

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.

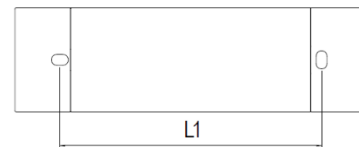
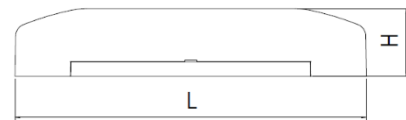
Benefits

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	110	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	B10:21 B16:33 C10:35 C16:56		
Leakage current	< 0.7	mA	Output floating	
Output	Nominal voltage range	23 – 42	V _{DC}	Refer to Table 1 for details
	Maximum voltage	60	V _{DC}	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	< 3	%	Ripple / average @ 100 Hz
	Pst LM	≤ 1		Full load
	SVM	≤ 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	-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 = 70°C, max.10% failure rate	

	Item	Value	Unit	Remarks
Protections	Over temperature	Yes		Automatic, reversible
	Over load	Yes		Automatic, reversible
	No load	Yes		Limitation of Output voltage $\leq 60V$
	Short-circuit	Yes		Automatic, reversible
	Output overvoltage	Yes		Limitation of Output voltage $\leq 60V$

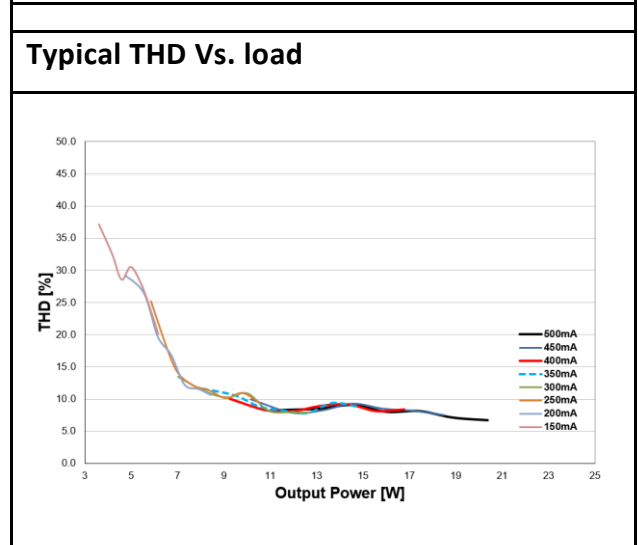
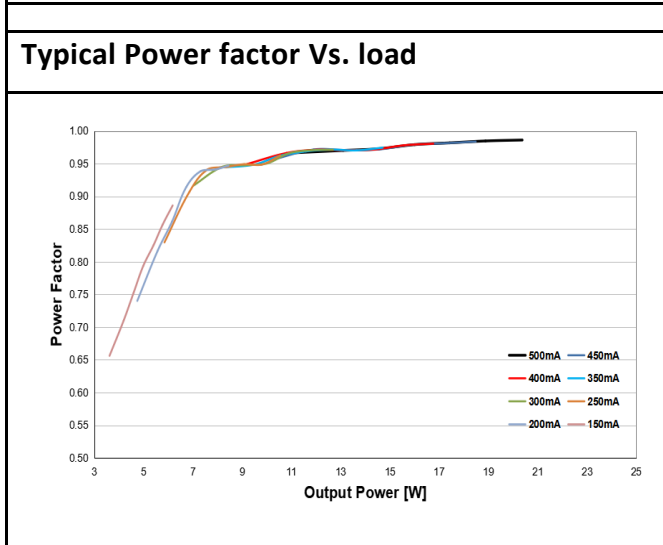
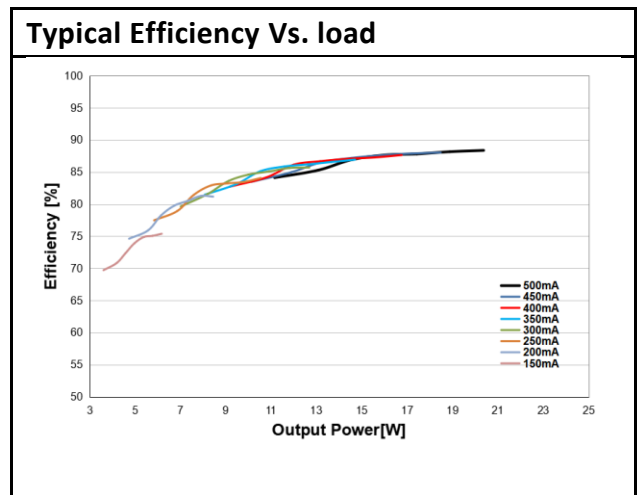
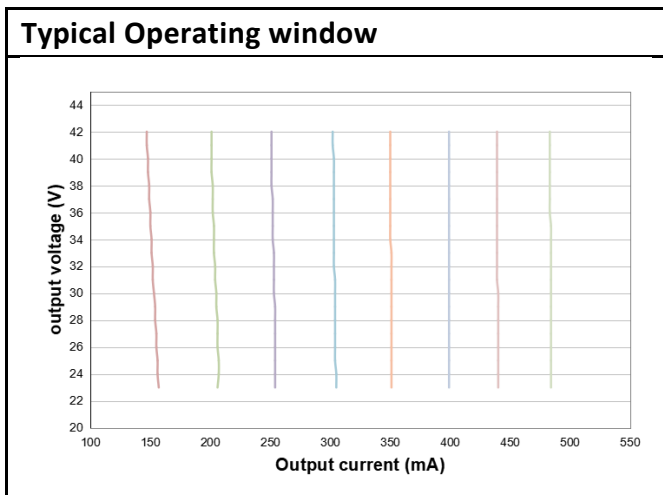


Table 1 - Rated output power and current sets									
I_{out} [A]	150	200	250	300	350	400	450	500	
U_{min} [V]	23	23	23	23	23	23	23	23	23
U_{max} [V]	42	42	42	42	42	42	42	42	42
P_{min} [W]	3.45	5.8	5.75	6.9	8.05	9.2	10.35	11.5	
P_{max} [W]	6.3	8.4	10.5	12.6	14.7	16.8	18.9	21	
T_a [°C]	50	50	50	50	50	50	50	50	50
T_c [°C]	70	70	70	70	70	70	70	70	70
Line Current, nominal @230V [mA]	54	62	71	80	88	98	107	117	
Max Power Loss @230V [W]	2.7	3.1	3	2.9	2.8	3	2.6	2.2	
Input Power @230V [W]	9	11.5	13.5	15.5	17.5	19.8	21.5	23.2	

Current selection by DIP-switch

PIN1	PIN2	PIN3	I_{out}(mA)
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



7-8 mm

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

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 20/220-240/500 CS I	4062172326285	4062172326292	50