OTI DX 35/220…240/400 D NFC L

OPTOTRONIC Intelligent – DEXAL (non-isolated) | Linear constant current LED driver – Dimmable



Product family features

- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Supply voltage: 220…240 V
- Constant Lumen Output (CLO)
- Monitoring of luminaire operating parameters
- Non-isolated drivers

Product family benefits

- Versatile non-isolated DEXAL LED driver up to 75 W 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
- Prepared for DiiA Specification Parts -250, -251, -252 and -253
- Fully programmable via T4T software (NFC, DALI Interface)
- Very high efficiency
- Protection against 4 kV burst and 1.5 kV surge voltage (L-N)
- Wide operating range up to 600 mA

OSRAM DEXAL®

Luminaire Data

Data Energy Diagnostic

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Areas of application

- Linear lighting for office, education, industry, storage areas and retail
- DEXAL, easy connection to different partner BMS systems
- Suitable for "Works with OSRAM DEXAL" partner components
- Suitable for luminaires of protection class I

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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
Input voltage DC	176…276 V
Current set	DALI / NFC / LEDset / Programmable
Total harmonic distortion	< 10 % [1]
Power factor λ	0.45C…0.96 [2]
Efficiency in full-load	90 % [3]
Device power loss	3.8 W
Inrush current	18 A
Max. ECG no. on circuit breaker 10 A (B)	17
Max. ECG no. on circuit breaker 16 A (B)	28
Surge capability (L/N-Ground)	2 kV
Surge capability (L-N)	1.5 kV
Nominal output voltage	54…240 V
U-OUT (working voltage)	< 250 V
Nominal output current	75…400 mA
Default output current	60 mA [4]
Output current tolerance	±5 %
Output ripple current (100 Hz)	< 4 %
Output PSTLM	≤1
Output SVM	≤0.4
Nominal output power	4…38 W
Maximum output power	38 W
Galvanic isolation	Non isolated
Power loss in stand-by mode	<0.25 W [5]
DEXAL Supply Voltage	15 V
DEXAL Peak Supply Current	60 mA
DEXAL Guaranteed Supply Current	53 mA

[1] At full load

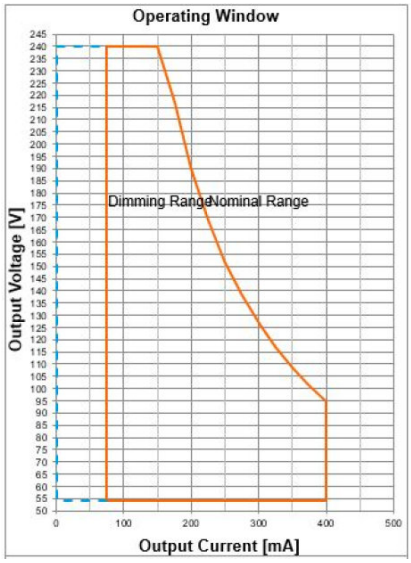
[2] Full load at 230 V

[3] at 230 V, 50 Hz

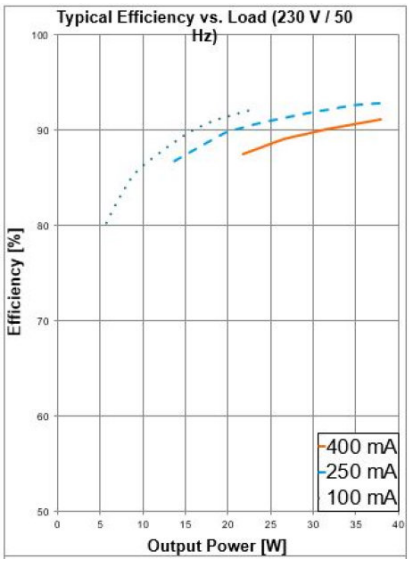
[4] LEDset deactivated

[5] DEXAL"OFF"

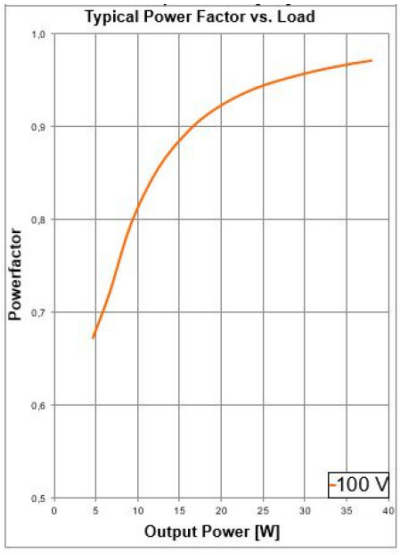
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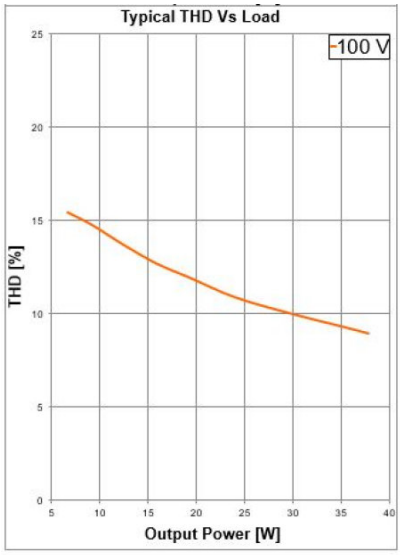
OTI DX 35400 D NFC L Operating window



OTI DX 35400 D NFC L Typical Efficiency vs. Load (230 V 50 Hz)

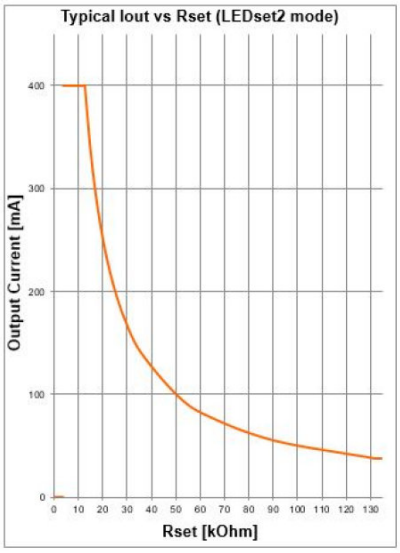


OTI DX 35400 D NFC L Typical Power Factor vs. Load



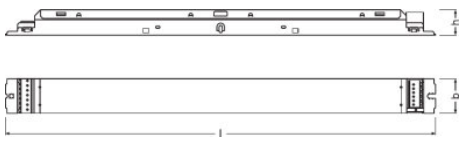
OTI DX 35400 D NFC L Typical THD Vs Load

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OTI DX 35400 D NFC L Typical Lout vs Rset (LEDset2 mode)

Dimensions & weight



Mounting hole spacing, length	350.0 mm
Product weight	227.40 g
Cable cross-section, input side	0.5…1.5 mm² [1]
Cable cross-section, output side	0.5…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	360.0 mm
Width	30.0 mm
Height	21.0 mm

[1] Solid or flexible leads

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Colors & materials

Casing material	Metal

Temperatures & operating conditions

Ambient temperature range	-25…+60 °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] At maximum T_c = 75°C / 10% failure rate / At T_c = 65°C / 10% failure rate

Expected Lifetime

Product name				
OTI DX 35/220…240/400 D NFC L	ECG ambient temperature [ta]	60	50	-
	Temperature at tc-point [°C]	75	65	-
	Lifetime [h]	50000 [1]	100000 [1]	-

[1] Max. 10% failure rate at tc max and input voltage 230 V_{AC}

Additional product data

Encapsulated	No

Capabilities

Programming interface	DEXAL, NFC, LEDset
Dimmable	Yes
Dimming interface	DALI-2 / DEXAL
Dimming range	1…100 %
Dimming method	Full analogue dimming [1]
Overheating protection	Automatic reversible
Overload protection	Non-reversible
Short-circuit protection	Automatic reversible

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No-load proof	Yes
Intended for no-load operation	No
Max. cable length to lamp/LED module	2.0 m [2]
Suitable for fixtures with prot. class	I
Suitable for emergency lighting	Yes
Type of connection, input side	Push terminal
Type of connection, output side	Push terminal
Constant lumen function	Programmable
Control interface	DEXAL
Number of channels	1
DALI-2 Energy Data	Yes
DALI-2 Diagnostic Data	Yes

[1] Selectable by Tuner4TRONIC

[2] Output wires must be routed as close as possible to each other

Programming

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

Programmable features

Operating Current	Yes
Constant Lumen	Yes
Lamp Operating Time	Yes
Driver Guard	Yes
DEXAL Power Supply Unit	Yes
Emergency Mode	Yes
DALI-2 Luminaire Data	Yes
Soft Switch Off	Yes
Dim to Dark	Yes
TouchDIM + Sensor	Yes

Certificates & standards

Approval marks – approval	CE / EL / VDE-ENEC / VDE-EMC / EAC / CCC / BIS / RCM
Standards	Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 62384/Acc. to EN 61000-3-2/Acc. to EN 61000-3-3/Acc. to EN 61547
Type of protection	IP20

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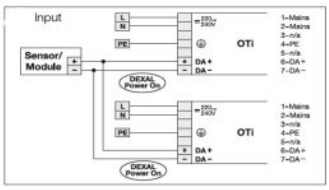
Logistical data

Commodity code	85044083900

Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh)	
Date of Declaration	20-11-2023
Primary Article Identifier	4052899590380
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	0510b763-eb43-437e-9b94-83ead9143051

Wiring Diagram



Wiring diagram OTI DX D NFC L

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.

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Download Data

	File
	User instruction OPTOTRONIC LED Power Supply
	Brochures Technical application guide DEXAL LED drivers (EN)
	Certificates OT EMC 40050085 200220
	Certificates OT ENEC 40038085 010322
	Certificates OT EMC 40044675 031022
	Declarations of conformity OTi DX D NFC L UK DoC 4281283 080321
	Declarations of conformity OTI DX D NFC L CE 3704710 020921
	CAD data OTI DX D NFC L IGS 281119
	CAD data OTI DX D NFC L STEP 281119
	CAD Data 2-dim OTI DX D NFC L CAD2PDF 281119
	CAD data 3-dim OTI DX D NFC L CAD3PDF 281119

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

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Logistical Data

4052899590380	OTI DX 35/220…240/400 D NFC L	Shipping carton box 20	385 mm x 160 mm x 100 mm	6.16 dm^3	4719.00 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

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