OSRAM

product - technical datasheet

OTi DALI 35/220-240/1A0 NFC I

OPTOTRONIC Intelligent - DALI NFC I (sq) | Compact constant current LED driver - Dimmable



Product family features

- Supply voltage: 220...240 V

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

Lifetime: up to 100,000 hType of protection: IP20

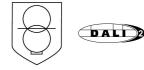
- Integrated cable clamp for luminaire and independent

installation

- Through-looping

Product family benefits

- Versatile DALI window driver due to flexible output characteristic
- 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



OSRAM

product - technical datasheet

Areas of application

- Suitable for downlights, spotlights and LED panels
- Suitable for use in luminaires with flexible current setting
- Installation in emergency lighting systems according to IEC 61347-2-13, appendix J
- Suitable for indoor SELV installations
- Suitable for luminaires of protection classes I and II

product - technical datasheet

Technical data

Electrical data

Device power loss	not relevant	
Nominal output voltage	1554 V ¹⁾	
Input voltage DC	176276 V	
Nominal output current	3501050 mA ²⁾	
Inrush current	17 A ³⁾	
Max. ECG no. on circuit breaker 10 A (B)	20	
Max. ECG no. on circuit breaker 16 A (B)	35	
Nominal output power	5.2535 W	
Input voltage AC	198264 V ⁴⁾	
Power factor λ	0.57C0.98	
U-OUT (working voltage)	60 V	
Surge capability (L-N)	1 kV	
Surge capability (L/N-Ground)	2 kV	
Mains frequency	0/50/60 Hz	
Protective conductor current	not relevant	
Nominal input voltage	220240 V	
Total harmonic distortion	< 10 % ⁵⁾	
Output current tolerance	±5 %	
Maximum output power	35 W	
Output ripple current (100 Hz)	< 5 % ⁶⁾	
Current set	DALI / NFC	
Networked standby power	<0.18 W ⁷⁾	

¹⁾ Maximum 60 V

^{2) ±5%}

³⁾ t width = 220 μs (measured at 50 % I peak)
4) Permitted voltage range

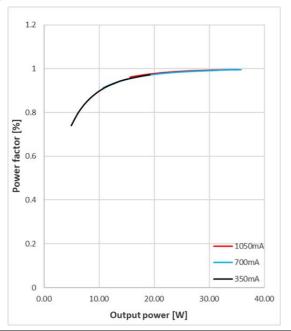
⁵⁾ At full load, 220...240 V, 50 Hz / see graphs

⁶⁾ Ripple average at 100 Hz

⁷⁾ at 230 V, 50 Hz

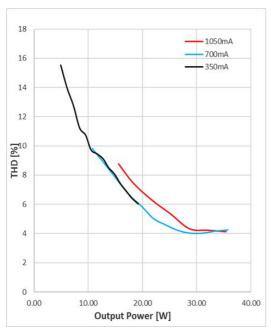
product - technical datasheet

Typical Power Factor v Load



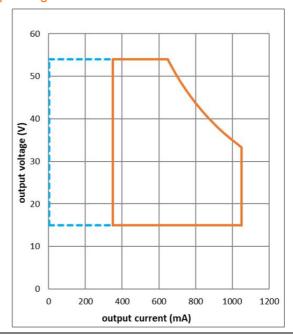
OTI DALI 35 NFC Typical Power Factor vs. Load

Typical THD v Load



OTI DALI 35 NFC Typical THD Vs Load

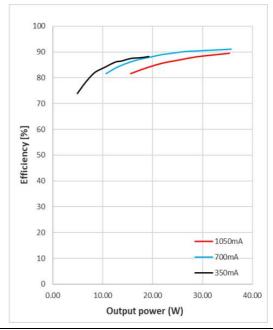
Operating Window



OSRAM

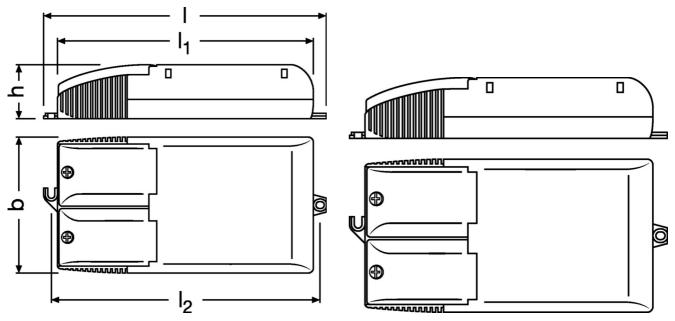
OTI DALI 35 NFC Operating Window

Typical Efficiency v Load 230 V 50 Hz



OTI DALI 35 NFC Typical Efficiency vs. Load

Dimensions & weight



Product weight	180.00 g	
Mounting hole spacing, width	not relevant mm	
Mounting hole spacing, length	163.0 mm	
Wire preparation length, output side	8.09.0 mm	
Wire preparation length, input side	8.09.0 mm	
Cable/wire length, output side	2000 mm	
Cable cross-section, output side	0.21.5 mm ² 1)	
Cable cross-section, input side	0.751.5 mm ² 1)	
Length	171.0 mm	
Height	32.0 mm	

¹⁾ Solid or flexible leads

Colors & materials

Casing material	Plastic

Temperatures & operating conditions

Max.housing temperature in case of fault	110 °C
Maximum temperature at tc test point	75 °C ¹⁾
Ambient temperature range	-20+60 °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 %

OSRAM

product - technical datasheet

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

Encapsulated	No

Capabilities

Max. cable length to lamp/LED module	2.0 m ¹⁾	
Dimming range	1100 %	
Dimming method	Amplitude Modulation	
Dimming interface	DALI-2 / Touch DIM / Touch DIM Sensor	
Suitable for through-wiring	Yes	
Suitable for emergency lighting	Yes	
Short-circuit protection	Automatic reversible	
Overload protection	Automatic reversible	
Overheating protection	Automatic reversible	
Dimmable	Yes	
Suitable for fixtures with prot. class	1/11	
No-load proof	Yes	
Type of connection, input side	Push terminal	
Type of connection, output side	Push terminal	
Constant lumen function	Programmable	
Programming interface	DALI, NFC	

¹⁾ Output wires must be routed as close as possible to each other

OSRAM

product - technical datasheet

Programming

Pay programming	Voc
Box programming	165

Programmable features

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

¹⁾ Acc. DALI part 251

Certificates & standards

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 ETSI EN 300 330 / Acc. to ETSI EN 301 489 - 1 / Acc. to ETSI EN 301 489-3	
Approval marks – approval	CE / UKCA / EL / DALI-2 / EAC	
Type of protection	IP20	

Logistical data

Commodity code	85044083900

OSRAM

product - technical datasheet

Download Data

File		
Certificates	PDF	►OT ENEC 40038447 270224
CAD data 3-dim	Compressed	►OTI DALI NFC I CAD3PDF 140721
CAD data 2-dim	Compressed	►OTI DALI NFC I CAD2PDF 140721
CAD data	Compressed	►OTI DALI NFC I IGS 140721
CAD data	Compressed	►OTI DALI NFC I STEP 140721
Mandatory Publications	PDF	►OTI DALI NFC S I CE 4169161 110222
Mandatory Publications	PDF	►OTI DALI NFC S I UK DoC 4281113 110222
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.



OSRAM

product - technical datasheet

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4062172201810	OTi DALI 35/220-240/1A0 NFC I	Shipping carton box 16 Pieces	366 x 268 x 100 mm	9.81 dm³	316.00 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.

Accessories Optional

Product description	Accessory name	Accessory code
OTi DALI 35/220-240/1A0 NFC I	PRH101 -USB	▶6977078996938
OTi DALI 35/220-240/1A0 NFC I	CPR30 -USB	▶6977078996945

Disclaimer

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