

## OT 20/170...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 or 60 °C
- Protection through double isolation between mains input and LED output

### Product family features

- Supply voltage: 220...240 V
- Current output range: 70...1,050 mA
- Flexible current setting with one additional wire (LEDset2)
- 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)

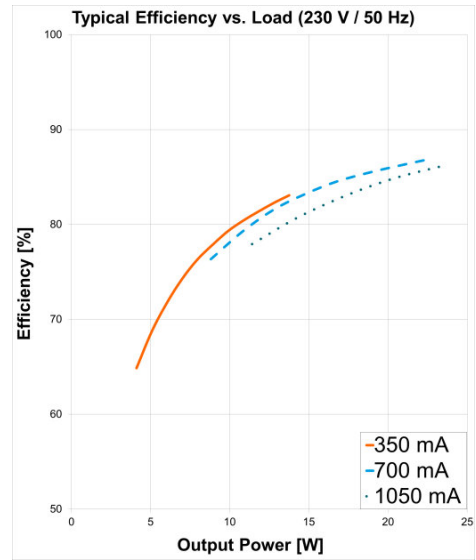
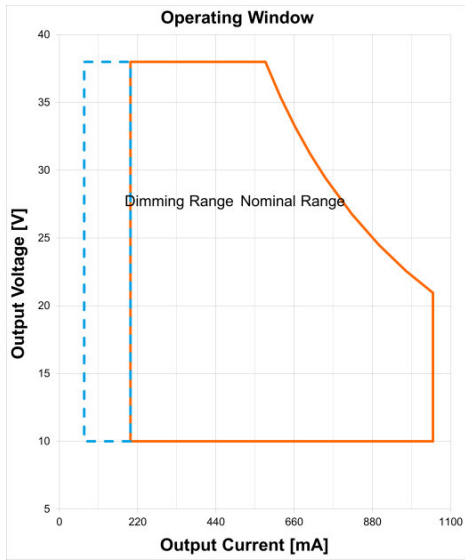
## Technical data

### Electrical data

Nominal voltage	220...240 V
Input voltage AC	198...264 V
Nominal current	0.12 A
Mains frequency	50...60 Hz
Power factor $\lambda$	0.95/0.90
Total harmonic distortion	< 10 %
Device power loss	3.5 W
Inrush current	25 A <sup>1)</sup>
Max. ECG no. on circuit breaker 10 A (B)	23
Max. ECG no. on circuit breaker 16 A (B)	36
Max. ECG no. on circuit breaker 25 A (B)	57
Surge capability (L/N-Ground)	10 kV
Surge capability (L-N)	6 kV
Nominal output power	22 W
ECG efficiency	87 %
Nominal output voltage	10...38 V
U-OUT (working voltage)	60 V
Nominal output current	200...1050 mA
Output current tolerance	±5 %
Output ripple current (100 Hz)	10 %
Minimum output current	70 mA
Galvanic isolation	SELV
Max. no. of ECGs on 16A MCB with EBN-OS	100

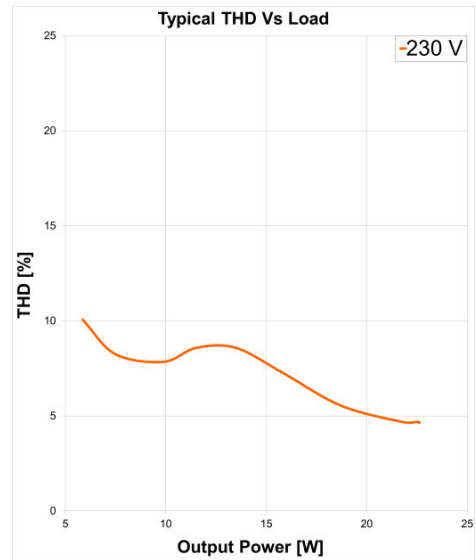
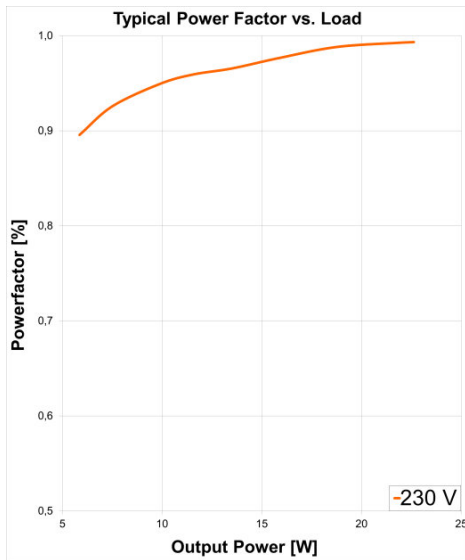
<sup>1)</sup> At 150  $\mu$ s

# Product datasheet



Operating Window

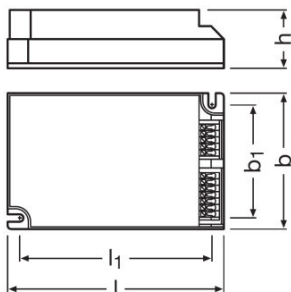
Typical Efficiency v Load 230 V 50 Hz



Typical Power Factor v Load

Typical THD v Load

## Dimensions & weight



<b>Length</b>	123.0 mm
<b>Width</b>	79.0 mm
<b>Height</b>	33.0 mm
<b>Mounting hole spacing, length</b>	111.0 mm
<b>Mounting hole spacing, width</b>	67.0 mm
<b>Product weight</b>	210.00 g
<b>Cable cross-section, input side</b>	0.2...1.5 mm <sup>2</sup>
<b>Cable cross-section, output side</b>	0.2...1.5 mm <sup>2</sup>
<b>Wire preparation length, input side</b>	8.5...9.5 mm

## Temperatures & operating conditions

<b>Ambient temperature range</b>	-40...+60 °C
<b>Maximum temperature at tc test point</b>	75 °C
<b>Max.housing temperature in case of fault</b>	120 °C
<b>Permitted rel. humidity during operation</b>	5...85 %

## Lifespan

<b>ECG lifetime</b>	50000 / 100000 h <sup>1)</sup>
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<sup>1)</sup> At maximum T<sub>c</sub> = 75°C / 10% failure rate / At T<sub>c</sub> = 63°C / 10% failure rate

## Expected Lifetime

Product name				
OT 20/170...240/1A0 1DIMLT2 G1 CE	ECG ambient temperature [ta]	60	50	48
	Temperature at tc-point [°C]	75	65	63
	Lifetime [h]	50000	85000	100000

## Capabilities

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

## Programmable features

<b>Operating Current</b>	Yes
<b>Tuning Factor</b>	Yes
<b>Constant Lumen</b>	Yes
<b>Lamp Operating Time</b>	Yes
<b>Thermal Protection</b>	Yes
<b>Driver Guard</b>	Yes
<b>AstroDIM</b>	Yes
<b>StepDIM</b>	No
<b>MainsDIM</b>	No
<b>Presence Detection</b>	No
<b>DALI Settings</b>	No
<b>Emergency Mode</b>	No
<b>Luminaire Info</b>	Yes
<b>Configuration Lock</b>	Yes

## Certificates & standards

<b>Type of protection</b>	IP20
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## Product datasheet

<b>Standards</b>	Acc. to IEC 61347-1/Acc. to EN 61347-1/Acc. to IEC 61347-2-13/Acc. to EN 61347-2-13/Acc. to IEC/EN 62384/Acc. to EN 55015:2006 + A1:2007 + A2:2009/Acc. to CISPR 15:2005 + A1:2006 + A2:2008/Acc. to IEC 61547/Acc. to EN 61547/Acc. to IEC 61000-3-2/EN 61000-3-2/Acc. to IEC 61000-3-3/Acc. to EN 61000-3-3/Acc. to IEC 62386-101/Acc. to EN 62386-101/Acc. to IEC 62386-102/Acc. to EN 62386-102/Acc. to IEC 62386-207/Acc. to EN 62386-207
<b>Approval marks – approval</b>	CE / ENEC / VDE / VDE-EMC / CCC

### Logistical data

<b>Temperature range at storage</b>	-25...85 °C
<b>Commodity code</b>	850440829000

### Download Data

File	
	Brochures Technical application guide - 1DIMLT2 G1 LED drivers (EN)
	Certificates VDE ENEC Certificate 40043863
	Certificates VDE EMC Certificate 40038482
	Certificates CB Certificate DE1-59452
	Certificates VDE ENEC Certificate 40043863 appendix
	Certificates CCC Certificate 2018171002002021
	Declarations of conformity EU Declaration of Conformity 3584649

### Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899517400	OT 20/170...240/1A0 1DIMLT2 G1 CE	Shipping carton box 20	400 mm x 277 mm x 122 mm	13.52 dm <sup>3</sup>	4651.00 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

## Product datasheet

This OSRAM driver can be configured using the Tuner4TRONIC software. This requires registering on [www.myosram.com](http://www.myosram.com) and downloading the Tuner4TRONIC 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.

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### Disclaimer

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