

ELEMENT 10/220-240/250 LPF

Constant Current LED Power Supply

250mA

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

Benefits:

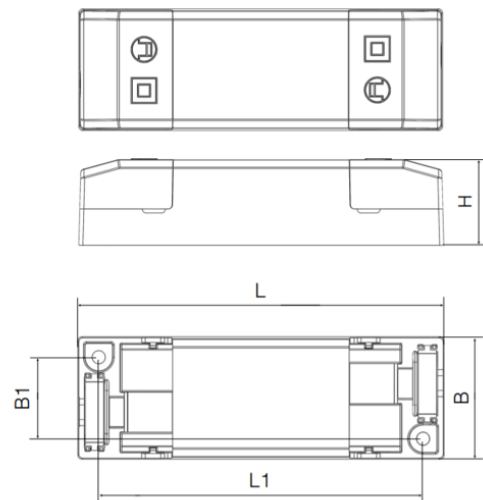
High compatibility with COBs and discrete LEDs;
 High quality of light with ripple current < 5%
 Safe and reliable
 Safety ensured by OSRAM (SELV)

Applications

Downlights, Spotlights
 Other Indoor LED luminaires
 Suitable for class II application

Approval marks

(Under preparation if not on the label)



L	90mm
L1	79.7mm
B	30mm
B1	20mm
H	21mm

Product Features

- Output currents: 250mA
- Output voltage: 30VDC – 42V_{DC}
- Output power: 7.5W – 10.5W
- Input voltage : 220 – 240 V_{AC}
- Suitable for class II luminaires
- 30'000 h lifetime
- Fixed Output (i.e. no dimming)
- Typ. Efficiency: 84%
- SELV
- Ambient temp range, ta: -20°C to +45°

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	98	mA	230V
	Total Harmonic Distortion (THD)	NA	%	
	Power factor	0.55		Full load, 230 V, 50 Hz / see graphs
	Efficiency	84	%	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	2.0	W	@230V, Input power 12.5W max.
	Protection class	II		Suitable for class II luminaires
	Inrush current	6.2	A	$t_{width} = 220\mu s$ typical (measured at 50% Ipeak)
	Max. units per circuit breaker	B10: 49 B16: 66 C10: 64 C16: 103		
Leakage current	< 0.7	mA	Output floating	
Output	Nominal voltage range	30 – 42	V _{DC}	
	Maximum voltage	60	V _{DC}	Open circuit
	Nominal current range	250	mA	
	Current accuracy	± 7.5 %		
	Current ripple	< 5%		Ripple / average @ 100 Hz
	Pst LM	≤ 1		
	SVM	≤ 0.4		
	Nominal power range	7.5 – 10.5	W	Partial Load.
	Maximum power	10.5	W	Ta ≤ 45°C
	Galvanic isolation	SELV		3, 75 kVrms. Output to mains - Touch current < 0.7 mA
Dim	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	
	Max. case temperature tc max	75	°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	30'000 50'000	hrs	@tcmax = 70°C, max. 10% failure rate @tcmax = 60°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

Wiring Diagram

Terminal: Push in terminals

Max. cable length 2m

Weight: 47g

For independent: 0.75-1.5 mm²

wire preparation:

push in

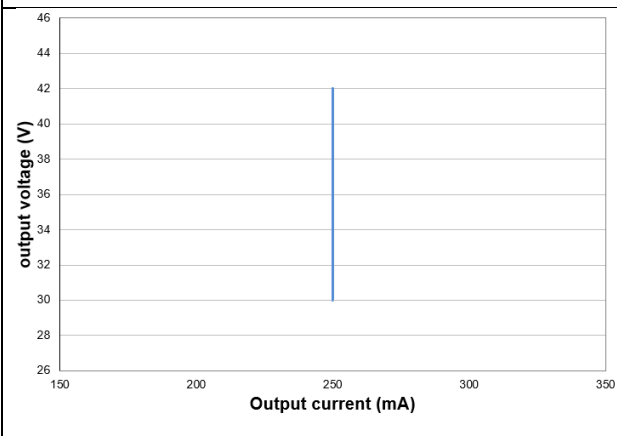
S: 0.75 - 1.5

f: 0.75 - 1.5

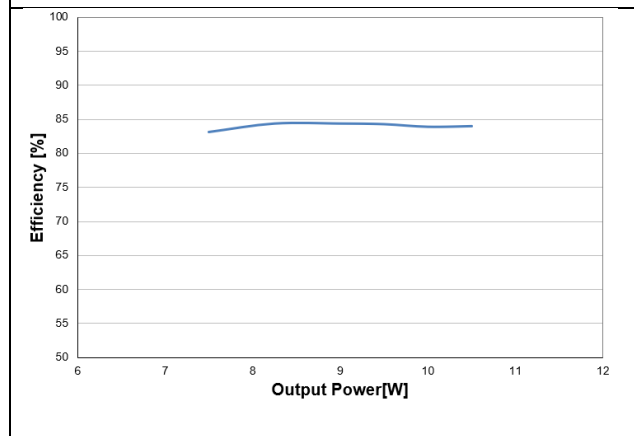
7-8mm

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

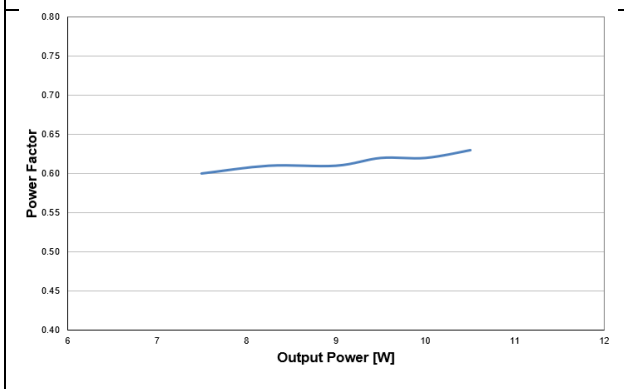
Typical Operating window



Typical Efficiency Vs load



Typical Power factor Vs load



NA

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
4062172361347	ELEMENT 10/220-240/250 LPF	50