

OT 1DIM NFC IP67 Outdoor

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

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

| Product description | Nominal output voltage | Nominal output current | Output current tolerance | Output ripple current (100 Hz) | Minimum output current |
|-------------------------------|------------------------|------------------------|--------------------------|--------------------------------|------------------------|
| OT 60/220...240/1A4 1DIMA P7 | 43...86 V | 700...1400 mA | ±5 % | < 5 % | 400 mA |
| OT 100/220...240/1A4 1DIMA P7 | 72...144 V | 700...1400 mA | ±5 % | < 5 % | 400 mA |
| OT 150/220...240/1A4 1DIMA P7 | 107...214 V | 700...1400 mA | ±5 % | < 5 % | 400 mA |
| OT 200/220...240/1A4 1DIMA P7 | 143...286 V | 700...1400 mA | ±5 % | < 5 % | 400 mA |

| Product description | Galvanic isolation | Max. no. of ECGs on 16A MCB with EBN-OS | Dimensions & weight | | |
|-------------------------------|--------------------|-----------------------------------------|---------------------|---------|---------|
| | | | Length | Width | Height |
| OT 60/220...240/1A4 1DIMA P7 | Double | 22 | 138.0 mm | 82.4 mm | 38.0 mm |
| OT 100/220...240/1A4 1DIMA P7 | Double | 18 | 172.6 mm | 68.5 mm | 38.6 mm |
| OT 150/220...240/1A4 1DIMA P7 | basic | 10 | 212.6 mm | 68.5 mm | 38.6 mm |
| OT 200/220...240/1A4 1DIMA P7 | basic | 8 | 227.6 mm | 68.5 mm | 38.6 mm |

Product family datasheet

| Product description | Mounting hole spacing, length | Mounting hole spacing, width | Product weight | Cable cross-section, input side | Cable cross-section, output side | Wire preparation length, input side |
|-------------------------------|-------------------------------|------------------------------|----------------|---------------------------------|----------------------------------|-------------------------------------|
| OT 60/220...240/1A4 1DIMA P7 | 126.0 mm | 52.0 mm | 540.00 g | 1.0 mm ² | 1.0 mm ² | 10 mm |
| OT 100/220...240/1A4 1DIMA P7 | 159.8 mm | 42.9 mm | 742.00 g | 1.0 mm ² | 1.0 mm ² | 10 mm |
| OT 150/220...240/1A4 1DIMA P7 | 199.8 mm | 42.9 mm | 940.00 g | 1.0 mm ² | 1.0 mm ² | 10 mm |
| OT 200/220...240/1A4 1DIMA P7 | 214.8 mm | 42.9 mm | 1022.00 g | 1.0 mm ² | 1.0 mm ² | 10 mm |

| Product description | Temperatures & operating conditions | | | |
|-------------------------------|-------------------------------------|------------------------------|--------------------------------------|------------------------------------------|
| | Ambient temperature range | Temperature range at storage | Maximum temperature at tc test point | Max.housing temperature in case of fault |
| OT 60/220...240/1A4 1DIMA P7 | -40...+55 °C | -25...85 °C | 85 °C | 110 °C |
| OT 100/220...240/1A4 1DIMA P7 | -40...+55 °C | -25...85 °C | 85 °C | 110 °C |
| OT 150/220...240/1A4 1DIMA P7 | -40...+55 °C | -25...85 °C | 85 °C | 110 °C |
| OT 200/220...240/1A4 1DIMA P7 | -40...+55 °C | -25...85 °C | 90 °C | 110 °C |

| Product description | Permitted rel. humidity during operation | Lifespan | Capabilities | |
|-------------------------------|------------------------------------------|--------------------------------|--------------|-------------------|
| | | ECG lifetime | Dimmable | Dimming interface |
| OT 60/220...240/1A4 1DIMA P7 | 5...85 % ³⁾ | 50000 / 100000 h ⁴⁾ | Yes | AstroDIM |
| OT 100/220...240/1A4 1DIMA P7 | 5...85 % ³⁾ | 50000 / 100000 h ⁴⁾ | Yes | AstroDIM |
| OT 150/220...240/1A4 1DIMA P7 | 5...85 % ³⁾ | 50000 / 100000 h ⁴⁾ | Yes | AstroDIM |
| OT 200/220...240/1A4 1DIMA P7 | 5...85 % ³⁾ | 50000 / 100000 h ⁴⁾ | Yes | AstroDIM |

| Product description | Dimming range | Suitable for fixtures with prot. class | Constant lumen function | Short-circuit protection |
|-------------------------------|---------------|----------------------------------------|-------------------------|--------------------------|
| OT 60/220...240/1A4 1DIMA P7 | 25...100 % | I / II | Yes | Yes |
| OT 100/220...240/1A4 1DIMA P7 | 25...100 % | I | Yes | Yes |
| OT 150/220...240/1A4 1DIMA P7 | 25...100 % | I | Yes | Yes |
| OT 200/220...240/1A4 1DIMA P7 | 25...100 % | I | Yes | Yes |

| Product description | No-load proof | Intended for no-load operation | Max. cable length to lamp/LED module | Number of channels | Programming |
|-------------------------------|---------------|--------------------------------|--------------------------------------|--------------------|--------------------|
| | | | | | Programming device |
| OT 60/220...240/1A4 1DIMA P7 | Yes | No | 2.0 m | 1 | NFC |
| OT 100/220...240/1A4 1DIMA P7 | Yes | No | 2.0 m | 1 | NFC |
| OT 150/220...240/1A4 1DIMA P7 | Yes | No | 2.0 m | 1 | NFC |
| OT 200/220...240/1A4 1DIMA P7 | Yes | No | 2.0 m | 1 | NFC |

Product family datasheet

| Product description | Certificates & standards | | | Logistical data |
|-------------------------------|--------------------------|--------------------------------------------------------|---------------------------|-----------------|
| | Type of protection | Standards | Approval marks – approval | Commodity code |
| OT 60/220...240/1A4 1DIMA P7 | IP67 | Acc. to EN 60598-1/Acc. to EN 61347-1/Acc. to EN 61547 | CCC / CE / ENEC | 850440829000 |
| OT 100/220...240/1A4 1DIMA P7 | IP67 | Acc. to EN 60598-1/Acc. to EN 61347-1/Acc. to EN 61547 | CCC / CE / ENEC | 850440829000 |
| OT 150/220...240/1A4 1DIMA P7 | IP67 | Acc. to EN 60598-1/Acc. to EN 61347-1/Acc. to EN 61547 | CCC / CE / ENEC | 850440829000 |
| OT 200/220...240/1A4 1DIMA P7 | IP67 | Acc. to EN 60598-1/Acc. to EN 61347-1/Acc. to EN 61547 | CCC / CE / ENEC | 850440829000 |

| Product description | Environmental information | | | |
|-------------------------------|---------------------------|---------------------------------------------------------------|----------------------------------------|------------------------|
| | Date of Declaration | Primary Article Identifier | Candidate List Substance 1 | CAS No. of substance 1 |
| OT 60/220...240/1A4 1DIMA P7 | 23-12-2021 | 4052899495012 4062172040525 4050732430886 8010703806023 | Lead | 7439-92-1 |
| OT 100/220...240/1A4 1DIMA P7 | 23-12-2021 | 4052899495036 4062172040549 4050732430909 8010703806030 | No declarable substances containedLead | 7439-92-1 |
| OT 150/220...240/1A4 1DIMA P7 | 23-12-2021 | 4052899495050 4062172040563 4050732430916 8010703806047 | Lead | 7439-92-1 |
| OT 200/220...240/1A4 1DIMA P7 | 23-12-2021 | 4052899495074 4062172040587 4050732430947 8010703806054 | Lead | 7439-92-1 |

| Product description | Safe Use Instruction | Declaration No. in SCIP database |
|-------------------------------|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| OT 60/220...240/1A4 1DIMA P7 | The identification of the Candidate List substance is sufficient to allow safe use of the article. | c95e8b47-62a0-4a89-8a66-93138e6b5279 e4c88c46-a86a-4a40-a1b4-030d355868c5 |
| OT 100/220...240/1A4 1DIMA P7 | The identification of the Candidate List substance is sufficient to allow safe use of the article. | 57f4a0cd-b22c-47cc-98ce-4d105acd283e 6fb19e77-893a-4367-bcc4-3b97a239b7b4 |

Product family datasheet

| Product description | Safe Use Instruction | Declaration No. in SCIP database |
|-------------------------------|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| OT 150/220...240/1A4 1DIMA P7 | The identification of the Candidate List substance is sufficient to allow safe use of the article. | fc45e981-2222-4cfc-818c-3b3596c9a743 60c3abd9-1480-4f7d-ac69-3c7b77d33cb9 |
| OT 200/220...240/1A4 1DIMA P7 | The identification of the Candidate List substance is sufficient to allow safe use of the article. | 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 %

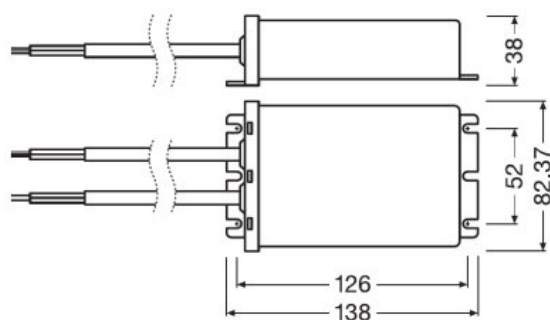
4) At maximum T_c = 85°C / 10% failure rate

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

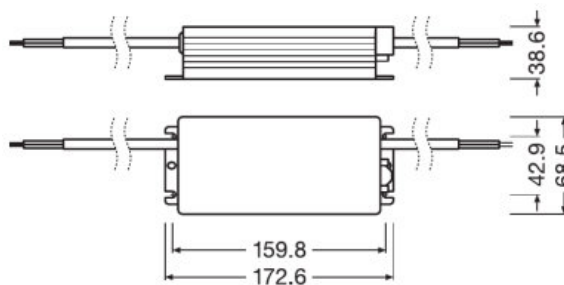
6) $t_{width} = 264 \mu s$ (measured at 50 % I_{peak})

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

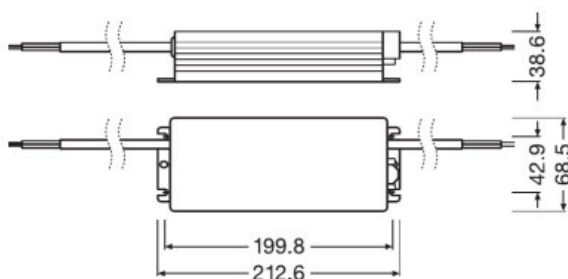
Product family datasheet



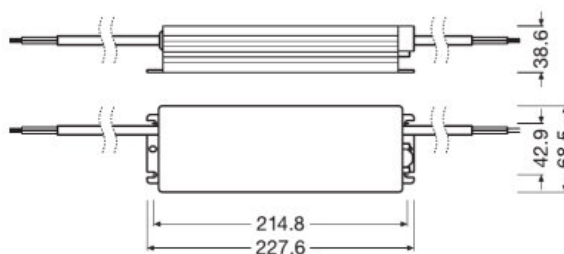
OT 60220-2401A4 1DIMA P7



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 060921

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.

Disclaimer

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