

OTe 10/220-240/700 PC

Constant Current LED Power Supply

700mA – PhaseCut functionality

OPTOTRONIC® LED Power Supply
with high efficiency and reliability in compact
housing. Equipped with Phase Cut functionality fits
in light fixtures for office and shop lighting.

**Benefits**

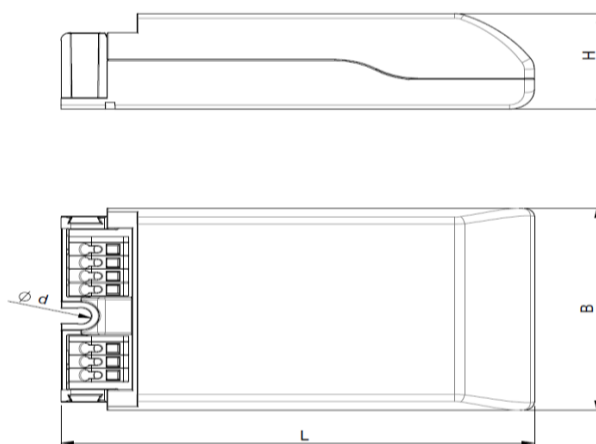
Suitable for use with electronic Leading and
Trailing Edge dimmer
Long lasting and high reliability
Extra small compact housing

Applications

Downlights, Spotlights and other Indoor LED
applications

Approval marks

In preparation, if not printed on product labels



L	95mm
B	53mm
H	25 mm
d	Φ 4,2

Product Features

- Output currents : 700mA
- Output voltage : $7V_{DC} - 14V_{DC}$
- Output power : 5W - 10W
- Input voltage : 220 – 240 V_{AC}
- Typ. Efficiency : 79%
- Phase Cut dimmable
- Ambient temp range t_a : -20°C to +55°C
- Max. case temperature at t_c point : 80°C
- Galvanic isolation : 3.75kVrms
- Optional cable clamp is available
- Suitable for class I and II luminaires
- 50'000 h lifetime at $t_c = 70^\circ\text{C}$

Electrical Specifications

	Item	Value	Unit	Remarks
INPUT	Nominal voltage	220 – 240	V _{AC}	
	Nominal frequency	50 - 60	Hz	
	AC voltage range	198 – 264	V _{AC}	Permitted voltage range
	DC voltage range	NA	V	
	Maximum voltage	275	V	2hrs
	Nominal current	65	mA	230V @ 10W load
	Total Harmonic Distortion (THD)	< 20	%	Full load, 230 V, 50 Hz / see graphs
	Power factor	0.95		Full load, 230 V, 50 Hz / see graphs
	Efficiency	79	%	Full load, 230 V, 50 Hz, typical / see graphs
	No-load power	< 1	W	230V, typical
	Stand-by power	NA	W	
	Power loss	2.8	W	at 230V input @ 10 W load max.
	Input power	12.8	W	at 230V input @ 10 W load max.
	Protection class	II		Suitable for class I and class II luminaires
	Inrush current	< 5	A	t _{width} = 100 µs typical (measured at 50% I _{peak})
OUTPUT	Max. units per circuit breaker	B16:160; B10:100		I max = 0.065 A Th = 230 µs
	Touch current	< 0.7	mA	Output floating
	Nominal voltage range	7 – 14	V _{DC}	
	Maximum voltage	22	V _{DC}	Open circuit
	Nominal current range	700	mA	
	Current accuracy	+/- 10	%	
	Current ripple	35	%	typical
	Nominal power range	5 – 10	W	Partial Load.
DIMMING	Maximum power	10	W	Ta ≤ 55°C,
	Galvanic isolation	SELV-equivalent		3,75 kVrms . Output to earth - Touch current < 0.7 mA
	Dimming control	Yes		Suitable for use with electronic leading- and trailing edge dimmer (Phase Cut)
	Dimming range	10 - 100	%	
ENVIRONMENT	Dimming technique	Amplitude dimming		
	Ambient temperature range t _a	-20 ...+55	°C	Refer to Table 1 for details
	Maximum case temperature t _c	80	°C	Measured on t _c point indicated of the product label.
	Max. case temp. in fault condition	110	°C	
	Storage temperature range	-25 ...+75	°C	Cool down before operating
	Relative humidity	5 ... 85	%	Not condensing
	Surge transient protection	1 1	kV	L/N LN/PE acc. IEC 61000-3-2 (ANSI C62.41 Cat.A ...)
	Environmental rating	Indoor		
	IP rating	IP 20		
	Mains switching cycles	> 100'000		
	Expected lifetime	35'000	hrs	t _a = 55°C , t _c = 80°C, 10% failure rate
		50'000		t _a = 45°C , t _c = 70°C, 10% failure rate

Protections

Overtemperature

Automatic, reversible

Overload

Automatic, reversible

No load

Yes

Short-circuit

Automatic, reversible

Input overvoltage

Maximum allowed input voltage 275V AC

Output overvoltage

Yes , Limitation of Output voltage < 60V

Output undervoltage

NA

LED load protection

NA

Wiring Diagram

Terminal:

Max. cable length - system:

Geometry (l x b x h):

Weight(typical):

Push in terminals

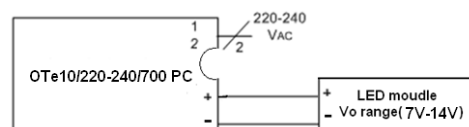
2 m

95 x 53 x 25 mm

100 g

Wire preparation:

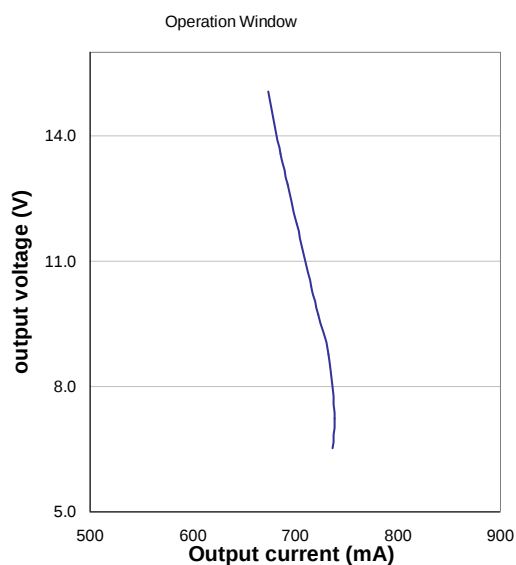
Push in
s: 0.5-1.5
f: 0.75-1.5
8-9mm



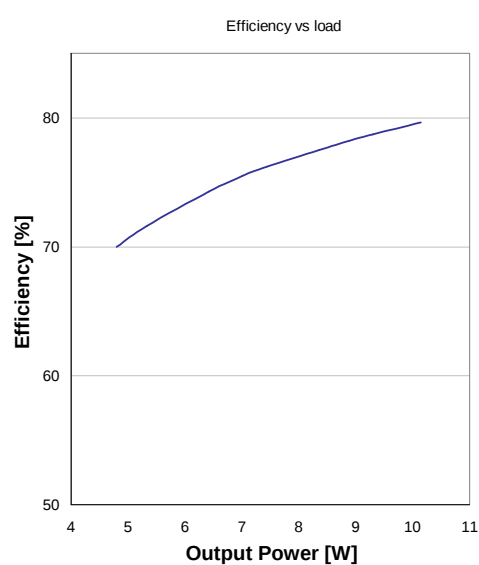
Example with 800mA LED module

Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.

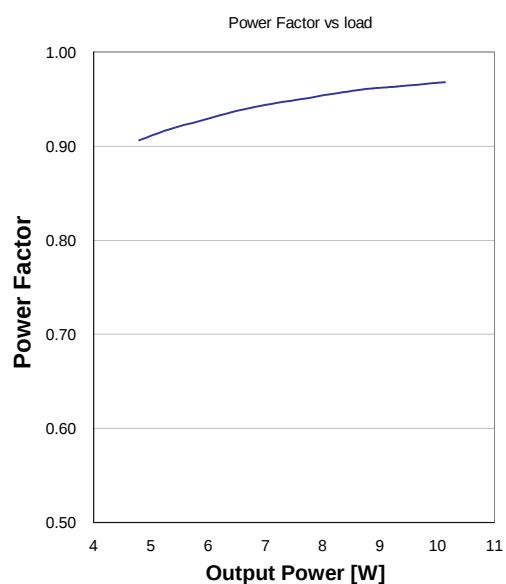
Typical Operating window



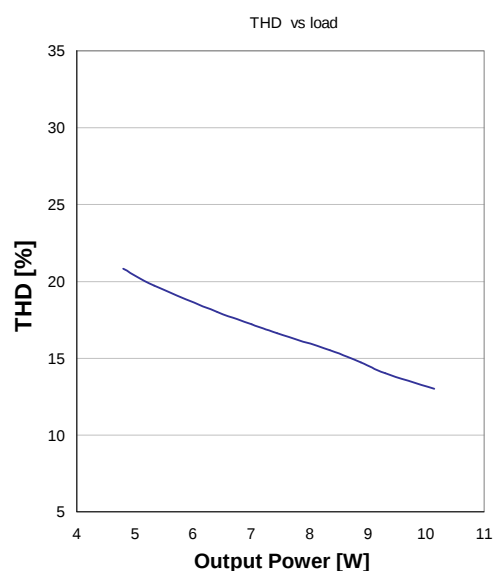
Typical Efficiency over load



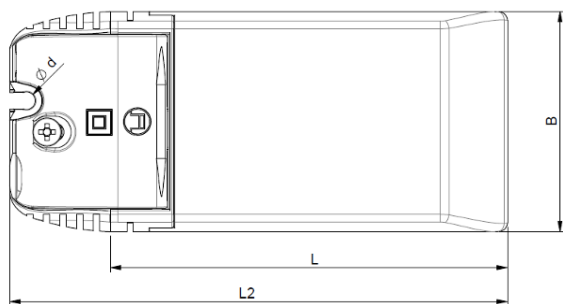
Typical Power factor over load



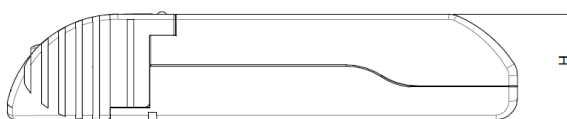
Typical THD over load



An optional cable clamp is available. This cable clamp can be snapped onto the ECG and thus converts it into an ECG suitable for independent installation.



L	95mm
L2	119mm
B	53mm
H	25mm
d	Φ 4,2



Standards

Safety: IEC 61347-1, IEC 61347-2-13

Performance: IEC 62384

Radio interference: CISPR 15

Harmonic content: IEC 61000-3-2

Immunity: IEC 61000-3-3

IEC 61547

Product name	EAN10	EAN40	Pieces / box
OTe 10/220-240/700 PC	4052899105300	4052899105317	20
OT Cable Clamp E-style	4052899167896	4052899095861	20

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