

# PRODUCT DATASHEET OTi DALI 50/220...240/1A4 NFC

OPTOTRONIC® Intelligent - DALI 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)

## Product benefits

- Versatile DALI window driver due to flexible output characteristic
- Locking and unlocking of luminaire/driver data
- Advanced luminaire/driver data (power, energy, operating hours...) for analytics
- DALI-2 certified incl. Parts 251, 252, 253
- Easy and fast output current setting via NFC
- Very high efficiency
- High-quality dimming of 1...100 % by amplitude dimming

## 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 features

- Supply voltage: 220...240 V

- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Line voltage: 198...264 V
- According to EN 61347-1, 61347-2-13, 62384
- RI suppression: to EN 55015/CISPR 15
- Immunity according to EN 61547
- Lifetime: up to 100,000 h
- Type of protection: IP20

## **TECHNICAL DATA**

## Electrical data

Nominal wattage	50.00 W
Nominal output power	55 W <sup>1)</sup>
Nominal voltage	220240 V
Nominal output voltage	1554 V <sup>2)</sup>
Input voltage range	220240 V
Input voltage AC	198264 V <sup>3)</sup>
Input voltage DC	176276 V
U-OUT (working voltage)	60 V
Nominal output current	6001400 mA <sup>4)</sup>
Inrush current	30 A <sup>5)</sup>
Output current tolerance	±3 %
Output ripple current (100 Hz)	< 3 % 6)
Mains frequency	0/50/60 Hz
Total harmonic distortion	< 10 % <sup>7)</sup>
Power factor $\lambda$	> 0.95
ECG efficiency	91 % <sup>8)</sup>
Device power loss	6.2 W
Surge capability (L/N-Ground)	2 kV
Surge capability (L-N)	1 kV
Galvanic isolation	SELV
Power loss in stand-by mode	< 0.15 W
Flickering metric (Pst LM)	≤1

<sup>1)</sup> Partial load 22...55 W

## Photometrical data

Flickering metric (Pst LM)	≤1
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<sup>2)</sup> Maximum 60 V

<sup>3)</sup> Permitted voltage range

<sup>4) ±3%</sup> 

<sup>5)</sup>  $t_{width}$  = 200 µs (measured at 50 %  $b_{eak}$ )

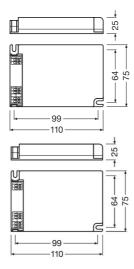
<sup>6)</sup> Ripple average at 100 Hz %

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

<sup>8)</sup> at 230 V, 50 Hz

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	0.21.5 mm <sup>2</sup> 1)
Cable cross-section, output side	0.21.5 mm <sup>2</sup> 1)
Wire preparation length, input side	8.09.0 mm
Wire preparation length, output side	8.09.0 mm
Product weight	175.00 g

<sup>1)</sup> 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	585 % <sup>2)</sup>

<sup>1)</sup> Maximum at the Tc-point

## Lifespan

ECG lif	time	50000 h / 100000 h <sup>1)</sup>

<sup>1)</sup>  $T_{\rm C}$  = 80°C, 0.2% / 1,000 h failure rate /  $T_{\rm C}$  = 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	1100 % <sup>1)</sup>
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 <sup>2)</sup>
Suitable for fixtures with prot. class	1711
Suitable for emergency lighting	Yes
Type of connection, output side	Push terminal

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

## Certificates & Standards

Approval marks – approval	CE / EL / DALI-2 / EAC
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
Energy efficiency class	A1

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

<sup>2)</sup> Output wires must be routed as close as possible to each other

## LOGISTICAL DATA

## Energy labelling regulation data acc EU 2019/2015

Networked standby power for CLS

## DOWNLOAD DATA

	Documents and certificates	Document name
PDF	User instruction / safety instruction	ors OTI DALI 50/220-240/1A4 NFC
PDF	Declarations of conformity	OTI DX DALI NFC CE 3770568 041219
PDF	Certificates	OTI DX DALI NFC CB DE1 63108 190220
PDF	Certificates	OTI DALI 50 NFC EATON AM35222 180220
PDF	Certificates	OTI DALI 50 NFC INOTEC AM35222 180220
PDF	Certificates	VDE EMC Certificate 40044675 (EN)
PDF	Certificates	VDE ENEC Certificate 40038447
PDF	Certificates	OTI DALI 50 NFC INOTEC 080121
PDF	Certificates	OTI DALI 50 NFC EATON 080121
PDF	Certificates	OT ENEC 40038447 161221
PDF	Certificates	OT EMC 40044675 250621
PDF	EU Data Act	Connected Products and Related Software and Services
	CAD/BIM files	Document name
	CAD STEP 3D	OTi DALI 50 220-240 1A4 NFC

CAD data OTi DALI 50/220-240/1A4 NFC built in pdf

CAD data 3D PDF

## LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4062172061889	Unpacked 1		167.00 g	
4062172061896	Shipping box 20	262 mm x 253 mm x 98 mm	3754.00 g	6.50 dm <sup>3</sup>

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.