

OTe 18/220...240/350 PC

OPTOTRONIC Phase-cut OTE | Compact constant current LED driver – Dimmable



Product family features

- Dimmable via leading edge/trailing edge
- Type of protection: IP20

Product family benefits

- Compact housing for mounting in very tight spaces
- Compatible with the most common leading-edge and trailing-edge phase dimmers

Areas of application

- Optional cable clamp E-style for independent mounting
- Suitable for indoor installations
- Suitable for indoor SELV installations

Technical data

Electrical data

| | |
|--|----------------------------|
| Nominal input voltage | 220...240 V |
| Mains frequency | 50/60 Hz |
| Input voltage AC | 198...264 V ¹⁾ |
| Total harmonic distortion | 15 % |
| Power factor λ | 0.88C...0.97 ²⁾ |
| Efficiency in full-load | 86 % ³⁾ |
| Device power loss | 3.0 W ⁴⁾ |
| Inrush current | 5 A ⁵⁾ |
| Max. ECG no. on circuit breaker 10 A (B) | 53 |
| Max. ECG no. on circuit breaker 16 A (B) | 84 |
| Max. ECG no. on circuit breaker 25 A (B) | - |
| Surge capability (L/N-Ground) | 1 kV |
| Surge capability (L-N) | 1 kV |
| Nominal output voltage | 27...54 V ⁶⁾ |
| U-OUT (working voltage) | 50 V |
| Nominal output current | 350 mA ⁷⁾ |
| Output current tolerance | ±10 % |
| Output ripple current (100 Hz) | < 35 % ⁸⁾ |
| Output PSTLM | ≤1 |
| Output SVM | ≤0.8 |
| Nominal output power | 19 W ⁹⁾ |
| Maximum output power | 19 W |
| Galvanic isolation primary/secondary | SELV |
| Current set | Fixed current |

¹⁾ Permitted voltage range

²⁾ Full load at 230 V/Minimum load at 230 V

³⁾ at 230 V, 50 Hz

⁴⁾ Maximum

⁵⁾ $t_{width} = 100 \mu s$ (measured at 50 % I_{peak})

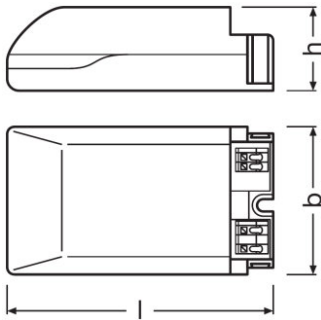
⁶⁾ Maximum 60 V

⁷⁾ ±10%

⁸⁾ Typical

⁹⁾ Partial load 9.5...19 W

Dimensions & weight



| | |
|--------------------------------------|--|
| Mounting hole spacing, length | - |
| Mounting hole spacing, width | - |
| Product weight | 93.00 g |
| Cable cross-section, input side | 0.75...1.5 mm ² ¹⁾ |
| Cable cross-section, output side | 0.5...1.5 mm ² ¹⁾ |
| Wire preparation length, input side | 8.0...9.0 mm |
| Wire preparation length, output side | 8.0...9.0 mm |
| Length | 95.0 mm |
| Width | 53.0 mm |
| Height | 30.0 mm |

¹⁾ Flexible / Solid leads

Colors & materials

| | |
|-----------------|---------|
| Casing material | Plastic |
|-----------------|---------|

Temperatures & operating conditions

| | |
|--|------------------------|
| Ambient temperature range | -20...+50 °C |
| Maximum temperature at tc test point | 75 °C ¹⁾ |
| Max.housing temperature in case of fault | 110 °C |
| Temperature range at storage | -25...75 °C |
| Permitted rel. humidity during operation | 5...85 % ²⁾ |

¹⁾ Maximum at the T_c-point

²⁾ Maximum 56 days/year at 85 %

Lifespan

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

¹⁾ At $T_{case} = 70\text{°C}$ at T_c point / 10% failure rate

Capabilities

| | |
|---|-------------------------|
| Dimmable | Yes |
| Dimming interface | Phase Cut ¹⁾ |
| Dimming range | 10...100 % |
| Dimming method | Amplitude Modulation |
| 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 ²⁾ |
| Suitable for fixtures with prot. class | I / II |
| Type of connection, output side | Push terminal |
| Suitable for through-wiring | No |

¹⁾ Leading edge / Trailing edge

²⁾ Output wires must be routed as close as possible to each other

Certificates & standards

| | |
|----------------------------------|---|
| Approval marks – approval | CE / ENEC 10 / VDE / CB |
| Standards | Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to CISPR 15/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547 |
| Protection class | II |
| 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 | 4052899105348 |
| 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 | 57669464-49fd-40ec-ac45-64d14aa31c37 |

Product datasheet

Download Data

| File | |
|---|---|
|  | Certificates OT EMC 40038482 290922 |
|  | Certificates OT ENEC 40038447 260623 |
|  | Certificates 503096_CB report OTe 25 700 PC - OTe 18 350 PC - OTe 18 500 |
|  | Declarations of conformity OTe PC UK DoC 4281102 220322 |
|  | Declarations of conformity OTE PC CE 3365230 220322 |
|  | Installation/Operation notice OT PC dimmer list (EN) |
|  | Installation guide 501496_OTe 18220-240350 PC |
|  | CAD data 3-dim 377015_OTe 18-25 PC -cable clamp |
|  | CAD data 3-dim 377016_OTe 18-25 PC -housing |
|  | CAD data 3-dim 377017_OTe 18-25 PC -housing with cable clamp |

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 |
|---------------|-------------------------|------------------------------|--------------------------------------|----------------------|--------------|
| 4052899105348 | OTe 18/220...240/350 PC | Shipping carton box 20 | 284 mm x 207 mm x 100 mm | 5.88 dm ³ | 2138.00 g |

Product datasheet

Logistical Data

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 |
|-------------------------|------------------------|-----------------|
| OTe 18/220...240/350 PC | OT CABLE CLAMP E-STYLE | ▶ 4052899167896 |

Disclaimer

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