

OPTOTRONIC - 1DIM NFC IP67

AstroDIM – constant current LED drivers



Product family features

- Supply voltage: 220...240 V
- Available with output current range: up to 1,400 mA
- AstroDIM for autonomous dimming with five independent levels (astro, time mode)
- Constant Lumen Output (CLO)
- IP rating: IP67 with independent installation
- Overtemperature protection

Product family benefits

- Easy and fast wireless luminaire programming
- Very high efficiency
- High surge protection: up to 6 kV
- Great flexibility due to wide operating temperature range of -40...55 °C
- Optimized for AstroDIM operation

Areas of application

- Street and urban lighting
- Industry

Product family datasheet

Technical data

Product description	Electrical data					
	Nominal voltage	Input voltage AC	Nominal current	Mains frequency	Power factor λ	Total harmonic distortion
OT 60/220...240/1A4 1DIMA P7	220...240 V	198...264 V	0.30 A	50...60 Hz	> 0.97	< 10 %
OT 100/220...240/1A4 1DIMA P7	220...240 V	198...264 V	0.50 A	50...60 Hz	> 0.95	< 10 %
OT 150/220...240/1A4 1DIMA P7	220...240 V	198...264 V	0.77 A	50...60 Hz	> 0.97	< 10 %
OT 200/220...240/1A4 1DIMA P7	220...240 V	198...264 V	0.95 A	50...60 Hz	> 0.98	< 10 %

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 60/220...240/1A4 1DIMA P7	8.0 W	52 A ¹⁾	7	11	17	10 kV
OT 100/220...240/1A4 1DIMA P7	11 W	52 A ⁶⁾	6	9	15	10 kV
OT 150/220...240/1A4 1DIMA P7	13 W	95 A ⁷⁾	3	5	8	10 kV
OT 200/220...240/1A4 1DIMA P7	15.0 W	119 A ⁸⁾	2	4	6	10 kV

Product description	Surge capability (L-N)	Nominal output power	Maximum output power	Efficiency in full-load	Nominal output current
OT 60/220...240/1A4 1DIMA P7	6 kV	60 W	60 W	88 % ²⁾	700...1400 mA
OT 100/220...240/1A4 1DIMA P7	6 kV	100 W	100 W	90.5 % ²⁾	700...1400 mA
OT 150/220...240/1A4 1DIMA P7	6 kV	150 W	150 W	92 % ²⁾	700...1400 mA
OT 200/220...240/1A4 1DIMA P7	6 kV	200 W	200 W	92 % ²⁾	700...1400 mA

Product description	Output current tolerance	Output ripple current (100 Hz)	Minimum output current	Galvanic isolation	Nominal output voltage
OT 60/220...240/1A4 1DIMA P7	±5 %	< 5 %	400 mA	Double	43...86 V
OT 100/220...240/1A4 1DIMA P7	±5 %	< 5 %	400 mA	Double	72...144 V
OT 150/220...240/1A4 1DIMA P7	±5 %	< 5 %	400 mA	basic	107...214 V
OT 200/220...240/1A4 1DIMA P7	±5 %	< 5 %	400 mA	basic	143...286 V

Product description	Max. no. of ECGs on 16A MCB with EBN-OS	Dimensions & weight				
		Length	Width	Height	Mounting hole spacing, length	Mounting hole spacing, width
OT 60/220...240/1A4 1DIMA P7	22	138.0 mm	82.4 mm	38.0 mm	126.0 mm	52.0 mm
OT 100/220...240/1A4 1DIMA P7	18	172.6 mm	68.5 mm	38.6 mm	159.8 mm	42.9 mm

Product family datasheet

Product description	Max. no. of ECGs on 16A MCB with EBN-OS	Dimensions & weight				
		Length	Width	Height	Mounting hole spacing, length	Mounting hole spacing, width
OT 150/220...240/1A4 1DIMA P7	10	212.6 mm	68.5 mm	38.6 mm	199.8 mm	42.9 mm
OT 200/220...240/1A4 1DIMA P7	8	227.6 mm	68.5 mm	38.6 mm	214.8 mm	42.9 mm

Product description	Product weight	Cable cross-section, input side	Cable cross-section, output side	Wire preparation length, input side	Temperatures & operating conditions
					Ambient temperature range
OT 60/220...240/1A4 1DIMA P7	540.00 g	1.0 mm ²	1.0 mm ²	10 mm	-40...+55 °C
OT 100/220...240/1A4 1DIMA P7	742.00 g	1.0 mm ²	1.0 mm ²	10 mm	-40...+55 °C
OT 150/220...240/1A4 1DIMA P7	940.00 g	1.0 mm ²	1.0 mm ²	10 mm	-40...+55 °C
OT 200/220...240/1A4 1DIMA P7	1022.00 g	1.0 mm ²	1.0 mm ²	10 mm	-40...+55 °C

Product description	Temperature range at storage	Maximum temperature at tc test point	Max.housing temperature in case of fault	Permitted rel. humidity during operation	Lifespan
					ECG lifetime
OT 60/220...240/1A4 1DIMA P7	-25...85 °C	85 °C	110 °C	5...85 % ³⁾	50000 / 100000 h ⁴⁾
OT 100/220...240/1A4 1DIMA P7	-25...85 °C	85 °C	110 °C	5...85 % ³⁾	50000 / 100000 h ⁴⁾
OT 150/220...240/1A4 1DIMA P7	-25...85 °C	85 °C	110 °C	5...85 % ³⁾	50000 / 100000 h ⁴⁾
OT 200/220...240/1A4 1DIMA P7	-25...85 °C	90 °C	110 °C	5...85 % ³⁾	50000 / 100000 h ⁴⁾

Product description	Capabilities			
	Dimmable	Dimming interface	Dimming range	Suitable for fixtures with prot. class
OT 60/220...240/1A4 1DIMA P7	Yes	AstroDIM	25...100 %	I / II
OT 100/220...240/1A4 1DIMA P7	Yes	AstroDIM	25...100 %	I
OT 150/220...240/1A4 1DIMA P7	Yes	AstroDIM	25...100 %	I
OT 200/220...240/1A4 1DIMA P7	Yes	AstroDIM	25...100 %	I

Product description	Constant lumen function	Short-circuit protection	No-load proof	Intended for no-load operation
OT 60/220...240/1A4 1DIMA P7	Yes	Yes	Yes	No
OT 100/220...240/1A4 1DIMA P7	Yes	Yes	Yes	No
OT 150/220...240/1A4 1DIMA P7	Yes	Yes	Yes	No

Product family datasheet

Product description	Constant lumen function	Short-circuit protection	No-load proof	Intended for no-load operation
OT 200/220...240/1A4 1DIMA P7	Yes	Yes	Yes	No

Product description	Max. cable length to lamp/LED module	Number of channels	Programming device	Type of protection
OT 60/220...240/1A4 1DIMA P7	2.0 m ⁵⁾	1	NFC	IP67
OT 100/220...240/1A4 1DIMA P7	2.0 m ⁵⁾	1	NFC	IP67
OT 150/220...240/1A4 1DIMA P7	2.0 m ⁵⁾	1	NFC	IP67
OT 200/220...240/1A4 1DIMA P7	2.0 m ⁵⁾	1	NFC	IP67

Product description	Standards	Approval marks – approval	Commodity code	Date of Declaration
OT 60/220...240/1A4 1DIMA P7	Acc. to EN 60598-1/Acc. to EN 61347-1/Acc. to EN 61547	CCC / CE / ENEC	850440829000	25-04-2022
OT 100/220...240/1A4 1DIMA P7	Acc. to EN 60598-1/Acc. to EN 61347-1/Acc. to EN 61547	CCC / CE / ENEC	850440829000	25-04-2022
OT 150/220...240/1A4 1DIMA P7	Acc. to EN 60598-1/Acc. to EN 61347-1/Acc. to EN 61547	CCC / CE / ENEC	850440829000	25-04-2022
OT 200/220...240/1A4 1DIMA P7	Acc. to EN 60598-1/Acc. to EN 61347-1/Acc. to EN 61547	CCC / CE / ENEC	850440829000	25-04-2022

Product description	Primary Article Identifier	Candidate List Substance 1	CAS No. of substance 1	Safe Use Instruction
OT 60/220...240/1A4 1DIMA P7	4052899495012 4062172040525 4050732430886 8010703806023	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.
OT 100/220...240/1A4 1DIMA P7	4052899495036 4062172040549 4050732430909 8010703806030	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.

Product family datasheet

Product description	Primary Article Identifier	Candidate List Substance 1	CAS No. of substance 1	Safe Use Instruction
OT 150/220...240/1A4 1DIMA P7	4052899495050 4062172040563 4050732430916 8010703806047	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.
OT 200/220...240/1A4 1DIMA P7	4052899495074 4062172040587 4050732430947 8010703806054	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.

Product description	Declaration No. in SCIP database
OT 60/220...240/1A4 1DIMA P7	c95e8b47-62a0-4a89-8a66-93138e6b5279 e4c88c46-a86a-4a40-a1b4-030d355868c5
OT 100/220...240/1A4 1DIMA P7	57F4A0CD-B22C-47CC-98CE-4D105ACD283E 6FB19E77-893A-4367-BCC4-3B97A239B7B4
OT 150/220...240/1A4 1DIMA P7	fc45e981-2222-4cfc-818c-3b3596c9a743 60c3abd9-1480-4f7d-ac69-3c7b77d33cb9
OT 200/220...240/1A4 1DIMA P7	de9ac287-8a2f-462b-b268-d9d87c24cbbe a189985d-b916-424f-aa35-690e93f63ab7

1) $t_{width} = 220 \mu s$ (measured at 50 % I_{peak})

2) at 230 V, 50 Hz

3) Maximum 56 days/year at 85 %

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

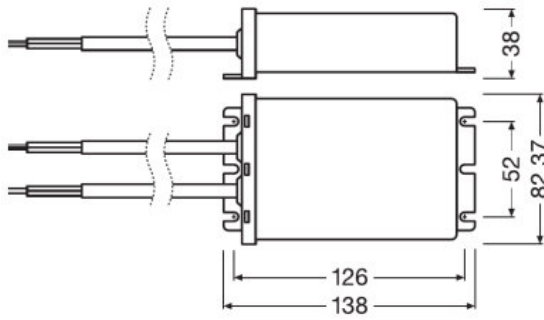
5) Output wires must be routed as close as possible to each other

6) $t_{width} = 250 \mu s$ (measured at 50 % I_{peak})

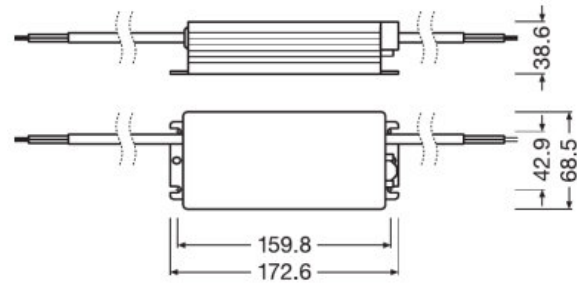
7) $t_{width} = 264 \mu s$ (measured at 50 % I_{peak})

8) $t_{width} = 262 \mu s$ (measured at 50 % I_{peak})

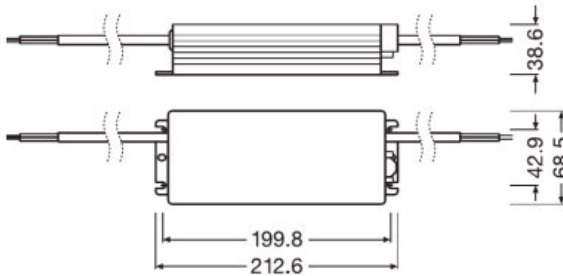
Product family datasheet



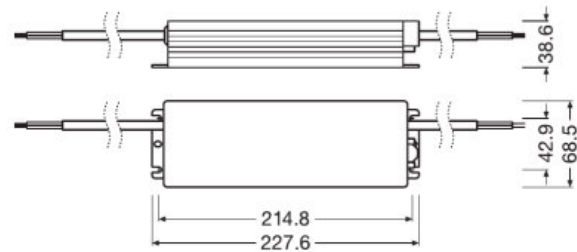
OT 60220-2401A4 1DIMA P7



OT 100220-2401A4 1DIMA P7



OT 150220-2401A4 1DIMA P7



OT 200220-2401A4 1DIMA P7



Application advice

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

Sales and Technical Support

Sales and Technical Support www.osram.com

Download Data

File	
	User instruction OPTOTRONIC 1DIMA P7
	Brochures Technical Application Guide - 4DIMLT2 G2 CE LED drivers (EN)

Product family datasheet



Declarations of conformity
OT 1DIMA P7 WP CE 3612841 110522

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
4052899495012	OT 60/220...240/1A4 1DIMA P7	Shipping carton box 20	519 mm x 273 mm x 228 mm	32.30 dm ³	12325.00 g
4052899495036	OT 100/220...240/1A4 1DIMA P7	Shipping carton box 10	469 mm x 253 mm x 128 mm	15.19 dm ³	8230.00 g
4052899495050	OT 150/220...240/1A4 1DIMA P7	Shipping carton box 10	469 mm x 289 mm x 128 mm	17.35 dm ³	10336.00 g
4052899495074	OT 200/220...240/1A4 1DIMA P7	Shipping carton box 10	469 mm x 304 mm x 128 mm	18.25 dm ³	11197.00 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 60/220...240/1A4 1DIMA P7	NFC Scanner by TERTIUM Technology	▶ 4055462290281
OT 100/220...240/1A4 1DIMA P7	NFC Scanner by TERTIUM Technology	▶ 4055462290281
OT 150/220...240/1A4 1DIMA P7	NFC Scanner by TERTIUM Technology	▶ 4055462290281
OT 200/220...240/1A4 1DIMA P7	NFC Scanner by TERTIUM Technology	▶ 4055462290281

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Disclaimer

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