



PowerBalance gen2

RC461B 40S/UE840 DEIA W30L120 VPC CWL SC

PowerBalance gen2, Recessed, UltraEfficient, 21 W, 1200x300 mm, VPC, 4000 lm, 4000 K, DALI, Interact Ready, UGR19, Wieland, TP(b), EL-DC

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 >90), upgradability features, a long lifetime, reparability, 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 bandraaster-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	
Number of gear units	1 unit
Driver included	Yes
Value ladder	Specification
Serviceability class	Class B, luminaire is equipped with some serviceable parts (when applicable): driver, control units, surge protection device, front cover and mechanical parts
Warranty period	5 years
Sustainability rating	Lighting for wellbeing

Light Technical	
Luminous Flux	4,000 lm
Saturated Red (R9)	>50
Correlated Color Temperature (Nom)	4000 K
Luminous Efficacy (rated) (Nom)	167 lm/W
Color rendering index (CRI)	>80
Beam angle of light source	120 degree(s)
Light source color	LED color BioUP Cyan Enhanced Spectrum CRI80 4000K
Optic type	Wide beam office compliant
Luminaire light beam spread	86°
Unified glare rating CEN	19
Indirect glare reduction measure for Display Screen Equipment (EN 12464-2021)	L65≤3000 cd/m ²

Operating and Electrical	
Input Voltage	220 to 240 V
Line Frequency	50 to 60 Hz
Inrush current	23 A
Inrush time	0.221 ms
Power Consumption	21 W
Power Factor (Fraction)	0.9
Connection	Push-in connector and pull relief
Cable	-
Number of products on MCB of 16 A type B	22
Suitable for random switching	No
Protection class IEC	Safety class I
Feed-through wiring	-

Wiring	
Connector Type	Wieland

Controls and Dimming	
Dimmable	Yes
Driver/power unit/transformer	Dali dimming Interact System ready external for central emergency lighting
Control interface	DALI
Constant light output	No
DALI Standard	DALI-2™
Maximum dim level	1%
Connectivity	Interact Ready

Embedded control	-
Mechanical and Housing	
Housing Material	Steel
Reflector material	Polycarbonate
Optic material	Polycarbonate
Optical cover material	Polycarbonate
Fixation material	-
Housing Color	White
Optical cover finish	Opal
Reflector Finish	White reflector
Overall height	86 mm
Compatible ceiling or ceiling installation accessory type	Visible profile ceiling version
Ingress protection code	IP20/40 [Finger-protected, Emitting surface]
Mech. impact protection code	IK03 [0.35 J reinforced]
Explosion hazard class	-
Mounting	Recessed
Safety device	SC [Safety cable]
Net Weight (Piece)	1.540 kg

Emergency Operation	
Central Emergency	Yes
Emergency lighting	DC operated central emergency lighting
Emergency lighting operation mode	Maintained

Approval and Application	
Glow-wire test	Temperature 650 °C, duration 30 s
Flammability mark	For mounting on normally flammable surfaces
CE mark	Yes
ENEC mark	ENEC mark
EU RoHS compliant	Yes
Diffuser Flammability Class	TP(b) diffuser flammability class
Performance ambient temperature Tq	25 °C
Flickering value (PstLM) - Flickering value as per EN 61000-3-3	1
Ambient temperature range	+10 to +35 °C

Initial Performance (IEC Compliant)	
Luminous flux tolerance	+/-10%
Initial chromaticity	(0.38, 0.38) SDCM ≤3
Power consumption tolerance	+/-10%
Standard Deviation of Colour Matching (McAdam ellipse)	SDCM≤3

Over Time Performance (IEC Compliant)	
Control gear failure rate at median useful life 50000 h	2.5 %
Control gear failure rate at median useful life 100000 h	5 %

PowerBalance gen2

Lumen maintenance (EN-IEC 62722-2-1) at L90
median useful life* 50000 h

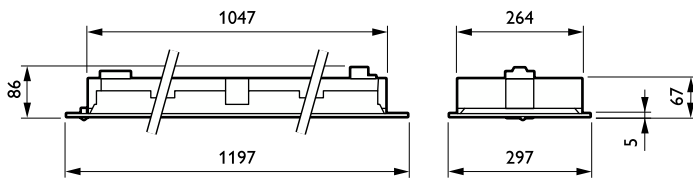
Lumen maintenance (EN-IEC 62722-2-1) at L85
median useful life* 100000 h

Product Data

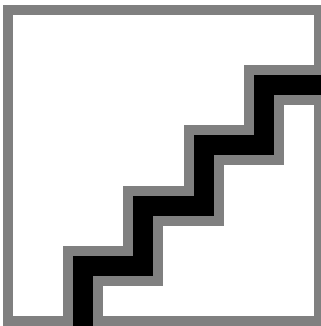
Order product name	RC461B 40S/UE840 DEIA W30L120 VPC CWL SC
Full product name	RC461B 40S/UE840 DEIA W30L120 VPC CWL SC

Full product code	872016963331500
Order code	910505105871
Material Nr. (12NC)	910505105871
Numerator - Quantity Per Pack	1
EAN/UPC - Product/Case	8720169633315
Numerator - Packs per outer box	1
EAN/UPC - Case	8720169633315
Product family code	RC461B [PowerBalance recessed]

Dimensional drawing



Photometric data



Polar Normal (separate) - null - 910505105871

