high ambient temperatures. It will meet all your expectations in a valued investment.

Available with a selection of lumen packages and various light distributions, the ECOBAY is perfectly suited for multiple indoor lighting applications.

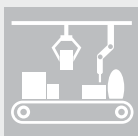
The ECOBAY not only lowers your initial investment; it maximises it by providing a comfortable environment for your staff while limiting energy consumption to what is absolutely necessary. Thanks to its reliable performance, low dust accumulation and no need for relamping and regular maintenance, the ECOBAY is the luminaire of choice.



INDUSTRIAL
HALL



WAREHOUSE



ASSEMBLY LINE



RETAIL AREA



SERVICE
STATION



SPORT AREA

Key advantages

- Designed and manufactured in South Africa
- Highly efficient and energy saving (replaces up to 400W HID light sources)
- Very flexible: Available for lowbay or highbay applications
- Optimised heatsink design by means of vertical ribs for heat dissipation for up to 201W
- Designed to operate LED light sources of up to 201W in an ambient temperature (T_a) environment of at least 25°C, without reducing the useful lifetime of up to 100 000 hours, at a lumen depreciation of not more than 30% (L70B10)
- T_a of up to 45°C
- Long lifetime and low maintenance, no lamp replacement for more than 10 years
- Various optical solutions available
- Suitable for very low Unified Glare Rating (UGR) requirements
- Flicker-free lighting
- Optional skirt for an aesthetically pleasing look with enhanced glare reduction
- Circular economy 3-star rating
- 5-year warranty (Terms and conditions apply)

Characteristics

GENERAL INFORMATION

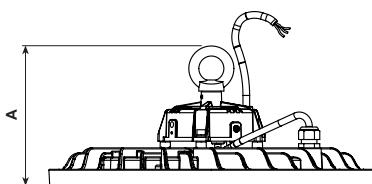
Recommended installation height	4m to 12m Please note: We have a complete product range available. For products catering for higher installation heights, please consult us.
Driver included	Yes
ROHS compliant	Yes
Testing standard	SANS 60598, SANS 62262

HOUSING AND FINISH

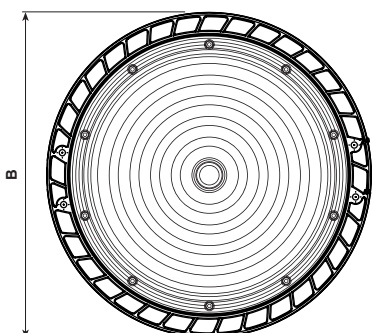
Housing	Marine grade high-pressure die-cast aluminium (EN 1706 AC-44300)
Optic	Acrylic PMMA
Protector	RP: PMMA (with integrated optic)
	SP: Glass
	Polycarbonate - clear
	Polycarbonate - opaque
Housing finish	Painted aluminium (For colour options, refer to page 9)
Tightness level	IP 66
Impact resistance	RP: PMMA: IK 08
	SP: Glass: IK 07
	High-impact polycarbonate: IK 10

DIMENSIONS AND MOUNTING

A (mm)	RP: 177
ØB (mm)	Ø350
	SP: 168
	Ø389
Weight (kg)	Up to 4.4
Standard mounting	Eyebolt for suspension chain



ECOBAY RP



ELECTRICAL INFORMATION

Electrical class	EU class I
Nominal voltage	198-264V – 50Hz
Power factor	> 95% at full load
Surge protection	6kV
Electromagnetic compatibility (EMC)	SANS 55015:2013/A1:2015, SANS 61000-3-2:2014, SANS 61000-3-3:2013, SANS 61547:2009, SANS 62493:2015
Control options	1-10V (SP only)
	DALI (SP only)

OPTICAL INFORMATION

LED colour temperature	4000K (Neutral white 740)
	5700K (Cool white 757)
Colour rendering index (CRI)	≥ 70 (Neutral white 740)
	≥ 70 (Cool white 757)
Upward Light Output Ratio (ULOR)	0%
Standard optic	RP: 4170
	SP: 4010

OPERATING CONDITIONS

Operating temperature range (Ta)	-30°C up to +45°C
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LIFETIME OF THE LEDS @ TQ 25°C

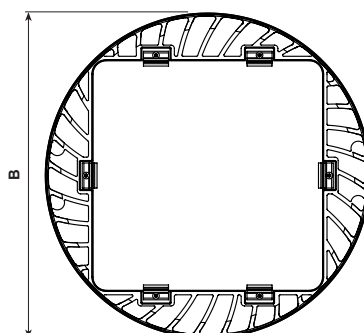
For all versions	100,000h - L70B10
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LIFETIME OF THE DRIVER @ TQ 25°C

For all versions	100,000h ≤10% failure rate
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For options and accessories, please turn to page 9.

ECOBAY SP



Performance

				Nominal flux (lm) ^(*)	Power consumption (W)	Nominal efficacy (lm/W)	Luminaire output flux (lm)	Luminaire efficacy (lm/W)	Photometry ^(**)	
Luminaire	Number of LEDs	Driver Current (mA)	Line Current (A)	Typical	Typical	Typical	Typical	Typical		
ECOBAY RP	MIDI	160	520	0.57	18266	132	138	17353	131	4160 4170
	MAXI	160	520	0.57	18266	132	138	17353	131	4290
		160	577	0.66	19902	151	132	18907	125	
		320	660	0.69	24586	158	156	23357	148	
		320	768	0.81	28174	186	151	26765	144	
ECOBAY SP		192	630	0.53	20845	122	170	18761	153	4010 4011 4120 4130 4140
		224	630	0.6	23534	137	172	21181	154	
		256	680	0.72	28042	165	170	25238	153	
		256	810	0.87	32650	201	162	29385	146	

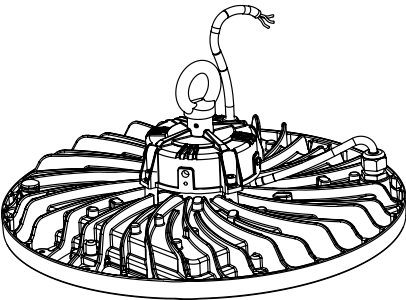
Tolerance on LED flux is ± 7% and on total luminaire power ± 5%

^(*) The nominal flux is an indicative LED flux @ Ts 85°C based on LED manufacturer’s data. The real flux output of the luminaire depends on environmental conditions (e.g. temperature and pollution) and the optical efficiency of luminaire. The type of LED used is subject to change due to the ongoing rapid progress taking place in LED technology.

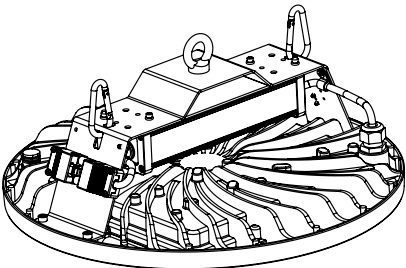
^(**) Custom combinations of lenses/optics to suit the project are available on request.

Mounting Options

Eyebolt fixation
Standard version



Anti-rotation fixation (SP only)
(Carabiners not included)

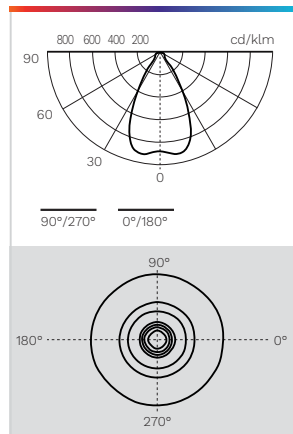


Light Distributions

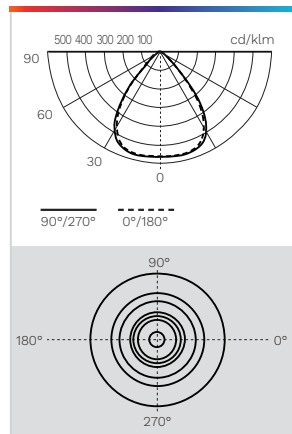
Custom combinations of lenses/optics to suit the project are available on request.

ECOBAY RP MIDI

4160 optic

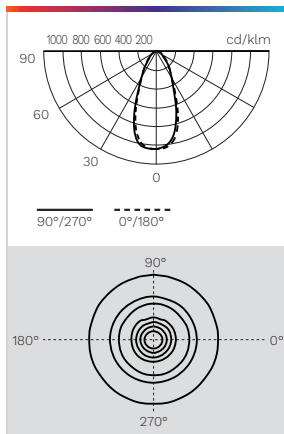


4170 optic



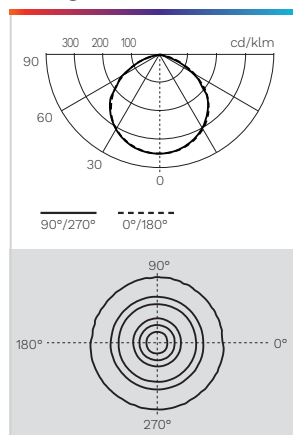
ECOBAY RP MAXI

4290 optic

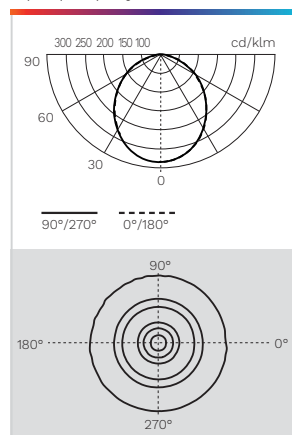


ECOBAY SP

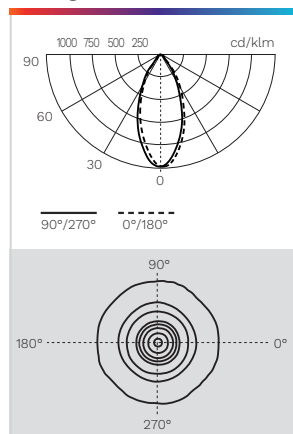
4010 optic Clear glass



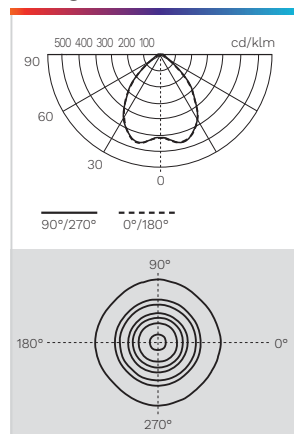
4011 optic Opaque polycarbonate



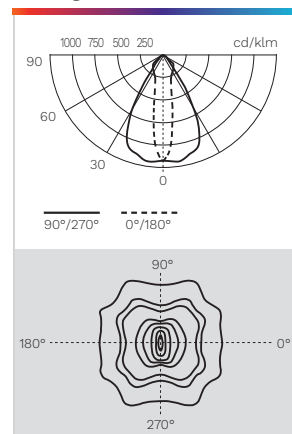
4120 optic Clear glass



4130 optic Clear glass



4140 optic Clear glass



Key Features

ECOBAY - All versions



Corrosion-resistant marine grade high-pressure die-cast aluminium housing (EN 1706 AC-44300)



Optimised heatsink design by means of vertical ribs for heat dissipation



Integrated vent (breather) for rapid pressure equalisation and reduction of condensation

ECOBAY RP



PMMA protector with integrated optic. Improved light output ratio (LOR) due to no glass protector.



Optional skirt for an aesthetically pleasing look with enhanced glare reduction

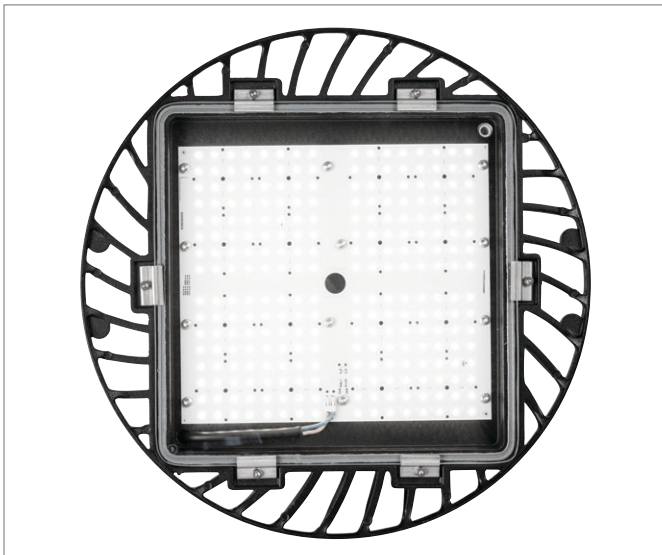
ECOBAY SP



Available with a clear glass or polycarbonate protector



Also available with an opaque polycarbonate protector



Glass protector suitable for very dirty environments as it can be cleaned easily to maintain lumen output over luminaire lifetime



Optional anti-rotation version: Anti-rotation fixation possible by using carabiners (carabiners not included)

Construction Details

The ECOBAY consists of a marine grade die-cast aluminium (EN 1706 AC-44300) optical housing, enclosed by a PMMA protector with integrated optic in the RP version, or in the case of the SP version, by a glass protector (IK 07) or optional clear or opaque polycarbonate protector (IK 10). The luminaire is suspended by means of an eyebolt.

The luminaire bears the SANS 60598 safety mark.

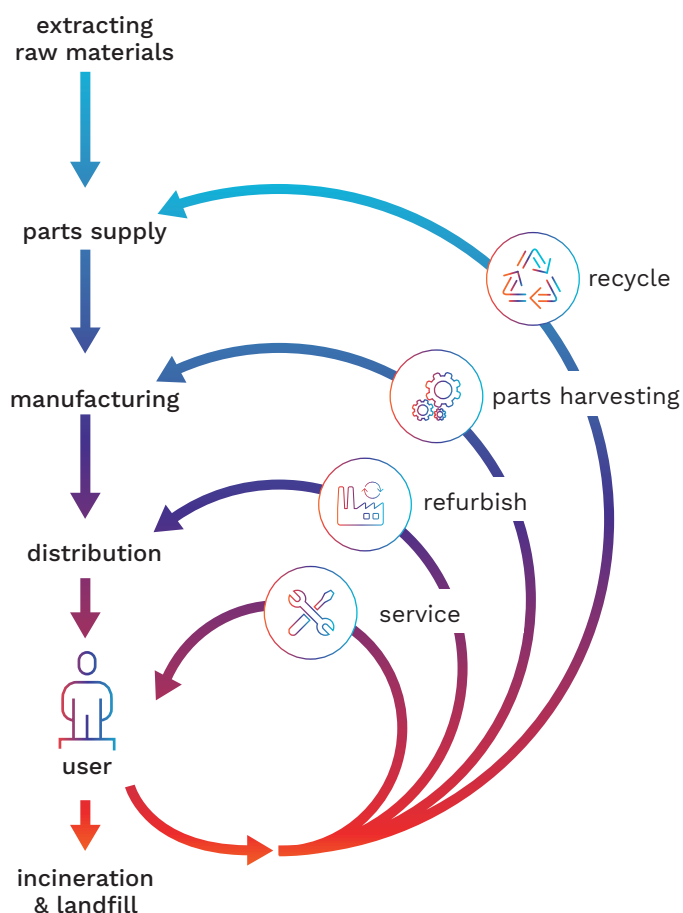
The IP 66 electronic power supply is suitable for operation with a 198-264V 50Hz single phase system. The power factor is rated at $\geq 0,95$. It is mounted externally to the optical compartment and can be connected via a dedicated IP 66 rated inline connector.

Electronic temperature monitoring prevents overheating of LEDs and power supply (ThermiX®).

Various optical solutions are available to achieve the highest energy savings and the most economical solution for almost any application.



Circularity concept



ECOBAY

Circularity focuses on reducing the environmental burden by valorising the flow of all materials. It is mainly defined in opposition to the traditional linear economy: take, make and dispose. In a circular economy, products are part of a value network where they will be used for as long as possible.




Then, depending on their characteristics, they can be reused, refurbished, upgraded or recycled.

BEKA Schröder takes circular economy into account, right from the offset. Before we start to design our products, we incorporate it into their DNA.

After a careful analysis of the potential circularity of our luminaires, we decided to introduce a “circular lighting” product label. This label acts as a circular indicator for our customers.

It clearly designates products that are optimised for circular economy through 12 objective criteria.

Circular highlights:

-  Tool-free opening of the gear compartment for easy maintenance
-  Equipped with a completely replaceable LED engine
-  Less than 7 steps to completely disassemble the luminaire (SP only)
-  Materials with a high rate of recyclability

Star rating:



It was designed to be cost-efficient



It was built to last but not with circular economy requirements



It was developed to meet most of circular economy requirements



It was developed to fully meet circular economy requirements

Ordering Information

Example:

ECOBAY RP320186MAN4290AP 3MDSO

ID	LED	Watt	Size (PCBA)	LED Colour	Optic ⁽¹⁾	Colour options	Protector	Other
ECOBAY RP	160	132	MD	N	4160 ⁽²⁾	S	P⁽²⁾	3M
	320	158	MIDI	Neutral White (4000K)	4170 ⁽²⁾	Pearl Light Grey (RAL 9022), Textured finish	PMMA clear	3 meter cabtyre complete with 6A plug
		186	MA	C	4290 ⁽³⁾	B		
			MAXI	Cool white (5700K)		Black (RAL 9017), Textured finish		DSO
						O		Décor Skirt - Opal
						Painted Other (RAL / Finish [Brilliant/Matt])		
ECOBAY SP	192	122	-	N	4010	A	G	3M
	224	137		Neutral White (4000K)	4011	Aluminium finish (unpainted)	Glass clear	3 meter cabtyre complete with 6A plug
	256	165		C	4120	S	P⁽⁴⁾	
	256	201		Cool white (5700K)	4130	Pearl Light Grey (RAL 9022), Textured finish	Polycarbonate clear	
					4140	B	O⁽⁴⁾	
						Black (RAL 9017), Textured finish	Polycarbonate opaque	
						O		
						Painted Other (RAL / Finish [Brilliant/Matt])		

⁽¹⁾ Custom combinations of lenses/optics to suit the project are available on request.

⁽²⁾ For ECOBAY RP MIDI version only

⁽³⁾ For ECOBAY RP MAXI version only

⁽⁴⁾ Suitable for Food & Beverage industry

Custom Options

ECOBAY RP & ECOBAY SP	
Cabtyre	5 meter cabtyre complete with 16A plug
Mounting	Suspension cable (specify length)
ECOBAY SP	
Switching/dimming control	DALI Dim
	1-10V dimming
Mounting	Anti-rotation version

BEKA Schröder

Experts in lightability™

SABS
ISO 9001



www.beka-schreder.co.za

Designed and manufactured by BEKA Schröder (Pty) Ltd



LOCALLY
manufactured

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