OT 110/170...240/1A0 1DIMLT2 G1 CE

OT 1DIM NFC IP20 Outdoor | AstroDIM – constant current LED drivers

Areas of application

- Street and urban lighting
- Industry
- Suitable for outdoor applications in luminaires with IP > 65
- Suitable for use in outdoor luminaires of protection class I and II

Product family benefits

- Easy and fast wireless luminaire programming
- Very high efficiency
- Optimized for AstroDIM operation
- 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
- Protection through double isolation between mains input and LED output

GERMAN INNOVATION AWARD '19 WINNER

Product family features

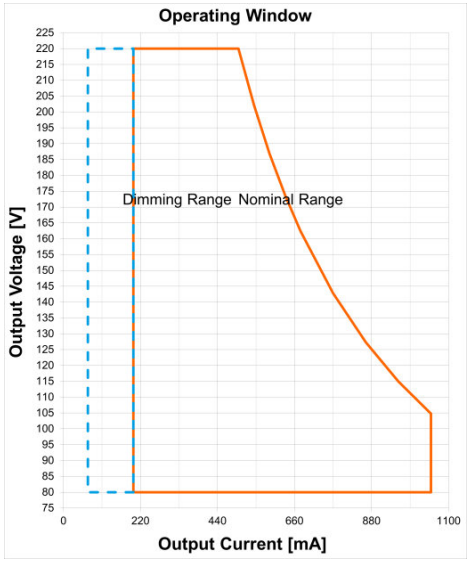
- Supply voltage: 220…240 V
- Current output range: 70…1,050 mA
- AstroDIM for autonomous dimming with five independent levels (astro, time mode)
- Standby power consumption: < 0.5 W
- Constant Lumen Output (CLO)
- Integrated customizable thermal management (Driver Guard)

Technical data

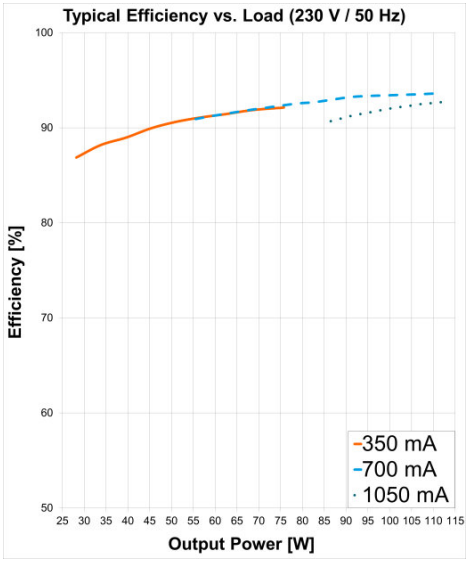
Electrical data

Nominal voltage	220…240 V
Input voltage AC	198…264 V
Nominal current	0.54 A
Mains frequency	50…60 Hz
Power factor λ	0.98/0.97
Total harmonic distortion	< 10 %
Device power loss	8.0 W
Inrush current	65 A
Max. ECG no. on circuit breaker 10 A (B)	7
Max. ECG no. on circuit breaker 16 A (B)	11
Max. ECG no. on circuit breaker 25 A (B)	17
Surge capability (L/N-Ground)	10 kV
Surge capability (L-N)	6 kV
Nominal output power	110 W
ECG efficiency	93 %
Nominal output voltage	80…220 V
Nominal output current	200…1050 mA
Output current LEDset open	70 mA
Output current LEDset shorted	Not allowed
Default output current	700 mA
Output current tolerance	±5 % [1)]
Output ripple current (100 Hz)	10 %
Output PSTLM	≤1
Output SVM	≤0.4
Minimum output current	70 mA
Galvanic isolation	Double
U-OUT (working voltage)	250 V
Max. no. of ECGs on 16A MCB with EBN-OS	30

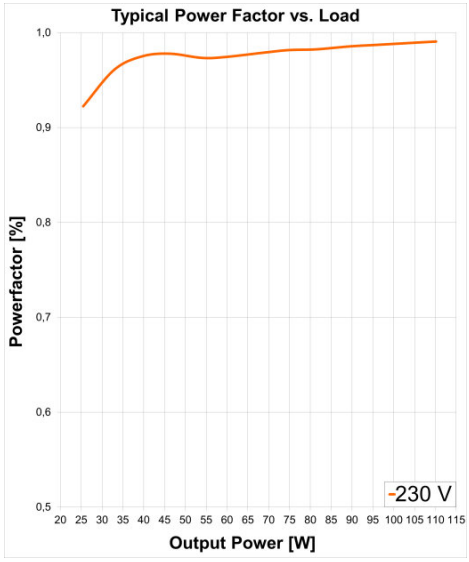
[1)] +/- 5% for LEDset down to 300mA



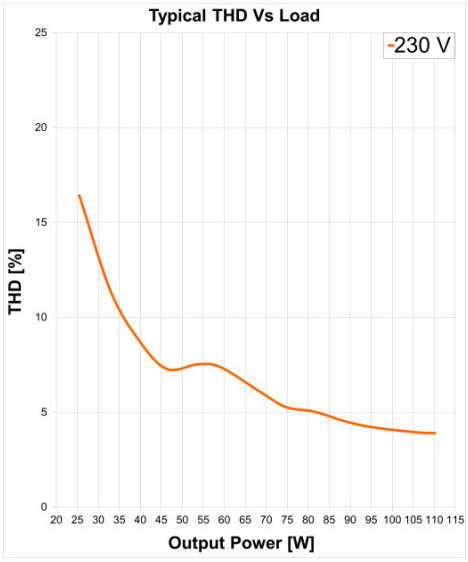
Operating Window



Typical Efficiency v Load 230 V 50 Hz

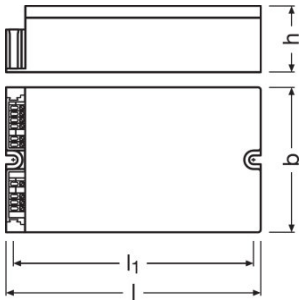


Typical Power Factor v Load



Typical THD v Load

Dimensions & weight



Length	150.0 mm
Width	90.0 mm
Height	40.0 mm
Mounting hole spacing, length	134.0 mm
Mounting hole spacing, width	-
Product weight	795.00 g
Cable cross-section, input side	0.2…1.5 mm²
Cable cross-section, output side	0.2…1.5 mm²
Wire preparation length, input side	8.5…9.5 mm

Temperatures & operating conditions

Ambient temperature range	-40…+55 °C
Temperature range at storage	-25…85 °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 / 100000 h [1)]

[1)] At maximum T_c = 85°C / 10% failure rate / At T_c = 73°C / 10% failure rate

Expected Lifetime

Product name				
OT 110/170...240/1A0 1DIMLT2 G1 CE	ECG ambient temperature [ta]	55	45	43
	Temperature at tc-point [°C]	85	75	73
	Lifetime [h]	50000	85000	100000

Capabilities

Dimmable	Yes
Dimming interface	AstroDIM
Dimming range	10...100 %
Suitable for fixtures with prot. class	I / II
Constant lumen function	Programmable
NTC input	Yes
Overheating protection	Automatic reversible
Overload protection	Automatic reversible
Short-circuit protection	Automatic reversible
No-load proof	Yes
Max. cable length to lamp/LED module	2.0 m
LEDset	Yes
Number of channels	1
DALI-2 Energy Data	No
DALI-2 Diagnostic Data	No

Programming

Tuner4TRONIC	Yes
Tuner4TRONIC Field App	Yes
Programming device	NFC

Programmable features

Operating Current	Yes
Tuning Factor	Yes
Constant Lumen	Yes
Lamp Operating Time	Yes
Thermal Protection	Yes
Driver Guard	Yes
AstroDIM	Yes

StepDIM	No
MainsDIM	No
Presence Detection	No
DALI Settings	No
Emergency Mode	No
Configuration Lock	Yes

Certificates & standards

Type of protection	IP20
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/UL-8750
Approval marks – approval	CE / ENEC / VDE / VDE-EMC / CCC

Logistical data

Commodity code	850440829000

Download Data

	File
	User instruction OPTOTRONIC Outdoor
	Brochures Technical application guide - 1DIMLT2 G1 LED drivers (EN)
	Brochures Technical Application Guide - 4DIMLT2 G2 CE LED drivers (EN)
	Certificates RCM Certificate CS10824N
	Certificates OT ENEC 40050684 090620
	Certificates OT Outdoor CB DE1 62952A1 220920
	Certificates OT EMC 40050085 200220
	Certificates OT Outdoor CB DE1 62952A2 220920
	Certificates OT Outdoor VDE TESTREPORT 276377 220920
	Certificates VDE ENEC Certificate 40043863
	Certificates VDE ENEC Certificate 40043863 appendix

	Certificates OT EMC 40044675 080920
	Certificates CB Test Certificate DE1-60243
	Certificates CCC Certificate 2018171002002265
	Declarations of conformity EU Declaration of Conformity 3806542
	Declarations of conformity EU Declaration of Conformity 3629845
	CAD data CAD data STEP OT 110170-2401A0 1DIMLT2 G1 CE

ISOLATION	Input / Mains	EQUI	LEDset	LED Output	Case	NTC
Input / Mains	-	Double	Double	Double	Double	Double
EQUI	Double	-	Basic	Basic	Basic	Double
LEDset	Double	Basic	-	-	Basic	-
LED Output	Double	Basic	-	-	Basic	-
Case	Double	Basic	Basic	Basic	-	Basic
NTC	Double	Double	-	-	Basic	-

Logistical Data

Product code	**Product description**	**Packaging unit (Pieces/Unit)**	**Dimensions (length x width x height)**	**Volume**	**Gross weight**
4052899541115	OT 110/170...240/1A0 1DIMLT2 G1 CE	Shipping carton box 10	385 mm x 300 mm x 125 mm	14.44 dm^3	8291.00 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.

Data privacy

This OSRAM driver can be configured using the Tuner4TRONIC software. This requires registering on www.myosram.com and downloading theTuner4TRONIC software from the Internet. The Tuner4TRONIC software enables users to access and view the operational data of a luminaire or driver via the corresponding programming interfaces. A password key (Config Lock) must be set up in the driver via the Tuner4TRONIC software in order to control which users can access and view operational data. Follow the instructions for password setup. To grant an external person or company rights to access or view operational data, you can assign password keys. In this case, however, you are responsible for ensuring that the third party concerned takes notice of the information described here. However, OSRAM can read out operating data from devices for maintenance and service purposes even when a password key has been assigned. In individual cases, OSRAM will also use its access rights in order to optimize or improve driver hardware and driver functions. In accordance with data privacy principles, any user of operating data (luminaire manufacturers, third parties with access rights) must ensure that personal data (e.g. name, address, location IDs) are only merged with the prior written consent of the person (end user) concerned. The respective user of the operating data is responsible for providing evidence of consent.

Disclaimer

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