# PowerBalance gen2

## RC461B G2 LED28S/840 PSD W60L60 CPC W

PowerBalance recessed, Generation 2, LED module, system flux 2800 lm, 840 neutral white, Power supply unit with DALI interface, Plug-in connector 3-pole Wieland/Adels compatible

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

| | |
|---|---|
| Lamp family code | LED28S [LED module, system flux 2800 lm] |
| 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. |
| Service tag | Yes |
| Product family code | RC461B [PowerBalance recessed] |
| Lighting Technology | LED |
| Value ladder | Specification |
| Embedded control | – |
| 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 ℃, duration 5 s |
| EU RoHS compliant | Yes |

## Light Technical

| | |
|---|---|
| Luminous Flux | 2,800 lm |
| Correlated Color Temperature (Nom) | 4000 K |
| Luminous Efficacy (rated) (Nom) | 141 lm/W |
| Color rendering index (CRI) | ≥80 |
| Number of light sources | 1 |
| Light source color | 840 neutral white |
| Optic type | – |
| Optical cover type | Polycarbonate bowl/cover |
| Luminaire light beam spread | 86° |
| Unified glare rating CEN | 16 |

## Operating and Electrical

| | |
|---|---|
| Input Voltage | 220–240 V |
| Line Frequency | 50 to 60 Hz |
| Inrush current | 5 A |
| Inrush time | 1 ms |
| Power Consumption | 19.8 W |
| Power Factor (Fraction) | 0.9 |
| Connection | Plug-in connector 3-pole Wieland/Adels compatible |
| Cable | – |
| Number of products on MCB of 16 A type B | 20 |

## Temperature

| | |
|---|---|
| Ambient temperature range | +10 to +40 ℃ |

## Controls and Dimming

| | |
|---|---|
| Dimmable | Yes |
| Driver/power unit/transformer | Power supply unit with DALI interface |
| Control interface | DALI |
| 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 | 597 mm |
| Overall width | 597 mm |
| Overall height | 86 mm |
| Dimensions (Height x Width x Depth) | 86 x 597 x 597 mm |

## Approval and Application

| | |
|---|---|
| Ingress protection code | IP20 [Finger-protected] |
| Mech. impact protection code | IK02 [0.2 J standard] |
| Protection class IEC | Safety class I |

## 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 ℃ |
| Maximum dim level | 1% |
| Suitable for random switching | No |

## Product Data

| | |
|---|---|
| Order product name | RC461B G2 LED28S/840 PSD W60L60 CPC W |
| Full product name | RC461B G2 LED28S/840 PSD W60L60 CPC W |
| Full product code | 871829127285400 |
| Order code | 910502021803 |
| Material Nr. (12NC) | 910502021803 |
| Numerator – Quantity Per Pack | 1 |

# PowerBalance gen2

| | |
|---|---|
| **EAN/UPC – Product/Case** | 8718291272854 |
| **Numerator – Packs per outer box** | 1 |
| **EAN/UPC – Case** | 8718291272854 |

## Dimensional drawing

www.lighting.philips.com

2023, December 4 – data subject to change