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OT WI 15/220-240/1A0 NFC CA LPI

OPTOTRONIC Wireless Intelligent – Casambi NFC LP I | Compact constant current LED driver – Dimmable



Product family features

- Driver with integrated CASAMBI lighting control system
- Supply voltage: 220...240 V
- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Line voltage: 198...264 VLifetime: up to 100,000 hType of protection: IP20
- Integrated cable clamp for luminaire and independent installation

Product family benefits

- Small housing for flexible luminaire designs
- Versatile CASAMBI window driver due to flexible output characteristic
- Easy and fast output current setting via NFC
- Very high efficiency
- High-quality dimming of 1...100 % by amplitude dimming



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Areas of application

- Suitable for downlights, spotlights and LED panels
- Suitable for use in luminaires with flexible current setting
- Installation in emergency lighting systems according to IEC 61347-2-13, appendix J
- Suitable for indoor SELV installations
- Suitable for luminaires of protection classes I and II

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Technical data

Electrical data

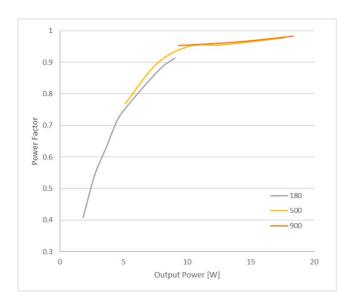
| Nominal output voltage | 1054 V ¹⁾ |
|--|--------------------------|
| Input voltage DC | 176276 V |
| Nominal output current | 1501050 mA ²⁾ |
| Inrush current | 20 A ³⁾ |
| Max. ECG no. on circuit breaker 10 A (B) | 82 |
| Max. ECG no. on circuit breaker 16 A (B) | 130 |
| Nominal output power | 18 W |
| Input voltage AC | 198264 V ⁴⁾ |
| Power factor λ | 0.33C0.98 |
| U-OUT (working voltage) | 60 V |
| Surge capability (L-N) | 1 kV |
| Surge capability (L/N-Ground) | 2 kV |
| Mains frequency | 0,50,60 Hz |
| Protective conductor current | not relevant |
| Nominal input voltage | 220240 V |
| Total harmonic distortion | < 10 % ⁵⁾ |
| Output current tolerance | ±3 % |
| Maximum output power | 18 W ⁶⁾ |
| Output ripple current (100 Hz) | < 3 % ⁷⁾ |
| Maximum TX power | 8 dBm ⁸⁾ |
| Current set | NFC |
| Radio frequency | 2.4 GHz |
| Wireless protocol | Casambi Evolution |
| Wireless range | 10 m line of sight |
| Networked standby power | 0.15 W ⁹⁾ |
| | |

- 1) Maximum 60 V
- 2) ±3%
- 3) t_{width} = 25 µs (measured at 50 % I_{peak}) 4) Permitted voltage range
- 5) At full load, 220...240 V, 50 Hz / see graphs
- 6) Partial load 3...18 W
- 7) Ripple average at 100 Hz
- 8) 2.512 mW
- 9) at 230 V, 50 Hz

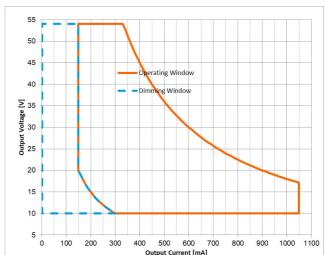
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Typical Power Factor v Load

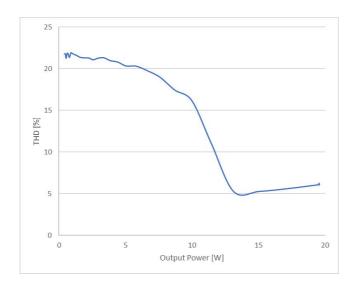


Operating Window



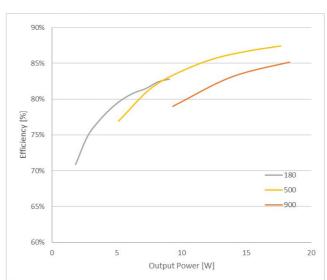
OTI DALI 15 NFC LP Typical Power Factor vs. Load

Typical THD v Load



OTI DALI 15 NFC LP Operating window

Typical Efficiency v Load 230 V 50 Hz



OTI DALI 15 NFC LP Typical THD Vs Load

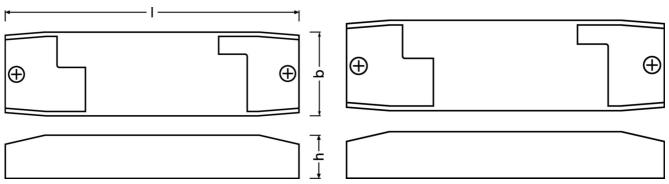
OTI DALI 15 NFC LP Typical Efficiency vs. Load (230 V / 50 Hz)

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Dimensions & weight

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| Product weight | 150.00 g |
|--------------------------------------|----------------------------|
| Mounting hole spacing, width | not relevant mm |
| Mounting hole spacing, length | 108.0 mm |
| Wire preparation length, output side | 78 mm |
| Wire preparation length, input side | 78 mm |
| Cable/wire length, output side | 2000 mm |
| Cable cross-section, output side | 0.51.5 mm² ¹⁾ |
| Cable cross-section, input side | 0.751.5 mm ² 1) |
| Length | 150.0 mm |
| Height | 22.0 mm |

¹⁾ Solid or flexible leads

Colors & materials

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

Temperatures & operating conditions

| Max.housing temperature in case of fault | 110 °C |
|--|---------------------|
| Maximum temperature at tc test point | 80 °C ¹⁾ |
| Ambient temperature range | -20+50 °C |
| Temperature range at storage | -40+85 °C |
| Permitted rel. humidity during operation | 585 % ²⁾ |

¹⁾ Maximum at the Tc-point

²⁾ Maximum 56 days/year at 85 %

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Lifespan

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

1) $T_c = 80^{\circ}$ C, 0.2% / 1,000 h failure rate / $T_c = 70^{\circ}$ C, 0.1% / 1,000 h failure rate

Additional product data

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

Capabilities

| Max. cable length to lamp/LED module | 2.0 m ¹⁾ |
|--|----------------------|
| | |
| Dimming range | 1100 % |
| Dimming method | Amplitude Modulation |
| Dimming interface | Bluetooth CASAMBI |
| Suitable for emergency lighting | Yes |
| Short-circuit protection | Automatic reversible |
| Overload protection | Automatic reversible |
| Overheating protection | Automatic reversible |
| Dimmable | Yes |
| Suitable for fixtures with prot. class | 1/11 |
| No-load proof | Yes |
| Type of connection, input side | Push terminal |
| Type of connection, output side | Push terminal |
| Constant lumen function | Programmable |
| Programming interface | NFC |

¹⁾ Output wires must be routed as close as possible to each other

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| Box programming | Yes |
|-----------------|-----|
| 20x programming | 100 |

Programmable features

| Tuning Factor | Yes |
|------------------------|--------------|
| Driver Guard | Yes |
| Emergency Mode | Yes |
| DALI-2 Luminaire Data | No |
| Configuration Lock | Yes |
| Soft Switch Off | Yes |
| Dim to Dark | Yes |
| Corridor Functionality | not relevant |

Certificates & standards

| 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 / Acc. to EN 62479 / Acc. to ETSI EN 300 328 / Acc. to ETSI EN 301 489-17 / Acc. to ETSI EN 301 489 - 1 |
|---------------------------|--|
| Approval marks – approval | CE / UKCA / ENEC / EAC / EL / BIS |
| Type of protection | IP20 |

Logistical data

| Commodity code | 85044095900 |
|----------------|-------------|



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Additional product information

- Download Casambi app from App store or Google play. For the correct functioning of the Casambi app refer to the Casambi website: http://www.casambi.com.
- The Casambi App is provided to you by Casambi. OSRAM shall have no liability for the Casambi app and does not make any representations, express or implied, about the availability and/or performance of the Casambi app.
- The Casambi cloud services are provided to you by Casambi. OSRAM shall have no liability for the Casambi cloud services and does not make any representations, express or implied, about the availability and/or performance of the Casambi cloud services.
- OSRAM shall have no liability for and does not make any representations, express or implied, about the connectivity of Casambi ready products of OSRAM with any other Casambi ready products.
- There are two places in the app where you can unpair a Casambi enabled device from a network.
- 1. Go to the 'Luminaires' tab and tap 'edit'. Unpair a luminaire by tapping the ("X") that will appear in the corner of the relevant luminaire icon. You can also double-tap a luminaire icon to open the "luminaire properties" screen, and then scroll down and tap 'Unpair device'.
- 2. Go to the "Nearby devices" screen found under the 'More' tab. Tap on the device you wish to unpair and select 'Unpair device'. This will unpair the luminaire if you have modification (administrator) rights to the network.
- If you don't have the modification rights to the network that the device is paired to then you need to have access to the devices power switch to be able to unpair. Tap on the device you wish to unpair and select 'Unpair device' and the app will open the 'Unpair' screen. Tap on the 'Start' button and an orange "Time bar" will appear and start to move across the screen. During the time it takes the bar to move across the screen, flick the power switch off and back on again. This should unpair the device. If unpairing succeeds then there is a message that luminaire has been unpaired. If it does not succeed then try again but switch the power off and on again more slowly (This may be needed for devices that use an additional power supply; such as a CBU-PWM4). If unpairing continues to be unsuccessful then it is probably the case that the power switch is not correct for the device you are trying to unpair.

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Download Data

| File | | |
|------------------------|------------|-------------------------------------|
| Certificates | PDF | ►OT ENEC 40038447 270224 |
| CAD data 3-dim | Compressed | ►OT WI NFC CA BL LPI CAD3PDF 130722 |
| CAD data 2-dim | Compressed | ►OT WI NFC CA BL LPI CAD2PDF 130722 |
| CAD data | Compressed | ►OT WI NFC CA BL LPI IGS 130722 |
| CAD data | Compressed | ►OT WI NFC CA BL LPI STEP 130722 |
| Mandatory Publications | PDF | ►OT WI NFC LP CE 4388804 080722 |
| Mandatory Publications | PDF | ►OT WI NFC LP UK DoC 4388806 080722 |
| User instruction | PDF | ►UI OT WI NFC CA LP I |

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.



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Logistical Data

| Product code | Product description | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Volume | Gross weight |
|---------------|------------------------------------|---------------------------------|--------------------------------------|----------|--------------|
| 4062172228039 | OT WI 15/220-240/1A0 NFC CA LPI | Shipping carton box 20 Pieces | 314 x 122 x 107 mm | 4.10 dm³ | 121.00 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

Accessories Optional

| Product description | Accessory name | Accessory code |
|---------------------------------|----------------|----------------|
| OT WI 15/220-240/1A0 NFC CA LPI | PRH101 -USB | ▶6977078996938 |
| OT WI 15/220-240/1A0 NFC CA LPI | CPR30 -USB | ▶6977078996945 |

Disclaimer

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