

Light is OSRAM

**OSRAM****ELEMENT 12/220-240/300****Constant Current LED Power Supply  
300mA**

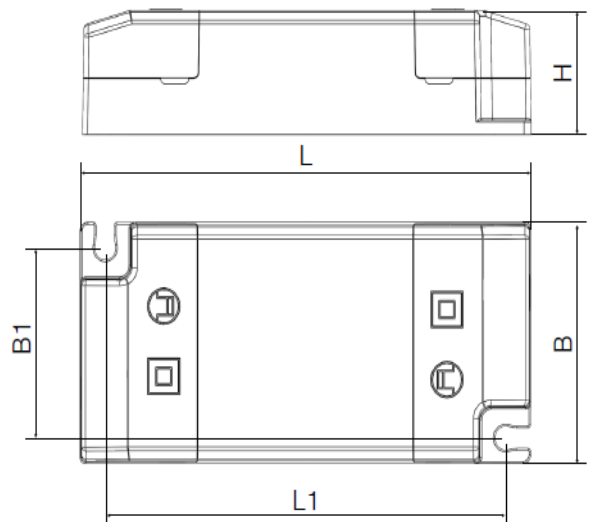
Element LED Power Supply fits in light fixtures for office, shop lighting or other indoor applications that require high quality of light

**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 and Panels  
Other Indoor LED luminaires

**Approval marks**

L	90mm
L1	80mm
B	43mm
B1	34mm
H	22mm

**Product Features**

- Output currents: 300mA
- Output voltage: 24V<sub>DC</sub> – 42V<sub>DC</sub>
- Output power: 7.2W – 12.6W
- Input voltage : 220 – 240 V<sub>AC</sub>
- Suitable for class I and II luminaires
- Up to 30'000 h lifetime
- Fixed Output (i.e. no dimming)
- Typ. Efficiency: 85%
- SELV
- Ambient temp range, ta: -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	n/a	Vdc	
	Maximum voltage	300	V	2hrs
	Nominal current	67	mA	230V
	Total Harmonic Distortion (THD)	< 20	%	Full load, 230 V, 50 Hz / see graphs
	Power factor	0.95		Full load, 230 V, 50 Hz / see graphs
	Efficiency	85	%	Full load, 230 V, 50 Hz, typical / see graphs
	No-load power	n/a		Load switching on output side is not permitted
	Power loss	2.22	W	@230V, Input power 14.82W max.
	Protection class	II		Suitable for class I and class II luminaires
	Inrush current	8.6	A	$t_{width} = 7.2\mu s$ typical (measured at 50% I <sub>peak</sub> )
	Max. units per circuit breaker	B10:59; B16:95; C10:89; C16:143;		
Leakage current	< 0.7	mA	Output floating	
Output	Nominal voltage range	24 – 42	V <sub>DC</sub>	Refer to Table 1 for details
	Maximum voltage	60	V <sub>DC</sub>	Open circuit
	Nominal current range	300	mA	
	Current accuracy	± 7.5 %		
	Current ripple	< 5%		Ripple / average @ 100 Hz
	Pst LM	≤ 1		
	SVM	≤ 0.4		
	Nominal power range	7.2-12.6	W	Partial Load.
	Maximum power	12.6	W	T <sub>a</sub> ≤ 50°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 t <sub>a</sub>	-20 ...+50	°C	
	Max. case temperature t <sub>c</sub> max	75	°C	Measured on t <sub>c</sub> point indicated o the product label.
	Max. case temp. in fault condition	110	°C	
	Storage temperature range	-40 ...+85	°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	30'000 50'000	hrs	@t <sub>c</sub> = t <sub>c</sub> -max 75°C, max. 10% failure rate @t <sub>c</sub> = 60°C, max. 10% failure rate

## Protections

### 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  $\leq 60V$

### Output under voltage

NA

## Wiring Diagram

Terminal: Push in terminals

Max. cable length 2 m

Weight: 52g

For build-in: 0.5-1.5 mm<sup>2</sup>, for independent: 0.75-1.5 mm<sup>2</sup>

### Wire preparation:

Push in

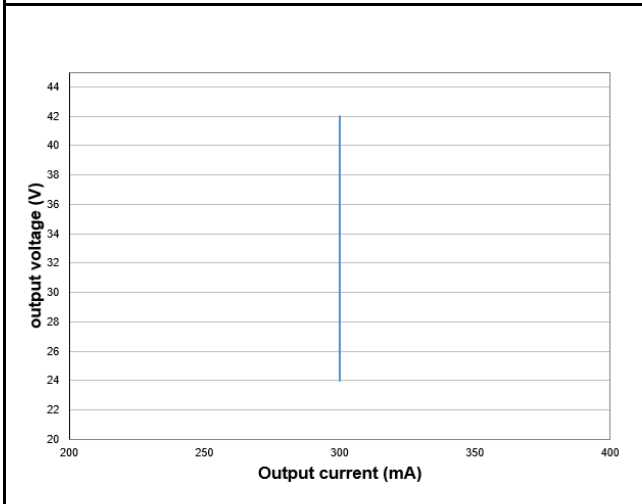
s:0.5-1.5

f:0.75-1.5

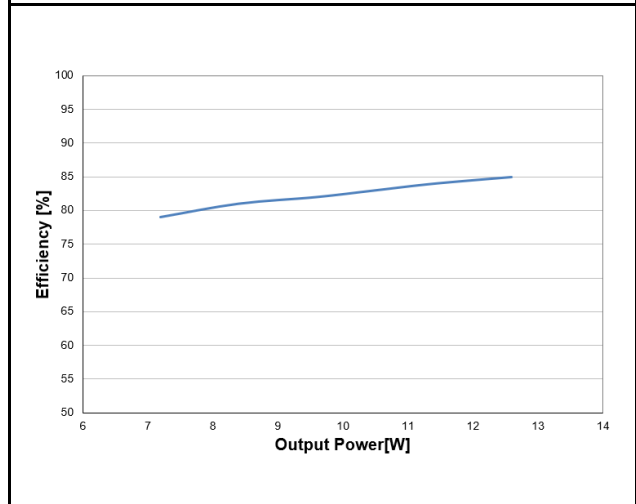
7-8 mm

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

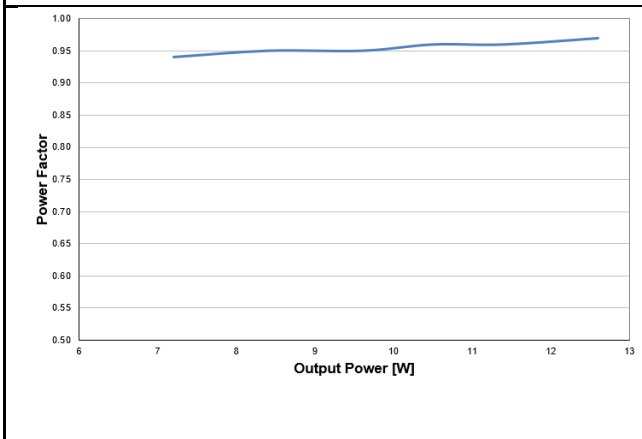
### Typical Operating window



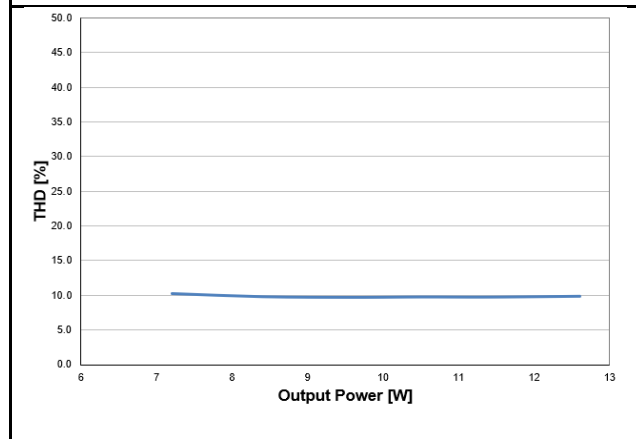
### Typical Efficiency Vs load



### 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
4062172355490	ELEMENT 12/220-240/300	50

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