

Light is OSRAM

**OSRAM****ELEMENT 28/220-240/700 G3**

Constant Current LED Power Supply

700mA

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

**Benefits:**

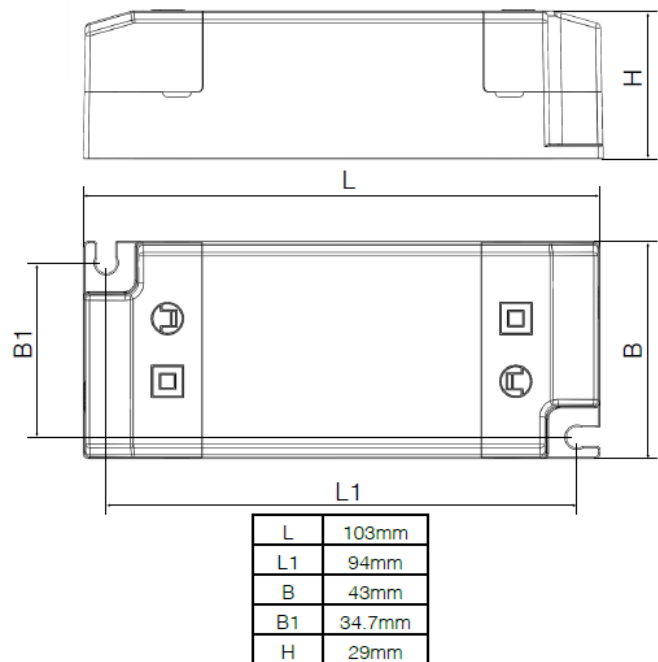
High compatibility with COBs and discrete LEDs;  
 High quality of light with ripple current < 5%  
 Safe and reliable  
 Safety ensured by OSRAM (SELV)  
 3 years guarantee

**Applications**

Downlights, Spotlights and Panels  
 Other Indoor LED luminaires

**Approval marks**

(Under preparation if on label)

**Product Features**

- Output currents: 700mA
- Output voltage: 21V<sub>DC</sub> – 40V<sub>DC</sub>
- Output power: 14.7W – 28W
- Input voltage : 220 – 240 V<sub>AC</sub>
- Suitable for class I and II luminaires
- 30'000 h lifetime at t<sub>cmax</sub> = 80°C
- Fixed Output (i.e. no dimming)
- Typ. Efficiency: 88%
- SELV
- Ambient temp range, t<sub>a</sub>: -20°C to +50°

## Electrical Specification

	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	142	mA	230Vac
	Total Harmonic Distortion (THD)	< 20	%	Full load, 230 V, 50 Hz / see graphs
	Power factor	0.97		Full load, 230 V, 50 Hz / see graphs
	Efficiency	88	%	Full load, 230 V, 50 Hz, typical / see graphs
	No-load power	< 0.5	W	230V, typical
	Power loss	3.8	W	@230V, Input power 31.8W max.
	Protection class	I / II		Suitable for class I and class II luminaires
	Inrush current	< 9.3	A	$t_{width} = 100 \mu s$ typical (measured at 50% I <sub>peak</sub> )
	Max. units per circuit breaker	B10: 28; B16: 45; C10: 42; C16: 68		
	Leakage current	< 0.7	mA	Output floating
Output	Nominal voltage range	21 – 40	V <sub>DC</sub>	
	Maximum voltage	60	V <sub>DC</sub>	Open circuit
	Nominal current range	700	mA	
	Current accuracy	± 7.5 %		
	Current ripple	< 5%		Ripple / average @ 100 Hz
	Pst LM	≤ 1		
	SVM	≤ 0.4		
	Nominal power range	14.7 – 28	W	Partial Load.
	Maximum power	28	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	80	°C	Measured on t <sub>c</sub> 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 ... 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>cmax</sub> = 80°C, max. 10% failure rate @t <sub>c</sub> = 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/ 2hr

### Output overvoltage

Yes, limitation of Output voltage < 60V

### Output under voltage

NA

## Wiring

Terminal

Push in terminals

Max. cable length

2 m

Weight:

72g

Wire preparation:

Push in

s:0.5-1.5

f:0.75-1.5

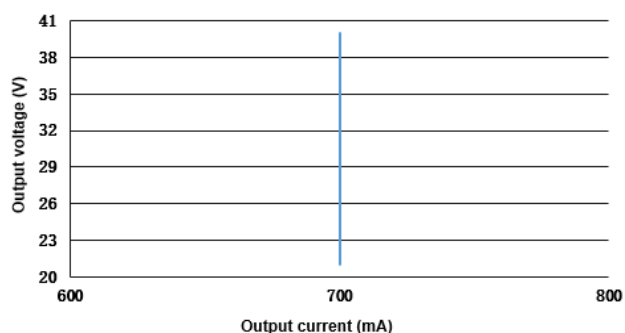


7-8 mm

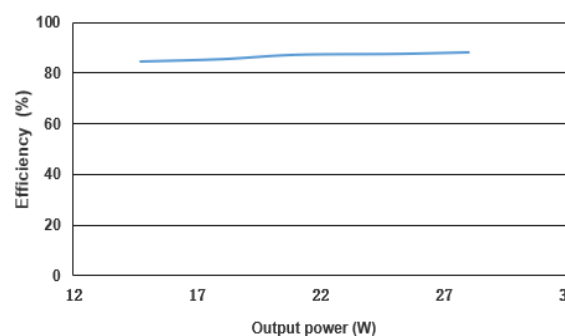
For build-in: 0.5-1.5 mm<sup>2</sup>, for independent: 0.75-1.5 mm<sup>2</sup>

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

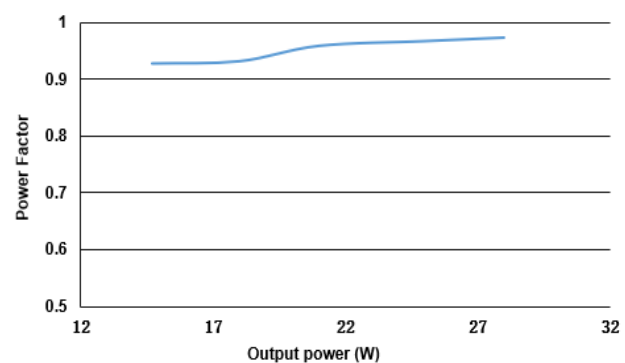
### Typical Operating window



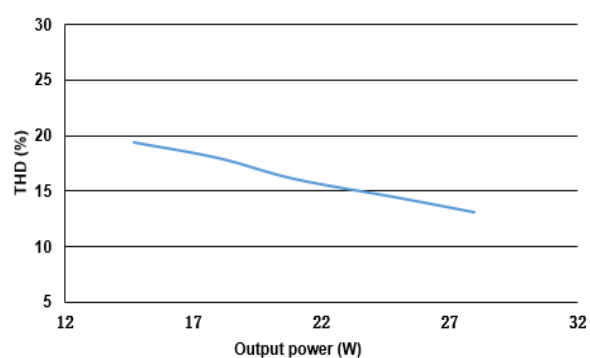
### Typical Efficiency Vs load



### 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
4062172167536	ELEMENT 28/220...240/700 G3	20

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