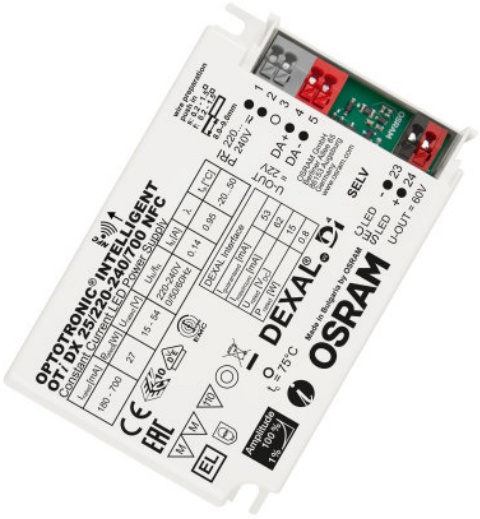
OTI DX 25/220...240/700 NFC

OPTOTRONIC Intelligent – DEXAL | 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 61547
- Lifetime: up to 100,000 h
- Type of protection: IP20

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Product family benefits

- Versatile DALI window driver due to flexible output characteristic
- Integrated DEXAL Bus power supply for sensors and wireless radios
- Simplified luminaire design for wireless lighting control system and sensors
- Locking and unlocking of luminaire/driver data
- Advanced luminaire/driver data (power, energy, operating hours…) for analytics
- D4i certified incl. Parts 250, 251, 252, 253
- Easy and fast output current setting via NFC
- Very high efficiency
- High-quality dimming of 1…100 % by amplitude dimming

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

Areas of application

- DEXAL, easy connection to different partner BMS systems
- Suitable for "Works with OSRAM DEXAL" partner components
- 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)

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Technical data

Electrical data

Nominal input voltage	220…240 V
Mains frequency	0/50/60 Hz
Input voltage AC	198…264 V [1)]
Input voltage DC	176…276 V
Total harmonic distortion	< 10 % [2)]
Power factor λ	0.67C…0.97
Efficiency in full-load	88 % [3)]
Device power loss	-
Inrush current	15 A [4)]
Max. ECG no. on circuit breaker 10 A (B)	18
Max. ECG no. on circuit breaker 10 A (C)	-
Max. ECG no. on circuit breaker 16 A (B)	28
Max. ECG no. on circuit breaker 16 A (C)	-
Max. ECG no. on circuit breaker 25 A (B)	-
Surge capability (L/N-Ground)	2 kV
Surge capability (L-N)	1 kV
Nominal output voltage	15…54 V [5)]
U-OUT (working voltage)	60 V
Nominal output current	180…700 mA [6)]
Default output current	500 mA
Output current tolerance	±3 %
Output ripple current (100 Hz)	< 3 % [7)]
Output PSTLM	≤1
Output SVM	≤0.4
Nominal output power	27 W [8)]
Maximum output power	27 W
Power loss in stand-by mode	0.1 W [9)]
Galvanic isolation primary/secondary	SELV
Current set	DALI / NFC
DEXAL Supply Voltage	15 V
DEXAL Peak Supply Current	60 mA
DEXAL Guaranteed Supply Current	53 mA
Galvanic isolation DALI/mains	SELV
Galvanic isolation DALI/output	SELV
Networked standby power	≤0.10 W [3)]

[1)] Permitted voltage range

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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})

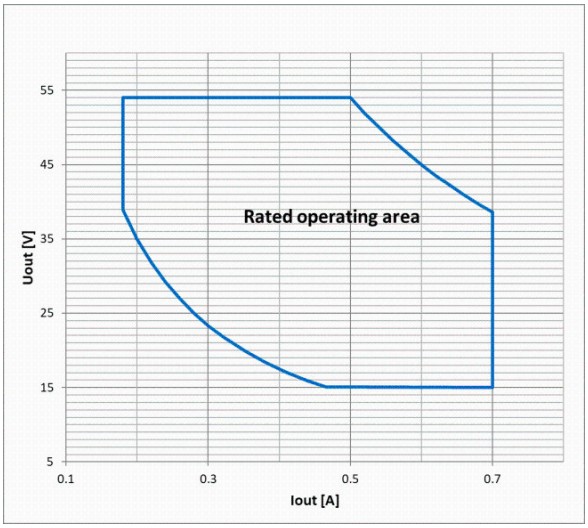
5) Maximum 60 V

6) ±3%

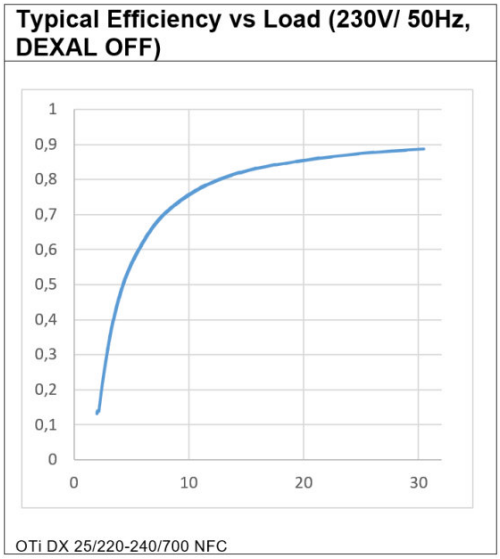
7) Ripple average at 100 Hz

8) Partial load 7...27 W

9) DEXAL"OFF"

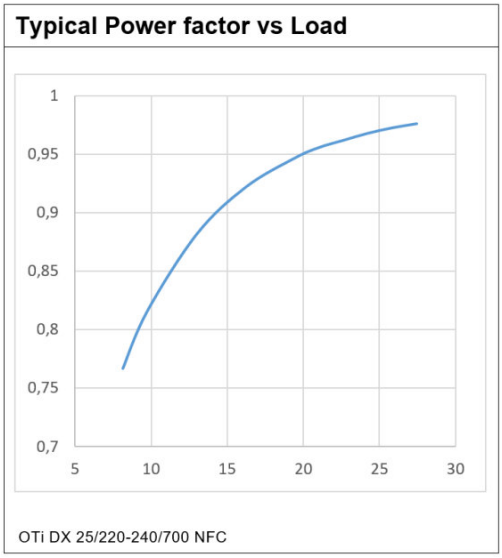


OTI DX DALI 25 NFC Operating window

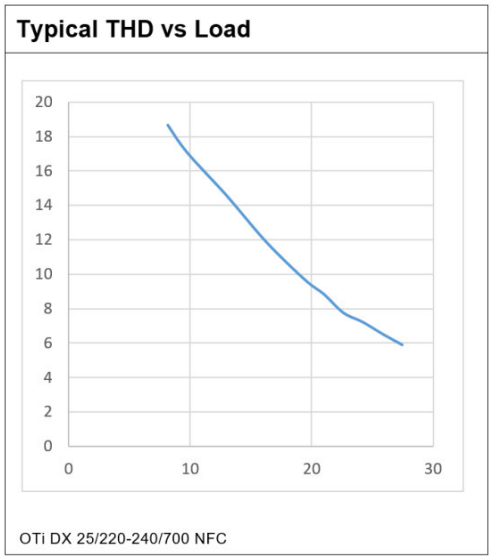


OTi DX 25220-240700 NFC

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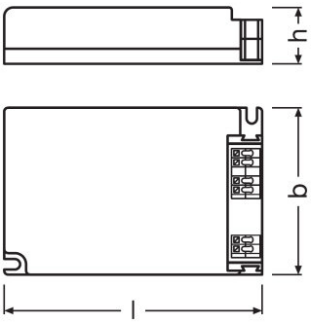


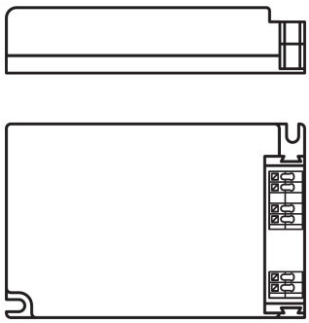
OTi DX 25220-240700 NFC



OTi DX 25220-240700 NFC

Dimensions & weight





Mounting hole spacing, length	94.0 mm
Mounting hole spacing, width	58.0 mm
Product weight	155.00 g
Cable cross-section, input side	0.2…1.5 mm² [1)]
Cable cross-section, output side	0.2…1.5 mm² [1)]
Wire preparation length, input side	8.0…9.0 mm
Wire preparation length, output side	8.0…9.0 mm
Length	103.0 mm
Width	67.0 mm
Height	29.5 mm

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1) Solid or flexible leads

Colors & materials

Casing material	Plastic

Temperatures & operating conditions

Ambient temperature range	-20…+50 °C
Maximum temperature at tc test point	75 °C 1)
Max.housing temperature in case of fault	110 °C
Temperature range at storage	-40…+85 °C
Permitted rel. humidity during operation	5…85 % 2)

1) Maximum at the Tc-point

2) Maximum 56 days/year at 85 %

Lifespan

ECG lifetime	50000 / 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

Capabilities

Dimmable	Yes
Dimming interface	DALI-2 / DEXAL / D4i
Dimming range	1…100 %
Dimming method	Amplitude Modulation
Overheating protection	Automatic reversible
Overload protection	Automatic reversible
Short-circuit protection	Automatic reversible
No-load proof	Yes
Intended for no-load operation	No
Max. cable length to lamp/LED module	2.0 m 1)
Suitable for fixtures with prot. class	I / II
Type of connection, input side	Push terminal
Type of connection, output side	Push terminal
Suitable for through-wiring	Yes with optional cable clamp
Constant lumen function	Programmable
Programming interface	DALI, NFC
Number of channels	1
DALI-2 Energy Data	Yes 2)
DALI-2 Diagnostic Data	Yes 3)

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

2) Acc. DALI part 252

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3) Acc. DALI part 253

Programming

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

Programmable features

Operating Current	Yes
Constant Lumen	Yes
Lamp Operating Time	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	No
Corridor Functionality	No
OEM Key	No

1) Acc. DALI part 251

Certificates & standards

Approval marks – approval	ENEC 10 / VDE / EMC / EL / CE / DALI-2 / CCC / EAC / D4i
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
Protection class	II
Type of protection	IP20

Logistical data

Commodity code	85044083900

Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh)

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Date of Declaration	08-12-2023
Primary Article Identifier	4062172017947
Candidate List Substance 1	Lead
CAS No. of substance 1	7439-92-1
Safe Use Instruction	The identification of the Candidate List substance is sufficient to allow safe use of the article.
Declaration No. in SCIP database	1c96444a-ec99-412f-a42f-74c8212869c0

Additional product information

- The DEXAL interface is polarity sensitive, even if the DEXAL bus power supply in the driver is turned off. Therefore the polarity of all connected drivers should not be mixed.
- For efficiency and standby power measurement, the D4i bus power supply shall be switched off by using Tuner4TRONIC. Refer to www.tuner4tronic.com.

Download Data

	File
	User instruction OPTOTRONIC LED Power Supply
	Brochures Technical application guide DEXAL LED drivers (EN)
	Certificates OTI DX DALI NFC CB DE1 63108 190220
	Certificates OT EMC 40050085 200220
	Certificates OTI DALI DX 25 35 NFC CCC 2020171002003129 071223
	Certificates OTI DALI DX 25 35 NFC CCC 2020171002003130 071223
	Certificates OT ENEC 40038447 260623
	Certificates OT EMC 40044675 031022
	Declarations of conformity OTI DX DALI NFC CE 3770568 040923
	Declarations of conformity OTI DALI DX NFC UK DoC 4281072 040923
	CAD data OTI DX 25 35 NFC IGS 280120
	CAD data OTI DX 25 35 NFC STEP 280120
	CAD Data 2-dim OTI DX 25 35 NFC CAD2PDF 280120

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	CAD data 3-dim OTI DX 25 35 NFC CAD3PDF 280120

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
4062172017947	OTI DX 25/220...240/700 NFC	Shipping carton box 20	218 mm x 158 mm x 155 mm	5.34 dm^3	3237.00 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.

Accessories Optional

Product description	Accessory name	Accessory code
OTI DX 25/220...240/700 NFC	OT CABLE CLAMP B-STYLE	4052899077881
OTI DX 25/220...240/700 NFC	OT CABLE CLAMP B-STYLE TL	4052899948051

Data privacy

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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.

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