OTi DALI 25/220-240/700 NFC TW I

OPTOTRONIC Intelligent – DALI NFC TW | Compact constant current LED driver – Dimmable

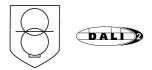
Product family features

- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Supply voltage: 220...240 V
- Usable as DT6 (2-channel) or DT8 (Tunable White) driver
- Constant Lumen Output (CLO)
- Integrated customizable thermal management (Driver Guard)
- SELV driver



Product family benefits

- Control of standard white or Tunable White light acc. DALI device type 8 (DT8)
- TouchDIM® Tunable White integrated for use without additional LMS
- Fully programmable via T4T software (NFC, DALI Interface)
- Lifetime: up to 100,000 h (temperature at T = 65 °C, max. 10 % failure rate)
- High-quality dimming of 1...100 % by amplitude dimming
- High quality of light thanks to <1% output ripple current
- Fulfill safety requirement due to overload, overtemperature, Hot Plug protection



Specifications are subject to changes without notice. www.inventronicsglobal.com

Areas of application

- Classrooms
- Conference rooms
- Daylight simulation for windowless rooms
- For Tunable White as well as for 2-channel use (e.g. direct/indirect lighting)
- Healthcare and hospitality with HCL functionality
- Independent mounting via Cable Clamp Kit possible
- Installation in emergency lighting systems according to IEC 61347-2-13, appendix J
- Office with high end HCL functionality
- Suitable for indoor and outdoor SELV installations

Technical data

| May ECC no on sizewit breaker 40 A (P) | 27 |
|--|-------------------------|
| Max. ECG no. on circuit breaker 10 A (B) | |
| Max. ECG no. on circuit breaker 16 A (B) | 43 |
| Maximum output power | 27 W |
| Nominal output current | 180700 mA ¹⁾ |
| Nominal output power | 25 W ²⁾ |
| Nominal output voltage | 1254 V ³⁾ |
| Nominal input voltage | 220240 V |
| Input voltage AC | 198264 V ⁴⁾ |
| Input voltage DC | 176276 V |
| Efficiency in full-load | 87 % ⁵⁾ |
| Galvanic isolation DALI/mains | Basic |
| Galvanic isolation DALI/output | SELV |
| Galvanic isolation primary/secondary | SELV |
| Inrush current | 17 A ⁶⁾ |
| Networked standby power | <0.20 W ⁵⁾ |
| Power factor λ | 0.42C0.95 |
| Mains frequency | 0/50/60 Hz |
| Surge capability (L-N) | 1 kV |
| Surge capability (L/N-Ground) | 2 kV |
| U-OUT (working voltage) | 60 V |
| Current set | DALI / NFC |
| Output current tolerance | ±3 % |
| Output ripple current (100 Hz) | < 2 % ⁷⁾ |
| Total harmonic distortion | < 15 % ⁸⁾ |
| Default output current | 300 mA |

1) not relevant

2) Partial load 3...25 W

3) Maximum 60 V

4) Permitted voltage range

5) at 230 V, 50 Hz

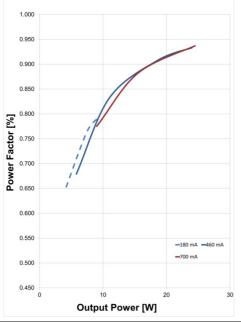
6) t_{width} = 180 µs (measured at 50 % I_{peak})

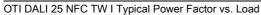
7) Ripple average at 100 Hz

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

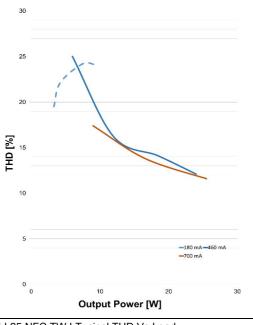
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Typical Power Factor v Load



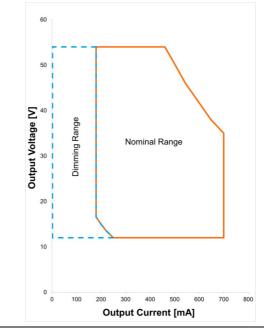


Typical THD v Load



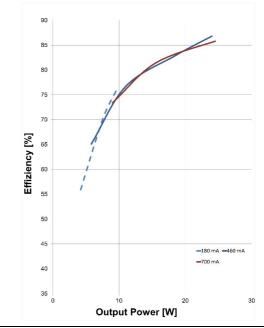
OTI DALI 25 NFC TW I Typical THD Vs Load

Operating Window



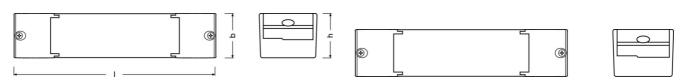
OTI DALI 25 NFC TW I Operating Window

Typical Efficiency v Load 230 V 50 Hz



OTI DALI 25 NFC TW I Typical Efficiency vs. Load 230 V / 50 Hz

Dimensions & weight



| Product weight | 190.00 g | | |
|--------------------------------------|--------------------------------------|--|--|
| Length | 203.0 mm | | |
| Height | 34.0 mm | | |
| Width | 44.5 mm | | |
| Cable cross-section, input side | 0.751.5 mm ^{2 1)} | | |
| Cable cross-section, output side | 0.21.5 mm ² ¹⁾ | | |
| Cable/wire length, output side | 2000 mm | | |
| Mounting hole spacing, length | 167.8 mm | | |
| Wire preparation length, input side | 8.09.0 mm | | |
| Wire preparation length, output side | 8.09.0 mm | | |

1) Solid or flexible leads

Colors & materials

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

Temperatures & operating conditions

| Ambient temperature range | -25+50 °C |
|--|---------------------|
| Max.housing temperature in case of fault | 110 °C |
| Maximum temperature at tc test point | 75 °C ¹⁾ |
| Permitted rel. humidity during operation | 585 % ²⁾ |
| Temperature range at storage | -40+85 °C |

1) Maximum at the Tc-point

2) Maximum 56 days/year at 85 %

product - technical datasheet

Lifespan

ECG lifetime

50000 h / 100000 h ¹⁾

1) T_c = 75°C, 0.2% / 1,000 h failure rate / T_c = 65°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⁾ | | |
| Number of channels | 2 ²⁾ | | |
| Dimmable | Yes | | |
| Dimming interface | DALI-2 / Touch DIM / Touch DIM Sensor | | |
| Dimming method | Amplitude Modulation | | |
| Dimming range | 1100 % | | |
| Overload protection | Automatic reversible | | |
| Overheating protection | Automatic reversible | | |
| Short-circuit protection | Automatic reversible | | |
| Suitable for through-wiring | Yes | | |
| Suitable for emergency lighting | Yes | | |
| Suitable for fixtures with prot. class | 1/11 | | |
| Type of connection, input side | Push terminal | | |
| Type of connection, output side | Push terminal | | |
| Constant lumen function | Programmable | | |
| No-load proof | Yes | | |
| Programming interface | DALI, NFC | | |

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

2) Default operation mode: tunable white DT8; optional operation mode: 2-channel DT6

product - technical datasheet

Programming

| Box programming | Yes |
|-----------------|-----|
| | |

Programmable features

| Dim to Dark | Yes |
|------------------------|-------------------|
| Configuration Lock | Yes |
| Corridor Functionality | Yes |
| DALI Settings | Yes |
| DALI-2 Luminaire Data | Yes ¹⁾ |
| Driver Guard | Yes |
| Emergency Mode | Yes |
| Soft Switch Off | Yes |
| Tuning Factor | Yes |
| TouchDIM + Sensor | Yes |
| | |

1) Acc. DALI part 251

Certificates & standards

| Type of protection | IP20 | | | |
|---------------------------|--|--|--|--|
| Standards | Acc. to IEC 61347-1 / Acc. to IEC 61347-2-13 / Acc. to IEC 62384 / Acc. to EN 55015 / Acc. to IEC 62386 / Acc. to IEC 61000-3-2 / Acc. to IEC 61000-3-3 / Acc. to IEC 61547 / Acc. to CISPR 15 / Acc. to ETSI EN 300 330 / Acc. to ETSI EN 301 489 - 1 / Acc. to ETSI EN 301 489-3 | | | |
| Approval marks – approval | CE / UKCA / EAC / DALI-2 / EL | | | |
| | | | | |

Logistical data

| Commodity code | 85044083900 |
|----------------|-------------|
|----------------|-------------|

product - technical datasheet

OSRAM

Additional product information

- Electrical connections between the two output channels are not allowed.

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.

Download Data

| File | | |
|------------------------|------------|--|
| Certificates | PDF | ►OT ENEC 40038447 270224 |
| CAD data 3-dim | Compressed | ►OTI DALI 15 25 NFC TW I CAD3PDF 040221 |
| CAD data 2-dim | Compressed | ►OTI DALI 15 25 NFC TW I CAD2PDF 040221 |
| CAD data | Compressed | ► OTI DALI 15 25 NFC TW I IGS 040221 |
| CAD data | Compressed | ►OTI DALI 15 25 NFC TW I STEP 040221 |
| Mandatory Publications | PDF | ►OTi DALI NFC TW I CE 4335714 180823 |
| Mandatory Publications | PDF | ►OTi DALI NFC TW I UK DoC 4335715 161221 |
| User instruction | PDF | OPTOTRONIC LED Power Supply |

product - technical datasheet

Logistical Data

| Product code | Product description | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Volume | Gross weight |
|---------------|-------------------------------------|---------------------------------|---|----------|--------------|
| 4062172211567 | OTi DALI 25/220-240/700 NFC TW I | Shipping carton box 20 Pieces | 418 x 185 x 108 mm | 8.35 dm³ | 214.00 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 and downloading theTuner4TRONIC 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.

Accessories Optional

| Product description | Accessory name | Accessory code |
|----------------------------------|----------------|----------------|
| OTi DALI 25/220-240/700 NFC TW I | PRH101 -USB | ►6977078996938 |
| OTi DALI 25/220-240/700 NFC TW I | CPR30 -USB | ▶6977078996945 |

Disclaimer

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