

Light is OSRAM

OSRAM

ELEMENT 42/220-240/1050 G3

Constant Current LED Power Supply 1050mA

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

Benefits:

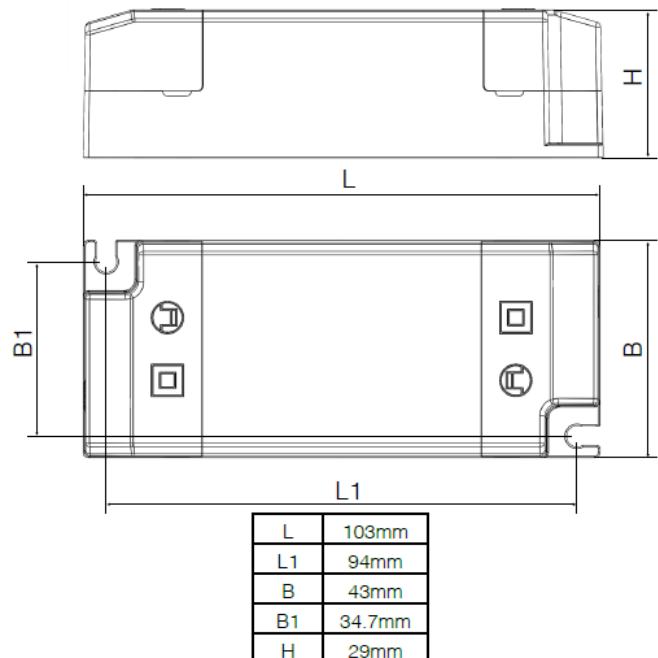
High compatibility with COBs and discrete LEDs;
High quality of light with ripple current < 5%
Safe and reliable
Safety ensured by OSRAM (SELV)
3 years guarantee

Applications

Downlights, Spotlights and Panels
Other Indoor LED luminaires

Approval marks

(Under preparation if on label)

**Product Features**

- Output currents: 1050mA
- Output voltage: 21V_{DC} – 40V_{DC}
- Output power: 22W – 42W
- Input voltage : 220 – 240 V_{AC}
- Suitable for class I and II luminaires
- 30'000 h lifetime at t_{cmax} = 80 °C
- Fixed Output (i.e. no dimming)
- Typ. Efficiency: 90%
- SELV
- Ambient temp range, t_a: -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	210.7	mA	230V
	Total Harmonic Distortion (THD)	< 20	%	Full load, 230 V, 50 Hz / see graphs
	Power factor	0.96		Full load, 230 V, 50 Hz / see graphs
	Efficiency	90	%	Full load, 230 V, 50 Hz, typical / see graphs
	No-load power	< 0.5	W	230V, typical
	Power loss	4.6	W	@230V, Input power 46.6W max.
	Protection class	I/II		Suitable for class I and class II luminaires
	Inrush current	< 11.6	A	$t_{width} = 100 \mu s$ typical (measured at 50% I_{peak})
	Max. units per circuit breaker	B10: 19; B16: 30; C10: 28; C16: 46		
	Leakage current	< 0.7	mA	Output floating
Output	Nominal voltage range	21 – 40	V _{DC}	
	Maximum voltage	60	V _{DC}	Open circuit
	Nominal current range	1050	mA	
	Current accuracy	± 7.5 %		
	Current ripple	< 5%		Ripple / average @ 100 Hz
	Pst LM	≤ 1		
	SVM	≤ 0.4		
	Nominal power range	22 - 42	W	Partial Load.
	Maximum power	42	W	Ta ≤ 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 _a	-20 ...+50	°C	
	Max. case temperature t _c max	80	°C	Measured on t _c 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 _{cmax} = 80°C, max. 10% failure rate @t _c = 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 Diagram

Terminal: Push in terminals

Max. cable length 2 m

Weight: 100g

Wire preparation:

Push in
s:0.5-1.5

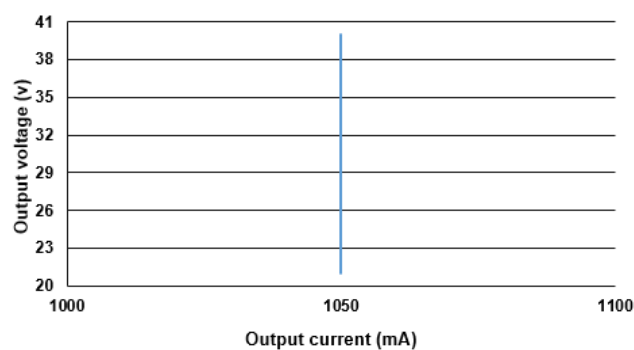
f:0.75-1.5

7-8 mm

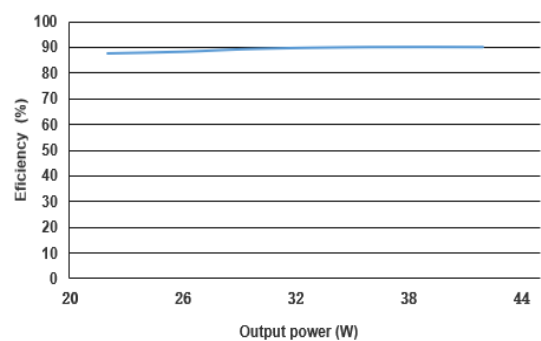
For build-in: 0.5-1.5 mm², for independent: 0.75-1.5 mm²

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

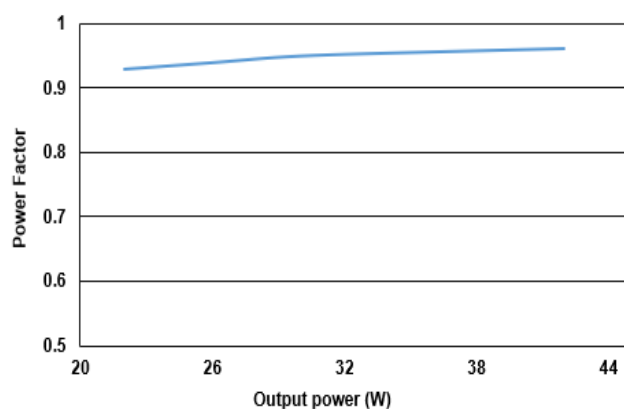
Typical Operating window



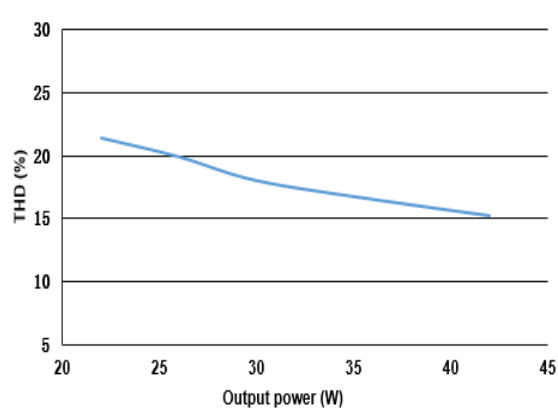
Typical Efficiency Vs load



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
4062172167611	ELEMENT 42/220...240/1050 G3	20

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