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## 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

### 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

## 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

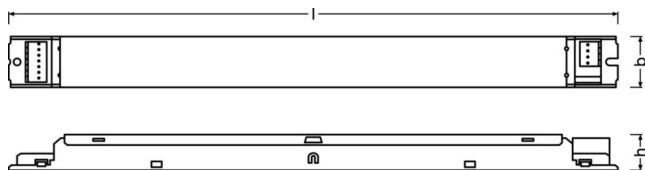
## Technical data

### Electrical data

|                                          |                       |
|------------------------------------------|-----------------------|
| Nominal input voltage                    | 220...240 V           |
| Mains frequency                          | 50/60 Hz              |
| Input voltage AC                         | 198...264 V           |
| Input voltage DC                         | 176...276 V           |
| Total harmonic distortion                | < 10 %                |
| Power factor $\lambda$                   | > 0.95                |
| Efficiency in full-load                  | 90 %                  |
| Device power loss                        | 6.0 W                 |
| Networked standby power                  | <0.20 W <sup>1)</sup> |
| 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                   | 15...54 V             |
| U-OUT (working voltage)                  | 15...54 V             |
| Nominal output current                   | 400...1400 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                     | 12...54 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      | 0.5...1.5 mm <sup>2</sup> |
| Cable cross-section, output side     | 0.5...1.5 mm <sup>2</sup> |
| Wire preparation length, input side  | 8.0...9.0 mm              |
| Wire preparation length, output side | 8.0...9.0 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 | 5...85 % <sup>1)</sup> |

1) Maximum 56 days/year at 85 %

## Lifespan

|              |          |
|--------------|----------|
| ECG lifetime | 100000 h |
|--------------|----------|

## Additional product data

|              |    |
|--------------|----|
| Encapsulated | No |
|--------------|----|

## Capabilities

|                                        |                      |
|----------------------------------------|----------------------|
| Programming interface                  | DEXAL, NFC           |
| Dimmable                               | Yes                  |
| Dimming interface                      | DALI / Corridor      |
| Dimming range                          | 1...100 %            |
| 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 <sup>1)</sup>  |
| 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 | 85044083900 |
|----------------|-------------|

## Environmental information

| Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH) |                               |
|-----------------------------------------------------------------------|-------------------------------|
| Date of Declaration                                                   | 29-10-2025                    |
| Primary Article Identifier                                            | 4062172372916   6937186111951 |
| Declaration No. in SCIP database                                      | In work                       |
| SCIP_STATUS                                                           | In work                       |
| SCIP_ID                                                               |                               |

## 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.

## 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](http://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                    |

## Logistical Data

| Product code                  | Product description            | Packaging unit<br>(Pieces/Unit)  | Dimensions (length<br>x width x height) | Volume               | Gross weight |
|-------------------------------|--------------------------------|----------------------------------|-----------------------------------------|----------------------|--------------|
| 4062172372916<br>OSRAM        | OTI DX 50/220-240/1A4<br>NFC L | Shipping carton box<br>20 Pieces | 385 x 160 x 100 mm                      | 6.16 dm <sup>3</sup> | 268.70 g     |
| 6937186111951<br>INVENTRONICS | OTI DX 50/220-240/1A4<br>NFC L | Shipping carton box<br>20 Pieces | 385 x 160 x 100 mm                      | 6.16 dm <sup>3</sup> | 268.40 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.