

Light is OSRAM

OSRAM

## Product Data Sheet

### IT FIT 30/220-240/500 CS

Constant Current LED Power Supply  
350/400/450/500/550/600/650/700mA

**ICUTRONIC®** LED Power Supply  
with high reliability in extra small & compact  
housing. Equips with 8 selectable currents fits in  
light fixtures for shop and office lighting.

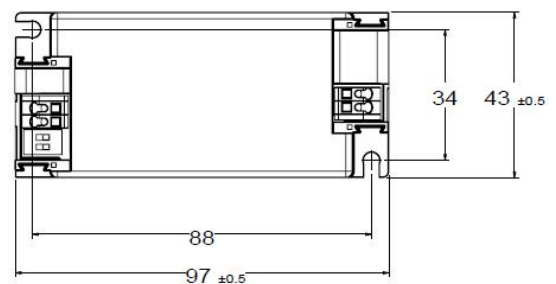
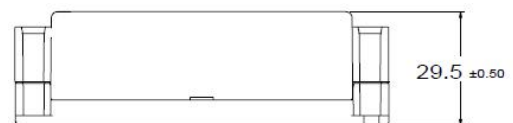
#### Benefits

1 driver with 8 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);

#### Applications

Downlights  
Spotlights  
Panels  
Other indoor luminaries

#### Approval marks



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

#### Product Features

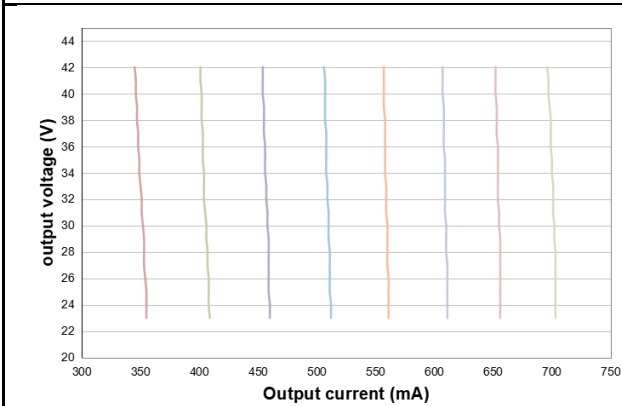
- Output currents: 350/400/450/500/550/600/650/700mA
- Output voltage: 23VDC – 42VDC
- Output power: 8.5W – 29.4W
- Suitable for class I and II luminaires
- Fixed Output (no dimming)
- Low ripple, Low THD
- Extra small housing
- Typ. Efficiency: 88%
- SELV
- 50'000 hours lifetime at  $t_{cmax} = 80^{\circ}C$

## Electrical Specifications

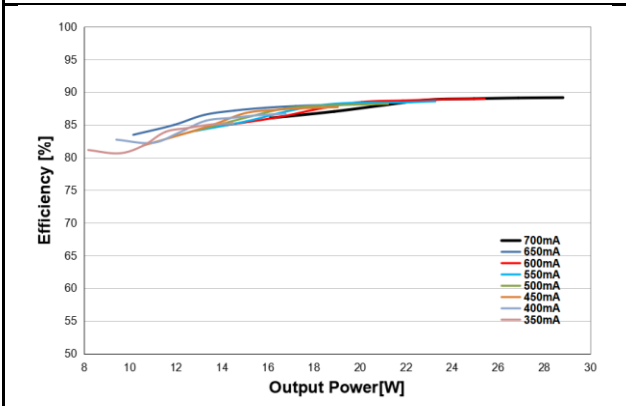
	Item	Value	Unit	Remarks
Input	Nominal Voltage	220 – 240	V <sub>ac</sub>	
	Nominal frequency	50/60	Hz	
	AC voltage range	198 – 264	V <sub>ac</sub>	Safety voltage range
	DC voltage range	NA	V	
	Maximum voltage	300	V	2hrs
	Nominal current	152	mA	230V, Refer to Table 1 for details
	THD	< 10	%	Full load, 230 V, 50 Hz / see graphs
	Power factor	0.97		Full load, 230 V, 50 Hz / see graphs
	Efficiency	88	%	Full load, 230 V, 50 Hz, typical / see graphs
	No-load power	n/a	W	Load switching on output side is not permitted
	Power loss	3.6	W	@230V, Input power 33W max.
	Protection class	II		Suitable for class I and class II luminaires
	Inrush current	23	A	t <sub>width</sub> = TBD µs typical (measured at 50% I <sub>peak</sub> )
	Max. units per circuit breaker	B10:25 B16:40 C10:42 C16:68		
	Leakage current	< 0.7	mA	Output floating
Output	Nominal voltage range	23 – 42	V <sub>DC</sub>	Refer to Table 1 for details
	Maximum voltage	60	V <sub>DC</sub>	Open circuit
	Nominal current range	350/400/450/500/ 550/600/650/700mA	mA	
	Current accuracy	±5	%	
	Current ripple	< 3	%	Ripple / average @ 100 Hz
	Pst LM	≤ 1		Full load
	SVM	≤ 0.4		Full load
	Nominal power range	8.5 – 29.4	W	Partial Load. Refer to Table 1 for details
	Maximum power	29.4	W	Ta ≤ Max. Refer to Table 1 for details
	Galvanic isolation	SELV		3, 75 kVrms. Output to mains - Touch current < 0.7 mA
Dimming	Dimming control	No		Non dimmable
	Dimming range	NA	%	
	Dimming technique	NA		
	Frequency	NA	Hz	
	Galvanic isolation	NA		
Environment	Ambient temperature range ta	-20 ...+50	°C	Refer to Table 1 for details
	Max. case temperature tc max	80	°C	Measured on tc point indicated on 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. IEC 61547 Clause 5.7
	Environmental rating	Indoor		
	IP rating	IP 20		
	Mains switching cycles	> 100'000		
	Expected lifetime	50'000	hrs	@ tcmax = 80, max.10% failure rate

	Item	Value	Unit	Remarks
<b>Protections</b>	Over temperature	Yes		Automatic, reversible
	Over load	Yes		Automatic, reversible
	No load	Yes		Limitation of Output voltage < 60V
	Short-circuit	Yes		Automatic, reversible
	Output overvoltage	Yes		Limitation of Output voltage < 60V

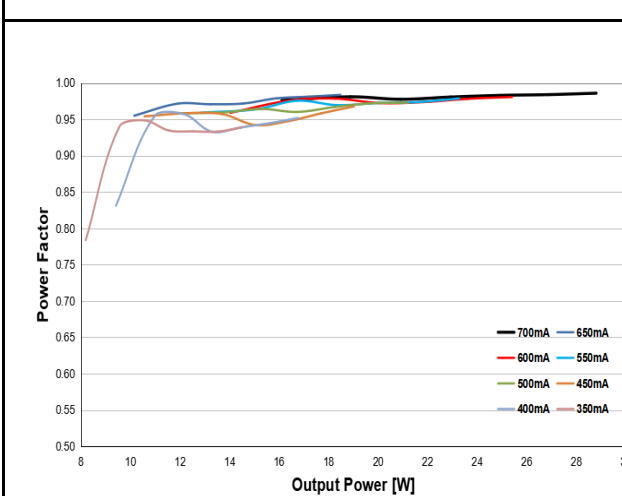
**Typical Operating window**



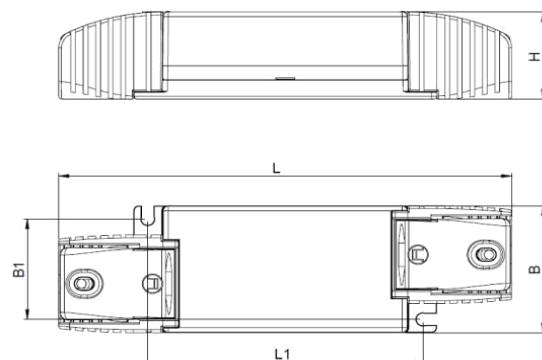
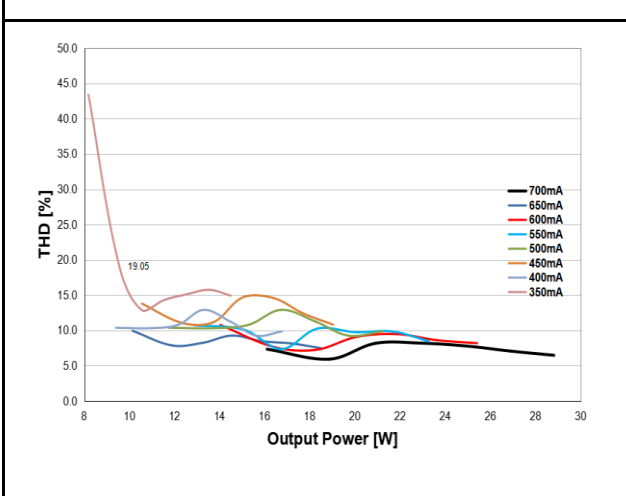
**Typical Efficiency Vs. load**



**Typical Power factor Vs. load**



**Typical THD Vs. load**



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

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

Table 1 - Rated output power and current sets									
I <sub>out</sub> [A]	350	400	450	500	550	600	650	700	
U <sub>min</sub> [V]	23	23	23	23	23	23	23	23	
U <sub>max</sub> [V]	42	42	42	42	42	42	42	42	
P <sub>min</sub> [W]	8.05	9.2	10.35	11.5	12.65	13.8	14.95	16.1	
P <sub>max</sub> [W]	14.7	16.8	18.9	21	23.1	25.2	27.3	29.4	
T <sub>a</sub> [°C]	50	50	50	50	50	50	50	50	
T <sub>c</sub> [°C]	80	80	80	80	80	80	80	80	
Line Current, nominal @230V [mA]	82	93	101	110	122	132	142	152	
Max Power Loss @230V [W]	2.8	3.2	3.1	3.5	3.9	3.8	3.2	3.6	
Input Power @230V [W]	17.5	20	22	24.5	27	29	30.5	33	

Current selection by DIP-switch

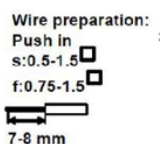
PIN1	PIN2	PIN3	I <sub>out</sub> (mA)
OFF	OFF	OFF	350
ON	OFF	OFF	400
OFF	ON	OFF	450
ON	ON	OFF	500
OFF	OFF	ON	550
ON	OFF	ON	600
OFF	ON	ON	650
ON	ON	ON	700

## Wiring Diagram

Terminal: Push in terminals

Max. cable length 2 m

Weight: 99.5g



For build-in: 0.5-1.5 mm<sup>2</sup>, for independent: 0.75-1.5 mm<sup>2</sup>

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

## 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
IT FIT 30/220-240/500 CS	4062172326360	4062172326377	50
OT CABLE CLAMP D-STYLE	4052899077904	4052899077911	40

### Disclaimer

Subject to change without notice. Errors and omission accepted. Always make sure to use the most recent release. The latest release of the datasheet is available under the following link [www.osram.com](http://www.osram.com)

OSRAM GmbH

Head office:

Marcel-Breuer-Strasse 6  
80807 Munich, Germany  
Phone +49 89 6213-0  
[www.osram.com](http://www.osram.com)

