# **PHILIPS** Lighting



# 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 ceilingstypes.

#### 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

- $\cdot$  Variety of mounting options
- $\cdot$  Advanced LED technology
- $\cdot$  Available in different shapes and sizes
- $\cdot$  Office-norm-compliant
- $\cdot$  Integrated 3 hour emergency options available
- Integrated sensor for (connected) lighting systems enabling additional energy saving and data collection

#### Application

- Offices
- Other indoor applications

#### Warnings and Safety

- The product is IP20 and as such is not protected against water ingress, so we strongly recommend that the environment in which the luminaire is to be installed is suitably checked
- If the above advice is not taken and the luminaires are subject to water ingress, Philips/Signify cannot guarantee safe use and the product warranty will become void

#### Versions

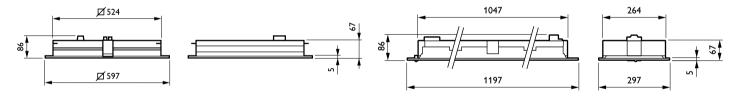




IPPR\_RC460Bi\_0065-Product photo

Upradable sensor

#### Dimensional drawing



#### **Product details**



IPDP\_RC460Bi\_0153-Detail photo



#### Upradable sensor

#### **Product details**



IPDP\_RC460Bi\_0043-Detail photo



IPDP\_RC460Bi\_0049-Detail photo



IPDP\_RC460Bi\_0055-Detail photo

General Information	
Driver included	Yes
ENEC mark	ENEC mark
Flammability mark	For mounting on
	normally
	flammable
	surfaces
Gear	-
Glow-wire test	Temperature 650
	°C, duration 30 s
Light source replaceable	No
Number of gear units	Unit
Product family code	RC461B
Light Technical	
Optic type	Wide beam office-
	compliant
Flickering value (PstLM)	1
Stroboscopic effect	0.4
Operating and Electrical	
Input Voltage	220 to 240 V
Line Frequency	50 to 60 Hz
Temperature	
Ambient temperature range	+10 to +40 °C
Controls and Dimming	
Dimmable	Yes
Mechanical and Housing	
Housing Colour	White
Approval and Application	
Protection class IEC	Safety class I
Mech. impact protection code	IK02
Ingress protection code	IP20/40
Initial Performance (IEC Complian	t)
Luminous flux tolerance	+/-10%
Application Conditions	
Maximum dim level	1%
Suitable for random switching	No

#### **General Information**

			Lamp family	
Order Code F	Full Product Name	CE mark	code	Embedded control
96451100 R	RC461B LED34S/940 PSD W60L60 VPC PIP	Yes	LED34S	-
96456600 R	RC461B LED40S/940 PSD W60L60 VPC PIP	Yes	LED40S	-
97998000 R	RC461B LED80S/TW9 DIA W60L60 VPC PIP	Yes	-	-
10930800 R	RC461B 34S/840 SRD W60L60 VPC U4 PIP	CE mark	-	Upgradable sensor slot
U	JE			with SNS210 sensor
97986700 R	RC461B LED80S/TW9 DIA W30L120 VPC PIP	Yes	-	-
98038200 R	RC461B LED34S/940 SRD W60L60 VPC U4	Yes	-	Upgradable sensor slot
P	PIP			with SNS210 sensor

#### Light Technical (1/2)

		Beam			Colour			Beam			Colour
		angle of	Correlated		rendering			angle of	Correlated		rendering
	Full Product	light	Colour	Optical cover	index		Full Product	light	Colour	Optical cover	index
Order Code	Name	source	Temperature	type	(CRI)	Order Code	Name	source	Temperature	type	(CRI)
<b>Order Code</b> 96451100	RC461B	source 120	Temperature 4000 K	<b>type</b> Polycarbonate	<b>(CRI)</b> ≥90	Order Code	Name PSD W60L60	source	Temperature	type	(CRI)

Order Code	Full Product Name	Beam angle of light source	Correlated Colour Temperature	Optical cover type	Colour rendering index (CRI)
96456600	RC461B LED40S/940 PSD W60L60 VPC PIP	120 degree(s)	4000 K	Polycarbonate bowl/cover	≥90
97998000	RC461B LED80S/TW9 DIA W60L60 VPC PIP	120 degree(s)	Tunable white 2700-6500 K	-	≥90
10930800	RC461B 34S/840 SRD	120 degree(s)	4000 K	-	≥80

	Full Product	Beam angle of light	Correlated Colour	Optical cover	Colour rendering index
Order Code	Name	source	Temperature	type	(CRI)
	W60L60 VPC U4 PIP UE				
97986700	RC461B LED80S/TW9 DIA W30L120 VPC PIP	120 degree(s)	Tunable white 2700-6500 K	-	≥90
98038200	RC461B LED34S/940 SRD W60L60 VPC U4 PIP	- degree(s)	4000 K	-	≥90

#### Light Technical (2/2)

		Luminous		Number of
		efficacy (rated)		light
Order Code	Full Product Name	(nom.)	Luminous Flux	sources
96451100	RC461B LED34S/940 PSD	139 lm/W	3,400 lm	1
	W60L60 VPC PIP			
96456600	RC461B LED40S/940 PSD	143 lm/W	4,000 lm	1
	W60L60 VPC PIP			
97998000	RC461B LED80S/TW9 DIA	130 lm/W	7,700 lm	-
	W60L60 VPC PIP			

		Luminous efficacy (rated)		Number of light
Order Code	Full Product Name	(nom.)	Luminous Flux	sources
10930800	RC461B 34S/840 SRD	172 lm/W	3,400 lm	-
	W60L60 VPC U4 PIP UE			
97986700	RC461B LED80S/TW9 DIA	130 lm/W	7,700 lm	-
	W30L120 VPC PIP			
98038200	RC461B LED34S/940 SRD	142 lm/W	3,400 lm	-
	W60L60 VPC U4 PIP			

#### **Operating and Electrical**

Order Code	Full Product Name	Power Consumption
96451100	RC461B LED34S/940 PSD W60L60 VPC PIP	24 W
96456600	RC461B LED40S/940 PSD W60L60 VPC PIP	28 W
97998000	RC461B LED80S/TW9 DIA W60L60 VPC PIP	64 W

Order Code	Full Product Name	Power Consumption
10930800	RC461B 34S/840 SRD W60L60 VPC U4 PIP UE	19.8 W
97986700	RC461B LED80S/TW9 DIA W30L120 VPC PIP	64 W
98038200	RC461B LED34S/940 SRD W60L60 VPC U4 PIP	24 W

#### Initial Performance (IEC Compliant)

Order Code	Full Product Name	Initial chromaticity
96451100	RC461B LED34S/940 PSD W60L60 VPC PIP	(0.38, 0.38) SDCM <3
96456600	RC461B LED40S/940 PSD W60L60 VPC PIP	(0.38, 0.38) SDCM <3

Order Code	Full Product Name	Initial chromaticity
97998000	RC461B LED80S/TW9 DIA W60L60 VPC PIP	(0.38, 0.38) SDCM <3
10930800	RC461B 34S/840 SRD W60L60 VPC U4 PIP UE	(0.384; 0.378)SDCM <3



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