

## PRODUCT DATASHEET

### OTi DALI 90/220...240/1A0 LT2 L

OPTOTRONIC® Intelligent – Dimmable DALI (non-isolated) | Constant Current - Indoor



#### 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

#### Product benefits

- Fully programmable via software (DALI Interface)
- Flexible current setting (LEDset2)
- Lifetime: up to 100,000 h (temperature at  $T_c = 65^\circ\text{C}$ , 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

#### 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

## Product 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)

## TECHNICAL DATA

### Electrical data

|                                          |                             |
|------------------------------------------|-----------------------------|
| Nominal wattage                          | 90.00 W                     |
| Nominal output power                     | 13.5...90 W                 |
| Nominal voltage                          | 220...240 V                 |
| Nominal output voltage                   | 54...240 V <sup>1)</sup>    |
| Input voltage AC                         | 198...264 V <sup>2)</sup>   |
| Input voltage DC                         | 176...276 V                 |
| U-OUT (working voltage)                  | < 250 V                     |
| Nominal current                          | 0.43 A                      |
| Nominal output current                   | 250...1000 mA <sup>3)</sup> |
| Inrush current                           | 25 A <sup>4)</sup>          |
| Output current tolerance                 | ±3 % <sup>5)</sup>          |
| Output ripple current (100 Hz)           | < 1 %                       |
| Mains frequency                          | 0/50/60 Hz                  |
| Total harmonic distortion                | < 10 %                      |
| Power factor $\lambda$                   | > 0.95 <sup>6)</sup>        |
| ECG efficiency                           | ≤94 % <sup>7)</sup>         |
| Device power loss                        | 9 W <sup>8)</sup>           |
| Max. ECG no. on circuit breaker 10 A (B) | 15                          |
| Max. ECG no. on circuit breaker 16 A (B) | 24                          |
| Max. ECG no. on circuit breaker 25 A (B) | 29                          |
| Surge capability (L/N-Ground)            | 2 kV                        |
| Surge capability (L-N)                   | 1 kV                        |
| Galvanic isolation                       | Non isolated                |
| Power loss in stand-by mode              | < 0.25 W                    |
| Flickering metric (Pst LM)               | ≤1                          |

1) Maximum 250 V

2) Permitted voltage range

3) ±5%

4) At 280 µs

5) When use DALI

6) Full load at 230 V

7) At full load and 230 V

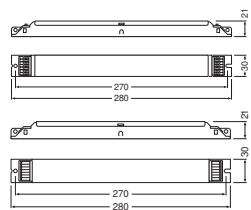
8) Maximum

### Photometrical data

|                            |    |
|----------------------------|----|
| Flickering metric (Pst LM) | ≤1 |
|----------------------------|----|

|                                 |      |
|---------------------------------|------|
| Stroboscope effect metric (SVM) | ≤0.4 |
|---------------------------------|------|

Dimensions & Weight



|                                      |                              |
|--------------------------------------|------------------------------|
| Length                               | 280.00 mm                    |
| Mounting hole spacing, length        | 270,0 mm                     |
| Width                                | 30.00 mm                     |
| Height                               | 21.00 mm                     |
| Cable cross-section, input side      | 0.5...1.5 mm <sup>2</sup> 1) |
| Cable cross-section, output side     | 0.5...1.5 mm <sup>2</sup> 1) |
| Wire preparation length, input side  | 8.5...9.5 mm                 |
| Wire preparation length, output side | 8.5...9.5 mm                 |
| Product weight                       | 205.00 g                     |

1) Solid or flexible leads

Colors & materials

|                 |       |
|-----------------|-------|
| Product color   | White |
| Casing material | Metal |
| Body 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       |
| Permitted rel. humidity during operation | 5...85 % 1)  |

1) Maximum 56 days/year at 85 %

Lifespan

|              |                       |
|--------------|-----------------------|
| ECG lifetime | 50000 h / 100000 h 1) |
|--------------|-----------------------|

1) 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

|                                        |                                       |
|----------------------------------------|---------------------------------------|
| Dimmable                               | Yes                                   |
| Dimming interface                      | DALI-2 / Touch DIM / Touch DIM Sensor |
| Dimming range                          | 1...100 % <sup>1)</sup>               |
| Overheating protection                 | Automatic reversible                  |
| Overload protection                    | Automatic reversible                  |
| No-load proof                          | Yes                                   |
| Short-circuit protection               | Automatic reversible                  |
| 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                         |

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

### Certificates & Standards

|                           |                                                                                                                                                     |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Approval marks – approval | CE / EL / ENEC 10 / VDE-EMC / CCC / RCM                                                                                                             |
| Standards                 | Acc. to EN 61347-1 / Acc. to EN 61347-2-13 / Acc. to EN 55015 /<br>Acc. to EN 61547 / Acc. to EN 61000-3-2 / Acc. to EN 62384 / Acc.<br>to EN 62386 |
| Protection class          | I                                                                                                                                                   |
| Type of protection        | IP20                                                                                                                                                |

### LOGISTICAL DATA

|                              |             |
|------------------------------|-------------|
| Temperature range at storage | -25...85 °C |
|------------------------------|-------------|

### Energy labelling regulation data acc EU 2019/2015

|                                 |         |
|---------------------------------|---------|
| Networked standby power for CLS | ≤0.30 W |
|---------------------------------|---------|

### DOWNLOAD DATA

|                                                                                    | Documents and certificates             | Document name                                                              |
|------------------------------------------------------------------------------------|----------------------------------------|----------------------------------------------------------------------------|
|  | User instruction / safety instructions | OPTOTRONIC® LED Power Supply                                               |
|  | Declarations of conformity             | EU Declaration of Conformity 3667898                                       |
|  | Declarations of conformity             | EATON(CEAG)-Conformity declaration AN00952 OTI DALI 90/220-240/1A0 D LT2 L |
|  | Declarations of conformity             | EATON(CEAG)-Conformity declaration AM00141_OTIDALI90_220_240_1A0_D_LT2_L   |

| Documents and certificates                                                         |                            | Document name                                                         |
|------------------------------------------------------------------------------------|----------------------------|-----------------------------------------------------------------------|
|    | Declarations of conformity | 727247_EC OTi                                                         |
|    | Declarations of conformity | INOTEC- Conformity declaration AM00141_OTiDALI90_220_240_1A0_D_LT2_L  |
|    | Declarations of conformity | INOTEC-Conformity declaration AN00952 OTi DALI 90/220-240/1A0 D LT2 L |
|    | Certificates               | 730563_VDE Certificate                                                |
|    | Certificates               | VDE ENEC Certificate 40038085                                         |
|    | Certificates               | 358995_CB Test Certificate OTi DALI 90/220-240/1A0 LT2 L              |
|    | Certificates               | OTi DALI OT FIT D LT2 L CB DE1 58970 040320                           |
|    | EU Data Act                | Connected Products and Related Software and Services                  |
| CAD/BIM files                                                                      |                            | Document name                                                         |
|  | CAD data 3D PDF            | 505460_CAD data OTi DALI 60/220-240/550 D LT2 L                       |

## LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume               |
|---------------|------------------------------|--------------------------------------|--------------|----------------------|
| 4052899494268 | Unpacked<br>1                |                                      | 213.00 g     |                      |
| 4052899494275 | Shipping box<br>20           | 305 mm x 161 mm x 104 mm             | 4277.00 g    | 5.11 dm <sup>3</sup> |

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.