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OTe 10/220...240/700 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

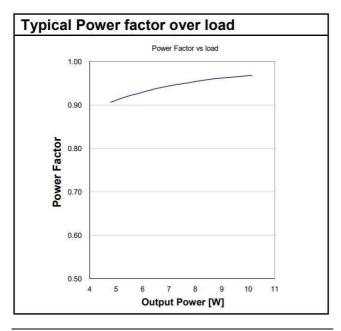
Electrical data

Mains frequency 50/60 Hz Input voltage AC 198264 V¹¹ Input voltage DC not relevant Current set Fixed current Total harmonic distortion < 20 % Power factor λ 0.90C0.98²¹ Efficiency in full-load 79 %³¹ Device power loss 2.8 W⁴¹ Protective conductor current not relevant Inrush current 5 A ⁵¹¹ Max. ECG no. on circuit breaker 10 A (B) 101 Max. ECG no. on circuit breaker 16 A (B) 160 Surge capability (L/N-Ground) 1 kV Surge capability (L/N) 1 kV Nominal output voltage 714 V U-OUT (working voltage) 25 V Nominal output current 700 mA ⁵¹ Output vurrent tolerance ±10 % Output PSTLM ≤1 Output SVM ≤1.0 Nominal output power 10 W Galvanic isolation SELV			
Input voltage AC	Nominal input voltage	220240 V	
Input voltage DC Current set Fixed current Total harmonic distortion < 20 % Power factor \(\) Efficiency in full-load Protective conductor current Inrush current S A \(\) Max. ECG no. on circuit breaker 10 A (B) Surge capability (L/N-Ground) Surge capability (L-N) Nominal output voltage U-OUT (working voltage) Voluput current 10 \(\) Cutput PSTLM Output SVM Nominal output power Maximum output power 10 W Nominal output power 10 W	Mains frequency	50/60 Hz	
Current set Fixed current Total harmonic distortion < 20 % Power factor λ 0.90C0.98²) Efficiency in full-load 79 %³) Device power loss 2.8 W⁴) Protective conductor current not relevant Inrush current 5 A⁵) Max. ECG no. on circuit breaker 10 A (B) 101 Max. ECG no. on circuit breaker 16 A (B) 160 Surge capability (L/N-Ground) 1 kV Surge capability (L-N) 1 kV Nominal output voltage 714 V U-OUT (working voltage) 25 V Nominal output current 700 mA ⁶) Output ripple current (100 Hz) 35 % ⁷ Output PSTLM ≤1 Output SVM ≤1.0 Nominal output power 10 W ⁶) Maximum output power 10 W	Input voltage AC	198264 V ¹⁾	
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Efficiency in full-load 79 % 3) Device power loss 2.8 W 4) Protective conductor current Inrush current 5 A 5) Max. ECG no. on circuit breaker 10 A (B) Max. ECG no. on circuit breaker 16 A (B) Surge capability (L/N-Ground) 1 kV Surge capability (L-N) Nominal output voltage 714 V U-OUT (working voltage) 25 V Nominal output current 700 mA 6) Output current tolerance ±10 % Output ripple current (100 Hz) 35 % 7) Output SVM ≤1.0 Nominal output power 10 W Maximum output power 10 W	Total harmonic distortion	< 20 %	
Device power loss 2.8 W 4) Protective conductor current not relevant Inrush current 5 A 5) Max. ECG no. on circuit breaker 10 A (B) 101 Max. ECG no. on circuit breaker 16 A (B) 160 Surge capability (L/N-Ground) 1 kV Surge capability (L-N) 1 kV Nominal output voltage 714 V U-OUT (working voltage) 25 V Nominal output current 700 mA 6) Output current tolerance ±10 % Output ripple current (100 Hz) 35 % 7) Output PSTLM ≤1 Output SVM ≤1.0 Nominal output power 10 W 8) Maximum output power 10 W	Power factor λ		
Protective conductor current Inrush current 5 A 5) Max. ECG no. on circuit breaker 10 A (B) Max. ECG no. on circuit breaker 16 A (B) Surge capability (L/N-Ground) 1 kV Surge capability (L-N) Nominal output voltage 714 V U-OUT (working voltage) 25 V Nominal output current 700 mA 6) Output current tolerance ±10 % Output ripple current (100 Hz) 35 % 7) Output SVM S1.0 Nominal output power 10 W 8) Maximum output power 10 W	Efficiency in full-load	79 % ³⁾	
Inrush current 5 A 5) Max. ECG no. on circuit breaker 10 A (B) 101 Max. ECG no. on circuit breaker 16 A (B) 160 Surge capability (L/N-Ground) 1 kV Nominal output voltage 714 V U-OUT (working voltage) 25 V Nominal output current 700 mA 6) Output current tolerance ±10 % Output ripple current (100 Hz) 35 % 7) Output SVM ≤1 Output SVM ≤1.0 Nominal output power 10 W 8) Maximum output power 10 W	Device power loss	2.8 W ⁴⁾	
Max. ECG no. on circuit breaker 10 A (B) 101 Max. ECG no. on circuit breaker 16 A (B) 160 Surge capability (L/N-Ground) 1 kV Surge capability (L-N) 1 kV Nominal output voltage 714 V U-OUT (working voltage) 25 V Nominal output current 700 mA ⁶⁾ Output current tolerance ±10 % Output ripple current (100 Hz) 35 % ⁷⁾ Output PSTLM ≤1 Output SVM ≤1.0 Nominal output power 10 W ⁸⁾ Maximum output power 10 W	Protective conductor current	not relevant	
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Surge capability (L/N-Ground) 1 kV Surge capability (L-N) 1 kV Nominal output voltage 714 V U-OUT (working voltage) 25 V Nominal output current 700 mA ⁶⁾ Output current tolerance ±10 % Output ripple current (100 Hz) 35 % ⁷⁾ Output PSTLM ≤1 Output SVM ≤1.0 Nominal output power 10 W ⁸⁾ Maximum output power 10 W	Max. ECG no. on circuit breaker 10 A (B)	101	
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Nominal output voltage 714 V U-OUT (working voltage) 25 V Nominal output current 700 mA ⁶⁾ Output current tolerance ±10 % Output ripple current (100 Hz) 35 % ⁷⁾ Output PSTLM ≤1 Output SVM ≤1.0 Nominal output power 10 W ⁸⁾ Maximum output power 10 W	Surge capability (L/N-Ground)	1 kV	
U-OUT (working voltage) 25 ∨ Nominal output current 700 mA ⁶⁾ Output current tolerance ±10 % Output ripple current (100 Hz) 35 % ⁷⁾ Output PSTLM ≤1 Output SVM ≤1.0 Nominal output power 10 W ⁸⁾ Maximum output power 10 W	Surge capability (L-N)	1 kV	
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Output current tolerance ±10 % Output ripple current (100 Hz) 35 % 7) Output PSTLM ≤1 Output SVM ≤1.0 Nominal output power 10 W 8) Maximum output power 10 W	U-OUT (working voltage)	25 V	
Output ripple current (100 Hz) 35 % 7) Output PSTLM ≤1 Output SVM ≤1.0 Nominal output power 10 W 8) Maximum output power 10 W	Nominal output current	700 mA ⁶⁾	
Output PSTLM ≤1 Output SVM ≤1.0 Nominal output power 10 W 8) Maximum output power 10 W	Output current tolerance	±10 %	
Output SVM ≤1.0 Nominal output power 10 W 8) Maximum output power 10 W	Output ripple current (100 Hz)	35 % ⁷⁾	
Nominal output power 10 W 8) Maximum output power 10 W	Output PSTLM	≤1	
Maximum output power 10 W	Output SVM	≤1.0	
	Nominal output power	10 W ⁸⁾	
Galvanic isolation SELV	Maximum output power	10 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 $_{width}$ = 100 μs (measured at 50 % I $_{peak}$) 6) $\pm 10\%$
- 7) Typical
- 8) Partial load 5...10 W

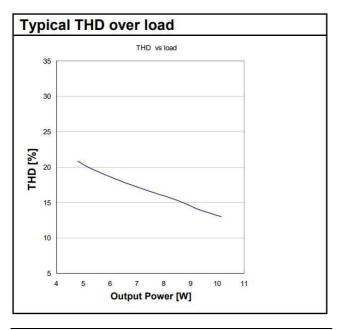
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Typical Power Factor v Load



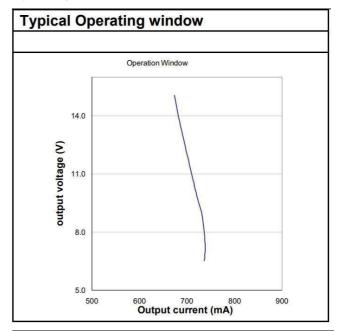
OTE 10/220-240/700 PC Typical Power Factor vs. Load

Typical THD v Load



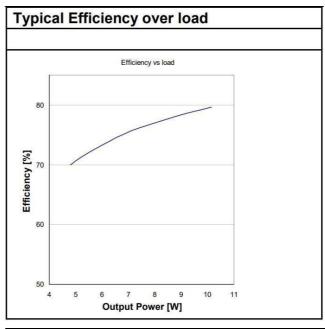
OTE 10/220-240/700 PC Typical THD Vs Load

Operating Window



OTE 10/220-240/700 PC Operating Window

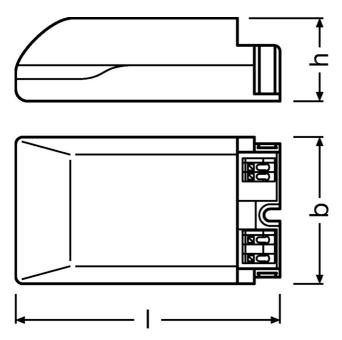
Typical Efficiency v Load 230 V 50 Hz



OTE 10/220-240/700 PC Typical Efficiency vs. Load (230 V / 50 Hz)

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Dimensions & weight



Length	95.0 mm
Width	53.0 mm
Height	25.0 mm
Cable cross-section, input side	0.751.5 mm ² 1)
Cable cross-section, output side	0.51.5 mm ² 1)
Wire preparation length, input side	8.09.0 mm
Wire preparation length, output side	8.09.0 mm
Product weight	81.00 g

¹⁾ Flexible / Solid leads

Colors & materials

Casing material	Plastic

Temperatures & operating conditions

Ambient temperature range	-20+55 °C
Maximum temperature at tc test point	80 °C ¹⁾
Max.housing temperature in case of fault	110 °C
Temperature range at storage	-2575 °C
Permitted rel. humidity during operation	585 % ²⁾

¹⁾ Maximum at the Tc-point

²⁾ Maximum 56 days/year at 85 %



Lifespan

ECG lifetime	50000 h ¹⁾

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

Capabilities

Dimmable	Yes		
Dimming interface	Phase Cut 1)		
Dimming range	10100 %		
Dimming method	Amplitude Modulation		
Max. cable length to lamp/LED module	2.0 m ²⁾		
Suitable for fixtures with prot. class	1/11		
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⁾ Trailing edge / Leading edge

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



Programming

Programming device	not relevant

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			
Type of protection	IP20			
Protection class	2			

Logistical data

Commodity code	85044083900

Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh)				
Date of Declaration 22-03-2024				
Primary Article Identifier 4052899105300				
Declaration No. in SCIP database	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	►496535_CB report OTe 10 700 PC and OTe 13 350 PC
CAD data 3-dim	Compressed	►377012_OTe 10-13 PC -cable clamp
CAD data 3-dim	Compressed	►377013_OTe 10-13 PC -housing
CAD data 3-dim	Compressed	►377014_OTe 10-13 PC -housing with cable clamp
Installation guide	PDF	►501498_OTe 10/220-240/700 PC
Declarations of conformity	PDF	►OTe PC UK DoC 4281102 220322
Declarations of conformity	PDF	►OTE PC CE 3365230 220322

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
4052899105300	OTe 10/220240/700 PC	Shipping carton box 20 Pieces	284 x 207 x 96 mm	5.64 dm³	1890.00 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 10/220240/700 PC	OT CABLE CLAMP E-STYLE	►4052899167896