OT 200/ 220-240/1A4 2DIM P7

OPTOTRONIC - 2DIM NFC IP67 | 2DIM, NFC – constant current LED drivers

Product family features

- 2DIM functionality (AstroDIM, 1...10 V)
- Wide output current range
- Adjustable and Constant Lumen Output (CLO)
- Short-circuit, overload and overtemperature protection
- High IP protection (IP67)
- 1...10 V dimming (minimum 10%)

Product family benefits

- Easily programmable by NFC (AstroDIM / Constant lumen)
- High surge protection: up to 10 kV
- High efficiency
- Lifetime: up to 100,000 h

Areas of application

- Street and urban lighting
- Industry lighting
- Suitable for luminaires of protection class I

Technical data

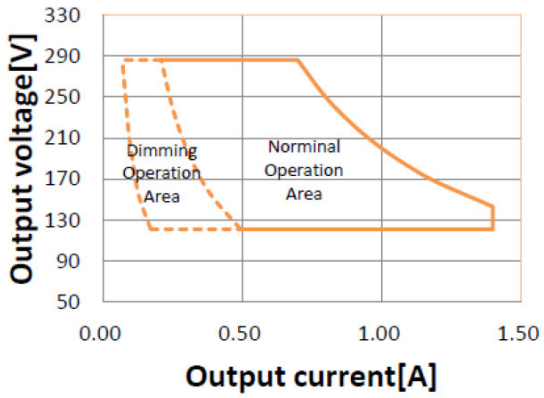
Electrical data

Nominal voltage	220…240 V
Input voltage AC	198…264 V
Nominal current	1 A
Mains frequency	50…60 Hz
Power factor λ	≥ 0.95
Total harmonic distortion	< 10 % [1)]
Device power loss	17 W
Inrush current	98 A [2)]
Max. ECG no. on circuit breaker 10 A (B)	3
Max. ECG no. on circuit breaker 16 A (B)	5
Max. ECG no. on circuit breaker 25 A (B)	7
Surge capability (L/N-Ground)	10 kV
Surge capability (L-N)	6 kV
Nominal output power	100…200 W
Maximum output power	200 W
Efficiency in full-load	92 % [3)]
Nominal output current	700…1400 mA
Default output current	700 mA
Output current tolerance	±5 %
Output ripple current (100 Hz)	< ±5 %
Minimum output current	400 mA
Galvanic isolation	basic
Nominal output voltage	121…286 V
U-OUT (working voltage)	350 V

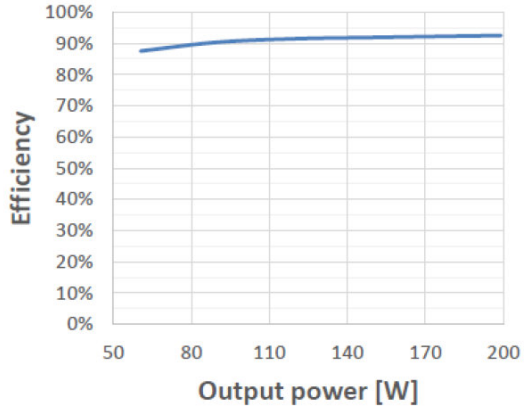
1) At full load

2) Max, th = 260µs

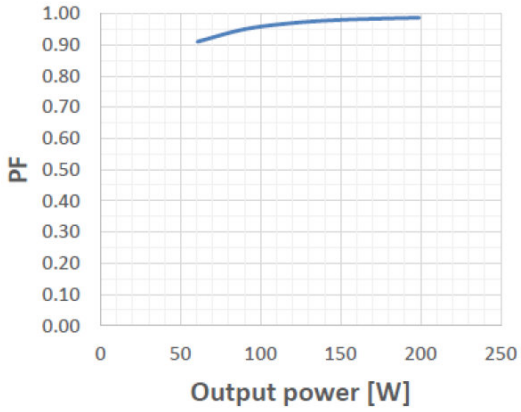
3) at 230 V, 50 Hz



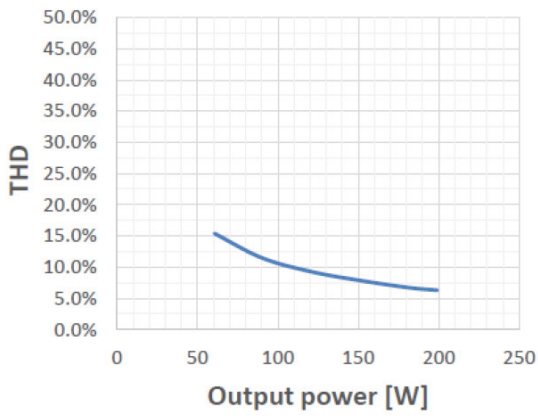
OT 200 2DIM NFC IP67 Operating Window



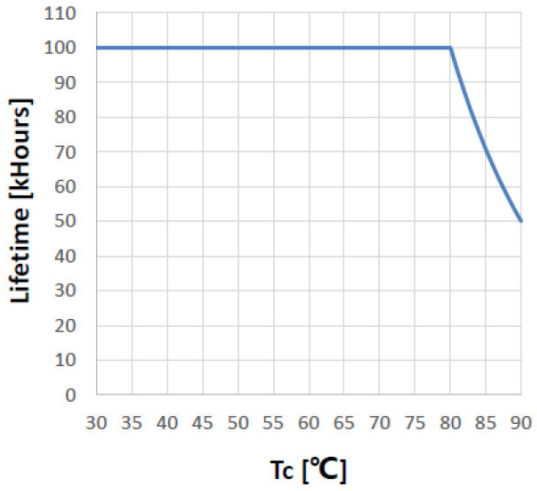
OT 200 2DIM NFC IP67 Typical Efficiency vs. Load (230V 50 Hz)



OT 200 2DIM NFC IP67 Typical Power Factor vs. Load

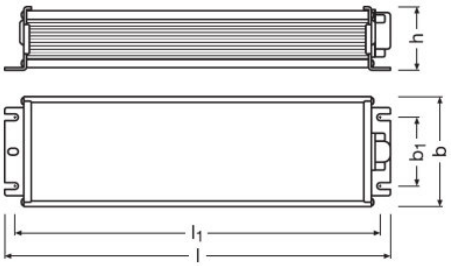


OT 200 2DIM NFC IP67 Typical THD vs Load



OT 200 2DIM NFC IP67 Lifetime vs. Case Temp

Dimensions & weight



Length	228.4 mm
Width	68.5 mm
Height	39.6 mm
Mounting hole spacing, length	215.6 mm
Mounting hole spacing, width	42.9 mm
Product weight	1000.00 g
Cable cross-section, input side	1.0 mm²
Cable cross-section, output side	1.0 mm²
Wire preparation length, input side	10 mm
Wire preparation length, output side	10 mm

Cable/wire length, output side	300±20 mm
Cable/wire length, input side	590±20 mm
Cable/wire length, control input	220±20 mm

Colors & materials

Casing material	Aluminium

Temperatures & operating conditions

Ambient temperature range	-40…+55 °C
Temperature range at storage	-40…+85 °C
Maximum temperature at tc test point	90 °C
Max.housing temperature in case of fault	120 °C
Permitted rel. humidity during operation	5…95 % [1)]

[1)] Non condensing, absolute humidity: 36g/m³

Lifespan

ECG lifetime	50000 / 100000 h [1)]

[1)] At maximum T_c = 85°C / 10% failure rate / At maximum T_c = 75°C / 10% failure rate

Capabilities

Dimmable	Yes
Dimming interface	AstroDIM / 1…10 V / Pulse Width Modulation
Dimming range	10…100 %
Suitable for fixtures with prot. class	I
Constant lumen function	Yes
NTC input	No
Short-circuit protection	Automatic reversible
No-load proof	Automatic reversible
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

Tuner4TRONIC	Yes
Programming device	NFC

Certificates & standards

Type of protection	IP67
Standards	Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 55015/Acc. to EN 61547/Acc. to EN 61000-3-2/Acc. to EN 61000-3-3/Acc. to EN 62384/EN 60598-1(ED.8)
Approval marks – approval	CE / CCC / RCM / ENEC 05 / TISI

Logistical data

Commodity code	850440829000

Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh)	
Date of Declaration	14-04-2022
Primary Article Identifier	4062172069649
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	f9327dc7-ae42-40a0-a5d6-4f4e72df6c55

Additional product information

- Input overvoltage protection: the driver withstands an input voltage up to 350 Vac for a maximum of two hours, shut down of the output load might occur in case the supply voltage exceeds the declared input voltage range;
- Output short circuit protection: short circuit current is limited to the actual output current setting without damage to the unit. See typical operating window graph for details;
- Input voltage range: Nominal operation at 198 – 264Vac. Workable at 120 – 277Vac without safety issue (refer to [8] Typical Input Voltage vs. Load), but normal performance such as THD, EMI, lifetime etc are not guaranteed;
- Over temperature protection: the driver is protected against temporary overheating by shutting down until the overheating eliminated; Auto-reversible when temperature back to normal;
- Not suitable to be mounted in celling corner
- The LED control gear cannot be abutted against or covered by normally flammable materials or used in installations where building insulation or debris is, or may be, present in normal use.
- The external flexible cable or cord of this driver cannot be replaced; if the cord is damaged, the driver shall be destroyed.
- The dimmer should fulfill at least basic insulation between control voltage and dimming circuit (for Australia and New Zealand).
- The startup time to reach the set output current is less than 2s.
- The protective earth (GNYE/PE wire, housing) has to be connected to the heat sink of the LED module to improve the capability of the system to withstand a surge and EMI in critical luminaires.
- For further details please consult the 2DIMLT2 application guide.
- Output over load/voltage protection: In case the input voltage of the load exceeds the output voltage range which is auto defined by output current setting of the driver (Vo=Po/Io), it automatically reduces the output current. Auto-reversible without mains power on/off;
- No load protection: the driver automatically adjusts the output voltage to the maximum output voltage which is auto defined by output current setting if no load is connected. Auto-reversible with the correct load connected;

Product datasheet

Download Data

	File
	User instruction OPTOTRONIC 2DIM P7
	Certificates ENEC Certificate

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
4062172069649	OT 200/ 220-240/1A4 2DIM P7	Shipping carton box 10	495 mm x 309 mm x 130 mm	19.88 dm^3	10994.00 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 200/ 220-240/1A4 2DIM P7	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

OSRAM products must never be directly exposed to external influences. Always provide adequate protection for relevant applications (covers, housings etc.) otherwise any warranty claim will be invalid.