

Light is OSRAM

OSRAM

Product data sheet: OT FIT 20/220-240/500 CS

Constant Current LED Power Supply

250mA - 350mA - 450mA- 500mA

OPTOTRONIC® LED Power Supply
with high reliability in extra small & compact
housing. Equips with 4 selectable currents fits in
light fixtures for shop and office lighting.

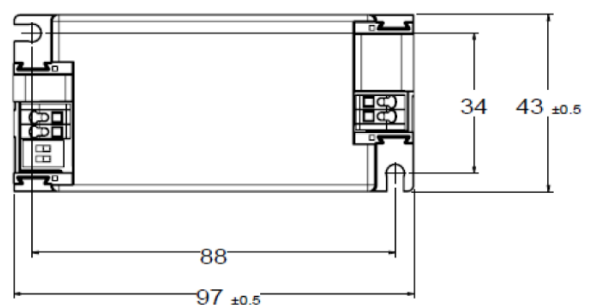
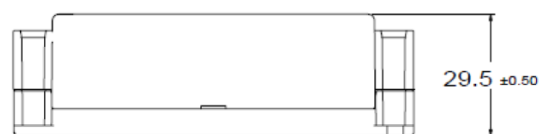
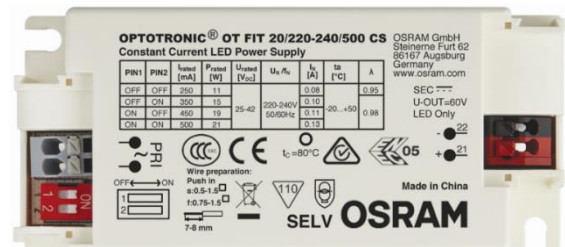
Benefits:

1 driver with 4 output currents;
High quality light with very low ripple;
Extra small housing for compact fixture;
Long lasting and high reliability
Safety ensured by OSRAM (SELV)
5 years guarantee

Applications

Downlights, Spotlights and Panels

Approval marks (under preparation if not on label)



L	97 mm
L1	88 mm
B	43 mm
B1	34 mm
H	29.5 mm

Product Features

- Output currents: 250/350/450/500 mA
- Output voltage: 25V_{DC} – 42V_{DC}
- Output power: 6.5 W – 21 W
- Suitable for class I and II luminaires
- Fixed Output (no dimming)
- Low ripple, Low THD
- Extra small housing
- Typ. Efficiency: 87%
- SELV
- Up to 50'000 hours lifetime

Electrical Specifications

	Item	Value	Unit	Remarks
Input	Nominal Voltage	220 - 240	V	
	Nominal frequency	50 / 60	Hz	
	AC voltage range	198 – 264	V	AC, Safety voltage range
	DC voltage range	n/a	V	
	Maximum voltage	275	V	2 h
	Nominal current	130	mA	230V, Refer to table 1 for details
	Total Harmonic Distortion (THD)	< 10	%	Full load, 230 V, 50 Hz / see graphs
	Power factor	0.98		Full load, 230 V, 50 Hz / see graphs
	Efficiency	87	%	Full load, 230 V, 50 Hz / typical/ see graphs
	No-load power	< 0.5	W	230 V, typical
	Power losses	3	W	At 230 V Input power 24 W max. refer to table 1 for details
	Protection class	II		Suitable for class I and II luminaires
	Inrush current	< 16	A	Th = 100 µs typical (measured at 50% Ipeak)
	Max. units per circuit breaker	B16: 50 B10: 30		
	Leakage current	< 0.7	mA	Output floating
Output	Nominal voltage range	25 – 42	V	Refer to table 1 for details
	Maximum voltage	60	Vdc	w/ Open Circuit
	Nominal current range	250/350/450/500	mA	
	Current accuracy	+/- 7.5	%	
	Current ripple	< 5	%	Ripple / average @ 100 Hz
	Nominal power range	6.5 – 21	W	Partial Load. Refer to table 1 for details
	Maximum power	21	W	Refer to table 1 for details
	Galvanic isolation	SELV		Output to mains – touch current < 0.7 mA
Dim	Dimming control	No		Not dimmable
	Dimming range	n/a	%	
	Dimming technique	n/a		
	Frequency	n/a	Hz	
	Galvanic isolation	n/a		
Environment	Ambient temperature range t_a	-20...+50	°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	-20...+80	°C	Cool down before operating
	Relative humidity	5...85	%	Not condensing
	Surge transient protection	1 / 2	kV	L/N /LN/PE acc to EN 61547
	Environmental rating	Indoor		
	IP rating	IP 20		
	Mains switching cycles	> 100'000		
	Expected lifetime	50'000	hrs	$t_c = 70^{\circ}\text{C}$ (operating at 10°C below T_c , max. failure rate of 10%)

Protections

Over temperature

Automatic, reversible

Overload

Automatic, reversible

No load

Yes. Limitation of Output voltage < 60V

Short-circuit

Automatic, reversible

Input overvoltage

Maximum allowed input voltage 275V AC

Output overvoltage

Yes. Limitation of Output voltage < 60V

Wiring Diagram

Terminal:

Max. cable length

Geometry (l x b x h):

Weight:

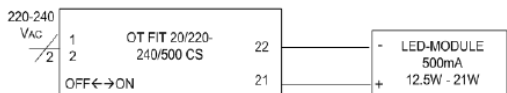
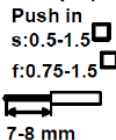
Push in terminals

2 m

97 x 43 x 29.5 mm

85 g

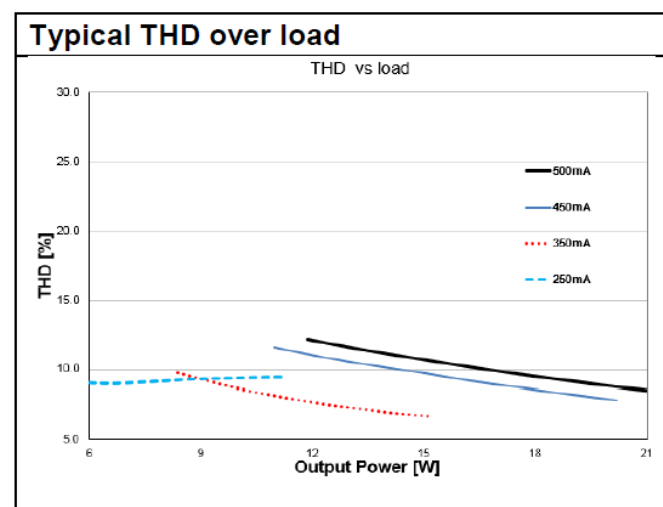
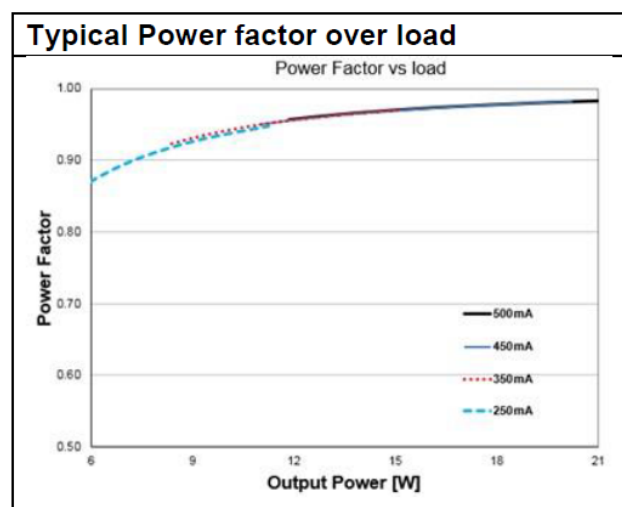
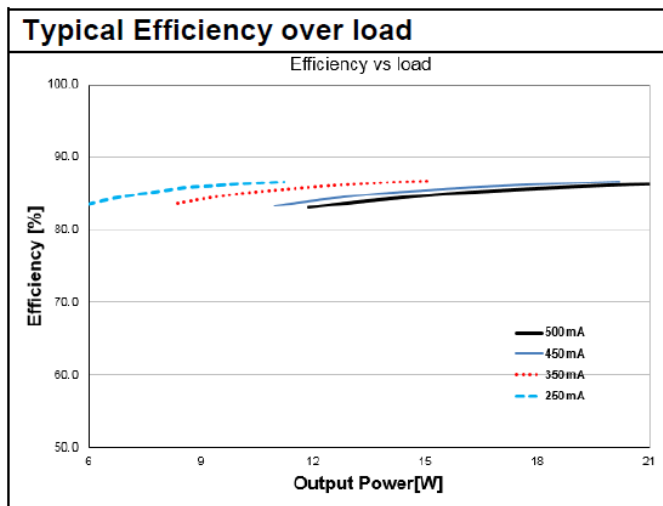
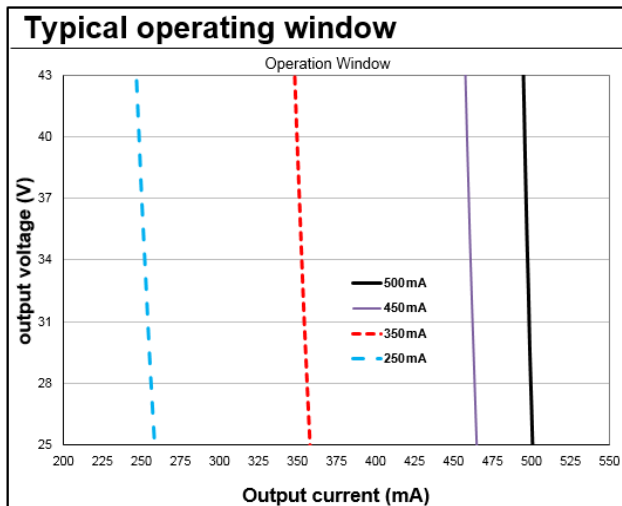
Wire preparation:



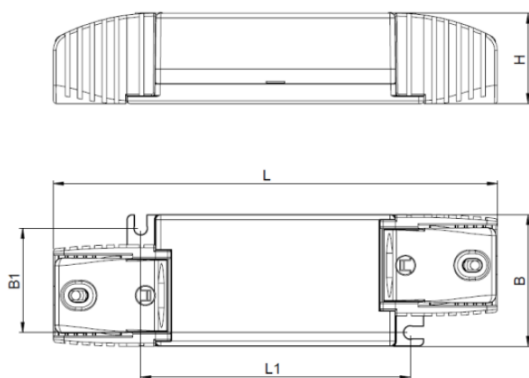
Example with 500mA LED module

For build-in: 0.5-1.5 mm², for independent: 0.75-1.5 mm²

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



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



L	145mm
L1	88mm
B	43mm
B1	34mm
1	29.5mm

Table 1 - Rated output power and current sets					
I_{out} (mA)	250	350	450	500	
U_{min} [V]	25	25	25	25	
U_{max} [V]	42	42	42	42	
P_{min} [W]	6.3	8.8	11.3	12.5	
P_{max} [W]	10.5	14.7	18.9	21	
T_a [°C]	50	50	50	50	
T_c [°C]	80	80	80	80	
Line Current, nominal@230V mA	80	100	110	130	
Max Power Loss@230V [W]	1.6	2.2	3.0	3.0	
Input Power @230V [W]	12.0	16.9	21.7	24	

Pin1	Pin2	Current
ON	ON	500
ON	OFF	450
OFF	ON	350
OFF	OFF	250

Current selection by DIP-switch

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
OT FIT 20/220-240/500 CS	4052899435612	4052899435629	20
OT Cable Clamp D-style	4052899077904	4052899077911	40

OSRAM GmbH

Head Office:

Marcel-Breuer-Strasse 6
80807 Munich, Germany
Phone +49 89 6213-0
www.osram.com

OSRAM