

OPTOTRONIC Intelligent

– 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, LED panels, etc.
- Installation via Cable Clamp Kit possible (depending on version of product)
- Independent mounting 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 (OTi DALI 15)
- 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

- 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)
- 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 λ
OTi DALI 50/220...240/1A4 LT2 FAN	220...240 V	50...60 Hz	198...264 V ¹⁾	176...276 V	< 18 %	> 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 50/220...240/1A4 LT2 FAN	91 % ²⁾	7.5 W	<0.4 W	30 A ³⁾	12	20
Product description	Max. ECG no. on circuit breaker 25 A (B)	Surge capability (L/N-Ground)	Surge capability (L-N)	Nominal output voltage		
OTi DALI 50/220...240/1A4 LT2 FAN	-	2 kV ⁴⁾	1 kV	15...54 V ⁵⁾		
Product description	U-OUT (working voltage)	Nominal output current	Output current tolerance	Output ripple current (100 Hz)	Nominal output power	
OTi DALI 50/220...240/1A4 LT2 FAN	60 V	600...1400 mA ⁶⁾	±3 %	≤ 2 %	55 W ⁷⁾	
Product description	Galvanic isolation	Galvanic isolation primary/secondary				
OTi DALI 50/220...240/1A4 LT2 FAN	SELV equivalent	3.75 kV ⁸⁾				

¹⁾ Permitted voltage range

²⁾ Typical

³⁾ $t_{width} = 200 \mu s$ (measured at 50 % I_{peak})

⁴⁾ Functional Earth

⁵⁾ Maximum 60 V

⁶⁾ ±5%

⁷⁾ Partial load 22...55 W

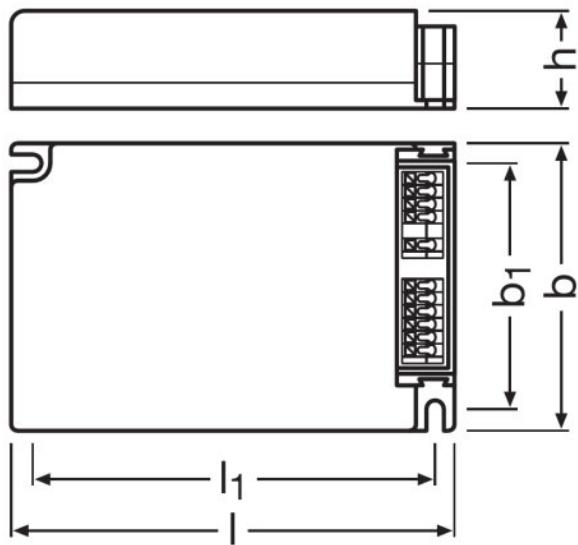
⁸⁾ SELV-equivalent

Dimensions & weight

Product description	Length	Width	Height	Mounting hole spacing, length	Mounting hole spacing, width	Product weight
OTi DALI 50/220...240/1A4 LT2 FAN	110.0 mm	75.0 mm	25.0 mm	99.0 mm	64.0 mm	180.00 g
Product description	Cable cross-section, input side	Cable cross-section, output side	Wire preparation length, input side	Wire preparation length, output side		
OTi DALI 50/220...240/1A4 LT2 FAN	0.2...1.5 mm ² ¹⁾	0.2...1.5 mm ² ¹⁾	8.5...9.5 mm	8.5...9.5 mm		

¹⁾ Solid or flexible leads

Product line drawing



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

Colors & materials

Product description	Casing material
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 50/220...240/1A4 LT2 FAN	-20...+50 °C	80 °C ¹⁾	100 °C	5...85 % ²⁾

¹⁾ Maximum at the Tc-point

²⁾ Maximum 56 days/year at 85 %

Lifespan

Product description	ECG lifetime
OTi DALI 50/220...240/1A4 LT2 FAN	50000 / 100000 h ¹⁾

¹⁾ $T_c = 80^\circ\text{C}$, 0.2% / 1,000 h failure rate

Product family datasheet

Additional product data

Product description	Encapsulated
OTi DALI 50/220...240/1A4 LT2 FAN	No

Capabilities

Product description	Dimmable	Dimming interface	Dimming range	Dimming method
OTi DALI 50/220...240/1A4 LT2 FAN	Yes	DALI / Touch DIM / Touch DIM Sensor	1...100 % ¹⁾	Amplitude Modulation / Pulse Width Modulation ²⁾

Product description	Constant lumen function	Overheating protection	Overload protection
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 50/220...240/1A4 LT2 FAN	Automatic reversible	Yes	2.0 m	I / II	Yes

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

¹⁾ For maximum nominal output current

²⁾ AM (> 450 mA) + PWM (< 450 mA)

Certificates & standards

Product description	Approval marks – approval
OTi DALI 50/220...240/1A4 LT2 FAN	ENEC 10 / VDE / EMC / EL / CE

Product description	Standards	Protection class
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	I

Product description	Type of protection
OTi DALI 50/220...240/1A4 LT2 FAN	IP20

Logistical data

Product description	Temperature range at storage
OTi DALI 50/220...240/1A4 LT2 FAN	-25...75 °C

Product family datasheet

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	
	Brochures OPTOTRONIC Compact LED drivers (GB)
	Certificates ENEC Certification_OT FIT CS
	Declarations of conformity Declaration of Conformity_OTi DALI LT2 9C1
	CAD data 3-dim STEP-CAD - OTi DALI 50220-2401A4 LT2 FAN
	CAD data PDF CAD - OTi DALI 50220-2401A4 LT2 FAN
	CAD data PDF IGS - CAD - OTi DALI 50220-2401A4 LT2 FAN

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899919433	OTi DALI 50/220...240/1A4 LT2 FAN	Shipping carton box 20	389 mm x 234 mm x 72 mm	6.55 dm ³	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 50/220...240/1A4 LT2 FAN	OT Cable Clamp, A-STYLE TL	4052899318359

Disclaimer

Product family datasheet

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