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

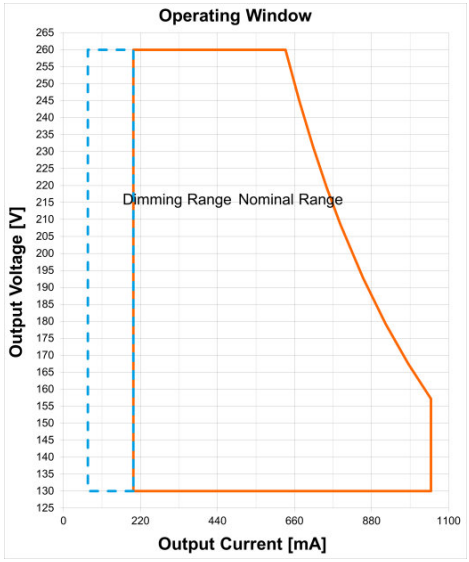
Electrical data

Nominal voltage	220…240 V
Input voltage AC	198…264 V
Nominal current	0.78 A
Mains frequency	50…60 Hz
Power factor λ	0.85C…0.99
Total harmonic distortion	< 5 % [1]
Device power loss	13 W
Inrush current	77 A [2]
Max. ECG no. on circuit breaker 10 A (B)	5
Max. ECG no. on circuit breaker 16 A (B)	8
Max. ECG no. on circuit breaker 25 A (B)	13
Surge capability (L/N-Ground)	10 kV
Surge capability (L-N)	6 kV
Nominal output power	165 W
Maximum output power	165 W
Efficiency in full-load	93 % [3]
Nominal output current	200…1050 mA
Output current tolerance	±3 %
Output ripple current (100 Hz)	< 5 %
Output PSTLM	≤1
Output SVM	≤0.4
Minimum output current	70 mA
Galvanic isolation	Double
Nominal output voltage	130…260 V
U-OUT (working voltage)	300 V
Max. no. of ECGs on 16A MCB with EBN-OS	21
Max. ECG no. on circuit breaker 10 A (C)	9
Max. ECG no. on circuit breaker 16 A (C)	14

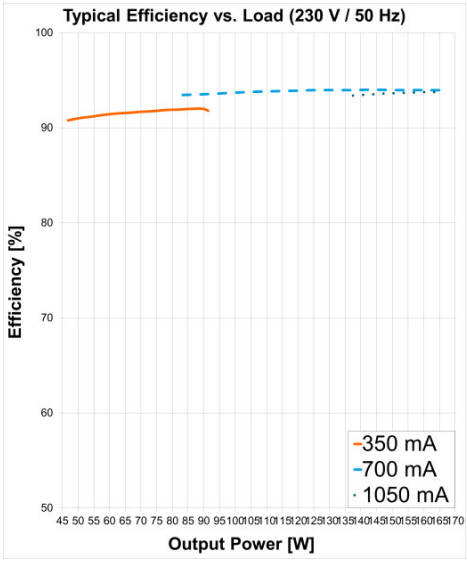
[1] At full load

[2] At 192 µs

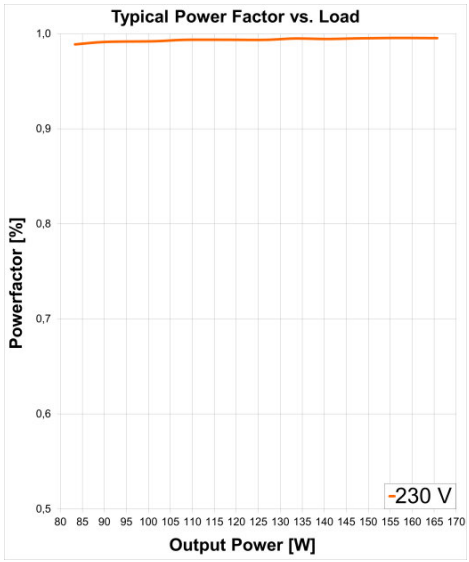
[3] at 230 V, 50 Hz



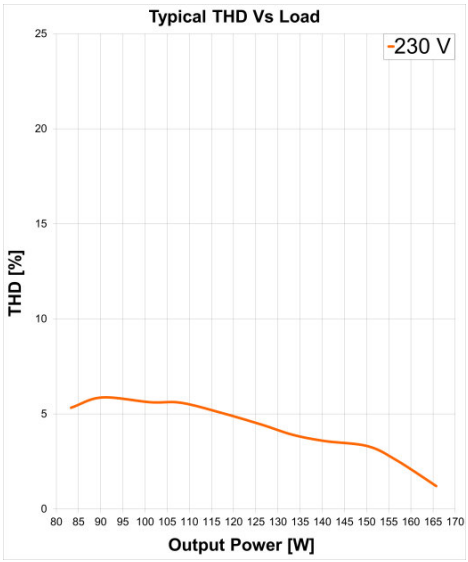
Operating Window OT DX 165 1A0 DIMA LT2 E



Typical Efficiency vs.Load (230 V 50 Hz) OT 165220-2401A0 1DIM G2 CE

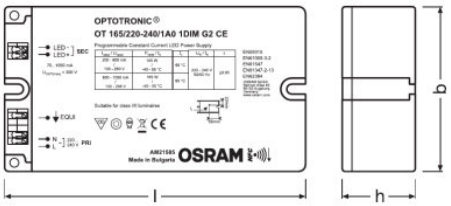


Typical Power Factor vs. Load OT 165220-2401A0 1DIM G2 CE



Typical THD vs Load OT 165220-2401A0 1DIM G2 CE

Dimensions & weight



Length	150.0 mm
Width	90.0 mm
Height	39.5 mm
Mounting hole spacing, length	134.0 mm
Mounting hole spacing, width	-
Product weight	785.00 g
Cable cross-section, input side	0.2…1.5 mm²
Cable cross-section, output side	0.2…1.5 mm²
Wire preparation length, input side	8.5…9.5 mm

Temperatures & operating conditions

Ambient temperature range	-40…+55 °C [1]
Temperature range at storage	-25…80 °C
Maximum temperature at tc test point	90 °C [2]
Max.housing temperature in case of fault	130 °C
Permitted rel. humidity during operation	5…85 % [3]

[1] Ta(max) = 50°C for output current >800 mA

[2] Tc(max) = 85°C for output current >800 mA

[3] Maximum 56 days/year at 85 %

Lifespan

ECG lifetime	50000 / 100000 h [1]

[1] T_c = 85°C, with max. 10% failure rate / T_c = 75°C, with max. 10% failure rate

Capabilities

Dimmable	Yes
Dimming interface	AstroDIM
Dimming range	10…100 %

Suitable for fixtures with prot. class	I / II
Constant lumen function	Programmable
Short-circuit protection	Automatic reversible
No-load proof	Yes
Intended for no-load operation	No
Max. cable length to lamp/LED module	2.0 m [1)]
Overload protection	Automatic reversible
Number of channels	1

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

Programming

Programming device	NFC

Certificates & standards

Type of protection	IP20
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)
Approval marks – approval	CE / ENEC / VDE / VDE-EMC / CCC / EAC

Logistical data

Commodity code	850440839000

Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh)	
Date of Declaration	12-05-2023
Primary Article Identifier	4052899605381 | 4050732430831 | 8010703816763
Candidate List Substance 1	Lead
CAS No. of substance 1	7439-92-1
Safe Use Instruction	The identification of the Candidate List substance is sufficient to allow safe use of the article.
Declaration No. in SCIP database	152e5914-5c70-44c0-894b-48cb3f2a5dab | 33086005-6e9a-4925-8b1d-8d4993a3aff1 | 5df14b72-4d90-4d71-8e2e-bccadc2fa0ad

Download Data

	File
	User instruction OPTOTRONIC Outdoor
	Brochures 4 DIM NFC G3 CE LED drivers and T4T C (EN)
	Certificates OT ENEC 40050684 041122
	Certificates OT EMC 40044675 031022
	Declarations of conformity EU Declaration of Conformity 3979050

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	385 mm x 300 mm x 125 mm	14.44 dm^3	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.

Accessories Optional

Product description	Accessory name	Accessory code
OT 165/220...240/1A0 1DIM G2 CE	NFC Scanner by TERTIUM Technology	4055462290281

Data privacy

This OSRAM driver can be configured using the Tuner4TRONIC software. This requires registering on www.myosram.com and downloading theTuner4TRONIC 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.

Disclaimer

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