

PRODUCT DATASHEET

OT 40/170...240/1A0 4DIMLT2 G2 CE

OPTOTRONIC® Constant current LED power supplies with 4DIM-DALI and NFC | Constant Current - Outdoor - dimmable



Areas of application

- Street and urban lighting
- Industry
- Suitable for outdoor applications in luminaires with IP > 54
- Suitable for use in outdoor luminaires of protection class I and II

Product benefits

- 4DIM functionality in one device (StepDIM, AstroDIM, MainsDIM, DALI)
- DALI-2 certified incl. Parts 251, 252, 253
- Easy and fast wireless luminaire programming
- Very high efficiency
- Wide current output range: 200 mA...1050 mA
- High surge protection: up to 10 kV (in protection class I or II)
- Great flexibility due to wide operating temperature range of -40...55 °C or 60 °C
- Protection through double isolation between mains input and LED output

Product features

- Supply voltage: 220...240 V
- Current output range: 70...1,050 mA
- Easy and fast wireless luminaire programming via NFC
- Flexible current setting with one additional wire (LEDset2)
- AstroDIM for autonomous dimming with five independent levels (astro, time mode)
- Allows for energy saving in twilight phases
- MainsDIM function for dimming via reduction of line voltage amplitude
- Isolated DALI interface for bidirectional telemanagement systems
- Standby power consumption: < 0.35 W

- Constant Lumen Output (CLO)
- Overtemperature protection via external NTC
- Integrated customizable thermal management (Driver Guard)

TECHNICAL DATA

Electrical data

Nominal wattage	40.00 W
Nominal output power	40 W ¹⁾
Nominal voltage	220...240 V
Nominal output voltage	15...56 V
Input voltage AC	170...264 V
Input voltage DC	176...276 V ²⁾
U-OUT (working voltage)	60 V
Nominal current	0.2 A
Nominal output current	200...1050 mA
Inrush current	26 A ³⁾
Output current tolerance	±3 % ⁴⁾
Output ripple current (100 Hz)	< 5 %
Mains frequency	0/50/60 Hz
Total harmonic distortion	< 10 % ⁵⁾
Power factor λ	> 0.98 ⁶⁾
ECG efficiency	90 %
Device power loss	4,5 W
Max. ECG no. on circuit breaker 25 A (B)	44
Surge capability (L/N-Ground)	10 kV
Surge capability (L-N)	6 kV
Galvanic isolation	SELV

1) Max. 75% in DC operating mode

2) Additional fuse needed in DC operation

3) At 180 μ s

4) +/- 5% for LEDset down to 300mA

5) At full power

6) At full load

Photometrical data

Flickering metric (Pst LM)	≤1
Stroboscope effect metric (SVM)	≤0.4

Dimensions & Weight

Length	123.00 mm
Mounting hole spacing, length	111,0 mm
Width	79.00 mm

Height	33.00 mm
Cable cross-section, input side	0,2...1,5 mm ²
Cable cross-section, output side	0,2...1,5 mm ²
Wire preparation length, input side	8,5...9,5 mm
Product weight	210.00 g

Colors & materials

Casing material	Plastic
Body material	Plastic

Temperatures & operating conditions

Ambient temperature range	-40...+60 °C
Maximum temperature at tc test point	80 °C
Max.housing temperature in case of fault	120 °C
Permitted rel. humidity during operation	5...85 % ¹⁾

¹⁾ Maximum 56 days/year at 85 %

Lifespan

ECG lifetime	50000 h / 100000 h ¹⁾
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¹⁾ At maximum $T_c = 80^\circ\text{C}$ / 10% failure rate / At $T_c = 68^\circ\text{C}$ / 10% failure rate

Capabilities

Dimmable	Yes
Dimming interface	4DIM / AstroDIM / DALI / MainsDIM / StepDIM
Dimming range	10...100 %
Overheating protection	Automatic reversible
Overload protection	Automatic reversible
No-load proof	Yes
Short-circuit protection	Automatic reversible
Max. cable length to lamp/LED module	2,0 m
Suitable for fixtures with prot. class	I / II

Certificates & Standards

Approval marks – approval	CE / ENEC / VDE / VDE-EMC / CCC / EL / RCM
Standards	Acc. to EN 61347-1 / Acc. to EN 61347-2-13 / Acc. to EN 62384 / Acc. to EN 55015:2006 + A1:2007 + A2:2009 / Acc. to EN 61547 / Acc. to FCC 47 part 15 class B / Acc. to IEC 61000-3-2 / Acc. to IEC 61000-3-3 / Acc. to IEC 62386-101 / Acc. to IEC 62386-102 / Acc. to IEC 62386-207 / UL-8750
Protection class	I/II
Type of protection	IP20

LOGISTICAL DATA

Temperature range at storage	-25...85 °C
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Energy labelling regulation data acc EU 2019/2015

Networked standby power for CLS	< 0.50 W
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DOWNLOAD DATA

Documents and certificates



Declarations Of Conformity CE



Certificates

CAD/BIM files



CAD_STEP_3D

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4052899981935	Unpacked 1			
4052899982024	Shipping box 20	400 mm x 277 mm x 119 mm	4784.00 g	13.19 dm ³
4062172279093	Shipping box 10	280 mm x 175 mm x 102 mm	2279.00 g	5.00 dm ³

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.