

## OTi DALI 80/220...240/2A1 NFC L

OPTOTRONIC Intelligent – DALI NFC (SELV) | Linear constant current LED driver – Dimmable



### Product family features

- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Versatile DALI window driver up to 50 W due to flexible output characteristic
- Supply voltage: 220...240 V
- Available with output current range: up to 1,400 mA
- Constant Lumen Output (CLO)
- Integrated customizable thermal management (Driver Guard)

### Product family benefits

- Fully programmable via software (DALI Interface, NFC)
- Advanced luminaire/driver data (power, energy, operating hours...) for analytics
- DALI-2 certified incl. Parts 251, 252, 253
- Lifetime: up to 100,000 h (temperature at  $T_C = 65\text{ }^\circ\text{C}$ , max. 10 % failure rate)
- High-quality dimming of 1...100 % by amplitude dimming
- Higher quality of light thanks to < 3% output ripple current
- Very high efficiency
- Very low standby power consumption: < 0.15 W \*
- Fulfill safety requirement due to overload, overtemperature, Hot Plug protection

### Areas of application

- Linear lighting for office, education, industry, storage areas and retail
- Installation in emergency lighting systems according to IEC 61347-2-13, appendix J
- Suitable for luminaires of protection class I

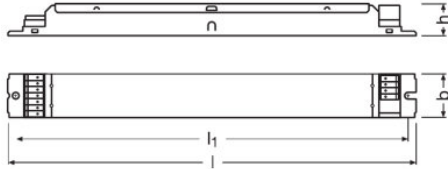
## Technical data

### 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               |
| Current set                              | DALI / NFC / Programmable |
| Total harmonic distortion                | ≤ 10 %                    |
| Power factor $\lambda$                   | 0.83C...0.99              |
| Efficiency in full-load                  | 91 % <sup>1)</sup>        |
| Device power loss                        | 8.0 W                     |
| Inrush current                           | ≤ 30 A                    |
| Max. ECG no. on circuit breaker 10 A (B) | 8                         |
| Max. ECG no. on circuit breaker 10 A (C) | -                         |
| Max. ECG no. on circuit breaker 16 A (B) | 13                        |
| Max. ECG no. on circuit breaker 16 A (C) | -                         |
| Max. ECG no. on circuit breaker 25 A (B) | -                         |
| Surge capability (L/N-Ground)            | 2 kV                      |
| Surge capability (L-N)                   | 1 kV                      |
| Nominal output voltage                   | 20...54 V                 |
| U-OUT (working voltage)                  | < 60 V                    |
| Nominal output current                   | 600...2100 mA             |
| Default output current                   | 600 mA                    |
| Output current tolerance                 | ±3 %                      |
| Output ripple current (100 Hz)           | ≤ 3 %                     |
| Output PSTLM                             | ≤1                        |
| Output SVM                               | ≤0.4                      |
| Nominal output power                     | 32...80 W                 |
| Maximum output power                     | 80 W                      |
| Galvanic isolation                       | SELV                      |
| Power loss in stand-by mode              | ≤0.15 W                   |
| Networked standby power                  | ≤0.19 W <sup>1)</sup>     |

<sup>1)</sup> at 230 V, 50 Hz

## Dimensions & weight



|                                      |                           |
|--------------------------------------|---------------------------|
| Mounting hole spacing, length        | 350.0 mm                  |
| Product weight                       | 270.00 g                  |
| 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              |
| Length                               | 360.0 mm                  |
| Width                                | 30.0 mm                   |
| Height                               | 21.0 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> |

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

## Lifespan

|              |                  |
|--------------|------------------|
| ECG lifetime | 100000 / 50000 h |
|--------------|------------------|

## Additional product data

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

### Capabilities

|  |                                       |
|--|---------------------------------------|
| Programming interface                  | DALI, NFC                             |
| Dimmable                               | Yes                                   |
| Dimming interface                      | DALI-2 / Touch DIM / Touch DIM Sensor |
| Dimming range                          | 1...100 %                             |
| Dimming method                         | Full analogue dimming                 |
| Overheating protection                 | Automatic reversible                  |
| Overload protection                    | Automatic reversible                  |
| Short-circuit protection               | Automatic reversible                  |
| No-load proof                          | Yes                                   |
| Intended for no-load operation         | No                                    |
| 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                         |
| Control interface                      | DALI                                  |
| Number of channels                     | 1                                     |
| DALI-2 Energy Data                     | Yes                                   |
| DALI-2 Diagnostic Data                 | Yes                                   |

<sup>1)</sup> 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                      |

### Programmable features

|                       |     |
|-----------------------|-----|
| DALI-2 Luminaire Data | Yes |
|-----------------------|-----|

### Certificates & standards

|                           |  |
|---------------------------|--|
| Approval marks – approval | CE / EL / VDE-ENEC / EAC / CCC / BIS / RCM   |
| 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 61347 |
| 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   | 21-04-2023   |
| Primary Article Identifier  | 4062172238656  |
| Candidate List Substance 1  | Lead   |
| CAS No. of substance 1  | 7439-92-1  |
| Safe Use Instruction  | The identification of the Candidate List substance is sufficient to allow safe use of the article. |
| Declaration No. in SCIP database                                      | 3097318f-8f14-4ecd-a064-9b2069aefa4c   |

Download Data

| File   |
|--|
|  User instruction<br>OPTOTRONIC LED Power Supply      |
|  Certificates<br>OT ENEC 40038085 010322             |
|  Certificates<br>OT ENEC 40038447 260623            |
|  CAD data<br>OTI DALI 80 NFC L IGS 271021           |
|  CAD data<br>OTI DALI 80 NFC L STEP 271021          |
|  CAD Data 2-dim<br>OTI DALI 80 NFC L CAD2PDF 271021 |
|  CAD data 3-dim<br>OTI DALI 80 NFC L CAD3PDF 271021 |

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.

## Product datasheet

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### Logistical Data

| Product code  | Product description                | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Volume               | Gross weight |
|---------------|------------------------------------|------------------------------|--------------------------------------|----------------------|--------------|
| 4062172238656 | OTi DALI<br>80/220...240/2A1 NFC L | Shipping carton box<br>20    | 385 mm x 160 mm x 100 mm             | 6.16 dm <sup>3</sup> | 5574.00 g    |

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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.

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### Disclaimer

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