

OTI DX 75/220...240/600 D NFC L

OPTOTRONIC Intelligent | – DEXAL (non-isolated)



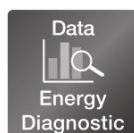
Areas of application

- 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

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®



Product datasheet

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

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	> 0.95 ²⁾
ECG efficiency	93 % ³⁾
Device power loss	5.25 W
Power loss in stand-by mode	<0.25 W ⁴⁾
Inrush current	27 A ⁵⁾
Max. ECG no. on circuit breaker 10 A (B)	15
Max. ECG no. on circuit breaker 16 A (B)	24
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	120...600 mA
Default output current	60 mA ⁶⁾
Output current tolerance	±5 %
Output ripple current (100 Hz)	< 4 %
Nominal output power	6.5...75 W
Galvanic isolation	Non isolated
DEXAL Supply Voltage	15 V
DEXAL Peak Supply Current	60 mA
DEXAL Guaranteed Supply Current	53 mA

¹⁾ At full load

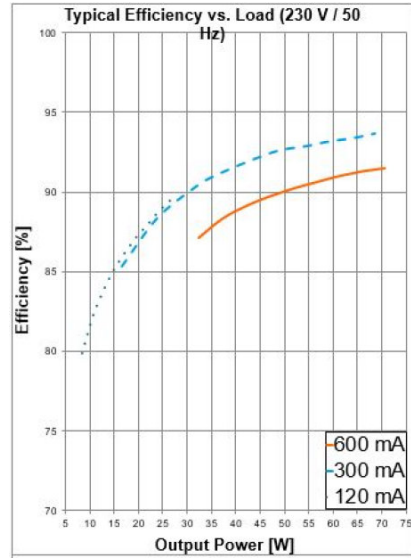
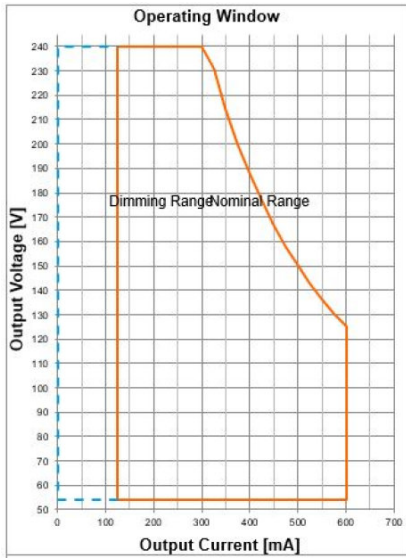
²⁾ Full load at 230 V

³⁾ At full load and 230 V

⁴⁾ DEXAL"OFF"

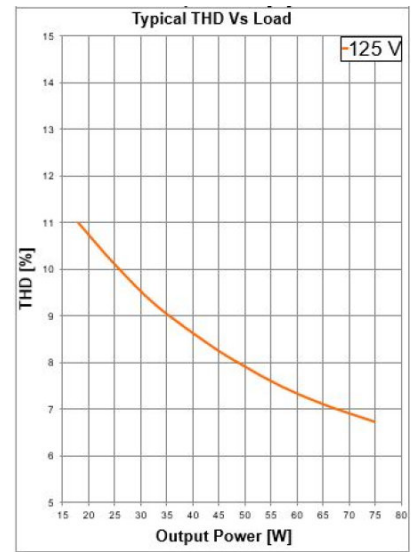
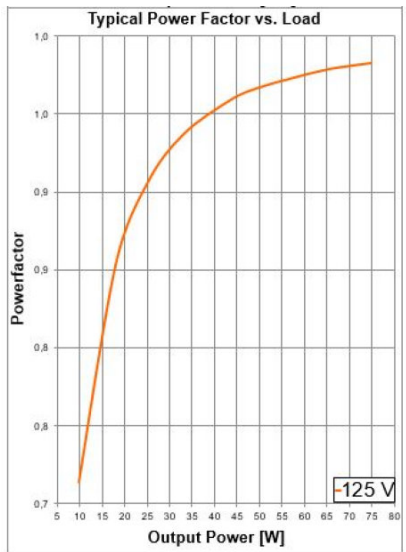
⁵⁾ $t_{width} = 200 \mu s$ (measured at 50 % I_{peak})

⁶⁾ LEDset deactivated



Operating Window

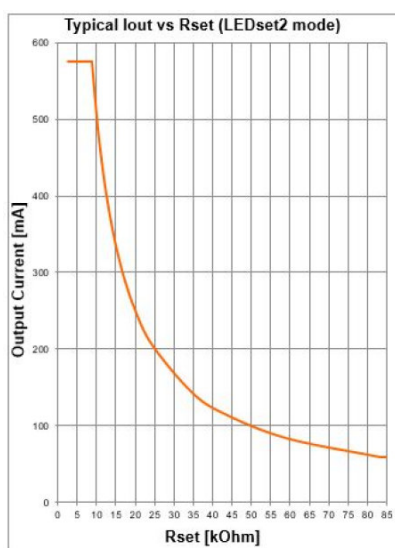
Typical Efficiency v Load 230 V 50 Hz



Typical Power Factor v Load

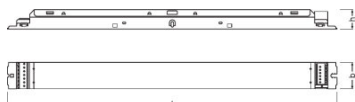
Typical THD v Load

Product datasheet



Typical Iout v Rset LEDset2 mode

Dimensions & weight



Mounting hole spacing, length	350.0 mm
Product weight	243.00 g
Cable cross-section, input side	0.5...1.5 mm ² ¹⁾
Cable cross-section, output side	0.5...1.5 mm ² 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

Colors & materials

Casing material	Metal
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Temperatures & operating conditions

Ambient temperature range	-25...+55 °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 T_c-point

²⁾ Maximum 56 days/year at 85 %

Lifespan

ECG lifetime	50000 / 100000 h ¹⁾
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¹⁾ At maximum T_c = 75°C / 10% failure rate / At T_c = 65°C / 10% failure rate

Expected Lifetime

Product name				
OTI DX 75/220...240/600 D NFC L	ECG ambient temperature [ta]	55	45	-
	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
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Capabilities

Programming interface	DALI, NFC, LEDset
Dimmable	Yes
Dimming interface	DALI / DEXAL
Dimming range	1...100 %
Dimming method	Analog and PWM dimming ¹⁾
Overheating protection	Automatic reversible
Overload protection	Non-reversible
Short-circuit protection	Yes

Product datasheet

No-load proof	Yes
Max. cable length to lamp/LED module	2.0 m
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
Number of channels	1

¹⁾ Selectable by Tuner4TRONIC

Programming

Tuner4TRONIC	Yes
Tuner4TRONIC Field App	No
Programming device	DALI / NFC

Programmable features

Operating Current	Yes
Tuning Factor	Yes
Constant Lumen	Yes
Lamp Operating Time	Yes
Driver Guard	Yes
DALI Settings	Yes
DEXAL Power Supply Unit	Yes
Emergency Mode	Yes
DALI-2 Luminaire Data	Yes
Configuration Lock	Yes
Soft Switch Off	Yes
Dim to Dark	Yes
TouchDIM + Sensor	No
Corridor Functionality	No

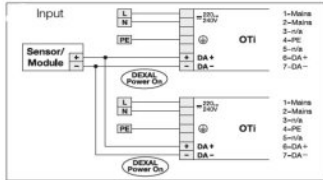
Certificates & standards

Approval marks – approval	CE / VDE / ENEC 10 / VDE-EMC / RCM / CCC / EAC / BIS / EL
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

Logistical data

Commodity code	850440829000
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Wiring Diagram










Wiring diagram



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.

Download Data

File	
	User instruction OPTOTRONIC LED Power Supply
	Product Datasheet Product datasheet OTI DX 35
	Brochures Technical application guide DEXAL LED drivers (EN)
	Certificates OT EMC 40050085 200220
	Certificates OT ENEC 40038085 200220
	Certificates OT EMC 40044675 170420
	Declarations of conformity EU Declaration of Conformity 3704710

Product datasheet

	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

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899590403	OTI DX 75/220...240/600 D NFC L	Shipping carton box 20	385 mm x 160 mm x 100 mm	6.16 dm ³	5031.00 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 the Tuner4TRONIC 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.