PRODUCT DATASHEET
PL-CORE AC -2000-830

PrevaLED® Core AC G2 | Spot-, Down- and Wallmount Light Engines and Modules

Areas of application

- Spotlighting in shops
- Down- and wall lighting in offices, corridors, meeting rooms, workplaces
- Decorative and functional lighting in the hospitality industry
- Accent lighting

Product benefits

- Connect directly to 220...240 V AC mains voltage for class 1 luminaires
- No external driver required
- Easy efficiency upgrade from generation 1 modules due to unchanged form factor
- Enables very high degree of freedom in luminaire design
- Allows very compact luminaire designs
- Less complexity in logistics as no external driver or special cables are required
- Enhanced safety thanks to protective cover glass and reversible thermal shutdown
- Easy to integrate due to compatibility with Zhaga book 3 heatsinks and reflectors
- Chip-On-Board technology with great homogeneity, no diffuser required
- 5 year guarantee

Product features

- LED light engine with integrated driver
- Light emitting surface, diameter, mounting holes positioning according to Zhaga Book 3
- Poke-in wire connection (no special connector required)
- Available with luminous flux: 800 lm, 2,000 lm
- System efficacy: up to 109 lm/W
- Color temperature: 2,700 K, 3,000 K or 4,000 K
- Color rendering index R_a: typ. 83
- Maximum housing temperature: 80 °C at t_c point
- Initial color consistency: < 3 SDCM
- Power factor: > 0.95
- LED module is reinforced isolated to mounting surface
- Photobiological safety according to IEC/TR 62778, risk group RG1

TECHNICAL DATA

Electrical data

Nominal wattage	19.60 W
Construction wattage	19.60 W
Nominal voltage	230 V
Input voltage range	220…240 V
Type of current	AC
Nominal current	90.000 mA
Power factor λ	0.99

Photometrical data

Total useful luminous flux [PICOS]	2000 lm
Luminous efficacy	102 lm/W
Luminous flux	2000 lm
Luminous intensity	717 cd
Nom. useful luminous flux 120° [PICOS]	1770 lm
Color temperature	3000 K
Color rendering index Ra	83
Light color LED	White
Light color (designation)	Warm White
Standard deviation of color matching	≤3 sdcm
Rated peak intensity	717 cd
Lumen main.fact.at end of nom.life time	0.70

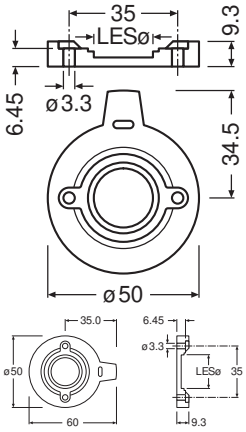
Light technical data

Beam angle	110 °
Rated beam angle (half peak value)	110.00 °
Starting time	0.3 s
Warm-up time (60 %)	0.30 s
Diameter of light emitting surface	19,0 mm

LED MODULE INFORMATION

Number of LEDs per module	1

Dimensions & Weight



Length	60.0 mm
Width	50.0 mm
Height	9.30 mm
Diameter	50,0 mm
Product weight	18.6 g

Colors & materials

Product color	White

Temperatures & operating conditions

Ambient temperature range	-20…+50 °C
Maximum temperature at tc test point	80 °C
Performance temp. acc. to IEC 62717	65 °C

Lifespan

Nominal lamp life time	50000 h
Number of switching cycles	50000

Additional product data

Product remark	For current photometric data and important safety, installation and application information, see www.osram.com/led-systems. / All the technical parameters apply to the entire module. In view of the complex manufacturing process for light emitting diodes, the typical values given above for the technical LED parameters are merely statistical values that do not necessarily correspond to the actual technical parameters of an individual product; individual products may vary from the typical values / Tolerance for optical and electrical data: +/-10%
Maximum thermal load	15.8 W

Capabilities

Dimmable	No

Certificates & Standards

Standards	Acc. to EN 62031 / Acc. to EN 55015 / Acc. to EN 61000-3-2 / Acc. to EN 61000-3-3 / Acc. to EN 61547 / Acc. to EN 62471
Type of protection	IP20
Energy consumption	19.60 kWh/1000h
Energy efficiency class	A+

LOGISTICAL DATA

Temperature range at storage	-20...85 °C

ADDITIONAL PRODUCT INFORMATION

- Installation by qualified electrician only.
- Please see the relevant application guides and instructions sheets for more detailed safety and mounting information. Additional information is available on request.
- For safety reasons the LED light engine must not be operated if the housing is damaged.
- The LED engine needs to be built into a luminaire.
- Not released for dimming operation.
- Suitable only for operation with line voltage.
- Conducting paths on the circuit board must not be damaged or destroyed during installation.
- Suitable for luminaires of protection class I, grounding is mandatory to comply with safety standards.
- When used in a luminaire of protection class II compliance with the required safety standards has to be ensured by the luminaire manufacturer.
- This LED module is not recommended to be used in rooms with fast moving parts as the light modulation can cause stroboscopic effects.
- This LED module might interfere with displays and cameras due to modulation.
- The LED module itself and all its components must not be stressed mechanically.
- For optimal cooling a thermal interface material should be applied between LED module and heat sink.
- It is highly recommended to use a thermal interface material (TIM). The TIM needs to enable adequate heat transfer, during installation it has to be taken care not to create air inclusions between surfaces. For this purpose it is recommended to use a heat sink with even and clean surfaces.
- The LED module should be mounted to a heat sink with M3 screws or suitable accessories. Maximum tightening torque for mounting screws need to be observed as excessive force may damage the housing.
- Protect against splashes!
- The module, as manufactured, has no inherent protection against corrosion. It is the user's responsibility to provide suitable protection against corrosive agents, such as moisture, condensation and other harmful elements.
- To avoid mechanical damage, the LED modules have to be attached securely to the intended mounting surface. It is recommended to avoid heavy vibration.
- Do not remove the cover or the safety glass from the LED module. Do not operate a LED module when the safety glass is broken, missing or cracked.

DOWNLOAD DATA

	Documents and certificates
PDF	Declarations Of Conformity CE

	Documents and certificates
PDF	Certificates

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4052899952775	Unpacked 1		18.60 g	
4052899953963	Shipping box 50	370 mm x 380 mm x 88 mm	2178.00 g	12.37 dm^3

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 more information on the multi-level guarantee and the terms and conditions of the guarantee visit www.ledvance.com/system-guarantee

DISCLAIMER

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