

OTi DALI 50/220...240/1A4 NFC L

OPTOTRONIC Intelligent – DALI NFC (SELV) | Linear constant current LED driver – Dimmable



Product family features

- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Versatile DALI window driver up to 50 W due to flexible output characteristic
- Supply voltage: 220...240 V
- Available with output current range: up to 1,400 mA
- Constant Lumen Output (CLO)
- Integrated customizable thermal management (Driver Guard)

Product family benefits

- Fully programmable via software (DALI Interface, NFC)
- Advanced luminaire/driver data (power, energy, operating hours...) for analytics
- DALI-2 certified incl. Parts 251, 252, 253
- Lifetime: up to 100,000 h (temperature at $T_C = 65\text{ }^\circ\text{C}$, max. 10 % failure rate)
- High-quality dimming of 1...100 % by amplitude dimming
- Higher quality of light thanks to < 3% output ripple current
- Very high efficiency
- Very low standby power consumption: < 0.15 W *
- Fulfill safety requirement due to overload, overtemperature, Hot Plug protection

Areas of application

- Linear lighting for office, education, industry, storage areas and retail
- Installation in emergency lighting systems according to IEC 61347-2-13, appendix J
- Suitable for luminaires of protection class I

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 / Programmable
Total harmonic distortion	≤ 10 %
Power factor λ	0.72C...0.98
Efficiency in full-load	89 % ¹⁾
Device power loss	5.0 W
Inrush current	≤ 20 A
Max. ECG no. on circuit breaker 10 A (B)	12
Max. ECG no. on circuit breaker 10 A (C)	-
Max. ECG no. on circuit breaker 16 A (B)	20
Max. ECG no. on circuit breaker 16 A (C)	-
Max. ECG no. on circuit breaker 25 A (B)	-
Surge capability (L/N-Ground)	2 kV
Surge capability (L-N)	1 kV
Nominal output voltage	15...54 V
U-OUT (working voltage)	< 60 V
Nominal output current	400...1400 mA
Default output current	600 mA
Output current tolerance	±3 %
Output ripple current (100 Hz)	≤ 3 %
Output PSTLM	≤1
Output SVM	≤0.4
Nominal output power	12...54 W
Maximum output power	54 W
Galvanic isolation	SELV
Power loss in stand-by mode	≤0.15 W

¹⁾ at 230 V, 50 Hz

Dimensions & weight



Mounting hole spacing, length	270.0 mm
Product weight	209.00 g
Cable cross-section, input side	0.5...1.5 mm ²
Cable cross-section, output side	0.5...1.5 mm ²
Wire preparation length, input side	8.0...9.0 mm
Wire preparation length, output side	8.0...9.0 mm
Length	280.0 mm
Width	30.0 mm
Height	21.0 mm

Colors & materials

Casing material	Metal
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Temperatures & operating conditions

Ambient temperature range	-25...+50 °C
Maximum temperature at tc test point	75 °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	100000 / 50000 h
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Additional product data

Encapsulated	No
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Capabilities

Programming interface	DALI, NFC
Dimmable	Yes
Dimming interface	DALI-2 / Touch DIM / Touch DIM Sensor
Dimming range	1...100 %
Dimming method	Full analogue dimming
Overheating protection	Automatic reversible
Overload protection	Automatic reversible
Short-circuit protection	Automatic reversible
No-load proof	Yes
Intended for no-load operation	No
Max. cable length to lamp/LED module	2.0 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
Constant lumen function	Programmable
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

DALI-2 Luminaire Data	Yes
TouchDIM + Sensor	Yes

Certificates & standards

Approval marks – approval	CE / EL / VDE-ENEC / EAC / CCC / BIS / RCM
Standards	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to IEC 62386/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61347
Type of protection	IP20

Product datasheet







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	21-04-2023
Primary Article Identifier	4062172074988
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	589fea0d-2309-4100-8b21-274fe23c079d

Download Data

File	
	User instruction OPTOTRONIC LED Power Supply
	Certificates OTI DALI 50 NFC L EAT AM31195 191219.
	Certificates OTI DALI 50 NFC L INO AM31195 191219
	Certificates OTI DALI NFC L CB DE1 63040 100220
	Certificates OT ENEC 40038447 260623
	Certificates OT EMC 40044675 031022
	Declarations of conformity OTI DALI NFC L CE 4159050 110522
	Declarations of conformity OTI DALI NFC L UK DoC 4281121 110522
	CAD data OTI DALI NFC L IGS 030220
	CAD data OTI DALI NFC L STEP 030220
	CAD Data 2-dim OTI DALI NFC L CAD2PDF 030220
	CAD data 3-dim OTI DALI NFC L CAD3PDF 030220

Product datasheet

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
4062172074988	OTi DALI 50/220...240/1A4 NFC L	Shipping carton box 20	303 mm x 159 mm x 105 mm	5.06 dm ³	4307.00 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.

Disclaimer

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