

## PRODUCT DATASHEET

### OTi DALI 50/220...240/1A4 LT2 FAN

OPTOTRONIC® Intelligent – DALI LT2 | Compact constant current LED drivers



#### Areas of application

- Installation in emergency lighting systems according to IEC 61347-2-13, appendix J
- Suitable for use in luminaires with flexible current setting (DALI, CLO, LEDset)
- Suitable for indoor SELV installations
- Suitable for luminaires of protection classes I and II
- Suitable for downlights, spotlights and LED panels
- Installation via Cable Clamp Kit possible (depending on version of product)

#### Product benefits

- Versatile DALI window driver due to flexible output characteristic
- Very high efficiency
- Protection of the system thanks to thermal management and Smart Control
- High-quality dimming of 1...100 % by amplitude dimming

#### 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

#### Product features

- Supply voltage: 220...240 V
- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Line voltage: 198...264 V
- Safety according to EN 61347-1, 61347-2-3, 61347-2-13, 62384
- RI suppression: to EN 55015/CISPR 15
- Line harmonics according to EN 61000-3-2

- Immunity according to EN 61547
- Lifetime: up to 100,000 h
- Type of protection: IP20
- Independent connection via through-looping (except OTi DALI 15)

## TECHNICAL DATA

### Electrical data

|                                          |                             |
|------------------------------------------|-----------------------------|
| Nominal wattage                          | 50.00 W                     |
| Nominal output power                     | 55 W <sup>1)</sup>          |
| Nominal voltage                          | 220...240 V                 |
| Nominal output voltage                   | 15...54 V <sup>2)</sup>     |
| Input voltage AC                         | 198...264 V <sup>3)</sup>   |
| Input voltage DC                         | 176...276 V                 |
| U-OUT (working voltage)                  | 60 V                        |
| Nominal current                          | 0.27 A                      |
| Nominal output current                   | 600...1400 mA <sup>4)</sup> |
| Inrush current                           | 30 A <sup>5)</sup>          |
| Output current tolerance                 | ±3 %                        |
| Output ripple current (100 Hz)           | < 2 % <sup>6)</sup>         |
| Mains frequency                          | 0/50/60 Hz                  |
| Total harmonic distortion                | < 10 % <sup>7)</sup>        |
| Power factor $\lambda$                   | > 0.95                      |
| ECG efficiency                           | 91 % <sup>8)</sup>          |
| Device power loss                        | 7.5 W                       |
| Max. ECG no. on circuit breaker 10 A (B) | 12                          |
| Max. ECG no. on circuit breaker 16 A (B) | 20                          |
| Max. ECG no. on circuit breaker 25 A (B) | -                           |
| Surge capability (L/N-Ground)            | 2 kV <sup>9)</sup>          |
| Surge capability (L-N)                   | 1 kV                        |
| Power loss in stand-by mode              | < 0.15 W                    |
| Flickering metric (Pst LM)               | ≤1                          |

1) Partial load 22...55 W

2) Maximum 60 V

3) Permitted voltage range

4) ±5%

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

6) Ripple average at 100 Hz %

7) At full load, 220...240 V, 50 Hz / see graphs

8) At full load and 230 V

9) Functional Earth

### Photometrical data

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

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

### Dimensions & Weight

|                                      |                                         |
|--------------------------------------|-----------------------------------------|
| Length                               | 110.00 mm                               |
| Mounting hole spacing, length        | 99,0 mm                                 |
| Width                                | 75.00 mm                                |
| Height                               | 25.00 mm                                |
| Cable cross-section, input side      | 0.2...1.5 mm <sup>2</sup> <sup>1)</sup> |
| Cable cross-section, output side     | 0.2...1.5 mm <sup>2</sup> <sup>1)</sup> |
| Wire preparation length, input side  | 8.0...9.0 mm                            |
| Wire preparation length, output side | 8.0...9.0 mm                            |
| Product weight                       | 180.00 g                                |

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

### Colors & materials

|                 |         |
|-----------------|---------|
| Product color   | White   |
| Casing material | Plastic |
| Body material   | Plastic |

### Temperatures & operating conditions

|                                          |                        |
|------------------------------------------|------------------------|
| Ambient temperature range                | -20...+50 °C           |
| Maximum temperature at tc test point     | 80 °C <sup>1)</sup>    |
| Max.housing temperature in case of fault | 110 °C                 |
| Permitted rel. humidity during operation | 5...85 % <sup>2)</sup> |

<sup>1)</sup> Maximum at the T<sub>c</sub>-point

<sup>2)</sup> Maximum 56 days/year at 85 %

### Lifespan

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

<sup>1)</sup> T<sub>c</sub> = 80°C, 0.2% / 1,000 h failure rate / T<sub>c</sub> = 70°C, 0.1% / 1,000 h failure rate

### Additional product data

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

### Capabilities

|                        |                                     |
|------------------------|-------------------------------------|
| Dimmable               | Yes                                 |
| Dimming interface      | DALI / 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 / II               |
| Suitable for emergency lighting        | Yes                  |
| Type of connection, output side        | Push terminal        |

1) For maximum nominal output current

### Certificates & Standards

|                           |                                                                                                                                                                                                                                             |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Approval marks – approval | ENEC 10 / VDE / EMC / EL / CE / DALI-2                                                                                                                                                                                                      |
| 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 / Acc. to IEC 62386-101:Ed2 / Acc. to IEC 62386-<br>102:Ed2 / Acc. to IEC 62386-207:Ed1 |
| Protection class          | II                                                                                                                                                                                                                                          |
| 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 | ≤0.18 W |
|---------------------------------|---------|

### DOWNLOAD DATA

|                                                                                    | Documents and certificates             | Document name                                                              |
|------------------------------------------------------------------------------------|----------------------------------------|----------------------------------------------------------------------------|
|  | User instruction / safety instructions | OPTOTRONIC LED Power Supply                                                |
|  | Declarations of conformity             | EATON(CEAG)-Conformity declaration AB42878_OTi_DALI_50_220-240_1A4_LT2_FAN |
|  | Declarations of conformity             | EU Declaration of Conformity 3365628                                       |
|  | Declarations of conformity             | INOTEC- Conformity declaration AB42878_OTi_DALI_50_220-240_1A4_LT2_FAN     |
|  | Certificates                           | OTi DALI 50 LT2 FAN CB DE1 59836 040320                                    |
|  | Certificates                           | 730563_VDE Certificate                                                     |
|  | Certificates                           | VDE ENEC Certificate 40038447                                              |

| Documents and certificates                                                       |                 | Document name                                        |
|----------------------------------------------------------------------------------|-----------------|------------------------------------------------------|
|  | EU Data Act     | Connected Products and Related Software and Services |
| CAD/BIM files                                                                    |                 | Document name                                        |
|  | CAD data 3D PDF | 491395_OTI DALI 50 LT2 FAN IGS 61119                 |
|  | CAD data 3D PDF | 491393_OTI DALI 50 LT2 FAN CADPDF 61119              |

## LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume               |
|---------------|------------------------------|--------------------------------------|--------------|----------------------|
| 4052899488182 | Unpacked<br>1                |                                      | 180.00 g     |                      |
| 4052899488199 | Shipping box<br>20           | 389 mm x 234 mm x 72 mm              | 3912.00 g    | 6.55 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.