

## OPTOTRONIC Intelligent – DALI NFC I

Compact constant current LED driver – Dimmable



### 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

### 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



## Product family datasheet

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### 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 datasheet

### Technical data

#### Electrical data

Product description	Nominal input voltage	Mains frequency	Input voltage AC	Input voltage DC	Total harmonic distortion	Power factor $\lambda$
OTi DALI 10/220...240/700 NFC I	220...240 V	0/50/60 Hz	198...264 V <sup>1)</sup>	176...276 V	15 % <sup>2)</sup>	> 0.95 <sup>3)</sup>
Product description	Efficiency in full-load	Device power loss	Networked standby power [GMS]	Inrush current		
OTi DALI 10/220...240/700 NFC I	82 % <sup>4)</sup>	3.5 W	≤0.15 W <sup>4)</sup>	< 5 A <sup>5)</sup>		
Product description	Max. ECG no. on circuit breaker 10 A (B)	Max. ECG no. on circuit breaker 16 A (B)	Surge capability (L/N-Ground)	Surge capability (L-N)		
OTi DALI 10/220...240/700 NFC I	80	130	2 kV	1 kV		
Product description	Nominal output voltage	U-OUT (working voltage)	Nominal output current	Default output current	Output current tolerance	
OTi DALI 10/220...240/700 NFC I	2.5...45 V <sup>6)</sup>	60 V	150...700 mA <sup>7)</sup>	350 mA	±3 %	
Product description	Output ripple current (100 Hz)	Output PSTLM	Output SVM	Nominal output power		
OTi DALI 10/220...240/700 NFC I	< 2 % <sup>8)</sup>	≤1	≤0.4	10 W <sup>9)</sup>		
Product description	Maximum output power	Current set	Galvanic isolation primary/secondary			
OTi DALI 10/220...240/700 NFC I	10 W	DALI / NFC	SELV			
Product description	Galvanic isolation DALI/mains	Galvanic isolation DALI/output				
OTi DALI 10/220...240/700 NFC I	Basic	SELV				

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

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

<sup>3)</sup> Full load at 220...240 V<sub>AC</sub>/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> ±3%

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

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

## Product family datasheet

### Dimensions & weight

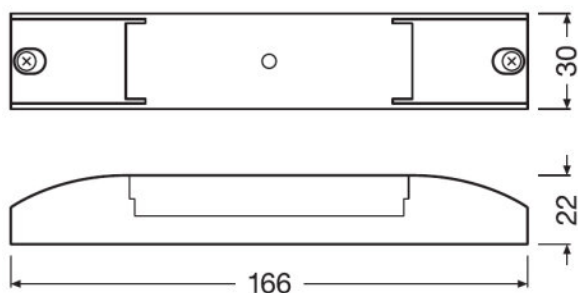
Product description	Mounting hole spacing, length	Product weight	Cable cross-section, input side	Cable cross-section, output side	Wire preparation length, input side
OTi DALI 10/220...240/700 NFC I	132.0 mm	76.00 g	0.75...1.5 mm <sup>2</sup> <sup>1)</sup>	0.5...1.5 mm <sup>2</sup> <sup>1)</sup>	7...8 mm

Product description	Wire preparation length, output side	Length	Width	Height
OTi DALI 10/220...240/700 NFC I	7...8 mm	166.0 mm	30.0 mm	22.0 mm

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

### Product line drawing



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

### Colors & materials

Product description	Casing material
OTi DALI 10/220...240/700 NFC I	Plastic

## Product family datasheet

### Temperatures & operating conditions

Product description	Ambient temperature range	Maximum temperature at tc test point	Max.housing temperature in case of fault	Temperature range at storage
OTi DALI 10/220...240/700 NFC I	-25...+50 °C	75 °C <sup>1)</sup>	110 °C	-40...+85 °C

Product description	Permitted rel. humidity during operation
OTi DALI 10/220...240/700 NFC I	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

Product description	ECG lifetime
OTi DALI 10/220...240/700 NFC I	50000 / 100000 h <sup>1)</sup>

<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

### Additional product data

Product description	Encapsulated
OTi DALI 10/220...240/700 NFC I	No

### Capabilities

Product description	Dimmable	Dimming interface	Dimming range	Dimming method
OTi DALI 10/220...240/700 NFC I	Yes	DALI-2 / Touch DIM / Touch DIM Sensor	1...100 %	Amplitude Modulation

Product description	Overheating protection	Overload protection	Short-circuit protection	No-load proof
OTi DALI 10/220...240/700 NFC I	Automatic reversible	Automatic reversible	Automatic reversible	Yes

Product description	Intended for no-load operation	Max. cable length to lamp/LED module	Suitable for fixtures with prot. class	Type of connection, input side
OTi DALI 10/220...240/700 NFC I	No	2.0 m <sup>1)</sup>	I / II	Push terminal

Product description	Type of connection, output side	Programming interface	Control interface
OTi DALI 10/220...240/700 NFC I	Push terminal	DALI, NFC	DALI-2

Product description	Number of channels	DALI-2 Energy Data	DALI-2 Diagnostic Data	Suitable for emergency lighting
OTi DALI 10/220...240/700 NFC I	1	Yes <sup>2)</sup>	Yes <sup>3)</sup>	Yes

## Product family datasheet

Product description	Constant lumen function
OTi DALI 10/220...240/700 NFC I	Programmable

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

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

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

### Programming

Product description	Programming device	Tuner4TRONIC Field App	Tuner4TRONIC
OTi DALI 10/220...240/700 NFC I	DALI / NFC	Yes	Yes

Product description	Box programming
OTi DALI 10/220...240/700 NFC I	Yes

### Programmable features

Product description	Constant Lumen	Lamp Operating Time	Driver Guard
OTi DALI 10/220...240/700 NFC I	Yes	Yes	Yes

Product description	DALI Settings	Emergency Mode	DALI-2 Luminaire Data
OTi DALI 10/220...240/700 NFC I	Yes	Yes	Yes <sup>1)</sup>

Product description	Configuration Lock	Soft Switch Off	Dim to Dark
OTi DALI 10/220...240/700 NFC I	Yes	Yes	Yes

Product description	OEM Key
OTi DALI 10/220...240/700 NFC I	No

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

### Certificates & standards

Product description	Approval marks – approval	Standards	Protection class	Type of protection
OTi DALI 10/220...240/700 NFC I	ENEC / VDE-EMC / EL / CE / DALI-2	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	II	IP20

## Product family datasheet

### Logistical data

Product description	Commodity code
OTi DALI 10/220...240/700 NFC I	850440829000

### Environmental information Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)

Product description	Date of Declaration	Primary Article Identifier	Candidate List Substance 1
OTi DALI 10/220...240/700 NFC I	01-08-2022	4062172151252	Lead

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
OTi DALI 10/220...240/700 NFC I	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	29b9dba8-1ed1-4837-96a0-fbcd3972c828






### Application advice

For more detailed application information and graphics please see product datasheet.

### Sales and Technical Support







Sales and Technical Support [www.osram.com](http://www.osram.com)

### Download Data

File
 User instruction OPTOTRONIC LED Power Supply
 User instruction OPTOTRONIC LED Power Supply OTi DALI 10 700 NFC
 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 130722
 Certificates OT EMC 40044675 250621

## Product family datasheet

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	Declarations of conformity OTI DALI NFC S I CE 4169161 110222
	Declarations of conformity OTI DALI NFC S I UK DoC 4281113 110222
	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

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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

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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



## Product family 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.