OPTOTRONIC Intelligent Tunable White – DALI (non-isolated)

Linear constant current LED driver – Dimmable



Areas of application

- For Tunable White as well as for 2-channel use (e.g. direct/indirect lighting)
- 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 installation in emergency lighting systems according to EN 60598-2-22
- Suitable for luminaires of protection class I
- Perfect system match with PrevaLED Linear Tunable White

Product family benefits

- Control of standard white or Tunable White light acc. DALI device type 8 (DT8)*
- TouchDIM Tunable White integrated for use without additional LMS
- Fully programmable via T4T software (NFC, DALI Interface)
- Lifetime: up to 100,000 h (temperature at T_c = 65 °C, max. 10 % failure rate)
- High-quality dimming of 1...100 % (amplitude and/or PWM selectable by software)
- High quality of light thanks to <1% output ripple current
- Very high efficiency
- Fulfill safety requirement due to overload, overtemperature, Hot Plug protection

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Versatile scope of application due to OSRAM DALI Technology:

- Easy to use in corridors and restrooms because of three-level Corridor function
- Touch DIM application: easy to control via pushbutton or sensor
- Energy efficient Touch DIM operation due to automatic switch-off at sufficient residual light
- Suitable for emergency Installations (acc. to EN 60598-2-22 and IEC 61347-2-13, appendix J) thanks to DC detection (0 Hz, pulsating DC), on/off switchable
- Feedback of power consumption and operating hours (Fit for SMART GRID)
- Suitable for buildings according to EPBD/BREEAM/LEED due to automatic Constant Lumen Output setting
- Luminaire information for easy maintenance

Product family features

- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Versatile DALI window driver up to 75 W due to flexible output characteristic
- Supply voltage: 220…240 V
- Usable as DT6 (2-channel) or DT8 (Tunable White) driver*
- Available with output current range: up to 700 mA
- Constant Lumen Output (CLO)
- Integrated customizable thermal management (Driver Guard)
- Non-isolated drivers

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Technical data

Electrical data

Product description	Nominal input voltage	Mains frequency	Input voltage AC	Input voltage DC	Current set
OTi DALI 35/220…240/400 D NFC TW L	220…240 V	0/50/60 Hz	198…264 V	176…276 V	DALI / NFC / Programmable
OTi DALI 75/220…240/700 D NFC TW L	220…240 V	0/50/60 Hz	198…264 V	176…276 V	DALI / NFC / Programmable

Product description	Total harmonic distortion	Power factor λ	Efficiency in full-load	Device power loss	Inrush current
OTi DALI 35/220…240/400 D NFC TW L	< 10 %	0.47C…0.95	90 % [1)]	3.0 W	17 A
OTi DALI 75/220…240/700 D NFC TW L	< 10 %	0.59C…0.98	91 % [1)]	6.0 W	23 A

Product description	Max. ECG no. on circuit breaker 10 A (B)	Max. ECG no. on circuit breaker 16 A (B)	Max. ECG no. on circuit breaker 25 A (B)	Surge capability (L/N-Ground)	Surge capability (L-N)
OTi DALI 35/220…240/400 D NFC TW L	19	28	-	2 kV	1 kV
OTi DALI 75/220…240/700 D NFC TW L	13	19	-	2 kV	1 kV

Product description	Nominal output voltage	U-OUT (working voltage)	Nominal output current	Default output current	Output current tolerance
OTi DALI 35/220…240/400 D NFC TW L	45…240 V	< 250 V	75…400 mA	75 mA	±3 %
OTi DALI 75/220…240/700 D NFC TW L	50…240 V	< 250 V	150…700 mA	150 mA	±3 %

Product description	Output ripple current (100 Hz)	Output PSTLM	Output SVM	Nominal output power
OTi DALI 35/220…240/400 D NFC TW L	< 1 %	≤1	≤0.4	4…38 W
OTi DALI 75/220…240/700 D NFC TW L	< 1 %	≤1	≤0.4	8.1…75 W

Product description	Maximum output power	Galvanic isolation	Power loss in stand-by mode	Galvanic isolation primary/secondary
OTi DALI 35/220…240/400 D NFC TW L	38 W	Non isolated	<0.2 W	-
OTi DALI 75/220…240/700 D NFC TW L	75 W	Non isolated	<0.2 W	-

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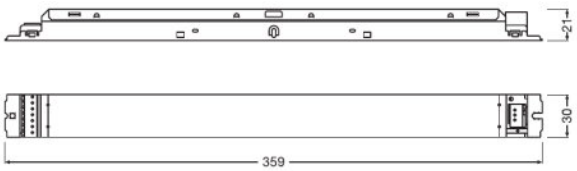
[1] at 230 V, 50 Hz

Dimensions & weight

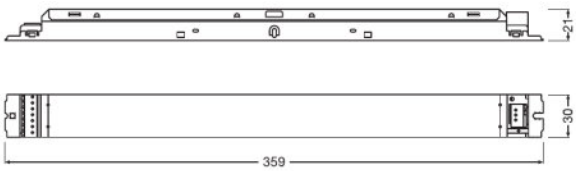
Product description	Mounting hole spacing, length	Product weight	Cable cross-section, input side	Cable cross-section, output side	Wire preparation length, input side
OTi DALI 35/220…240/400 D NFC TW L	350.0 mm	235.00 g	0.5…1.5 mm²	0.5…1.5 mm²	8.0…9.0 mm
OTi DALI 75/220…240/700 D NFC TW L	350.0 mm	260.00 g	0.5…1.5 mm²	0.5…1.5 mm²	8.0…9.0 mm

Product description	Wire preparation length, output side	Width	Length	Height
OTi DALI 35/220…240/400 D NFC TW L	8.0…9.0 mm	30.0 mm	360.0 mm	21.0 mm
OTi DALI 75/220…240/700 D NFC TW L	8.0…9.0 mm	30.0 mm	360.0 mm	21.0 mm

Product line drawing



OTi DALI 35/220…240/400 D NFC TW L



OTi DALI 75/220…240/700 D NFC TW L

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Colors & materials

Product description	Casing material
OTi DALI 35/220...240/400 D NFC TW L	Metal
OTi DALI 75/220...240/700 D NFC TW L	Metal

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 35/220...240/400 D NFC TW L	-25...+50 °C	75 °C	110 °C	-40...+85 °C
OTi DALI 75/220...240/700 D NFC TW L	-25...+50 °C	75 °C	110 °C	-40...+85 °C

Product description	Permitted rel. humidity during operation
OTi DALI 35/220...240/400 D NFC TW L	5...85 % [1)]
OTi DALI 75/220...240/700 D NFC TW L	5...85 % [1)]

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

Lifespan

Product description	ECG lifetime
OTi DALI 35/220...240/400 D NFC TW L	50000 / 100000 h [1)]
OTi DALI 75/220...240/700 D NFC TW L	50000 / 100000 h [1)]

[1)] At maximum T_c = 75°C / 10% failure rate / At T_c = 65°C / 10% failure rate

Additional product data

Product description	Encapsulated
OTi DALI 35/220...240/400 D NFC TW L	No
OTi DALI 75/220...240/700 D NFC TW L	No

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Capabilities

Product description	Programming interface	Dimmable	Dimming interface	Dimming range
OTi DALI 35/220...240/400 D NFC TW L	DALI, NFC	Yes	DALI-2 / Touch DIM / Touch DIM Sensor	1...100 %
OTi DALI 75/220...240/700 D NFC TW L	DALI, NFC	Yes	DALI-2 / Touch DIM / Touch DIM Sensor	1...100 %

Product description	Dimming method	Constant lumen function	Overheating protection
OTi DALI 35/220...240/400 D NFC TW L	Full analogue dimming / AM/PWM selectable	Programmable	Automatic reversible
OTi DALI 75/220...240/700 D NFC TW L	Full analogue dimming / AM/PWM selectable	Programmable	Automatic reversible

Product description	Overload protection	Short-circuit protection	No-load proof	Intended for no-load operation
OTi DALI 35/220...240/400 D NFC TW L	Automatic reversible	Automatic reversible	Yes	No
OTi DALI 75/220...240/700 D NFC TW L	Automatic reversible	Automatic reversible	Yes	No

Product description	Max. cable length to lamp/LED module	Suitable for fixtures with prot. class	Suitable for emergency lighting	Type of connection, input side
OTi DALI 35/220...240/400 D NFC TW L	2.0 m [1)]	I	Yes	Push terminal
OTi DALI 75/220...240/700 D NFC TW L	2.0 m [1)]	I	Yes	Push terminal

Product description	Type of connection, output side	Number of channels	DALI-2 Diagnostic Data
OTi DALI 35/220...240/400 D NFC TW L	Push terminal	2	No
OTi DALI 75/220...240/700 D NFC TW L	Push terminal	2	No

Product description	DALI-2 Energy Data
OTi DALI 35/220...240/400 D NFC TW L	No
OTi DALI 75/220...240/700 D NFC TW L	No

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

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Programming

Product description	Programming device	Box programming
OTi DALI 35/220...240/400 D NFC TW L	DALI magic / NFC Scanner	Yes
OTi DALI 75/220...240/700 D NFC TW L	DALI magic / NFC Scanner	Yes

Programmable features

Product description	Operating Current	Lamp Operating Time	Driver Guard
OTi DALI 35/220...240/400 D NFC TW L	Yes	Yes	Yes
OTi DALI 75/220...240/700 D NFC TW L	Yes	Yes	Yes

Product description	DALI Settings	Emergency Mode	DALI-2 Luminaire Data
OTi DALI 35/220...240/400 D NFC TW L	Yes	Yes	No
OTi DALI 75/220...240/700 D NFC TW L	Yes	Yes	No

Product description	Soft Switch Off	Dim to Dark	TouchDIM + Sensor
OTi DALI 35/220...240/400 D NFC TW L	Yes	Yes	Yes
OTi DALI 75/220...240/700 D NFC TW L	Yes	Yes	Yes

Product description	Corridor Functionality	Tunable White CCT	Tunable White High precision
OTi DALI 35/220...240/400 D NFC TW L	Yes	Yes	Yes
OTi DALI 75/220...240/700 D NFC TW L	Yes	Yes	Yes

Certificates & standards

Product description	Approval marks – approval	Standards	Type of protection
OTi DALI 35/220...240/400 D NFC TW L	CE / EL / VDE-ENEC / EAC / CCC / RCM / BIS	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547	IP20
OTi DALI 75/220...240/700 D NFC TW L	CE / EL / VDE-ENEC / EAC / CCC / RCM / BIS	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547	IP20

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Logistical data

Product description	Commodity code
OTi DALI 35/220...240/400 D NFC TW L	850440829000
OTi DALI 75/220...240/700 D NFC TW L	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 35/220...240/400 D NFC TW L	22-09-2023	4052899990302	Lead
OTi DALI 75/220...240/700 D NFC TW L	07-07-2023	4052899990326 | 4050732460562	Lead

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
OTi DALI 35/220...240/400 D NFC TW L	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	5d018f90-f20f-4306-87aa-04a991f4a89a
OTi DALI 75/220...240/700 D NFC TW L	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	5950e01c-db9f-4acb-91ba-c878dcf5f020 | 14285238-1377-40be-b396-66efb470b658

Application advice

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

Additional product information

- Electrical connections between the two output channels are not allowed.

Sales and Technical Support

Sales and Technical Support www.osram.com

Download Data

	File

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	User instruction OPTOTRONIC LED Power Supply
	User instruction OPTOTRONIC LED Power Supply
	Certificates OT EMC 40050085 200220
	Certificates OT ENEC 40038085 010322
	Certificates OT EMC 40044675 031022
	Declarations of conformity OTI DALI D NFC TW L UK DoC 4287948 110522
	Declarations of conformity OTI DALI D NFC TW L CE 3633314 110522
	Declarations of conformity EATON(CEAG) Conformity declaration AM28017 OTi DALI35 220-240 400 D NFC TW L
	Declarations of conformity INOTEC Conformity declaration AM28017 OTi DALI35 220-240 400 D NFC TW L
	CAD data OTI DALI D NFC TWL IGS 050220
	CAD data OTI DALI D NFC TWL STEP 050220
	CAD Data 2-dim OTI DALI D NFC TWL CAD2PDF 050220
	CAD data 3-dim OTI DALI D NFC TWL CAD3PDF 050220
	Declarations of conformity EATON(CEAG) Conformity declaration AM28015 OTI DALI75 220 240 700 D NFC TW L
	Declarations of conformity INOTEC Conformity declaration AM28015 OTI DALI75 220 240 700 D NFC TW L

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.

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Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899990302	OTi DALI 35/220…240/400 D NFC TW L	Shipping carton box 20	385 mm x 160 mm x 100 mm	6.16 dm^3	4871.00 g
4052899990326	OTi DALI 75/220…240/700 D NFC TW L	Shipping carton box 20	385 mm x 160 mm x 100 mm	6.16 dm^3	5371.00 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 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

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