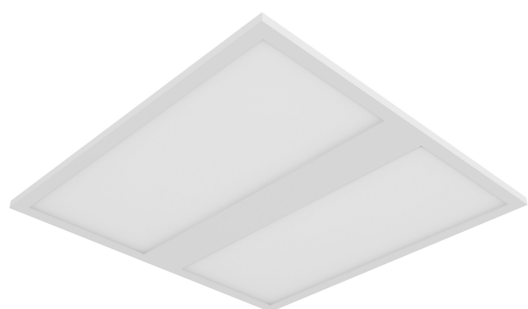


# PRODUCT DATASHEET

## PL PROT 600 ZB P 36W 830

PANEL PROTECT 600 ZIGBEE | Square recessed panel luminaires with IP54 protection, Zigbee 3.0 technology, 600 x 600 mm



### Areas of application

- Direct replacement for luminaires with fluorescent lamps
- Suitable for recessed ceiling systems with grid size of 600 x 600 mm
- Hospitals
- Laboratories
- Kitchens, canteens, workspaces

### Product benefits

- Suitable luminaire for DIRECT EASY / VIVARES Zigbee and other Zigbee 3.0 Light Management Systems
- Suitable for use in applications where a higher IP protection is needed
- High lumen output with up to 5040 lm
- Tool-free electrical connection due to push button connector
- Through-wiring possible with included connector box
- Energy savings thanks to high system efficacy: up to 140 lm/W
- High color consistency with SDCM 3
- Extended services such as energy monitoring and remote maintenance possible with Zigbee versions
- External driver for extended flexibility and easy installation
- Easy cleanable frontside thanks to the smooth PMMA surface of the diffuser

### Product features

- IoT-ready luminaire with Zigbee 3.0 technology
- Type of protection: IP54 (frontside), IP20 (backside)
- Steel housing with notch in the backside for the driver to allow maximum height of 34 mm
- PMMA diffuser
- 5-pole terminal block, cable cross section up to 5 x 2.5 mm<sup>2</sup>
- Lifetime (L90/B10): 50,000 h (at 25° C)
- Panel can be customized with optical sensors on individual request

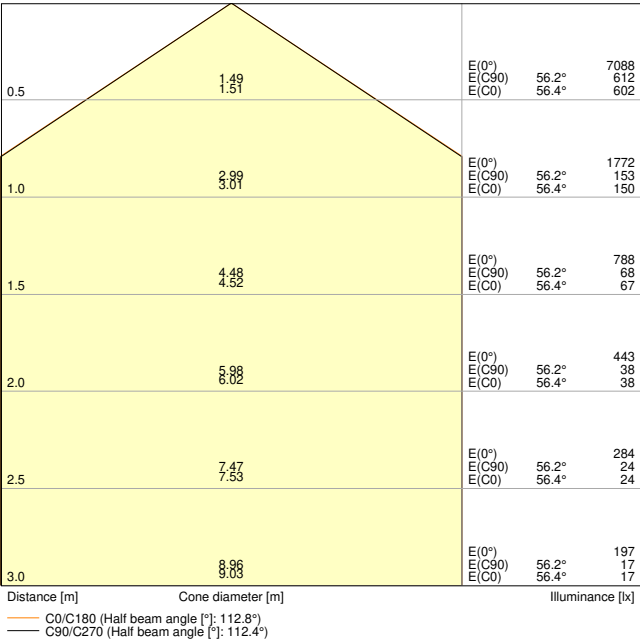
---

**TECHNICAL DATA****Electrical data**

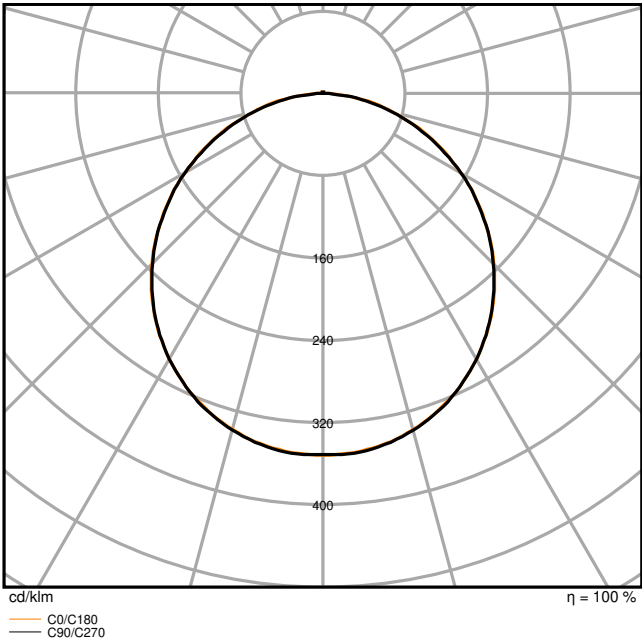
|                                                             |                     |
|-------------------------------------------------------------|---------------------|
| Nominal wattage                                             | 36.00 W             |
| Nominal voltage                                             | 220...240 V         |
| Mains frequency                                             | 0/50/60 Hz          |
| Nominal current                                             | 165.000 mA          |
| Inrush current                                              | 60 A                |
| Inrush current time $T_{h50}$                               | 2.72 $\mu$ s        |
| Max. number of luminaires per miniature circuit breaker B16 | 12                  |
| Max. number of luminaires per miniature circuit breaker C10 | 10                  |
| Max. number of luminaires per miniature circuit breaker C16 | 16                  |
| Power factor $\lambda$                                      | > 0.90              |
| Total harmonic distortion                                   | < 20 %              |
| Protection class                                            | II                  |
| Surge capability (L-N)                                      | 1000 V              |
| Operating mode                                              | External LED driver |
| Dimming interface                                           | Zigbee Direct / IoT |

**Photometrical data**

|                                              |                    |
|----------------------------------------------|--------------------|
| Luminous flux                                | 5040 lm            |
| Luminous efficacy                            | 140 lm/W           |
| Color temperature                            | 3000 K             |
| Light color (designation)                    | Warm White         |
| Color rendering index Ra                     | > 80               |
| Standard deviation of color matching         | 3 sdc <sub>m</sub> |
| Low flicker                                  | Yes                |
| Flickering metric (Pst LM)                   | < 1                |
| Stroboscope effect metric (SVM)              | < 0.4              |
| Photobiological safety group acc. to EN62778 | RG0                |
| Beam angle                                   | 120 °              |
| UGR                                          | < 22               |



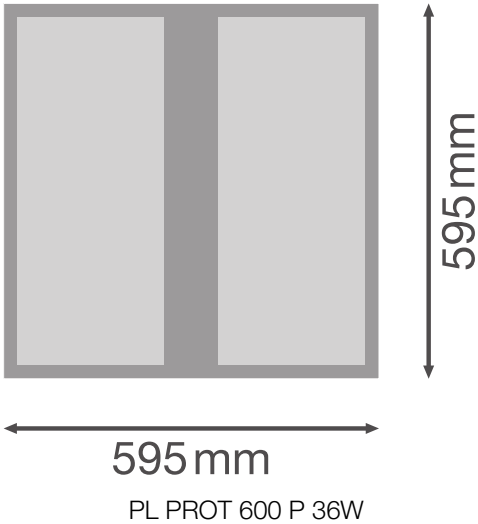
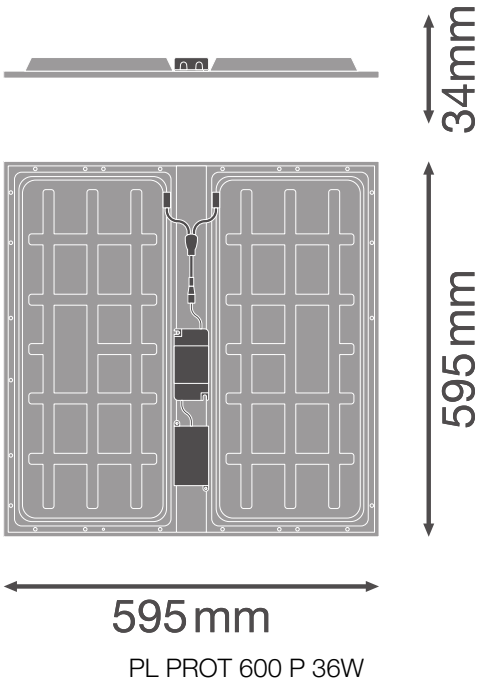
PL PROT 600 ZB P 36W 830



PL PROT 600 ZB P 36W 830

Dimensions & Weight

|                |           |
|----------------|-----------|
| Length         | 595.00 mm |
| Width          | 595.00 mm |
| Height         | 34.00 mm  |
| Product weight | 2100.00 g |



## Materials & Colors

|                                            |                               |
|--------------------------------------------|-------------------------------|
| Product color                              | White                         |
| Housing color                              | White                         |
| RAL Color (most similar)                   | RAL 9003                      |
| Body material                              | Aluminum                      |
| Cover material                             | Polymethylmethacrylate (PMMA) |
| Light emitting surface material            | Polymethylmethacrylate (PMMA) |
| Glow Wire Test according to IEC 60695-2-12 | 650 °C                        |
| Mercury content                            | 0.0 mg                        |

## Application & Mounting

|                                        |                                                                                                                                                      |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ambient temperature range              | -10...+50 °C                                                                                                                                         |
| Temperature range at storage           | -20...+70 °C                                                                                                                                         |
| Type of connection                     | Screwless terminal, 3-POLE (L, N, PE)                                                                                                                |
| Type of protection                     | IP54/IP20                                                                                                                                            |
| Protection class IK (shock resistance) | IK02                                                                                                                                                 |
| Dimmable                               | Yes                                                                                                                                                  |
| Dimming range                          | 1...100 %                                                                                                                                            |
| IoT ready                              | Support of Zigbee Data Clusters: 0x0302 (Luminaire Asset Management), 0x0702 (Smart Energy: Metering), 0x0B04 (Electrical Measurement) <sup>1)</sup> |
| Mounting type                          | Recessed/Suspended/Surface                                                                                                                           |
| Mounting location                      | Ceiling                                                                                                                                              |
| Application environment                | Indoor                                                                                                                                               |
| Mounting length                        | 575 mm                                                                                                                                               |
| Mounting width                         | 575 mm                                                                                                                                               |
| Mounting depth                         | 50 mm                                                                                                                                                |
| Mechanically adjustable                | No                                                                                                                                                   |
| With light source                      | Yes                                                                                                                                                  |
| Replaceable light source               | Yes                                                                                                                                                  |

<sup>1)</sup> Internet of Things. Supports data transfer via gateway to cloud-based monitoring platforms, such as LEDVANCE VIVARES Cloud

## Lifespan

|                            |                        |
|----------------------------|------------------------|
| Lifespan L70/B50 at 25 °C  | 100000 h <sup>1)</sup> |
| Lifespan L80/B10 at 25 °C  | 70000 h <sup>1)</sup>  |
| Lifespan L80/B50 at 25 °C  | 70000 h                |
| Lifespan L90/B10 at 25 °C  | 50000 h                |
| Number of switching cycles | 100000                 |

1) t[h]: L70 / B50 @ 25 °C (Ta), t[h]: L80 / B10 @ 25 °C (Ta), t[h]: L90 / B10 @ 25 °C (Ta)

### Control gear

|                             |               |
|-----------------------------|---------------|
| Output current              | 600...1200 mA |
| ECG - Output ripple current | < 5 %         |
| ECG - Length                | 119,0 mm      |
| ECG - Width                 | 45 mm         |
| ECG - Height                | 25 mm         |

### Emergency lighting

|                                           |                                                                                 |
|-------------------------------------------|---------------------------------------------------------------------------------|
| Type of Emergency Lighting (EL)           | EL certified driver (0Hz / DC operation) for central battery operation included |
| Type of emergency operation test          | None                                                                            |
| Wattage in emergency operation mode       | 6.5 W                                                                           |
| Luminous flux in emergency operation mode | 720 lm                                                                          |

### Certificates & Standards

|                                                      |                           |
|------------------------------------------------------|---------------------------|
| Standards                                            | CE / CB / TÜV / UKCA / EL |
| Luminaire with limited surface temperature, "D sign" | No                        |
| Ball shot safe                                       | No                        |
| Replaceable light source (EPREL)                     | Not replaceable           |

### Additional product data

|                |         |
|----------------|---------|
| Added function | VIVARES |
|----------------|---------|

### Components for light control

| Components Light Control                                                            |                                                     |               |
|-------------------------------------------------------------------------------------|-----------------------------------------------------|---------------|
| Product image                                                                       | Product name                                        | EAN           |
|  | MANUAL CONTROL UNIT SELECT DIRECT 100-240 TW RGB ZB | 4099854476334 |
|   | SENSOR DIRECT LS-PD-7 IR CI ZB                      | 4099854476358 |
|  | SWITCH KINETIC DIRECT 4B WT M ZB                    | 4099854589799 |

| Product image                                                                       | Product name                     | EAN           |
|-------------------------------------------------------------------------------------|----------------------------------|---------------|
|    | SWITCH KINETIC DIRECT 4B WT G ZB | 4099854589812 |
|    | SWITCH KINETIC DIRECT 4B BK ZB   | 4099854589836 |
|    | SWITCH KINETIC DIRECT 4B GR ZB   | 4099854589850 |
|     | VIVARES ZB CONTROL               | 4058075427488 |
|     | VIVARES ZB L/O SENS 220-240      | 4058075446182 |
|   | VIVARES ZB O SENS 220-240        | 4058075544222 |
|   | VIVARES ZB COUPLER               | 4058075463806 |
|  | VIVARES ZB SENS ADAPTER          | 4058075650107 |

## EQUIPMENT / ACCESSORIES

- Accessories for several mounting options available
- Connector box with 5-pole terminal included
- Security rope for luminaire included
- Security brackets preinstalled
- External control gear included
- Special mounting frame with an overall height of only 50 mm available separately

## Safety advice

- All electrical connections must be made by a qualified person.
- Caution, risk of electric shock.
- The luminaires are not suitable for covering with thermally insulated material.

## DOWNLOAD DATA

| Documents and certificates                                                        |                                        | Document name                               |
|-----------------------------------------------------------------------------------|----------------------------------------|---------------------------------------------|
|   | User instruction / safety instructions | User Instruction G11230683 PANEL PROTECT ZB |
|   | Legal information                      | PL PROT ZB P                                |
|   | Legal information                      | G11239899 Legal Insert                      |
|   | Legal information                      | Safety Insert G11207793                     |
|   | Legal information                      | App Download guide                          |
|   | Declarations of conformity             | PL PROT                                     |
|   | Declarations of conformity UKCA        | PL PROT                                     |
|  | EU Data Act                            | SMART ZigBee Lamps and Luminaires           |

| Photometric and lighting design files                                              |                                     | Document name            |
|------------------------------------------------------------------------------------|-------------------------------------|--------------------------|
|  | IES file (IES)                      | PL PROT 600 ZB P 36W 830 |
|  | LDT file (Eulumdat)                 | PL PROT 600 ZB P 36W 830 |
|  | UGR file (UGR table)                | PL PROT 600 ZB P 36W 830 |
|  | Light distribution curve type cone  | PL PROT 600 ZB P 36W 830 |
|  | Light distribution curve type polar | PL PROT 600 ZB P 36W 830 |

| CAD/BIM files                                                                      |              | Document name |
|------------------------------------------------------------------------------------|--------------|---------------|
|  | BIM Revit 3D | PL PROT       |

| Tender texts                                                                       |                  | Document name                       |
|------------------------------------------------------------------------------------|------------------|-------------------------------------|
|  | Tender documents | PANEL PROTECT 600 ZIGBEE 36W 830-en |

## LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume                |
|---------------|------------------------------|--------------------------------------|--------------|-----------------------|
| 4099854514531 | Folding box<br>1             | 41 mm x 602 mm x 602 mm              | 2488.00 g    | 14.86 dm <sup>3</sup> |

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume                |
|---------------|------------------------------|--------------------------------------|--------------|-----------------------|
| 4099854514548 | Shipping box<br>5            | 620 mm x 229 mm x 631 mm             | 13522.00 g   | 89.59 dm <sup>3</sup> |

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

---

#### References / Links

– For Guarantee see [www.ledvance.com/guarantee](http://www.ledvance.com/guarantee)

---

#### DISCLAIMER

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.