

PrevaLED® COIN 111 G2

Technical Information



Benefits

- Fits in most existing R111 traditional luminaires
- Easy & fast design-in for luminaire manufacturers
- Narrow beam angles, 24° and 40°
- High lumen output for HID lamp replacement
- Flexibility through 3 lumen packages and 3 CCTs

Applications

For Spot & Track-light in:

- Chain stores, Retail shops
- Shopping malls
- Exhibition halls
- Museums

Technical Operating Data

Product ** (made to order)	Nominal If [mA]	Nominal Power [W]	Radiance Angle [°]	Color Temp. [K]	Nominal Flux [lm]	Lum. Intensity [cd]	Typ. CRI [Ra]	Efficacy [lm/W]
PL-CN111-G2-1500-927-24D **	700	17.3	24	2700	1430	5150	92	82
PL-CN111-G2-1500-930-24D	700	17.3	24	3000	1430	5150	92	82
PL-CN111-G2-1500-940-24D	700	17.3	24	4000	1560	5620	92	90
PL-CN111-G2-1500-927-40D **	700	17.3	40	2700	1430	2570	92	82
PL-CN111-G2-1500-930-40D	700	17.3	40	3000	1430	2570	92	82
PL-CN111-G2-1500-940-40D	700	17.3	40	4000	1560	2810	92	90
PL-CN111-G2-2400-827-24D **	700	21.6	24	2700	2100	7560	83	97
PL-CN111-G2-2400-830-24D	700	21.6	24	3000	2300	8280	83	106
PL-CN111-G2-2400-840-24D	700	21.6	24	4000	2500	9000	83	115
PL-CN111-G2-2400-827-40D **	700	21.6	40	2700	2100	3780	83	97
PL-CN111-G2-2400-830-40D	700	21.6	40	3000	2300	4140	83	106
PL-CN111-G2-2400-840-40D	700	21.6	40	4000	2500	4500	83	115
PL-CN111-G2-3600-827-24D **	1050	32.1	24	2700	3000	10800	83	93
PL-CN111-G2-3600-830-24D	1050	32.1	24	3000	3300	11880	83	102
PL-CN111-G2-3600-840-24D	1050	32.1	24	4000	3600	12960	83	112
PL-CN111-G2-3600-827-40D **	1050	32.1	40	2700	3000	5400	83	93
PL-CN111-G2-3600-830-40D	1050	32.1	40	3000	3300	5940	83	102
PL-CN111-G2-3600-840-40D	1050	32.1	40	4000	3600	6480	83	112

All Data are related to the entire module (Testing at steady status. Ta=25°C ± 5°C. Testing current tolerance: ±5%)

Due to the special conditions of the manufacturing processes of LED the typical data of technical parameters can only reflect statistical figures and do not necessarily correspond to the actual parameters of each single product which could differ from the typical data

Technical Features

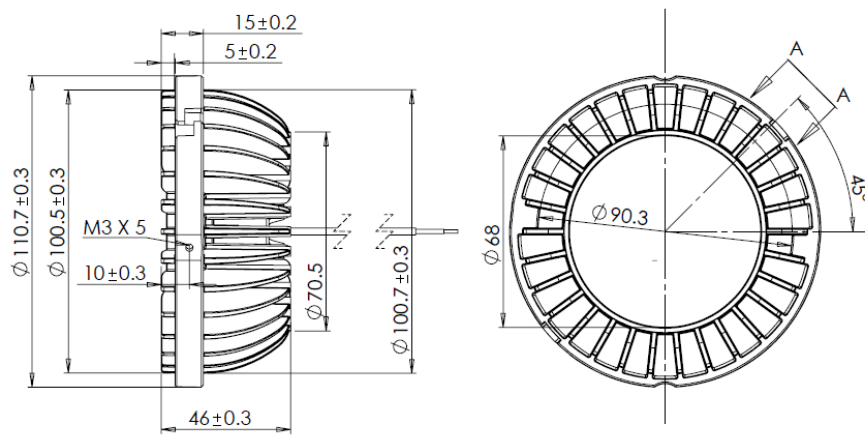
- Module ready to use with two cables:
 - red cable (+ pole)
 - black cable (- pole)
- Cable length 500 mm, cable Ø 1.6 mm/AWG 22
- Color Rendering index CRI (Ra) typ. 92 for PL-CN111-1500 and typ. 83 for PL-CN111-2400 & PL-CN111-3600
- Modul efficacy up to 115 lm/W
- Color tolerance: <MacAdam 4 SDCM
- Max. tc temperature of 85°C (see IEC/PAS 62717)
- L70B50 >= 50,000 hours at tp=75°C
- Best efficacy in combination with OSRAM OPTOTRONIC® constant current control gears

Minimum and Maximum Ratings

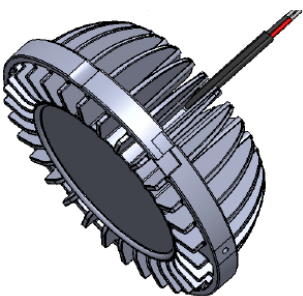
Product	Operating Temperature At tc-Point [C°]*	Storage Temperature [C°]*	Max. Current [mA]*
PL-CN111-G2-1500-927-24D	-20 ... 85	-40 ... 80	735
PL-CN111-G2-1500-930-24D	-20 ... 85	-40 ... 80	735
PL-CN111-G2-1500-940-24D	-20 ... 85	-40 ... 80	735
PL-CN111-G2-1500-927-40D	-20 ... 85	-40 ... 80	735
PL-CN111-G2-1500-930-40D	-20 ... 85	-40 ... 80	735
PL-CN111-G2-1500-940-40D	-20 ... 85	-40 ... 80	735
PL-CN111-G2-2400-827-24D	-20 ... 85	-40 ... 80	735
PL-CN111-G2-2400-830-24D	-20 ... 85	-40 ... 80	735
PL-CN111-G2-2400-840-24D	-20 ... 85	-40 ... 80	735
PL-CN111-G2-2400-827-40D	-20 ... 85	-40 ... 80	735
PL-CN111-G2-2400-830-40D	-20 ... 85	-40 ... 80	735
PL-CN111-G2-2400-840-40D	-20 ... 85	-40 ... 80	735
PL-CN111-G2-3600-827-24D	-20 ... 85	-40 ... 80	1100
PL-CN111-G2-3600-830-24D	-20 ... 85	-40 ... 80	1100
PL-CN111-G2-3600-840-24D	-20 ... 85	-40 ... 80	1100
PL-CN111-G2-3600-827-40D	-20 ... 85	-40 ... 80	1100
PL-CN111-G2-3600-830-40D	-20 ... 85	-40 ... 80	1100
PL-CN111-G2-3600-840-40D	-20 ... 85	-40 ... 80	1100

*) Exceeding maximum ratings for operating and storage temperature will reduce expected life time or destroy the LED Module.
Exceeding maximum ratings for operating current will cause hazardous overload and will likely destroy the LED Module.
The temperature of the LED module must be measured at the tc-point according to EN60598-1 in a thermally constant status with a temperature sensor or a temperature sensitive label. For exact location of the tc-point see drawing below.

Dimensions & Mechanical data



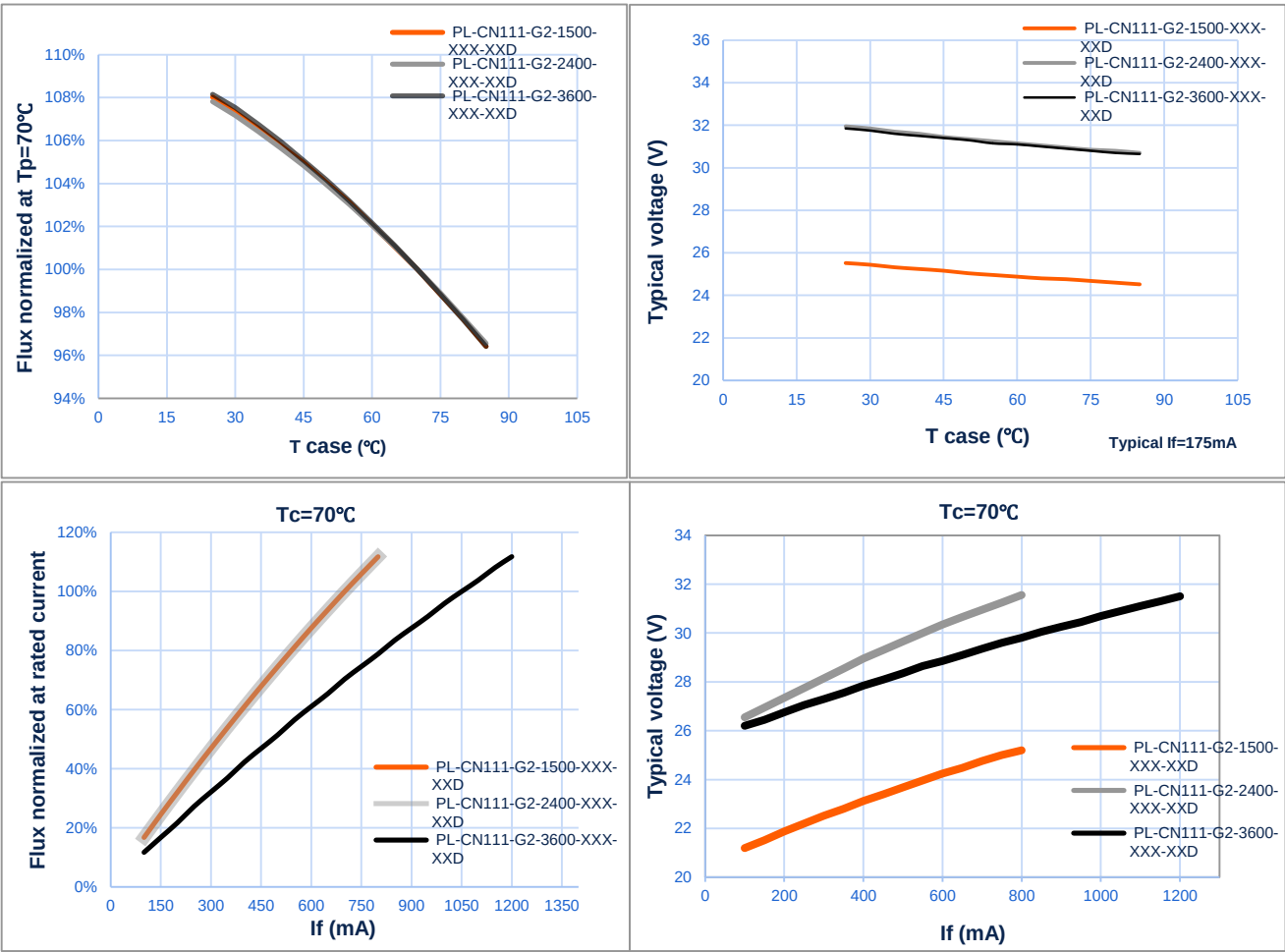
Dimension (mm)	Ø111 x 46 (H)
Mounting	AR111 similar
Optics	PC lens
Weight	290 grams



Standard Compliance

Safety	EN 62031, IEC 60598-1
EMC	EN 55015, EN 61547
Eye Security	EN 62471
Ingress Production	Dry Location, IP 20
Environment	RoHS

Electrical Operating Conditions



Safety Information

- The LED module itself and all its components must not be mechanically stressed.
- Assembly must not damage or destroy conducting paths on the circuit board.
- To avoid mechanical damage to the connecting cables, the module should be attached securely to the intended substrate. Heavy vibration should be avoided.

In order to drive OSRAM LED-Modules safely, it is absolutely necessary to operate them with an electronically stabilised power supply protecting against short circuits, overload and overheating.

To also ease the luminaire/installation approval, electronic control gear for LED or LED modules should carry the CE mark and be ENEC certified. The declarations of conformity must include the following standards:

CE: EC 61347-2-13, EN 55015, IEC 61547 and IEC 61000-3-2 - ENEC: 61347-2-13 and IEC/EN 62384.

Also check for the mark of an independent authorized certification institute.

Please see the relevant brochure for more detailed information (see "Related and Further Information").

OSRAM OPTOTRONIC® electronic control gear complies to all relevant standards and guarantees safe operation.

- Installation of LED modules (with power supplies) needs to be made with regard to all applicable electrical and safety standards. Only qualified personnel should be allowed to perform installations.
- Correct electrical polarity needs to be observed. **Wrong polarity will destroy the module** and will result in no light emission.
- Pay attention to standard ESD precautions when installing the module.
- The module, as manufactured, has no conformal coating and therefore offers no inherent protection against corrosion.
- Damage by corrosion will not be honored as a materials defect claim. It is the user's responsibility to provide suitable protection against corrosive agents such as moisture and condensation and other harmful elements.
- If the IP rating of the fixture should be higher than IP20, the design of the housing should be according to the IP standards in the application.
- Pay attention not to exceed the maximum operation temperature at tc point when the modules are used in enclosed environment.

Ordering Guide

Product Name	Product Code	Product Number (EAN10)	Product Number (EAN40)	Piece per box
PrevaLED® COIN 111-G2	PL-CN111-G2-1500-927-24D	4052899323735	4052899323742	12
PrevaLED® COIN 111-G2	PL-CN111-G2-1500-930-24D	4052899323797	4052899323803	12
PrevaLED® COIN 111-G2	PL-CN111-G2-1500-940-24D	4052899323810	4052899323827	12
PrevaLED® COIN 111-G2	PL-CN111-G2-1500-927-40D	4052899323834	4052899323841	12
PrevaLED® COIN 111-G2	PL-CN111-G2-1500-930-40D	4052899323858	4052899323865	12
PrevaLED® COIN 111-G2	PL-CN111-G2-1500-940-40D	4052899323872	4052899323889	12
PrevaLED® COIN 111-G2	PL-CN111-G2-2400-827-24D	4052899323896	4052899323902	12
PrevaLED® COIN 111-G2	PL-CN111-G2-2400-830-24D	4052899323919	4052899323926	12
PrevaLED® COIN 111-G2	PL-CN111-G2-2400-840-24D	4052899323933	4052899323940	12
PrevaLED® COIN 111-G2	PL-CN111-G2-2400-827-40D	4052899323957	4052899323964	12
PrevaLED® COIN 111-G2	PL-CN111-G2-2400-830-40D	4052899323971	4052899323988	12
PrevaLED® COIN 111-G2	PL-CN111-G2-2400-840-40D	4052899323995	4052899324008	12
PrevaLED® COIN 111-G2	PL-CN111-G2-3600-827-24D	4052899324015	4052899324022	12
PrevaLED® COIN 111-G2	PL-CN111-G2-3600-830-24D	4052899324039	4052899324046	12
PrevaLED® COIN 111-G2	PL-CN111-G2-3600-840-24D	4052899324053	4052899324060	12
PrevaLED® COIN 111-G2	PL-CN111-G2-3600-827-40D	4052899324077	4052899324084	12
PrevaLED® COIN 111-G2	PL-CN111-G2-3600-830-40D	4052899324091	4052899324107	12
PrevaLED® COIN 111-G2	PL-CN111-G2-3600-840-40D	4052899324121	4052899324138	12

Sales and Technical Support

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Sales and technical support is given by the local
OSRAM subsidiaries. Complete subsidiaries
listing is available at OSRAM homepage.

Application Note

Recommended OPTOTRONIC® devices

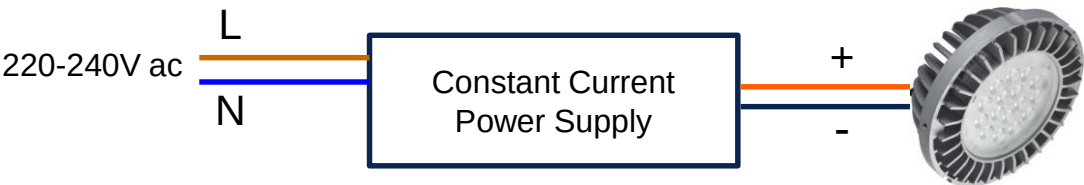
Drivers	Typ. Current [mA]										
		OTe 20/700 PC	OTe 20/700 TE	OTe 35/700 SD	OTe 35/700 PC	OTe 35/700 TE	OTe 35/1A TE	OTe 25 CS	OTe 35 CS	OTe 50 CS	OTe 25 PC
Modules											
Dimming		PC	TE	SD	PC	TE	TE	N.A	N.A	N.A	PC
PL-CN111-G2-1500	700	✓	✓	✓				✓			✓
PL-CN111-G2-2400	700			✓	✓	✓		✓	✓		✓
PL-CN111-G2-3600	1050						✓			✓	
Connection Type		B	B	A	B	B	B	A	A	A	B
Driver Availability		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Jan 2014

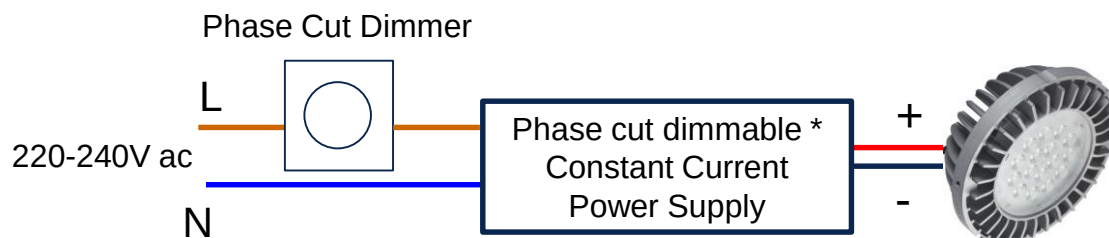
Reference Connection Diagrams

CAUTION

- The following diagrams are for reference only.
- Please refer to Instruction Sheet of power supply/ dimmer/ controller for details.
- Disconnected from mains supply before wiring work.
- Wrong polarity will destroy the module and result in no light emission.

Type A: 1-to-1 connection



Type B: 1-to-1 connection with Phase Cut/ Trailing Edge dimming

Remark: - 1pc OTe PC driver for 1pc PL-CN111-G2 @700mA or 1050mA
- Dimming by reduce output current
* Trailing Edge dimmable OT shall work with trailing edge dimmer.