

PRODUCT DATASHEET

OT 75/170...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	75.00 W
Nominal output power	75 W ¹⁾
Nominal voltage	220...240 V
Nominal output voltage	35...115 V
Input voltage range	220...240 V
Input voltage AC	170...240 V
Input voltage DC	176...276 V ²⁾
U-OUT (working voltage)	120 V
Nominal current	0.37 A
Nominal output current	250...1050 mA
Inrush current	54 A ³⁾
Output current tolerance	±3 % ⁴⁾
Output ripple current (100 Hz)	< 6 %
Mains frequency	0/50/60 Hz ²⁾
Total harmonic distortion	< 5 % ⁵⁾
Power factor λ	> 0.98 ⁶⁾
ECG efficiency	93 % ⁷⁾
Device power loss	5.3 W
Max. ECG no. on circuit breaker 25 A (B)	20
Surge capability (L/N-Ground)	10 kV
Surge capability (L-N)	6 kV
Galvanic isolation	SELV
Flickering metric (Pst LM)	≤1

1) Max. 75% in DC operating mode

2) Additional fuse needed in DC operation

3) At 190 µs

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

5) At full power

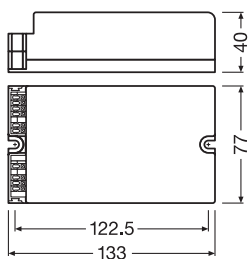
6) At full load

7) at 230 V, 50 Hz

Photometrical data

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

Dimensions & Weight



Length	133.00 mm
Mounting hole spacing, length	122,5 mm
Width	77.00 mm
Height	40.00 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	300.00 g

Colors & materials

Casing material	Plastic
Body material	Plastic

Temperatures & operating conditions

Ambient temperature range	-40...+60 °C
Maximum temperature at tc test point	85 °C
Max.housing temperature in case of fault	110 °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 = 85°C / 10% failure rate / At T_c = 73°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 ¹⁾
Suitable for fixtures with prot. class	I / II

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

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	-40...+85 °C
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Energy labelling regulation data acc EU 2019/2015

Networked standby power for CLS	
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DOWNLOAD DATA

	Documents and certificates	Document name
	User instruction / safety instructions	OPTOTRONIC Outdoor
	Declarations of conformity	EU Declaration of Conformity 3806542
	Declarations of conformity	INOTEC-Conformity declaration AM03550 OT 75/170-240/1A0 4DIMLT2 G2 CE
	Declarations of conformity	EU Declaration of Conformity 3605907 (EN)
	Declarations of conformity	EATON(CEAG)-Conformity declaration AM03550 OT 75/170-240/1A0 4DIMLT2 G2 CE
	Certificates	VDE ENEC Certificate 40043863 appendix
	Certificates	CB Test Certificate DE1-60243
	Certificates	VDE EMC Certificate 40044675 (EN)
	Certificates	OT Outdoor CB DE1 62952 100220

Documents and certificates		Document name
	Certificates	VDE EMC Certificate 40038482
	Certificates	CCC Certificate 2018171002002244
	Certificates	OT 75 4DIM LT2 G2 EATON AM35338 210520
	Certificates	OT outdoor ENEC 40050684 100220
	Certificates	OT EMC 40050085 200220
	Certificates	OT 75 4DIM LT2 G2 INOTEC AM35338 210520
	Certificates	RCM Certificate CS10824N
	Certificates	VDE ENEC Certificate 40043863
CAD/BIM files		Document name
	CAD STEP 3D	OT 75W 4DIM G2

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4052899981942	Unpacked 1			
4052899982031	Shipping box 20	609 mm x 289 mm x 118 mm	6564.00 g	20.77 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.