

## OTi DALI 80/220...240/2A1 LT2 L

OPTOTRONIC Intelligent – DALI LEDset LT2 (SELV) | Linear constant current LED driver – Dimmable



### Product family features

- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Versatile DALI window driver up to 80 W due to flexible output characteristic
- Supply voltage: 220...240 V
- Available with output current range: up to 2,100 mA
- Constant Lumen Output (CLO)
- Integrated customizable thermal management (Driver Guard)
- DALI-2 certified (Part -101,-102 and -207)

## Product datasheet

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### Product family benefits

- Fully programmable via software (DALI Interface)
- Flexible current setting (LEDset2)
- Lifetime: up to 100,000 h (temperature at  $T_C = 65\text{ °C}$ , max. 10 % failure rate)
- High-quality dimming of 1...100 % by amplitude dimming (except 80 W versions)
- High quality of light thanks to <1% output ripple current
- Very high efficiency
- Very low standby power consumption: < 0.15 W \*
- Fulfill safety requirement due to overload, overtemperature, Hot Plug protection

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### Versatile scope of application due to OSRAM DALI Technology:

- Easy to use in corridors and restrooms because of three-level Corridor function
- Touch DIM application: easy to control via pushbutton or sensor
- Energy efficient Touch DIM operation due to automatic switch-off at sufficient residual light
- Suitable for emergency Installations (acc. to EN 60598-2-22 and IEC 61347-2-13, appendix J) thanks to DC detection (0 Hz, pulsating DC), on/off switchable
- Feedback of power consumption and operating hours (Fit for SMART GRID)
- Suitable for buildings according to EPBD/BREEAM/LEED due to automatic Constant Lumen Output setting
- Luminaire information for easy maintenance

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### Areas of application

- Linear lighting for office, education, 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 <sup>1)</sup>    |
| Input voltage DC                         | 176...276 V                  |
| Current set                              | DALI / LEDset / Programmable |
| Total harmonic distortion                | < 20 %                       |
| Power factor $\lambda$                   | 0.91C...0.99 <sup>2)</sup>   |
| Efficiency in full-load                  | 90 % <sup>3)</sup>           |
| Device power loss                        | 10 W <sup>4)</sup>           |
| Protective conductor current             | <2.0 mA                      |
| Inrush current                           | 53 A <sup>5)</sup>           |
| Max. ECG no. on circuit breaker 10 A (B) | 8                            |
| Max. ECG no. on circuit breaker 16 A (B) | 13                           |
| 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 <sup>6)</sup>      |
| U-OUT (working voltage)                  | < 60 V                       |
| Nominal output current                   | 1000...2100 mA <sup>7)</sup> |
| Output current LEDset open               | 500 mA                       |
| Output current LEDset shorted            | 2100 mA                      |
| Default output current                   | 500 mA <sup>8)</sup>         |
| Output current tolerance                 | $\pm 3$ % <sup>9)</sup>      |
| Output ripple current (100 Hz)           | < 1 %                        |
| Output PSTLM                             | $\leq 1$                     |
| Output SVM                               | $\leq 0.4$                   |
| Nominal output power                     | 32...80 W                    |
| Maximum output power                     | 80 W                         |
| Galvanic isolation                       | SELV                         |
| Power loss in stand-by mode              | <0.5 W                       |
| Galvanic isolation primary/secondary     | 3.75 kV <sup>10)</sup>       |

<sup>1)</sup> Permitted voltage range

<sup>2)</sup> Full load at 230 V

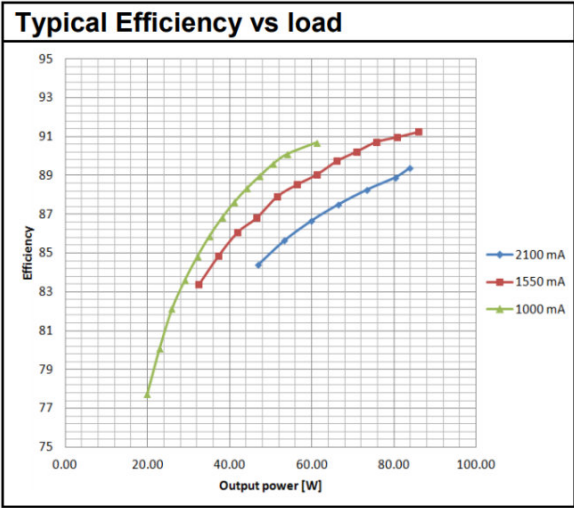
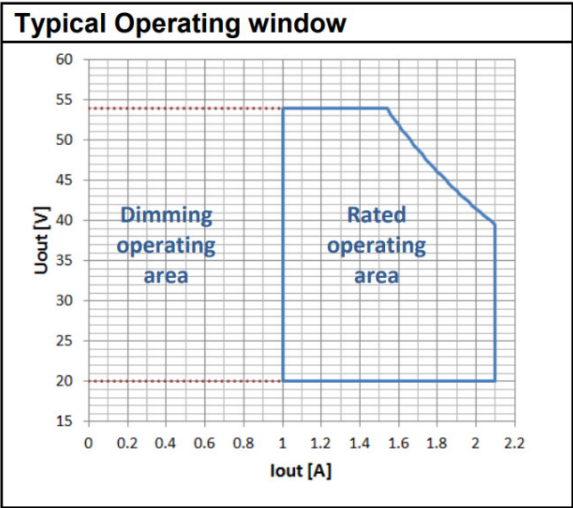
<sup>3)</sup> at 230 V, 50 Hz

<sup>4)</sup> Maximum

<sup>5)</sup> At 200  $\mu$ s

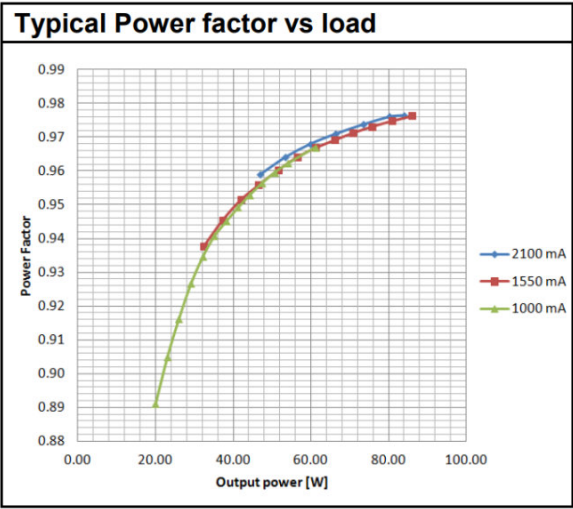
<sup>6)</sup> Maximum 60 V

- 7)  $\pm 2\%$
- 8) LEDset deactivated
- 9) When use DALI
- 10) SELV-equivalent

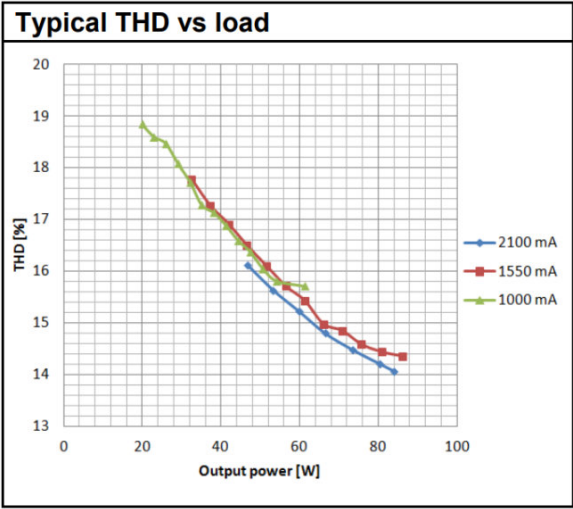


OTI DALI 80220-2402A1 LT2 L Operating Window

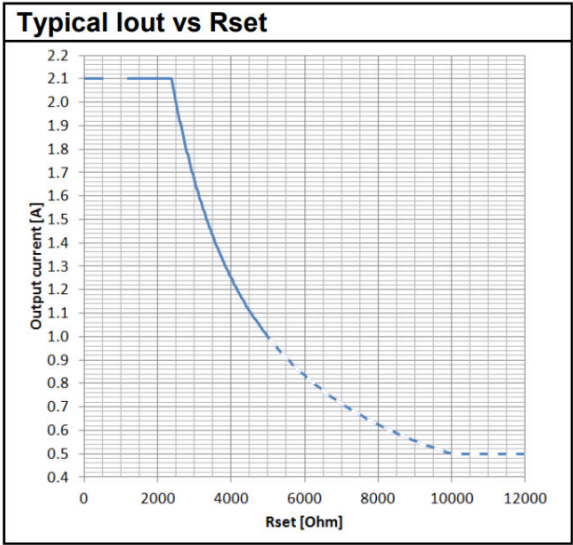
OTI DALI 80220-2402A1 LT2 L Typical Efficiency vs. Load  
(230 V 50 Hz)



OTI DALI 80220-2402A1 LT2 L Typical Power Factor vs. Load



OTI DALI 80220-2402A1 LT2 L Typical THD Vs Load



OTI DALI 80220-2402A1 LT2 L Typical Iout vs Rset (LEDset2 mode)

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> <sup>1)</sup> |
| Cable cross-section, output side     | 0.5...1.5 mm <sup>2</sup> <sup>1)</sup> |
| Wire preparation length, input side  | 8.5...9.5 mm                            |
| Wire preparation length, output side | 8.5...9.5 mm                            |
| Length                               | 360.0 mm                                |
| Width                                | 30.0 mm                                 |
| Height                               | 21.0 mm                                 |

<sup>1)</sup> Solid or flexible leads

Colors & materials

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

Temperatures & operating conditions

|                                          |                        |
|------------------------------------------|------------------------|
| Ambient temperature range                | -25...+45 °C           |
| Maximum temperature at tc test point     | 80 °C                  |
| Max.housing temperature in case of fault | 120 °C                 |
| Temperature range at storage             | -25...85 °C            |
| Permitted rel. humidity during operation | 5...85 % <sup>1)</sup> |

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

Lifespan

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

<sup>1)</sup> At maximum T<sub>c</sub> = 75°C / 10% failure rate / At T<sub>c</sub> = 65°C / 10% failure rate

Additional product data

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

### Capabilities

|                                        |                                               |
|----------------------------------------|-----------------------------------------------|
| Programming interface                  | DALI, LEDset                                  |
| Dimmable                               | Yes                                           |
| Dimming interface                      | DALI-2 / Touch DIM / Touch DIM Sensor         |
| Dimming range                          | 1...100 % <sup>1)</sup>                       |
| Dimming method                         | Amplitude Modulation / Pulse Width Modulation |
| Constant lumen function                | Programmable                                  |
| 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>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                                 |
| Control interface                      | DALI                                          |
| Number of channels                     | 1                                             |
| DALI-2 Energy Data                     | Yes                                           |
| DALI-2 Diagnostic Data                 | Yes                                           |

<sup>1)</sup> For maximum nominal output current

<sup>2)</sup> Output wires must be routed as close as possible to each other

### Programming

|                        |            |
|------------------------|------------|
| Programming device     | DALI magic |
| Tuner4TRONIC           | Yes        |
| Tuner4TRONIC Field App | Yes        |

### Programmable features

|                       |     |
|-----------------------|-----|
| Operating Current     | Yes |
| Constant Lumen        | Yes |
| Lamp Operating Time   | Yes |
| DALI Settings         | Yes |
| Emergency Mode        | Yes |
| DALI-2 Luminaire Data | Yes |
| Configuration Lock    | Yes |
| TouchDIM + Sensor     | Yes |

Product datasheet

|                        |     |
|------------------------|-----|
| Corridor Functionality | Yes |
|------------------------|-----|

Certificates & standards

|                           |                                                                                                                  |
|---------------------------|------------------------------------------------------------------------------------------------------------------|
| Approval marks – approval | CE / EL / VDE-ENEC / VDE-EMC / EAC / CCC / RCM                                                                   |
| Standards                 | Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 55015/Acc. to EN 61547/Acc. to EN 61000-3-2/Acc. to EN 62384 |
| Type of protection        | IP20                                                                                                             |

Logistical data

|                |              |
|----------------|--------------|
| Commodity code | 850440839000 |
|----------------|--------------|

Environmental information

| Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH) |                                                                                                    |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| Date of Declaration                                                   | 05-05-2023                                                                                         |
| Primary Article Identifier                                            | 4052899028050                                                                                      |
| 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                                      | 43b5ca1e-8a2a-441d-8886-2cd1700417ee                                                               |

Download Data

| File                                                                                |                                                                |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------|
|  | User instruction<br>OPTOTRONIC LED Power Supply                |
|  | Certificates<br>OT FIT OTi DALI LT2 CB DE1 63464 060520        |
|  | Certificates<br>OT ENEC 40038447 260623                        |
|  | Certificates<br>489311_CB Certificate OTi DALI LT2 L           |
|  | Certificates<br>494640_CE Declaration OTi DALI linear          |
|  | Certificates<br>OT EMC 40038827 300922                         |
|  | Declarations of conformity<br>OTi DALI LT2 L CE 3366462 230821 |
|  | CAD data<br>OTi DALI 80 LT2 L IGS 270220                       |

## Product datasheet



CAD data  
OTI DALI 80 LT2 L STEP 270220



CAD Data 2-dim  
OTI DALI 80 LT2 L CAD2PDF 270220



CAD data 3-dim  
OTI DALI 80 LT2 L CAD3PDF 270220

### 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.

### Logistical Data

| Product code  | Product description                | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Volume               | Gross weight |
|---------------|------------------------------------|------------------------------|--------------------------------------|----------------------|--------------|
| 4052899028050 | OTi DALI<br>80/220...240/2A1 LT2 L | Shipping carton box<br>20    | 385 mm x 160 mm x 100 mm             | 6.16 dm <sup>3</sup> | 5875.00 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.

### Disclaimer

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