

PRODUCT DATASHEET

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

OPTOTRONIC® Intelligent – DALI LT2 | Compact constant current LED drivers



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
- Protection of the system thanks to thermal management and Smart Control
- High-quality dimming of 1...100 % by amplitude dimming

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
- RI suppression: to EN 55015/CISPR 15
- Line harmonics according to EN 61000-3-2

- Immunity according to EN 61547
- Lifetime: up to 100,000 h
- Type of protection: IP20
- Independent connection via through-looping (except OTi DALI 15)

TECHNICAL DATA

Electrical data

Nominal wattage	50.00 W
Nominal output power	55 W ¹⁾
Nominal voltage	220...240 V
Nominal output voltage	15...54 V ²⁾
Input voltage AC	198...264 V ³⁾
Input voltage DC	176...276 V
U-OUT (working voltage)	60 V
Nominal current	0.27 A
Nominal output current	600...1400 mA ⁴⁾
Inrush current	30 A ⁵⁾
Output current tolerance	±3 %
Output ripple current (100 Hz)	< 2 % ⁶⁾
Mains frequency	0/50/60 Hz
Total harmonic distortion	< 10 % ⁷⁾
Power factor λ	> 0.95
ECG efficiency	91 % ⁸⁾
Device power loss	7.5 W
Max. ECG no. on circuit breaker 10 A (B)	12
Max. ECG no. on circuit breaker 16 A (B)	20
Max. ECG no. on circuit breaker 25 A (B)	-
Surge capability (L/N-Ground)	2 kV ⁹⁾
Surge capability (L-N)	1 kV
Power loss in stand-by mode	< 0.15 W
Flickering metric (Pst LM)	≤1

1) Partial load 22...55 W

2) Maximum 60 V

3) Permitted voltage range

4) ±5%

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

6) Ripple average at 100 Hz %

7) At full load, 220...240 V, 50 Hz / see graphs

8) At full load and 230 V

9) Functional Earth

Photometrical data

Flickering metric (Pst LM)	≤1
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Stroboscope effect metric (SVM)	≤0.4
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Dimensions & Weight

Length	110.00 mm
Mounting hole spacing, length	99,0 mm
Width	75.00 mm
Height	25.00 mm
Cable cross-section, input side	0.2...1.5 mm ² 1)
Cable cross-section, output side	0.2...1.5 mm ² 1)
Wire preparation length, input side	8.0...9.0 mm
Wire preparation length, output side	8.0...9.0 mm
Product weight	180.00 g

1) Solid or flexible leads

Colors & materials

Product color	White
Casing material	Plastic
Body material	Plastic

Temperatures & operating conditions

Ambient temperature range	-20...+50 °C
Maximum temperature at tc test point	80 °C 1)
Max.housing temperature in case of fault	110 °C
Permitted rel. humidity during operation	5...85 % 2)

1) Maximum at the T_c-point

2) Maximum 56 days/year at 85 %

Lifespan

ECG lifetime	50000 h / 100000 h 1)
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1) T_c = 80°C, 0.2% / 1,000 h failure rate / T_c = 70°C, 0.1% / 1,000 h failure rate

Additional product data

Encapsulated	No
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Capabilities

Dimmable	Yes
Dimming interface	DALI / Touch DIM / Touch DIM Sensor
Dimming range	1...100 % 1)
Overheating protection	Automatic reversible

Overload protection	Automatic reversible
No-load proof	Yes
Short-circuit protection	Automatic reversible
Max. cable length to lamp/LED module	2,0 m
Suitable for fixtures with prot. class	I / II
Suitable for emergency lighting	Yes
Type of connection, output side	Push terminal

1) For maximum nominal output current

Certificates & Standards

Approval marks – approval	ENEC 10 / VDE / EMC / EL / CE / DALI-2
Standards	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
Protection class	II
Type of protection	IP20

LOGISTICAL DATA

Temperature range at storage	-25...85 °C
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Energy labelling regulation data acc EU 2019/2015

Networked standby power for CLS	≤0.18 W
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DOWNLOAD DATA

	Documents and certificates	Document name
	User instruction / safety instructions	OPTOTRONIC LED Power Supply
	Declarations of conformity	EATON(CEAG)-Conformity declaration AB42878_OTi_DALI_50_220-240_1A4_LT2_FAN
	Declarations of conformity	EU Declaration of Conformity 3365628
	Declarations of conformity	INOTEC- Conformity declaration AB42878_OTi_DALI_50_220-240_1A4_LT2_FAN
	Certificates	OTi DALI 50 LT2 FAN CB DE1 59836 040320
	Certificates	730563_VDE Certificate
	Certificates	VDE ENEC Certificate 40038447

CAD/BIM files		Document name
	CAD data 3D PDF	491395_OTI DALI 50 LT2 FAN IGS 61119
	CAD data 3D PDF	491393_OTI DALI 50 LT2 FAN CADPDF 61119

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4052899488182	Unpacked 1		180.00 g	
4052899488199	Shipping box 20	389 mm x 234 mm x 72 mm	3912.00 g	6.55 dm ³

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.