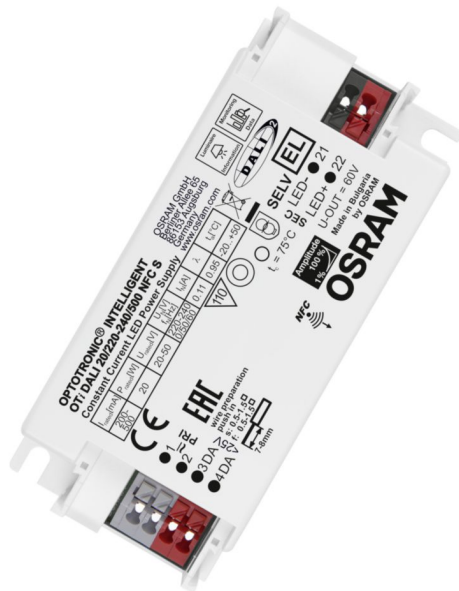


## OTi DALI 20/220-240/500 NFC S

OPTOTRONIC Intelligent – DALI NFC S | Compact constant current LED driver – Dimmable



### Product family features

- Supply voltage: 220...240 V
- Line frequency: 0 Hz, 50...60 Hz
- Line voltage: 198...264 V
- According to EN 61347-1, 61347-2-13, 62384
- RI suppression: to EN 55015/CISPR 15
- Immunity according to EN 61547
- Type of protection: IP20

### Product family benefits

- Versatile DALI window driver due to flexible output characteristic
- Locking and unlocking of luminaire/driver data
- Easy and fast output current setting via NFC
- Very high efficiency
- High-quality dimming of 1...100 % by amplitude dimming
- DALI-2 certified incl. Parts 251, 252, 253



Specifications are subject to changes without notice.

[www.inventronicsglobal.com](http://www.inventronicsglobal.com)

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[support@inventronicsglobal.com](mailto:support@inventronicsglobal.com)

### Areas of application

- Suitable for downlights, spotlights and LED panels
- Suitable for use in luminaires with flexible current setting
- Installation in emergency lighting systems according to IEC 61347-2-13, appendix J
- Suitable for indoor SELV installations
- Suitable for luminaires of protection classes I and II

## Technical data

### Electrical data

Nominal output voltage	20...50 V <sup>1)</sup>
Input voltage DC	176...276 V
Nominal output current	200...500 mA <sup>2)</sup>
Inrush current	< 20 A <sup>3)</sup>
Max. ECG no. on circuit breaker 10 A (B)	20
Max. ECG no. on circuit breaker 16 A (B)	30
Nominal output power	20 W <sup>4)</sup>
Input voltage AC	198...264 V <sup>5)</sup>
Power factor $\lambda$	0.63C...0.95
U-OUT (working voltage)	60 V
Surge capability (L-N)	1 kV
Surge capability (L/N-Ground)	2 kV
Mains frequency	0...60 Hz
Protective conductor current	not relevant
Nominal input voltage	220...240 V
Total harmonic distortion	< 10 % <sup>6)</sup>
Output current tolerance	±5 %
Maximum output power	20 W
Output ripple current (100 Hz)	< 5 % <sup>7)</sup>
Current set	DALI / NFC
Networked standby power	≤0.18 W <sup>8)</sup>

1) Maximum 60 V

2) ±5%

3)  $t_{width} = 200 \mu s$  (measured at 50 %  $I_{peak}$ )

4) Partial load 4...20 W

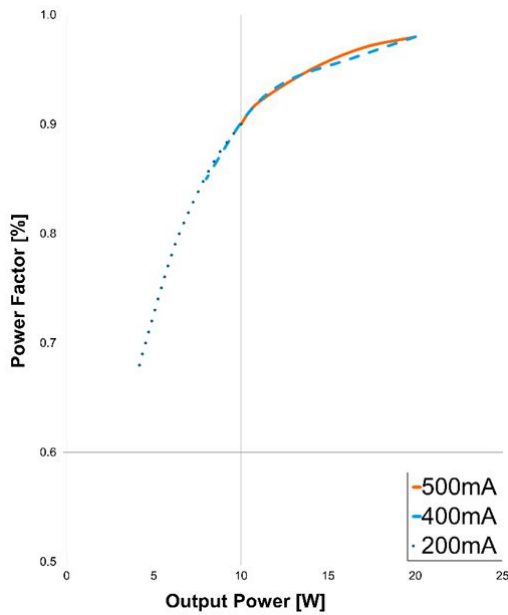
5) Permitted voltage range

6) At full load, 220...240 V, 50 Hz / see graphs

7) Ripple average at 100 Hz

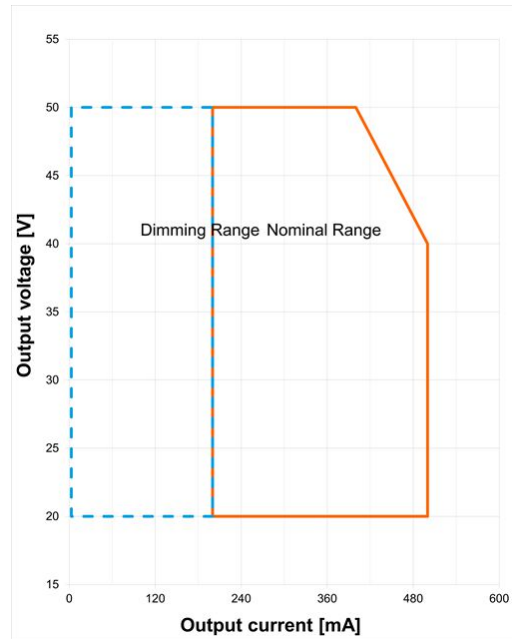
8) at 230 V, 50 Hz

### Typical Power Factor v Load



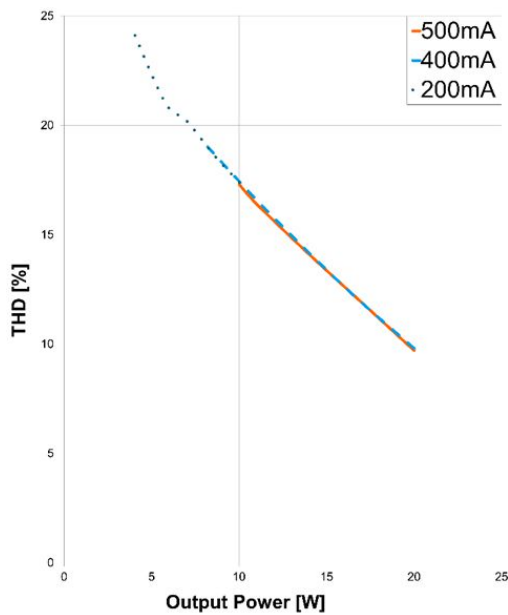
OTI QBM DALI 20 Typical Power Factor vs. Load

### Operating Window



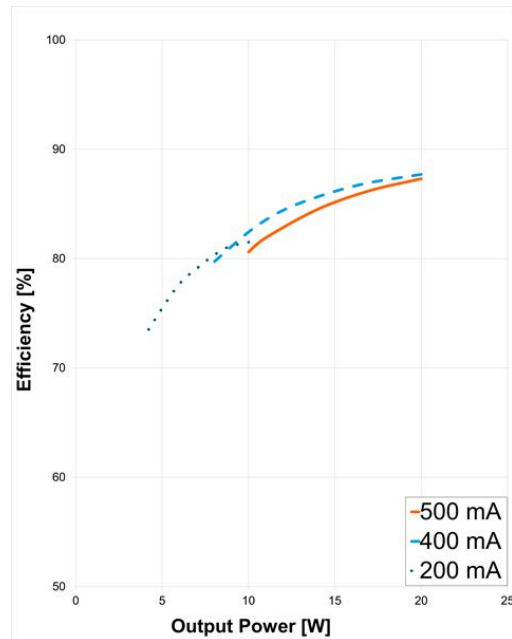
OTI QBM DALI 20 Operating Window

### Typical THD v Load



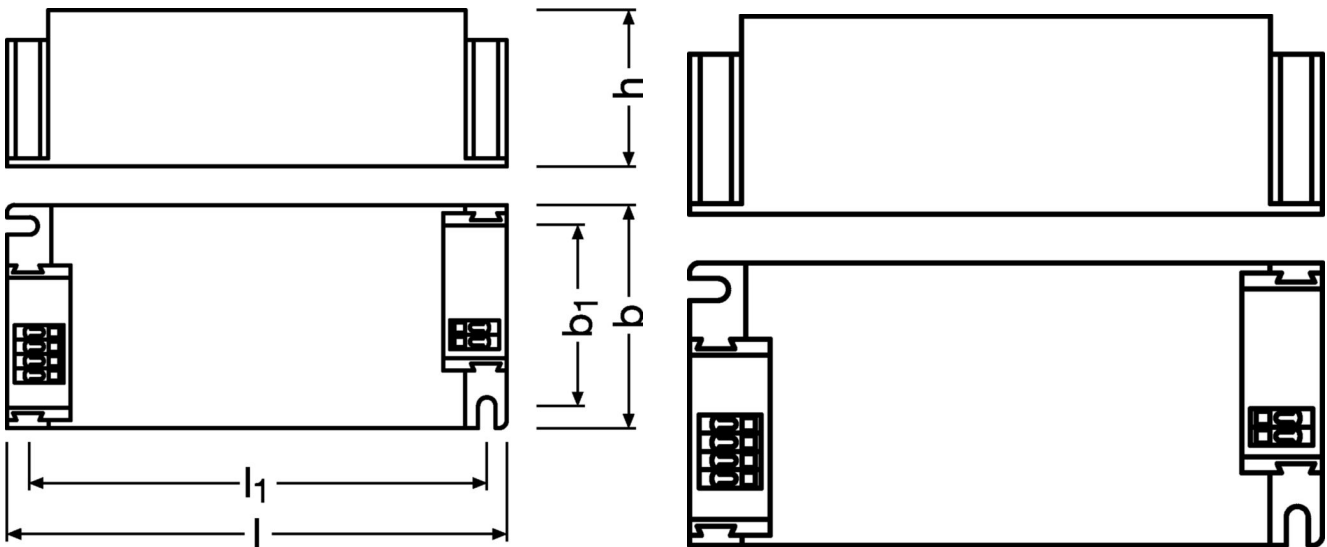
OTI QBM DALI 20 Typical THD Vs Load

### Typical Efficiency v Load 230 V 50 Hz



OTI QBM DALI 20 Typical Efficiency vs. Load

## Dimensions & weight



Product weight	110.00 g
Mounting hole spacing, width	34.0 mm
Mounting hole spacing, length	88.0 mm
Wire preparation length, output side	8.0...9.0 mm
Wire preparation length, input side	8.0...9.0 mm
Cable/wire length, output side	2000 mm
Cable cross-section, output side	0.2...1.5 mm <sup>2 1)</sup>
Cable cross-section, input side	0.2...1.5 mm <sup>2 1)</sup>
Length	97.0 mm
Height	29.5 mm

1) Solid or flexible leads

## Colors & materials

Product color	White
Casing material	Plastic

## Temperatures & operating conditions

Max.housing temperature in case of fault	110 °C
Maximum temperature at tc test point	75 °C <sup>1)</sup>
Ambient temperature range	-20...+50 °C
Temperature range at storage	-25...85 °C
Permitted rel. humidity during operation	5...85 % <sup>2)</sup>

1) Maximum at the Tc-point

2) Maximum 56 days/year at 85 %

## Lifespan

<b>ECG lifetime</b>	50000 h / 100000 h <sup>1)</sup>
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1)  $T_c = 75^\circ\text{C}$ , 0.2% / 1,000 h failure rate /  $T_c = 65^\circ\text{C}$ , 0.1% / 1,000 h failure rate

## Capabilities

<b>Max. cable length to lamp/LED module</b>	2.0 m <sup>1)</sup>
<b>Dimming range</b>	1...100 %
<b>Dimming method</b>	Amplitude Modulation
<b>Dimming interface</b>	DALI-2
<b>Suitable for through-wiring</b>	No
<b>Suitable for emergency lighting</b>	Yes
<b>Short-circuit protection</b>	Automatic reversible
<b>Overload protection</b>	Automatic reversible
<b>Overheating protection</b>	Automatic reversible
<b>Dimmable</b>	Yes
<b>Suitable for fixtures with prot. class</b>	I / II
<b>No-load proof</b>	Yes
<b>Type of connection, input side</b>	Push terminal
<b>Type of connection, output side</b>	Push terminal
<b>Constant lumen function</b>	Programmable
<b>Programming interface</b>	DALI, NFC

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

## Programming

Box programming	Yes
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## Programmable features

Tuning Factor	Yes
Driver Guard	Yes
DALI Settings	Yes
Emergency Mode	Yes
DALI-2 Luminaire Data	Yes <sup>1)</sup>
Configuration Lock	Yes
Soft Switch Off	Yes
Dim to Dark	Yes
TouchDIM + Sensor	No
Corridor Functionality	No

1) Acc. DALI part 251

## Certificates & standards

Standards	Acc. to EN 61347-1 / Acc. to EN 61347-2-13 / Acc. to EN 55015 / Acc. to EN 61547 / Acc. to EN 61000-3-2 / Acc. to EN 62384 / Acc. to EN 62386 / Acc. to IEC 62386-101:Ed2 / Acc. to IEC 62386-102:Ed2 / Acc. to IEC 62386-207:Ed1
Approval marks – approval	CE / EL / DALI-2 / EAC / CCC / ENEC
Type of protection	IP20

## Logistical data

Commodity code	85044083900
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## Download Data

File		
Certificates	PDF	▶ OTI DALI 20 NFC S EATON AM31177 050320
Certificates	PDF	▶ OTI DALI 20 NFC S INOTEC AM31177 050320
Certificates	PDF	▶ OTI DALI NFC S RCM CS10925N 180821
Certificates	PDF	▶ OT ENEC 40038447 270224
CAD data 3-dim	Compressed	▶ OTI DALI NFC S CAD3PDF 140220
CAD data 2-dim	Compressed	▶ OTI DALI NFC S CAD2PDF 140220
CAD data	Compressed	▶ OTI DALI NFC S IGS 140220
CAD data	Compressed	▶ OTI DALI NFC S STEP 140220
Mandatory Publications	PDF	▶ OTI DALI NFC S I CE 4169161 110222
Mandatory Publications	PDF	▶ OTI DALI NFC S I UK DoC 4281113 110222
User instruction	PDF	▶ OPTOTRONIC LED Power Supply

## 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.



## Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4062172110068	OTi DALI 20/220-240/500 NFC S	Shipping carton box 20 Pieces	208 x 158 x 107 mm	3.52 dm <sup>3</sup>	115.00 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](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.

## Accessories Optional

Product description	Accessory name	Accessory code
OTi DALI 20/220-240/500 NFC S	PRH101 -USB	▶ 6977078996938
OTi DALI 20/220-240/500 NFC S	CPR30 -USB	▶ 6977078996945

## Disclaimer

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