

# PowerBalance gen2

## RC461B G2 LED34S/840 PSD-T W60L60 PCV AC

PowerBalance recessed - Generation 2 - LED Module, system flux 3400 lm - 840 neutral white - Power supply unit with DALI touch-switch & dimming interface - Width 0.60 m, length 0.60 m - Plaster ceiling version - ActiLume

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. PowerBalance is also available in a surface-mounted version.

### Product data

| General Information           |   |                             |  |
|-------------------------------|---|-----------------------------|--|
| Number of light sources       | 1 [ 1 pc]   | Driver included             | Yes                                      |
| Lamp family code              | LED34S [ LED Module, system flux 3400 lm]                             | Optic type                  | No [ -]                                  |
| Light source colour           | 840 neutral white   | Optical cover/lens type     | PC [ Polycarbonate bowl/cover]           |
| Cap base                      | - [ -]  | Luminaire light beam spread | 86°                                      |
| Light source replaceable      | No  | Emergency lighting          | No [ -]                                  |
| Number of gear units          | 1 unit  | Embedded control            | ACL [ ActiLume]                          |
| Gear                          | -   | Control interface           | DALI                                     |
| Driver/power unit/transformer | PSD-T [ Power supply unit with DALI touch-switch & dimming interface] | Connection                  | PIP [ Push-in connector and pull relief] |
|                               |   | Cable                       | -  |
|                               |   | Protection class IEC        | Safety class I (I)                       |

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|                             |   |
|-----------------------------|---|
| Air handling                | No [ - ]  |
| Glow-wire test              | 850/5 [ Temperature 850 °C, duration 5 s]   |
| Flammability mark           | F [ For mounting on normally flammable surfaces]  |
| Safety bracket              | -   |
| Safety device               | No [ - ]  |
| CE mark                     | CE mark   |
| ENEC mark                   | ENEC plus mark  |
| UL mark                     | -   |
| Design award-winner marking | Design Award Winner 2015  |
| Warranty period             | 5 years   |
| 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. |
| Constant light output       | No  |
| Number of products on MCB   | 20  |
| RoHS mark                   | RoHS mark   |
| Accessory PFC               | N/A   |
| Product Family Code         | RC461B [ PowerBalance recessed]   |
| Unified glare rating CEN    | 16  |

### Operating and Electrical

|                        |                |
|------------------------|----------------|
| Input voltage          | 220-240 V      |
| Input frequency        | 50 to 60 Hz    |
| Control signal voltage | 0-16 V DC DALI |
| Inrush current         | 5 A            |
| Inrush time            | 1 ms           |
| Power factor (min.)    | 0.9            |

### Controls and Dimming

|          |     |
|----------|-----|
| Dimmable | Yes |
|----------|-----|

### Mechanical and Housing

|                             |                                       |
|-----------------------------|---------------------------------------|
| Geometry                    | W60L60 [ Width 0.60 m, length 0.60 m] |
| Housing configuration       | PCV [ Plaster ceiling version]        |
| Housing material            | Steel                                 |
| Reflector material          | Polycarbonate                         |
| Optic material              | -                                     |
| Optical cover/lens material | Polycarbonate                         |
| Gear tray material          | Steel                                 |
| Fixation material           | -                                     |

|                           |        |
|---------------------------|--------|
| Optical cover/lens finish | Matte  |
| Overall length            | 597 mm |
| Overall width             | 597 mm |
| Overall height            | 86 mm  |

### Approval and Application

|                              |                          |
|------------------------------|--------------------------|
| Ingress protection code      | IP20 [ Finger-protected] |
| Mech. impact protection code | IK02 [ 0.2 J standard]   |

### Initial Performance (IEC Compliant)

|                                |                      |
|--------------------------------|----------------------|
| Initial luminous flux          | 3400 lm              |
| Luminous flux tolerance        | +/-10%               |
| Initial LED luminaire efficacy | 136 lm/W             |
| Init. Corr. colour temperature | 4000 K               |
| Init. colour rendering index   | ≥80                  |
| Initial chromaticity           | (0.38, 0.38) SDCM <3 |
| Initial input power            | 25 W                 |
| 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

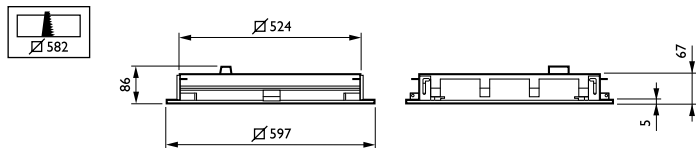
|                                    |   |
|------------------------------------|---|
| Ambient temperature range          | +10 to +40 °C   |
| Performance ambient temperature Tq | 25 °C   |
| Maximum dimming level              | 1%  |
| Suitable for random switching      | Yes (relates to presence/ movement detection and daylight harvesting) |

### Product Data

|                                 |  |
|---------------------------------|--|
| Full product code               | 871829127205200                          |
| Order product name              | RC461B G2 LED34S/840 PSD-T W60L60 PCV AC |
| EAN/UPC – product               | 8718291272052                            |
| Order code                      | 27205200                                 |
| Numerator – quantity per pack   | 1  |
| Numerator – packs per outer box | 1  |
| Material no. (I2NC)             | 910502012303                             |
| Net weight (piece)              | 5.200 kg                                 |

## PowerBalance gen2

### Dimensional drawing



PowerBalance RC460B-RC468B

