

## OPTOTRONIC Intelligent

Compact constant current LED drivers – Dimmable DALI



### Areas of application

- Installation in emergency lighting systems according to IEC 61347-2-13, appendix J
- Suitable for use in luminaires with flexible current setting (DALI, CLO, LEDset)
- Suitable for indoor SELV installations
- Suitable for luminaires of protection classes I and II
- Suitable for downlights, spotlights and LED panels
- Installation via Cable Clamp Kit possible (depending on version of product)

### Product benefits

- Versatile DALI window driver due to flexible output characteristic
- Very high efficiency and reliability
- Protection of the system thanks to thermal management and Smart Control
- High-quality dimming of 1...100 % by amplitude dimming
- Soft switch off function (OTi DALI 15)

### 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

### Product features

- Supply voltage: 220...240 V
- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Line voltage: 198...264 V
- Safety according to EN 61347-1, 61347-2-3, 61347-2-13, 62384

## Product family datasheet

- Prepared for DALI-2 certification (Part -101,-102 and -207)
- RI suppression according to EN 55015:2007+A1:2007/CDN
- Line harmonics according to EN 61000-3-2
- Immunity according to EN 61547
- Lifetime: up to 100,000 h (temperature at  $T_c = 65\text{ °C}$ , max. 10 % failure rate)
- Type of protection: IP20
- Independent connection via through-looping (except OTi DALI 15)

# Product family datasheet

## Technical data

### Electrical data

Product description	Nominal voltage	Mains frequency	Input voltage AC	Input voltage DC	Total harmonic distortion	Power factor $\lambda$
OTi DALI 15/220...240/1A0 LT2	220...240 V	50...60 Hz	198...264 V <sup>1)</sup>	176...276 V	< 10 %	0.95
OTi DALI 25/220...240/700 LT2	220...240 V	50...60 Hz	198...264 V <sup>1)</sup>	176...276 V	< 20 %	> 0.95
OTi DALI 35/220...240/1A0 LT2	220...240 V	50...60 Hz	198...264 V <sup>1)</sup>	176...276 V	< 20 %	> 0.95
OTi DALI 50/220...240/1A4 LT2 FAN	220...240 V	50...60 Hz	198...264 V <sup>1)</sup>	176...276 V	< 10 %	> 0.95

Product description	ECG efficiency	Device power loss	Power loss in stand-by mode	Inrush current	Max. ECG no. on circuit breaker 10 A (B)	Max. ECG no. on circuit breaker 16 A (B)
OTi DALI 15/220...240/1A0 LT2	88 % <sup>2)</sup>	2.4 W	≤0.27 W	5 A <sup>3)</sup>	80	130
OTi DALI 25/220...240/700 LT2	88 % <sup>2)</sup>	4.5 W	<0.1 W	< 20 A <sup>7)</sup>	45	80
OTi DALI 35/220...240/1A0 LT2	86 % <sup>2)</sup>	5.7 W	<0.1 W	< 20 A <sup>7)</sup>	33	55
OTi DALI 50/220...240/1A4 LT2 FAN	91 % <sup>10)</sup>	7.5 W	<0.15 W	30 A <sup>11)</sup>	12	20

Product description	Max. ECG no. on circuit breaker 25 A (B)	Surge capability (L/N-Ground)	Nominal output voltage	U-OUT (working voltage)
OTi DALI 15/220...240/1A0 LT2	-	1 kV	7.5...54 V <sup>4)</sup>	60 V
OTi DALI 25/220...240/700 LT2	-	1 kV	12...54 V <sup>4)</sup>	60 V
OTi DALI 35/220...240/1A0 LT2	-	2 kV	15...54 V <sup>4)</sup>	60 V
OTi DALI 50/220...240/1A4 LT2 FAN	-	2 kV <sup>12)</sup>	15...54 V <sup>4)</sup>	60 V

Product description	Nominal output current	Output current tolerance	Output ripple current (100 Hz)	Nominal output power
OTi DALI 15/220...240/1A0 LT2	150...1050 mA <sup>5)</sup>	±3 %	< 2 %	18 W <sup>6)</sup>
OTi DALI 25/220...240/700 LT2	180...700 mA <sup>5)</sup>	±3 %	< 1 %	27 W <sup>8)</sup>
OTi DALI 35/220...240/1A0 LT2	350...1050 mA <sup>5)</sup>	±3 %	< 2 %	35 W <sup>9)</sup>
OTi DALI 50/220...240/1A4 LT2 FAN	600...1400 mA <sup>5)</sup>	±3 %	< 2 %	55 W <sup>13)</sup>

Product description	Galvanic isolation	Surge capability (L-N)
OTi DALI 15/220...240/1A0 LT2	SELV	
OTi DALI 25/220...240/700 LT2	SELV	1 kV
OTi DALI 35/220...240/1A0 LT2	SELV	1 kV
OTi DALI 50/220...240/1A4 LT2 FAN	SELV	1 kV

<sup>1)</sup> Permitted voltage range

<sup>2)</sup> Typical

<sup>3)</sup>  $t_{width} = 45 \mu s$  (measured at 50 %  $I_{peak}$ )

<sup>4)</sup> Maximum 60 V

## Product family datasheet

5)  $\pm 5\%$

6) Partial load 3...18 W

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

8) Partial load 7...27 W

9) Partial load 15...35 W

10) At full load and 230 V

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

12) Functional Earth

13) Partial load 22...55 W

### Dimensions & weight

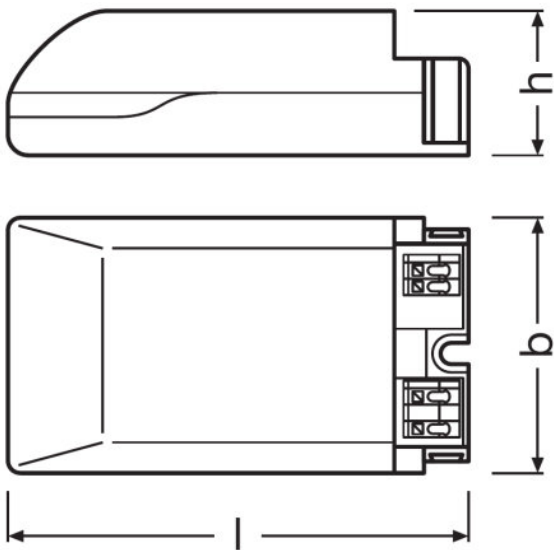
Product description	Length	Width	Height	Product weight	Cable cross-section, input side
OTi DALI 15/220...240/1A0 LT2	95.0 mm	53.0 mm	30.0 mm	100.00 g	0.2...1.5 mm <sup>2</sup> <sup>1)</sup>
OTi DALI 25/220...240/700 LT2	103.0 mm	67.0 mm	29.5 mm	149.00 g	0.2...1.5 mm <sup>2</sup> <sup>1)</sup>
OTi DALI 35/220...240/1A0 LT2	103.0 mm	67.0 mm	29.5 mm	149.00 g	0.2...1.5 mm <sup>2</sup> <sup>1)</sup>
OTi DALI 50/220...240/1A4 LT2 FAN	110.0 mm	75.0 mm	25.0 mm	180.00 g	0.2...1.5 mm <sup>2</sup> <sup>1)</sup>

Product description	Cable cross-section, output side	Wire preparation length, input side	Wire preparation length, output side	Mounting hole spacing, length	Mounting hole spacing, width
OTi DALI 15/220...240/1A0 LT2	0.2...1.5 mm <sup>2</sup> <sup>1)</sup>	8.0...9.0 mm	8.0...9.0 mm		
OTi DALI 25/220...240/700 LT2	0.2...1.5 mm <sup>2</sup> <sup>1)</sup>	8.0...9.0 mm	8.0...9.0 mm	94.0 mm	58.0 mm
OTi DALI 35/220...240/1A0 LT2	0.2...1.5 mm <sup>2</sup> <sup>1)</sup>	8.0...9.0 mm	8.0...9.0 mm	94.0 mm	58.0 mm
OTi DALI 50/220...240/1A4 LT2 FAN	0.2...1.5 mm <sup>2</sup> <sup>1)</sup>	8.5...9.5 mm	8.5...9.5 mm	99.0 mm	64.0 mm

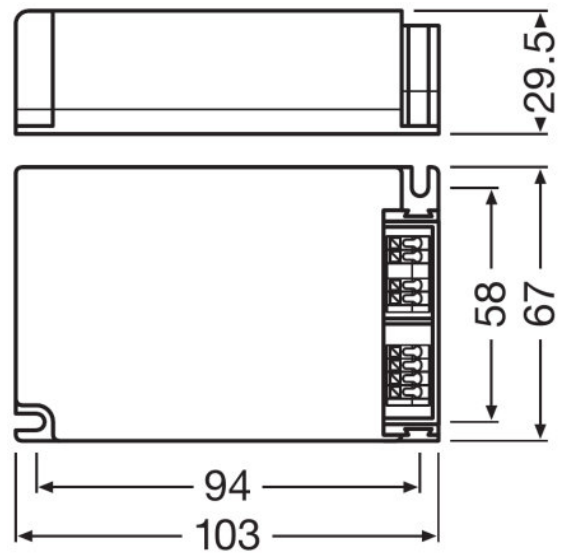
<sup>1)</sup> Solid or flexible leads

Product family datasheet

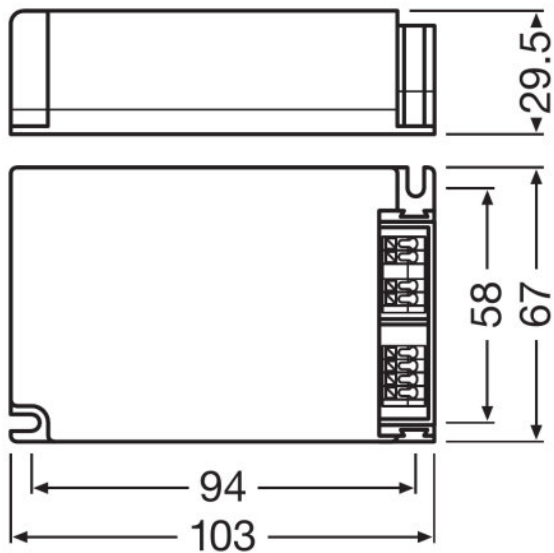
Product line drawing



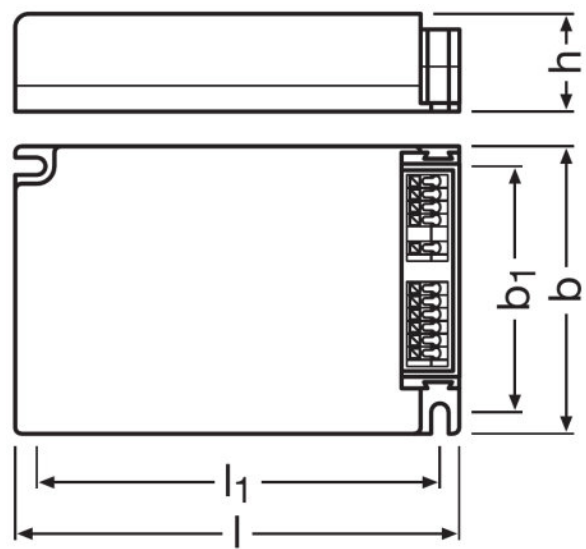
OTi DALI 15/220...240/1A0 LT2



OTi DALI 25/220...240/700 LT2



OTi DALI 35/220...240/1A0 LT2



OTi DALI 50/220...240/1A4 LT2 FAN

## Product family datasheet

### Colors & materials

Product description	Casing material
OTi DALI 15/220...240/1A0 LT2	Plastic
OTi DALI 25/220...240/700 LT2	Plastic
OTi DALI 35/220...240/1A0 LT2	Plastic
OTi DALI 50/220...240/1A4 LT2 FAN	Plastic

### Temperatures & operating conditions

Product description	Ambient temperature range	Maximum temperature at tc test point	Max.housing temperature in case of fault	Permitted rel. humidity during operation
OTi DALI 15/220...240/1A0 LT2	-20...+50 °C	75 °C <sup>1)</sup>	100 °C	5...85 % <sup>2)</sup>
OTi DALI 25/220...240/700 LT2	-20...+50 °C	75 °C <sup>1)</sup>	110 °C	5...85 % <sup>2)</sup>
OTi DALI 35/220...240/1A0 LT2	-20...+50 °C	75 °C <sup>1)</sup>	110 °C	5...85 % <sup>2)</sup>
OTi DALI 50/220...240/1A4 LT2 FAN	-20...+50 °C	80 °C <sup>1)</sup>	110 °C	5...85 % <sup>2)</sup>

<sup>1)</sup> Maximum at the T<sub>c</sub>-point

<sup>2)</sup> Maximum 56 days/year at 85 %

### Lifespan

Product description	ECG lifetime
OTi DALI 15/220...240/1A0 LT2	50000 / 100000 h <sup>1)</sup>
OTi DALI 25/220...240/700 LT2	50000 / 100000 h <sup>1)</sup>
OTi DALI 35/220...240/1A0 LT2	50000 / 100000 h <sup>1)</sup>
OTi DALI 50/220...240/1A4 LT2 FAN	50000 / 100000 h <sup>2)</sup>

<sup>1)</sup> T<sub>c</sub> = 75°C, 0.2% / 1,000 h failure rate

<sup>2)</sup> T<sub>c</sub> = 80°C, 0.2% / 1,000 h failure rate

### Additional product data

Product description	Encapsulated
OTi DALI 15/220...240/1A0 LT2	No
OTi DALI 25/220...240/700 LT2	No
OTi DALI 35/220...240/1A0 LT2	No
OTi DALI 50/220...240/1A4 LT2 FAN	No

## Product family datasheet

### Capabilities

Product description	Dimmable	Dimming interface	Dimming range	Dimming method
OTi DALI 15/220...240/1A0 LT2	Yes	DALI / Touch DIM / Touch DIM Sensor	1...100 % <sup>1)</sup>	Amplitude Modulation
OTi DALI 25/220...240/700 LT2	Yes	DALI / Touch DIM / Touch DIM Sensor	1...100 % <sup>1)</sup>	Amplitude Modulation
OTi DALI 35/220...240/1A0 LT2	Yes	DALI / Touch DIM / Touch DIM Sensor	1...100 % <sup>1)</sup>	Amplitude Modulation
OTi DALI 50/220...240/1A4 LT2 FAN	Yes	DALI / Touch DIM / Touch DIM Sensor	1...100 % <sup>1)</sup>	Amplitude Modulation

Product description	Constant lumen function	Overheating protection	Overload protection
OTi DALI 15/220...240/1A0 LT2	Programmable	Automatic reversible	Automatic reversible
OTi DALI 25/220...240/700 LT2	Programmable	Automatic reversible	Automatic reversible
OTi DALI 35/220...240/1A0 LT2	Programmable	Automatic reversible	Automatic reversible
OTi DALI 50/220...240/1A4 LT2 FAN	Programmable	Automatic reversible	Automatic reversible

Product description	Short-circuit protection	No-load proof	Max. cable length to lamp/LED module	Suitable for fixtures with prot. class	Suitable for emergency lighting
OTi DALI 15/220...240/1A0 LT2	Automatic reversible	Yes	2.0 m	I / II	Yes
OTi DALI 25/220...240/700 LT2	Automatic reversible	Yes	2.0 m	I / II	Yes
OTi DALI 35/220...240/1A0 LT2	Automatic reversible	Yes	2.0 m	I / II	Yes
OTi DALI 50/220...240/1A4 LT2 FAN	Automatic reversible	Yes	2.0 m	I / II	Yes

Product description	Type of connection, output side
OTi DALI 15/220...240/1A0 LT2	Push terminal
OTi DALI 25/220...240/700 LT2	Push terminal
OTi DALI 35/220...240/1A0 LT2	Push terminal
OTi DALI 50/220...240/1A4 LT2 FAN	Push terminal

<sup>1)</sup> For maximum nominal output current

### Certificates & standards

Product description	Approval marks – approval
OTi DALI 15/220...240/1A0 LT2	ENEC 10 / VDE / EMC / EL / CE
OTi DALI 25/220...240/700 LT2	ENEC 10 / VDE / EMC / EL / CE / DALI-2
OTi DALI 35/220...240/1A0 LT2	ENEC 10 / VDE / EMC / EL / CE / DALI-2
OTi DALI 50/220...240/1A4 LT2 FAN	ENEC 10 / VDE / EMC / EL / CE / DALI-2

Product description	Standards	Protection class
OTi DALI 15/220...240/1A0 LT2	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	II

## Product family datasheet

Product description	Standards	Protection class
OTi DALI 25/220...240/700 LT2	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 IEC 62386-101:Ed2/Acc. to IEC 62386-102:Ed2/Acc. to IEC 62386-207:Ed1	II
OTi DALI 35/220...240/1A0 LT2	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 IEC 62386-101:Ed2/Acc. to IEC 62386-102:Ed2/Acc. to IEC 62386-207:Ed1	II
OTi DALI 50/220...240/1A4 LT2 FAN	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 IEC 62386-101:Ed2/Acc. to IEC 62386-102:Ed2/Acc. to IEC 62386-207:Ed1	I

Product description	Type of protection
OTi DALI 15/220...240/1A0 LT2	IP20
OTi DALI 25/220...240/700 LT2	IP20
OTi DALI 35/220...240/1A0 LT2	IP20
OTi DALI 50/220...240/1A4 LT2 FAN	IP20

### Logistical data

Product description	Temperature range at storage
OTi DALI 15/220...240/1A0 LT2	-25...85 °C
OTi DALI 25/220...240/700 LT2	-25...85 °C
OTi DALI 35/220...240/1A0 LT2	-25...85 °C
OTi DALI 50/220...240/1A4 LT2 FAN	-25...85 °C



### Application advice

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

### Sales and Technical Support

Sales and Technical Support [www.osram.com](http://www.osram.com)

### Download Data

File
 Product Datasheet OTi DALI 15 220-2401A0 LT2
 Certificates 730563_VDE Certificate



## Product family datasheet

	Certificates 489247_ENEC Certification_OT FIT CS
	Certificates 664763_CB-Certificate-OTi DALI 15
	Certificates 664765_VDE_CB-Certificate-OTi DALI 15
	Declarations of conformity 711016_Declaration of Conformity_OTi DALI LT2 9C1
	CAD data 660729_OTi DALI 15_CAD file_IGS
	CAD data 660730_OTi DALI 15_CAD file
	CAD data 660731_OTi DALI 15_CAD file_STEP
	CAD data 673587_CAD Data OT-CableClamp-F-Style
	CAD data 673588_CAD Data OT-CableClamp-F-Style
	CAD data PDF 673589_CAD Data OT-CableClamp-F-Style
	Product Datasheet 729814_TDS OTi DALI 25
	Certificates 545693_VDE license_OTi DALI
	CAD data 3-dim 491388_CAD OTi DALI 351A0 LT2 OTi DALI 25700 LT2
	CAD data 3-dim 491391_IGS - CAD OTi DALI 351A0 LT2 OTi DALI 25700 LT2
	CAD data PDF 491387_CAD OTi DALI 351A0 LT2 OTi DALI 25700 LT2
	Product Datasheet 729815_TDS OTi DALI 35
	Product Datasheet Datasheet OTi DALI 50
	CAD data 3-dim 491394_STEP-CAD - OTi DALI 50220-2401A4 LT2 FAN
	CAD data PDF 491393_CAD - OTi DALI 50220-2401A4 LT2 FAN
	CAD data PDF 491395_IGS - CAD - OTi DALI 50220-2401A4 LT2 FAN

## Logistical Data

## Product family datasheet

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899324879	OTi DALI 15/220...240/1A0 LT2	Shipping carton box 20	284 mm x 207 mm x 90 mm	5.29 dm <sup>3</sup>	2270.00 g
4052899488144	OTi DALI 25/220...240/700 LT2	Shipping carton box 20	357 mm x 222 mm x 96 mm	7.61 dm <sup>3</sup>	3231.00 g
4052899488168	OTi DALI 35/220...240/1A0 LT2	Shipping carton box 20	357 mm x 222 mm x 96 mm	7.61 dm <sup>3</sup>	3231.00 g
4052899488182	OTi DALI 50/220...240/1A4 LT2 FAN	Shipping carton box 20	389 mm x 234 mm x 72 mm	6.55 dm <sup>3</sup>	4118.00 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.

### Accessories Optional

Product description	Accessory name	Accessory code
OTi DALI 15/220...240/1A0 LT2	OPTOTRONIC Cable Clamp, F-STYLE	▶ 4052899325562
OTi DALI 25/220...240/700 LT2	OPTOTRONIC Cable Clamp, B-STYLE	▶ 4052899077898
OTi DALI 25/220...240/700 LT2	OPTOTRONIC Cable Clamp, B-STYLE TL	▶ 4052899268227
OTi DALI 35/220...240/1A0 LT2	OPTOTRONIC Cable Clamp, B-STYLE	▶ 4052899077898
OTi DALI 35/220...240/1A0 LT2	OPTOTRONIC Cable Clamp, B-STYLE TL	▶ 4052899268227
OTi DALI 50/220...240/1A4 LT2 FAN	OPTOTRONIC Cable Clamp, A-STYLE	▶ 4052899089587
OTi DALI 50/220...240/1A4 LT2 FAN	OPTOTRONIC Cable Clamp, A-STYLE TL	▶ 4052899318359

### Disclaimer

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