

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 ¹⁾
Nominal voltage	220...240 V
Nominal output voltage	15...54 V ²⁾
Input voltage range	220...240 V
Input voltage AC	198...264 V ³⁾
Input voltage DC	176...276 V
U-OUT (working voltage)	60 V
Nominal output current	600...1400 mA ⁴⁾
Inrush current	30 A ⁵⁾
Output current tolerance	±3 %
Output ripple current (100 Hz)	< 3 % ⁶⁾
Mains frequency	0/50/60 Hz
Total harmonic distortion	< 10 % ⁷⁾
Power factor λ	> 0.95
ECG efficiency	91 % ⁸⁾
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

1) Partial load 22...55 W

2) Maximum 60 V

3) Permitted voltage range

4) ±3%

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

6) Ripple average at 100 Hz %

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

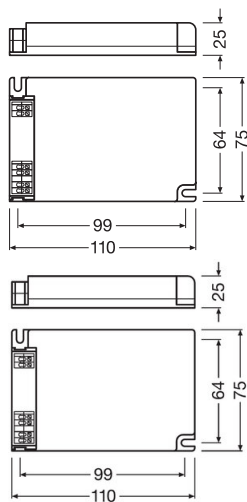
8) at 230 V, 50 Hz

Photometrical data

Flickering metric (Pst LM)	≤1
----------------------------	----

Stroboscope effect metric (SVM)	≤0.4
---------------------------------	------

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	175.00 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⁾
--------------	----------------------------------

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

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 ²⁾
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

2) Output wires must be routed as close as possible to each other

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

LOGISTICAL DATA

Temperature range at storage	-40...+85 °C
------------------------------	--------------

Energy labelling regulation data acc EU 2019/2015

Networked standby power for CLS	
---------------------------------	--

DOWNLOAD DATA

Documents and certificates		Document name
	User instruction / safety instructions	OTI DALI 50/220-240/1A4 NFC
	Declarations of conformity	OTI DX DALI NFC CE 3770568 041219
	Certificates	OTI DX DALI NFC CB DE1 63108 190220
	Certificates	OTI DALI 50 NFC EATON AM35222 180220
	Certificates	OTI DALI 50 NFC INOTEC AM35222 180220
	Certificates	VDE EMC Certificate 40044675 (EN)
	Certificates	VDE ENEC Certificate 40038447
	Certificates	OTI DALI 50 NFC INOTEC 080121
	Certificates	OTI DALI 50 NFC EATON 080121
	Certificates	OT ENEC 40038447 161221
	Certificates	OT EMC 40044675 250621
	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 3D PDF	CAD data OTi DALI 50/220-240/1A4 NFC built in 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 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.