

## ELEMENT 12/220-240/300 LPF

### 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:

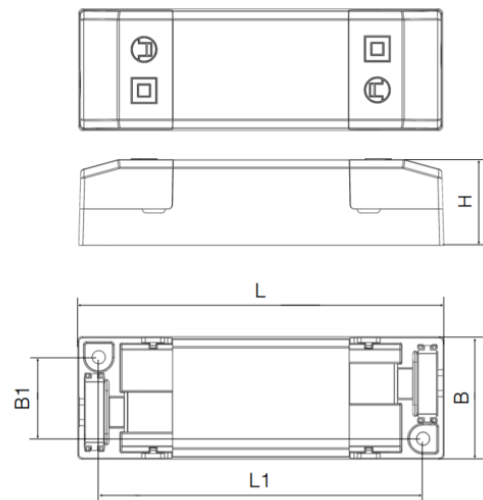
High compatibility with COBs and discrete LEDs;  
High quality of light with ripple current < 5%  
Safe and reliable  
Safety ensured by OSRAM (SELV)  
Suitable for class II application

#### Applications

Downlights, Spotlights  
Other Indoor LED luminaires

#### Approval marks

(Under preparation if not on the label)



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

### Product Features

- Output currents: 300mA
- Output voltage: 30V<sub>DC</sub> – 42V<sub>DC</sub>
- Output power: 9W – 12.6W
- Input voltage : 220 – 240 V<sub>AC</sub>
- Suitable for class II luminaires
- 30'000 h lifetime
- Fixed Output (i.e. no dimming)
- Typ. Efficiency: 85%
- 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	109	mA	230V
	Total Harmonic Distortion (THD)	NA	%	
	Power factor	0.55		
	Efficiency	85	%	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	2.2	W	@230V, Input power 14.8W max.
	Protection class	II		Suitable for class II luminaires
	Inrush current	7.7	A	$t_{width} = 220\mu s$ typical (measured at 50% Ipeak)
	Max. units per circuit breaker	B10: 41 B16: 66 C10: 64 C16: 103		
Leakage current	< 0.7	mA	Output floating	
Output	Nominal voltage range	30 – 42	V <sub>DC</sub>	
	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	9 - 12.6	W	Partial Load.
	Maximum power	12.6	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 mm<sup>2</sup>

wire preparation:

push in

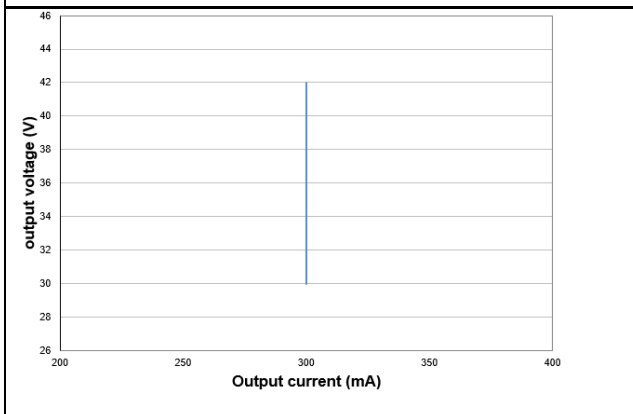
S: 0.75 - 1.5

f: 0.75 - 1.5

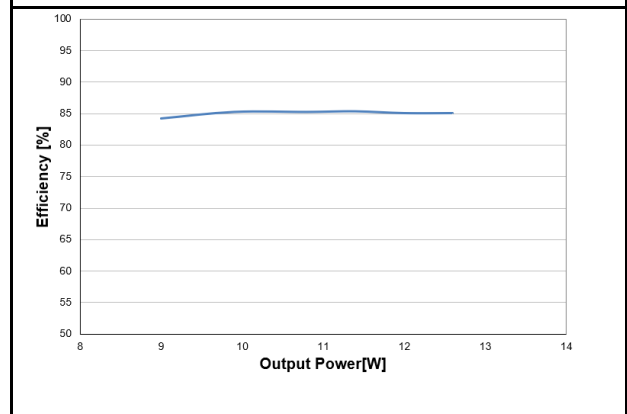
7 - 8mm

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

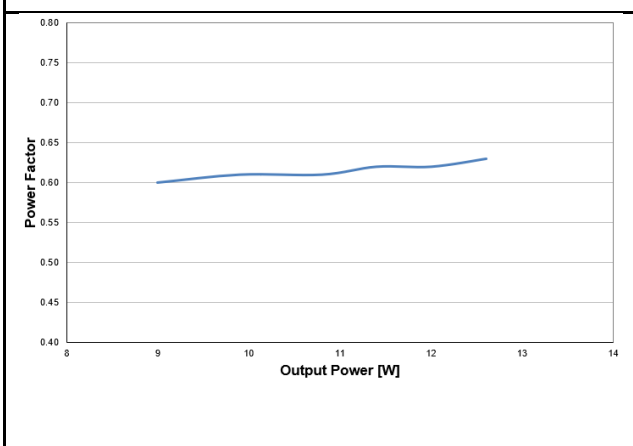
### Typical Operating window



### 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
4062172361361	ELEMENT 12/220-240/300 LPF	50