The trusted value of OSRAM Digital Systems continues with Inventronics Global - where experience meets innovation.

OTI DX 50/220-240/1A4 NFC L

OPTOTRONIC Intelligent – DEXAL (SELV) | 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
- SELV driver

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Product family benefits

- D4i certified SELV DX LED driver up to 80 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
- Following DiiA Specification Parts -250, -251, -252 and -253
- Fully programmable via T4T software (NFC, DALI Interface)
- Very high efficiency
- Wide operating range up to 2100 mA

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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 luminaires of protection class I

Technical data

Electrical data

Nominal input voltage	220240 V
Mains frequency	50/60 Hz
Input voltage AC	198264 V
Input voltage DC	176276 V
Total harmonic distortion	< 10 %
Power factor λ	> 0.95
Efficiency in full-load	90 %
Device power loss	6.0 W
Networked standby power	<0.20 W ¹⁾
Inrush current	28.6 mA
Max. ECG no. on circuit breaker 10 A (B)	14
Max. ECG no. on circuit breaker 16 A (B)	22
Surge capability (L-N)	1 kV
Surge capability (L/N-Ground)	2 kV
Protective conductor current	<0.5 mA
Nominal output voltage	1554 V
U-OUT (working voltage)	1554 V
Nominal output current	4001400 mA
Default output current	400 mA
Output current tolerance	±3 %
Output ripple current (100 Hz)	< ±3 %
Output PSTLM	<1
Output SVM	<0.4
Nominal output power	1254 W
Maximum output power	54 W
Galvanic isolation primary/secondary	SELV
DEXAL Supply Voltage	15 V
DEXAL Peak Supply Current	62 mA
DEXAL Guaranteed Supply Current	53 mA

1) DEXAL PSU disabled

Dimensions & weight

Product weight	260.00 g	
Length	360.0 mm	
Width	30.0 mm	
Height	21.0 mm	
Mounting hole spacing, length	350.0 mm	
Cable cross-section, input side	0.51.5 mm²	
Cable cross-section, output side	0.51.5 mm²	
Wire preparation length, input side	8.09.0 mm	
Wire preparation length, output side	8.09.0 mm	

Colors & materials

Casing material	Metal

Temperatures & operating conditions

Ambient temperature range	-25+50 °C
Maximum temperature at tc test point	75 °C
Max.housing temperature in case of fault	110 °C
Temperature range at storage	-40+85 °C
Permitted rel. humidity during operation	585 % ¹⁾

1) Maximum 56 days/year at 85 %

Product - technical datasheet

Lifespan	
ECG lifetime	100000 h
Additional product data	
Encapsulated	No
Capabilities	
Programming interface	DEXAL, NFC
Dimmable	Yes
Dimming interface	DALI / Corridor
Dimming range	1100 %
Dimming method	Analog
DALI-2 Diagnostic Data	Yes
DALI-2 Energy Data	Yes
Constant lumen function	Yes
Max. cable length to lamp/LED module	2.0 m ¹⁾
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
Overheating protection	Automatic reversible
Overload protection	Automatic reversible
Short-circuit protection	Automatic reversible
Intended for no-load operation	No
No-load proof	Yes

1) 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

DALI Settings	Yes
DALI-2 Luminaire Data	Yes
Corridor Functionality	Yes
Dim to Dark	Yes
Soft Switch Off	Yes
Tuning Factor	Yes
Configuration Lock	Yes
Driver Guard	Yes
Emergency Mode	Yes

Certificates & standards

Approval marks – approval	CE / EL / ENEC / CCC / BIS / RCM
Standards	IEC 61347-1 / IEC 61347-2-13 / IEC 62384 / IEC 62386 / IEC 61000-3-2 / IEC 61000-3-3 / IEC 61547
Type of protection	NONE

Logistical data

Commodity code 8	85044083900

Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh)		
Date of Declaration	26-06-2025	
Primary Article Identifier	4062172372916 6937186111951	
Declaration No. in SCIP database In work		
SCIP_STATUS	In work	
SCIP_ID		

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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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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		
Certificates	PDF	►OT ENEC 40038085 230824
Mandatory Publications	PDF	►OTi DX NFC L CE 4452520 01 080125
Mandatory Publications	PDF	►OTi DX NFC L UK DoC 4506595 200923
User instruction	PDF	►UI OTI DX NFC L

Product - technical datasheet

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4062172372916 OSRAM	OTI DX 50/220-240/1A4 NFC L	Shipping carton box 20 Pieces	385 x 160 x 100 mm	6.16 dm³	268.70 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

Disclaimer

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