

OT 20/170...240/1A0 4DIMLT2 G2 CE

OT 4DIM NFC IP20 Outdoor | DALI, AstroDIM, StepDIM, MainsDIM – constant current LED drivers



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 family benefits

- 4DIM functionality in one device (StepDIM, AstroDIM, MainsDIM, DALI)
- 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 family 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: < 0.5 W
- Constant Lumen Output (CLO)
- Overtemperature protection via external NTC
- Integrated customizable thermal management (Driver Guard)

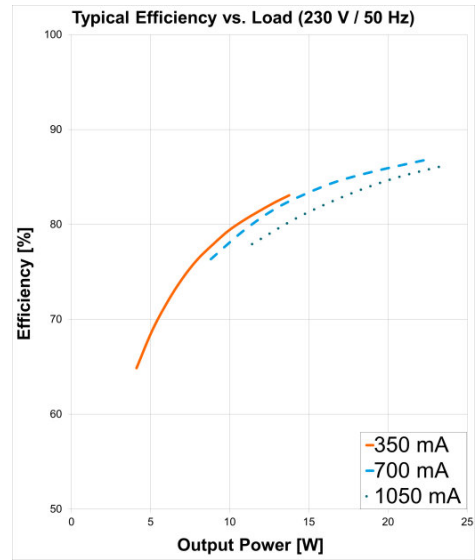
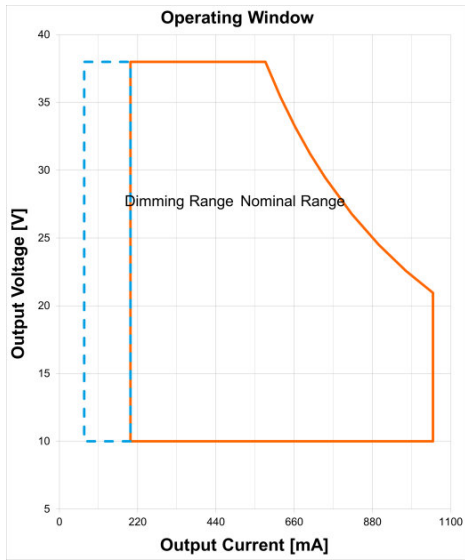
Technical data

Electrical data

| | |
|--|--------------------|
| Nominal voltage | 170...240 V |
| Input voltage AC | 170...264 V |
| Nominal current | 0.12 A |
| Mains frequency | 50...60 Hz |
| Nominal input voltage (SD port) | 220...277 V |
| Power factor λ | 0.95/0.90 |
| Total harmonic distortion | < 10 % |
| Device power loss | 3.5 W |
| Inrush current | 25 A ¹⁾ |
| 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 | ±3 % |
| Output ripple current (100 Hz) | 5 % |
| Minimum output current | 70 mA |
| Galvanic isolation | SELV |
| Max. no. of ECGs on 16A MCB with EBN-OS | 100 |
| Surge capability (SD – Ground) | 10 kV |
| Surge capability (L/N – SD) | 6 kV |

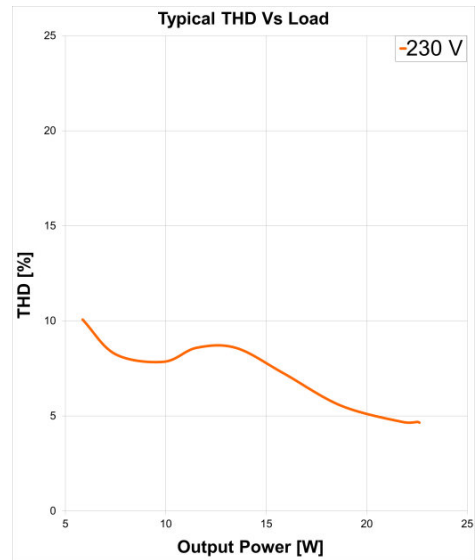
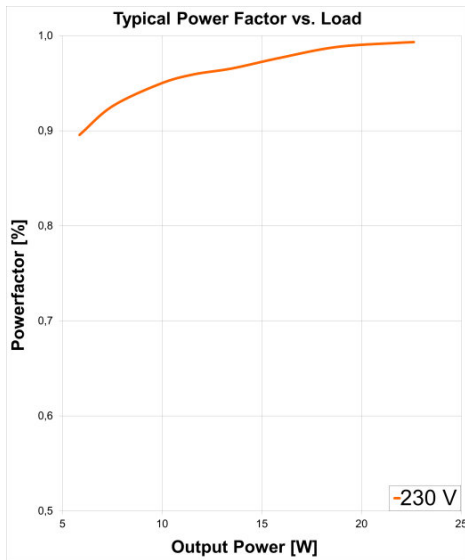
¹⁾ At 150 μ s

Product datasheet



Operating Window

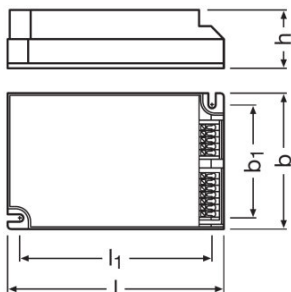
Typical Efficiency v Load 230 V 50 Hz



Typical Power Factor v Load

Typical THD v Load

Dimensions & weight



| | |
|--|---------------------------|
| Length | 123.0 mm |
| Width | 79.0 mm |
| Height | 33.0 mm |
| Mounting hole spacing, length | 111.0 mm |
| Mounting hole spacing, width | 67.0 mm |
| Product weight | 210.00 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...+60 °C |
| Maximum temperature at tc test point | 75 °C |
| Max.housing temperature in case of fault | 120 °C |
| Permitted rel. humidity during operation | 5...85 % |

Lifespan

| | |
|---------------------|--------------------------------|
| ECG lifetime | 50000 / 100000 h ¹⁾ |
|---------------------|--------------------------------|

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

Expected Lifetime

| Product name | | | | |
|--------------------------------------|------------------------------|-------|-------|--------|
| OT 20/170...240/1A0 4DIMLT2 G2 CE | ECG ambient temperature [ta] | 60 | 50 | 48 |
| | Temperature at tc-point [°C] | 75 | 65 | 63 |
| | Lifetime [h] | 50000 | 85000 | 100000 |

Capabilities

| | |
|---|---|
| Dimmable | Yes |
| Dimming interface | 4DIM / AstroDIM / DALI / MainsDIM / StepDIM |
| 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 |

Programmable features

| | |
|----------------------------|-----|
| Operating Current | Yes |
| Tuning Factor | Yes |
| Constant Lumen | Yes |
| Lamp Operating Time | Yes |
| End of Life | Yes |
| Thermal Protection | Yes |
| Driver Guard | Yes |
| AstroDIM | Yes |
| StepDIM | Yes |
| MainsDIM | Yes |
| Presence Detection | Yes |
| DALI Settings | Yes |
| Emergency Mode | Yes |
| Luminaire Info | Yes |
| 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/Acc. to IEC 62386-207/UL-8750 |









Product datasheet

| | |
|---------------------------|--------------------------------------|
| Approval marks – approval | CE / ENEC / VDE / VDE-EMC / CCC / EL |
|---------------------------|--------------------------------------|

Logistical data

| | |
|------------------------------|--------------|
| Temperature range at storage | -25...85 °C |
| Commodity code | 850440829000 |

Download Data

| File |
|--|
|  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 EATON(CEAG)-Conformity declaration AM04626_OT20_170-240_1A0_4DIMLT2_G2_CE |
|  Declarations of conformity INOTEC- Conformity declaration AM04626_OT20_170-240_1A0_4DIMLT2_G2_CE |
|  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 |
|---------------|--------------------------------------|------------------------------|--------------------------------------|-----------------------|--------------|
| 4052899981928 | OT 20/170...240/1A0 4DIMLT2 G2 CE | Shipping carton box 20 | 400 mm x 277 mm x 122 mm | 13.52 dm ³ | 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 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.

Disclaimer

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