

OPTOTRONIC Intelligent – DALI NFC I (sq)

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

- Versatile DALI window driver due to flexible output characteristic
- DALI-2 certified incl. Parts 251, 252, 253
- Easy and fast output current setting via NFC
- Very high efficiency
- High-quality dimming of 1...100 % by amplitude dimming

Product family features

- Supply voltage: 220...240 V
- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Lifetime: up to 100,000 h
- Type of protection: IP20
- Integrated cable clamp for luminaire and independent installation
- Through-looping



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 25/220...240/700 NFC I	220...240 V	0/50/60 Hz	198...264 V ¹⁾	176...276 V	< 10 % ²⁾	> 0.98
OTi DALI 35/220...240/1A0 NFC I	220...240 V	0/50/60 Hz	198...264 V ¹⁾	176...276 V	< 10 % ²⁾	> 0.99
OTi DALI 60/220...240/1A4 NFC I	220...240 V	0/50/60 Hz	198...264 V ¹⁾	176...276 V	< 10 % ²⁾	\geq 0.95

Product description	Efficiency in full-load	Networked standby power [GMS]	Inrush current	Max. ECG no. on circuit breaker 10 A (B)
OTi DALI 25/220...240/700 NFC I	88 % ³⁾	<0.18 W ³⁾	17 A ⁴⁾	20
OTi DALI 35/220...240/1A0 NFC I	89 % ³⁾	<0.18 W ³⁾	17 A ⁴⁾	20
OTi DALI 60/220...240/1A4 NFC I	90 % ³⁾	<0.18 W ³⁾	20 A ⁸⁾	12

Product description	Max. ECG no. on circuit breaker 10 A (C)	Max. ECG no. on circuit breaker 16 A (C)	Max. ECG no. on circuit breaker 16 A (B)	Max. ECG no. on circuit breaker 25 A (B)	Surge capability (L/N-Ground)
OTi DALI 25/220...240/700 NFC I	-	-	35	-	2 kV
OTi DALI 35/220...240/1A0 NFC I	-	-	35	-	2 kV
OTi DALI 60/220...240/1A4 NFC I	-	-	20	-	2 kV

Product description	Surge capability (L-N)	Nominal output voltage	U-OUT (working voltage)	Nominal output current	Default output current
OTi DALI 25/220...240/700 NFC I	1 kV	15...54 V ⁵⁾	60 V	180...700 mA ⁶⁾	500 mA
OTi DALI 35/220...240/1A0 NFC I	1 kV	15...54 V ⁵⁾	60 V	350...1050 mA ⁶⁾	700 mA
OTi DALI 60/220...240/1A4 NFC I	1 kV	15...54 V ⁵⁾	60 V	600...1400 mA ⁶⁾	1050 mA

Product description	Output current tolerance	Output ripple current (100 Hz)	Output PSTLM
OTi DALI 25/220...240/700 NFC I	\pm 5 %	< 5 % ⁷⁾	<1
OTi DALI 35/220...240/1A0 NFC I	\pm 5 %	< 5 % ⁷⁾	<1
OTi DALI 60/220...240/1A4 NFC I	\pm 5 %	< 5 % ⁷⁾	<1

Product description	Output SVM	Nominal output power	Maximum output power	Current set
OTi DALI 25/220...240/700 NFC I	<0.4	2.7...27 W	27 W	DALI / NFC
OTi DALI 35/220...240/1A0 NFC I	<0.4	5.25...35 W	35 W	DALI / NFC
OTi DALI 60/220...240/1A4 NFC I	<0.4	22...58 W	58 W	DALI / NFC

Product family datasheet

Product description	Galvanic isolation primary/secondary	Power loss in stand-by mode	Galvanic isolation DALI/mains	Galvanic isolation DALI/output
OTi DALI 25/220...240/700 NFC I	SELV	≤0.18 W	Basic	SELV
OTi DALI 35/220...240/1A0 NFC I	SELV	≤0.18 W	Basic	SELV
OTi DALI 60/220...240/1A4 NFC I	SELV	≤0.18 W	Basic	SELV

1) Permitted voltage range

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

3) at 230 V, 50 Hz

4) $t_{width} = 220 \mu s$ (measured at 50 % I_{peak})

5) Maximum 60 V

6) ±5%

7) Ripple average at 100 Hz

8) $t_{width} = 200 \mu s$ (measured at 50 % I_{peak})

Dimensions & weight

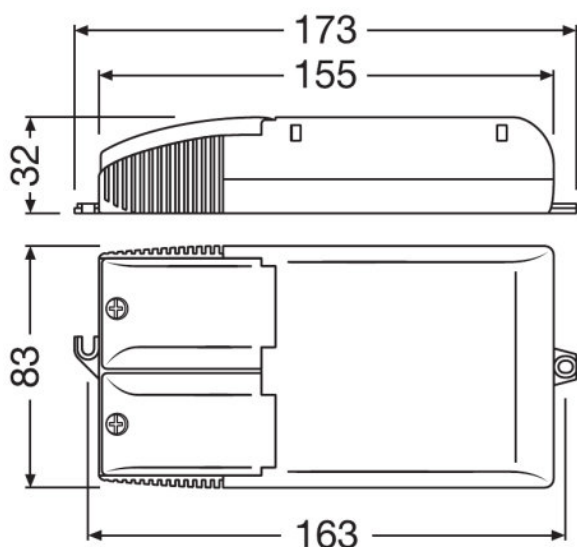
Product description	Mounting hole spacing, length	Product weight	Cable cross-section, input side	Cable cross-section, output side	Wire preparation length, input side
OTi DALI 25/220...240/700 NFC I	163.0 mm	180.00 g	0.75...1.5 mm ^{2 1)}	0.2...1.5 mm ^{2 1)}	8.0...9.0 mm
OTi DALI 35/220...240/1A0 NFC I	163.0 mm	180.00 g	0.75...1.5 mm ^{2 1)}	0.2...1.5 mm ^{2 1)}	8.0...9.0 mm
OTi DALI 60/220...240/1A4 NFC I	163.0 mm	215.00 g	0.75...1.5 mm ^{2 1)}	0.2...1.5 mm ^{2 1)}	8.0...9.0 mm

Product description	Wire preparation length, output side	Height	Width	Length
OTi DALI 25/220...240/700 NFC I	8.0...9.0 mm	32.0 mm	83.0 mm	171.0 mm
OTi DALI 35/220...240/1A0 NFC I	8.0...9.0 mm	32.0 mm	83.0 mm	171.0 mm
OTi DALI 60/220...240/1A4 NFC I	8.0...9.0 mm	32.0 mm	83.0 mm	171.0 mm

1) Solid or flexible leads

Product family datasheet

Product line drawing



OTi DALI 25/220...240/700 NFC I, OTi DALI
35/220...240/1A0 NFC I, OTi DALI 60/220...240/1A4 NFC I

Colors & materials

Product description	Casing material
OTi DALI 25/220...240/700 NFC I	Plastic
OTi DALI 35/220...240/1A0 NFC I	Plastic
OTi DALI 60/220...240/1A4 NFC I	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 25/220...240/700 NFC I	-20...+60 °C	75 °C ¹⁾	110 °C	-40...+85 °C
OTi DALI 35/220...240/1A0 NFC I	-20...+60 °C	75 °C ¹⁾	110 °C	-40...+85 °C
OTi DALI 60/220...240/1A4 NFC I	-20...+50/-20...+45 °C ³⁾	85 °C ¹⁾	110 °C	-40...+85 °C

Product description	Permitted rel. humidity during operation
OTi DALI 25/220...240/700 NFC I	5...85 % ²⁾
OTi DALI 35/220...240/1A0 NFC I	5...85 % ²⁾
OTi DALI 60/220...240/1A4 NFC I	5...85 % ²⁾

Product family datasheet

1) Maximum at the T_c-point

2) Maximum 56 days/year at 85 %

3) At output power ≤ 50W/At output power > 50 W

Lifespan

Product description	ECG lifetime
OTi DALI 25/220...240/700 NFC I	50000 / 100000 h ¹⁾
OTi DALI 35/220...240/1A0 NFC I	50000 / 100000 h ¹⁾
OTi DALI 60/220...240/1A4 NFC I	50000 / 100000 h ²⁾

1) T_c = 75°C, 0.2% / 1,000 h failure rate / T_c = 65°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 25/220...240/700 NFC I	No
OTi DALI 35/220...240/1A0 NFC I	No
OTi DALI 60/220...240/1A4 NFC I	No

Capabilities

Product description	Dimmable	Dimming interface	Dimming range	Dimming method
OTi DALI 25/220...240/700 NFC I	Yes	DALI-2 / Touch DIM / Touch DIM Sensor	1...100 %	Amplitude Modulation
OTi DALI 35/220...240/1A0 NFC I	Yes	DALI-2 / Touch DIM / Touch DIM Sensor	1...100 %	Amplitude Modulation
OTi DALI 60/220...240/1A4 NFC I	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 25/220...240/700 NFC I	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OTi DALI 35/220...240/1A0 NFC I	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OTi DALI 60/220...240/1A4 NFC I	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 25/220...240/700 NFC I	No	2.0 m ¹⁾	I / II	Push terminal
OTi DALI 35/220...240/1A0 NFC I	No	2.0 m ¹⁾	I / II	Push terminal
OTi DALI 60/220...240/1A4 NFC I	No	2.0 m ¹⁾	I / II	Push terminal

Product description	Type of connection, output side	DALI-2 Diagnostic Data	Number of channels
OTi DALI 25/220...240/700 NFC I	Push terminal	Yes ²⁾	1
OTi DALI 35/220...240/1A0 NFC I	Push terminal	Yes ²⁾	1

Product family datasheet

Product description	Type of connection, output side	DALI-2 Diagnostic Data	Number of channels
OTi DALI 60/220...240/1A4 NFC I	Push terminal	Yes ²⁾	1

Product description	Suitable for through-wiring	Suitable for emergency lighting	Constant lumen function	DALI-2 Energy Data
OTi DALI 25/220...240/700 NFC I	Yes	Yes	Programmable	Yes ³⁾
OTi DALI 35/220...240/1A0 NFC I	Yes	Yes	Programmable	Yes ³⁾
OTi DALI 60/220...240/1A4 NFC I	Yes	Yes	Programmable	Yes ³⁾

Product description	Control interface	Programming interface
OTi DALI 25/220...240/700 NFC I	DALI-2	DALI, NFC
OTi DALI 35/220...240/1A0 NFC I	DALI-2	DALI, NFC
OTi DALI 60/220...240/1A4 NFC I	DALI-2	DALI, NFC

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

²⁾ Acc. DALI part 253

³⁾ Acc. DALI part 252

Programming

Product description	Programming device	Tuner4TRONIC Field App	Tuner4TRONIC
OTi DALI 25/220...240/700 NFC I	DALI / NFC	No	Yes
OTi DALI 35/220...240/1A0 NFC I	DALI / NFC	No	Yes
OTi DALI 60/220...240/1A4 NFC I	DALI / NFC	Yes	Yes

Product description	Box programming
OTi DALI 25/220...240/700 NFC I	Yes
OTi DALI 35/220...240/1A0 NFC I	Yes
OTi DALI 60/220...240/1A4 NFC I	Yes

Programmable features

Product description	OEM Key	Configuration Lock	DALI-2 Luminaire Data
OTi DALI 25/220...240/700 NFC I	No	Yes	Yes ¹⁾
OTi DALI 35/220...240/1A0 NFC I	No	Yes	Yes ¹⁾
OTi DALI 60/220...240/1A4 NFC I	No	Yes	Yes ¹⁾

Product description	Emergency Mode	TouchDIM + Sensor	Dim to Dark
OTi DALI 25/220...240/700 NFC I	Yes	Yes	Yes
OTi DALI 35/220...240/1A0 NFC I	Yes	Yes	Yes
OTi DALI 60/220...240/1A4 NFC I	Yes	Yes	Yes

Product description	Soft Switch Off	Driver Guard	DALI Settings
OTi DALI 25/220...240/700 NFC I	Yes	Yes	Yes
OTi DALI 35/220...240/1A0 NFC I	Yes	Yes	Yes
OTi DALI 60/220...240/1A4 NFC I	Yes	Yes	Yes

Product family datasheet

Product description	Corridor Functionality	Constant Lumen	Lamp Operating Time
OTi DALI 25/220...240/700 NFC I	Yes	Yes	Yes
OTi DALI 35/220...240/1A0 NFC I	Yes	Yes	Yes
OTi DALI 60/220...240/1A4 NFC I	Yes	Yes	Yes

¹⁾ Acc. DALI part 251

Certificates & standards

Product description	Approval marks – approval	Standards	Protection class	Type of protection
OTi DALI 25/220...240/700 NFC I	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 ETSI EN 300 330/Acc. to ETSI EN 301 489 - 1/Acc. to ETSI EN 301 489-3	II	IP20
OTi DALI 35/220...240/1A0 NFC I	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 ETSI EN 300 330/Acc. to ETSI EN 301 489 - 1/Acc. to ETSI EN 301 489-3	II	IP20
OTi DALI 60/220...240/1A4 NFC I	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 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 25/220...240/700 NFC I	850440829000
OTi DALI 35/220...240/1A0 NFC I	850440829000
OTi DALI 60/220...240/1A4 NFC I	850440829000

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 25/220...240/700 NFC I	01-08-2022	4062172201797	Lead
OTi DALI 35/220...240/1A0 NFC I	01-08-2022	4062172201810	Lead
OTi DALI 60/220...240/1A4 NFC I	01-08-2022	4062172201834	Lead

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
OTi DALI 25/220...240/700 NFC I	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	3ccf3c64-3d1a-4f6b-8643-5d2e3b7a95a3
OTi DALI 35/220...240/1A0 NFC I	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	81e9413c-fffc-4068-a61a-9d625dda4f56
OTi DALI 60/220...240/1A4 NFC I	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	f81ff467-1c2b-419a-99fc-49b30c31a49d






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 130722
 CAD data OTI DALI NFC I IGS 140721
 CAD data OTI DALI NFC I STEP 140721
 CAD Data 2-dim OTI DALI NFC I CAD2PDF 140721

Product family datasheet



CAD data 3-dim
OTI DALI NFC I CAD3PDF 140721

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
4062172201797	OTi DALI 25/220...240/700 NFC I	Shipping carton box 16	366 mm x 268 mm x 100 mm	9.81 dm ³	3196.00 g
4062172201810	OTi DALI 35/220...240/1A0 NFC I	Shipping carton box 16	366 mm x 268 mm x 100 mm	9.81 dm ³	3196.00 g
4062172201834	OTi DALI 60/220...240/1A4 NFC I	Shipping carton box 16	366 mm x 268 mm x 100 mm	9.81 dm ³	3756.00 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.

Product family datasheet

Disclaimer

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