

Light is OSRAM

**OSRAM****ELEMENT 20/220-240/500 G3****Constant Current LED Power Supply**

500mA

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

**Approval marks Features**

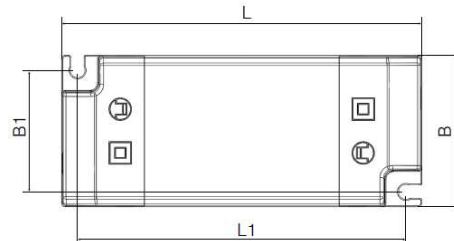
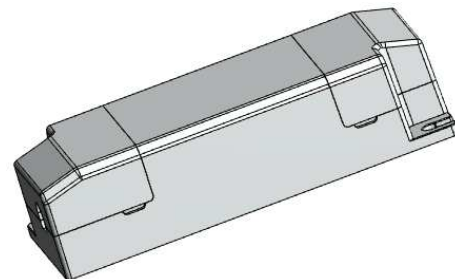
High compatibility with COBs and discrete LEDs;  
High quality of light with ripple current < 5%  
Safe and reliable

**Applications**

Spotlight;  
Downlight;  
Panel light  
Other Indoor LED luminaires

**Approval marks**

(Under preparation if on label)



L	103mm
L1	94mm
B	43mm
B1	34.7mm
H	29mm

**Product Features**

- Output currents: 500mA
- Output voltage: 21V<sub>DC</sub> – 40V<sub>DC</sub>
- Output power: 10.5W – 20W
- Input voltage : 220 – 240 V<sub>AC</sub>
- Suitable for class I and II luminaires
- 30'000 h lifetime at tc max
- Fixed Output (i.e. no dimming)
- Typ. Efficiency: 87%
- SELV
- Ambient temp range, ta: -20°C to +50°

## Electrical Specifications

	Item	Value	Unit	Remarks
INPUT	Nominal voltage	220 – 240	V <sub>AC</sub>	
	Nominal frequency	50 – 60	Hz	
	AC voltage range	198 – 264	V <sub>AC</sub>	Permitted voltage range
	DC voltage range	NA	V	
	Maximum voltage	300	V	2hrs
	Nominal current	103	mA	at 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	> 87	%	Full load, 230 V, 50 Hz, typical / see graphs
	No-load power	< 0.5	W	230V, typical
	Stand-by power	NA	W	
	Power loss	3.0	W	at 230V, Input power 24.7 W max.
	Protection class	I/II		Suitable for class I and class II luminaires
	Inrush current	<3	A	t <sub>width</sub> = 100 μs typical (measured at 50% I <sub>peak</sub> )
	Max. units per circuit breaker	B16: 70; B10: 44 C16: TBD C10: TBD		
Leakage current	0.7	mA	Output floating	
OUTPUT	Nominal voltage range	21 – 40	V <sub>DC</sub>	Refer to Table 1 for details
	Maximum voltage	60	V <sub>DC</sub>	Open circuit
	Nominal current range	500	mA	
	Current accuracy	± 7.5 %		
	Current ripple (typical)	< 5%		Ripple / average @ 100 Hz
	Nominal power range	10.5 – 20	W	Partial Load.
	Maximum power	20	W	T <sub>a</sub> ≤ 50°C, Refer to Table 1 for details
	Galvanic isolation	SELV		3,75 kVrms. Output to mains - Touch current < 0.7 mA
DIMMING	Dimming control	No		Not dimmable
	Dimming range	NA	%	
	Dimming technique	NA		
	Frequency	NA	Hz	
	Galvanic isolation	NA		
Cable clam	Tested cable types: according to IEC60598			
	Input side	TBD		Cable type
	Output side	TBD		Cable type
ENVIRONMENT	Ambient temperature range t <sub>a</sub>	-20 ...+50	°C	
	Maximum case temperature t <sub>c</sub>	80	°C	Measured on t <sub>c</sub> point indicated of the product label. s
	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 61000-3-2 (ANSI C62.41 Cat.A ...)
	Environmental rating	Indoor		
	IP rating	IP 20		
	Mains switching cycles	> 100'000		
	Expected lifetime	30'000 50'000	Hrs Hrs	@t <sub>cmax</sub> = 80°C, max. 10% failure rate @t <sub>cmax</sub> = 70°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 < 60V

#### Output under voltage

NA

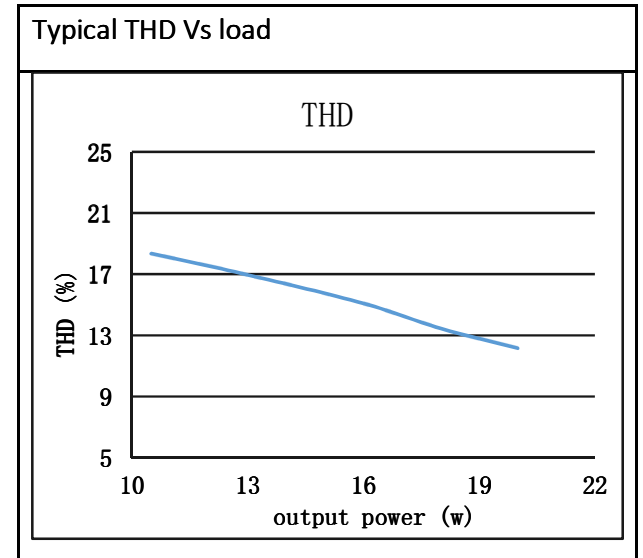
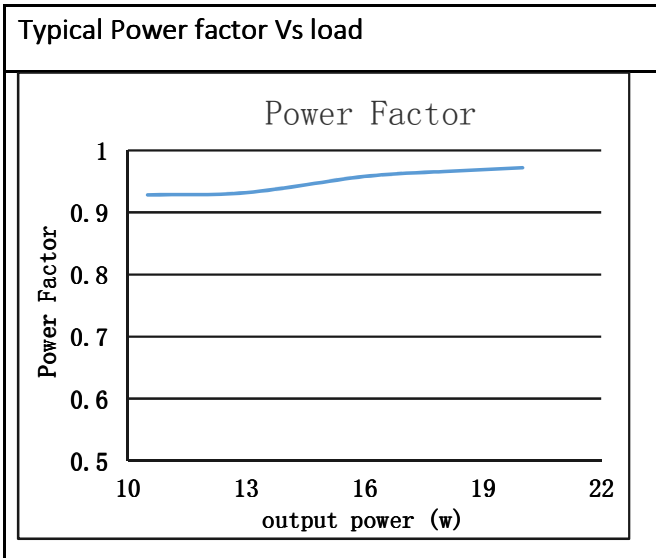
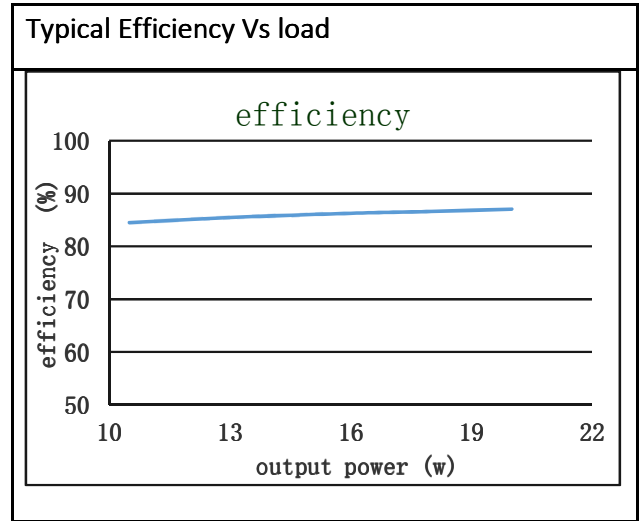
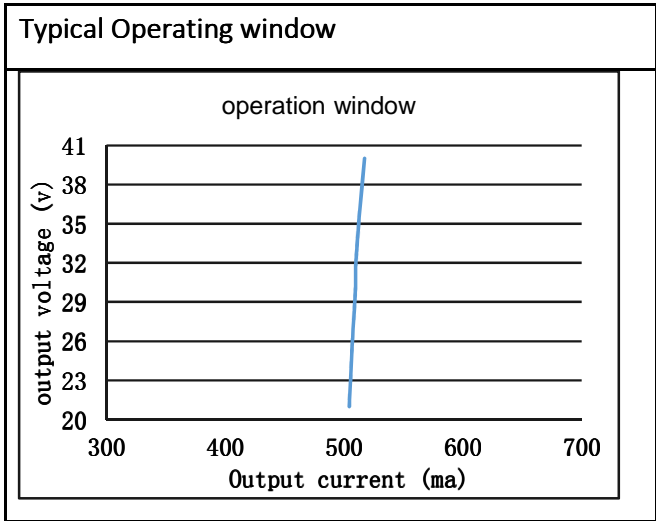
## Wiring Diagram

Terminal: Push in terminals  
 Max. cable length: 2 m  
 Weight: 70g

	Wire preparation (push in)	
	Built-in	Independent
Input/PRI	s: 0.5 - 1.5 mm <sup>2</sup>	s: 0.75 - 1.5 mm <sup>2</sup>
	f: 0.75 - 1.5 mm <sup>2</sup>	
Output/SEC	s: 0.5 - 1.5 mm <sup>2</sup>	
	f: 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



## 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
4062172167499	ELEMENT 20/220...240/500 G3	50

OSRAM GmbH

Head Office:

Marcel-Breuer-Strasse 6

80807 Munich, Germany

Phone +49 89 6213-0

www.osram.com