

## OTi DALI 100/220...240/700 D NFC IND L

OPTOTRONIC Intelligent Industry – DALI (non-isolated) | Linear constant current LED driver – Dimmable



### Product family features

- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Versatile scope of application thanks to an output power range of up to 300 W
- Supply voltage: 220...240 V
- Available with output current range: up to 1,000 mA
- Constant Lumen Output (CLO)
- Integrated customizable thermal management (Driver Guard)
- Non-isolated drivers
- DALI-2 certified (Part -101,-102 and -207)

### Product family benefits

- Fully programmable via T4T software (NFC, DALI Interface)
- Lifetime: up to 100,000 h (temperature at  $T_c = 75\text{ °C}$ , max. 10 % failure rate)
- High light quality: 1...100% amplitude dimming and <1% output ripple current
- Wide operating temperature range: -40...+65 °C
- High surge protection: up to 4 kV (L-N) / 4 kV (L/N-PE)
- Integrated inrush current limiter
- Very high efficiency (up to 96%)
- Fulfill safety requirement due to overload, overtemperature, Hot Plug protection

## Areas of application

- Linear lighting solutions for industry, storage areas and retail applications
  - Installation in emergency lighting systems according to IEC 61347-2-13, appendix J
  - Suitable for installation in emergency lighting systems according to EN 60598-2-22
  - Suitable for luminaires of protection class I
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## Versatile scope of application due to OSRAM DALI Technology:

- Easy to use in corridors and restrooms because of three-level Corridor function
- Touch DIM® application: easy to control via pushbutton or sensor
- Energy efficient Touch DIM® operation due to automatic switch-off at sufficient residual light
- 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
- Luminaire information for easy maintenance
- Advanced luminaire/driver data (power, energy, operating hours...) for analytics

## Technical data

### Electrical data

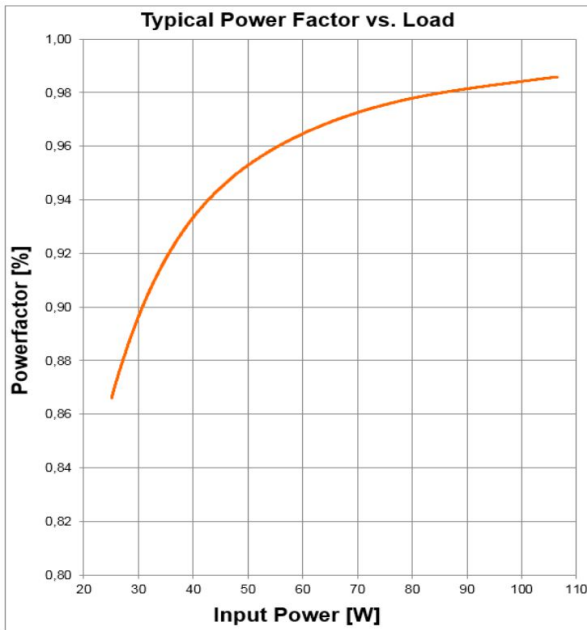
Nominal input voltage	220...240 V
Mains frequency	0/50/60 Hz
Input voltage AC	198...264 V
Input voltage DC	176...276 V
Current set	DALI / NFC / LEDset / Programmable
Total harmonic distortion	< 8 %
Power factor $\lambda$	0.58C...0.98
Efficiency in full-load	94 % <sup>1)</sup>
Device power loss	9.0 W
Inrush current	5 A
Max. ECG no. on circuit breaker 10 A (B)	23
Max. ECG no. on circuit breaker 16 A (B)	36
Surge capability (L/N-Ground)	4 kV
Surge capability (L-N)	4 kV
Nominal output voltage	64...300 V
U-OUT (working voltage)	< 310 V
Nominal output current	200...700 mA
Default output current	100 mA <sup>2)</sup>
Output current tolerance	$\pm 3$ % <sup>3)</sup>
Output current LEDset open	100 mA
Output current LEDset shorted	200 mA
Output ripple current (100 Hz)	< 1 %
Output PSTLM	$\leq 1$
Output SVM	$\leq 0.4$
Nominal output power	28...100 W
Maximum output power	100 W
Galvanic isolation	Non isolated
Networked standby power	$\leq 0.22$ W <sup>1)</sup>

1) at 230 V, 50 Hz

2) LEDset deactivated

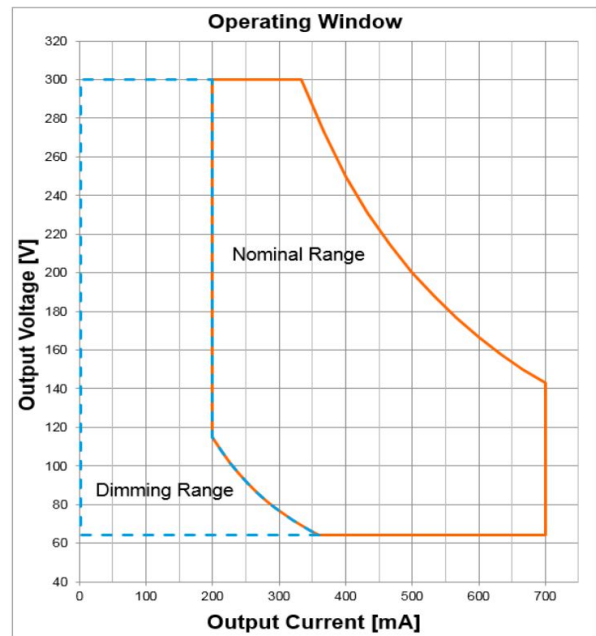
3) When use DALI

## Typical Power Factor v Load



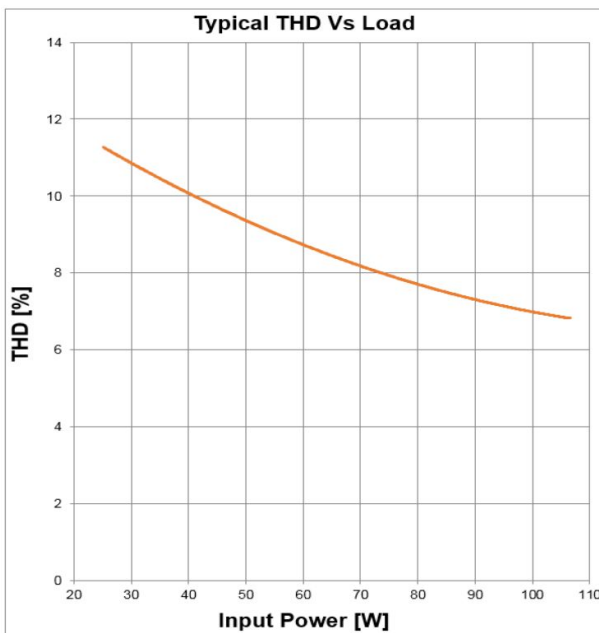
OTI DALI 100/220-240/700 D NFC IND L Typical Power Factor vs. Load

## Operating Window



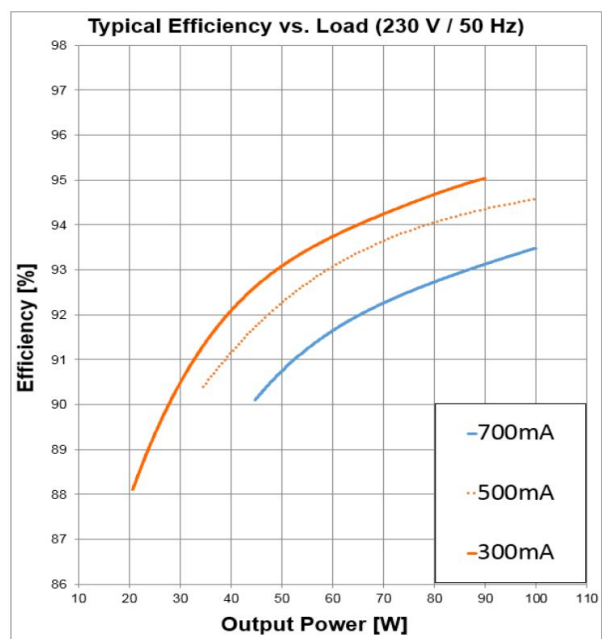
OTI DALI 100/220-240/700 D NFC IND L Operating Window

## Typical THD v Load



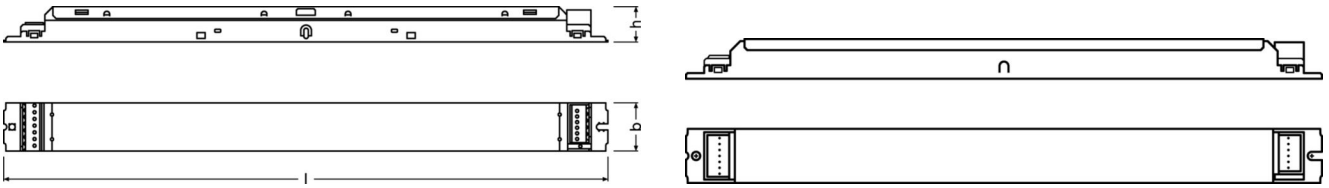
OTI DALI 100/220-240/700 D NFC IND L Typical THD Vs Load

## Typical Efficiency v Load 230 V 50 Hz



OTI DALI 100/220-240/700 D NFC IND L Typical Efficiency vs. Load (230 V / 50 Hz)

## Dimensions & weight



<b>Length</b>	360.0 mm
<b>Width</b>	30.0 mm
<b>Height</b>	21.0 mm
<b>Mounting hole spacing, length</b>	350.0 mm
<b>Cable cross-section, input side</b>	0.5...1.5 mm <sup>2</sup>
<b>Cable cross-section, output side</b>	0.5...1.5 mm <sup>2</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>Product weight</b>	260.00 g

## Colors & materials

<b>Casing material</b>	Metal
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## Temperatures & operating conditions

<b>Ambient temperature range</b>	-40...+65 °C
<b>Maximum temperature at tc test point</b>	85 °C
<b>Max.housing temperature in case of fault</b>	110 °C
<b>Temperature range at storage</b>	-40...+85 °C
<b>Permitted rel. humidity during operation</b>	5...85 % <sup>1)</sup>

1) Maximum 56 days/year at 85 %

## Lifespan

<b>ECG lifetime</b>	50000 h / 100000 h <sup>1)</sup>
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1) At maximum  $T_c = 85^\circ\text{C}$  / 10% failure rate / At  $T_{\text{case}} = 75^\circ\text{C}$  at  $T_c$  point / 10% failure rate

## Additional product data

<b>Encapsulated</b>	No
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## Capabilities

<b>Programming interface</b>	DALI, NFC, LEDset
<b>Control interface</b>	DALI
<b>Dimmable</b>	Yes
<b>Dimming interface</b>	DALI-2 / Touch DIM / Touch DIM Sensor
<b>Dimming range</b>	1...100 %
<b>Dimming method</b>	Full analogue dimming
<b>DALI-2 Diagnostic Data</b>	Yes
<b>DALI-2 Energy Data</b>	Yes
<b>Constant lumen function</b>	Programmable
<b>Max. cable length to lamp/LED module</b>	5.0 m <sup>1)</sup>
<b>Suitable for fixtures with prot. class</b>	I
<b>Suitable for emergency lighting</b>	Yes
<b>Type of connection, input side</b>	Push terminal
<b>Type of connection, output side</b>	Push terminal
<b>Number of channels</b>	1
<b>Overheating protection</b>	Automatic reversible
<b>Overload protection</b>	Non-reversible
<b>Short-circuit protection</b>	Automatic reversible
<b>Intended for no-load operation</b>	No
<b>No-load proof</b>	Yes

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

## Programming

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

## Programmable features

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

## Certificates & standards

Approval marks – approval	CE / EL / VDE-ENEC / EAC / CCC / RCM / BIS
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
Type of protection	IP20
Protection class	I

## 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	22-03-2024
Primary Article Identifier	4052899559516
Declaration No. in SCIP database	In work

## Download Data

File		
Certificates	PDF	▶ OT EMC 40050085 200220
Certificates	PDF	▶ OTI DALI D NFC IND L CB DE1 63739 130720
Certificates	PDF	▶ OTI DALI 100 D NFC IND L EATON AM35717 110820
Certificates	PDF	▶ OTI DALI 100 D NFC IND L INOTEC AM35717 110820
Certificates	PDF	▶ OT ENEC 40038085 010322
Certificates	PDF	▶ OT EMC 40044675 031022
CAD data 3-dim	Compressed	▶ OTI DALI 100 D NFC IND L CAD3PDF 090120
CAD data 2-dim	Compressed	▶ OTI DALI 100 D NFC IND L CAD2PDF 090120
CAD data	Compressed	▶ OTI DALI 100 D NFC IND L STEP 090120
Mandatory Publications	PDF	▶ OTI DALI D NFC IND L UK DoC 4296094 110822
Declarations of conformity	PDF	▶ OTI DALI D NFC IND L CE 3633294 161023
Declarations of conformity	PDF	▶ EATON(CEAG) Conformity declaration AM07661_OTi_DALI_100_220-240_700_D_NFC_IND_L
Declarations of conformity	PDF	▶ INOTEC Conformity declaration AM07661_OTi_DALI_100_220-240_700_D_NFC_IND_L
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.



## Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899559516	OTi DALI 100/220...240/700 D NFC IND L	Shipping carton box 20 Pieces	385 x 160 x 100 mm	6.16 dm <sup>3</sup>	5546.00 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](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.

## Disclaimer

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

## Accessories Optional

Product description	Accessory name	Accessory code
OTi DALI 100/220...240/700 D NFC IND L	PRH101 -USB	▶4055462165152
OTi DALI 100/220...240/700 D NFC IND L	CPR30 -USB	▶4055462165169