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OT 20/170-240/1A0 1DIMLT2 G1 CE *(NEW)*

OPTOTRONIC - 1DIM NFC IP20 | AstroDIM – constant current LED drivers

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)

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

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Mon Sep 16 04:29:43 CST 2024

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
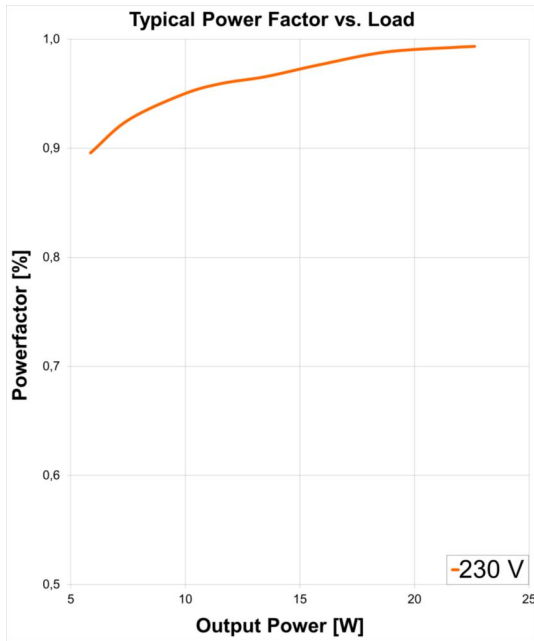
Technical data

Electrical data

Max. ECG no. on circuit breaker 10 A (B)	23
Max. ECG no. on circuit breaker 16 A (B)	36
Maximum output power	22 W
Minimum output current	70 mA
Nominal output current	200…1050 mA
Nominal output power	22 W
Nominal output voltage	10…38 V
Nominal input voltage	220…240 V
Input voltage AC	170…264 V
Input voltage DC	not relevant
Device power loss	3.5 W
Efficiency in full-load	87 % [1]
Galvanic isolation primary/secondary	3.75 kV
Inrush current	25 A [2]
Power factor λ	0.57C...0.99
Mains frequency	50…60 Hz
Surge capability (L-N)	6 kV
Surge capability (L/N-Ground)	10 kV
U-OUT (working voltage)	60 V
Output current tolerance	±5 % [3]
Output ripple current (100 Hz)	< 5 %
Total harmonic distortion	< 10 %
Default output current	700 mA

1) at 230 V, 50 Hz
2) At 150 µs
3) +/- 5% for LEDset down to 300mA

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Typical Power Factor v Load

Typical Power Factor vs. Load

OT 20/170-240/1A0 1DIMLT2 G1 CE Typical Power Factor vs. Load

Operating Window
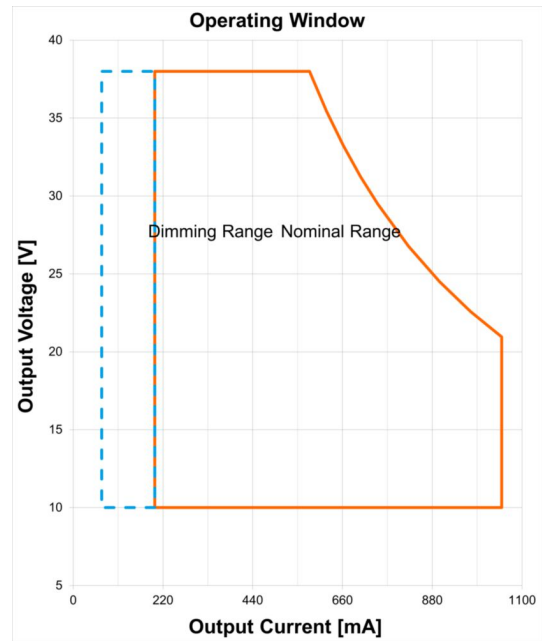
Operating Window

OT 20/170-240/1A0 1DIMLT2 G1 CE Operating Window

Typical THD v Load
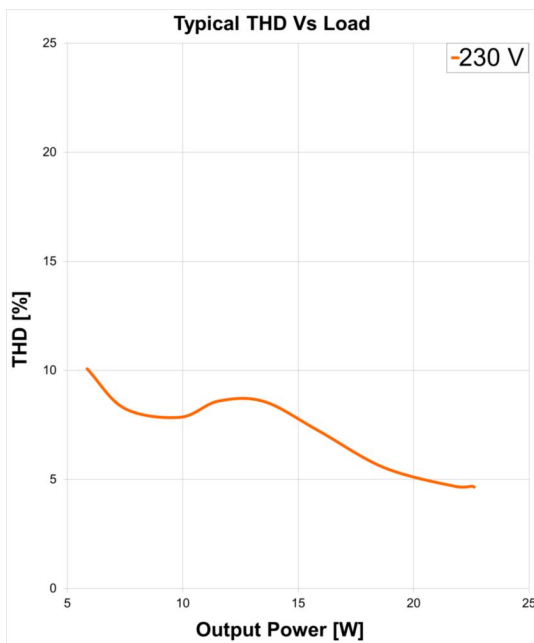
Typical THD Vs Load

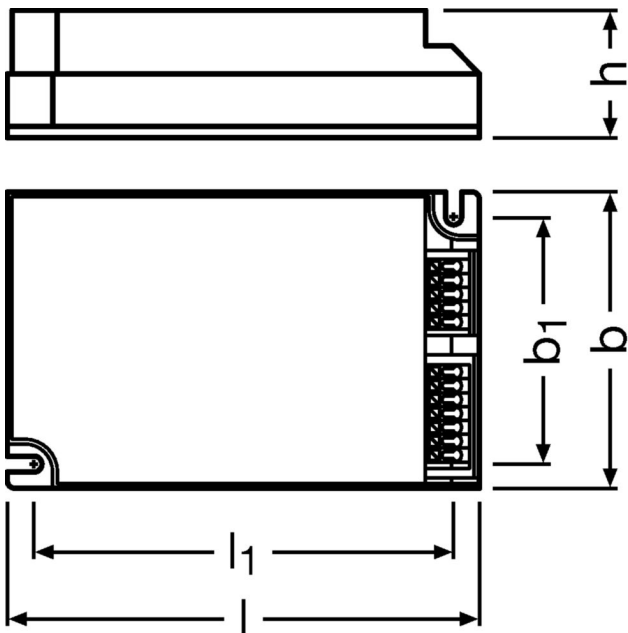OT 20/170-240/1A0 1DIMLT2 G1 CE Typical THD Vs Load

Typical Efficiency v Load 230 V 50 Hz

Typical Efficiency vs. Load (230 V / 50 Hz)
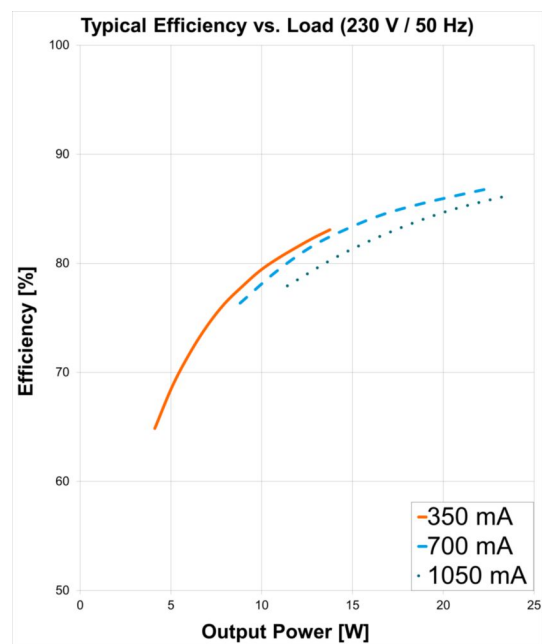
OT 20/170-240/1A0 1DIMLT2 G1 CE Typical Efficiency vs. Load (230 V 50 Hz)

Dimensions & weight

Product weight	210.00 g
Length	123.0 mm
Height	33.0 mm
Width	79.0 mm
Cable cross-section, input side	0.2…1.5 mm²
Cable cross-section, output side	0.2…1.5 mm²
Mounting hole spacing, length	111.0 mm
Mounting hole spacing, width	67.0 mm
Wire preparation length, input side	8.5…9.5 mm
Wire preparation length, output side	8.5…9.5 mm

Colors & materials

Casing material	Plastic

Temperatures & operating conditions

Ambient temperature range	-40…+60 °C
Max.housing temperature in case of fault	120 °C
Maximum temperature at tc test point	75 °C
Permitted rel. humidity during operation	5…85 % [1]
Temperature range at storage	-25…85 °C

1) Maximum 56 days/year at 85 %

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

Lifespan

ECG lifetime	50000 h / 100000 h [1]

1) At maximum T_c = 75°C / 10% failure rate / At T_c = 63°C / 10% failure rate

Capabilities

Max. cable length to lamp/LED module	2.0 m [1]
Number of channels	1
Dimmable	Yes
Dimming interface	AstroDIM
Dimming range	10…100 %
Overload protection	Automatic reversible
Overheating protection	Automatic reversible
Short-circuit protection	Automatic reversible
Suitable for fixtures with prot. class	I / II
Type of connection, output side	Terminal
Constant lumen function	Programmable
No-load proof	Yes

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

Programming

Box programming	Yes

Certificates & standards

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

Logistical data

Commodity code	85044083900

Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh)	
Date of Declaration	21-08-2024
Primary Article Identifier	4052899517400 | 4050732430848
Declaration No. in SCIP database	In work
SCIP_STATUS	In work
SCIP_ID	

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.

Download Data

File			
Certificates	PDF	▶RCM Certificate CS10824N	
Certificates	PDF	▶OT VDE ENEC 40050684 160724	
Certificates	PDF	▶OT Outdoor VDE TESTREPORT 276377 220920	
Certificates	PDF	▶VDE ENEC Certificate 40043863	
Certificates	PDF	▶VDE ENEC Certificate 40043863 appendix	
Certificates	PDF	▶CCC Certificate 2018171002002021	
Brochures	PDF	▶Technical application guide - 1DIMLT2 G1 LED drivers (EN)	
Brochures	PDF	▶4 DIM NFC G3 CE LED drivers and T4T C (EN)	
CAD data	Compressed	▶CAD data STEP OT 20/170-240/1A0 1DIMLT2 G1 CE	
Mandatory Publications	PDF	▶OT 1DIMLT2 G1 4DIMLT2 G2 CE 3806542 061221	
Mandatory Publications	PDF	▶OT DIM LT2 CE UK DoC 4291524 260221	
Mandatory Publications	PDF	▶EU Declaration of Conformity 3584649	

ISOLATION	Input/Mains	EQUI	DALI	LEDset	LED Output	Case	AUX	LSI	NTC
Input/Mains	-	Double		SELV	SELV	Double			SELV
EQUI	Double	-		Basic	Basic	Basic			Double
DALI			-						
LEDset	SELV	Basic		-		Basic			
LED Output	SELV	Basic			-	Basic			
Case	Double	Basic		Basic	Basic	-			Basic
AUX							-		
LSI								-	
NTC	SELV	Double				Basic			-

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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 Pieces	400 x 277 x 119 mm	13.19 dm³	232.75 g
4052899517400	OT 20/170-240/1A0 1DIMLT2 G1 CE	Shipping carton box 10 Pieces	280 x 175 x 102 mm	5.00 dm³	227.90 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.

Accessories Optional

Product description	Accessory name	Accessory code
OT 20/170-240/1A0 1DIMLT2 G1 CE	PRH101 -USB	▶6977078996938
OT 20/170-240/1A0 1DIMLT2 G1 CE	CPR30 -USB	▶6977078996945
OT 20/170-240/1A0 1DIMLT2 G1 CE	NFC Scanner by TERTIUM Technology	▶4055462203571
OT 20/170-240/1A0 1DIMLT2 G1 CE	NFC Scanner by TERTIUM Technology	▶4055462290281

Disclaimer

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