# OT 150 UNV 1A0 2DIM P7 (NEW)

OPTOTRONIC - 2DIM UNV IP67 | 2DIM/UNV (IP67) - constant current LED drivers



## Product family features

- Available with different wattage: 100 W, 150 W, 200 W, 320 W
- Input voltage: 100...277 V
- Flexible current setting with programming tool
- AstroDIM for autonomous dimming
- Constant Lumen Output (CLO)

## Product family benefits

- 2DIM functionality in one device (AstroDIM, 1...10 V)
- High surge protection: up to 10 kV
- High efficiency up to 92%
- Great flexibility due to wide operating temperature range of -40...60 °C
- IP rating: IP67

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# Areas of application

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

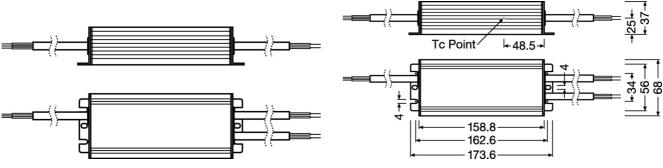
#### Technical data

#### Electrical data

| Max. ECG no. on circuit breaker 10 A (B) | 3                  |
|--|--------------------|
| Max. ECG no. on circuit breaker 16 A (B) | 4                  |
| Maximum output power                     | 150 W              |
| Minimum output current                   | 110 mA             |
| Nominal output current                   | 5201050 mA         |
| Nominal output power                     | 150 W              |
| Nominal output voltage                   | 107214 V           |
| Nominal input voltage                    | 120240/277 V       |
| Input voltage AC                         | 90305 V            |
| Device power loss                        | 13 W               |
| Efficiency in full-load                  | 92 % <sup>1)</sup> |
| Inrush current                           | 65 A               |
| Power factor λ                           | 0.95               |
| Mains frequency                          | 4763 Hz            |
| Surge capability (L-N)                   | 5 kV               |
| Surge capability (L/N-Ground)            | 10 kV              |
| U-OUT (working voltage)                  | 240 V              |
| Output current tolerance                 | ±5 %               |
| Output ripple current (100 Hz)           | 10 %               |
| Total harmonic distortion                | < 10 %             |
| Default output current                   | 700 mA             |

<sup>1)</sup> at 230 V, 50 Hz

## **Dimensions & weight**



| Product weight                       | 800.00 g            |
|--------------------------------------|---------------------|
| Length                               | 173.6 mm            |
| Height                               | 37.0 mm             |
| Width                                | 68.0 mm             |
| Cable cross-section, input side      | 1.0 mm <sup>2</sup> |
| Cable cross-section, output side     | 1.0 mm <sup>2</sup> |
| Cable/wire length, input side        | 300 mm              |
| Cable/wire length, output side       | 300 mm              |
| Mounting hole spacing, length        | 162.6 mm            |
| Mounting hole spacing, width         | 34.0 mm             |
| Wire preparation length, input side  | 10 mm               |
| Wire preparation length, output side | 10 mm               |

# Colors & materials

| Casing material | Aluminium |
|-----------------|-----------|
|-----------------|-----------|

# Temperatures & operating conditions

| Ambient temperature range                | -40+60 °C           |
|--|---------------------|
| Max.housing temperature in case of fault | 110 °C              |
| Maximum temperature at tc test point     | 85 °C               |
| Permitted rel. humidity during operation | 585 % <sup>1)</sup> |
| Temperature range at storage             | -40+80 °C           |

<sup>1)</sup> Maximum 56 days/year at 85 %



## Lifespan

| ECG lifetime | 50000 h / 100000 h <sup>1)</sup> |
|--------------|----------------------------------|

1) At maximum T<sub>c</sub> = 85°C / 10% failure rate / At maximum T<sub>c</sub> = 75°C / 10% failure rate

# Capabilities

| Max. cable length to lamp/LED module   | 2.0 m <sup>1)</sup>     |
|--|-------------------------|
| Number of channels                     | 1                       |
| Dimmable                               | Yes                     |
| Dimming interface                      | 2DIM / 110 V / AstroDIM |
| Dimming range                          | 10100 %                 |
| Overload protection                    | No                      |
| Overheating protection                 | Yes                     |
| Short-circuit protection               | Automatic reversible    |
| Suitable for fixtures with prot. class | I                       |
| Constant lumen function                | Programmable            |
| No-load proof                          | Yes                     |

<sup>1)</sup> Output wires must be routed as close as possible to each other



#### 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 62384 / Acc. to EN 62386 / GB 19510.1 / GB 19510.14 / GB 17625.1 / UL-8750 / FCC part 15 / SASO 2927:2019 |
| Approval marks – approval | CCC / CE / ENEC / UL   |

# Logistical data

| Commodity code | 85044083900 |
|----------------|-------------|

## **Environmental information**

| Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh) |               |  |  |
|---|---------------|--|--|
| Date of Declaration 24-05-2024  |               |  |  |
| Primary Article Identifier  | 4062172158183 |  |  |
| Declaration No. in SCIP database In work                              |               |  |  |
| SCIP_STATUS   | In work       |  |  |
| SCIP_ID   |               |  |  |



## 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.



#### Additional product information

- The driver withstands an input voltage of up to 305 Vac. Shut down of output load might occur in case the supply voltage exceeds the declared input voltage range.
- For short circuit protection the driver automatically switches into hiccup mode and auto recovery. No damage will occur when any output is short circuited. The output shall return to normal when the fault condition is removed.
- The driver automatically switches into protection mode when output voltage exceeds limit and return to normal when the fault condition is removed.
- The constant lumen feature is disabled by default.
- If any output level is below the physical min level, the physical min level will be used.
- External control devices connected to the 1-10V interface shall be double/reinforced insulated.
- For configuration of the product USB Programming Tool OT PROGRAMMER (4062172171632) and Software OPTOTRONIC 2DIM P7 Programming Tool (https://www.osram.com/ds/tools/software.jsp) is required.
- Important note:
- OSRAM products must never be directly exposed to external influences. Always provide adequate protection for relevant applications (covers, housings etc.), otherwise the warranty claim will be invalid.

#### **Download Data**

| File                   |            |  |
|------------------------|------------|--|
| Certificates           | PDF        | ►OT 2DIMP7 ENEC 50357504 260421                        |
| Certificates           | PDF        | ►OT UNV 2DIM P7 UL E320395 310321                      |
| CAD data               | Compressed | ►OT 150 2DIM UNV P7 STEP 040221                        |
| Mandatory Publications | PDF        | ►OT 2DIMP7 CE 4224289 061221                           |
| Mandatory Publications | PDF        | ►UKD OT xx P7 family 9C1-4281273-EN-02 2022-02         |
| Mandatory Publications | PDF        | ►CED OT xx P7 outdoor family 9C1-3799852-EN-05 2022-02 |
| User instruction       | PDF        | ►OPTOTRONIC UNV 2DIM P7                                |



# **Logistical Data**

| Product code  | Product description       | Packaging unit (Pieces/Unit)  | Dimensions (length x width x height) | Volume    | Gross weight |
|---------------|---------------------------|-------------------------------|--------------------------------------|-----------|--------------|
| 4062172158183 | OT 150 UNV 1A0 2DIM<br>P7 | Shipping carton box 10 Pieces | 500 x 310 x 160 mm                   | 24.80 dm³ | 911.00 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 150 UNV 1A0 2DIM P7 | OT PROGRAMMER/5 | ►4062172171632 |

#### Disclaimer

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