

PRODUCT DATASHEET

PL PROT 600 ZB P 36W 840

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

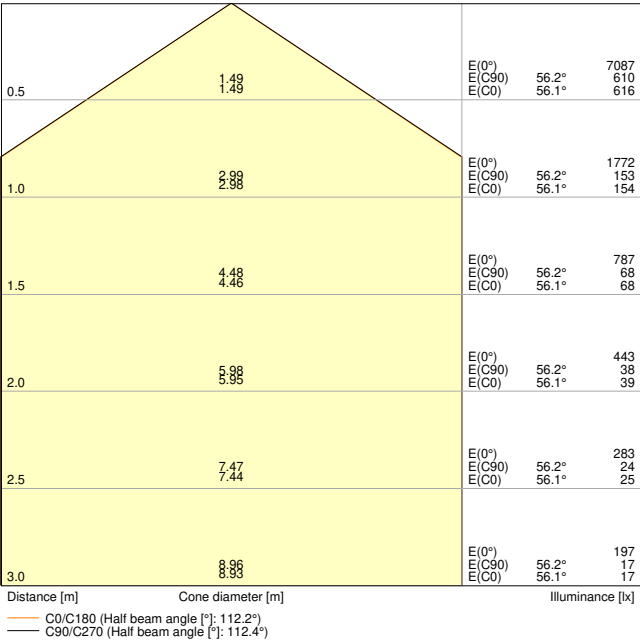
- IoT-ready luminaire with Zigbee 3.0 technology
- Type of protection: IP54 (frontside), IP20 (backside)
- Steel housing with notch in the backside for the driver to allow maximum height of 34 mm
- PMMA diffuser
- 5-pole terminal block, cable cross section up to 5 x 2.5 mm²
- Lifetime (L90/B10): 50,000 h (at 25° C)
- Panel can be customized with optical sensors on individual request

TECHNICAL DATA**Electrical data**

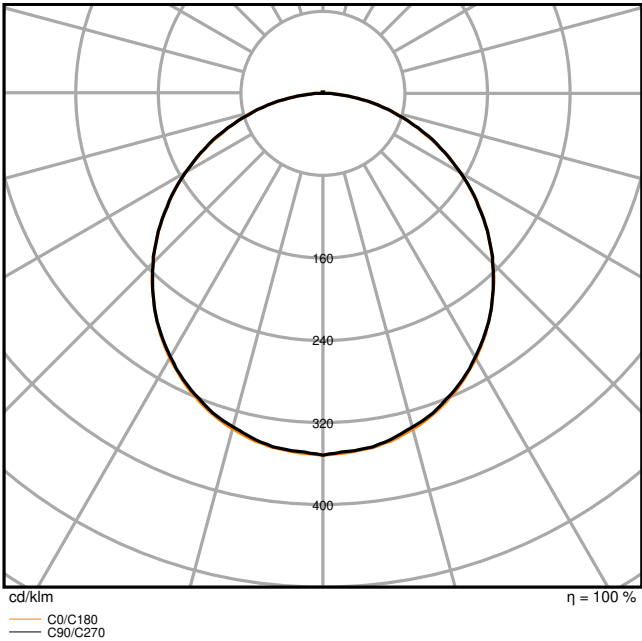
Nominal wattage	36.00 W
Nominal voltage	220...240 V
Mains frequency	0/50/60 Hz
Nominal current	165.000 mA
Inrush current	60 A
Inrush current time T_{h50}	2.72 μ s
Max. number of luminaires per miniature circuit breaker B16	12
Max. number of luminaires per miniature circuit breaker C10	10
Max. number of luminaires per miniature circuit breaker C16	16
Power factor λ	> 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
Total luminous flux of contained light sources	6000 lm
Luminous efficacy	140 lm/W
Color temperature	4000 K
Light color (designation)	Cool White
Color rendering index Ra	> 80
Standard deviation of color matching	3 sdcm
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



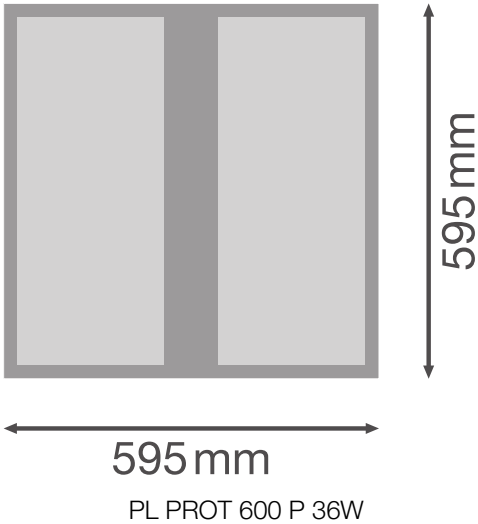
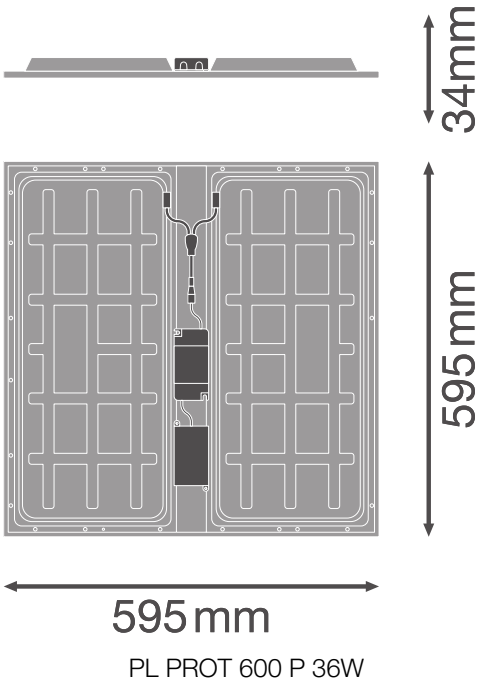
PL PROT 600 ZB P 36W 840



PL PROT 600 ZB P 36W 840

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	Steel
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
IoT ready	Support of Zigbee Data Clusters: 0x0302 (Luminaire Asset Management), 0x0702 (Smart Energy: Metering), 0x0B04 (Electrical Measurement) ¹⁾
Mounting type	Recessed/Suspended/Surface
Mounting location	Ceiling
Application environment	Indoor
Mounting length	575 mm
Mounting width	575 mm
Mounting depth	50 mm
Adjustable	No
With light source	Yes
Replaceable light source	Yes

¹⁾ 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 ¹⁾
Lifespan L80/B10 at 25 °C	70000 h ¹⁾
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
----------------	---------

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

Upgrade and replacement components

Components Light Control		
Product image	Product name	EAN
	MANUAL CONTROL UNIT SELECT DIRECT 100-240 TW RGB ZB	4099854476334

Product image	Product name	EAN
	SENSOR DIRECT LS-PD-7 IR CI ZB	4099854476358
	SWITCH KINETIC DIRECT 4B WT M ZB	4099854589799
	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

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	LUM PANELS_LI
	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 840
	LDT file (Eulumdat)	PL PROT 600 ZB P 36W 840
	UGR file (UGR table)	PL PROT 600 ZB P 36W 840
	Light distribution curve type cone	PL PROT 600 ZB P 36W 840
	Light distribution curve type polar	PL PROT 600 ZB P 36W 840

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

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854514555	Folding box 1	41 mm x 602 mm x 602 mm	2488.00 g	14.86 dm³
4099854514562	Shipping box 5	620 mm x 229 mm x 631 mm	13522.00 g	89.59 dm³

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

DISCLAIMER

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