

## OTi DALI 10/220...240/700 NFC I

OPTOTRONIC Intelligent – DALI NFC I | 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
- Integrated cable clamp for luminaire and independent installation

### 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

### 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 input voltage	220...240 V
Mains frequency	0/50/60 Hz
Input voltage AC	198...264 V <sup>1)</sup>
Input voltage DC	176...276 V
Total harmonic distortion	15 % <sup>2)</sup>
Power factor $\lambda$	> 0.98 / > 0.94 <sup>3)</sup>
Efficiency in full-load	82 % <sup>4)</sup>
Device power loss	3.5 W
Networked standby power	$\leq 0.15$ W <sup>4)</sup>
Inrush current	< 5 A <sup>5)</sup>
Max. ECG no. on circuit breaker 10 A (B)	80
Max. ECG no. on circuit breaker 16 A (B)	130
Surge capability (L/N-Ground)	2 kV
Surge capability (L-N)	1 kV
Nominal output voltage	2.5...45 V <sup>6)</sup>
U-OUT (working voltage)	60 V
Nominal output current	150...700 mA <sup>7)</sup>
Default output current	350 mA
Output current tolerance	$\pm 3$ %
Output ripple current (100 Hz)	< 2 % <sup>8)</sup>
Output PSTLM	$\leq 1$
Output SVM	$\leq 0.4$
Nominal output power	10 W <sup>9)</sup>
Maximum output power	10 W
Galvanic isolation	SELV
Current set	DALI / NFC

<sup>1)</sup> Permitted voltage range

<sup>2)</sup> At full load, 220...240 V, 50 Hz / see graphs

<sup>3)</sup> At Pmax, 220...240 V, 50 Hz / At 50% Pmax, 220...240 V, 50 Hz

<sup>4)</sup> at 230 V, 50 Hz

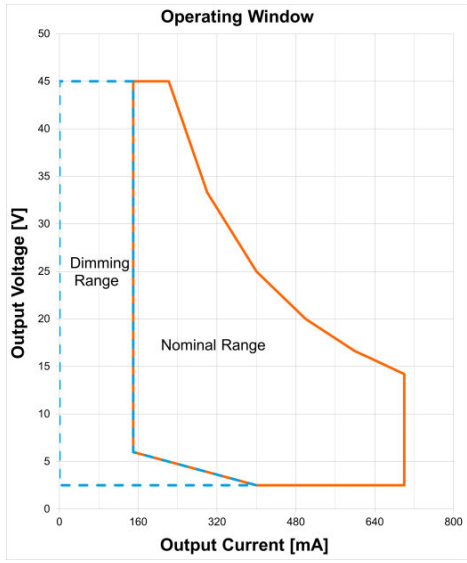
<sup>5)</sup>  $t_{width} = 100 \mu s$  (measured at 50 %  $I_{peak}$ )

<sup>6)</sup> Maximum 60 V

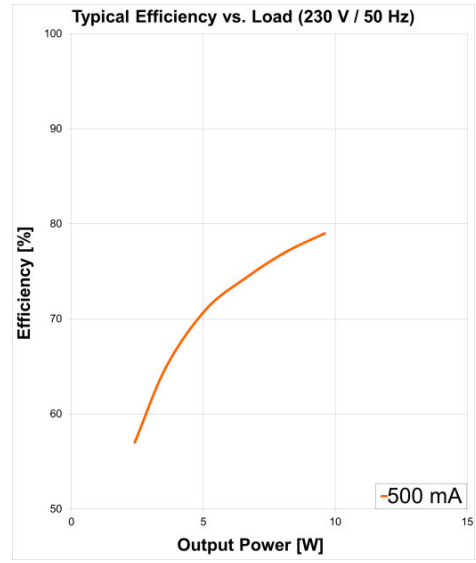
<sup>7)</sup>  $\pm 3\%$

<sup>8)</sup> Ripple / average @ 100 Hz

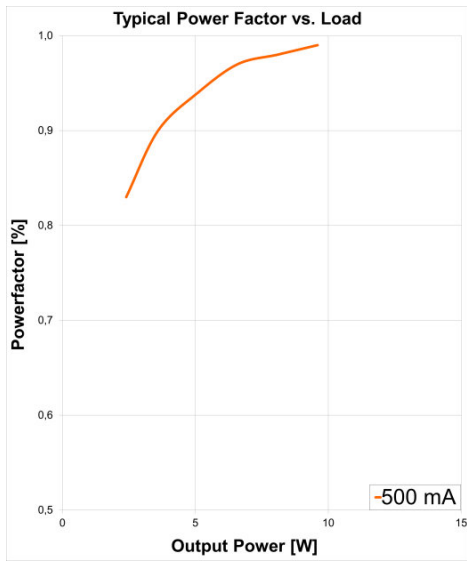
<sup>9)</sup> Partial load 1.5...10 W



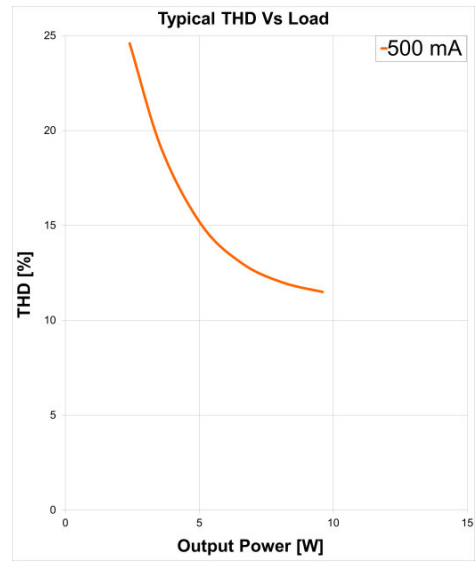
OTI DALI 10 NFC Operating Window



OTI DALI 10 NFC Typical Efficiency vs. Load (230 V 50 Hz)

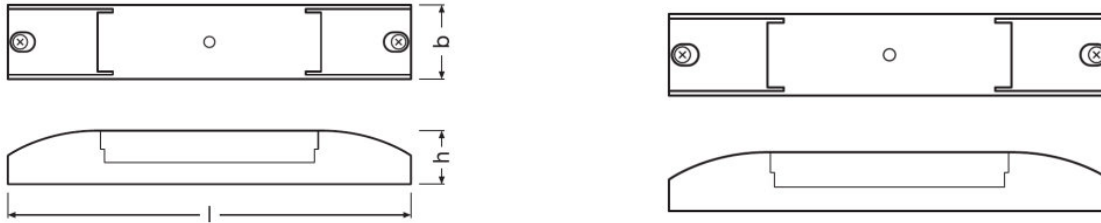


OTI DALI 10 NFC Typical Power Factor vs. Load



OTI DALI 10 NFC Typical THD Vs Load.tif

## Dimensions & weight



<b>Mounting hole spacing, length</b>	132.0 mm
<b>Product weight</b>	76.00 g
<b>Cable cross-section, input side</b>	0.2...1.5 mm <sup>2</sup> <sup>1)</sup>
<b>Cable cross-section, output side</b>	0.2...1.5 mm <sup>2</sup> <sup>1)</sup>
<b>Wire preparation length, input side</b>	8.0...9.1 mm
<b>Wire preparation length, output side</b>	8.0...9.1 mm
<b>Length</b>	166.0 mm
<b>Width</b>	30.0 mm
<b>Height</b>	22.0 mm

<sup>1)</sup> Solid or flexible leads

## Colors & materials

<b>Casing material</b>	Plastic
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## Temperatures & operating conditions

<b>Ambient temperature range</b>	-25...+50 °C
<b>Maximum temperature at tc test point</b>	75 °C <sup>1)</sup>
<b>Max.housing temperature in case of fault</b>	110 °C
<b>Temperature range at storage</b>	-40...+85 °C
<b>Permitted rel. humidity during operation</b>	5...85 % <sup>2)</sup>

<sup>1)</sup> Maximum at the T<sub>c</sub>-point

<sup>2)</sup> Maximum 56 days/year at 85 %

## Lifespan

<b>ECG lifetime</b>	50000 / 100000 h <sup>1)</sup>
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<sup>1)</sup> T<sub>c</sub> = 75°C, 0.2% / 1,000 h failure rate / T<sub>c</sub> = 65°C, 0.1% / 1,000 h failure rate

## Capabilities

## Product datasheet

<b>Dimmable</b>	Yes
<b>Dimming interface</b>	DALI-2 / Touch DIM / Touch DIM Sensor
<b>Dimming range</b>	1...100 % <sup>1)</sup>
<b>Dimming method</b>	Amplitude Modulation
<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>Intended for no-load operation</b>	No
<b>Max. cable length to lamp/LED module</b>	2.0 m
<b>Suitable for fixtures with prot. class</b>	I / II
<b>Type of connection, input side</b>	Push terminal
<b>Type of connection, output side</b>	Push terminal
<b>Suitable for emergency lighting</b>	Yes
<b>Constant lumen function</b>	Programmable
<b>Programming interface</b>	DALI, NFC
<b>Number of channels</b>	1
<b>DALI-2 Energy Data</b>	Yes <sup>2)</sup>
<b>DALI-2 Diagnostic Data</b>	Yes <sup>3)</sup>

<sup>1)</sup> For maximum nominal output current

<sup>2)</sup> Acc. DALI part 252

<sup>3)</sup> Acc. DALI part 253

### Programming

<b>Box programming</b>	Yes
<b>Tuner4TRONIC</b>	Yes
<b>Tuner4TRONIC Field App</b>	No
<b>Programming device</b>	DALI / NFC

### Programmable features

<b>Constant Lumen</b>	Yes
<b>Lamp Operating Time</b>	Yes
<b>Driver Guard</b>	Yes
<b>DALI Settings</b>	Yes
<b>Emergency Mode</b>	Yes
<b>DALI-2 Luminaire Data</b>	Yes <sup>1)</sup>
<b>Configuration Lock</b>	Yes
<b>Soft Switch Off</b>	Yes
<b>Dim to Dark</b>	Yes

## Product datasheet

<b>OEM Key</b>	No
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<sup>1)</sup> Acc. DALI part 251













### Certificates & standards

<b>Approval marks – approval</b>	ENEC / VDE-EMC / EL / CE / DALI-2
<b>Standards</b>	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 55015/Acc. to IEC 61547/Acc. to IEC 61000-3-2/Acc. to IEC 62384/Acc. to IEC 62386/Acc. to IEC 62386-101:Ed2/Acc. to IEC 62386-102:Ed2/Acc. to IEC 62386-207:Ed1
<b>Protection class</b>	II
<b>Type of protection</b>	IP20

### Logistical data

<b>Commodity code</b>	850440829000
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### Download Data

File	
	User instruction OPTOTRONIC LED Power Supply
	Certificates OTI DALI 10 NFC I EATON 091220
	Certificates OTI DALI 10 NFC I INOTEC 091220
	Certificates OTI DALI NFC I CCC 2020171002003881 280121
	Certificates OT ENEC 40038447 210721
	Certificates OT EMC 40044675 250621
	Declarations of conformity OTI DALI NFC S I CE 4169161 210921
	Declarations of conformity OTI DALI NFC S I UK DoC 4281113 210921
	CAD data OTI DALI 10 NFC I IGS 031220
	CAD data OTI DALI 10 NFC I STEP 031220
	CAD Data 2-dim OTI DALI 10 NFC I CAD2PDF 031220
	CAD data 3-dim OTI DALI 10 NFC I CAD3PDF 031220

## Product datasheet

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### 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.

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### Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4062172151252	OTi DALI 10/220...240/700 NFC I	Shipping carton box 20	344 mm x 126 mm x 83 mm	3.60 dm <sup>3</sup>	1639.00 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.

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### 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.

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### Disclaimer

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