

OT 165/220-240/1A0 1DIM G2 CE

OPTOTRONIC - 1DIM NFC IP20 | AstroDIM – constant current LED drivers



Product family features

- Supply voltage: 220...240 V
- Current output range: 70...1,050 mA
- AstroDIM for autonomous dimming with five independent levels (astro, time mode)
- Standby power consumption: < 0.5 W
- Constant Lumen Output (CLO)
- Integrated customizable thermal management (Driver Guard)

Product family benefits

- Easy and fast wireless luminaire programming
- Very high efficiency
- Optimized for AstroDIM operation
- Wide current output range: 200 mA...1050 mA
- High surge protection: up to 10 kV (in protection class I or II)
- Great flexibility due to wide operating temperature range of -40...55 °C
- Protection through double isolation between mains input and LED output

Areas of application

- Street and urban lighting
- Industry
- Suitable for outdoor applications in luminaires with IP > 65
- Suitable for use in outdoor luminaires of protection class I and II

Technical data

Electrical data

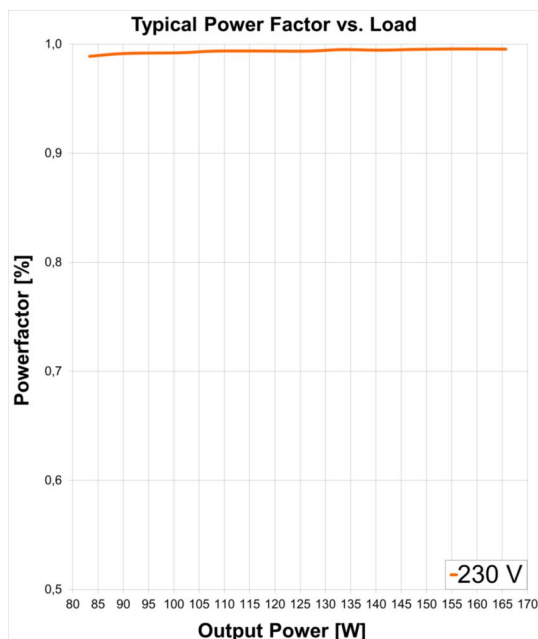
Nominal input voltage	220...240 V
Mains frequency	50...60 Hz
Input voltage AC	198...264 V
Total harmonic distortion	< 5 % ¹⁾
Power factor λ	0.85C...0.99
Efficiency in full-load	93 % ²⁾
Device power loss	13 W
Inrush current	77 A ³⁾
Max. ECG no. on circuit breaker 10 A (B)	5
Max. ECG no. on circuit breaker 16 A (B)	8
Surge capability (L/N-Ground)	10 kV
Surge capability (L-N)	6 kV
Nominal output voltage	130...260 V
U-OUT (working voltage)	300 V
Nominal output current	200...1050 mA
Output current tolerance	±3 %
Output ripple current (100 Hz)	< 5 %
Output PSTLM	≤1
Output SVM	≤0.4
Nominal output power	165 W
Maximum output power	165 W
Galvanic isolation	Double

1) At full load

2) at 230 V, 50 Hz

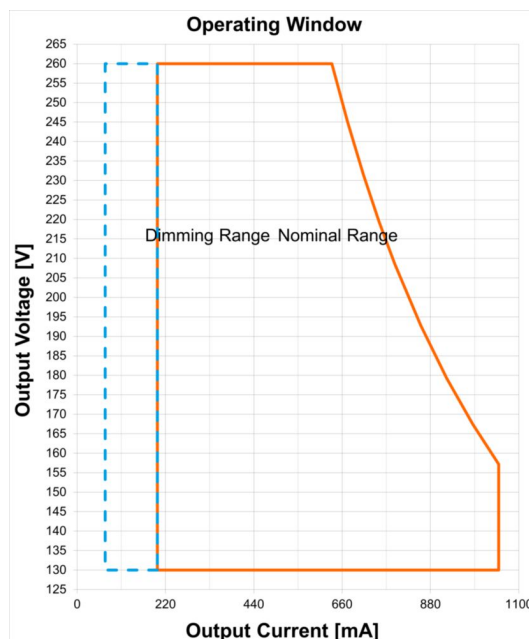
3) At 192 µs

Typical Power Factor v Load



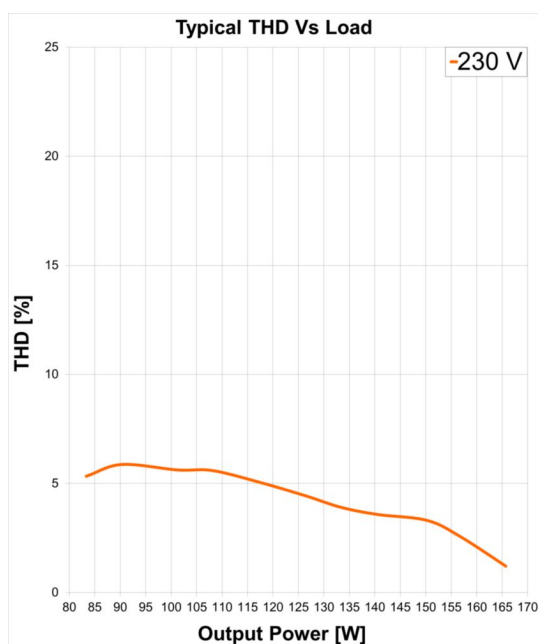
Typical Power Factor vs. Load OT 165/220-240/1A0 1DIM G2 CE

Operating Window



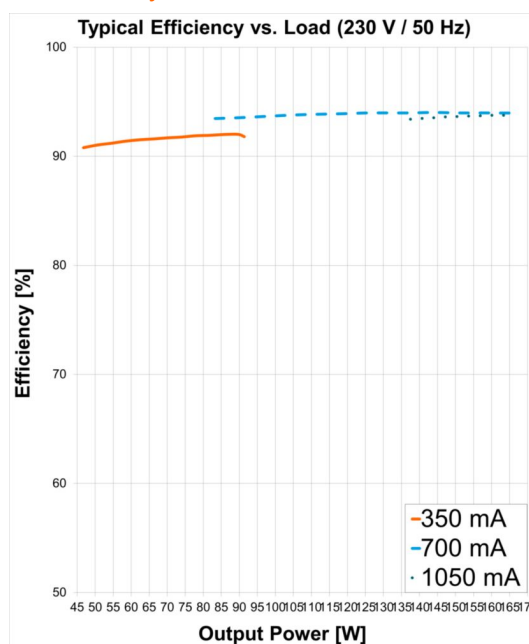
Operating Window OT DX 165 1A0 DIMA LT2 E

Typical THD v Load



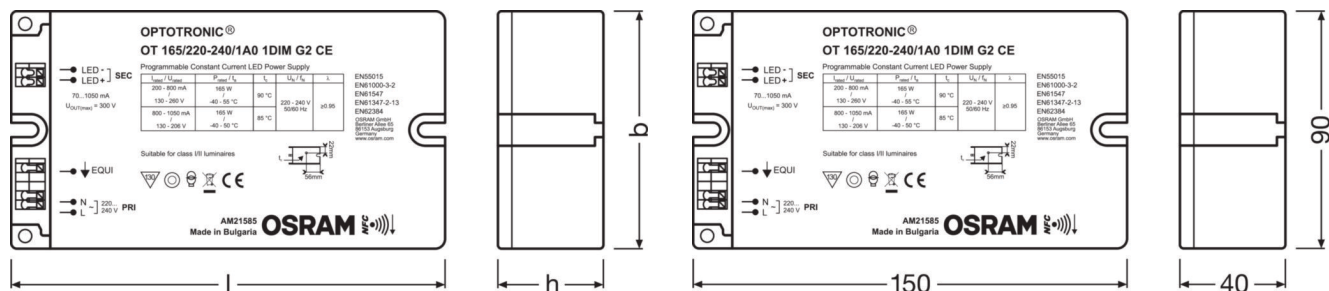
Typical THD vs Load OT 165/220-240/1A0 1DIM G2 CE

Typical Efficiency v Load 230 V 50 Hz



Typical Efficiency vs. Load (230 V / 50 Hz) OT 165/220-240/1A0 1DIM G2 CE

Dimensions & weight



Length	150.0 mm
Width	90.0 mm
Height	39.5 mm
Mounting hole spacing, length	134.0 mm
Cable cross-section, input side	0.2... 1.5 mm ²
Cable cross-section, output side	0.2... 1.5 mm ²
Wire preparation length, input side	8.5...9.5 mm
Wire preparation length, output side	8.5...9.5 mm
Product weight	785.00 g

Colors & materials

Casing material	Plastic
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Temperatures & operating conditions

Ambient temperature range	-40...+55 °C
Maximum temperature at tc test point	90 °C ¹⁾
Max.housing temperature in case of fault	130 °C
Temperature range at storage	-25...80 °C
Permitted rel. humidity during operation	5...85 % ²⁾

1) Tc(max) = 85 °C for output current >800 mA

2) Maximum 56 days/year at 85 %

Lifespan

ECG lifetime	50000 h / 100000 h ¹⁾
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1) $T_c = 85^\circ\text{C}$, with max. 10% failure rate / $T_c = 75^\circ\text{C}$, with max. 10% failure rate

Capabilities

Dimmable	Yes
Dimming interface	AstroDIM
Dimming range	10...100 %
Constant lumen function	Programmable
Max. cable length to lamp/LED module	2.0 m ¹⁾
Suitable for fixtures with prot. class	I / II
Number of channels	1
Overheating protection	Automatic reversible
Overload protection	Automatic reversible
Short-circuit protection	Automatic reversible
Intended for no-load operation	No
No-load proof	Yes

1) Output wires must be routed as close as possible to each other

Programming

Programming device	NFC
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Certificates & standards

Approval marks – approval	CE / ENEC / VDE / VDE-EMC / CCC / EAC
Standards	Acc. to EN 61347-1:2015 / Acc. to EN 61347-2-13:2014 + A1:2017 / Acc. to EN 62384:2006 + A1:2009-09 / Acc. to EN 55015:2013 + A1:2015 / Acc. to EN 61000-3-2:2014 / Acc. to EN 61000-3-3:2013 / Acc. to EN 61547:2009 / Acc. to ETSI EN 301 489-3 V2.1.1 (2019-03)
Type of protection	IP20
Protection class	I,II

Logistical data

Commodity code	85044083900
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Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)	
Date of Declaration	04-06-2024
Primary Article Identifier	4052899605381 8010703816763
Declaration No. in SCIP database	In work

Download Data

File		
Certificates	PDF	▶ OT VDE ENEC 40050684 290923
Brochures	PDF	▶ 4 DIM NFC G3 CE LED drivers and T4T C (EN)
Mandatory Publications	PDF	▶ EU Declaration of Conformity 3979050
User instruction	PDF	▶ OPTOTRONIC Outdoor

Ecodesign regulation information:

Intended for use with LED modules.

The forward voltage of the LED light source shall be within the defined operating window of the control gear in all operating conditions including dimming if applicable.

Separate control gear and light sources must be disposed of at certified disposal companies in accordance with Directive 2012/19/EU (WEEE) in the EU and with Waste Electrical and Electronic Equipment (WEEE) Regulations 2013 in the UK. For this purpose, collection points for recycling centres and take-back systems (CRSO) are available from retailers or private disposal companies, which accept separate control gear and light sources free of charge. In this way, raw materials are conserved and materials are recycled.

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899605381	OT 165/220-240/1A0 1DIM G2 CE	Shipping carton box 10 Pieces	385 x 300 x 125 mm	14.44 dm³	8191.00 g

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

Data privacy

This OSRAM driver can be configured using the Tuner4TRONIC software. This requires registering on www.myosram.com and downloading the Tuner4TRONIC software from the Internet. The Tuner4TRONIC software enables users to access and view the operational data of a luminaire or driver via the corresponding programming interfaces. A password key (Config Lock) must be set up in the driver via the Tuner4TRONIC software in order to control which users can access and view operational data. Follow the instructions for password setup. To grant an external person or company rights to access or view operational data, you can assign password keys. In this case, however, you are responsible for ensuring that the third party concerned takes notice of the information described here.

However, OSRAM can read out operating data from devices for maintenance and service purposes even when a password key has been assigned. In individual cases, OSRAM will also use its access rights in order to optimize or improve driver hardware and driver functions. In accordance with data privacy principles, any user of operating data (luminaire manufacturers, third parties with access rights) must ensure that personal data (e.g. name, address, location IDs) are only merged with the prior written consent of the person (end user) concerned. The respective user of the operating data is responsible for providing evidence of consent.

Accessories Optional

Product description	Accessory name	Accessory code
OT 165/220-240/1A0 1DIM G2 CE	PRH101 -USB	▶ 6977078996938
OT 165/220-240/1A0 1DIM G2 CE	CPR30 -USB	▶ 6977078996945
OT 165/220-240/1A0 1DIM G2 CE	NFC Scanner by TERTIUM Technology	▶ 4055462203571
OT 165/220-240/1A0 1DIM G2 CE	NFC Scanner by TERTIUM Technology	▶ 4055462290281

Disclaimer

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