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OTi DALI 35/220...240/1A0 NFC

OPTOTRONIC Intelligent - DALI NFC | 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 V

- According to EN 61347-1, 61347-2-13, 62384

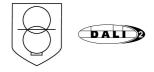
- RI suppression: to EN 55015/CISPR 15

Immunity according to EN 61547Lifetime: up to 100,000 h

- Type of protection: IP20

Product family 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





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)

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



Technical data

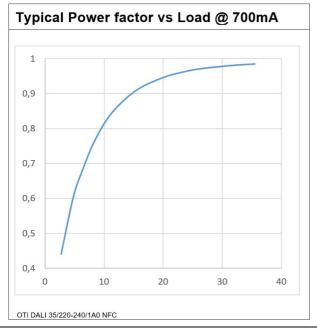
Electrical data

Nominal input voltage	220240 V
Mains frequency	0/50/60 Hz
Input voltage AC	198264 V ¹⁾
Input voltage DC	176276 V
Current set	DALI / NFC
Total harmonic distortion	< 10 % ²⁾
Power factor λ	0.56C0.98
Efficiency in full-load	90 % 3)
Protective conductor current	not relevant
Inrush current	15 A ⁴⁾
Max. ECG no. on circuit breaker 10 A (B)	18
Max. ECG no. on circuit breaker 16 A (B)	28
Surge capability (L/N-Ground)	2 kV
Surge capability (L-N)	1 kV
Nominal output voltage	1554 V ⁵⁾
U-OUT (working voltage)	60 V
Nominal output current	3501050 mA ⁶⁾
Default output current	700 mA
Output current tolerance	±3 %
Output ripple current (100 Hz)	< 3 % ⁷⁾
Output PSTLM	≤1
Output SVM	≤0.4
Nominal output power	35 W ⁸⁾
Maximum output power	35 W
Galvanic isolation DALI/mains	SELV
Galvanic isolation DALI/output	SELV
Networked standby power	≤0.10 W ³⁾

- 1) Permitted voltage range 2) At full load, 220...240 V, 50 Hz / see graphs
- 3) at 230 V, 50 Hz
- 4) t_{width} = 220 µs (measured at 50 % I_{peak}) 5) Maximum 60 V
- 6) ±3%
- 7) Ripple average at 100 Hz
- 8) Partial load 15...35 W

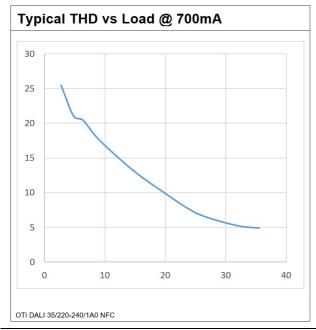
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Typical Power Factor v Load



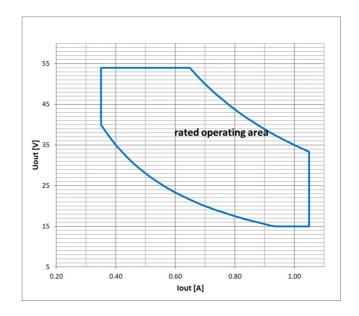
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Typical THD v Load



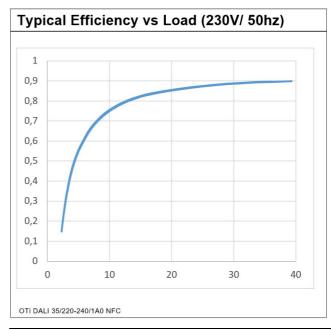
OTi DALI 35/220-240/1A0 NFC

Operating Window



OTI DX DALI 35 NFC Operating window

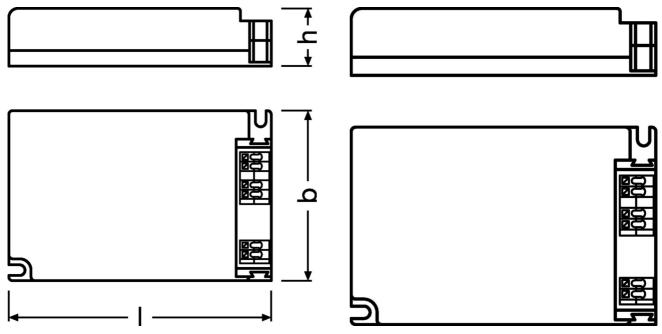
Typical Efficiency v Load 230 V 50 Hz



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Dimensions & weight



Length	103.0 mm
Width	67.0 mm
Height	29.5 mm
Mounting hole spacing, length	94.0 mm
Mounting hole spacing, width	58.0 mm
Cable cross-section, input side	0.21.5 mm ² 1)
Cable cross-section, output side	0.21.5 mm ² 1)
Wire preparation length, input side	8.09.0 mm
Wire preparation length, output side	8.09.0 mm
Product weight	145.00 g

¹⁾ 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 ¹⁾
Max.housing temperature in case of fault	110 °C
Temperature range at storage	-40+85 °C
Permitted rel. humidity during operation	585 % ²⁾

¹⁾ Maximum at the Tc-point

²⁾ Maximum 56 days/year at 85 %



Lifespan

ECG lifetime	50000 h / 100000 h ¹⁾

1) $T_c = 75$ °C, 0.2% / 1,000 h failure rate / $T_c = 65$ °C, 0.1% / 1,000 h failure rate

Additional product data

Capabilities

Programming interface	DALI, NFC
Control interface	DALI-2
Dimmable	Yes
Dimming interface	DALI-2 / Touch DIM / Touch DIM Sensor
Dimming range	1100 %
Dimming method	Amplitude Modulation
DALI-2 Diagnostic Data	Yes ¹⁾
DALI-2 Energy Data	Yes ²⁾
Constant lumen function	Programmable
Max. cable length to lamp/LED module	2.0 m ³⁾
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

¹⁾ Acc. DALI part 253 2) Acc. DALI part 252

³⁾ Output wires must be routed as close as possible to each other



Programming

Programming device	DALI / NFC
Tuner4TRONIC	Yes
Tuner4TRONIC Field App	Yes
Box programming	Yes

Programmable features

Emergency Mode	Yes
DALI Settings	Yes
DALI-2 Luminaire Data	Yes 1)
TouchDIM + Sensor	Yes
Corridor Functionality	Yes
Dim to Dark	Yes
Soft Switch Off	Yes
Tuning Factor	Yes
Configuration Lock	Yes
Driver Guard	Yes
Emergency Mode	Yes

¹⁾ Acc. DALI part 251

Certificates & standards

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

Logistical data

Commodity code	85044083900
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Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh)	
Date of Declaration	22-03-2024
Primary Article Identifier	4062172017923
Declaration No. in SCIP database	In work



Download Data

File			
Certificates	PDF	►OTi DALI 35 1A0 NFC EAT AM22187 090120	
Certificates	PDF	►OTi DALI 35 1A0 NFC INO AM22187 090120	
Certificates	PDF	►OTI DALI 35 NFC INOTEC 080121	
Certificates	PDF	►OTI DX DALI NFC CB DE1 63108 190220	
Certificates	PDF	►OT EMC 40050085 200220	
Certificates	PDF	►OTI DALI 35 NFC EATON 080121	
Certificates	PDF	►OTI DALI NFC BIS 45164 231023	
Certificates	PDF	►OTI DALI DX 25 35 NFC CCC 2020171002003129 071223	
Certificates	PDF	►OTI DALI DX 25 35 NFC CCC 2020171002003130 071223	
Certificates	PDF	►OT ENEC 40038447 260623	
Certificates	PDF	►OT EMC 40044675 031022	
CAD data 3-dim	Compressed	►OTI DALI 25 35 NFC CAD3PDF 280120	
CAD data 2-dim	Compressed	►OTI DALI 25 35 NFC CAD2PDF 280120	
CAD data	Compressed	►OTI DALI 25 35 NFC IGS 280120	
CAD data	Compressed	►OTI DALI 25 35 NFC STEP 280120	
Declarations of conformity	PDF	►OTI DX DALI NFC CE 3770568 040923	
Declarations of conformity	PDF	►OTI DALI DX NFC UK DoC 4281072 040923	
User instruction	PDF	►OPTOTRONIC LED Power Supply	
User instruction	PDF	►OPTOTRONIC LED Power Supply	

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.



Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4062172017923	OTi DALI 35/220240/1A0 NFC	Shipping carton box 20 Pieces	357 x 222 x 96 mm	7.61 dm³	3225.00 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

Data privacy

This OSRAM driver can be configured using the Tuner4TRONIC software. This requires registering on www.myosram.com and downloading theTuner4TRONIC 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, OSRAM can read out operating data from devices for maintenance and service purposes even when a password key has been assigned. In individual cases, OSRAM 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.

Disclaimer

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

Accessories Optional

Product description	Accessory name	Accessory code
OTi DALI 35/220240/1A0 NFC	OT CABLE CLAMP B-STYLE	4 052899077881
OTi DALI 35/220240/1A0 NFC	OT CABLE CLAMP B-STYLE TL	4 052899948051
OTi DALI 35/220240/1A0 NFC	PRH101 -USB	4 055462165152
OTi DALI 35/220240/1A0 NFC	CPR30 -USB	4 055462165169