

## OTI DX 100/220...240/700 D NFC IND L

OPTOTRONIC Intelligent Industry | – DEXAL



### Areas of application

- Linear and area lighting
- Industry lighting
- Suitable for luminaires of protection class I

### Product family benefits

- Versatile non-isolated DEXAL LED driver up to 150 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)
- Lifetime: up to 100,000 h (temperature at  $T_c = 75\text{ °C}$ , max. 10 % failure rate)
- High light quality: 1...100% amplitude dimming and <1% output ripple current
- Wide operating temperature range: -40...+65 °C
- High surge protection: up to 4 kV (L-N) / 4 kV (L/N-PE)
- Integrated inrush current limiter
- Very high efficiency (up to 96%)



## Product datasheet

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### Product family features

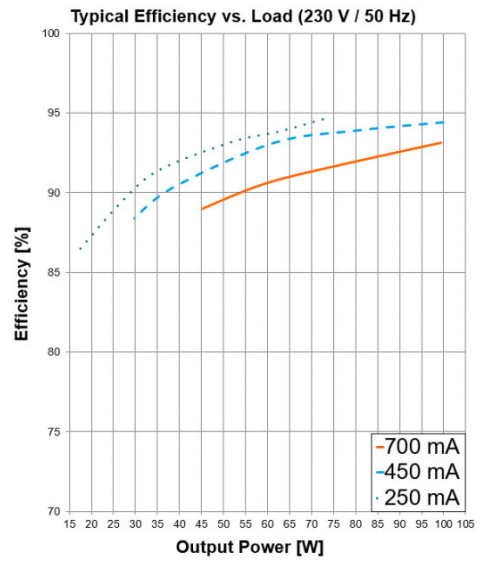
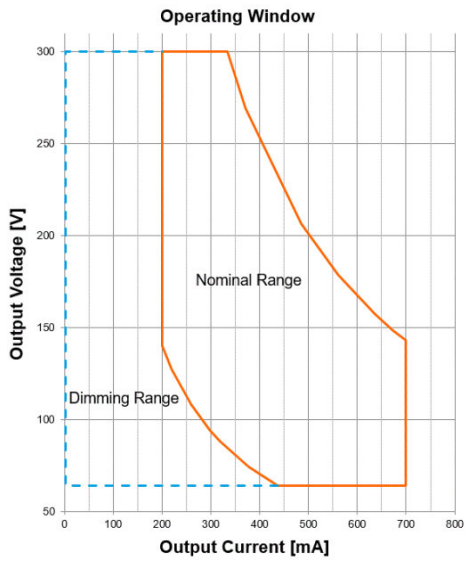
- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Versatile scope of application due to output power range of up to 150 W
- Monitoring of luminaire operating parameters
- Supply voltage: 220...240 V
- Available with output current range: up to 850 mA
- Constant Lumen Output (CLO)
- Integrated customizable thermal management (Driver Guard)
- Non-isolated drivers

## Technical data

### Electrical data

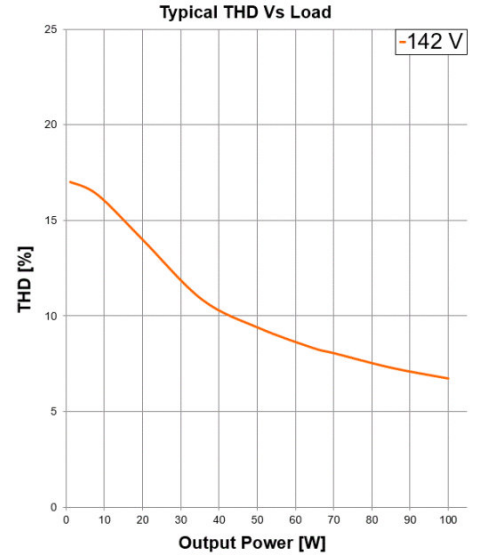
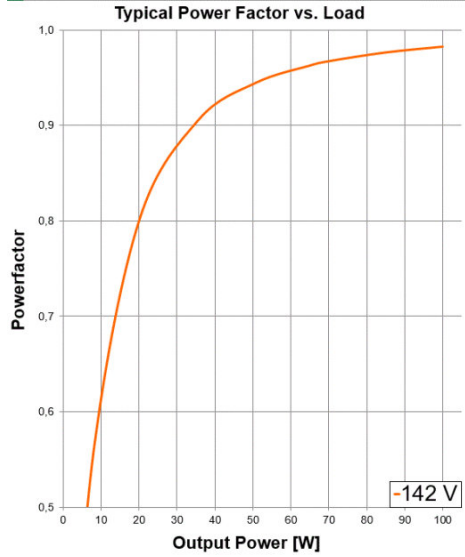
|  |                      |
|--|----------------------|
| Nominal input voltage                    | 220...240 V          |
| Mains frequency                          | 0/50/60 Hz           |
| Input voltage AC                         | 198...264 V          |
| Input voltage DC                         | 176...276 V          |
| Current set                              | NFC / LEDset         |
| Total harmonic distortion                | < 10 %               |
| Power factor $\lambda$                   | > 0.95               |
| ECG efficiency                           | up to 93 %           |
| Device power loss                        | 2.0 W                |
| Power loss in stand-by mode              | <0.25 W              |
| Inrush current                           | $\leq 5$ A           |
| Max. ECG no. on circuit breaker 10 A (B) | 21                   |
| Max. ECG no. on circuit breaker 10 A (C) | -                    |
| Max. ECG no. on circuit breaker 16 A (B) | 36                   |
| Max. ECG no. on circuit breaker 16 A (C) | -                    |
| Max. ECG no. on circuit breaker 25 A (B) | -                    |
| Surge capability (L/N-Ground)            | 4 kV                 |
| Surge capability (L-N)                   | 4 kV                 |
| Nominal output voltage                   | 64...300 V           |
| U-OUT (working voltage)                  | 64 - 300 V           |
| Nominal output current                   | 200...700 mA         |
| Output current LEDset open               | 100 mA               |
| Output current LEDset shorted            | 200 mA               |
| Default output current                   | 100 mA <sup>1)</sup> |
| Output current tolerance                 | $\pm 3$ %            |
| Output ripple current (100 Hz)           | < 1 %                |
| Nominal output power                     | 23...100 W           |
| Galvanic isolation                       | Non isolated         |

<sup>1)</sup> LEDset deactivated



Operating Window

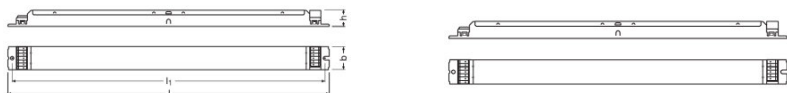
Typical Efficiency v Load 230 V 50 Hz



Typical Power Factor v Load

Typical THD v Load

## Dimensions & weight



|                                     |                           |
|-------------------------------------|---------------------------|
| Mounting hole spacing, length       | 414.0 mm                  |
| Product weight                      | 311.13 g                  |
| Cable cross-section, input side     | -                         |
| Cable cross-section, output side    | 0.5...1.5 mm <sup>2</sup> |
| Wire preparation length, input side | 8.0...9.0 mm              |
| Length                              | 425.0 mm                  |
| Width                               | 30.0 mm                   |
| Height                              | 21.0 mm                   |

## Colors & materials

|                 |       |
|-----------------|-------|
| Casing material | Metal |
|-----------------|-------|

## Temperatures & operating conditions

|  |                        |
|--|------------------------|
| Ambient temperature range                | -40...+70 °C           |
| Maximum temperature at tc test point     | 85 °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> |

<sup>1)</sup> Maximum 56 days/year at 85 %

## Lifespan

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

## Additional product data

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

## Capabilities

## Product datasheet

|  |                    |
|--|--------------------|
| Programming interface                  | DEXAL, NFC, LEDset |
| Dimmable                               | Yes                |
| Dimming interface                      | DALI               |
| Dimming range                          | 1...100 %          |
| Dimming method                         | AM/PWM selectable  |
| Overheating protection                 | Yes                |
| Overload protection                    | Yes                |
| Short-circuit protection               | Yes                |
| 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, output side        | Push terminal      |
| Number of channels                     | 1                  |

### Programming

|                        |            |
|------------------------|------------|
| Tuner4TRONIC           | Yes        |
| Tuner4TRONIC Field App | No         |
| Programming device     | DALI magic |

### Certificates & standards

|                           |  |
|---------------------------|--|
| Approval marks – approval | CE / VDE-ENEC / VDE-EMC / EAC / CCC / BIS  |
| Standards                 | Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to IEC 62386/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547 |
| Type of protection        | IP20   |


### Logistical data

|                |              |
|----------------|--------------|
| Commodity code | 850440829000 |
|----------------|--------------|











### 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<br>OPTOTRONIC LED Power Supply |

## Product datasheet

|   |  |
|---|--|
|  | Product Datasheet<br>OTi DX 100220-240700 D NFC IND L (EN)         |
|  | Brochures<br>Technical application guide DEXAL LED drivers (EN)    |
|  | Certificates<br>OT ENEC 40038085 200220                            |
|  | Certificates<br>OT EMC 40044675 170420                             |
|  | Declarations of conformity<br>EU Declaration of Conformity 3790165 |
|  | CAD data<br>OTI DX D NFC IND L IGS 191219                          |
|  | CAD data<br>OTI DX D NFC IND L STEP 191219                         |
|  | CAD Data 2-dim<br>OTI DX D NFC IND L CAD2PDF 191219                |
|  | CAD data 3-dim<br>OTI DX D NFC IND L CAD3PDF 191219                |
|  | Video<br>Overview of DEXAL Technology                              |

## Logistical Data

| Product code  | Product description                        | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Volume               | Gross weight |
|---------------|--|------------------------------|--------------------------------------|----------------------|--------------|
| 4062172050883 | OTI DX<br>100/220...240/700 D NFC<br>IND L | Shipping carton box<br>20    | 447 mm x 160 mm x 101 mm             | 7.22 dm <sup>3</sup> | 6422.00 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](http://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.

## Product datasheet

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### Disclaimer

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