

OT 100/ 220-240/1A4 2DIM P7 WP

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

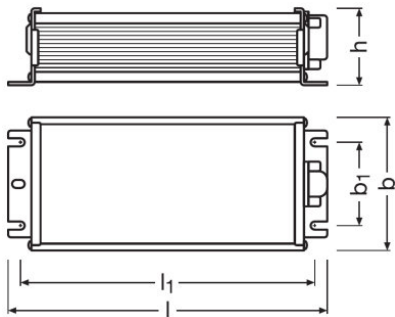
Nominal voltage	220...240 V
Input voltage AC	198...264 V
Nominal current	050 A
Mains frequency	50...60 Hz
Power factor λ	> 098
Total harmonic distortion	< 10 % ¹⁾
Device power loss	11 W
Inrush current	62 A ²⁾
Max. ECG no. on circuit breaker 10 A (B)	8
Max. ECG no. on circuit breaker 16 A (B)	13
Max. ECG no. on circuit breaker 25 A (B)	21
Surge capability (L/N-Ground)	10 kV
Surge capability (L-N)	6 kV
Nominal output power	10...100 W
Maximum output power	100 W
Efficiency in full-load	91 % 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	Double
Nominal output voltage	72...144 V
U-OUT (working voltage)	200 V

¹⁾ At full load

²⁾ Max, $t_h = 155\mu s$

³⁾ at 230 V, 50 Hz

Dimensions & weight



Length	1684 mm
Width	685 mm
Height	396 mm
Mounting hole spacing, length	151.6 mm
Mounting hole spacing, width	42.9 mm
Product weight	72000 g
Cable cross-section, input side	1.0 mm ²
Cable cross-section, output side	1.0 mm ²
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
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Temperatures & operating conditions

Ambient temperature range	-40...+55 °C
Temperature range at storage	-40...+85 °C
Maximum temperature at tc test point	85 °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⁾
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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	No
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
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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
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Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)	
Date of Declaration	14-04-2022
Primary Article Identifier	4062172060721
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	085619d0-2377-4acc-8429-5988c48d1cd0

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 ceiling 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 ($V_o = P_o / I_o$), 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;

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
4062172060721	OT 100/ 220-240/1A4 2DIM P7 WP	Shipping carton box 10	469 mm x 253 mm x 128 mm	15.19 dm ³	8010.00 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.