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OTi DALI 50/220-240/1A4 NFC

OPTOTRONIC Intelligent - DALI 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, 62384RI suppression: to EN 55015/CISPR 15

- 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
- Locking and unlocking of luminaire/driver data
- Advanced luminaire/driver data (power, energy, operating hours...) for analytics
- DALI-2 certified incl. Parts 251, 252, 253
- Easy and fast output current setting via NFC
- Very high efficiency
- High-quality dimming of 1...100 % by amplitude dimming



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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)

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

support@inventronicsglobal.com

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Technical data

Electrical data

Device power loss	6.2 W
Nominal output voltage	1554 V ¹⁾
Input voltage DC	176276 V
Nominal output current	6001400 mA ²⁾
Inrush current	30 A ³⁾
Max. ECG no. on circuit breaker 10 A (B)	12
Max. ECG no. on circuit breaker 16 A (B)	20
Nominal output power	55 W ⁴⁾
Input voltage AC	198264 V ⁵⁾
Power factor λ	0.82C0.98
U-OUT (working voltage)	60 V
Surge capability (L-N)	1 kV
Surge capability (L/N-Ground)	2 kV
Mains frequency	0/50/60 Hz
Protective conductor current	not relevant
Nominal input voltage	220240 V
Total harmonic distortion	< 10 % ⁶⁾
Output current tolerance	±3 %
Maximum output power	55 W
Output ripple current (100 Hz)	< 3 % ⁷⁾
Current set	DALI / NFC
Networked standby power	≤0.15 W ⁸⁾

¹⁾ Maximum 60 V

^{2) ±3%}

³⁾ t width = 200 μs (measured at 50 % I peak)
4) Partial load 22...55 W

⁵⁾ Permitted voltage range

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

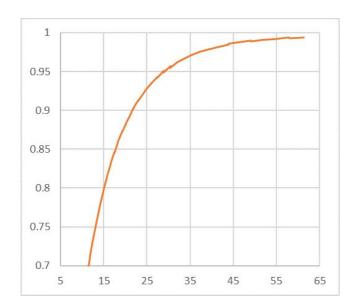
⁷⁾ Ripple average at 100 Hz

⁸⁾ at 230 V, 50 Hz

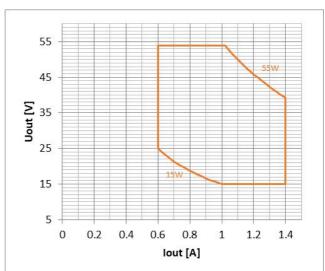
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Typical Power Factor v Load

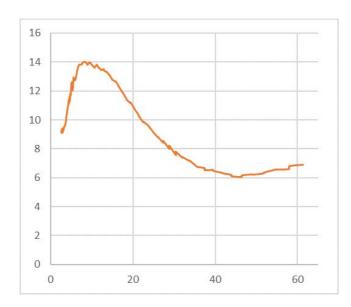


Operating Window



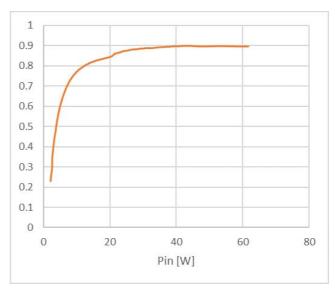
OTI DX DALI 50 NFC Typical Power Factor vs. Load

Typical THD v Load



OTI DX DALI 50 NFC Operating window

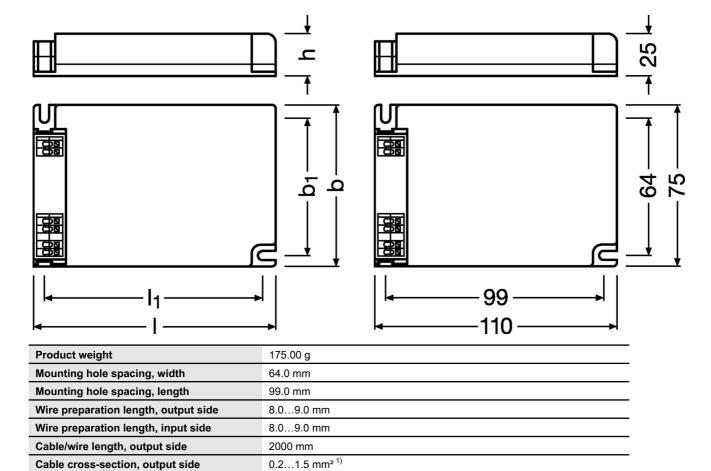
Typical Efficiency v Load 230 V 50 Hz



OTI DX DALI 50 NFC Typical THD Vs Load

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

Dimensions & weight



Length

Height

Cable cross-section, input side

Colors & materials

Product color	White
Casing material	Plastic

0.2...1.5 mm² 1)

110.0 mm

25.0 mm

Temperatures & operating conditions

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

¹⁾ Maximum at the Tc-point

¹⁾ Solid or flexible leads

²⁾ Maximum 56 days/year at 85 %

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Lifespan

ECG lifetime	50000 h / 100000 h ¹⁾

1) $T_c = 80^{\circ}$ C, 0.2% / 1,000 h failure rate / $T_c = 70^{\circ}$ C, 0.1% / 1,000 h failure rate

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Additional product data

Predecessor EAN	4052899548251

Capabilities

Supul				
Max. cable length to lamp/LED module	2.0 m ¹⁾			
Dimming range	1100 %			
Dimming method	Amplitude Modulation			
Dimming interface	DALI-2 / Touch DIM / Touch DIM Sensor			
Suitable for through-wiring	Yes with optional cable clamp			
Suitable for emergency lighting	Yes			
Short-circuit protection	Automatic reversible			
Overload protection	Automatic reversible			
Overheating protection	Automatic reversible			
Dimmable	Yes			
Suitable for fixtures with prot. class	1/11			
No-load proof	Yes			
Type of connection, input side	Push terminal			
Type of connection, output side	Push terminal			
Constant lumen function	Programmable			
Programming interface	DALI, NFC			

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

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Programming

Pay programming	Voc
Box programming	165

Programmable features

Tuning Factor	Yes
Driver Guard	Yes
DALI Settings	Yes
Emergency Mode	Yes
DALI-2 Luminaire Data	Yes 1)
Configuration Lock	Yes
Soft Switch Off	Yes
Dim to Dark	Yes
TouchDIM + Sensor	Yes
Corridor Functionality	Yes

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	
Type of protection	IP20	

Logistical data

Commodity code	85044083900

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Download Data

File		
Certificates	PDF	►OTI DALI 50 NFC INOTEC 080121
Certificates	PDF	►OTI DALI 50 NFC EATON 080121
Certificates	PDF	►OTI DALI NFC BIS 45164 231023
Certificates	PDF	►OT ENEC 40038447 270224
CAD data	Compressed	►CAD data OTi DALI 50/220-240/1A4 NFC built in IGS
CAD data	Compressed	►CAD data OTi DALI 50/220-240/1A4 NFC built in STEP
CAD data PDF	Compressed	►CAD data OTi DALI 50/220-240/1A4 NFC built in pdf
Mandatory Publications	PDF	►OTI DX DALI NFC CE 3770568 040923
Mandatory Publications	PDF	►OTI DALI DX NFC UK DoC 4281072 040923
User instruction	PDF	►UI OTI DALI NFC

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
4062172061889	OTi DALI 50/220-240/1A4 NFC	Shipping carton box 20 Pieces	262 x 253 x 98 mm	6.50 dm³	254.00 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 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 50/220-240/1A4 NFC	OT CABLE CLAMP A-STYLE	4 052899089570
OTi DALI 50/220-240/1A4 NFC	OT CABLE CLAMP A-STYLE	4 050732499425
OTi DALI 50/220-240/1A4 NFC	OT CABLE CLAMP A-STYLE TL	►4052899325982
OTi DALI 50/220-240/1A4 NFC	PRH101 -USB	▶6977078996938
OTi DALI 50/220-240/1A4 NFC	CPR30 -USB	▶6977078996945

Disclaimer

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