PowerBalance gen2

RC461B G2 LED34S/840 POE W30L172 BCV ACL

PowerBalance gen2, 24.5 W, 3400 lm, 4000 K, Power over Ethernet

When it comes to lighting office spaces with LED luminaires, businesses are willing to invest in sustainability, provided they get a payback on their investment. At the same time, the system should comply with office lighting norms to ensure a comfortable working environment. Philips PowerBalance Gen2 is our most energy-efficient, office-compliant LED luminaire. Designed for circularity and enhanced wellbeing, this office luminaire also promises future-proof connectivity. State-of-the-art efficacy (at CRI <gt/>90), upgradability features, a long lifetime, repairability, and design for recyclability make PowerBalance Gen2 a true 'green choice'. One that also delivers significantly lower operational costs to ensure an attractive payback that meets the needs of businesses and the specification market.The Gen2 architecture in the latest PowerBalance range has enabled us to create a range of highly-versatile modular and semi-modular luminaires. These LED luminaires can be easily mounted in ceilings with an exposed T-bar or concealed T-bar, as well as plaster ceilings and bandraster-type ceilings. PowerBalance is a solution with superior lighting specifications combined with a best-in-class connectivity designed for Circularity & enhanced Wellbeing using Interact Pro - all with a sustainable approach to high-performance office lighting.

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

Product data

PowerBalance gen2

General Information

Cap-Base	– [–]
Light source replaceable	No
Number of gear units	1 unit
Gear	–
Driver included	Yes
Remarks	*–Per Lighting Europe guidance paper "Evaluating performance of LED based luminaires – January 2018": statistically there is no relevant difference in lumen maintenance between B50 and for example B10. Therefore, the median useful life (B50) value also represents the B10 value.
Product family code	RC461B [PowerBalance recessed]
Lighting Technology	LED
Value ladder	Specification
Embedded control	ActiLume
CE mark	Yes
Warranty period	5 years
Flammability mark	For mounting on normally flammable surfaces
ENEC mark	ENEC plus mark
Glow-wire test	Temperature 850 °C, duration 5 s
EU RoHS compliant	Yes

Light Technical

Luminous Flux	3,400 lm
Correlated Color Temperature (Nom)	4000 K
Luminous Efficacy (rated) (Nom)	139 lm/W
Color rendering index (CRI)	≥80
Number of light sources	1
Light source color	840 neutral white
Optic type	–
Luminaire light beam spread	86°
Unified glare rating CEN	16

Operating and Electrical

Input Voltage	51 to 54 V
Line Frequency	– Hz
End CLO power consumption	– W
Inrush current	5 A
Inrush time	1 ms
Power Consumption	24.5 W
Connection	RJ45 connector, male
Cable	–
Number of products on MCB of 16 A type B	20

Temperature

Ambient temperature range	+10 to +40 °C

Controls and Dimming

Dimmable	Yes
Driver/power unit/transformer	Luminaire controller with power over Ethernet
Control interface	Power over Ethernet
Constant light output	No

Mechanical and Housing

Housing Material	Steel
Reflector material	Polycarbonate
Optic material	–
Optical cover material	Polycarbonate
Fixation material	–
Housing Color	White
Optical cover finish	Matte
Overall length	1,247 mm
Overall width	310 mm
Overall height	79 mm
Dimensions (Height x Width x Depth)	79 x 310 x 1247 mm

Approval and Application

Ingress protection code	IP20 [Finger–protected]
Mech. impact protection code	IK02 [0.2 J standard]
Protection class IEC	Safety class III

Initial Performance (IEC Compliant)

Luminous flux tolerance	+/–10%
Initial chromaticity	(0.38, 0.38) SDCM <3
Power consumption tolerance	+/–10%

Over Time Performance (IEC Compliant)

Control gear failure rate at median useful life 50000 h	5 %
Lumen maintenance at median useful life* 50000 h	L90

Application Conditions

Performance ambient temperature Tq	25 °C
Maximum dim level	1%
Suitable for random switching	Yes

Product Data

Order product name	RC461B G2 LED34S/840 POE W30L172 BCV ACL
Full product name	RC461B G2 LED34S/840 POE W30L172 BCV ACL
Full product code	871869687580300
Order code	910502045503
Material Nr. (12NC)	910502045503
Numerator – Quantity Per Pack	1
EAN/UPC – Product/Case	8718696875803
Numerator – Packs per outer box	1

PowerBalance gen2

Dimensional drawing

1720x297

30

93

73

1722

1750

297

www.lighting.philips.com

2023, December 4 – data subject to change