

OTi DALI 50/220...240/1A4 LT2F NFC

OPTOTRONIC Intelligent – DALI LT2 NFC | 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
- 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)
- "I" version includes pre-assembled cable clamps for immediate installation

Product family 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
- Easy and fast output current setting via NFC

Versatile scope of application due to OSRAM DALI Technology:

- 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 family 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, 61347-2-13, 62384
- 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

Technical data

Electrical data

Nominal input voltage	220...240 V
Mains frequency	50...60 Hz
Input voltage AC	198...264 V ¹⁾
Input voltage DC	176...276 V
Total harmonic distortion	< 10 % ²⁾
Power factor λ	> 0.95
ECG efficiency	91 % ³⁾
Device power loss	7.5 W
Power loss in stand-by mode	0.15 W
Inrush current	30 A ⁴⁾
Max. ECG no. on circuit breaker 10 A (B)	13
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 ⁵⁾
Surge capability (L-N)	1 kV
Nominal output voltage	15...54 V ⁶⁾
U-OUT (working voltage)	60 V
Nominal output current	600...1400 mA ⁷⁾
Output current tolerance	±3 %
Output ripple current (100 Hz)	2 %
Nominal output power	55 W ⁸⁾
Galvanic isolation	SELV

¹⁾ Permitted voltage range

²⁾ At full load, 220...240 V, 50 Hz / see graphs

³⁾ At full load and 230 V

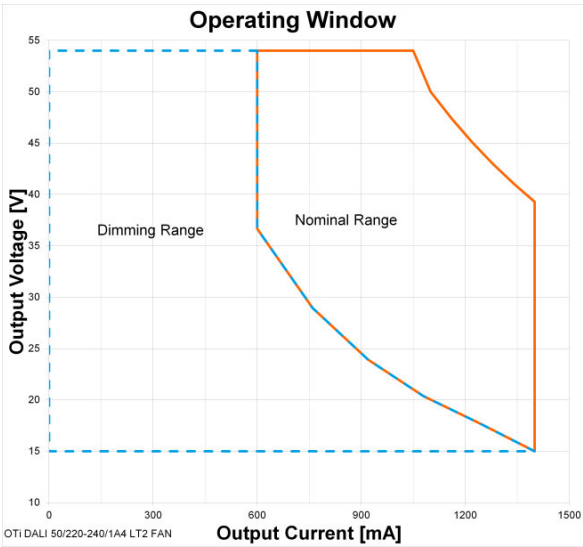
⁴⁾ $t_{width} = 200 \mu s$ (measured at 50 % I_{peak})

⁵⁾ Functional Earth

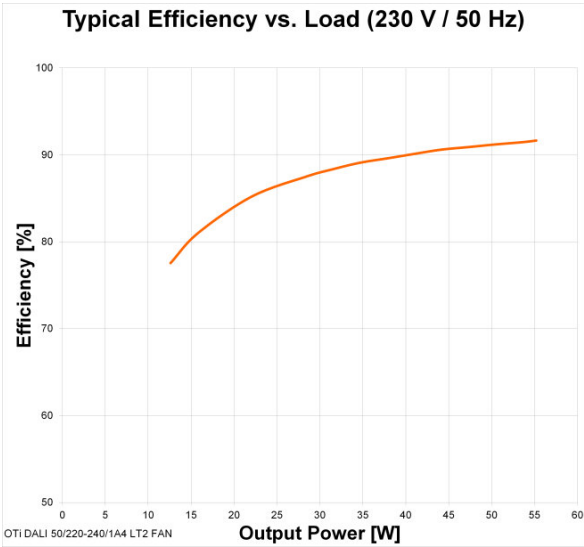
⁶⁾ Maximum 60 V

⁷⁾ ±5%

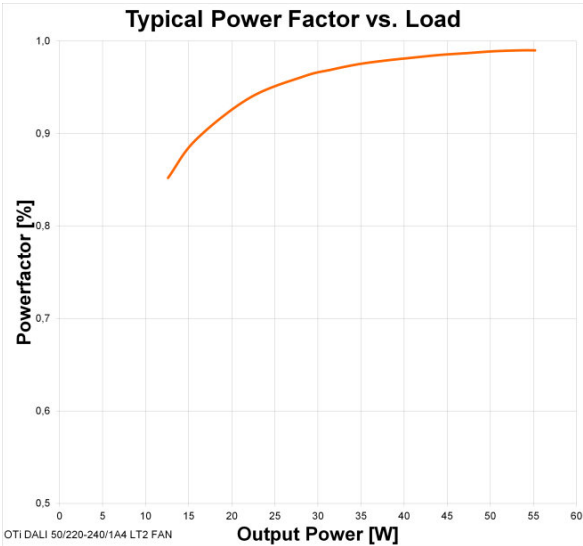
⁸⁾ Partial load 22...55 W



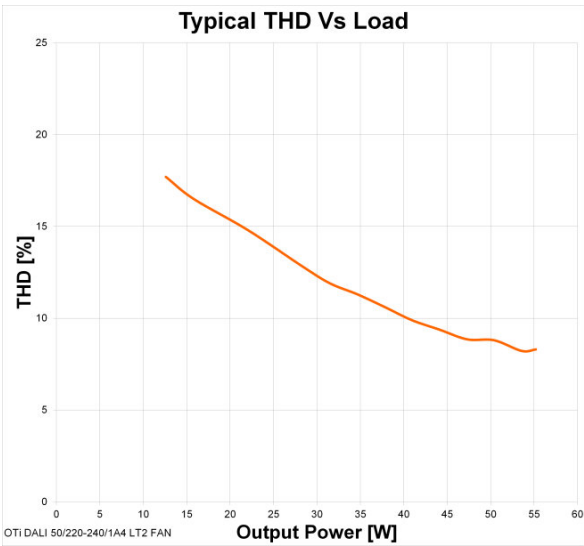
Operating Window



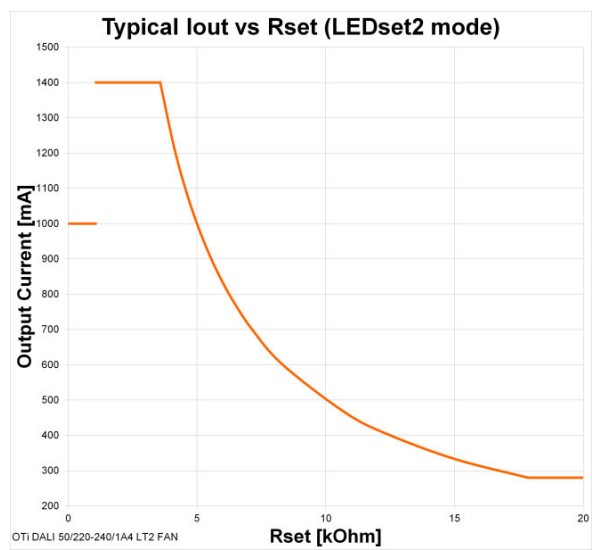
Typical Efficiency v Load 230 V 50 Hz



Typical Power Factor v Load

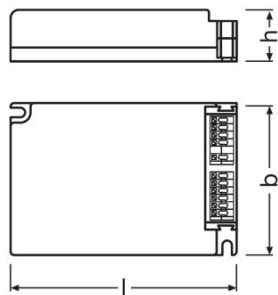


Typical THD v Load



Typical Iout v Rset LEDset2 mode

Dimensions & weight



Mounting hole spacing, length	99.0 mm
Mounting hole spacing, width	64.0 mm
Product weight	180.00 g
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	8.5...9.5 mm
Wire preparation length, output side	8.5...9.5 mm
Length	110.0 mm
Width	75.0 mm
Height	25.0 mm

¹⁾ Solid or flexible leads

Colors & materials

Casing 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
Temperature range at storage	-40...85 °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 / 100000 h ¹⁾
--------------	--------------------------------

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
--------------	----

Capabilities

Suitable for through-wiring	Yes
Dimmable	Yes
Dimming interface	DALI / Touch DIM / Touch DIM Sensor
Dimming range	1...100 % ¹⁾
Dimming method	Amplitude Modulation
Overheating protection	Automatic reversible
Overload protection	Automatic reversible
Short-circuit protection	Automatic reversible
No-load proof	Yes
Max. cable length to lamp/LED module	2.0 m
Suitable for fixtures with prot. class	I / II
Type of connection, output side	Push terminal
Number of channels	1

¹⁾ For maximum nominal output current

Programmable features

Operating Current	Yes
Tuning Factor	Yes

Product datasheet

Constant Lumen	Yes
Lamp Operating Time	Yes
Driver Guard	Yes
DALI Settings	Yes
Emergency Mode	Yes
Luminaire Info	Yes
Configuration Lock	Yes
Soft Switch Off	Yes
Dim to Dark	Yes
TouchDIM + Sensor	Yes
Corridor Functionality	Yes
Tunable White CCT	No
Tunable White High precision	No
OEM Key	No

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

Commodity code	850440829000
----------------	--------------

Download Data

File	
	User instruction OPTOTRONIC LED Power Supply
	Certificates VDE EMC Certificate 40011668
	Certificates VDE ENEC Certificate 40038447
	Certificates VDE EMC Certificate 40044675 (EN)
	Declarations of conformity EATON(CEAG) Conformity declaration AM12413_OTi_DALI_50_220-240_1A4_LT2_FAN_NFC
	Declarations of conformity INOTEC Conformity declaration AM12413_OTi_DALI_50_220-240_1A4_LT2_FAN_NFC

Product datasheet

	Declarations of conformity EU Declaration of Conformity 3758701
	Declarations of conformity EU Declaration of Conformity 3365628
	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 code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899548251	OTi DALI 50/220...240/1A4 LT2F NFC	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.

Disclaimer

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