

OPTOTRONIC Intelligent Flat – 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

- Flat housing (16 mm height) for innovative luminaire designs and applications
- Fully programmable via software (DALI Interface, NFC)
- Advanced luminaire/driver data (power, energy, operating hours...) for analytics
- Prepared for DiiA Specification Parts -251, -252 and -253
- Lifetime: up to 100,000 h (temperature at $T_c = 65^\circ\text{C}$, max. 10 % failure rate)
- High-quality dimming of 1...100 % (amplitude and/or PWM selectable by software)
- Higher 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

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 500 mA
- DALI-2 certified (Part -101,-102 and -207)
- Monitoring of luminaire operating parameters
- Constant Lumen Output (CLO)
- Non-isolated drivers

Product family datasheet

Technical data

Electrical data

Product description	Nominal input voltage	Mains frequency	Input voltage AC	Input voltage DC	Current set	
OTi DALI 25/220...240/300 D NFC FL	220...240 V	0/50/60 Hz	198...264 V	176...276 V	DALI / NFC / Programmable	
OTi DALI 35/220...240/400 D NFC FL	220...240 V	0/50/60 Hz	198...264 V	176...276 V	DALI / NFC / Programmable	
OTi DALI 75/220...240/500 D NFC FL	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	Protective conductor current
OTi DALI 25/220...240/300 D NFC FL	9.50 %	030C...095	90.5 % ¹⁾		2.0 W	<0.5 mA
OTi DALI 35/220...240/400 D NFC FL	8 %	047C...097	92 % ¹⁾		3.0 W	<0.5 mA
OTi DALI 75/220...240/500 D NFC FL	5.50 %	061C...099	93.5 % ¹⁾		6.0 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)	Max. ECG no. on circuit breaker 25 A (B)	Surge capability (L/N-Ground)	
OTi DALI 25/220...240/300 D NFC FL	21 A	17	28	-	2 kV	
OTi DALI 35/220...240/400 D NFC FL	21 A	17	28	-	2 kV	
OTi DALI 75/220...240/500 D NFC FL	28 A	14	23	-	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...240/300 D NFC FL	1 kV	54...240 V	< 250 V	35...300 mA	35 mA	
OTi DALI 35/220...240/400 D NFC FL	1 kV	54...240 V	< 250 V	75...400 mA	75 mA	
OTi DALI 75/220...240/500 D NFC FL	1 kV	54...240 V	< 250 V	120...500 mA	125 mA	
Product description	Output current tolerance	Output ripple current (100 Hz)		Output PSTLM		
OTi DALI 25/220...240/300 D NFC FL	±3 %	< 1 %		≤1		
OTi DALI 35/220...240/400 D NFC FL	±3 %	< 1 %		≤1		
OTi DALI 75/220...240/500 D NFC FL	±3 %	< 1 %		≤1		
Product description	Output SVM		Nominal output power	Maximum output power		Galvanic isolation
OTi DALI 25/220...240/300 D NFC FL	≤0.4		2.7...25 W	25 W		Non isolated
OTi DALI 35/220...240/400 D NFC FL	≤0.4		4...38 W	38 W		Non isolated
OTi DALI 75/220...240/500 D NFC FL	≤0.4		6.5...75 W	75 W		Non isolated

Product family datasheet

Product description	Power loss in stand-by mode
OTi DALI 25/220...240/300 D NFC FL	<0.15 W
OTi DALI 35/220...240/400 D NFC FL	<0.15 W
OTi DALI 75/220...240/500 D NFC FL	<0.15 W

1) at 230 V, 50 Hz

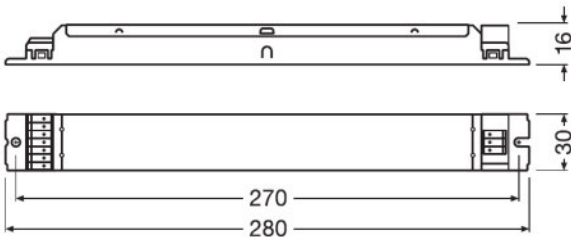
Dimensions & weight

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 25/220...240/300 D NFC FL	270.0 mm	20500 g	0.5...1.5 mm ²	0.5...1.5 mm ²	8.0...9.0 mm
OTi DALI 35/220...240/400 D NFC FL	270.0 mm	20500 g	0.5...1.5 mm ²	0.5...1.5 mm ²	8.0...9.0 mm
OTi DALI 75/220...240/500 D NFC FL	270.0 mm	20500 g	0.5...1.5 mm ²	0.5...1.5 mm ²	8.0...9.0 mm

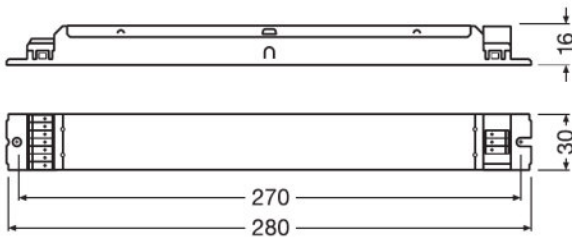
Product description	Wire preparation length, output side	Height	Width	Length
OTi DALI 25/220...240/300 D NFC FL	8.0...9.0 mm	160 mm	300 mm	2800 mm
OTi DALI 35/220...240/400 D NFC FL	8.0...9.0 mm	160 mm	300 mm	2800 mm
OTi DALI 75/220...240/500 D NFC FL	8.0...9.0 mm	160 mm	300 mm	2800 mm

Product family datasheet

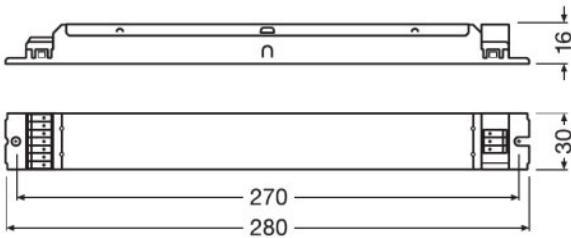
Product line drawing



OTi DALI 25/220...240/300 D NFC FL



OTi DALI 35/220...240/400 D NFC FL



OTi DALI 75/220...240/500 D NFC FL

Colors & materials

Product description	Casing material
OTi DALI 25/220...240/300 D NFC FL	Metal
OTi DALI 35/220...240/400 D NFC FL	Metal
OTi DALI 75/220...240/500 D NFC FL	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 25/220...240/300 D NFC FL	-25...+60 °C	75 °C	110 °C	-40...+85 °C
OTi DALI 35/220...240/400 D NFC FL	-25...+60 °C	75 °C	110 °C	-40...+85 °C
OTi DALI 75/220...240/500 D NFC FL	-25...+60 °C	75 °C	110 °C	-40...+85 °C

Product description	Permitted rel. humidity during operation
OTi DALI 25/220...240/300 D NFC FL	5...85 % ¹⁾
OTi DALI 35/220...240/400 D NFC FL	5...85 % ¹⁾
OTi DALI 75/220...240/500 D NFC FL	5...85 % ¹⁾

¹⁾ Maximum 56 days/year at 85 %

Lifespan

Product description	ECG lifetime
OTi DALI 25/220...240/300 D NFC FL	50000 / 100000 h
OTi DALI 35/220...240/400 D NFC FL	50000 / 100000 h
OTi DALI 75/220...240/500 D NFC FL	50000 / 100000 h

Capabilities

Product description	Programming interface	Dimmable	Dimming interface	Dimming range
OTi DALI 25/220...240/300 D NFC FL	DALI, NFC	Yes	DALI-2 / Touch DIM / Touch DIM Sensor	0.1...100 %
OTi DALI 35/220...240/400 D NFC FL	DALI, NFC	Yes	DALI-2 / Touch DIM / Touch DIM Sensor	0.1...100 %
OTi DALI 75/220...240/500 D NFC FL	DALI, NFC	Yes	DALI-2 / Touch DIM / Touch DIM Sensor	0.1...100 %

Product description	Dimming method	Constant lumen function	Overheating protection
OTi DALI 25/220...240/300 D NFC FL	Full analogue dimming / AM/PWM selectable	Programmable	Automatic reversible
OTi DALI 35/220...240/400 D NFC FL	Full analogue dimming / AM/PWM selectable	Programmable	Automatic reversible
OTi DALI 75/220...240/500 D NFC FL	Full analogue dimming / AM/PWM selectable	Programmable	Automatic reversible

Product family datasheet

Product description	Overload protection	Short-circuit protection	No-load proof	Intended for no-load operation
OTi DALI 25/220...240/300 D NFC FL	Automatic reversible	Automatic reversible	Yes	No
OTi DALI 35/220...240/400 D NFC FL	Automatic reversible	Automatic reversible	Yes	No
OTi DALI 75/220...240/500 D NFC FL	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 25/220...240/300 D NFC FL	2.0 m ¹⁾	I	Yes	Push terminal
OTi DALI 35/220...240/400 D NFC FL	2.0 m ¹⁾	I	Yes	Push terminal
OTi DALI 75/220...240/500 D NFC FL	2.0 m ¹⁾	I	Yes	Push terminal

Product description	Type of connection, output side	DALI-2 Diagnostic Data	DALI-2 Energy Data
OTi DALI 25/220...240/300 D NFC FL	Push terminal	Yes	Yes
OTi DALI 35/220...240/400 D NFC FL	Push terminal	Yes	Yes
OTi DALI 75/220...240/500 D NFC FL	Push terminal	Yes	Yes

Product description	Number of channels
OTi DALI 25/220...240/300 D NFC FL	1
OTi DALI 35/220...240/400 D NFC FL	1
OTi DALI 75/220...240/500 D NFC FL	1

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

Programming

Product description	Programming device	Box programming
OTi DALI 25/220...240/300 D NFC FL	DALI magic / NFC Scanner	Yes
OTi DALI 35/220...240/400 D NFC FL	DALI magic / NFC Scanner	Yes
OTi DALI 75/220...240/500 D NFC FL	DALI magic / NFC Scanner	Yes

Programmable features

Product description	DALI-2 Luminaire Data
OTi DALI 25/220...240/300 D NFC FL	Yes
OTi DALI 35/220...240/400 D NFC FL	Yes
OTi DALI 75/220...240/500 D NFC FL	Yes

Certificates & standards

Product description	Approval marks – approval	Standards	Type of protection
OTi DALI 25/220...240/300 D NFC FL	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 62386/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547	IP20
OTi DALI 35/220...240/400 D NFC FL	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 62386/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547	IP20
OTi DALI 75/220...240/500 D NFC FL	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 62386/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547	IP20

Logistical data

Product description	Commodity code
OTi DALI 25/220...240/300 D NFC FL	85044083900
OTi DALI 35/220...240/400 D NFC FL	85044083900
OTi DALI 75/220...240/500 D NFC FL	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 25/220...240/300 D NFC FL	16-06-2023	4062172020749	Lead
OTi DALI 35/220...240/400 D NFC FL	14-07-2023	4062172020763	Lead
OTi DALI 75/220...240/500 D NFC FL	07-07-2023	4062172020787	Lead

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
OTi DALI 25/220...240/300 D NFC FL	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	f00e77d6-5b5f-44e0-bebc-a2a12c964506
OTi DALI 35/220...240/400 D NFC FL	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	3d276763-4086-48d3-abfa-60644045cc2d

Product family datasheet

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
OTi DALI 75/220...240/500 D NFC FL	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	5ecf784a-d49b-40a3-8f2f-7f2dfa5e33ea

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
 User instruction OPTOTRONIC LED Power Supply
 Certificates OT EMC 40050085 200220
 Certificates OTi DALI 25 D NFC FL EATON AM35714 070920
 Certificates OTi DALI 25 D NFC FL INOTEC AM35714 070920
 Certificates OT ENEC 40038085 010322
 Certificates OT EMC 40044675 031022
 Certificates INOTEC Conformity declaration AM18335 OTi DALI 25 220-240 300 D NFC F L
 Declarations of conformity OTi DALI D NFC FL CE 3747608 110522
 Declarations of conformity OTi DALI D NFC FL UK DoC 4281098 110522
 Declarations of conformity EATON(CEAG) Conformity declaration AM18335 OTi DALI 25 220-240 300 D NFC F L (EN)
 CAD data OTi DALI D NFC FL IGS 090120
 CAD data OTi DALI D NFC FL STEP 090120

Product family datasheet

	CAD Data 2-dim OTi DALI D NFC FL CAD2PDF 090120
	CAD data 3-dim OTi DALI D NFC FL CAD3PDF 090120
	Certificates OTi DALI 35 D NFC FL EATON AM35715 070920
	Certificates OTi DALI 35 D NFC FL INOTEC AM35715 070920
	Declarations of conformity EATON(CEAG)-Conformity declaration AM18316 OTi DALI 35 220-240 400 D NFC F L (EN)
	Declarations of conformity INOTEC-Conformity declaration AM18316 OTi DALI 35 220-240 400 D NFC F L (EN)
	Certificates OTi DALI 75 D NFC FL EATON AM35716 070920
	Certificates OTi DALI 75 D NFC FL INOTEC AM35716 070920
	Declarations of conformity EATON(CEAG)-Conformity declaration AM18317 OTi DALI 75 220-240 500 D NFC F L (EN)
	Declarations of conformity INOTEC Conformity declaration AM18317 OTi DALI 75 220-240 500 D NFC F L (EN)

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
4062172020749	OTi DALI 25/220...240/300 D NFC FL	Shipping carton box 20	300 mm x 128 mm x 106 mm	4.07 dm ³	4223.00 g
4062172020763	OTi DALI 35/220...240/400 D NFC FL	Shipping carton box 20	300 mm x 128 mm x 106 mm	4.07 dm ³	4223.00 g

Product family datasheet

Logistical Data

4062172020787	OTi DALI 75/220...240/500 D NFC FL	Shipping carton box 20	300 mm x 128 mm x 106 mm	4.07 dm ³	4223.00 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.

Disclaimer

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