

OPTOTRONIC Intelligent Tunable White – DALI (SELV)

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 $T_c = 65\text{ °C}$, max. 10 % failure rate)
- High-quality dimming of 1...100 %
- 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

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 1,400 mA
- Constant Lumen Output (CLO)
- Integrated customizable thermal management (Driver Guard)
- SELV driver

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...240/700 NFC TW L	220...240 V	0/50/60 Hz	198...264 V	176...276 V	DALI / NFC / Programmable	
OTi DALI 75/220...240/1A4 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...240/700 NFC TW L	< 15 %	0.73C...0.98	88 % ¹⁾		3.0 W	21 A
OTi DALI 75/220...240/1A4 NFC TW L	< 10 %	0.57C...0.95	90 % ¹⁾		6.0 W	23 A
Product description	Max. ECG no. on circuit breaker 10 A (B)	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)	
OTi DALI 35/220...240/700 NFC TW L	19	-	-	30	-	
OTi DALI 75/220...240/1A4 NFC TW L	13	-	-	20	-	
Product description	Surge capability (L/N-Ground)		Surge capability (L-N)	Nominal output voltage	U-OUT (working voltage)	Nominal output current
OTi DALI 35/220...240/700 NFC TW L	2 kV		1 kV	15...54 V	< 60 V	200...700 mA
OTi DALI 75/220...240/1A4 NFC TW L	2 kV		1 kV	15...54 V	< 60 V	400...1400 mA
Product description	Default output current		Output current tolerance	Output ripple current (100 Hz)		
OTi DALI 35/220...240/700 NFC TW L	200 mA		±3 %	< 1 %		
OTi DALI 75/220...240/1A4 NFC TW L	400 mA		±3 %	< 1 %		
Product description	Output PSTLM		Output SVM		Nominal output power	Maximum output power
OTi DALI 35/220...240/700 NFC TW L	≤1		≤0.4		4...38 W	38 W
OTi DALI 75/220...240/1A4 NFC TW L	≤1		≤0.4		8.0...75 W	75 W
Product description	Galvanic isolation		Power loss in stand-by mode			
OTi DALI 35/220...240/700 NFC TW L	SELV		<0.2 W			
OTi DALI 75/220...240/1A4 NFC TW L	SELV		<0.2 W			

¹⁾ at 230 V, 50 Hz

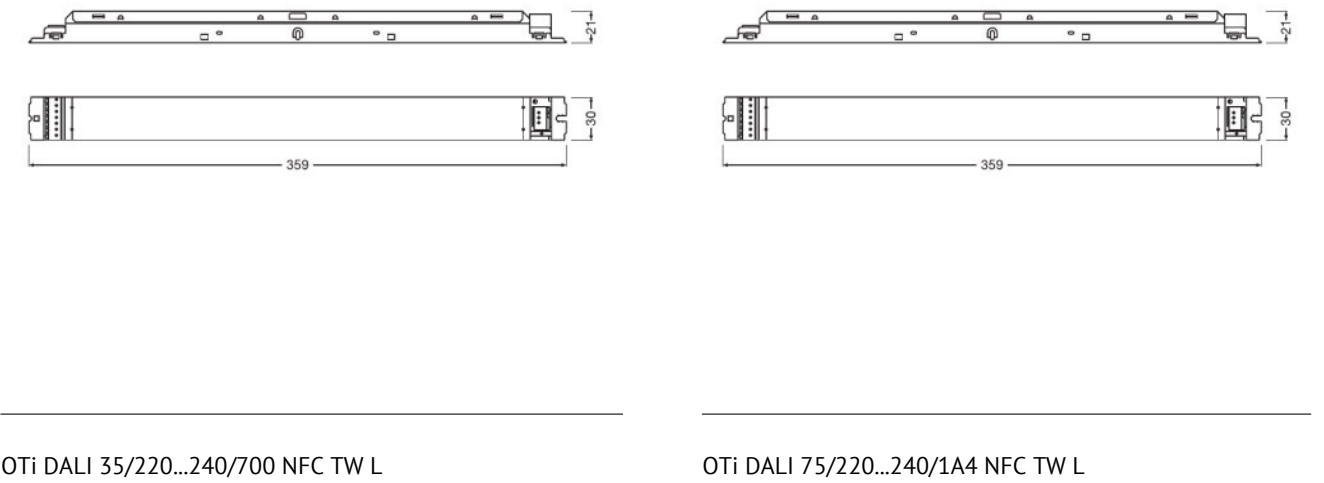
Product family datasheet

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...240/700 NFC TW L	350.0 mm	300.00 g	0.5...1.5 mm ²	0.5...1.5 mm ²	8.5...9.5 mm
OTi DALI 75/220...240/1A4 NFC TW L	350.0 mm	300.00 g	0.5...1.5 mm ²	0.5...1.5 mm ²	8.5...9.5 mm

Product description	Wire preparation length, output side	Height	Width	Length
OTi DALI 35/220...240/700 NFC TW L	8.5...9.5 mm	21.0 mm	30.0 mm	360.0 mm
OTi DALI 75/220...240/1A4 NFC TW L	8.5...9.5 mm	21.0 mm	30.0 mm	360.0 mm

Product line drawing



Colors & materials

Product description	Casing material
OTi DALI 35/220...240/700 NFC TW L	Metal
OTi DALI 75/220...240/1A4 NFC TW L	Metal

Product family datasheet

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...240/700 NFC TW L	-25...+60 °C	78 °C	110 °C	-40...+85 °C
OTi DALI 75/220...240/1A4 NFC TW L	-25...+50 °C	75 °C	110 °C	-40...+85 °C

Product description	Permitted rel. humidity during operation
OTi DALI 35/220...240/700 NFC TW L	5...85 % ¹⁾
OTi DALI 75/220...240/1A4 NFC TW L	5...85 % ¹⁾

¹⁾ Maximum 56 days/year at 85 %

Lifespan

Product description	ECG lifetime
OTi DALI 35/220...240/700 NFC TW L	50000 / 100000 h
OTi DALI 75/220...240/1A4 NFC TW L	50000 / 100000 h

Additional product data

Product description	Encapsulated
OTi DALI 35/220...240/700 NFC TW L	No
OTi DALI 75/220...240/1A4 NFC TW L	No

Capabilities

Product description	Programming interface	Dimmable	Dimming interface	Dimming range
OTi DALI 35/220...240/700 NFC TW L	DALI, NFC	Yes	DALI-2 / Touch DIM / Touch DIM Sensor	1...100 %
OTi DALI 75/220...240/1A4 NFC TW L	DALI, NFC	Yes	DALI-2 / Touch DIM / Touch DIM Sensor	1...100 %

Product description	Dimming method	Overheating protection	Overload protection
OTi DALI 35/220...240/700 NFC TW L	Full analogue dimming / AM/PWM selectable	Automatic reversible	Automatic reversible
OTi DALI 75/220...240/1A4 NFC TW L	Full analogue dimming / AM/PWM selectable	Automatic reversible	Automatic reversible

Product description	Short-circuit protection	No-load proof	Intended for no-load operation	Max. cable length to lamp/LED module
OTi DALI 35/220...240/700 NFC TW L	Automatic reversible	Yes	No	2.0 m ¹⁾
OTi DALI 75/220...240/1A4 NFC TW L	Automatic reversible	Yes	No	2.0 m ¹⁾

Product family datasheet

Product description	Suitable for fixtures with prot. class	Suitable for emergency lighting	Type of connection, input side	Type of connection, output side
OTi DALI 35/220...240/700 NFC TW L	I	Yes	Push terminal	Push terminal
OTi DALI 75/220...240/1A4 NFC TW L	I	Yes	Push terminal	Push terminal

Product description	Constant lumen function	DALI-2 Diagnostic Data	DALI-2 Energy Data
OTi DALI 35/220...240/700 NFC TW L	Programmable	No	No
OTi DALI 75/220...240/1A4 NFC TW L	Programmable	No	No

Product description	Number of channels
OTi DALI 35/220...240/700 NFC TW L	2
OTi DALI 75/220...240/1A4 NFC TW L	2

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

Programming

Product description	Programming device	Box programming
OTi DALI 35/220...240/700 NFC TW L	DALI magic / NFC Scanner	Yes
OTi DALI 75/220...240/1A4 NFC TW L	DALI magic / NFC Scanner	Yes

Programmable features

Product description	Tunable White CCT	DALI-2 Luminaire Data	Corridor Functionality
OTi DALI 35/220...240/700 NFC TW L	Yes	No	Yes
OTi DALI 75/220...240/1A4 NFC TW L	Yes	No	Yes

Product description	Tunable White High precision	TouchDIM + Sensor	Dim to Dark
OTi DALI 35/220...240/700 NFC TW L	Yes	Yes	Yes
OTi DALI 75/220...240/1A4 NFC TW L	Yes	Yes	Yes

Product description	Soft Switch Off	Emergency Mode	DALI Settings
OTi DALI 35/220...240/700 NFC TW L	Yes	Yes	Yes
OTi DALI 75/220...240/1A4 NFC TW L	Yes	Yes	Yes

Product description	Driver Guard	Lamp Operating Time	Constant Lumen
OTi DALI 35/220...240/700 NFC TW L	Yes	Yes	Yes
OTi DALI 75/220...240/1A4 NFC TW L	Yes	Yes	Yes

Product description	Operating Current
OTi DALI 35/220...240/700 NFC TW L	Yes
OTi DALI 75/220...240/1A4 NFC TW L	Yes

Product family datasheet

Certificates & standards

Product description	Approval marks – approval	Standards	Type of protection
OTi DALI 35/220...240/700 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...240/1A4 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

Logistical data

Product description	Commodity code
OTi DALI 35/220...240/700 NFC TW L	850440829000
OTi DALI 75/220...240/1A4 NFC TW L	850440839000

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...240/700 NFC TW L	03-05-2023	4062172092968	Lead
OTi DALI 75/220...240/1A4 NFC TW L	03-05-2023	4062172092982	Lead

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
OTi DALI 35/220...240/700 NFC TW L	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	16525cdf-6508-45f7-9c91-8eb878dcbe3e
OTi DALI 75/220...240/1A4 NFC TW L	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	226b64b6-8b5a-4b99-8d97-56b510420cb4

Application advice

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

Product family 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	
	User instruction OPTOTRONIC LED Power Supply
	Certificates OTI DALI 35 NFC TW L EATON AM3294 220620
	Certificates OTI DALI 35 NFC TW L INOTEC AM32494 220620
	Certificates OT ENEC 40038447 260623
	Certificates OT EMC 40044675 031022
	Declarations of conformity OTi DALI NFC TW L CE 4222044 161023
	Declarations of conformity OTI DALI NFC TW L UK DoC 4281073 040923
	CAD data OTI DALI NFC TW L IGS 020320
	CAD data OTI DALI NFC TW L STEP 020320
	CAD Data 2-dim OTI DALI NFC TW L CAD2PDF 020320
	CAD data 3-dim OTI DALI NFC TW L CAD3PDF 020320
	Certificates OTI DALI 75 NFC TW L EATON AM32493 220620
	Certificates OTI DALI 75 NFC TW L INOTEC AM32493 220620

Product family datasheet

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
4062172092968	OTi DALI 35/220...240/700 NFC TW L	Shipping carton box 20	385 mm x 160 mm x 100 mm	6.16 dm ³	6171.00 g
4062172092982	OTi DALI 75/220...240/1A4 NFC TW L	Shipping carton box 20	385 mm x 160 mm x 100 mm	6.16 dm ³	6171.00 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.

Disclaimer

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