

EM 44/220-240/1A0 I

Constant Current LED Power Supply 1050mA

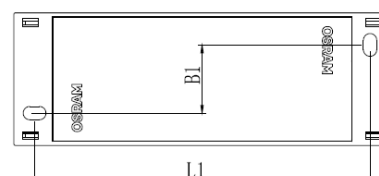
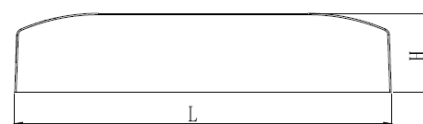
Element LED Power Supply fits in light fixtures for office, shop lighting or other indoor applications that require high quality of light

Benefits:

High compatibility with COBs and discrete LEDs;
High quality of light with ripple current < 5%
Safe and reliable
Safety ensured by OSRAM (SELV)

Applications

Panel lights, Downlights and other indoor luminaires
For class II luminaires, independent installations



L	119mm
L1	106mm
B	42mm
B1	21.6mm
H	25mm

Approval marks and Symbol



Product Features

- Output currents: 1050mA
- Output voltage: 27VDC – 42VDC
- Output power: 28.35W – 44.1W
- Input voltage : 220 – 240 VAC
- Suitable for class II luminaires
- 35'000 h lifetime at $t_c \text{ max} = 80^\circ\text{C}$
- Fixed Output (i.e. no dimming)
- Typ. Efficiency: 89%
- SELV
- Ambient temp range, t_a : -20°C to $+40^\circ\text{C}$

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	176 – 280	Vdc	Operational for safety
	Maximum voltage	300	V	2hrs
	Nominal current	260	mA	220V
	Total Harmonic Distortion (THD)	< 15	%	Full load, 230 V, 50 Hz / see graphs
	Power factor	0.95		Full load, 230 V, 50 Hz / see graphs
	Efficiency	89	%	Full load, 230 V, 50 Hz, typical / see graphs
	No-load power	NA	W	230V, typical
	Power loss	5.5	W	@230V, Input power 49.6 W max.
	Protection class	II		Suitable for class II luminaires
	Inrush current	34.0	A	twidth = 142 µs typical (measured at 50% Ipeak)
	Max. units per circuit breaker	B10: 17; B16: 28; C10: 29; C16: 47		
	Leakage current	< 0.7	mA	Output floating
Output	Nominal voltage range	27 – 42	V _{DC}	
	Maximum voltage	60	V _{DC}	Open circuit
	Nominal current range	1050	mA	
	Current accuracy	±7.5 %		
	Current ripple	< 5%		Ripple / average @ 100 Hz
	Nominal power range	28.35 - 44.1	W	Partial Load.
	Maximum power	44.1	W	Ta ≤ 40°C
	Galvanic isolation	SELV		3, 75 kVrms. Output to mains - Touch current < 0.7 mA
Dim	Dimming control	No		Not dimmable
	Dimming range	NA	%	
	Dimming technique	NA		
	Frequency	NA	Hz	
	Galvanic isolation	NA		
Environment	Ambient temperature range t _a	-20 ...+40	°C	
	Max. case temperature t _c max	80	°C	Measured on t _c point indicated of 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	35'000	hrs	@tc = 80°C, max. 10% failure rate
	Expected lifetime	50'000	hrs	@tc = 70°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/ 2hrs

Output overvoltage

Yes, limitation of Output voltage < 60V

Output under voltage

NA

Wiring Diagram

Terminal:

Max. cable length:

Geometry (l x b x h):

Weight:

Push in terminals

2 m

119 x 42 x 25 mm

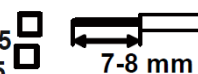
97g

wire preparation:

push in

s:0.75--1.5

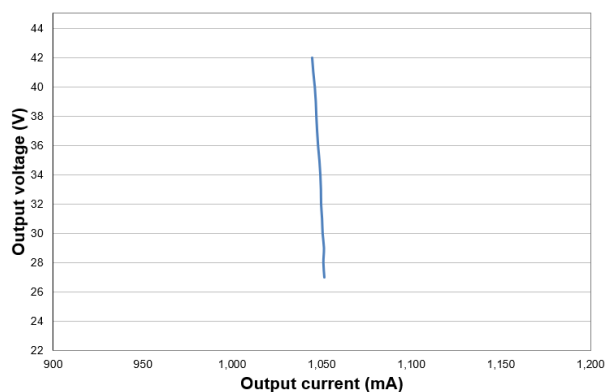
f:0.75--1.5



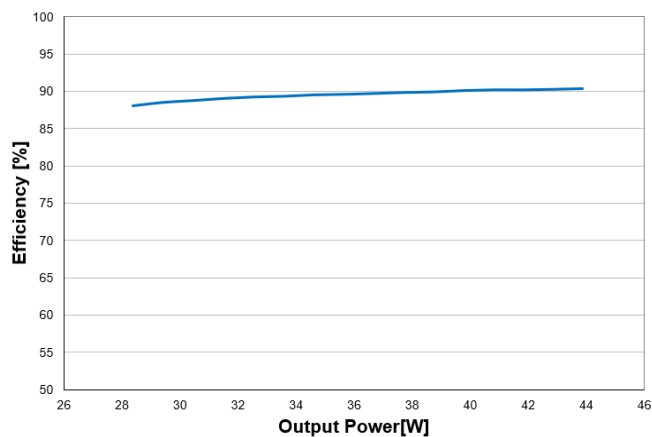
For independent: 0.75-1.5 mm²

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

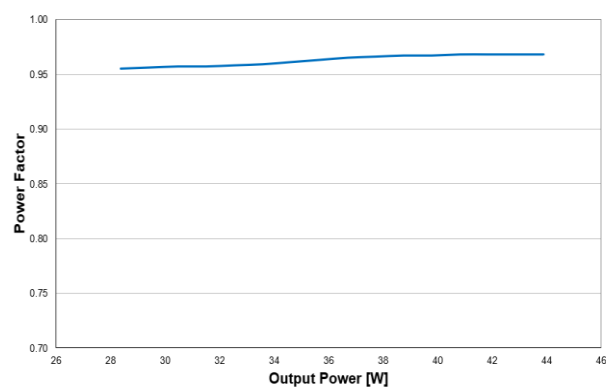
Typical Operating window



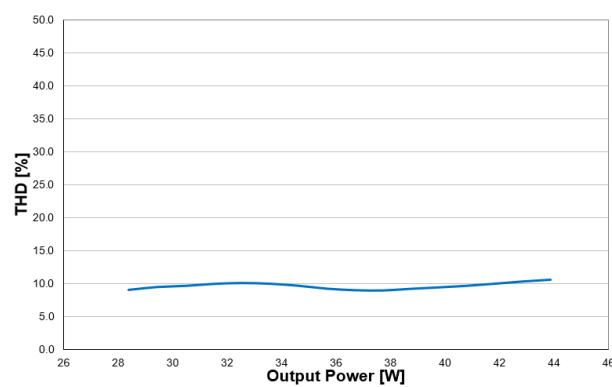
Typical Efficiency Vs load



Typical Power factor Vs load



Typical THD Vs load



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	Pcs/ box
4062172322065	EM 44/220-240/1A0 I	50