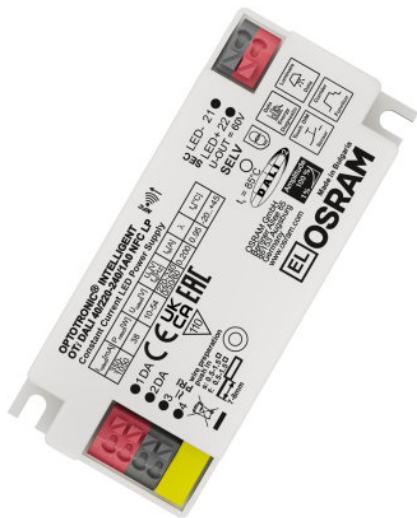


OPTOTRONIC Intelligent – DALI NFC LP

Compact constant current LED driver – Dimmable



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

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



Product family datasheet

Product family features

- Supply voltage: 220...240 V
- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Line voltage: 198...264 V
- Lifetime: up to 100,000 h
- Type of protection: IP20

Product family datasheet

Technical data

Electrical data

Product description	Nominal input voltage	Mains frequency	Input voltage AC	Input voltage DC	Total harmonic distortion	Power factor λ
OTi DALI 15/220...240/1A0 NFC LP	220...240 V	0,50,60 Hz	198...264 V ¹⁾	176...276 V	< 10 % ²⁾	033C...098
OTi DALI 25/220...240/700 NFC LP	220...240 V	0,50,60 Hz	198...264 V ¹⁾	176...276 V	< 10 % ²⁾	049C...099
OTi DALI 40/220...240/1A0 NFC LP	220...240 V	0,50,60 Hz	198...264 V ¹⁾	176...276 V	< 10 % ²⁾	070C...099
OTi DALI 50/220...240/1A4 NFC LP	220...240 V	0,50,60 Hz	198...264 V ¹⁾	176...276 V	< 10 % ²⁾	064C...098

Product description	Efficiency in full-load	Device power loss	Inrush current	Max. ECG no. on circuit breaker 10 A (B)	Max. ECG no. on circuit breaker 16 A (B)
OTi DALI 15/220...240/1A0 NFC LP	87.5 % ³⁾	-	20 A ⁴⁾	82	130
OTi DALI 25/220...240/700 NFC LP	88 % ³⁾	-	20 A ⁴⁾	50	80
OTi DALI 40/220...240/1A0 NFC LP	88 % ³⁾	-	20 A ⁴⁾	35	55
OTi DALI 50/220...240/1A4 NFC LP	90 % ³⁾	-	20 A ¹¹⁾	12	20

Product description	Surge capability (L/N-Ground)	Surge capability (L-N)	Nominal output voltage	U-OUT (working voltage)	Nominal output current
OTi DALI 15/220...240/1A0 NFC LP	2 kV	1 kV	10...54 V ⁵⁾	60 V	150...1050 mA ⁶⁾
OTi DALI 25/220...240/700 NFC LP	2 kV	1 kV	10...54 V ⁵⁾	60 V	180...700 mA ⁶⁾
OTi DALI 40/220...240/1A0 NFC LP	2 kV	1 kV	10...54 V ⁵⁾	60 V	350...1050 mA ⁶⁾
OTi DALI 50/220...240/1A4 NFC LP	2 kV	1 kV	15...54 V ⁵⁾	60 V	600...1400 mA ⁶⁾

Product description	Default output current	Galvanic isolation primary/secondary	Galvanic isolation DALI/mains
OTi DALI 15/220...240/1A0 NFC LP	350 mA	SELV	Basic
OTi DALI 25/220...240/700 NFC LP	500 mA	SELV	Basic
OTi DALI 40/220...240/1A0 NFC LP	700 mA	SELV	Basic
OTi DALI 50/220...240/1A4 NFC LP	1050 mA	SELV	Basic

Product description	Galvanic isolation DALI/output	Current set	Output current tolerance
OTi DALI 15/220...240/1A0 NFC LP	SELV	DALI / NFC	±3 %
OTi DALI 25/220...240/700 NFC LP	SELV	DALI / NFC	±3 %
OTi DALI 40/220...240/1A0 NFC LP	SELV	DALI / NFC	±3 %
OTi DALI 50/220...240/1A4 NFC LP	SELV	DALI / NFC	±3 %

Product description	Output ripple current (100 Hz)	Output PSTLM	Output SVM	Nominal output power
OTi DALI 15/220...240/1A0 NFC LP	< 3 % ⁷⁾	≤1	≤0.4	18 W ⁸⁾
OTi DALI 25/220...240/700 NFC LP	< 3 % ⁷⁾	≤1	≤0.4	27 W ⁹⁾

Product family datasheet

Product description	Output ripple current (100 Hz)	Output PSTLM	Output SVM	Nominal output power
OTi DALI 40/220...240/1A0 NFC LP	< 3 % ⁷⁾	≤1	≤0.4	38 W ¹⁰⁾
OTi DALI 50/220...240/1A4 NFC LP	< 5 % ⁷⁾	≤1	≤0.4	55 W ¹²⁾

Product description	Maximum output power	Networked standby power
OTi DALI 15/220...240/1A0 NFC LP	18 W ⁸⁾	0.13 W ³⁾
OTi DALI 25/220...240/700 NFC LP	27 W ⁹⁾	0.13 W ³⁾
OTi DALI 40/220...240/1A0 NFC LP	38 W ¹⁰⁾	0.13 W ³⁾
OTi DALI 50/220...240/1A4 NFC LP	55 W ¹²⁾	≤0.19 W ³⁾

1) Permitted voltage range
2) At full load, 220...240 V, 50 Hz / see graphs
3) at 230 V, 50 Hz
4) $t_{width} = 25 \mu s$ (measured at 50 % I_{peak})
5) Maximum 60 V
6) ±3%
7) Ripple average at 100 Hz
8) Partial load 3...18 W
9) Partial load 3.6...27 W
10) Partial load 7...38 W
11) $t_{width} = 200 \mu s$ (measured at 50 % I_{peak})
12) Partial load 9...55 W

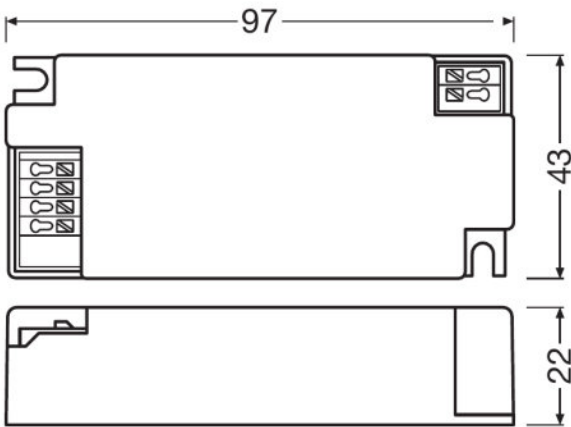
Dimensions & weight

Product description	Mounting hole spacing, length	Mounting hole spacing, width	Product weight	Cable cross-section, input side	Cable cross-section, output side
OTi DALI 15/220...240/1A0 NFC LP	88.0 mm	34.0 mm	12000 g	0.5...1.5 mm ² ¹⁾	0.5...1.5 mm ² ¹⁾
OTi DALI 25/220...240/700 NFC LP	88.0 mm	34.0 mm	12000 g	0.5...1.5 mm ² ¹⁾	0.5...1.5 mm ² ¹⁾
OTi DALI 40/220...240/1A0 NFC LP	88.0 mm	34.0 mm	13000 g	0.5...1.5 mm ² ¹⁾	0.5...1.5 mm ² ¹⁾
OTi DALI 50/220...240/1A4 NFC LP	94.0 mm	58.0 mm	17500 g	0.5...1.5 mm ² ¹⁾	0.5...1.5 mm ² ¹⁾

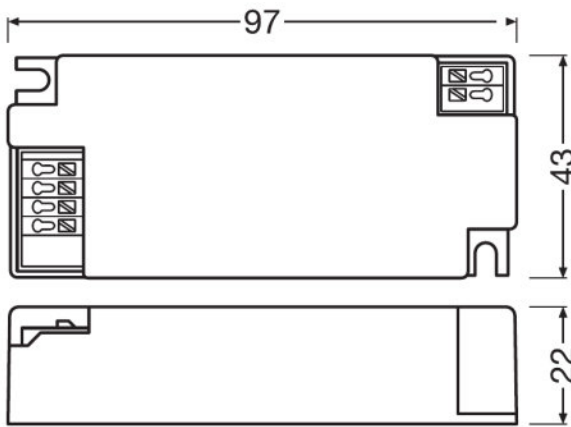
Product description	Wire preparation length, input side	Wire preparation length, output side	Height	Length	Width
OTi DALI 15/220...240/1A0 NFC LP	7...8 mm	7...8 mm	220 mm	970 mm	425 mm
OTi DALI 25/220...240/700 NFC LP	7...8 mm	7...8 mm	220 mm	970 mm	425 mm
OTi DALI 40/220...240/1A0 NFC LP	7...8 mm	7...8 mm	220 mm	970 mm	425 mm
OTi DALI 50/220...240/1A4 NFC LP	7...8 mm	7...8 mm	225 mm	1030 mm	670 mm

1) Solid or flexible leads

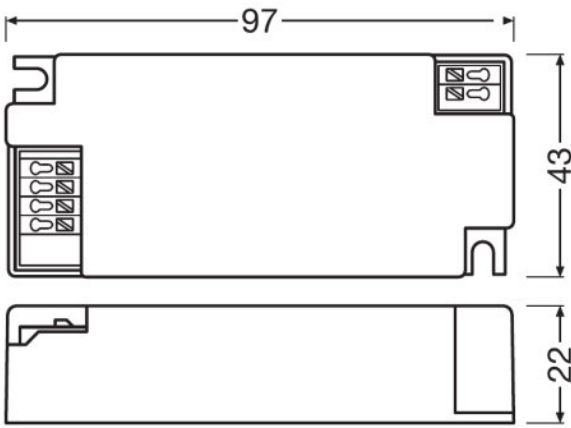
Product line drawing



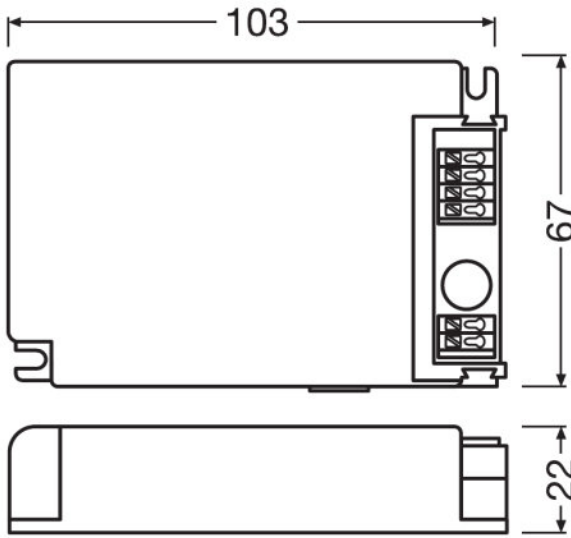
OTi DALI 15/220...240/1A0 NFC LP



OTi DALI 25/220...240/700 NFC LP



OTi DALI 40/220...240/1A0 NFC LP



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

Colors & materials

Product description	Casing material
OTi DALI 15/220...240/1A0 NFC LP	Plastic
OTi DALI 25/220...240/700 NFC LP	Plastic
OTi DALI 40/220...240/1A0 NFC LP	Plastic
OTi DALI 50/220...240/1A4 NFC LP	Plastic

Temperatures & operating conditions

Product description	Ambient temperature range	Maximum temperature at tc test point	Max.housing temperature in case of fault	Temperature range at storage
OTi DALI 15/220...240/1A0 NFC LP	-20...+50 °C	80 °C ¹⁾	110 °C	-40...+85 °C
OTi DALI 25/220...240/700 NFC LP	-20...+50 °C	85 °C ¹⁾	110 °C	-40...+85 °C
OTi DALI 40/220...240/1A0 NFC LP	-20...+45 °C	85 °C ¹⁾	110 °C	-40...+85 °C
OTi DALI 50/220...240/1A4 NFC LP	-20...+50 °C	75 °C ¹⁾	110 °C	-40...+85 °C

Product description	Permitted rel. humidity during operation
OTi DALI 15/220...240/1A0 NFC LP	5...85 % ²⁾
OTi DALI 25/220...240/700 NFC LP	5...85 % ²⁾
OTi DALI 40/220...240/1A0 NFC LP	5...85 % ²⁾
OTi DALI 50/220...240/1A4 NFC LP	5...85 % ²⁾

¹⁾ Maximum at the Tc-point

²⁾ Maximum 56 days/year at 85 %

Lifespan

Product description	ECG lifetime
OTi DALI 15/220...240/1A0 NFC LP	50000 / 100000 h ¹⁾
OTi DALI 25/220...240/700 NFC LP	50000 / 100000 h ²⁾
OTi DALI 40/220...240/1A0 NFC LP	50000 / 100000 h ²⁾
OTi DALI 50/220...240/1A4 NFC LP	50000 / 100000 h ³⁾

¹⁾ T_c = 80°C, 0.2% / 1,000 h failure rate / T_c = 70°C, 0.1% / 1,000 h failure rate

²⁾ T_c = 85°C, 0.2% / 1,000 h failure rate / T_c = 75°C, 0.1% / 1,000 h failure rate

³⁾ T_c = 75°C, 0.2% / 1,000 h failure rate / T_c = 65°C, 0.1% / 1,000 h failure rate

Additional product data

Product description	Encapsulated
OTi DALI 15/220...240/1A0 NFC LP	No
OTi DALI 25/220...240/700 NFC LP	No
OTi DALI 40/220...240/1A0 NFC LP	No
OTi DALI 50/220...240/1A4 NFC LP	No

Capabilities

Product description	Dimmable	Dimming interface	Dimming range	Dimming method
OTi DALI 15/220...240/1A0 NFC LP	Yes	DALI-2 / Touch DIM / Touch DIM Sensor	1...100 %	Amplitude Modulation
OTi DALI 25/220...240/700 NFC LP	Yes	DALI-2 / Touch DIM / Touch DIM Sensor	1...100 %	Amplitude Modulation
OTi DALI 40/220...240/1A0 NFC LP	Yes	DALI-2 / Touch DIM / Touch DIM Sensor	1...100 %	Amplitude Modulation
OTi DALI 50/220...240/1A4 NFC LP	Yes	DALI-2 / Touch DIM / Touch DIM Sensor	1...100 %	Amplitude Modulation

Product description	Overheating protection	Overload protection	Short-circuit protection	No-load proof
OTi DALI 15/220...240/1A0 NFC LP	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OTi DALI 25/220...240/700 NFC LP	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OTi DALI 40/220...240/1A0 NFC LP	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OTi DALI 50/220...240/1A4 NFC LP	Automatic reversible	Automatic reversible	Automatic reversible	Yes

Product description	Intended for no-load operation	Max. cable length to lamp/LED module	Suitable for fixtures with prot. class	Type of connection, input side
OTi DALI 15/220...240/1A0 NFC LP	No	2.0 m ¹⁾	I / II	Push terminal
OTi DALI 25/220...240/700 NFC LP	No	2.0 m ¹⁾	I / II	Push terminal
OTi DALI 40/220...240/1A0 NFC LP	No	2.0 m ¹⁾	I / II	Push terminal
OTi DALI 50/220...240/1A4 NFC LP	No	2.0 m ¹⁾	I / II	Push terminal

Product description	Type of connection, output side	DALI-2 Diagnostic Data	Control interface
OTi DALI 15/220...240/1A0 NFC LP	Push terminal	Yes ²⁾	DALI
OTi DALI 25/220...240/700 NFC LP	Push terminal	Yes ²⁾	DALI-2
OTi DALI 40/220...240/1A0 NFC LP	Push terminal	Yes ²⁾	DALI
OTi DALI 50/220...240/1A4 NFC LP	Push terminal	Yes ²⁾	DALI

Product description	DALI-2 Energy Data	Programming interface	Number of channels	Suitable for emergency lighting
OTi DALI 15/220...240/1A0 NFC LP	Yes ³⁾	DALI, NFC	1	Yes
OTi DALI 25/220...240/700 NFC LP	Yes ³⁾	DALI, NFC	1	Yes
OTi DALI 40/220...240/1A0 NFC LP	Yes ³⁾	DALI, NFC	1	Yes
OTi DALI 50/220...240/1A4 NFC LP	Yes ³⁾	DALI, NFC	1	Yes

Product description	Suitable for through-wiring	Constant lumen function
OTi DALI 15/220...240/1A0 NFC LP	No	Programmable
OTi DALI 25/220...240/700 NFC LP	No	Programmable
OTi DALI 40/220...240/1A0 NFC LP	No	Programmable
OTi DALI 50/220...240/1A4 NFC LP	No	Programmable

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

Product family datasheet

²⁾ Acc. DALI part 253

³⁾ Acc. DALI part 252

Programming

Product description	Box programming	Tuner4TRONIC	Tuner4TRONIC Field App
OTi DALI 15/220...240/1A0 NFC LP	Yes	Yes	Yes
OTi DALI 25/220...240/700 NFC LP	Yes	Yes	Yes
OTi DALI 40/220...240/1A0 NFC LP	Yes	Yes	Yes
OTi DALI 50/220...240/1A4 NFC LP	Yes	Yes	Yes
Product description	Programming device		
OTi DALI 15/220...240/1A0 NFC LP	DALI / NFC		
OTi DALI 25/220...240/700 NFC LP	DALI / NFC		
OTi DALI 40/220...240/1A0 NFC LP	DALI / NFC		
OTi DALI 50/220...240/1A4 NFC LP	DALI / NFC		

Programmable features

Product description	Constant Lumen	Operating Current	Lamp Operating Time
OTi DALI 15/220...240/1A0 NFC LP	Yes	Yes	Yes
OTi DALI 25/220...240/700 NFC LP	Yes	Yes	Yes
OTi DALI 40/220...240/1A0 NFC LP	Yes	Yes	Yes
OTi DALI 50/220...240/1A4 NFC LP	Yes	Yes	Yes
Product description	Soft Switch Off	Configuration Lock	DALI-2 Luminaire Data
OTi DALI 15/220...240/1A0 NFC LP	Yes	Yes	Yes ¹⁾
OTi DALI 25/220...240/700 NFC LP	Yes	Yes	Yes ¹⁾
OTi DALI 40/220...240/1A0 NFC LP	Yes	Yes	Yes ¹⁾
OTi DALI 50/220...240/1A4 NFC LP	Yes	Yes	Yes ¹⁾
Product description	OEM Key	Corridor Functionality	TouchDIM + Sensor
OTi DALI 15/220...240/1A0 NFC LP	No	Yes	Yes
OTi DALI 25/220...240/700 NFC LP	No	Yes	Yes
OTi DALI 40/220...240/1A0 NFC LP	No	Yes	Yes
OTi DALI 50/220...240/1A4 NFC LP	No	Yes	Yes
Product description	Dim to Dark	Emergency Mode	DALI Settings
OTi DALI 15/220...240/1A0 NFC LP	Yes	Yes	Yes
OTi DALI 25/220...240/700 NFC LP	Yes	Yes	Yes
OTi DALI 40/220...240/1A0 NFC LP	Yes	Yes	Yes
OTi DALI 50/220...240/1A4 NFC LP	Yes	Yes	Yes
Product description	Driver Guard		
OTi DALI 15/220...240/1A0 NFC LP	Yes		
OTi DALI 25/220...240/700 NFC LP	Yes		
OTi DALI 40/220...240/1A0 NFC LP	Yes		
OTi DALI 50/220...240/1A4 NFC LP	Yes		

1) Acc. DALI part 251

Certificates & standards

Product description	Approval marks – approval	Standards	Protection class	Type of protection
OTi DALI 15/220...240/1A0 NFC LP	CE / UKCA / EL / DALI-2 / EAC	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	II	IP20
OTi DALI 25/220...240/700 NFC LP	CE / UKCA / EL / DALI-2 / EAC	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	II	IP20
OTi DALI 40/220...240/1A0 NFC LP	CE / UKCA / EL / DALI-2 / EAC	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	II	IP20
OTi DALI 50/220...240/1A4 NFC LP	CE / UKCA / EL / DALI-2 / EAC	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	II	IP20

Logistical data

Product description	Commodity code
OTi DALI 15/220...240/1A0 NFC LP	85044083900
OTi DALI 25/220...240/700 NFC LP	85044083900
OTi DALI 40/220...240/1A0 NFC LP	85044083900
OTi DALI 50/220...240/1A4 NFC LP	85044083900

Product family datasheet

Environmental information
Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)

Product description	Date of Declaration	Primary Article Identifier	Candidate List Substance 1
OTi DALI 15/220...240/1A0 NFC LP	21-04-2023	4062172227674	Lead
OTi DALI 25/220...240/700 NFC LP	21-04-2023	4062172227698	Lead
OTi DALI 40/220...240/1A0 NFC LP	21-04-2023	4062172227711	Lead
OTi DALI 50/220...240/1A4 NFC LP	21-04-2023	4062172224024	Lead

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
OTi DALI 15/220...240/1A0 NFC LP	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	668ca664-22f7-4d6e-8dfe-a0c632395311
OTi DALI 25/220...240/700 NFC LP	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	93b7f05f-ad9e-4c94-8605-29b88ce435d5
OTi DALI 40/220...240/1A0 NFC LP	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	bb767afb-334c-4417-96fd-bd5af49cf8cc
OTi DALI 50/220...240/1A4 NFC LP	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	7ddb7e17-068a-489b-99d3-99860a97aaa4

Application advice

For more detailed application information and graphics please see product datasheet.

Sales and Technical Support

Sales and Technical Support www.osram.com

Download Data

File	
	User instruction OPTOTRONIC LED Power Supply
	Certificates OT ENEC 40038447 260623
	CAD data OTI DALI NFC LP IGS 240921

Product family datasheet

	CAD data OTI DALI NFC LP STEP 240921
	CAD Data 2-dim OTI DALI NFC LP CAD2PDF 240921
	CAD data 3-dim OTI DALI NFC LP CAD3PDF 240921
	User instruction OPTOTRONIC LED Power Supply
	CAD data OTI DALI 50 NFC LP IGS 271021
	CAD data OTI DALI 50 NFC LP STEP 271021
	CAD Data 2-dim OTI DALI 50 NFC LP CAD2PDF 271021
	CAD data 3-dim OTI DALI 50 NFC LP CAD3PDF 271021

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
4062172227674	OTi DALI 15/220...240/1A0 NFC LP	Shipping carton box 20	208 mm x 122 mm x 107 mm	2.72 dm ³	2490.00 g
4062172227698	OTi DALI 25/220...240/700 NFC LP	Shipping carton box 20	208 mm x 122 mm x 107 mm	2.72 dm ³	2490.00 g
4062172227711	OTi DALI 40/220...240/1A0 NFC LP	Shipping carton box 20	208 mm x 122 mm x 107 mm	2.72 dm ³	2690.00 g
4062172224024	OTi DALI 50/220...240/1A4 NFC LP	Shipping carton box 20	218 mm x 124 mm x 155 mm	4.19 dm ³	3613.00 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 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.