

OTe 18/220...240/500 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⁾
Input voltage DC	not relevant
Current set	Fixed current
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⁾
Protective conductor current	not relevant
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
Surge capability (L/N-Ground)	1 kV
Surge capability (L-N)	1 kV
Nominal output voltage	18...36 V ⁶⁾
U-OUT (working voltage)	60 V
Nominal output current	500 mA ⁷⁾
Output current tolerance	± 10 %
Output ripple current (100 Hz)	< 35 % ⁸⁾
Output PSTLM	≤ 1
Output SVM	≤ 0.6
Nominal output power	18 W ⁹⁾
Maximum output power	18 W
Galvanic isolation	SELV

1) Permitted voltage range

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

3) at 230 V, 50 Hz

4) Maximum

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

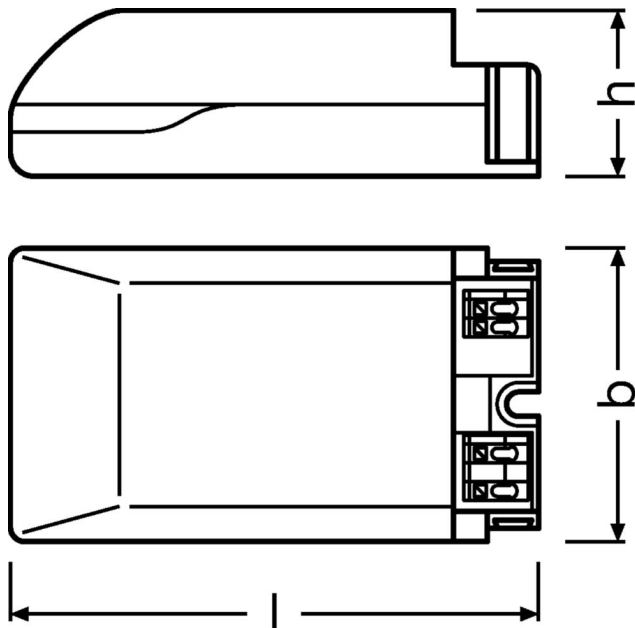
6) Maximum <48 V

7) $\pm 10\%$

8) Typical

9) Partial load 9...18 W

Dimensions & weight



Length	95.0 mm
Width	53.0 mm
Height	30.0 mm
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
Product weight	93.00 g

1) Flexible / Solid leads

Colors & materials

Casing material	Plastic
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Temperatures & operating conditions

Ambient temperature range	-20...+55 °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 Tc-point

2) Maximum 56 days/year at 85 %

Lifespan

ECG lifetime	50000 h ¹⁾
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1) At $T_{case} = 70^{\circ}C$ at T_c point / 10% failure rate

Capabilities

Dimmable	Yes
Dimming interface	Phase Cut ¹⁾
Dimming range	10...100 %
Dimming method	Amplitude Modulation
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
Overheating protection	Automatic reversible
Overload protection	Automatic reversible
Short-circuit protection	Automatic reversible
Intended for no-load operation	No
No-load proof	Yes

1) Leading edge / Trailing edge

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

Programming

Programming device	not relevant
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Certificates & standards

Approval marks – approval	CE / ENEC 10 / VDE / CB
Standards	Acc. to IEC 61347 / 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
Type of protection	IP20
Protection class	2

Logistical data

Commodity code	85044083900
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Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)	
Date of Declaration	22-03-2024
Primary Article Identifier	4052899105362
Declaration No. in SCIP database	In work

Download Data

File		
Installation/Operation notice	PDF	▶OT PC dimmer list (EN)
Certificates	PDF	▶OT EMC 40038482 290922
Certificates	PDF	▶OT ENEC 40038447 260623
Certificates	PDF	▶503096_CB report OTe 25 700 PC - OTe 18 350 PC - OTe 18 500
CAD data 3-dim	Compressed	▶377015_OTe 18-25 PC -cable clamp
CAD data 3-dim	Compressed	▶377016_OTe 18-25 PC -housing
CAD data 3-dim	Compressed	▶377017_OTe 18-25 PC -housing with cable clamp
Declarations of conformity	PDF	▶OTe PC UK DoC 4281102 220322
Declarations of conformity	PDF	▶OTE PC CE 3365230 220322
Installation guide	PDF	▶501495_OTe 18/220-240/500 PC

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
4052899105362	OTe 18/220...240/500 PC	Shipping carton box 20 Pieces	284 x 207 x 100 mm	5.88 dm³	2138.00 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

Disclaimer

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

Accessories Optional

Product description	Accessory name	Accessory code
OTe 18/220...240/500 PC	OT CABLE CLAMP E-STYLE	▶ 4052899167896