# **OSRAM**

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# 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

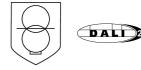
- Integrated cable clamp for luminaire and independent

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



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# 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

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#### Technical data

inventronics

## **Electrical data**

Max. ECG no. on circuit breaker 10 A (B)	20	
Max. ECG no. on circuit breaker 16 A (B)	35	
Maximum output power	35 W	
Nominal output current	3501050 mA <sup>1)</sup>	
Nominal output power	5.2535 W	
Nominal output voltage	1554 V <sup>2)</sup>	
Nominal input voltage	220240 V	
Input voltage AC	198264 V <sup>3)</sup>	
Input voltage DC	176276 V	
Device power loss	not relevant	
Efficiency in full-load	89 % <sup>4)</sup>	
Galvanic isolation DALI/mains	Basic	
Galvanic isolation DALI/output	SELV	
Galvanic isolation primary/secondary	SELV	
Inrush current	17 A <sup>5)</sup>	
Networked standby power	<0.18 W <sup>4)</sup>	
Power factor λ	0.57C0.98	
Mains frequency	0/50/60 Hz	
Surge capability (L-N)	1 kV	
Surge capability (L/N-Ground)	2 kV	
U-OUT (working voltage)	60 V	
Current set	DALI / NFC	
Output current tolerance	±5 %	
Output ripple current (100 Hz)	< 5 % <sup>6)</sup>	
Protective conductor current	not relevant	
Total harmonic distortion	< 10 % <sup>7)</sup>	
Default output current	700 mA	

<sup>1) ±5%</sup> 

<sup>2)</sup> Maximum 60 V

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

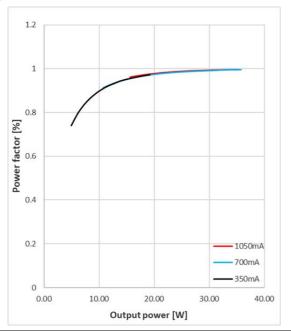
<sup>4)</sup> at 230 V, 50 Hz

<sup>5)</sup>  $t_{width}$  = 220 µs (measured at 50 %  $I_{peak}$ ) 6) Ripple average at 100 Hz

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

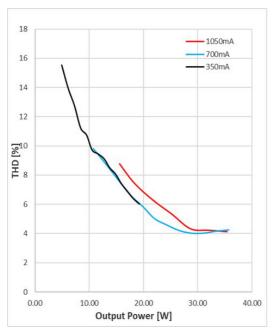
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# Typical Power Factor v Load



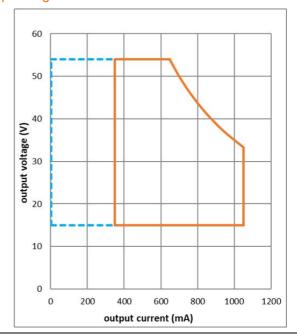
OTI DALI 35 NFC Typical Power Factor vs. Load

# Typical THD v Load



OTI DALI 35 NFC Typical THD Vs Load

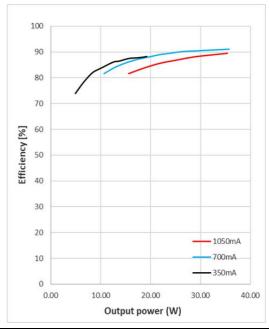
# **Operating Window**



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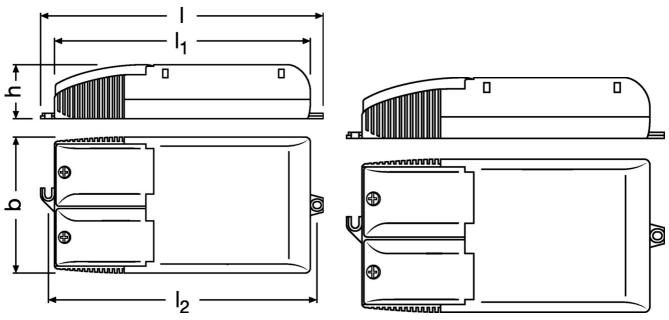
OTI DALI 35 NFC Operating Window

# Typical Efficiency v Load 230 V 50 Hz



OTI DALI 35 NFC Typical Efficiency vs. Load

## **Dimensions & weight**



Product weight	180.00 g	
Length	171.0 mm	
Height	32.0 mm	
Width	83.0 mm	
Cable cross-section, input side	0.751.5 mm <sup>2</sup> 1)	
Cable cross-section, output side	0.21.5 mm <sup>2</sup> 1)	
Cable/wire length, output side	2000 mm	
Mounting hole spacing, length	163.0 mm	
Mounting hole spacing, width	not relevant mm	
Wire preparation length, input side	8.09.0 mm	
Wire preparation length, output side	8.09.0 mm	

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

## Colors & materials

Casing material Plastic
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# Temperatures & operating conditions

Ambient temperature range	-20+60 °C
Max.housing temperature in case of fault	110 °C
Maximum temperature at tc test point	75 °C <sup>1)</sup>
Permitted rel. humidity during operation	585 % <sup>2)</sup>
Temperature range at storage	-40+85 °C

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

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

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## Lifespan

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

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

<sup>1)</sup> Output wires must be routed as close as possible to each other

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## **Programming**

Box programming	Vec
box programming	Yes

# **Programmable features**

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

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

# **Certificates & standards**

Type of protection	IP20	
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	

# Logistical data

Commodity code	85044083900



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# 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.

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### **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



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### **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.