

Light is OSRAM

## Product Data Sheet

### IT FIT 20/220-240/500 CS I

Constant Current LED Power Supply  
150/200/250/300/350/400/450/500mA

**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.

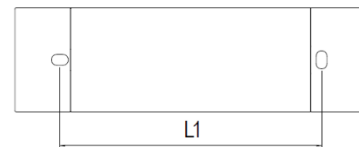
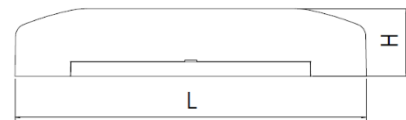
#### Benefits

1 driver with 8 output currents;  
High quality light with very low ripple;  
Long lasting and high reliability;  
Safety ensured by OSRAM(SELV);

#### Applications

Downlights  
Spotlights  
Panels  
Class II indoor luminaires, independent installations

#### Approval marks



L	145 mm
L1	108 mm
B	43 mm
H	28 mm

#### Product Features

- Output currents: 150/200/250/300/350/400/450/500mA
- Output voltage: 23VDC – 42VDC
- Output power: 3.45W - 21W
- Suitable for class II luminaires
- Fixed Output (no dimming)
- Low ripple, Low THD
- Extra small housing
- Typ. Efficiency: 87%
- SELV
- 50'000 hours lifetime at  $t_{cmax} = 70^{\circ}C$

## Electrical Specifications

	Item	Value	Unit	Remarks
Input	Nominal Voltage	220 – 240	Vac	
	Nominal frequency	50/60	Hz	
	AC voltage range	198 – 264	Vac	Safety voltage range
	DC voltage range	NA	V	
	Maximum voltage	300	V	2hrs
	Nominal current	117	mA	230V, Refer to Table 1 for details
	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	n/a	W	Load switching on output side is not permitted
	Power loss	3.1	W	@230V, Input power 24.1W max.
	Protection class	II		Suitable for class II luminaires
	Inrush current	18	A	$t_{width} = 134\mu s$ typical (measured at 50% Ipeak)
	Max. units per circuit breaker	B10:36 B16:58 C10:61 C16:97		
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	150/200/250/300 350/400/450/500	mA	
	Current accuracy	$\pm 5 / \pm 7.5$	%	350-500mA: $\pm 5\%$ 150-300mA: $\pm 7.5\%$
	Current ripple	$\leq 3$	%	Ripple / average @ 100 Hz
	Pst LM	$\leq 1$		Full load
	SVM	$\leq 0.4$		Full load
	Nominal power range	3.45 - 21	W	Partial Load. Refer to Table 1 for details
	Maximum power	21	W	Ta $\leq$ 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 ... +45	°C	Refer to Table 1 for details
	Max. case temperature tc max	70	°C	Measured on tc point indicated on the product label.
	Max. case temp. in fault condition	110	°C	
	Storage temperature range	-40 ... +85	°C	Cool down before operating
	Relative humidity	5 ... 95	%	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 = 70°C, 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

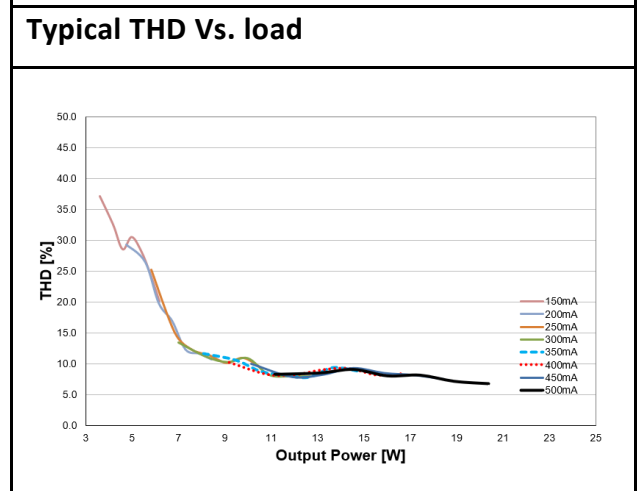
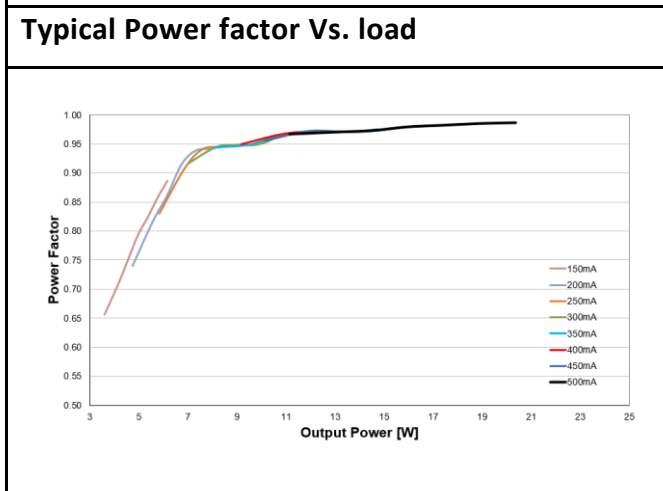
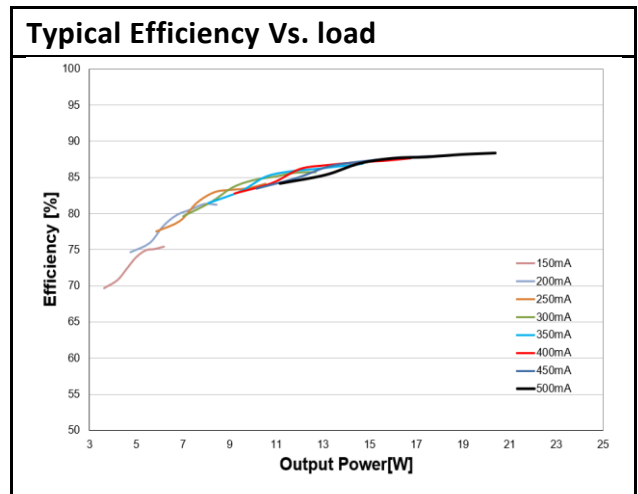
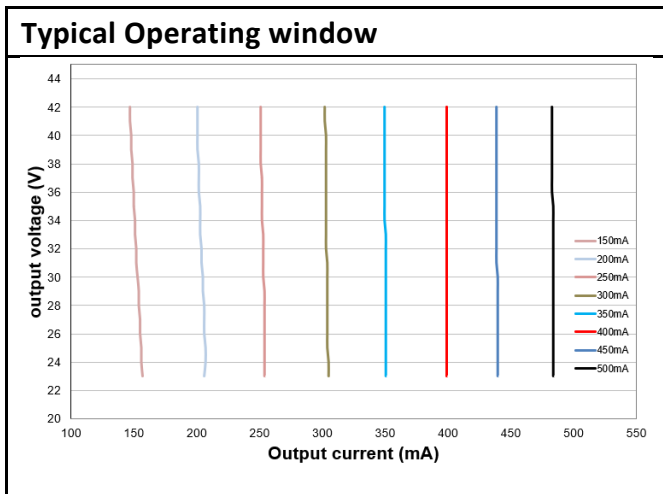


Table 1 - Rated output power and current sets									
<b>I<sub>out</sub> [A]</b>	<b>150</b>	<b>200</b>	<b>250</b>	<b>300</b>	<b>350</b>	<b>400</b>	<b>450</b>	<b>500</b>	
<b>U min [V]</b>	23	23	23	23	23	23	23	23	23
<b>U max [V]</b>	42	42	42	42	42	42	42	42	42
<b>P min [W]</b>	3.45	5.8	5.75	6.9	8.05	9.2	10.35	11.5	
<b>P max [W]</b>	6.3	8.4	10.5	12.6	14.7	16.8	18.9	21	
<b>T<sub>a</sub> [°C]</b>	45	45	45	45	45	45	45	45	45
<b>T<sub>c</sub> [°C]</b>	70	70	70	70	70	70	70	70	70
<b>Line Current, nominal @230V [mA]</b>	54	62	71	80	88	98	107	117	
<b>Max Power Loss @230V [W]</b>	2.7	3.1	3	2.9	2.8	3	2.6	2.2	
<b>Input Power @230V [W]</b>	9	11.5	13.5	15.5	17.5	19.8	21.5	23.2	

Current selection by DIP-switch

<b>PIN1</b>	<b>PIN2</b>	<b>PIN3</b>	<b>I<sub>out</sub>(mA)</b>
OFF	OFF	OFF	150
ON	OFF	OFF	200
OFF	ON	OFF	250
ON	ON	OFF	300
OFF	OFF	ON	350
ON	OFF	ON	400
OFF	ON	ON	450
ON	ON	ON	500

### Wiring Diagram

Terminal: Push in terminals  
 Max. cable length 2 m  
 Weight: 120g

#### wire preparation:

push in  
 s:0.75--1.5  
 f:0.75--1.5 

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

<b>Product name</b>	<b>EAN10</b>	<b>EAN40</b>	<b>Pieces / box</b>
IT FIT 20/220-240/500 CS I	4062172326285	4062172326292	50

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The OSRAM logo is displayed in a bold, orange, sans-serif font.