

Light is OSRAM

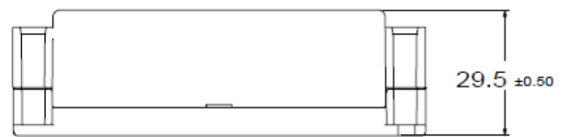
OSRAM

Product data sheet: OT FIT 40/220-240/1A0 CS

Constant Current LED Power Supply

800mA - 900mA - 950mA- 1050mA

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.

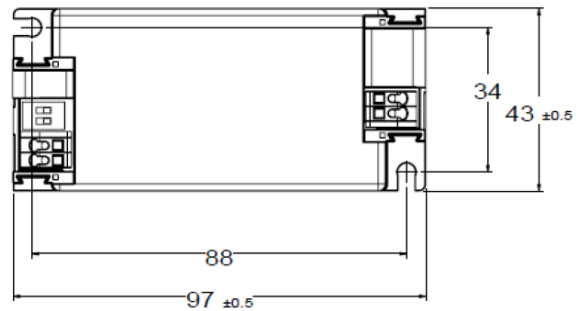


Benefits

- 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: 800/900/950/1050 mA
- Output voltage: 25V_{DC} – 42V_{DC}
- Output power: 20 W – 44 W
- Suitable for class I and II luminaires
- Fixed Output (no dimming)
- Low ripple, Low THD
- Extra small housing
- Typ. Efficiency: 90%
- 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	240	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	90	%	Full load, 230 V, 50 Hz / typical/ see graphs
	No-load power	< 0.5	W	230 V, typical
	Standby power	n/a	W	
	Power losses	4.9	W	At 230 V Input power 49 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: 25 B10: 15		
Output	Leakage current	< 0.7	mA	Output floating
	Nominal voltage range	25 – 42	Vdc	Refer to table 1 for details
	Maximum voltage	60	Vdc	w/ Open Circuit
	Nominal current range	800/900/950/1050	mA	
	Current accuracy	+/- 7.5	%	
	Current ripple	< 5	%	Ripple / average @ 100 Hz
	Nominal power range	20 – 40	W	Partial Load. Refer to table 1 for details
	Maximum power	44	W	Ta ≤ 50°C 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°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

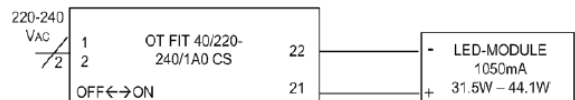
Wiring Diagram

Terminal:
Max. cable length - system: 2 m
Geometry (l x b x h): 97 x 43 x 29.5 mm
Weight: 110 g

Push in terminals
2 m
97 x 43 x 29.5 mm
110 g

Wire preparation:

Push in
s: 0.5-1.5 mm
t: 0.75-1.5 mm
7-8 mm

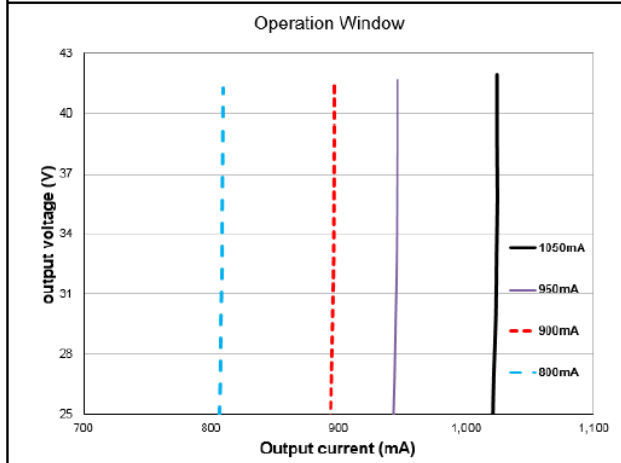


Example with 1050mA LED module

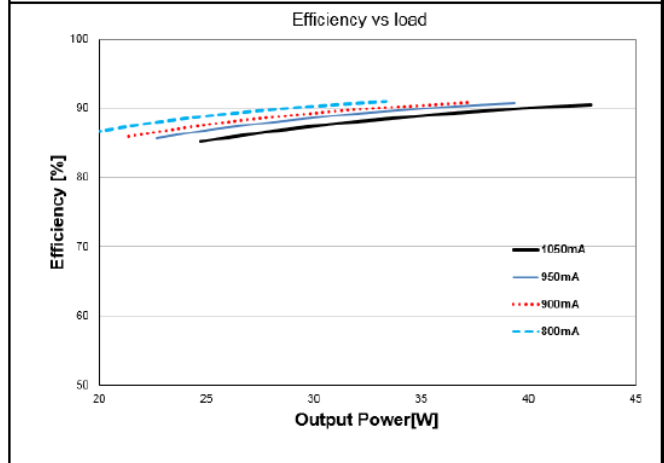
For build-in: 0.5-1.5 mm², for independent: 0.75-1.5 mm²

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

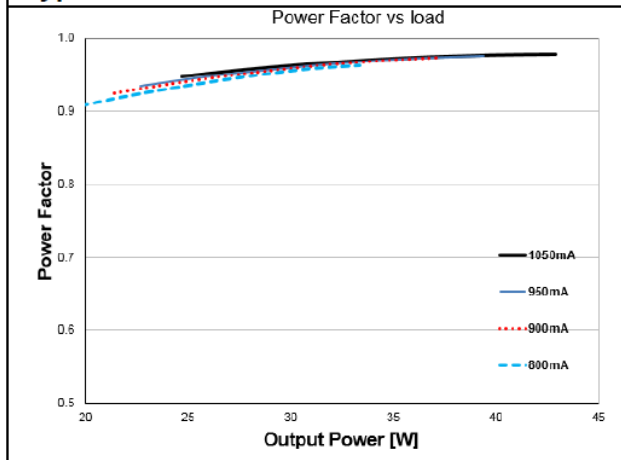
Typical Operating window



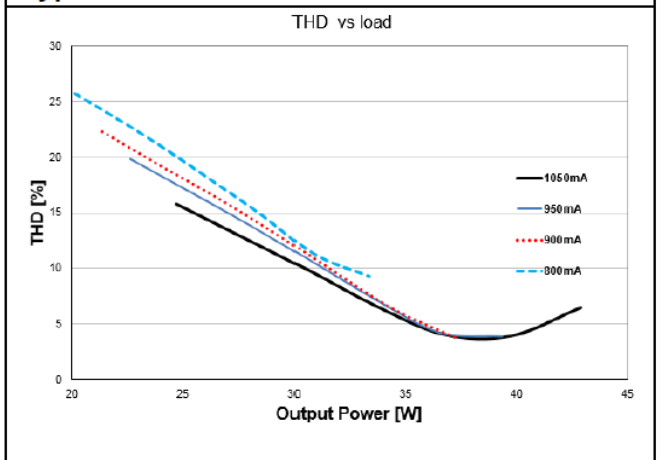
Typical Efficiency over load



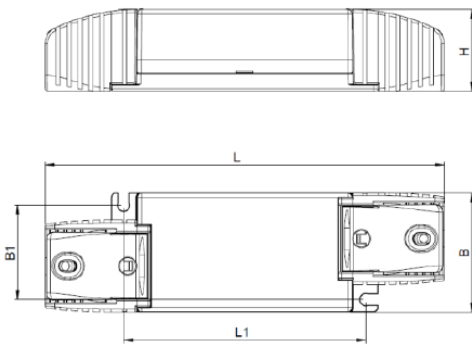
Typical Power factor over load



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	145mm
L1	88mm
B	43mm
B1	34mm
H	29.5mm

Table 1 - Rated output power and current sets					
I _{out} (mA)	800	900	950	1050	
U _{min} [V]	25	25	25	30	
U _{max} [V]	42	42	42	42	
P _{min} [W]	20	22.5	23.8	31.5	
P _{max} [W]	33.6	37.8	39.9	44.1	
T _a [°C]	50	50	50	45	
T _c [°C]	80	80	80	80	
Line Current, nominal@230V mA	190	210	220	240	
Max Power Loss@230V [W]	3.7	4.2	4.4	4.9	
Input Power @230V [W]	37.3	42.0	44.3	49	

Pin1	Pin2	Current
ON	ON	1050
ON	OFF	950
OFF	ON	900
OFF	OFF	800

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 40/220-240/1A0 CS	4052899435650	4052899435667	20
OT Cable Clamp D-style	4052899077904	4052899077911	40

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