

OT 165/220...240/1A0 1DIM G2 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



Product datasheet

Product family features

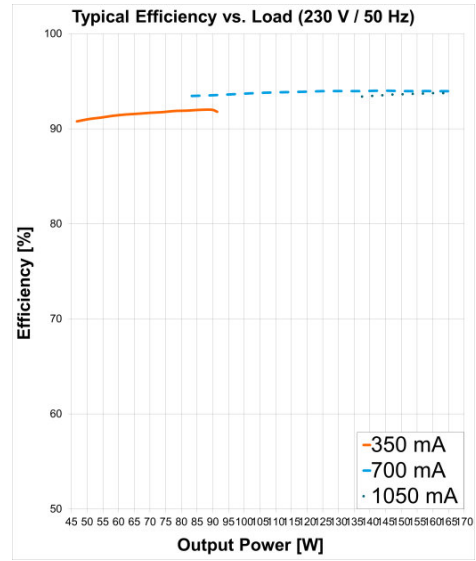
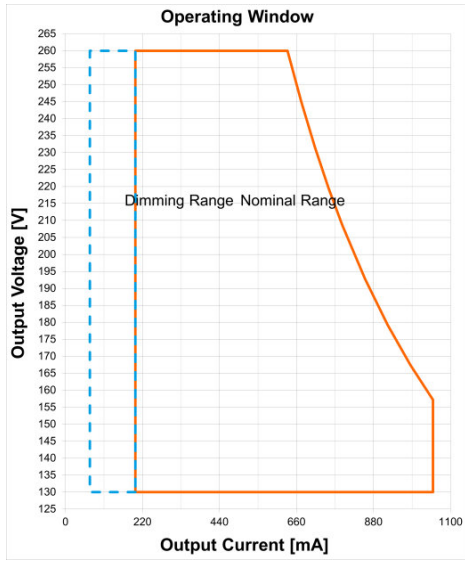
- Supply voltage: 220...240 V
- Current output range: 70...1,050 mA
- AstroDIM for autonomous dimming with five independent levels (astro, time mode)
- Standby power consumption: < 0.5 W
- Constant Lumen Output (CLO)
- Integrated customizable thermal management (Driver Guard)

Technical data

Electrical data

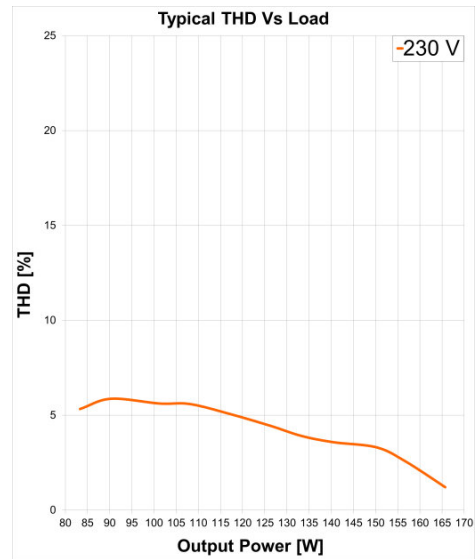
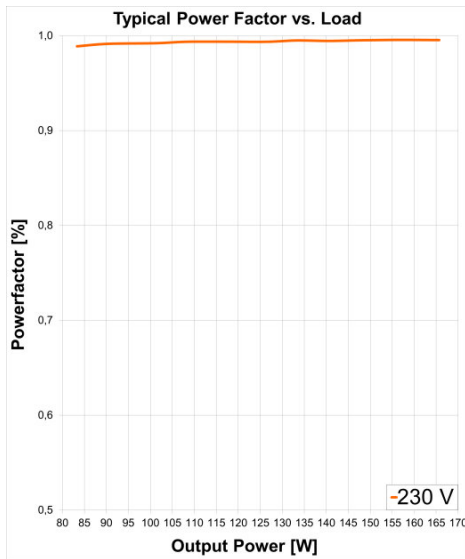
Nominal voltage	220...240 V
Input voltage AC	198...264 V
Nominal current	0.78 A
Mains frequency	50...60 Hz
Power factor λ	> 0.98
Total harmonic distortion	< 5 % ¹⁾
Device power loss	13 W
Inrush current	< 80 A
Max. ECG no. on circuit breaker 10 A (B)	5
Max. ECG no. on circuit breaker 16 A (B)	8
Max. ECG no. on circuit breaker 25 A (B)	13
Surge capability (L/N-Ground)	10 kV
Surge capability (L-N)	6 kV
Nominal output power	165 W
ECG efficiency	93 %
Nominal output voltage	130...260 V
Nominal output current	200...1050 mA
Output current tolerance	±3 %
Output ripple current (100 Hz)	< 5 %
Minimum output current	70 mA
Galvanic isolation	Double
U-OUT (working voltage)	300 V
Max. no. of ECGs on 16A MCB with EBN-OS	21
Max. ECG no. on circuit breaker 10 A (C)	9
Max. ECG no. on circuit breaker 16 A (C)	14

¹⁾ At full load



Operating Window

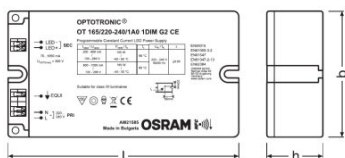
Typical Efficiency v Load 230 V 50 Hz



Typical Power Factor v Load

Typical THD v Load

Dimensions & weight



Length	150.0 mm
Width	90.0 mm
Height	39.5 mm
Mounting hole spacing, length	134.0 mm
Mounting hole spacing, width	-
Product weight	785.00 g
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

Temperatures & operating conditions

Ambient temperature range	-40...+55 °C
Temperature range at storage	-25...80 °C
Maximum temperature at tc test point	90 °C
Max.housing temperature in case of fault	130 °C
Permitted rel. humidity during operation	5...85 % ¹⁾

¹⁾ Maximum 56 days/year at 85 %

Lifespan

ECG lifetime	50000 / 100000 h ¹⁾
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¹⁾ $T_c = 85^\circ\text{C} / 1,000 \text{ h failure rate} / T_c = 75^\circ\text{C} / 1,000 \text{ h failure rate}$

Capabilities

Dimmable	Yes
Dimming interface	AstroDIM
Dimming range	10...100 %
Suitable for fixtures with prot. class	I / II

Product datasheet

Constant lumen function	Programmable
NTC input	No
Overheating protection	Automatic reversible
Overload protection	Yes
Short-circuit protection	Automatic reversible
No-load proof	Yes
Max. cable length to lamp/LED module	2.0 m
LEDset	No
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	No
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 61347-1:2015/Acc. to EN 61347-2-13:2014 + A1:2017/Acc. to EN 62384:2006 + A1:2009-09/Acc. to EN 55015:2013 + A1:2015/Acc. to EN 61000-3-2:2014/Acc. to EN 61000-3-3:2013/Acc. to EN 61547:2009/Acc. to ETSI EN 301 489-3 V2.1.1 (2019-03)





Product datasheet

Approval marks – approval	CE / ENEC / VDE / VDE-EMC / CCC / EAC
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Logistical data

Commodity code	850440829000
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Download Data

File
 User instruction OPTOTRONIC Outdoor
 Brochures Technical Application Guide - 4DIMLT2 G2 CE LED drivers (EN)
 Certificates OT ENEC 40050684 090620
 Declarations of conformity EU Declaration of Conformity 3979050

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899605381	OT 165/220...240/1A0 1DIM G2 CE	Shipping carton box 10	385 mm x 300 mm x 125 mm	14.44 dm ³	8191.00 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.

Disclaimer

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