

# OTi DALI 15/220...240/1A0 NFC LP

OPTOTRONIC Intelligent - DALI NFC LP | Compact constant current LED driver - Dimmable



### Product family features

- Supply voltage: 220...240 V

- Line frequency: 0 Hz | 50 Hz | 60 Hz

Line voltage: 198...264 VLifetime: up to 100,000 hType of protection: IP20

### Product family benefits

- Small housing for flexible luminaire designs
- Versatile DALI window driver due to flexible output characteristic
- 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
- Easy to use in corridors and restrooms because of three-level Corridor function
- Touch DIM application: easy to control via pushbutton or sensor





### 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	220240 V
Mains frequency	0,50,60 Hz
Input voltage AC	198264 V <sup>1)</sup>
Input voltage DC	176276 V
Total harmonic distortion	< 10 % <sup>2)</sup>
Power factor λ	033C098
Efficiency in full-load	87.5 % <sup>3)</sup>
Device power loss	-
Inrush current	20 A <sup>4)</sup>
Max. ECG no. on circuit breaker 10 A (B)	82
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	1054 V <sup>5)</sup>
U-OUT (working voltage)	60 V
Nominal output current	1501050 mA <sup>6)</sup>
Default output current	350 mA
Galvanic isolation primary/secondary	SELV
Galvanic isolation DALI/mains	Basic
Galvanic isolation DALI/output	SELV
Current set	DALI / NFC
Output current tolerance	±3 %
Output ripple current (100 Hz)	< 3 % <sup>7)</sup>
Output PSTLM	≤1
Output SVM	≤0.4
Nominal output power	18 W <sup>8)</sup>
Maximum output power	18 W <sup>8)</sup>
Networked standby power	0.13 W <sup>3)</sup>

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

Page 3 of 9

 $<sup>^{2)}</sup>$  At full load, 220...240 V, 50 Hz  $\!\!/$  see graphs

<sup>&</sup>lt;sup>3)</sup> at 230 V, 50 Hz

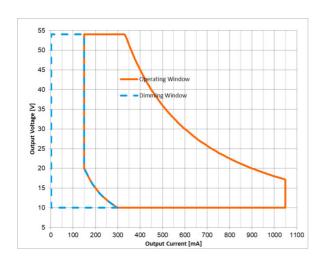
 $<sup>^{4)}</sup>$ t width = 25 µs (measured at 50 % I peak)

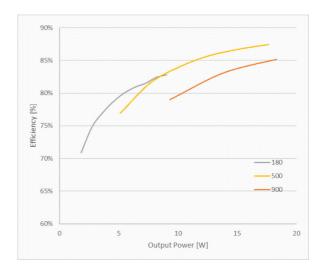
<sup>5)</sup> Maximum 60 V

<sup>6) ±3%</sup> 

<sup>7)</sup> Ripple average at 100 Hz

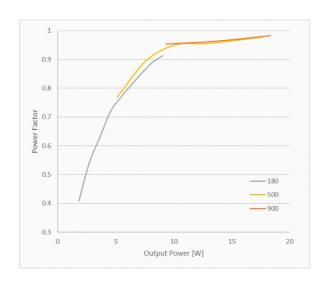
<sup>8)</sup> Partial load 3...18 W

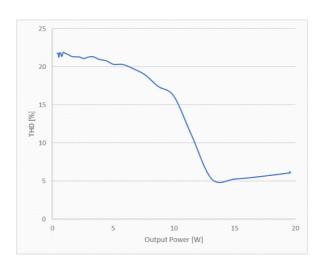




OTI DALI 15 NFC LP Operating window

OTI DALI 15 NFC LP Typical Efficiency vs. Load (230 V 50 Hz)

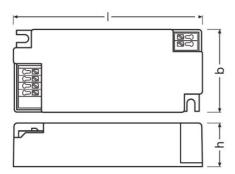


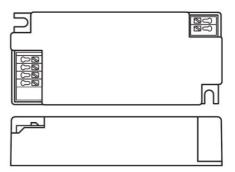


OTI DALI 15 NFC LP Typical Power Factor vs. Load

OTI DALI 15 NFC LP Typical THD Vs Load

# Dimensions & weight





Mounting hole spacing, length	88.0 mm
Mounting hole spacing, width	34.0 mm
Product weight	12000 g
Cable cross-section, input side	0.51.5 mm <sup>2</sup> 1)
Cable cross-section, output side	0.51.5 mm <sup>2</sup> 1)
Wire preparation length, input side	78 mm
Wire preparation length, output side	78 mm
Length	970 mm
Width	425 mm
Height	220 mm

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

### Colors & materials

# Temperatures & operating conditions

Ambient temperature range	-20+50 °C
Maximum temperature at tc test point	80 °C <sup>1)</sup>
Max.housing temperature in case of fault	110 °C
Temperature range at storage	-40+85 °C
Permitted rel. humidity during operation	585 % <sup>2)</sup>

 $<sup>^{1)}</sup>$  Maximum at the Tc-point

## Lifespan

ECG lifetime	50000 / 100000 h <sup>1)</sup>

<sup>1)</sup> T  $_{\rm C}$  = 80°C, 0.2% / 1,000 h failure rate / T  $_{\rm C}$  = 70°C, 0.1% / 1,000 h failure rate

 $<sup>^{2)}\,\</sup>mathrm{Maximum}$  56 days/year at 85 %

## Additional product data

Encapsulated	No
--------------	----

# **Capabilities**

•	
Dimmable	Yes
Dimming interface	DALI-2 / Touch DIM / Touch DIM Sensor
Dimming range	1100 %
Dimming method	Amplitude Modulation
Overheating protection	Automatic reversible
Overload protection	Automatic reversible
Short-circuit protection	Automatic reversible
No-load proof	Yes
Intended for no-load operation	No
Max. cable length to lamp/LED module	2.0 m <sup>1)</sup>
Suitable for fixtures with prot. class	1/11
Type of connection, input side	Push terminal
Type of connection, output side	Push terminal
Suitable for through-wiring	No
Suitable for emergency lighting	Yes
Constant lumen function	Programmable
Programming interface	DALI, NFC
Control interface	DALI
Detection angle (Light sensor)	-
Number of channels	1
DALI-2 Energy Data	Yes <sup>2)</sup>
DALI-2 Diagnostic Data	Yes <sup>3)</sup>

 $<sup>^{1)}</sup>$  Output wires must be routed as close as possible to each other

# **Programming**

Box programming	Yes
Tuner4TRONIC	Yes
Tuner4TRONIC Field App	Yes
Programming device	DALI / NFC

# Programmable features

Operating Current	Yes
Constant Lumen	Yes

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

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

Lamp Operating Time	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	Yes
Corridor Functionality	Yes
OEM Key	No

<sup>1)</sup> Acc. DALI part 251

### Certificates & standards

Approval marks – approval	CE / UKCA / EL / DALI-2 / EAC
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
Protection class	Ш
Type of protection	IP20

# Logistical data

Commodity code	85044083900

### **Environmental information**

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh)				
Date of Declaration	21-04-2023			
Primary Article Identifier	4062172227674			
Candidate List Substance 1	Lead			
CAS No. of substance 1	7439-92-1			
Safe Use Instruction	The identification of the Candidate List substance is sufficient to allow safe use of the article.			
Declaration No. in SCIP database	668ca664-22f7-4d6e-8dfe-a0c632395311			

### Download Data

File

Z	User instruction OPTOTRONIC LED Power Supply
Z	Certificates OT ENEC 40038447 260623
<u> </u>	CAD data OTI DALI NFC LP IGS 240921
<u> </u>	CAD data OTI DALI NFC LP STEP 240921
<b>=</b>	CAD Data 2-dim OTI DALI NFC LP CAD2PDF 240921
<b>=</b>	CAD data 3-dim OTI DALI NFC LP CAD3PDF 240921

#### 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
4062172227674	OTi DALI 15/220240/1A0 NFC LP	Shipping carton box 20	208 mm x 122 mm x 107 mm	2.72 dm <sup>3</sup>	2490.00 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 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.

#### Disclaimer

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