

## OTi DALI 50/220...240/1A4 LT2 FAN NFC

OPTOTRONIC Intelligent – DALI LT2 NFC | Compact constant current LED drivers



### 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)

### 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



## Product datasheet

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### 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 according to EN 55015:2007+A1:2007/CDN
- Line harmonics according to EN 61000-3-2
- Immunity according to EN 61547
- Lifetime: up to 100,000 h
- Type of protection: IP20

## 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	< 10 % <sup>2)</sup>
Power factor $\lambda$	> 0.95
ECG efficiency	91 % <sup>3)</sup>
Device power loss	7.5 W
Power loss in stand-by mode	0.15 W
Inrush current	30 A <sup>4)</sup>
Max. ECG no. on circuit breaker 10 A (B)	12
Max. ECG no. on circuit breaker 10 A (C)	-
Max. ECG no. on circuit breaker 16 A (B)	20
Max. ECG no. on circuit breaker 16 A (C)	-
Max. ECG no. on circuit breaker 25 A (B)	-
Surge capability (L/N-Ground)	2 kV <sup>5)</sup>
Surge capability (L-N)	1 kV
Nominal output voltage	15...54 V <sup>6)</sup>
U-OUT (working voltage)	60 V
Nominal output current	600...1400 mA <sup>7)</sup>
Output current LEDset open	300 mA
Output current LEDset shorted	1050 mA
Default output current	1050 mA <sup>8)</sup>
Output current tolerance	$\pm 3$ %
Output ripple current (100 Hz)	2 %
Nominal output power	55 W <sup>9)</sup>
Galvanic isolation	SELV
Current set	DALI / LEDset2 / NFC

1) Permitted voltage range

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

3) Typical / At full load and 230 V

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

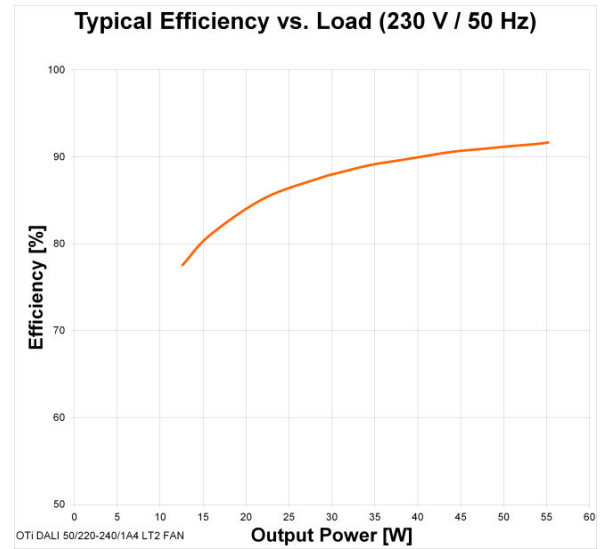
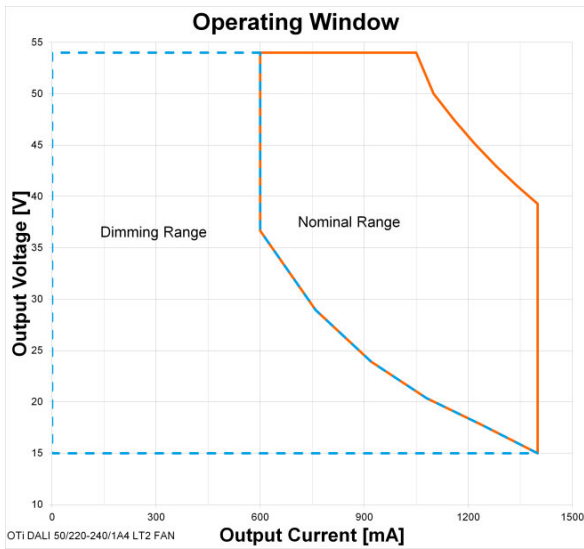
5) Functional Earth

6) Maximum 60 V

7)  $\pm 5$  %

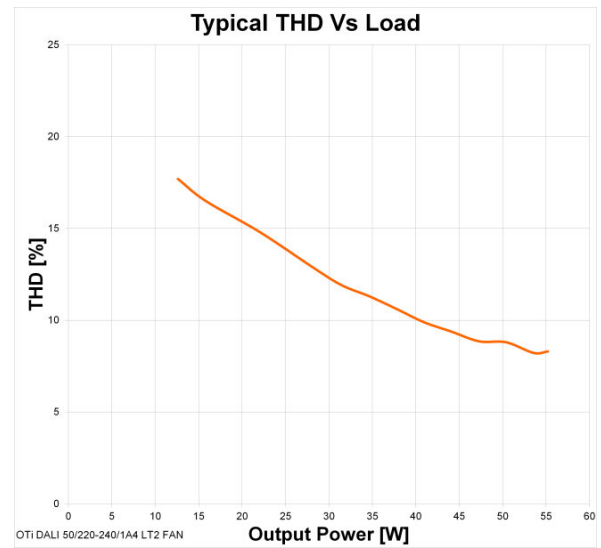
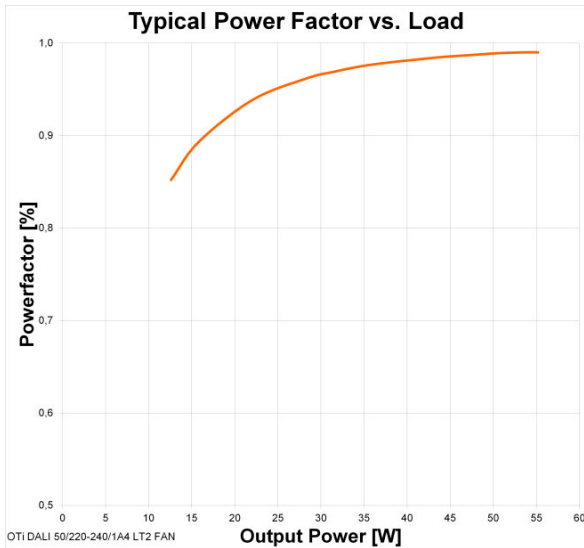
8) LEDset deactivated

9) Partial load 22...55 W



Operating Window

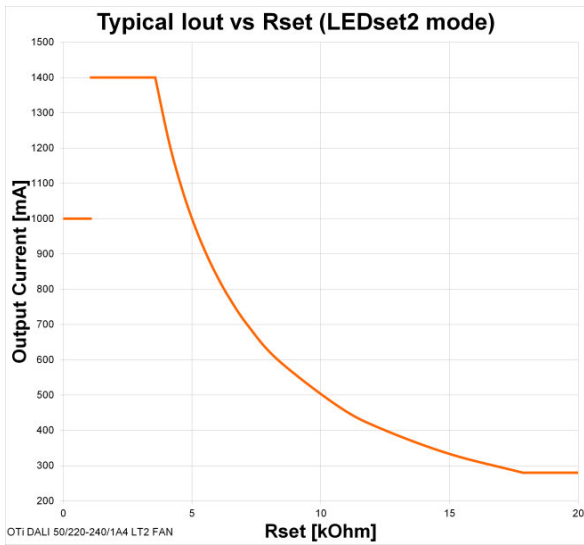
Typical Efficiency v Load 230 V 50 Hz



Typical Power Factor v Load

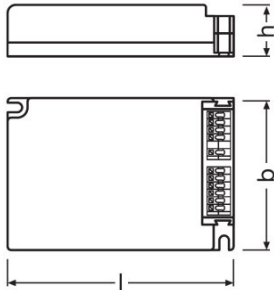
Typical THD v Load

## Product datasheet



Typical I<sub>out</sub> v R<sub>set</sub> LEDset2 mode

## Dimensions & weight



<b>Mounting hole spacing, length</b>	99.0 mm
<b>Mounting hole spacing, width</b>	64.0 mm
<b>Product weight</b>	180.00 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...9.0 mm
<b>Wire preparation length, output side</b>	8.0...9.0 mm
<b>Length</b>	110.0 mm
<b>Width</b>	75.0 mm
<b>Height</b>	25.0 mm

## Product datasheet

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

### Colors & materials

Casing material	Plastic
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### 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	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

ECG lifetime	50000 / 100000 h <sup>1)</sup>
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<sup>1)</sup> T<sub>c</sub> = 80°C, 0.2% / 1,000 h failure rate / T<sub>c</sub> = 70°C, 0.1% / 1,000 h failure rate

### Additional product data

Encapsulated	No
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### Capabilities

Suitable for through-wiring	Yes
Dimmable	Yes
Dimming interface	DALI / Touch DIM / Touch DIM Sensor
Dimming range	1...100 % <sup>1)</sup>
Dimming method	Amplitude Modulation
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
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, LEDset
Number of channels	1

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

## Product datasheet

### Programming

Tuner4TRONIC	Yes
Tuner4TRONIC Field App	Yes
Programming device	DALI / LEDset / NFC

### Programmable features

Operating Current	Yes
Tuning Factor	Yes
Constant Lumen	Yes
Lamp Operating Time	Yes
Driver Guard	Yes
DALI Settings	Yes
Emergency Mode	Yes
DALI-2 Luminaire Data	No
Configuration Lock	Yes
Soft Switch Off	Yes
Dim to Dark	Yes
TouchDIM + Sensor	Yes
Corridor Functionality	Yes
Tunable White CCT	No
Tunable White High precision	No
OEM Key	No

### 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
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### Download Data

File
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## Product datasheet

	User instruction OPTOTRONIC LED Power Supply
	Certificates OT EMC 40050085 200220
	Certificates VDE EMC Certificate 40011668
	Certificates OT ENEC 40038447 010420
	Certificates OT EMC 40044675 170420
	Declarations of conformity EATON(CEAG) Conformity declaration AM12413_OTi_DALI_50_220-240_1A4_LT2_FAN_NFC
	Declarations of conformity INOTEC Conformity declaration AM12413_OTi_DALI_50_220-240_1A4_LT2_FAN_NFC
	Declarations of conformity EU Declaration of Conformity 3758701
	Declarations of conformity OTi DALI LT2 CE 3365628 121119
	CAD data OTi DALI LT2 NFC IGS 130120
	CAD Data 2-dim OTi DALI LT2 NFC CAD2PDF 130120
	CAD data 3-dim OTi DALI LT2 NFC CAD3PDF 130120
	CAD data PDF OTi DALI LT2 NFC STEP 130120

## Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899548251	OTi DALI 50/220...240/1A4 LT2 FAN NFC	Shipping carton box 20	389 mm x 234 mm x 72 mm	6.55 dm <sup>3</sup>	4118.00 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](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.