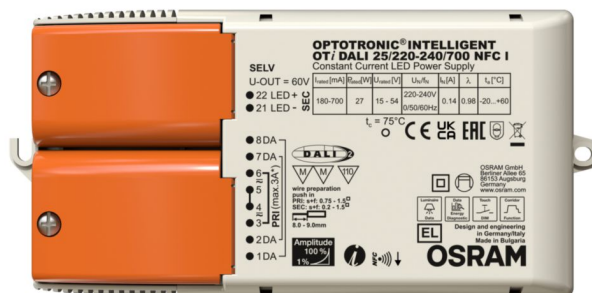# OTi DALI 25/220-240/700 NFC I

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 h
- Type 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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Fri Sep 06 16:40:45 CST 2024

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

Technical data

Electrical data

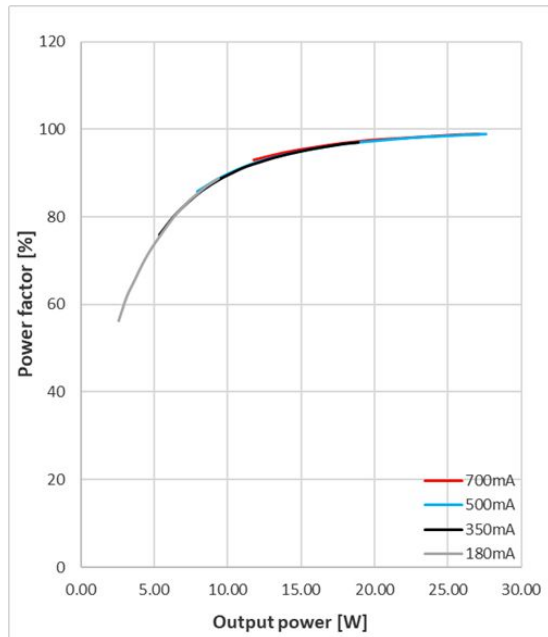|	
Max. ECG no. on circuit breaker 10 A (B)	20
Max. ECG no. on circuit breaker 16 A (B)	35
Maximum output power	27 W
Nominal output current	180…700 mA [1]
Nominal output power	2.7…27 W
Nominal output voltage	15…54 V [2]
Nominal input voltage	220…240 V
Input voltage AC	198…264 V [3]
Input voltage DC	176…276 V
Device power loss	not relevant
Efficiency in full-load	88 % [4]
Galvanic isolation DALI/mains	Basic
Galvanic isolation DALI/output	SELV
Galvanic isolation primary/secondary	SELV
Inrush current	17 A [5]
Networked standby power	<0.18 W [4]
Power factor λ	0.36C…0.97
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 % [6]
Protective conductor current	not relevant
Total harmonic distortion	< 10 % [7]
Default output current	500 mA

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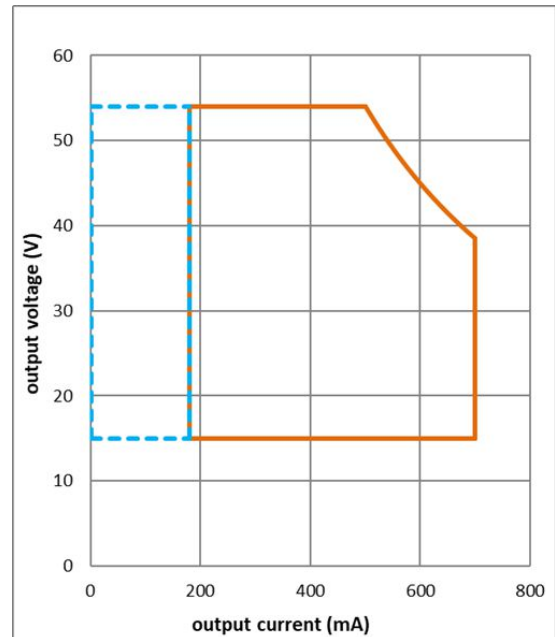6) Ripple average at 100 Hz
7) At full load, 220…240 V, 50 Hz / see graphs

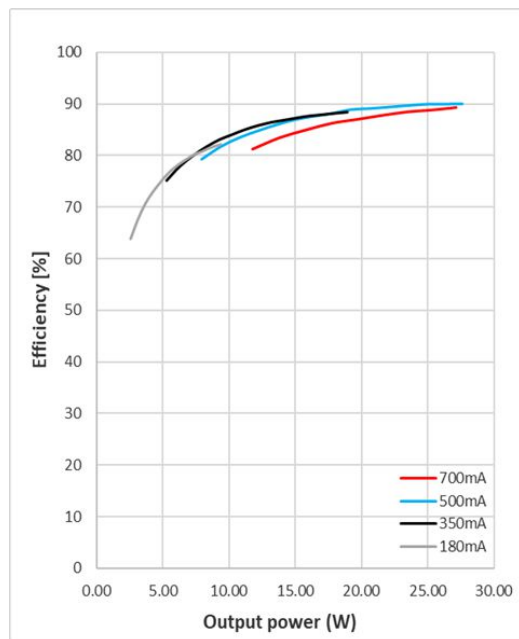## Typical Power Factor v Load

OTI DALI 25 NFC Typical Power Factor vs. Load

Operating Window
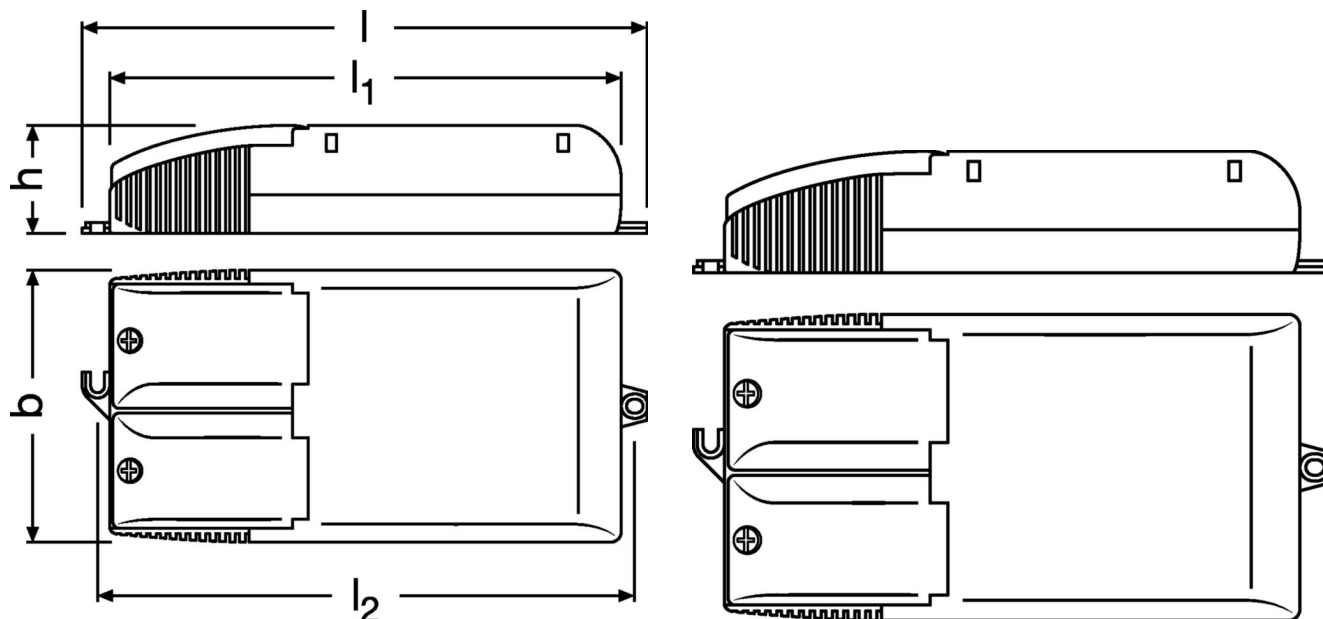

OTI DALI 25 NFC Operating Window

Typical Efficiency v Load 230 V 50 Hz

OTI DALI 25 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	0.75…1.5 mm² [1]
Cable cross-section, output side	0.2…1.5 mm² [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	8.0…9.0 mm
Wire preparation length, output side	8.0…9.0 mm

1) Solid or flexible leads

Colors & materials

Casing material	Plastic

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 [1]
Permitted rel. humidity during operation	5…85 % [2]
Temperature range at storage	-40…+85 °C

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

Encapsulated	No

Capabilities

Max. cable length to lamp/LED module	2.0 m [1]
Number of channels	1
Dimmable	Yes
Dimming interface	DALI-2 / Touch DIM / Touch DIM Sensor
Dimming method	Amplitude Modulation
Dimming range	1…100 %
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	I / II
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

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

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Programming

Box programming	Yes

Programmable features

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

1) 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

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
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
4062172201797	OTi DALI 25/220-240/700 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 25/220-240/700 NFC I	PRH101 -USB	▶6977078996938
OTi DALI 25/220-240/700 NFC I	CPR30 -USB	▶6977078996945

Disclaimer

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