Product datasheet

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 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	058C...098
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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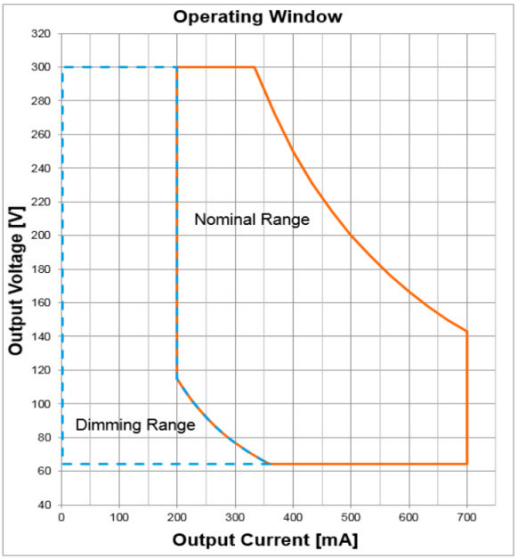
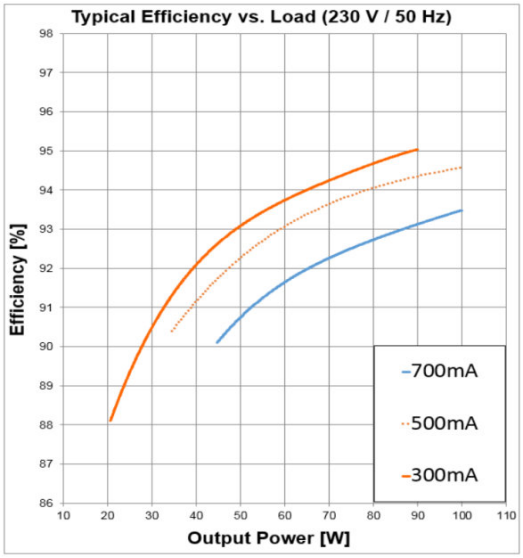
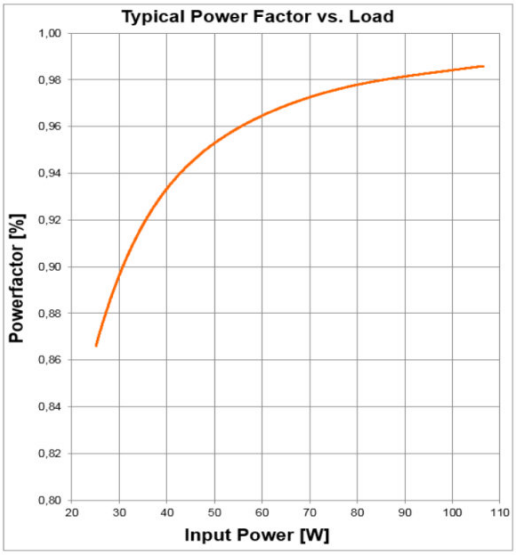


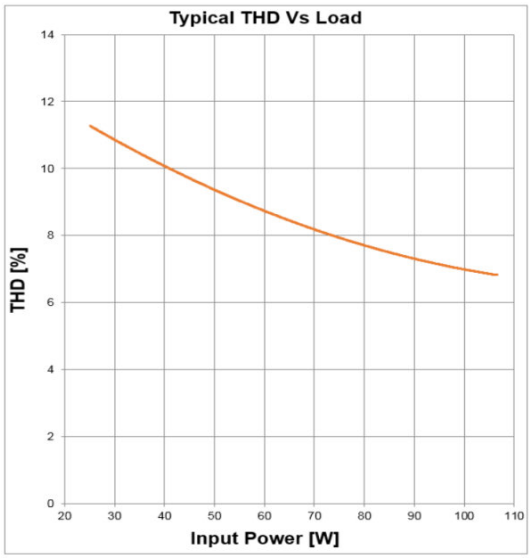
OTI DALI 100220-240700 D NFC IND L Operating Window



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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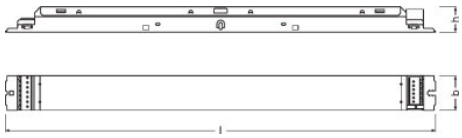
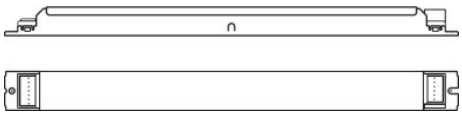
Dimensions & weight





Mounting hole spacing, length	350.0 mm
Product weight	26000 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	3600 mm
Width	300 mm
Height	210 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 OPTOTRONIC LED Power Supply
	Certificates OT EMC 40050085 200220
	Certificates OTI DALI D NFC IND L CB DE1 63739 130720
	Certificates OTI DALI 100 D NFC IND L EATON AM35717 110820
	Certificates OTI DALI 100 D NFC IND L INOTEC AM35717 110820
	Certificates OT ENEC 40038085 010322

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	Certificates OT EMC 40044675 031022
	Declarations of conformity OTI DALI D NFC IND L CE 3633294 161023
	Declarations of conformity EATON(CEAG) Conformity declaration AM07661_OTi_DALI_100_220-240_700_D_NFC_IND_L
	Declarations of conformity INOTEC Conformity declaration AM07661_OTi_DALI_100_220-240_700_D_NFC_IND_L
	CAD data OTI DALI 100 D NFC IND L STEP 090120
	CAD Data 2-dim OTI DALI 100 D NFC IND L CAD2PDF 090120
	CAD data 3-dim 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	5374.00 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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