# **OSRAM**

product - technical datasheet

# OTi DALI 25/220-240/700 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, 62384

RI 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

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#### 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	
Current set	DALI / NFC	
Total harmonic distortion	< 10 % <sup>2)</sup>	
Power factor λ	0.54C0.99	
Efficiency in full-load	88 % <sup>3)</sup>	
Protective conductor current	not relevant	
Inrush current	15 A <sup>4)</sup>	
Max. ECG no. on circuit breaker 10 A (B)	18	
Max. ECG no. on circuit breaker 16 A (B)	28	
Surge capability (L/N-Ground)	2 kV	
Surge capability (L-N)	1 kV	
Nominal output voltage	1554 V <sup>5)</sup>	
U-OUT (working voltage)	60 V	
Nominal output current	180700 mA <sup>6)</sup>	
Default output current	500 mA	
Output current tolerance	±3 %	
Output ripple current (100 Hz)	< 3 % <sup>7)</sup>	
Output PSTLM	≤1	
Output SVM	≤0.4	
Nominal output power	27 W <sup>8)</sup>	
Maximum output power	27 W	
Galvanic isolation DALI/mains	SELV	
Galvanic isolation DALI/output	SELV	
Networked standby power	≤0.10 W <sup>3)</sup>	

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

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

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

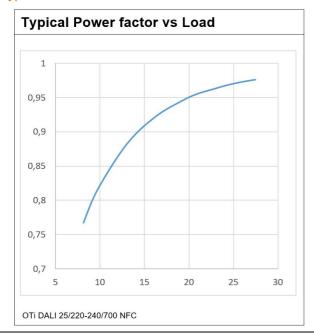
<sup>4)</sup>  $t_{width}$  = 220 µs (measured at 50 %  $I_{peak}$ ) 5) Maximum 60 V

<sup>6) ±3%</sup> 

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

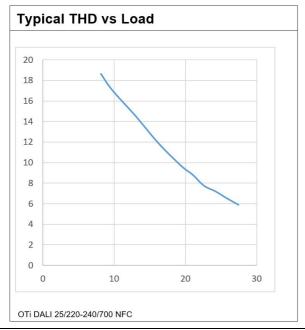
<sup>8)</sup> Partial load 7...27 W

## Typical Power Factor v Load



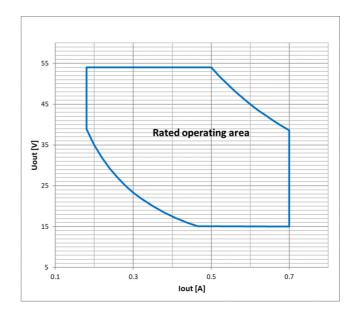
OTi DALI 25/220-240/700 NFC

# Typical THD v Load



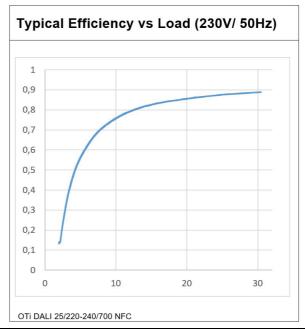
OTi DALI 25/220-240/700 NFC

## **Operating Window**



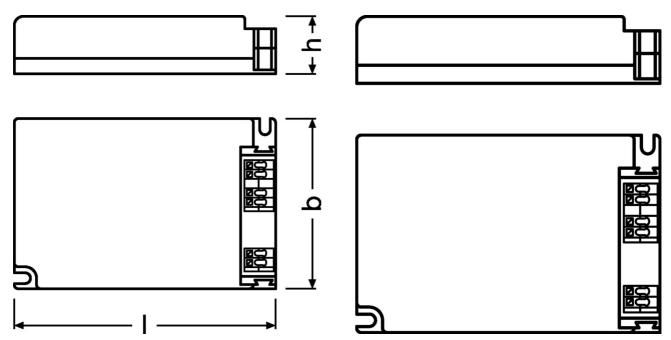
OTI DX DALI 25 NFC Operating window

# Typical Efficiency v Load 230 V 50 Hz



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# **Dimensions & weight**



Length	103.0 mm	
Width	67.0 mm	
Height	29.5 mm	
Mounting hole spacing, length	94.0 mm	
Mounting hole spacing, width	58.0 mm	
Cable cross-section, input side	0.21.5 mm <sup>2</sup> 1)	
Cable cross-section, output side	0.21.5 mm <sup>2</sup> 1)	
Wire preparation length, input side	8.09.0 mm	
Wire preparation length, output side	8.09.0 mm	
Product weight	145.00 g	

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

## Colors & materials

Casing material	Plastic
Product color	White

# Temperatures & operating conditions

Ambient temperature range	-20+50 °C
Maximum temperature at tc test point	75 °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

<sup>2)</sup> Maximum 56 days/year at 85 %

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### Lifespan

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

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

# Capabilities

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

<sup>1)</sup> Acc. DALI part 253 2) Acc. DALI part 252

<sup>3)</sup> Output wires must be routed as close as possible to each other

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### **Programming**

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

### **Programmable features**

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

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

#### Certificates & standards

Approval marks – approval	CE / EL / ENEC 10 / VDE / VDE-EMC / DALI-2 / EAC / MM	
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	
Type of protection	IP20	
Protection class	II II	

# Logistical data

Commodity code	85044083900
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# **Environmental information**

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh)	
Date of Declaration	30-05-2024
Primary Article Identifier	4062172017909
Declaration No. in SCIP database	In work

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#### **Download Data**

File		
Certificates	PDF	►OTI DALI 25 NFC INOTEC 080121
Certificates	PDF	►OTI DALI 25 NFC EATON 080121 (EN)
Certificates	PDF	►OTI DALI NFC BIS 45164 231023
Certificates	PDF	►OTI DALI DX 25 35 NFC CCC 2020171002003129 071223
Certificates	PDF	►OTI DALI DX 25 35 NFC CCC 2020171002003130 071223
Certificates	PDF	►OT ENEC 40038447 270224
CAD data 3-dim	Compressed	►OTI DALI 25 35 NFC CAD3PDF 280120
CAD data 2-dim	Compressed	►OTI DALI 25 35 NFC CAD2PDF 280120
CAD data	Compressed	►OTI DALI 25 35 NFC IGS 280120
CAD data	Compressed	►OTI DALI 25 35 NFC STEP 280120
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
4062172017909	OTi DALI 25/220-240/700 NFC	Shipping carton box 20 Pieces	218 x 158 x 155 mm	5.34 dm³	3037.00 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.

#### **Accessories Optional**

Product description	Accessory name	Accessory code
OTi DALI 25/220-240/700 NFC	OT CABLE CLAMP B-STYLE	<b>4</b> 052899077881
OTi DALI 25/220-240/700 NFC	OT CABLE CLAMP B-STYLE TL	<b>4</b> 052899948051
OTi DALI 25/220-240/700 NFC	PRH101 -USB	▶6977078996938
OTi DALI 25/220-240/700 NFC	CPR30 -USB	▶6977078996945

#### Disclaimer

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