# 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)


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# Product datasheet

## Product family benefits

- Fully programmable via T4T software (NFC, DALI Interface)
- Lifetime: up to 100,000 h (temperature at $T_C$ = 75 °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

## 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

## 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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Technical data

## Electrical data

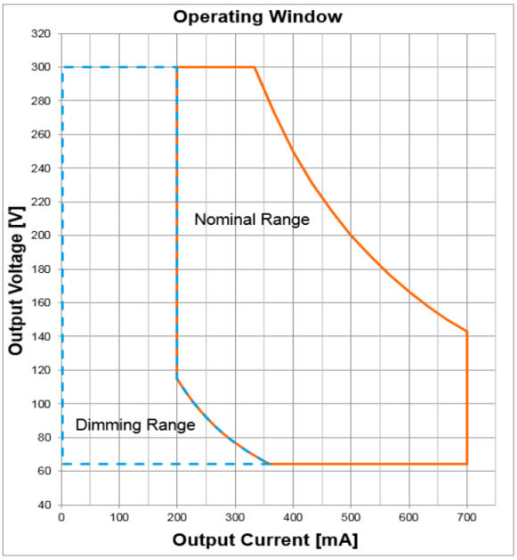
| | |
|---|---|
| **Nominal input voltage** | 220…240 V |
| **Mains frequency** | 0/50/60 Hz |
| **Input voltage AC** | 198…264 V |
| **Input voltage DC** | 176…276 V |
| **Current set** | DALI / NFC / LEDset / Programmable |
| **Total harmonic distortion** | < 8 % |
| **Power factor λ** | 0.58C…0.98 |
| **Efficiency in full-load** | 94 % [1)] |
| **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 10 A (C)** | - |
| **Max. ECG no. on circuit breaker 16 A (B)** | 36 |
| **Max. ECG no. on circuit breaker 16 A (C)** | - |
| **Max. ECG no. on circuit breaker 25 A (B)** | - |
| **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 |
| **Output current LEDset open** | 100 mA |
| **Output current LEDset shorted** | 200 mA |
| **Default output current** | 100 mA [2)] |
| **Output current tolerance** | ±3 % [3)] |
| **Output ripple current (100 Hz)** | < 1 % |
| **Output PSTLM** | ≤1 |
| **Output SVM** | ≤0.4 |
| **Nominal output power** | 28…100 W |
| **Maximum output power** | 100 W |
| **Galvanic isolation** | Non isolated |
| **Power loss in stand-by mode** | <0.2 W |
| **Galvanic isolation primary/secondary** | - |
| **Networked standby power** | ≤0.22 W [1)] |

1) at 230 V, 50 Hz

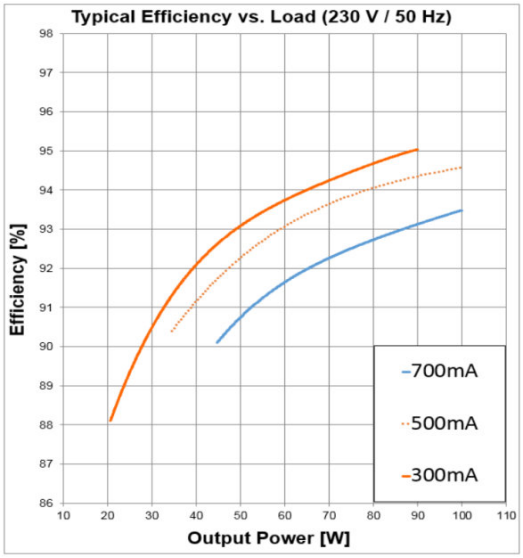
2) LEDset deactivated

3) When use DALI

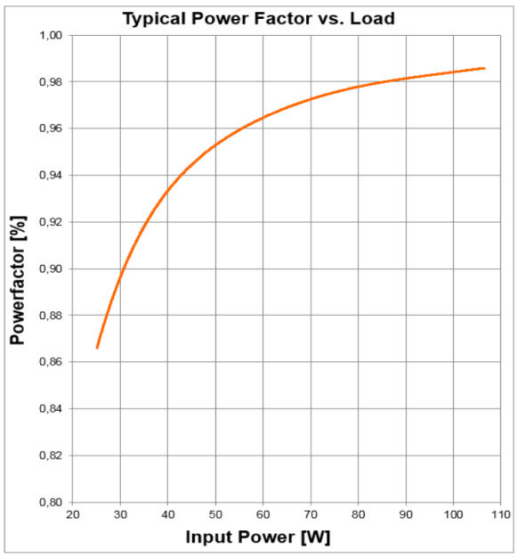

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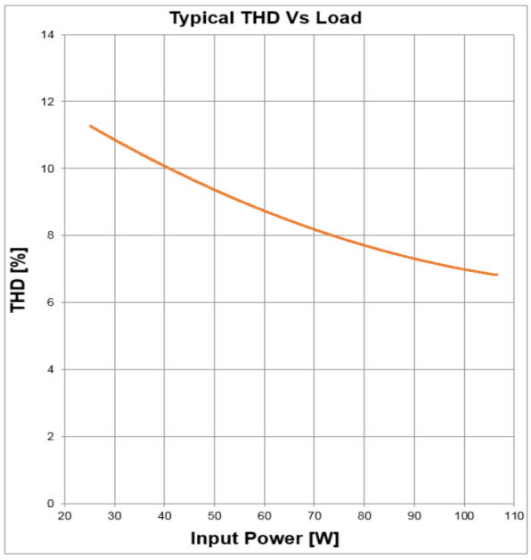

OTI DALI 100220-240700 D NFC IND L Operating Window




OTI DALI 100220-240700 D NFC IND L Typical Efficiency vs. Load (230 V  50 Hz)



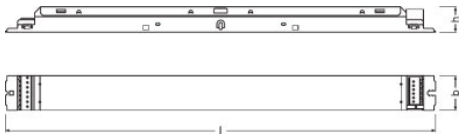

OTI DALI 100220-240700 D NFC IND L Typical Power Factor vs. Load

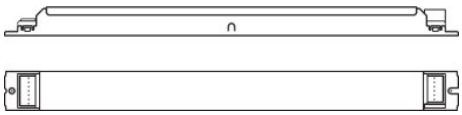



OTI DALI 100220-240700 D NFC IND L Typical THD Vs Load


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## Dimensions & weight





| | |
|---|---|
| **Mounting hole spacing, length** | 350.0 mm |
| **Product weight** | 260.00 g |
| **Cable cross-section, input side** | 0.5…1.5 mm² |
| **Cable cross-section, output side** | 0.5…1.5 mm² |
| **Wire preparation length, input side** | 8.0…9.0 mm |
| **Wire preparation length, output side** | 8.0…9.0 mm |
| **Length** | 360.0 mm |
| **Width** | 30.0 mm |
| **Height** | 21.0 mm |

## Colors & materials

| | |
|---|---|
| **Casing material** | Metal |

## Temperatures & operating conditions

| | |
|---|---|
| **Ambient temperature range** | -40…+65 °C |
| **Maximum temperature at tc test point** | 85 °C |
| **Max.housing temperature in case of fault** | 110 °C |
| **Temperature range at storage** | -40…+85 °C |
| **Permitted rel. humidity during operation** | 5…85 % [1)] |

[1)] Maximum 56 days/year at 85 %

## Lifespan

| | |
|---|---|
| **ECG lifetime** | 50000 / 100000 h [1)] |

[1)] At maximum $T_c$ = 85°C / 10% failure rate / At $T_{case}$ = 75°C at $T_c$ point / 10% failure rate

## Additional product data

| | |
|---|---|
| **Encapsulated** | No |


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## Capabilities

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

| | |
|---|---|
| **Operating Current** | Yes |
| **Constant Lumen** | Yes |
| **Lamp Operating Time** | Yes |
| **Thermal Protection** | Yes |
| **Driver Guard** | Yes |
| **DALI Settings** | Yes |
| **Emergency Mode** | Yes |
| **DALI-2 Luminaire Data** | Yes |


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| | |
|---|---|
| **Soft Switch Off** | Yes |
| **Dim to Dark** | Yes |
| **TouchDIM + Sensor** | Yes |
| **Corridor Functionality** | 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 |

## Logistical data

| | |
|---|---|
| **Commodity code** | 85044083900 |

## Environmental information

| **Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh)** | |
|---|---|
| **Date of Declaration** | 21-04-2023 |
| **Primary Article Identifier** | 4052899559516 |
| **Candidate List Substance 1** | Lead |
| **CAS No. of substance 1** | 7439-92-1 |
| **Safe Use Instruction** | The identification of the Candidate List substance is sufficient to allow safe use of the article. |
| **Declaration No. in SCIP database** | 1515021f-10c3-411a-967c-9674db8c3511 |

## Download Data

| | File |
|---|---|
| | User instruction<br>OPTOTRONIC LED Power Supply |
| | Certificates<br>OT EMC 40050085 200220 |
| | Certificates<br>OTI DALI D NFC IND L CB DE1 63739 130720 |
| | Certificates<br>OTI DALI 100 D NFC IND L EATON AM35717 110820 |
| | Certificates<br>OTI DALI 100 D NFC IND L INOTEC AM35717 110820 |
| | Certificates<br>OT ENEC 40038085 010322 |


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| | |
|---|---|
| | Certificates<br>OT EMC 40044675 031022 |
| | Declarations of conformity<br>OTI DALI D NFC IND L CE 3633294 161023 |
| | Declarations of conformity<br>EATON(CEAG) Conformity declaration  AM07661_OTi_DALI_100_220-240_700_D_NFC_IND_L |
| | Declarations of conformity<br>INOTEC Conformity declaration AM07661_OTi_DALI_100_220-240_700_D_NFC_IND_L |
| | CAD data<br>OTI DALI 100 D NFC IND L STEP 090120 |
| | CAD Data 2-dim<br>OTI DALI 100 D NFC IND L CAD2PDF 090120 |
| | CAD data 3-dim<br>OTI DALI 100 D NFC IND L CAD3PDF 090120 |

## 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 | 385 mm x 160 mm x 100 mm | 6.16 $dm^3$ | 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


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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.

## Disclaimer

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