

Light is OSRAM

OSRAM

IT DIM 40/220-240/1A0 CS I

Constant Current LED Power Supply

600/700/750/800/850/900/950/1050mA

ICUTRONIC® LED Power Supply fits in light fixtures for office, shop lighting or other indoor applications that require high quality of light

Benefits:

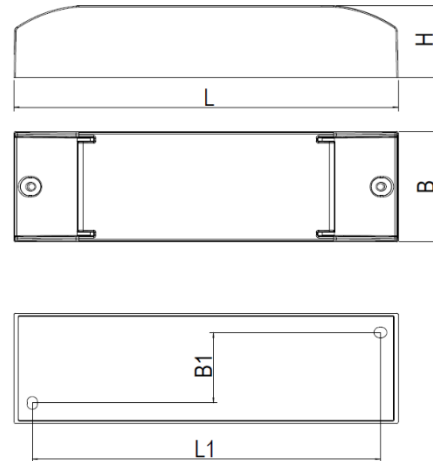
High compatibility with COBs and discrete LEDs;
 High quality of light with ripple current $\leq 3\%$
 Safe and reliable
 Safety ensured by OSRAM (SELV)

Applications

Downlights, Spotlights, Panel lights
 Other Indoor LED luminaires
 For class II luminaires, independent installations

Approval marks

(Under preparation if not on the label)



L	150 mm
L1	136 mm
B	43 mm
B1	27.5 mm
H	28 mm

Product Features

- Output currents: 600/700/750/800/850/900/950/1050mA
- Output voltage: 23V_{DC} – 42V_{DC}
- Output power: 13.8W – 44.1W
- Input voltage : 220 – 240 V_{AC}
- Suitable for class II luminaires
- 50'000 h lifetime at t_{cmax} 80°C
- 0-10V dimming, dim-to-off
- Typ. Efficiency: 87%
- SELV
- Ambient temp range, t_a: -20°C to +50°

Electrical Specifications

	Item	Value	Unit	Remarks
Input	Nominal Voltage	220 – 240	Vac	
	Nominal frequency	50/60	Hz	
	AC voltage range	198 – 264	Vac	Permitted voltage range
	DC voltage range	NA	V	
	Maximum voltage	300	V	2hrs
	Nominal current	270	mA	230V
	Total Harmonic Distortion (THD)	<10%	%	Full load, 230 V, 50 Hz / see graphs
	Power factor	>0.9		Full load, 230 V, 50 Hz / see graphs
	Efficiency	87	%	Full load, 230 V, 50 Hz, typical / see graphs
	No-load power	NA	W	Load switching on output side is not permitted
	Power loss	5.8	W	@230V, Input power max. 49.9W
	Protection class	II		
	Inrush current	32	A	twidth = 1.4 μ s typical (measured at 50% Ipeak)
	Max. units per circuit breaker	B10: 26 B16: 41 C10: 26 C16: 41		
	Leakage current	< 0.7	mA	Output floating
Output	Nominal voltage range	23 – 42	V _{DC}	
	Maximum voltage	60	V _{DC}	Open circuit
	Nominal current range	600/700/750/ 800/850/900/ 950/1050	mA	Current selection by dip switch
	Current accuracy	±5	%	
	Current ripple	< =3	%	Ripple / average @ 100 Hz
	Pst LM	≤ 1		
	SVM	≤ 0.4		
	Nominal power range	13.8-44.1	W	Partial Load.
	Maximum power	44.1	W	Ta ≤ 50°C
	Galvanic isolation	SELV		3, 75 kVrms. Output to mains - Touch current < 0.7 mA
Dim	Dimming control	0-10V		0-10V
	Dimming range	1-100	%	
	Dimming to off	Yes		Standby power <0.5W
	Dimming technique	NA		
	Frequency	NA	Hz	
	Isolation input to dimming	Double		
	Isolation output to dimming	Basic		
Environment	Ambient temperature range ta	-20 ...+50	°C	@600/700/750/800/850/900/950mA
		-20 ...+45		@1050mA
	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	-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 = 80°C, max. 10% failure rate

Protection

Overload

Automatic, reversible

No load

Automatic, reversible

Short-circuit

Automatic, reversible

Input overvoltage

Maximum allowed input voltage 300V AC/ 2hr

Output overvoltage

Yes, limitation of Output voltage <= 60V

Output under voltage

NA

Table 1 - Rated output power and current sets									
I _{out} [A]	600	700	750	800	850	900	950	1050	
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]	13.8	16.1	17.3	18.4	19.6	20.7	21.9	24.2	
P _{max} [W]	25.2	29.4	31.5	33.6	35.7	37.8	39.9	44.1	
T _a [°C]	50	50	50	50	50	50	50	45	
T _c [°C]	80	80	80	80	80	80	80	80	
Line Current, nominal @230V [mA]	160	190	200	210	220	240	250	270	
Max Power Loss @230V [W]	3.3	3.7	3.9	4.1	4.6	4.9	5.2	5.8	
Input Power @230V [W]	28.5	33.1	35.4	47.7	40.3	42.7	45.1	49.9	

PIN1	PIN2	PIN3	I _{out} (mA)
ON	ON	ON	600
OFF	ON	ON	700
ON	OFF	ON	750
ON	ON	OFF	800
OFF	OFF	ON	850
OFF	ON	OFF	900
ON	OFF	OFF	950
OFF	OFF	OFF	1050

Current selection by DIP-switch

Wiring Diagram

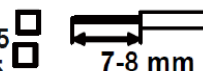
Terminal: Push in terminals

Max. cable length 2m

Weight: 171g

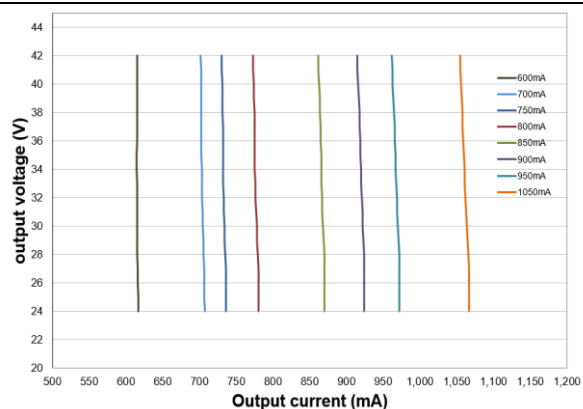
wire preparation:

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

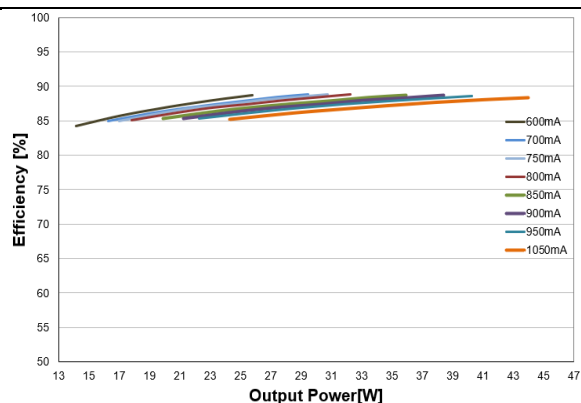


Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs

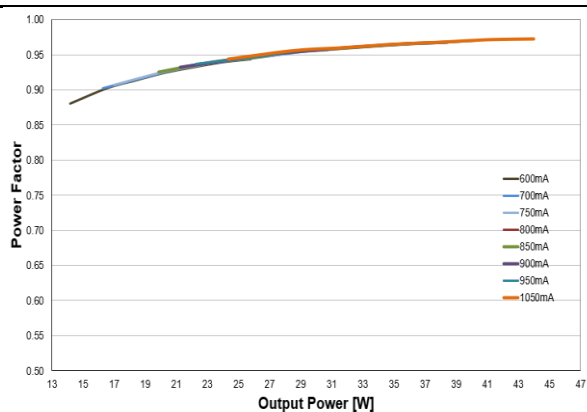
Typical Operating window



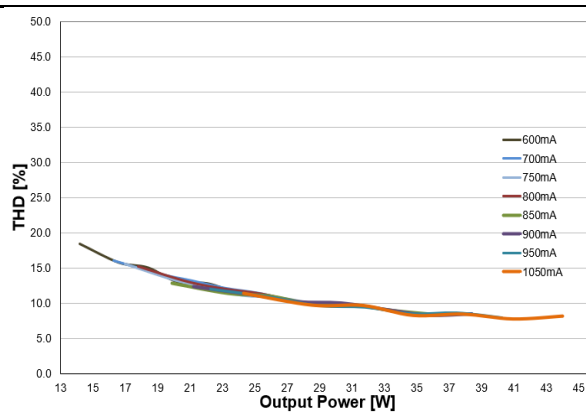
Typical Efficiency Vs load



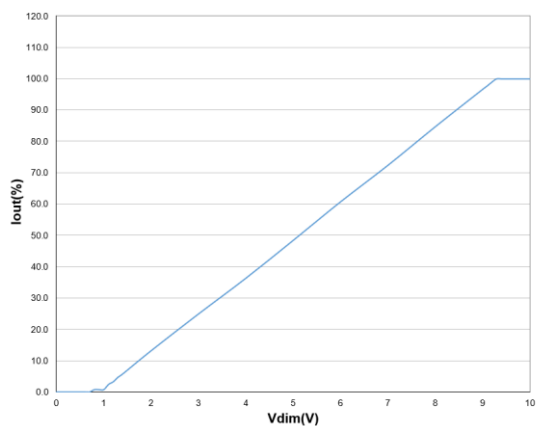
Typical Power factor Vs load



Typical THD Vs load



Dimming Curve:



Standards

Safety: IEC 61347-1, IEC 61347-2-13

Performance: IEC 62384

Harmonic content: IEC 61000-3-2

Immunity: IEC 61547

IEC 61000-3-3

EAN10	Product name	Units/ box
4062172321426	IT DIM 40/220-240/1A0 CS I	20

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