

OPTOTRONIC Intelligent Ultraflat – DALI (non-isolated)

Linear constant current LED driver – Dimmable



Areas of application

- 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 luminaires of protection class I

Product family benefits

- Ultra-flat housing (11 mm height) for innovative luminaire designs and applications
- LEDset interface for direct Ultraflat sensor connection (LS/PD LT2 LI UF sensor)
- Fully programmable via T4T software (NFC, DALI Interface)
- Lifetime: up to 100,000 h (temperature at $T_C = 65\text{ °C}$, max. 10 % failure rate)
- High-quality dimming of 1...100 % by amplitude dimming
- High quality of light thanks to <1% output ripple current
- Very high efficiency
- Fulfill safety requirement due to overload, overtemperature, Hot Plug protection

Product family datasheet

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
- Available with output current range: up to 700 mA
- Direct Ultraflat sensor connection via LEDset (LS/PD LT2 LI UF Sensor)
- Use with Ultraflat DALI sensor (LS/PD DALI LI UF Sensor)
- Constant Lumen Output (CLO)
- Non-isolated drivers
- DALI-2 certified (Part -101,-102 and -207)

Product family datasheet

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 LT2 UF L	220...240 V	0/50/60 Hz	198...264 V ¹⁾	176...276 V	DALI / NFC / LEDset / Programmable
OTi DALI 75/220...240/700 D LT2 UF L	220...240 V	0/50/60 Hz	198...264 V ¹⁾	176...276 V	DALI / NFC / LEDset / Programmable
Product description	Total harmonic distortion	Power factor λ	Efficiency in full-load	Device power loss	Protective conductor current
OTi DALI 35/220...240/400 D LT2 UF L	< 10 %	0.38C...0.96	93 % ²⁾	4.0 W	<0.5 mA
OTi DALI 75/220...240/700 D LT2 UF L	< 10 %	0.61C...0.97	93 % ²⁾	7.0 W	<0.5 mA
Product description	Inrush current	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 35/220...240/400 D LT2 UF L	10 A	19	30	2 kV	1 kV
OTi DALI 75/220...240/700 D LT2 UF L	20 A	13	20	2 kV	1 kV
Product description	Nominal output voltage	U-OUT (working voltage)	Nominal output current	Output current LEDset open	
OTi DALI 35/220...240/400 D LT2 UF L	54...240 V	< 250 V	75...400 mA ³⁾	35 mA	
OTi DALI 75/220...240/700 D LT2 UF L	54...240 V	< 250 V	150...700 mA ³⁾	75 mA	
Product description	Output current LEDset shorted	Default output current	Output current tolerance		
OTi DALI 35/220...240/400 D LT2 UF L	75 mA	35 mA ⁴⁾	±5 %		
OTi DALI 75/220...240/700 D LT2 UF L	125 mA	75 mA ⁴⁾	±5 %		
Product description	Output ripple current (100 Hz)	Output PSTLM	Output SVM	Nominal output power	
OTi DALI 35/220...240/400 D LT2 UF L	< 1 %	≤1	≤0.4	4...38 W	
OTi DALI 75/220...240/700 D LT2 UF L	< 1 %	≤1	≤0.4	9.7...75 W	

Product family datasheet

Product description	Maximum output power	Galvanic isolation	Power loss in stand-by mode
OTi DALI 35/220...240/400 D LT2 UF L	38 W	Non isolated	<0.25 W
OTi DALI 75/220...240/700 D LT2 UF L	75 W	Non isolated	<0.25 W

1) Permitted voltage range
2) at 230 V, 50 Hz
3) ±5%
4) LEDset deactivated

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 LT2 UF L	350.0 mm	180.00 g	0.5...0.75 mm ²	0.5...0.75 mm ²	8.0...9.0 mm
OTi DALI 75/220...240/700 D LT2 UF L	350.0 mm	180.00 g	0.5...0.75 mm ²	0.5...0.75 mm ²	8.0...9.0 mm

Product description	Wire preparation length, output side	Width	Length	Height
OTi DALI 35/220...240/400 D LT2 UF L	8.0...9.0 mm	30.0 mm	360.0 mm	11.0 mm ¹⁾
OTi DALI 75/220...240/700 D LT2 UF L	8.0...9.0 mm	30.0 mm	360.0 mm	11.0 mm ¹⁾

1) +/- 0.55 mm

Product line drawing



OTi DALI 35/220...240/400 D LT2 UF L, OTi DALI 75/220...240/700 D LT2 UF L

Colors & materials

Product description	Casing material
OTi DALI 35/220...240/400 D LT2 UF L	Metal
OTi DALI 75/220...240/700 D LT2 UF 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 LT2 UF L	-25...+60 °C	75 °C	110 °C	-25...85 °C
OTi DALI 75/220...240/700 D LT2 UF L	-25...+50 °C	75 °C	110 °C	-25...85 °C

Product description	Permitted rel. humidity during operation
OTi DALI 35/220...240/400 D LT2 UF L	5...85 % ¹⁾
OTi DALI 75/220...240/700 D LT2 UF L	5...85 % ¹⁾

Product family datasheet

¹⁾ Maximum 56 days/year at 85 %

Lifespan

Product description	ECG lifetime
OTi DALI 35/220...240/400 D LT2 UF L	50000 / 100000 h ¹⁾
OTi DALI 75/220...240/700 D LT2 UF L	50000 / 100000 h ¹⁾

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

Capabilities

Product description	Programming interface	Dimmable	Dimming interface	Dimming range
OTi DALI 35/220...240/400 D LT2 UF L	DALI, NFC, LEDset	Yes	DALI-2 / Touch DIM / Touch DIM Sensor	1...100 %
OTi DALI 75/220...240/700 D LT2 UF L	DALI, NFC, LEDset	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 LT2 UF L	Full analogue dimming	Programmable	Automatic reversible
OTi DALI 75/220...240/700 D LT2 UF L	Full analogue dimming	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 LT2 UF L	Automatic reversible	Automatic reversible	Yes	No
OTi DALI 75/220...240/700 D LT2 UF 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 LT2 UF L	2.0 m ¹⁾	I	Yes	Push terminal
OTi DALI 75/220...240/700 D LT2 UF L	2.0 m ¹⁾	I	Yes	Push terminal

Product description	Type of connection, output side	DALI-2 Energy Data	Number of channels
OTi DALI 35/220...240/400 D LT2 UF L	Push terminal	No	1
OTi DALI 75/220...240/700 D LT2 UF L	Push terminal	No	1

Product description	DALI-2 Diagnostic Data
OTi DALI 35/220...240/400 D LT2 UF L	No

Product family datasheet

Product description	DALI-2 Diagnostic Data
OTi DALI 75/220...240/700 D LT2 UF L	No

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

Programming

Product description	Programming device
OTi DALI 35/220...240/400 D LT2 UF L	DALI magic / NFC Scanner
OTi DALI 75/220...240/700 D LT2 UF L	DALI magic / NFC Scanner

Programmable features

Product description	Constant Lumen	DALI-2 Luminaire Data	Configuration Lock
OTi DALI 35/220...240/400 D LT2 UF L	Yes	No	Yes
OTi DALI 75/220...240/700 D LT2 UF L	Yes	No	Yes

Certificates & standards

Product description	Approval marks – approval	Standards	Type of protection
OTi DALI 35/220...240/400 D LT2 UF L	CE / EL / VDE-ENEC / VDE-EMC / EAC / CCC / RCM / BIS	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	IP20
OTi DALI 75/220...240/700 D LT2 UF L	CE / EL / VDE-ENEC / VDE-EMC / EAC / CCC / RCM / BIS	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	IP20

Logistical data

Product description	Commodity code
OTi DALI 35/220...240/400 D LT2 UF L	85044083900
OTi DALI 75/220...240/700 D LT2 UF L	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 35/220...240/400 D LT2 UF L	24-05-2023	4052899957022	Lead
OTi DALI 75/220...240/700 D LT2 UF L	16-06-2023	4052899957046	Lead

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
OTi DALI 35/220...240/400 D LT2 UF L	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	c986deb6-b8d9-457a-8b1b-c23474109f0a
OTi DALI 75/220...240/700 D LT2 UF L	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	c1f6bf07-4f79-4da2-b4a6-5881ec3a1708

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 EMC 40050085 200220
	Certificates OT FIT OTi DALI CB DE1 62965 270220
	Certificates OT ENEC 40038085 010322
	Certificates OT EMC 40044675 031022
	Declarations of conformity OTi DALI D LT2 UF L CE 3379564 150222

Product family datasheet

	Declarations of conformity OTi DALI D LT2 UF L UK DoC 4281275 101023
	CAD data OTi DALI LT2 UFL IGS 211019
	CAD data OTi DALI LT2 UFL STEP 211019
	CAD Data 2-dim OTi DALI LT2 UFL CAD2PDF 211019
	CAD data 3-dim OTi DALI LT2 UFL CAD3PDF 211019

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
4052899957022	OTi DALI 35/220...240/400 D LT2 UF L	Shipping carton box 20	385 mm x 160 mm x 66 mm	4.07 dm ³	3717.00 g
4052899957046	OTi DALI 75/220...240/700 D LT2 UF L	Shipping carton box 20	385 mm x 160 mm x 66 mm	4.07 dm ³	3717.00 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

Product family datasheet

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.