OSRAM

OPTOTRONIC Intelligent – DALI NFC Track

Compact constant current LED driver – Dimmable

Areas of application

- Track lights
- Shops and hospitality: retail, hotels, restaurants

Product family benefits

- High quality of light thanks to low output ripple current
- Short housing for minimum distance between spotlights
- Versatile DALI window driver due to flexible output characteristic
- Easy and fast output current setting via NFC
- High-quality dimming of 1…100 % by amplitude dimming
- DALI-2 certified incl. Parts 251, 252, 253
- Touch DIM application: easy to control via pushbutton or sensor
- SELV system

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

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 40/220...240/1A0 NFC T-B	220...240 V	0/50/60 Hz	198...264 V [1]	176...276 V	< 10 % [2]	0.30C...0.95 [3]
OTi DALI 40/220...240/1A0 NFC T-W	220...240 V	0/50/60 Hz	198...264 V [1]	176...276 V	< 10 % [2]	0.30C...0.95 [3]
OTi DALI 40/220...240/1A0 NFC T-G	220...240 V	0/50/60 Hz	198...264 V [1]	176...276 V	< 10 % [2]	0.30C...0.95 [3]

Product description	Efficiency in full-load	Inrush current	Max. ECG no. on circuit breaker 10 A (B)	Max. ECG no. on circuit breaker 16 A (B)	
OTi DALI 40/220...240/1A0 NFC T-B	86 % [4]	36 A [5]	47	76	
OTi DALI 40/220...240/1A0 NFC T-W	86 % [4]	36 A [5]	47	76	
OTi DALI 40/220...240/1A0 NFC T-G	86 % [4]	36 A [5]	47	76	

Product description	Surge capability (L/N-Ground)	Surge capability (L-N)	Nominal output voltage	U-OUT (working voltage)	Nominal output current
OTi DALI 40/220...240/1A0 NFC T-B	2 kV	1 kV	18...42 V [6]	60 V	150...1050 mA [7]
OTi DALI 40/220...240/1A0 NFC T-W	2 kV	1 kV	18...42 V [6]	60 V	150...1050 mA [7]
OTi DALI 40/220...240/1A0 NFC T-G	2 kV	1 kV	18...42 V [6]	60 V	150...1050 mA [7]

Product description	Output current tolerance	Output ripple current (100 Hz)	Output PSTLM	
OTi DALI 40/220...240/1A0 NFC T-B	±5 %	< 5 % [8]	≤1	
OTi DALI 40/220...240/1A0 NFC T-W	±5 %	< 5 % [8]	≤1	
OTi DALI 40/220...240/1A0 NFC T-G	±5 %	< 5 % [8]	≤1	

Product description	Output SVM	Nominal output power	Maximum output power	Galvanic isolation primary/secondary
OTi DALI 40/220...240/1A0 NFC T-B	≤0.4	2.7...40 W	40 W [9]	SELV
OTi DALI 40/220...240/1A0 NFC T-W	≤0.4	2.7...40 W	40 W [9]	SELV
OTi DALI 40/220...240/1A0 NFC T-G	≤0.4	2.7...40 W	40 W [9]	SELV

Product description	Current set	Networked standby power	Galvanic isolation DALI/output
OTi DALI 40/220...240/1A0 NFC T-B	DALI / NFC	≤0.20 W [4]	SELV
OTi DALI 40/220...240/1A0 NFC T-W	DALI / NFC	≤0.20 W [4]	SELV
OTi DALI 40/220...240/1A0 NFC T-G	DALI / NFC	≤0.20 W [4]	SELV

Product family datasheet

Product description	Galvanic isolation DALI/mains	Default output current
OTi DALI 40/220...240/1A0 NFC T-B	Basic	500 mA
OTi DALI 40/220...240/1A0 NFC T-W	Basic	500 mA
OTi DALI 40/220...240/1A0 NFC T-G	Basic	500 mA

[1] Permitted voltage range

[2] At full load, 220...240 V, 50 Hz / see graphs

[3] Full load at 230 V/50 Hz

[4] at 230 V, 50 Hz

[5] t_{width} = 7 μs (measured at 50 % I_{peak})

[6] Maximum 60 V

[7] ±5%

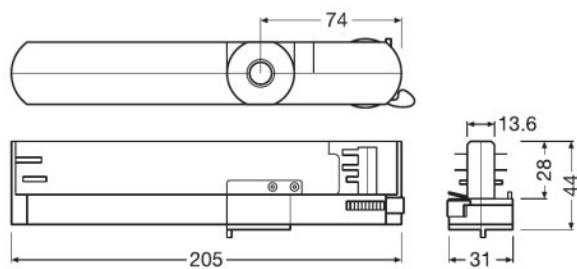[8] <3% for 350-1050mA

[9] Partial load 2.7...40 W

Dimensions & weight

Product description	Product weight	Cable cross-section, output side	Wire preparation length, output side	Length	Width
OTi DALI 40/220...240/1A0 NFC T-B	154.00 g	0.75...1.5 mm² [1]	8.0...9.0 mm	205.0 mm	31.0 mm
OTi DALI 40/220...240/1A0 NFC T-W	154.00 g	0.75...1.5 mm² [1]	8.0...9.0 mm	205.0 mm	31.0 mm
OTi DALI 40/220...240/1A0 NFC T-G	162.00 g	0.75...1.5 mm² [1]	8.0...9.0 mm	205.0 mm	31.0 mm

Product description	Height
OTi DALI 40/220...240/1A0 NFC T-B	44.0 mm
OTi DALI 40/220...240/1A0 NFC T-W	44.0 mm
OTi DALI 40/220...240/1A0 NFC T-G	49.9 mm

[1] Solid or flexible leads

Product line drawing

OTi DALI 40/220...240/1A0 NFC T-B, OTi DALI 40/220...240/1A0 NFC T-W, OTi DALI 40/220...240/1A0 NFC T-G

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Colors & materials

Product description	Casing material	Product color
OTi DALI 40/220...240/1A0 NFC T-B	Plastic	BLACK RAL 9011
OTi DALI 40/220...240/1A0 NFC T-W	Plastic	WHITE RAL 9010
OTi DALI 40/220...240/1A0 NFC T-G	Plastic	GREY RAL 7040

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 40/220...240/1A0 NFC T-B	-20...+35 °C	90 °C [1]	110 °C	-40...+85 °C
OTi DALI 40/220...240/1A0 NFC T-W	-20...+35 °C	90 °C [1]	110 °C	-40...+85 °C
OTi DALI 40/220...240/1A0 NFC T-G	-20...+35 °C	90 °C [1]	110 °C	-40...+85 °C

Product family datasheet

Product description	Permitted rel. humidity during operation
OTi DALI 40/220...240/1A0 NFC T-B	5...85 % [2]
OTi DALI 40/220...240/1A0 NFC T-W	5...85 % [2]
OTi DALI 40/220...240/1A0 NFC T-G	5...85 % [2]

[1] Measured on tc point indicated of the product label.

[2] Maximum 56 days/year at 85 %

Lifespan

Product description	ECG lifetime
OTi DALI 40/220...240/1A0 NFC T-B	50000 / 100000 h [1]
OTi DALI 40/220...240/1A0 NFC T-W	50000 / 100000 h [1]
OTi DALI 40/220...240/1A0 NFC T-G	50000 / 100000 h [1]

[1] T_c = 90°C - 0.2% / 1,000 h failure rate / Tc = 80°C, 0.1% / 1,000 h failure rate

Additional product data

Product description	Encapsulated	Compatible track systems
OTi DALI 40/220...240/1A0 NFC T-B	No	GLOBAL / Stucchi / Unipro / Powergear [1]
OTi DALI 40/220...240/1A0 NFC T-W	No	GLOBAL / Stucchi / Unipro / Powergear [1]
OTi DALI 40/220...240/1A0 NFC T-G	No	GLOBAL / Stucchi / Unipro / Powergear [1]

[1] The compatibility may become invalid when the critical track dimension is modified by the brand owner in case of engineering change or optimization in the future

Capabilities

Product description	Dimmable	Dimming interface	Dimming range	Dimming method
OTi DALI 40/220...240/1A0 NFC T-B	Yes	DALI-2 / Touch DIM / Touch DIM Sensor	1...100 %	Amplitude Modulation
OTi DALI 40/220...240/1A0 NFC T-W	Yes	DALI-2 / Touch DIM / Touch DIM Sensor	1...100 %	Amplitude Modulation
OTi DALI 40/220...240/1A0 NFC T-G	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 40/220...240/1A0 NFC T-B	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OTi DALI 40/220...240/1A0 NFC T-W	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OTi DALI 40/220...240/1A0 NFC T-G	Automatic reversible	Automatic reversible	Automatic reversible	Yes

Product family datasheet

Product description	Intended for no-load operation	Max. cable length to lamp/LED module	Type of connection, input side	Type of connection, output side
OTi DALI 40/220...240/1A0 NFC T-B	No	2.0 m [1]	-	Push terminal
OTi DALI 40/220...240/1A0 NFC T-W	No	2.0 m [1]	-	Push terminal
OTi DALI 40/220...240/1A0 NFC T-G	No	2.0 m [1]	-	Push terminal

Product description	Control interface	Programming interface	Constant lumen function
OTi DALI 40/220...240/1A0 NFC T-B	DALI-2	DALI, NFC	Programmable
OTi DALI 40/220...240/1A0 NFC T-W	DALI-2	DALI, NFC	Programmable
OTi DALI 40/220...240/1A0 NFC T-G	DALI-2	DALI, NFC	Programmable

Product description	Number of channels	Suitable for through-wiring
OTi DALI 40/220...240/1A0 NFC T-B	1	No
OTi DALI 40/220...240/1A0 NFC T-W	1	No
OTi DALI 40/220...240/1A0 NFC T-G	1	No

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

Programming

Product description	Box programming	Tuner4TRONIC	Tuner4TRONIC Field App
OTi DALI 40/220...240/1A0 NFC T-B	Yes	Yes	Yes
OTi DALI 40/220...240/1A0 NFC T-W	Yes	Yes	Yes
OTi DALI 40/220...240/1A0 NFC T-G	Yes	Yes	Yes

Product description	Programming device
OTi DALI 40/220...240/1A0 NFC T-B	DALI / NFC
OTi DALI 40/220...240/1A0 NFC T-W	DALI / NFC
OTi DALI 40/220...240/1A0 NFC T-G	DALI / NFC

Programmable features

Product description	OEM Key	Dim to Dark	Soft Switch Off
OTi DALI 40/220...240/1A0 NFC T-B	No	Yes	Yes
OTi DALI 40/220...240/1A0 NFC T-W	No	Yes	Yes
OTi DALI 40/220...240/1A0 NFC T-G	No	Yes	Yes

Product description	Configuration Lock	Emergency Mode	Driver Guard
OTi DALI 40/220...240/1A0 NFC T-B	Yes	No	Yes
OTi DALI 40/220...240/1A0 NFC T-W	Yes	No	Yes
OTi DALI 40/220...240/1A0 NFC T-G	Yes	No	Yes

Product description	Lamp Operating Time	Constant Lumen
OTi DALI 40/220...240/1A0 NFC T-B	Yes	Yes
OTi DALI 40/220...240/1A0 NFC T-W	Yes	Yes
OTi DALI 40/220...240/1A0 NFC T-G	Yes	Yes

Product family datasheet

Certificates & standards

Product description	Approval marks – approval	Standards	Protection class	Type of protection
OTi DALI 40/220...240/1A0 NFC T-B	CE / UKCA / DALI-2 / CQC / RCM	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 61547/Acc. to CISPR 15/Acc. to ETSI EN 300 330/Acc. to ETSI EN 301 489 - 1/Acc. to ETSI EN 301 489-3	II	IP20
OTi DALI 40/220...240/1A0 NFC T-W	CE / UKCA / DALI-2 / CQC / RCM	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 61547/Acc. to CISPR 15/Acc. to ETSI EN 300 330/Acc. to ETSI EN 301 489 - 1/Acc. to ETSI EN 301 489-3	II	IP20
OTi DALI 40/220...240/1A0 NFC T-G	CE / UKCA / DALI-2 / CQC / RCM	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 61547/Acc. to CISPR 15/Acc. to ETSI EN 300 330/Acc. to ETSI EN 301 489 - 1/Acc. to ETSI EN 301 489-3	II	IP20

Logistical data

Product description	Commodity code
OTi DALI 40/220...240/1A0 NFC T-B	85044083900
OTi DALI 40/220...240/1A0 NFC T-W	85044083900
OTi DALI 40/220...240/1A0 NFC T-G	85044083900

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 40/220...240/1A0 NFC T-B	21-08-2023	4062172310475	Lead
OTi DALI 40/220...240/1A0 NFC T-W	21-08-2023	4062172310529	Lead
OTi DALI 40/220...240/1A0 NFC T-G	21-08-2023	4062172350105	Lead

Product family datasheet

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
OTi DALI 40/220...240/1A0 NFC T-B	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	01d5b3db-b54e-4066-b8fe-29a3f63508d3
OTi DALI 40/220...240/1A0 NFC T-W	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	2996aef9-84ad-4057-a8aa-2d124cda2a0d
OTi DALI 40/220...240/1A0 NFC T-G	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	12ff75af-0702-4867-bb50-067a4c4d6fb3

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
CAD data 3-dim OTI DALI 40 220 240 1A0 NFC CAD 3D 20221208

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.

Product family datasheet

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4062172310475	OTi DALI 40/220...240/1A0 NFC T-B	Shipping carton box 20	266 mm x 225 mm x 234 mm	14.00 dm³	3516.00 g
4062172310529	OTi DALI 40/220...240/1A0 NFC T-W	Shipping carton box 20	266 mm x 225 mm x 234 mm	14.00 dm³	3516.00 g
4062172350105	OTi DALI 40/220...240/1A0 NFC T-G	Shipping carton box 20	266 mm x 225 mm x 234 mm	14.00 dm³	3676.00 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.

Accessories Optional

Product description	Accessory name	Accessory code
OTi DALI 40/220...240/1A0 NFC T-B	Track Joint	4062172228183
OTi DALI 40/220...240/1A0 NFC T-B	BLACK RING	4062172138567
OTi DALI 40/220...240/1A0 NFC T-W	Track Joint	4062172228183
OTi DALI 40/220...240/1A0 NFC T-W	WHITE RING	4062172138550
OTi DALI 40/220...240/1A0 NFC T-G	Track Joint	4062172228183
OTi DALI 40/220...240/1A0 NFC T-G	GREY RING	4062172138543

Data privacy

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

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

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