OT 2DIM NFC IP67 Outdoor

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					
Product description	**Nominal voltage**	**Input voltage AC**	**Nominal current**	**Mains frequency**	**Power factor λ**	**Total harmonic distortion**
OT 100/ 220-240/1A4 2DIM P7	220…240 V	198…264 V	0.50 A	50…60 Hz	≥ 0.95	< 10 % [1]
OT 150/ 220-240/1A4 2DIM P7	220…240 V	198…264 V	0.73 A	50…60 Hz	≥ 0.95	< 10 % [1]
OT 200/ 220-240/1A4 2DIM P7	220…240 V	198…264 V	1 A	50…60 Hz	≥ 0.95	< 10 % [1]
OT 240/ 220-240/1A0 2DIM P7	220…240 V	198…264 V	1.15 A	50…60 Hz	≥ 0.95	< 10 % [1]

Product description	**Device power loss**	**Inrush current**	**Max. ECG no. on circuit breaker 10 A (B)**	**Max. ECG no. on circuit breaker 16 A (B)**	**Max. ECG no. on circuit breaker 25 A (B)**	**Surge capability (L/N-Ground)**
OT 100/ 220-240/1A4 2DIM P7	11 W	62 A [2]	8	13	21	10 kV
OT 150/ 220-240/1A4 2DIM P7	13 W	96 A [6]	5	8	13	10 kV
OT 200/ 220-240/1A4 2DIM P7	17 W	98 A [7]	3	5	7	10 kV
OT 240/ 220-240/1A0 2DIM P7	17 W	139 A [7]	3	5	7	10 kV

Product description	**Surge capability (L-N)**	**Nominal output power**	**Maximum output power**	**Efficiency in full-load**
OT 100/ 220-240/1A4 2DIM P7	6 kV	50…100 W	100 W	91 % [3]
OT 150/ 220-240/1A4 2DIM P7	6 kV	75…150 W	150 W	92 % [3]
OT 200/ 220-240/1A4 2DIM P7	6 kV	100…200 W	200 W	92 % [3]
OT 240/ 220-240/1A0 2DIM P7	6 kV	120…240 W	240 W	93.5 % [3]

Product description	**Nominal output voltage**	**Nominal output current**	**Default output current**	**Output current tolerance**	**Output ripple current (100 Hz)**
OT 100/ 220-240/1A4 2DIM P7	72…144 V	700…1400 mA	700 mA	±5 %	< ±5 %
OT 150/ 220-240/1A4 2DIM P7	107…214 V	700…1400 mA	700 mA	±5 %	< ±5 %
OT 200/ 220-240/1A4 2DIM P7	143…286 V	700…1400 mA	700 mA	±5 %	< ±5 %
OT 240/ 220-240/1A0 2DIM P7	228…343 V	700…1050 mA	700 mA	±5 %	< ±5 %

				Dimensions & weight	
Product description	**Minimum output current**	**Galvanic isolation**	**U-OUT (working voltage)**	**Length**	**Width**
OT 100/ 220-240/1A4 2DIM P7	400 mA	Double	200 V	164.4 mm	68.5 mm
OT 150/ 220-240/1A4 2DIM P7	400 mA	basic	250 V	203.4 mm	68.5 mm
OT 200/ 220-240/1A4 2DIM P7	400 mA	basic	350 V	228.4 mm	68.5 mm
OT 240/ 220-240/1A0 2DIM P7	400 mA	basic	450 V	252.4 mm	68.5 mm

Product family datasheet

Product description	Height	Mounting hole spacing, length	Mounting hole spacing, width	Product weight	Cable cross-section, input side	Cable cross-section, output side
OT 100/ 220-240/1A4 2DIM P7	39.6 mm	151.6 mm	42.9 mm	720.00 g	1.0 mm²	1.0 mm²
OT 150/ 220-240/1A4 2DIM P7	39.6 mm	190.6 mm	42.9 mm	920.00 g	1.0 mm²	1.0 mm²
OT 200/ 220-240/1A4 2DIM P7	39.6 mm	215.6 mm	42.9 mm	1000.00 g	1.0 mm²	1.0 mm²
OT 240/ 220-240/1A0 2DIM P7	39.6 mm	239.6 mm	42.9 mm	1200.00 g	1.0 mm²	1.0 mm²

Product description	Wire preparation length, input side	Cable/wire length, control input	Wire preparation length, output side	Cable/wire length, input side
OT 100/ 220-240/1A4 2DIM P7	10 mm	220±20 mm	10 mm	590±20 mm
OT 150/ 220-240/1A4 2DIM P7	10 mm	220±20 mm	10 mm	590±20 mm
OT 200/ 220-240/1A4 2DIM P7	10 mm	220±20 mm	10 mm	590±20 mm
OT 240/ 220-240/1A0 2DIM P7	10 mm	220±20 mm	10 mm	590±20 mm

		Colors & materials	Temperatures & operating conditions	
Product description	Cable/wire length, output side	Casing material	Ambient temperature range	Temperature range at storage
OT 100/ 220-240/1A4 2DIM P7	300±20 mm	Aluminium	-40…+55 °C	-40…+85 °C
OT 150/ 220-240/1A4 2DIM P7	300±20 mm	Aluminium	-40…+55 °C	-40…+85 °C
OT 200/ 220-240/1A4 2DIM P7	300±20 mm	Aluminium	-40…+55 °C	-40…+85 °C
OT 240/ 220-240/1A0 2DIM P7	300±20 mm	Aluminium	-40…+55 °C	-40…+85 °C

				Lifespan	Capabilities
Product description	Maximum temperature at tc test point	Max.housing temperature in case of fault	Permitted rel. humidity during operation	ECG lifetime	Dimmable
OT 100/ 220-240/1A4 2DIM P7	85 °C	120 °C	5…95 % [4]	50000 / 100000 h [5]	Yes
OT 150/ 220-240/1A4 2DIM P7	85 °C	120 °C	5…95 % [4]	50000 / 100000 h [5]	Yes
OT 200/ 220-240/1A4 2DIM P7	90 °C	120 °C	5…95 % [4]	50000 / 100000 h [5]	Yes
OT 240/ 220-240/1A0 2DIM P7	85 °C	120 °C	5…95 % [4]	50000 / 100000 h [8]	Yes

Product description	Dimming interface	Dimming range	Suitable for fixtures with prot. class	Constant lumen function
OT 100/ 220-240/1A4 2DIM P7	AstroDIM / 1…10 V / Pulse Width Modulation	10…100 %	I	Yes
OT 150/ 220-240/1A4 2DIM P7	AstroDIM / 1…10 V / Pulse Width Modulation	10…100 %	I	Yes
OT 200/ 220-240/1A4 2DIM P7	AstroDIM / 1…10 V / Pulse Width Modulation	10…100 %	I	Yes

Product family datasheet

Product description	Dimming interface	Dimming range	Suitable for fixtures with prot. class	Constant lumen function
OT 240/ 220-240/1A0 2DIM P7	AstroDIM / 1...10 V / Pulse Width Modulation	10...100 %	I	Yes

Product description	NTC input	Short-circuit protection	No-load proof	Intended for no-load operation
OT 100/ 220-240/1A4 2DIM P7	No	Automatic reversible	Automatic reversible	No
OT 150/ 220-240/1A4 2DIM P7	No	Automatic reversible	Automatic reversible	No
OT 200/ 220-240/1A4 2DIM P7	No	Automatic reversible	Automatic reversible	No
OT 240/ 220-240/1A0 2DIM P7	No	Automatic reversible	Automatic reversible	No

				Programming
Product description	Max. cable length to lamp/LED module	Number of channels	Overload protection	Programming device
OT 100/ 220-240/1A4 2DIM P7	2.0 m	1	Automatic reversible	NFC
OT 150/ 220-240/1A4 2DIM P7	2.0 m	1	Automatic reversible	NFC
OT 200/ 220-240/1A4 2DIM P7	2.0 m	1	Automatic reversible	NFC
OT 240/ 220-240/1A0 2DIM P7	2.0 m	1	Automatic reversible	NFC

		Certificates & standards		
Product description	Tuner4TRONIC	Type of protection	Standards	Approval marks – approval
OT 100/ 220-240/1A4 2DIM P7	Yes	IP67	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)	CE / CCC / RCM / ENEC 05 / TISI
OT 150/ 220-240/1A4 2DIM P7	Yes	IP67	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)	CE / CCC / RCM / ENEC 05 / TISI
OT 200/ 220-240/1A4 2DIM P7	Yes	IP67	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)	CE / CCC / RCM / ENEC 05 / TISI

Product family datasheet

		Certificates & standards		
Product description	**Tuner4TRONIC**	**Type of protection**	**Standards**	**Approval marks – approval**
OT 240/ 220-240/1A0 2DIM P7	Yes	IP67	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)	CE / CCC / RCM / ENEC 05 / TISI

	Logistical data	Environmental information		
Product description	**Commodity code**	**Date of Declaration**	**Primary Article Identifier**	**Candidate List Substance 1**
OT 100/ 220-240/1A4 2DIM P7	850440829000	23-12-2021	4062172060677	Lead
OT 150/ 220-240/1A4 2DIM P7	850440829000	23-12-2021	4062172060691	Lead
OT 200/ 220-240/1A4 2DIM P7	850440829000	23-12-2021	4062172069649	Lead
OT 240/ 220-240/1A0 2DIM P7	850440829000	23-12-2021	4062172069663	Lead

Product description	**CAS No. of substance 1**	**Safe Use Instruction**	**Declaration No. in SCIP database**
OT 100/ 220-240/1A4 2DIM P7	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	dd02d336-2443-49bb-bd00-3d7ca233d5cb
OT 150/ 220-240/1A4 2DIM P7	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	19846064-a789-44fb-8c35-eba27eee41ea
OT 200/ 220-240/1A4 2DIM P7	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	f9327dc7-ae42-40a0-a5d6-4f4e72df6c55
OT 240/ 220-240/1A0 2DIM P7	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	78aea16c-f4d7-4d2d-b794-32f3cb7b6d50

1) At full load

2) Max, th = 155µs

3) at 230 V, 50 Hz

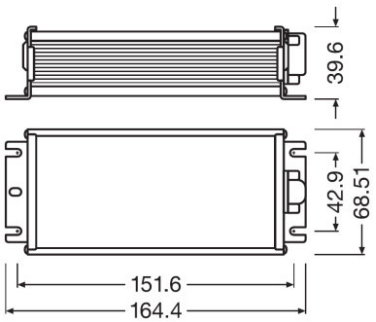
4) Non condensing, absolute humidity: 36g/m³

5) At maximum T_c = 85°C / 10% failure rate

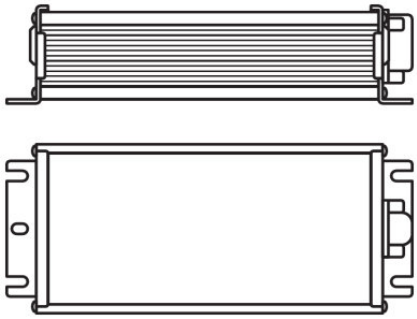
6) Max, th = 160µs

7) Max, th = 260µs

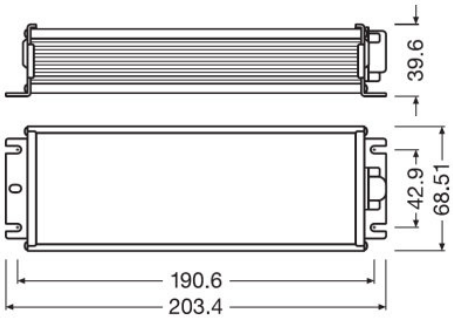
[8] At maximum T_c = 80°C / 10% failure rate



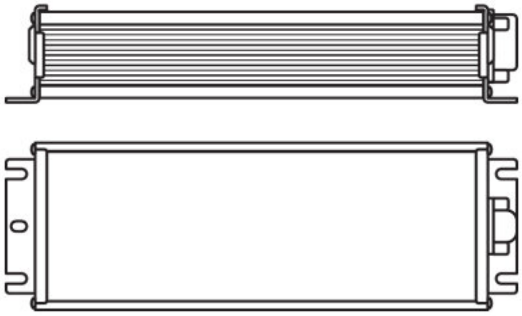
OT 100W 2DIM P7



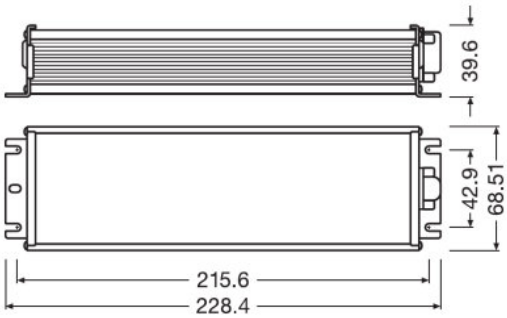
OT 100W 2DIM P7



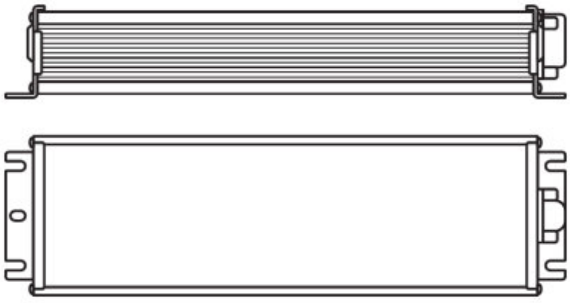
OT 150W 2DIM P7



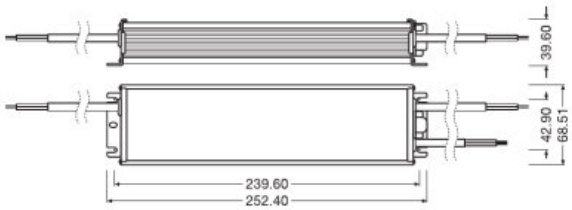
OT 150W 2DIM P7



OT 200W 2DIM P7



OT 200W 2DIM P7



Line Drawing of OT 240W 2DIM P7

Application advice

For more detailed application information and graphics please see product datasheet.

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;

Sales and Technical Support

Sales and Technical Support www.osram.com

Download Data

	File
	User instruction OPTOTRONIC 2DIM P7
	Certificates ENEC Certificate
	Certificates CB certification OT 240W 2DIM P7
	Certificates CCC certificate OT 240W 2DIM P7
	Certificates ENEC certification OT 240W 2DIM P7

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
4062172060677	OT 100/ 220-240/1A4 2DIM P7	Shipping carton box 10	469 mm x 253 mm x 128 mm	15.19 dm^3	8010.00 g
4062172060691	OT 150/ 220-240/1A4 2DIM P7	Shipping carton box 10	469 mm x 289 mm x 128 mm	17.35 dm^3	10136.00 g
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
4062172069663	OT 240/ 220-240/1A0 2DIM P7	Shipping carton box 10	495 mm x 333 mm x 130 mm	21.43 dm^3	13078.00 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 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.