The trusted value of OSRAM Digital Systems continues with Inventronics Global – where experience meets innovation.

# OTi DALI 50/220-240/1A4 LT2 FAN

OPTOTRONIC Intelligent - DALI LT2 | Compact constant current LED driver - Dimmable



#### Product family features

- Supply voltage: 220...240 V

- Line frequency: 0 Hz | 50 Hz | 60 Hz

Line voltage: 198...264 VLifetime: up to 100,000 hType of protection: IP20

Independent connection via through-looping (except OTi DALI 15)

#### 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
- DALI-2 certified incl. Parts 251, 252, 253





# 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)

#### Versatile scope of application due to 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



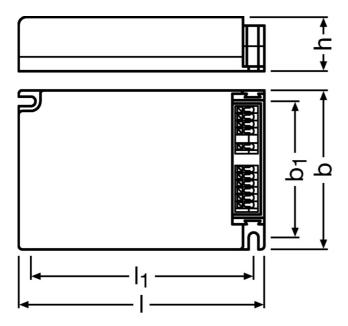
#### Technical data

#### **Electrical data**

Nominal input voltage	220240 V
Mains frequency	0/50/60 Hz
Input voltage AC	198264 V <sup>1)</sup>
Input voltage DC	176276 V
Nominal input current at 230 V	0.27 A
Total harmonic distortion	< 10 % <sup>2)</sup>
Power factor λ	0.81C0.97
Efficiency in full-load	91 % <sup>3)</sup>
Device power loss	7.5 W
Networked standby power	≤0.15 W <sup>3)</sup>
Inrush current	30 A <sup>4)</sup>
Max. ECG no. on circuit breaker 10 A (B)	12
Max. ECG no. on circuit breaker 16 A (B)	20
Surge capability (L-N)	1 kV
Surge capability (L/N-Ground)	2 kV <sup>5)</sup>
Protective conductor current	not relevant
Nominal output voltage	1554 V <sup>6)</sup>
U-OUT (working voltage)	60 V
Nominal output current	6001400 mA <sup>7)</sup>
Minimum output current	6 mA
Default output current	1050 mA <sup>8)</sup>
Output current tolerance	±3 %
Output ripple current (100 Hz)	< 2 % <sup>9)</sup>
Output PSTLM	≤1
Output SVM	≤0.4
Output current LEDset open	300 mA
Output current LEDset shorted	1050 mA
Nominal output power	55 W <sup>10)</sup>
Maximum output power	55 W
Galvanic isolation primary/secondary	SELV
Galvanic isolation DALI/mains	Basic
Galvanic isolation DALI/output	SELV

- 1) Permitted voltage range
- 2) At full load, 220...240 V, 50 Hz / see graphs
- 3) at 230 V, 50 Hz
- 4) t = 200 µs (measured at 50 % I peak) 5) Functional Earth
- 6) Maximum 60 V
- 7) ±5%
- 8) LEDset deactivated
- 9) Ripple average at 100 Hz
- 10) Partial load 22...55 W

# **Dimensions & weight**



Product weight	180.00 g
Length	110.0 mm
Width	75.0 mm
Height	25.0 mm
Mounting hole spacing, length	99.0 mm
Mounting hole spacing, width	64.0 mm
Cable cross-section, input side	0.21.5 mm <sup>2</sup> 1)
Cable cross-section, output side	0.21.5 mm² <sup>1)</sup>
Wire preparation length, input side	8.09.0 mm
Wire preparation length, output side	8.09.0 mm
Cable/wire length, output side	2000 mm

<sup>1)</sup> Solid or flexible leads

# Colors & materials

Casing material	Plastic
Product color	White

# Temperatures & operating conditions

Ambient temperature range	-20+50 °C
Maximum temperature at tc test point	80 °C <sup>1)</sup>
Max.housing temperature in case of fault	110 °C
Temperature range at storage	-2585 °C
Permitted rel. humidity during operation	585 % <sup>2)</sup>

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

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

#### Lifespan

ECG lifetime	50000 h / 100000 h <sup>1)</sup>

1)  $T_c = 80^{\circ}$ C, 0.2% / 1,000 h failure rate /  $T_c = 70^{\circ}$ C, 0.1% / 1,000 h failure rate

# Additional product data

Encapsulated	No

# Capabilities

Programming interface	DALI, LEDset
Control interface	DALI-2, Touch DIM, Corridor
Dimmable	Yes
Dimming interface	DALI-2 / Touch DIM / Corridor
Dimming range	1100 %
Dimming method	Amplitude Modulation
DALI-2 Diagnostic Data	Yes <sup>1)</sup>
DALI-2 Energy Data	Yes <sup>2)</sup>
Constant lumen function	Programmable
Max. cable length to lamp/LED module	2.0 m <sup>3)</sup>
Suitable for fixtures with prot. class	1/11
Suitable for emergency lighting	Yes
Type of connection, input side	Push terminal
Type of connection, output side	Push terminal
Suitable for through-wiring	Yes with optional cable clamp
Number of channels	1
Overheating protection	Automatic reversible
Overload protection	Automatic reversible
Short-circuit protection	Automatic reversible
Intended for no-load operation	No
No-load proof	Yes

<sup>1)</sup> Acc. DALI part 253 2) Acc. DALI part 252

<sup>3)</sup> Output wires must be routed as close as possible to each other



# **Programming**

Programming device	DALI / LEDset
Tuner4TRONIC	Yes
Tuner4TRONIC Field App	No

# **Programmable features**

DALI Settings	Yes
DALI-2 Luminaire Data	Yes 1)
TouchDIM + Sensor	Yes
Corridor Functionality	Yes
Dim to Dark	No
Soft Switch Off	Yes
Tuning Factor	No
Configuration Lock	No
Driver Guard	No
Emergency Mode	Yes

<sup>1)</sup> Acc. DALI part 251

# **Certificates & standards**

Approval marks – approval	CE / ENEC / DALI-2 / EL
Standards	EN 61347-1 / EN 61347-2-13 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 62384 / EN 62386 / IEC 62386-101:Ed2 / IEC 62386-102:Ed2 / IEC 62386-207:Ed1
Type of protection	IP20

# Logistical data

Commodity code	85044083900

#### **Environmental information**

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh)	
Date of Declaration	18-08-2025
Primary Article Identifier	4052899488182   6937186111531
Declaration No. in SCIP database	In work
SCIP_STATUS	In work
SCIP_ID	



# Ecodesign regulation information:

Intended for use with LED modules.

The forward voltage of the LED light source shall be within the defined operating window of the control gear in all operating conditions including dimming if applicable.

Separate control gear and light sources must be disposed of at certified disposal companies in accordance with Directive 2012/19/EU (WEEE) in the EU and with Waste Electrical and Electronic Equipment (WEEE) Regulations 2013 in the UK. For this purpose, collection points for recycling centres and take-back systems (CRSO) are available from retailers or private disposal companies, which accept separate control gear and light sources free of charge. In this way, raw materials are conserved and materials are recycled.

#### **Download Data**

File			
Certificates	PDF	►OT ENEC 40038447 270224	
Certificates	PDF	►EATON(CEAG)-Conformity declaration AB42878_OTi_DALI_50_220-240_1A4_LT2_FAN	
Certificates	PDF	►INOTEC- Conformity declaration AB42878_OTi_DALI_50_220-240_1A4_LT2_FAN	
CAD data 3-dim	Compressed	►491394_OTI DALI 50 LT2 FAN STEP 61119	
CAD data PDF	PDF	►491393_OTI DALI 50 LT2 FAN CADPDF 61119	
CAD data PDF	Compressed	►491395_OTI DALI 50 LT2 FAN IGS 61119	
Mandatory Publications	PDF	►OTi DALI LT2 UK DoC 4281294 02 200923	
Mandatory Publications	PDF	►OTi DALI LT2 CE 3365628 16 200125	
User instruction	PDF	►UI OTi DALI 50 LT2 FAN	



#### **Logistical Data**

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899488182 OSRAM	OTi DALI 50/220- 240/1A4 LT2 FAN	Shipping carton box 20 Pieces	389 x 234 x 72 mm	6.55 dm³	205.90 g
6937186111531 INVENTRONICS	OTi DALI 50/220- 240/1A4 LT2 FAN	Shipping carton box 20 Pieces	389 x 234 x 72 mm	6.55 dm³	205.90 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

#### Data privacy

This Inventronics driver can be configured using the Tuner4TRONIC software. This requires registering on www.inventronicsglobal.com/ds and downloading the Tuner4TRONIC software from the Internet. The Tuner4TRONIC software enables users to access and view the operational data of a luminaire or driver via the corresponding programming interfaces. A password key (Config Lock) must be set up in the driver via the Tuner4TRONIC software in order to control which users can access and view operational data. Follow the instructions for password setup. To grant an external person or company rights to access or view operational data, you can assign password keys. In this case, however, you are responsible for ensuring that the third party concerned takes notice of the information described here.

However, Inventronics can read out operating data from devices for maintenance and service purposes even when a password key has been assigned. In individual cases, Inventronics will also use its access rights in order to optimize or improve driver hardware and driver functions. In accordance with data privacy principles, any user of operating data (luminaire manufacturers, third parties with access rights) must ensure that personal data (e.g. name, address, location IDs) are only merged with the prior written consent of the person (end user) concerned. The respective user of the operating data is responsible for providing evidence of consent.

#### **Accessories Optional**

Product description	Accessory name	Accessory code
OTi DALI 50/220-240/1A4 LT2 FAN	OT CABLE CLAMP A-STYLE	<b>4</b> 052899089570
OTi DALI 50/220-240/1A4 LT2 FAN	OT CABLE CLAMP A-STYLE	<b>4</b> 050732499425
OTi DALI 50/220-240/1A4 LT2 FAN	OT CABLE CLAMP A-STYLE	▶6977770432048
OTi DALI 50/220-240/1A4 LT2 FAN	OT CABLE CLAMP A-STYLE TL	►4052899325982
OTi DALI 50/220-240/1A4 LT2 FAN	OT CABLE CLAMP A-STYLE TL	<b>►</b> 6977770432062

#### Disclaimer

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