OPTOTRONIC Intelligent – DALI NFC LP I

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

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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
- Integrated cable clamp for luminaire and independent installation

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Technical data

Electrical data

Product description	Nominal input voltage	Mains frequency	Input voltage AC	Total harmonic distortion	Power factor λ
OTi DALI 15/220...240/1A0 NFC LPI	220...240 V	0,50,60 Hz	198...264 V [1]	< 10 % [2]	≥ 0.95
OTi DALI 25/220...240/700 NFC LPI	220...240 V	0,50,60 Hz	198...264 V [1]	< 10 % [2]	≥ 0.95
OTi DALI 40/220...240/1A0 NFC LPI	220...240 V	0,50,60 Hz	198...264 V [1]	< 10 % [2]	≥ 0.95

Product description	Efficiency in full-load	Device power loss	Networked standby power	Inrush current
OTi DALI 15/220...240/1A0 NFC LPI	87.5 % [3]	-	0.13 W [3]	20 A [4]
OTi DALI 25/220...240/700 NFC LPI	88 % [3]	-	0.13 W [3]	20 A [4]
OTi DALI 40/220...240/1A0 NFC LPI	88 % [3]	-	0.13 W [3]	20 A [4]

Product description	Max. ECG no. on circuit breaker 10 A (B)	Max. ECG no. on circuit breaker 16 A (B)	Surge capability (L/N-Ground)	Surge capability (L-N)
OTi DALI 15/220...240/1A0 NFC LPI	82	130	4 kV	2 kV
OTi DALI 25/220...240/700 NFC LPI	50	80	4 kV	2 kV
OTi DALI 40/220...240/1A0 NFC LPI	35	55	4 kV	2 kV

Product description	Nominal output voltage	U-OUT (working voltage)	Nominal output current	Output current tolerance	Output ripple current (100 Hz)
OTi DALI 15/220...240/1A0 NFC LPI	10...54 V [5]	60 V	150...1050 mA [6]	±3 %	< 3 % [7]
OTi DALI 25/220...240/700 NFC LPI	10...54 V [5]	60 V	180...700 mA [6]	±3 %	< 3 % [7]
OTi DALI 40/220...240/1A0 NFC LPI	10...54 V [5]	60 V	350...1050 mA [6]	±3 %	< 3 % [7]

Product description	Output PSTLM	Output SVM	Nominal output power	Maximum output power
OTi DALI 15/220...240/1A0 NFC LPI	≤1	≤0.4	18 W [8]	18 W [8]
OTi DALI 25/220...240/700 NFC LPI	≤1	≤0.4	27 W	27 W [9]
OTi DALI 40/220...240/1A0 NFC LPI	≤1	≤0.4	38 W	38 W [10]

Product description	Galvanic isolation primary/secondary	Galvanic isolation DALI/mains	Galvanic isolation DALI/output
OTi DALI 15/220...240/1A0 NFC LPI	SELV	Basic	SELV
OTi DALI 25/220...240/700 NFC LPI	SELV	Basic	SELV
OTi DALI 40/220...240/1A0 NFC LPI	SELV	Basic	SELV

[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 µs (measured at 50 % I_{peak})

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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

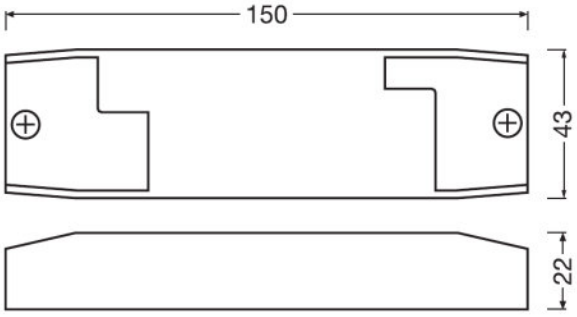
Dimensions & weight

Product description	Mounting hole spacing, length	Product weight	Cable cross-section, input side	Cable cross-section, output side	Wire preparation length, input side
OTi DALI 15/220...240/1A0 NFC LPI	108.0 mm	150.00 g	0.75...1.5 mm² 1)	0.5...1.5 mm² 1)	7...8 mm
OTi DALI 25/220...240/700 NFC LPI	108.0 mm	150.00 g	0.75...1.5 mm² 1)	0.5...1.5 mm² 1)	7...8 mm
OTi DALI 40/220...240/1A0 NFC LPI	108.0 mm	160.00 g	0.75...1.5 mm² 1)	0.5...1.5 mm² 1)	7...8 mm

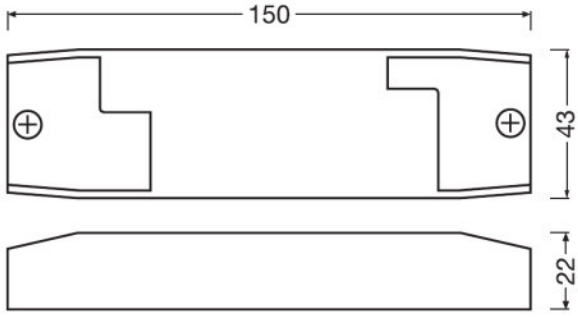
Product description	Wire preparation length, output side	Height	Length	Width
OTi DALI 15/220...240/1A0 NFC LPI	7...8 mm	22.0 mm	150.0 mm	42.5 mm
OTi DALI 25/220...240/700 NFC LPI	7...8 mm	22.0 mm	150.0 mm	42.5 mm
OTi DALI 40/220...240/1A0 NFC LPI	7...8 mm	22.0 mm	150.0 mm	42.5 mm

1) Solid or flexible leads

Product line drawing



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



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

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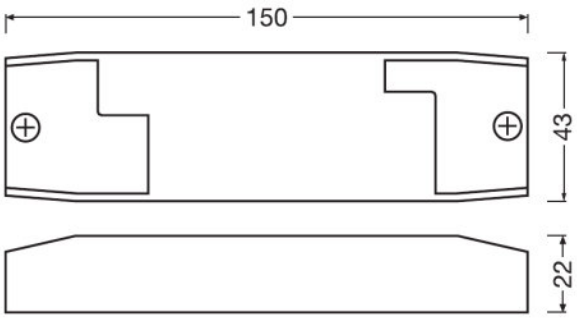

OTi DALI 40/220...240/1A0 NFC LPI

Colors & materials

Product description	Casing material
OTi DALI 15/220...240/1A0 NFC LPI	Plastic
OTi DALI 25/220...240/700 NFC LPI	Plastic
OTi DALI 40/220...240/1A0 NFC LPI	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 LPI	-20...+50 °C	80 °C [1)]	110 °C	-40...+85 °C
OTi DALI 25/220...240/700 NFC LPI	-20...+50 °C	85 °C [1)]	110 °C	-40...+85 °C
OTi DALI 40/220...240/1A0 NFC LPI	-20...+45 °C	85 °C [1)]	110 °C	-40...+85 °C

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

[1)] Maximum at the Tc-point

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

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Lifespan

Product description	ECG lifetime
OTi DALI 15/220...240/1A0 NFC LPI	50000 / 100000 h [1]
OTi DALI 25/220...240/700 NFC LPI	50000 / 100000 h [2]
OTi DALI 40/220...240/1A0 NFC LPI	50000 / 100000 h [2]

[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

Additional product data

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

Capabilities

Product description	Dimmable	Dimming interface	Dimming range	Dimming method
OTi DALI 15/220...240/1A0 NFC LPI	Yes	DALI / Touch DIM / Touch DIM Sensor	1...100 % [1]	Amplitude Modulation
OTi DALI 25/220...240/700 NFC LPI	Yes	DALI / Touch DIM / Touch DIM Sensor	1...100 % [1]	Amplitude Modulation
OTi DALI 40/220...240/1A0 NFC LPI	Yes	DALI / Touch DIM / Touch DIM Sensor	1...100 % [1]	Amplitude Modulation

Product description	Overheating protection	Overload protection	Short-circuit protection	No-load proof
OTi DALI 15/220...240/1A0 NFC LPI	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OTi DALI 25/220...240/700 NFC LPI	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OTi DALI 40/220...240/1A0 NFC LPI	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 LPI	No	2.0 m [2]	I / II	Push terminal
OTi DALI 25/220...240/700 NFC LPI	No	2.0 m [2]	I / II	Push terminal
OTi DALI 40/220...240/1A0 NFC LPI	No	2.0 m [2]	I / II	Push terminal

Product description	Type of connection, output side	Suitable for through-wiring	Detection angle (PIR)
OTi DALI 15/220...240/1A0 NFC LPI	Push terminal	No	-
OTi DALI 25/220...240/700 NFC LPI	Push terminal	No	-
OTi DALI 40/220...240/1A0 NFC LPI	Push terminal	No	-

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Product description	Number of channels	Detection angle (Light sensor)	Control interface
OTi DALI 15/220...240/1A0 NFC LPI	1	-	DALI
OTi DALI 25/220...240/700 NFC LPI	1	-	DALI
OTi DALI 40/220...240/1A0 NFC LPI	1	-	DALI

[1] For maximum nominal output current

[2] Output wires must be routed as close as possible to each other

Programming

Product description	Programming device	Tuner4TRONIC Field App	Tuner4TRONIC
OTi DALI 15/220...240/1A0 NFC LPI	DALI / NFC	No	Yes
OTi DALI 25/220...240/700 NFC LPI	DALI / NFC	No	Yes
OTi DALI 40/220...240/1A0 NFC LPI	DALI / NFC	No	Yes

Product description	Box programming
OTi DALI 15/220...240/1A0 NFC LPI	Yes
OTi DALI 25/220...240/700 NFC LPI	Yes
OTi DALI 40/220...240/1A0 NFC LPI	Yes

Certificates & standards

Product description	Approval marks – approval	Standards	Protection class	Type of protection
OTi DALI 15/220...240/1A0 NFC LPI	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 LPI	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 LPI	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	III	IP20

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Logistical data

Product description	Commodity code
OTi DALI 15/220...240/1A0 NFC LPI	850440829000
OTi DALI 25/220...240/700 NFC LPI	850440829000
OTi DALI 40/220...240/1A0 NFC LPI	850440829000

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 LPI	25-04-2022	4062172227735	Lead
OTi DALI 25/220...240/700 NFC LPI	25-04-2022	4062172227759	Lead
OTi DALI 40/220...240/1A0 NFC LPI	25-04-2022	4062172227773	Lead

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
OTi DALI 15/220...240/1A0 NFC LPI	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	1769c6a0-05ec-475f-8897-2085465a9f19
OTi DALI 25/220...240/700 NFC LPI	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	740eedc3-56b7-4855-a498-ac0bf21ec62e
OTi DALI 40/220...240/1A0 NFC LPI	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	3dcc03c7-73ab-4b00-a1b3-59bcccf3075e

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

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	CAD data OTI DALI NFC LP I IGS 240921
	CAD data OTI DALI NFC LP I STEP 240921
	CAD Data 2-dim OTI DALI NFC LP I CAD2PDF 240921
	CAD data 3-dim OTI DALI NFC LP I CAD3PDF 240921

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
4062172227735	OTi DALI 15/220...240/1A0 NFC LPI	Shipping carton box 20	314 mm x 122 mm x 107 mm	4.10 dm^3	3121.00 g
4062172227759	OTi DALI 25/220...240/700 NFC LPI	Shipping carton box 20	314 mm x 122 mm x 107 mm	4.10 dm^3	3121.00 g
4062172227773	OTi DALI 40/220...240/1A0 NFC LPI	Shipping carton box 20	314 mm x 122 mm x 107 mm	4.10 dm^3	3321.00 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.

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