

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

## OTI DX 75/220-240/600 D NFC L

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



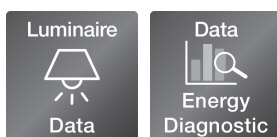
### Product family features

- 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
- D4i certified
- 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®



Specifications are subject to changes without notice.

[www.inventronicsglobal.com](http://www.inventronicsglobal.com)

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[support@inventronicsglobal.com](mailto:support@inventronicsglobal.com)

### 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                          | 0/50/60 Hz                 |
| Input voltage AC                         | 198...264 V                |
| Input voltage DC                         | 176...276 V                |
| Nominal input current at 230 V           | 0.36 A                     |
| Total harmonic distortion                | < 10 % <sup>1)</sup>       |
| Power factor $\lambda$                   | 0.46C...0.98 <sup>2)</sup> |
| Efficiency in full-load                  | 93 % <sup>3)</sup>         |
| Device power loss                        | 5.25 W                     |
| Networked standby power                  | <0.25 W <sup>4)</sup>      |
| Inrush current                           | 27 A <sup>5)</sup>         |
| Max. ECG no. on circuit breaker 10 A (B) | 15                         |
| Max. ECG no. on circuit breaker 16 A (B) | 24                         |
| Surge capability (L-N)                   | 1.5 kV                     |
| Surge capability (L/N-Ground)            | 2 kV                       |
| Protective conductor current             | 0.28 mA                    |
| Nominal output voltage                   | 54...240 V                 |
| U-OUT (working voltage)                  | < 250 V                    |
| Nominal output current                   | 120...600 mA               |
| Default output current                   | 60 mA <sup>6)</sup>        |
| Output current tolerance                 | ±5 %                       |
| Output ripple current (100 Hz)           | < 4 %                      |
| Output PSTLM                             | ≤1                         |
| Output SVM                               | ≤0.4                       |
| Output current LEDset open               | 60 mA                      |
| Output current LEDset shorted            | 120 mA                     |
| Nominal output power                     | 6.5...75 W                 |
| Maximum output power                     | 75 W                       |
| 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

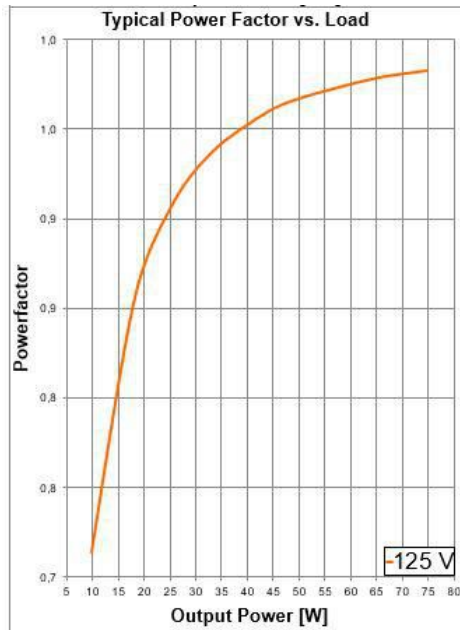
3) at 230 V, 50 Hz

4) DEXAL PSU disabled

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

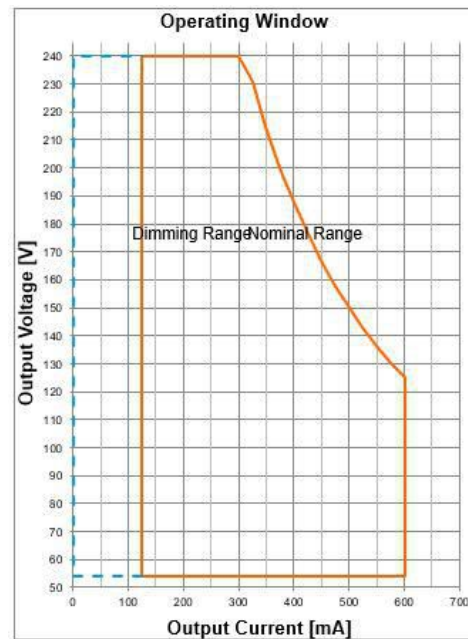
6) LEDset deactivated

### Typical Power Factor v Load



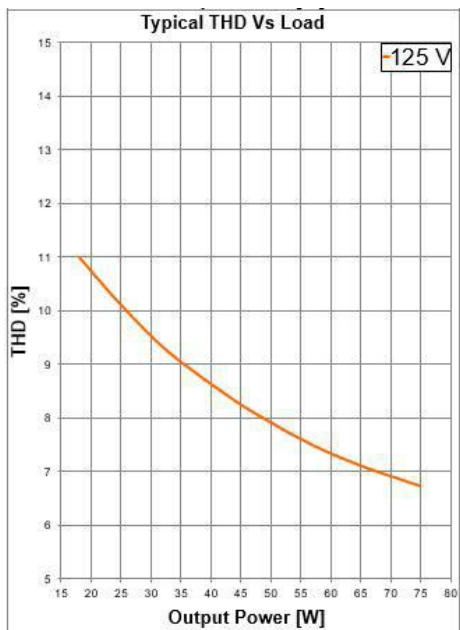
OTI DX 75/600 D NFC L Typical Power Factor vs. Load

### Operating Window



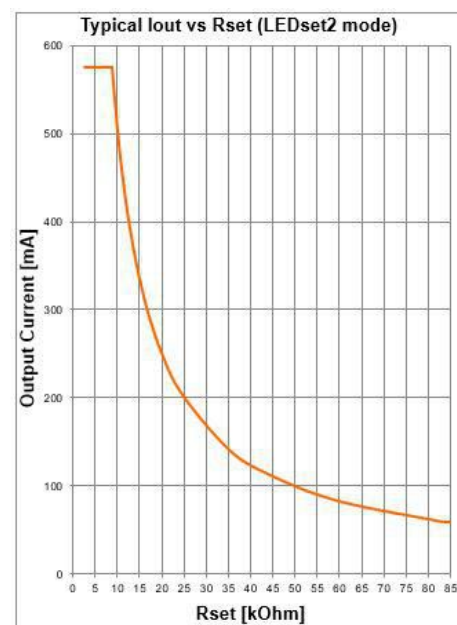
OTI DX 75/600 D NFC L Operating Window

### Typical THD v Load



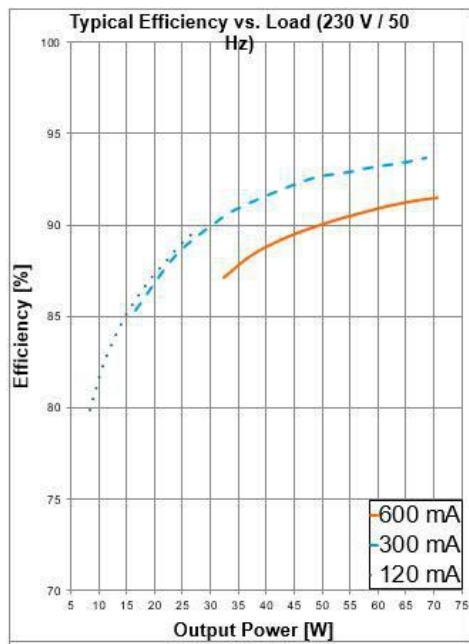
OTI DX 75/600 D NFC L Typical THD Vs Load

### Typical Iout v Rset LEDset2 mode



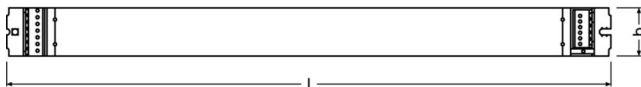
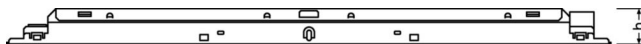
OTI DX 75/600 D NFC L Typical Iout vs Rset (LEDset2 mode)

## Typical Efficiency v Load 230 V 50 Hz



OTI DX 75/600 D NFC L Typical Efficiency vs. Load (230 V / 50 Hz)

## Dimensions & weight



|                                             |                              |
|---------------------------------------------|------------------------------|
| <b>Product weight</b>                       | 243.00 g                     |
| <b>Length</b>                               | 360.0 mm                     |
| <b>Width</b>                                | 30.0 mm                      |
| <b>Height</b>                               | 21.0 mm                      |
| <b>Mounting hole spacing, length</b>        | 350.0 mm                     |
| <b>Cable cross-section, input side</b>      | 0.5...1.5 mm <sup>2 1)</sup> |
| <b>Cable cross-section, output side</b>     | 0.5...1.5 mm <sup>2 1)</sup> |
| <b>Wire preparation length, input side</b>  | 8.0...9.0 mm                 |
| <b>Wire preparation length, output side</b> | 8.0...9.0 mm                 |
| <b>Cable/wire length, output side</b>       | 2000 mm                      |

1) Solid or flexible leads

## Colors & materials

|                        |       |
|------------------------|-------|
| <b>Casing material</b> | Metal |
|------------------------|-------|

## Temperatures & operating conditions

|                                                 |                        |
|-------------------------------------------------|------------------------|
| <b>Ambient temperature range</b>                | -25...+55 °C           |
| <b>Maximum temperature at tc test point</b>     | 75 °C <sup>1)</sup>    |
| <b>Max.housing temperature in case of fault</b> | 110 °C                 |
| <b>Temperature range at storage</b>             | -40...+85 °C           |
| <b>Permitted rel. humidity during operation</b> | 5...85 % <sup>2)</sup> |

1) Maximum at the Tc-point

2) Maximum 56 days/year at 85 %

## 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 | 100000 |  |

## Lifespan

|              |                                  |
|--------------|----------------------------------|
| ECG lifetime | 50000 h / 100000 h <sup>1)</sup> |
|--------------|----------------------------------|

1) At maximum  $T_c = 75^\circ\text{C}$  / 10% failure rate / At  $T_c = 65^\circ\text{C}$  / 10% failure rate

## Additional product data

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

## Capabilities

|                                        |                                     |
|----------------------------------------|-------------------------------------|
| Programming interface                  | DEXAL, NFC, LEDset                  |
| Control interface                      | DEXAL                               |
| Dimmable                               | Yes                                 |
| Dimming interface                      | DALI-2 / DEXAL / Corridor           |
| Dimming range                          | 1...100 %                           |
| Dimming method                         | Full analogue dimming <sup>1)</sup> |
| DALI-2 Diagnostic Data                 | Yes                                 |
| DALI-2 Energy Data                     | Yes                                 |
| Constant lumen function                | Programmable                        |
| Max. cable length to lamp/LED module   | 2.0 m <sup>2)</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                    | Non-reversible                      |
| Short-circuit protection               | Automatic reversible                |
| Intended for no-load operation         | No                                  |
| No-load proof                          | 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**

|                       |     |
|-----------------------|-----|
| DALI-2 Luminaire Data | Yes |
| Dim to Dark           | Yes |
| Soft Switch Off       | Yes |
| Tuning Factor         | Yes |
| Driver Guard          | Yes |
| Emergency Mode        | Yes |

**Certificates & standards**

|                           |                                                                                |
|---------------------------|--------------------------------------------------------------------------------|
| Approval marks – approval | CE / EL / VDE-ENEC / VDE-EMC / EAC / CCC / BIS / RCM / D4i                     |
| Standards                 | EN 61347-1 / EN 61347-2-13 / EN 62384 / EN 61000-3-2 / EN 61000-3-3 / EN 61547 |
| Type of protection        | IP20                                                                           |

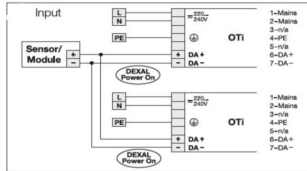
**Logistical data**

|                |             |
|----------------|-------------|
| Commodity code | 85044083900 |
|----------------|-------------|

**Environmental information**

| Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH) |                               |
|-----------------------------------------------------------------------|-------------------------------|
| Date of Declaration                                                   | 27-08-2025                    |
| Primary Article Identifier                                            | 4052899590403   6937186111876 |
| Declaration No. in SCIP database                                      | In work                       |
| SCIP_STATUS                                                           | In work                       |
| SCIP_ID                                                               |                               |

## Wiring Diagram



Wiring diagram OTI DX D NFC L

### 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                 |
| CAD data 3-dim         | Compressed | ▶ OTI DX D NFC L CAD3PDF 281119           |
| CAD data 2-dim         | Compressed | ▶ OTI DX D NFC L CAD2PDF 281119           |
| CAD data               | Compressed | ▶ OTI DX D NFC L IGS 281119               |
| CAD data               | Compressed | ▶ OTI DX D NFC L STEP 281119              |
| Mandatory Publications | PDF        | ▶ OTI DX D NFC L UK DoC 4281283 01 080923 |
| Mandatory Publications | PDF        | ▶ OTI DX D NFC L CE 3704710 06 200125     |
| User instruction       | PDF        | ▶ UI OTI DX D NFC L                       |

## Logistical Data

| Product code           | Product description              | Packaging unit<br>(Pieces/Unit)  | Dimensions (length<br>x width x height) | Volume               | Gross weight |
|------------------------|----------------------------------|----------------------------------|-----------------------------------------|----------------------|--------------|
| 4052899590403<br>OSRAM | OTI DX 75/220-240/600<br>D NFC L | Shipping carton box<br>20 Pieces | 385 x 160 x 100 mm                      | 6.16 dm <sup>3</sup> | 253.15 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 Inventronics driver can be configured using the Tuner4TRONIC software. This requires registering on [www.inventronicsglobal.com/ds](http://www.inventronicsglobal.com/ds) 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, Inventronics can read out operating data from devices for maintenance and service purposes even when a password key has been assigned. In individual cases, Inventronics 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.

## Accessories Optional

| Product description           | Accessory name | Accessory code  |
|-------------------------------|----------------|-----------------|
| OTI DX 75/220-240/600 D NFC L | PRH101 -USB    | ▶ 6977078996938 |
| OTI DX 75/220-240/600 D NFC L | PRH101 -USB    | ▶ 6937186112354 |
| OTI DX 75/220-240/600 D NFC L | CPR30+         | ▶ 6977078996945 |
| OTI DX 75/220-240/600 D NFC L | CPR30+         | ▶ 6937186112378 |

## Disclaimer

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