



PowerBalance gen2 – sustainable performance

PowerBalance gen2

When it comes to lighting an office space with LED luminaires, people are usually willing to invest in sustainability provided the investment pays back. At the same time, the system should comply with office lighting norms to ensure a comfortable working environment. PowerBalance gen2 is Philips' most energy-efficient office-norm-compliant LED luminaire. It more than halves energy costs compared to a T5 solution, and the light source has a longer lifetime. This results in significantly lower operational costs, ensuring a payback that meets the needs of the specification market. The gen2 architecture enables a range of highly versatile modular and semi-modular luminaires. These luminaires can be easily mounted in ceilings with exposed T-bar and concealed T-bar, as well as plaster ceilings and bandraaster-type ceilings.

Benefits

- Extremely efficient office-norm-compliant LED luminaire
- Good-quality lighting solution for direct replacement of T5 luminaires in most indoor applications
- Significantly reduces operational costs, resulting in an attractive payback time

Features

- Variety of mounting options
- Advanced LED technology
- Available in different shapes and sizes
- Office-norm-compliant

Application

- Offices
- Other indoor applications

PowerBalance gen2

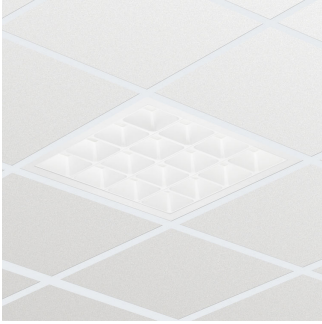
Specifications

Type	RC461B (module size 600x600 mm versions) RC463B (module size 625x625 mm versions) RC468B (module size 675x675 mm versions)
Ceiling type	Exposed and symmetrical concealed T-bar ceiling and plaster (board) ceiling Asymmetrical concealed T-bar ceiling, square Bandraster ceiling
Ceiling grid	RC461B: module size in length: 600 mm RC463B: module size in length: 625 mm RC468B: module size in length: 675 mm
Light source	Philips LED module PP
Power	20.5 to 30 W (depending on type)
Beam angle	90°
Luminous flux	2,800, 3,400 or 4,000 lm (depending on configuration)
Correlated Colour	3,000 or 4,000 K/Tunable White
Temperature	
Colour Rendering Index	> 80
Lumen maintenance at median useful life*	L90
50,000 h	
Control gear failure rate at median useful life	5%
50,000 h	
Performance Ambient	+25 °C
Temperature Tq	
Operating temperature range	+10 to +40 °C
Driver	Built-in: Non-dimmable (PSU) DALI Dimmable (PSD) DALI Dimmable Touch and Dim (PSD-T)
Mains voltage	220-240 V/50 Hz
Dimming	Compatible with DALI controllers
Control system input	DALI
Options	Emergency lighting (integrated): 3 hours (EL3) Airhandling (only VPC, Bandraster) Controls: Actilume (ACL)
Material	Housing: coated steel and plastic Rim: powder-coated steel Optics: plastic
Colour	White (WH, comparable to RAL 9003)
Connection	Wieland connector GST 18, 3 or 4 poles (W, W4) Push-in connector with pull relief (PIP)
Maintenance	Optical module sealed for life; no internal cleaning required
Installation	Visible profile ceiling version (VPC): in-lay, no brackets needed Concealed profile ceiling version (CPC): using separate mounting rim and brackets (included) (not in RC467B/RC468B) Plaster ceiling version (PCV): using separate mounting rim and brackets (included) (only RC460B/RC461B)

Type	RC415B (module size 600x600 mm version) RC416B (module size 625x625 mm version)
Ceiling type	Exposed T-bar ceiling Bandraster ceiling (RC416 W15LEXT)
Ceiling grid	RC415B: module size in length: 600 mm RC416B: module size in length: 625 mm
Light source	Philips LED module PP
Power	LED34S: 30 W (4,000 K) LED20S: 17 W (4,000 K)
Beam angle	90°
Luminous flux	2,000 or 3,400 lm (depending on configuration)
Correlated Colour	3,000 or 4,000 K
Temperature	
Colour Rendering Index	> 80
Lumen maintenance at median useful life*	L90
50,000 h	
Control gear failure rate at median useful life	5%
50,000 h	
Performance Ambient	+25 °C
Temperature Tq	
Operating temperature range	+10 to +40 °C
Driver	Built-in: Non-dimmable (PSU) DALI Dimmable (PSD) DALI Dimmable Touch and Dim (PSD-T)
Mains voltage	220-240 V/50 Hz
Dimming	Compatible with DALI controllers
Control system input	DALI
Options	Emergency lighting (integrated): 3 hours (EL3) Airhandling (bandraster only) Controls: Actilume (ACL)
Material	Housing: coated steel and plastic Rim: powder-coated steel Optics: plastic
Colour	White (WH, comparable to RAL 9003)
Connection	Wieland connector GST 18, 3 or 4 poles (W, W4) Push-in connector with pull relief (PIP)
Maintenance	Optical module sealed for life; no internal cleaning required
Installation	Visible profile ceiling version (VPC): in-lay, no brackets needed Bandraster

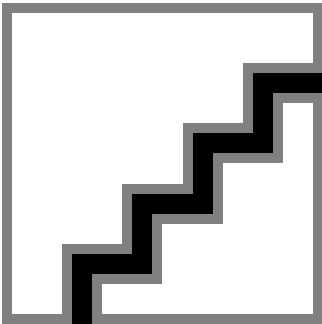
PowerBalance gen2

Versions

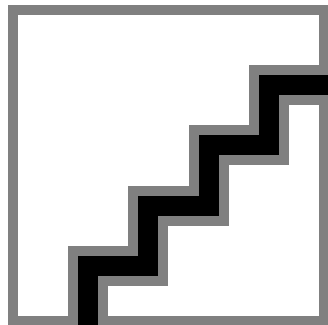
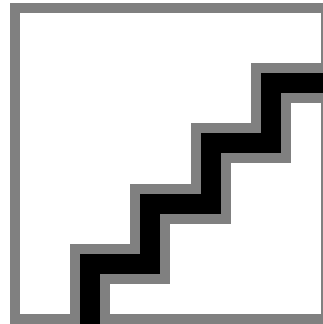


PowerBalance gen2 RC460B/
RC461B recessed LED luminaire,
module size 600 (visible profile
ceiling version)

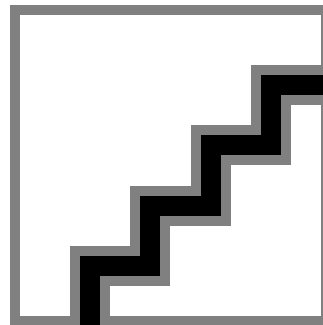
Product details



IPDP_RC460Bi_0153-Detail photo



IPDP_RC460Bi_0049-Detail
photo



IPDP_RC460Bi_0055-Detail
photo

Application Conditions

Ambient temperature range	+10 to +40 °C
Maximum dim level	1%
Suitable for random switching	Yes (relates to presence/movement detection and daylight harvesting)

Approval and Application

Mech. impact protection code	IK02
Ingress protection code	IP20

Controls and Dimming

Dimmable	Yes
----------	-----

Operating and Electrical

Input Voltage	220-240 V
---------------	-----------

General Information

Beam angle of light source	120 °
CE mark	CE mark
Protection class IEC	Safety class I
Optical cover/lens type	PC
Driver included	Yes
ENEC mark	ENEC plus mark
Flammability mark	F
Gear	-
Glare shielding accessories	No
Glow-wire test	Temperature 850 °C, duration 5 s
Light source replaceable	No
Number of gear units	1 unit
Number of light sources	1
Optic type	No
Product Family Code	RC461B
UL mark	No

Initial Performance (IEC Compliant)

Initial chromaticity	(0.38, 0.38) SDCM <3
Init. Corr. Colour Temperature	4000 K
Init. Colour Rendering Index	≥90
Luminous flux tolerance	+/-10%

Mechanical and Housing

Colour	White RAL 9003
--------	----------------

Over Time Performance (IEC Compliant)

Median useful life L80B50	50000 h
Median useful life L90B50	25000 h

General Information

Order Code	Full Product Name	Lamp family code
96451100	RC461B LED34S/940 PSD W60L60 VPC PIP	LED34S
96456600	RC461B LED40S/940 PSD W60L60 VPC PIP	LED40S

Initial Performance (IEC Compliant)

PowerBalance gen2

Order Code	Full Product Name	Initial LED luminaire efficacy	Initial luminous flux	Initial input power
96451100	RC461B LED34S/940 PSD W60L60 VPC PIP	139 lm/W	3400 lm	24.5 W

Order Code	Full Product Name	Initial LED luminaire efficacy	Initial luminous flux	Initial input power
96456600	RC461B LED40S/940 PSD W60L60 VPC PIP	140 lm/W	4000 lm	28.5 W

