# **OSRAM**

product - technical datasheet

# OTi DALI 25/220-240/700 NFC LPI

OPTOTRONIC Intelligent - DALI NFC LP I | 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 VLifetime: up to 100,000 hType of protection: IP20

- Integrated cable clamp for luminaire and independent

installation

### Product family benefits

- Small housing for flexible luminaire designs
- Versatile DALI window driver due to flexible output characteristic
- 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
- Easy to use in corridors and restrooms because of three-level Corridor function
- Touch DIM application: easy to control via pushbutton or sensor



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# 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

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#### Technical data

### **Electrical data**

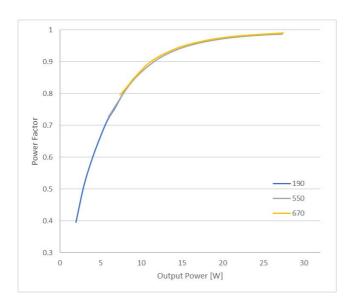
Nominal output voltage	1054 V <sup>1)</sup>	
Input voltage DC	176276 V	
Nominal output current	180700 mA <sup>2)</sup>	
Inrush current	20 A <sup>3)</sup>	
Max. ECG no. on circuit breaker 10 A (B)	50	
Max. ECG no. on circuit breaker 16 A (B)	80	
Nominal output power	27 W <sup>4)</sup>	
Input voltage AC	198264 V <sup>5)</sup>	
Power factor λ	0.49C0.99 <sup>6)</sup>	
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 % <sup>7)</sup>	
Output current tolerance	±3 %	
Maximum output power	27 W <sup>4)</sup>	
Output ripple current (100 Hz)	< 3 % <sup>8)</sup>	
Current set	DALI / NFC	
Networked standby power	0.13 W <sup>9)</sup>	

- 1) Maximum 60 V
- 2) ±3%
- 3) t = 25  $\mu$ s (measured at 50 % I peak) 4) Partial load 3.6...27 W
- 5) Permitted voltage range
- 6) Full load at 230 V / 50 Hz
- 7) At full load, 220...240 V, 50 Hz / see graphs
- 8) Ripple average at 100 Hz
- 9) at 230 V, 50 Hz

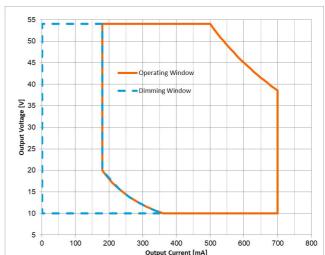
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### Typical Power Factor v Load

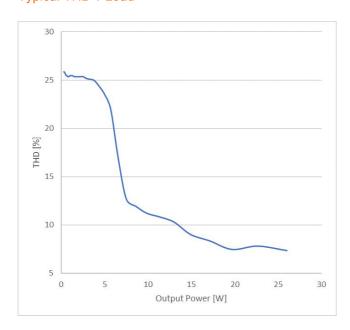


# **Operating Window**



OTI DALI 25 NFC LP Typical Power Factor vs. Load

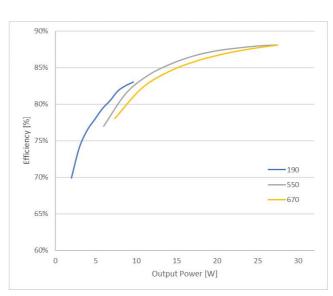
# Typical THD v Load



OTI DALI 25 NFC LP Typical THD Vs Load

# OTI DALI 25 NFC LP Operating window

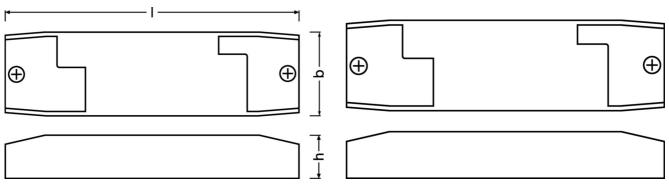
# Typical Efficiency v Load 230 V 50 Hz



OTI DALI 25 NFC LP Typical Efficiency vs. Load (230 V / 50 Hz)

# Dimensions & weight

inventronics



Product weight	150.00 g	
Mounting hole spacing, width	not relevant mm	
Mounting hole spacing, length	108.0 mm	
Wire preparation length, output side	78 mm	
Wire preparation length, input side	78 mm	
Cable/wire length, output side	2000 mm	
Cable cross-section, output side	0.51.5 mm <sup>2</sup> 1)	
Cable cross-section, input side	0.751.5 mm <sup>2</sup> 1)	
Length	150.0 mm	
Height	22.0 mm	

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

# Colors & materials

Product color	White
Casing material	Plastic

# Temperatures & operating conditions

Max.housing temperature in case of fault	110 °C
Maximum temperature at tc test point	85 °C <sup>1)</sup>
Ambient temperature range	-20+50 °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<sub>c</sub> = 85°C, 0.2% / 1,000 h failure rate / T<sub>c</sub> = 75°C, 0.1% / 1,000 h failure rate

# Additional product data

Encapsulated	No

## Capabilities

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Max. cable length to lamp/LED module	2.0 m <sup>1)</sup>	
Dimming range	1100 %	
Dimming method	Amplitude Modulation	
Dimming interface	DALI-2 / Touch DIM / Touch DIM Sensor	
Suitable for through-wiring	No	
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	

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

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### **Programming**

Box programming	Vec
box programming	Yes

## **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

<sup>1)</sup> 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 / UKCA / ENEC / EL / DALI-2 / EAC / BIS	
Type of protection	IP20	

# Logistical data

Commodity code	85044083900

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#### **Download Data**

File		
Certificates	PDF	►OT ENEC 40038447 270224
CAD data 3-dim	Compressed	►OTI DALI NFC LP I CAD3PDF 240921
CAD data 2-dim	Compressed	►OTI DALI NFC LP I CAD2PDF 240921
CAD data	Compressed	►OTI DALI NFC LP I IGS 240921
CAD data	Compressed	►OTI DALI NFC LP I STEP 240921
Mandatory Publications	PDF	►OTi DALI NFC LP CE 4378498 260422
Mandatory Publications	PDF	►OTi DALI NFC LP UK DoC 4378499 260422
User instruction	PDF	►OPTOTRONIC LED Power Supply

# 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
4062172227759	OTi DALI 25/220-240/700 NFC LPI	Shipping carton box 20 Pieces	314 x 122 x 107 mm	4.10 dm³	121.00 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 LPI	PRH101 -USB	▶6977078996938
OTi DALI 25/220-240/700 NFC LPI	CPR30 -USB	▶6977078996945

#### Disclaimer

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

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