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

OPTOTRONIC Intelligent – DALI LT2 NFC | 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 V
- According to EN 61347-1, 61347-2-13, 62384
- RI suppression: to EN 55015/CISPR 15
- Line harmonics according to EN 61000-3-2
- Immunity according to EN 61547
- Lifetime: up to 100,000 h
- Type of protection: IP20

Product family benefits

- Versatile DALI window driver due to flexible output characteristic
- Very high efficiency
- Protection of the system thanks to thermal management and Smart Control
- High-quality dimming of 1...100 % by amplitude dimming
- Easy and fast output current setting via NFC

Versatile scope of application due to OSRAM DALI Technology:

- Suitable for emergency Installations (acc. to EN 60598-2-22 and IEC 61347-2-13,appendix J) thanks to DC detection (0 Hz, pulsating DC), on/off switchable
- Feedback of power consumption and operating hours (Fit for SMART GRID)
- Suitable for buildings according to EPBD/BREEAM/LEED due to automatic Constant Lumen Output setting

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Areas of application

- Installation in emergency lighting systems according to IEC 61347-2-13, appendix J
- Suitable for use in luminaires with flexible current setting
- Suitable for indoor SELV installations
- Suitable for luminaires of protection classes I and II
- Suitable for downlights, spotlights and LED panels
- Installation via Cable Clamp Kit possible (depending on version of product)

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Technical data

Electrical data

Nominal input voltage	220…240 V
Mains frequency	0/50/60 Hz
Input voltage AC	198…264 V [1)]
Input voltage DC	176…276 V
Total harmonic distortion	15 % [2)]
Power factor λ	> 0.98/> 0.94 [3)]
Efficiency in full-load	82 % [4)]
Device power loss	3.5 W
Inrush current	< 5 A [5)]
Max. ECG no. on circuit breaker 10 A (B)	80
Max. ECG no. on circuit breaker 16 A (B)	130
Max. ECG no. on circuit breaker 25 A (B)	-
Surge capability (L/N-Ground)	2 kV
Surge capability (L-N)	1 kV
Nominal output voltage	2.5…45 V [6)]
U-OUT (working voltage)	60 V
Nominal output current	150…700 mA [7)]
Default output current	350 mA
Output current tolerance	±3 %
Output ripple current (100 Hz)	< 2 % [8)]
Output PSTLM	≤1
Output SVM	≤0.4
Nominal output power	10 W [9)]
Maximum output power	10 W
Power loss in stand-by mode	≤0.15 W
Galvanic isolation primary/secondary	SELV
Current set	DALI / NFC
Galvanic isolation DALI/mains	Basic
Galvanic isolation DALI/output	SELV
Networked standby power	≤0.15 W [4)]

1) Permitted voltage range

2) At full load, 220…240 V, 50 Hz / At half load, 220…240 V, 50 Hz

3) At Pmax, 220…240 V, 50 Hz/At 50% Pmax, 220…240 V, 50 Hz

4) at 230 V, 50 Hz

5) t_{width} = 100 µs (measured at 50 % I_{peak})

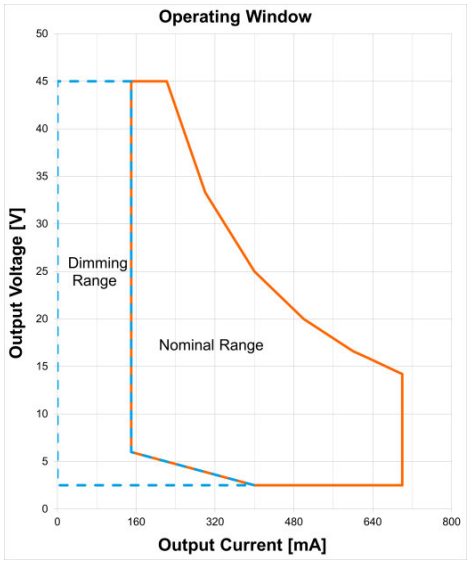
6) Maximum 60 V

7) ±3%

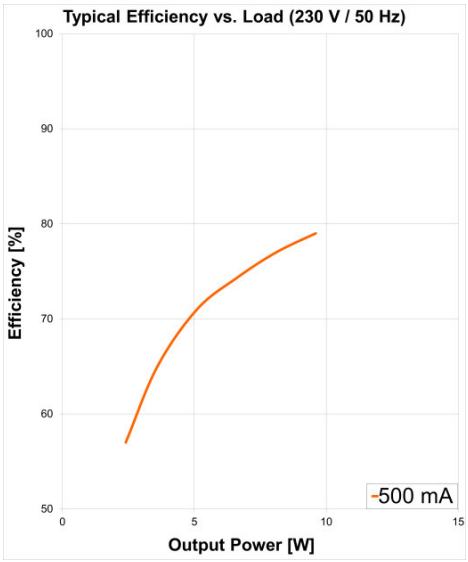
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8) Ripple average at 100 Hz

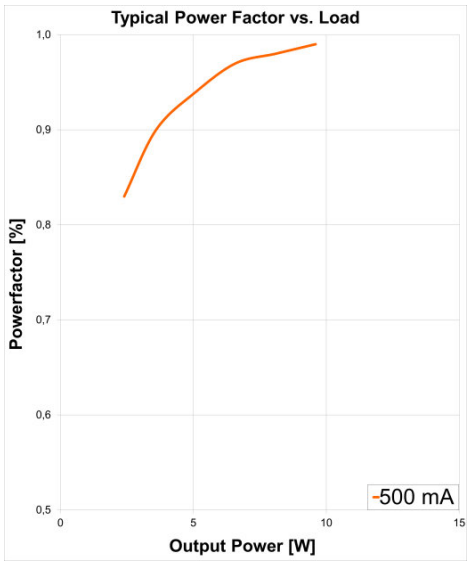
9) Partial load 1.5...10 W



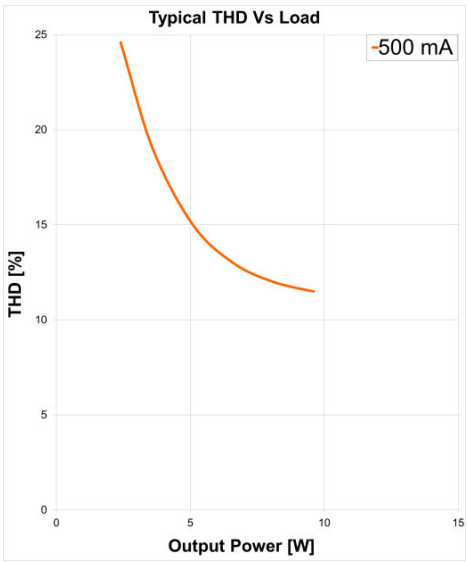
OTI DALI 10 NFC Operating Window



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



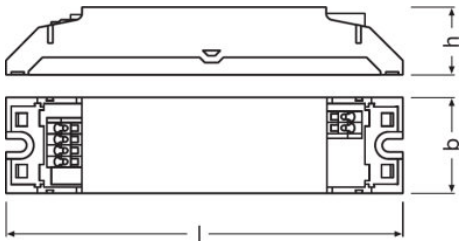
OTI DALI 10 NFC Typical Power Factor vs. Load



OTI DALI 10 NFC Typical THD Vs Load.tif

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Dimensions & weight



Mounting hole spacing, length	115.0 mm
Product weight	58.00 g
Cable cross-section, input side	0.2…1.5 mm² [1]
Cable cross-section, output side	0.2…1.5 mm² [1]
Wire preparation length, input side	8.0…9.1 mm
Wire preparation length, output side	8.0…9.1 mm
Length	124.0 mm
Width	31.0 mm
Height	21.0 mm

[1] Solid or flexible leads

Colors & materials

Casing material	Plastic

Temperatures & operating conditions

Ambient temperature range	-20…+50 °C
Maximum temperature at tc test point	75 °C [1]
Max.housing temperature in case of fault	110 °C
Temperature range at storage	-40…+85 °C
Permitted rel. humidity during operation	5…85 % [2]

[1] Maximum at the Tc-point

[2] Maximum 56 days/year at 85 %

Lifespan

ECG lifetime	50000 / 100000 h [1]

[1] T_c = 75°C, 0.2% / 1,000 h failure rate / T_c = 65°C, 0.1% / 1,000 h failure rate

Additional product data

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Successor EAN	4062172143899

Capabilities

Dimmable	Yes
Dimming interface	DALI-2
Dimming range	1...100 %
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 [1)]
Suitable for fixtures with prot. class	I / II
Type of connection, input side	Push terminal
Type of connection, output side	Push terminal
Suitable for emergency lighting	Yes
Constant lumen function	Programmable
Programming interface	DALI, NFC
Number of channels	1

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

Programming

Tuner4TRONIC	Yes
Tuner4TRONIC Field App	Yes
Programming device	DALI / NFC

Programmable features

Constant Lumen	Yes
Lamp Operating Time	Yes
Driver Guard	Yes
DALI Settings	Yes
Emergency Mode	Yes
Configuration Lock	Yes
Soft Switch Off	Yes
Dim to Dark	Yes
TouchDIM + Sensor	No
Corridor Functionality	No
OEM Key	No

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Certificates & standards

Approval marks – approval	ENEC 10 / VDE / EMC / EL / CE / DALI-2 / CCC
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	II
Type of protection	IP20

Logistical data

Commodity code	850440829000

Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh)	
Date of Declaration	18-10-2022
Primary Article Identifier	4052899562639
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	76aba481-9f21-42ba-9d2e-a3a03dbf7947

Download Data

	File
	User instruction OPTOTRONIC LED Power Supply
	User instruction OPTOTRONIC LED Power Supply
	Certificates OT EMC 40050085 200220
	Certificates OTI DALI 10 NFC EATON AM29184 210720
	Certificates OTI DALI 10 NFC INOTEC AM29184 210720
	Certificates OT ENEC 40038447 260623
	Certificates OT EMC 40044675 031022

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	Declarations of conformity OTI DALI NFC UK DoC 4291512 240221
	Declarations of conformity OTI DALI NFC CE 3758701 161023
	CAD data OTI DALI 10 NFC IGS 140120
	CAD data OTI DALI 10 NFC STEP 140120
	CAD Data 2-dim OTI DALI 10 NFC CAD2PDF 140120
	CAD data 3-dim OTI DALI 10 NFC CAD3PDF 140120

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
4052899562639	OTi DALI 10/220...240/700 NFC	Shipping carton box 20	165 mm x 258 mm x 71 mm	3.02 dm^3	1416.00 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.

Accessories Optional

Product description	Accessory name	Accessory code
OTi DALI 10/220...240/700 NFC	OT CABLE CLAMP N-STYLE	4062172046732

Data privacy

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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.

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