

Light is OSRAM

OSRAM

**ELEMENT 120/220-240/24 G2****24 V Constant Voltage LED driver**

A reliable choice for decorative lighting,  
tested by OSRAM quality standard,  
fits 24V flex & Signage applications in retails, hotel,  
restaurants, etc.

**Benefits**

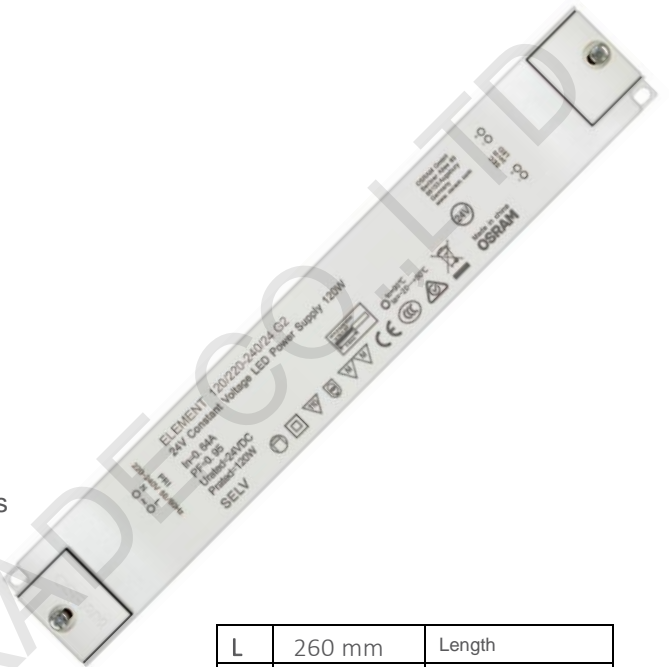
Compatible with OSRAM 24V Flex and Signage products  
High efficiency up to 89%  
Class II design for wide application possibilities  
Excellent price / quality / watt ratio

**Applications**

Hospitality – decorative lighting, night light  
Restaurants – decorative lighting  
Shops – decorative lighting, shelf lighting  
Residential – cove lighting, under cabinet lighting

**Approval marks**

In preparation, if not already printed on product label



L	260 mm	Length
L1	252 mm	Holes interaxis
B	40 mm	Width
H	31 mm	Height

Housing materials: plastic, white

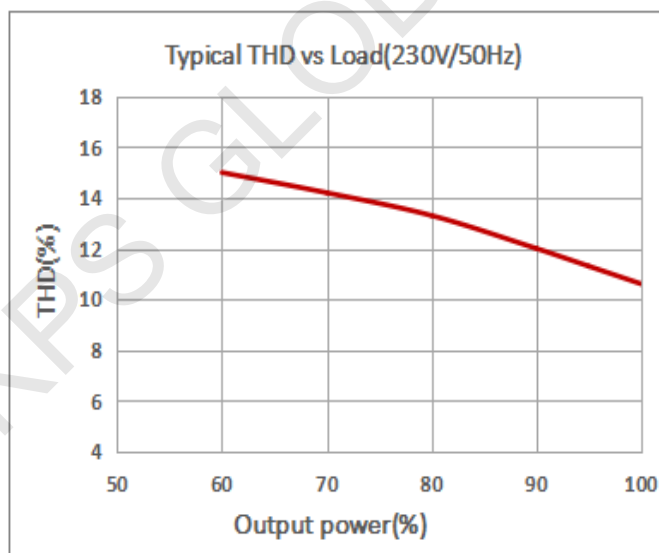
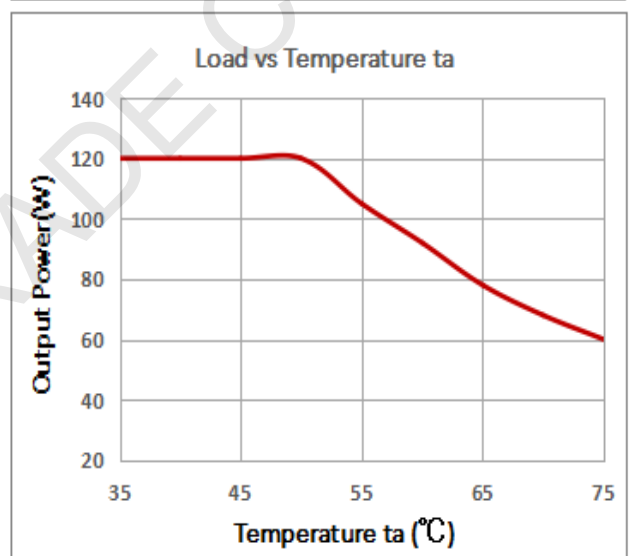
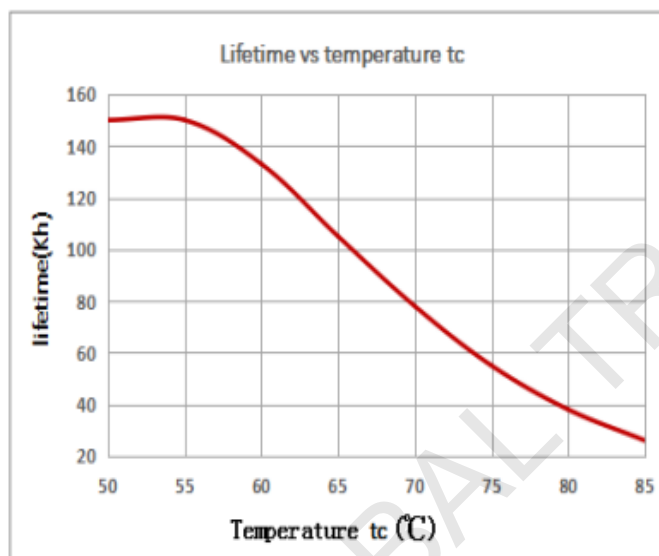
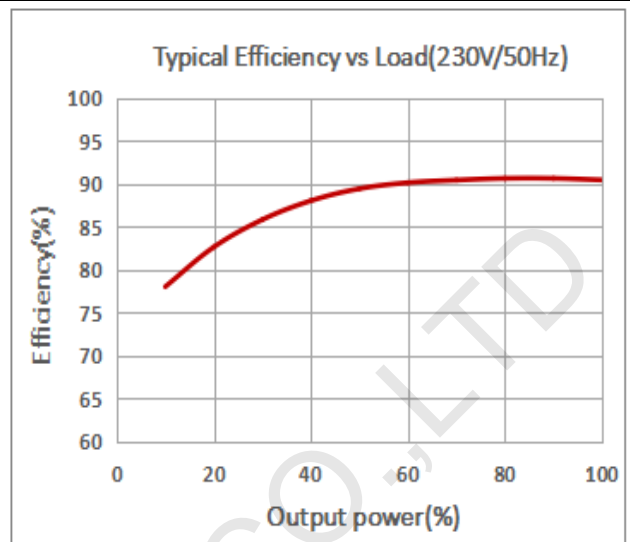
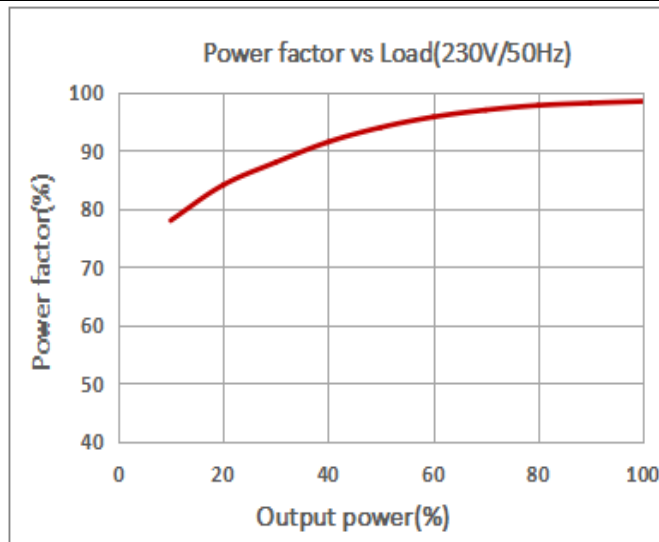
**Product Features**

- SELV 24 V constant output voltage
- Output power up to 120W
- Wide  $t_a$  range -20 ... +50 °C
- Mains voltage: 220 – 240 V<sub>AC</sub>
- High efficiency up to 89%
- PF>0.95
- Screw terminals
- Integrated cable clamp
- Overload protection
- Over temperature protection
- Short circuit protection
- $t_c$  max = 90 °C
- 30'000 h lifetime at  $t_c$  of 90°C
- 3 years guarantee
- Suitable for Class I / II luminaires
- Matching with OSRAM dimmers

## Electrical specification

	Item	Value	Unit	Remarks
INPUT	Nominal voltage	220 – 240	V	
	Mains frequency	50 / 60	Hz	
	Input voltage AC	198 – 264	V	
	Maximum voltage	280	V	2 h max, unit might not operate in this abnormal condition
	Nominal current	0,64	A	At 230 Vac
	Total Harmonic Distortion (THD)	< 15	%	Full load, 230 Vac, 50 Hz / 60 Hz, see graphs
	Power factor $\lambda$	0,95		Typical, Full load, 230 Vac, 50 Hz / 60 Hz, see graphs
	Efficiency in full load	89	%	Typical, Full load, 230Vac, 50Hz, see graphs
	Power loss	14.8	W	Full load, 230 Vac, 50 Hz / 60 Hz
	Intended for no-load application	No		Secondary switching not allowed
	Protection class	II		
	Suitable for fixtures with prot. Class	I / II		
	Inrush current	< 32 Apk / 240 $\mu$ s		
	Max. units per circuit breaker 10A	B10: 5   C10: 8		
	Max. units per circuit breaker 16A	B16: 8   C16: 12		
	Max. units per circuit breaker 25A	B25: 12   C25: 20		
OUTPUT	Nominal output voltage	24	V	
	Voltage accuracy	+/- 3	%	
	Voltage ripple	< 3	%	Ripple / average @ 100 Hz; Full load
	Nominal output power	120	W	
	Maximum output power	120	W	LED output, at steady state
	Capacitive load	20	$\mu$ F/A	
	Galvanic isolation	SELV		
	U-OUT	25		
ENVIRONMENTAL	Ambient temperature range	-20 / +50	°C	
	Max. temperature at $t_c$ test point	90	°C	Measured on $t_c$ point of the product label, $t_a$ not exceeded
	Max. case temp. in fault condition	110	°C	
	Storage temperature range	-40 ...+85	°C	
	Permitted rel. humidity during operation	5 – 85	%	Not condensing
	Surge capability (L/N)	1	kV	L/N acc to. EN 61547
	Environmental rating	Indoor		
	IP protection class	IP 20		
	Mains switching cycles	> 50'000		
	Expected ECG lifetime	30'000 50'000	h	$t_c$ = max with 10% failure rate $t_c$ = -10°C with 10% failure rate
	No-load proof	Yes		
	Intended for no-load operation	No		
	Overheating protection	Yes		Auto reversible
	Overload protection	Yes		Auto reversible
	Short-circuit protection	Yes		Auto reversible
	Type of connection, input / output side	Screw terminals		0,75 – 1,5 mm <sup>2</sup>
DIMENSIONS	Height	31	mm	
	Length	260	mm	
	Width	40	mm	
	Mounting hole spacing, length	252	mm	
	Product weight	386	g	
	Casing material	Plastic		
	Wire prep. length, input side	5	mm	

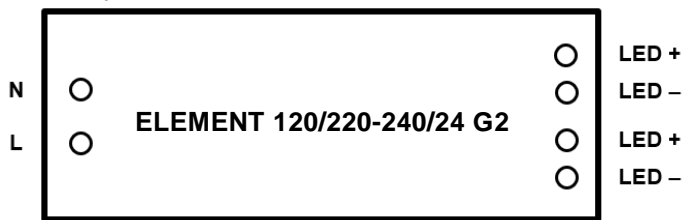
Wire prep. length, output side	5	mm
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— ELEMENT 120/220-240/24 G2

## Protection

Over temperature, Overload, Short-circuit. Reversible.



## Wiring

- Input wires cross section: 0.75 - 1,5 mm<sup>2</sup>
- Output wires cross section: 0.75 - 1.5 mm<sup>2</sup>
- Wire peeling length: input 5 mm; output 5 mm
- Cable recommendation: H05VVH2-F 2\*0.75mm<sup>2</sup>; H05VVH2-F 2\*1.0mm<sup>2</sup>; H03VVH2-F 2x0.75mm<sup>2</sup>
- Load wires length: 3 m verified. EMI pass verified with wire length of 2 m, from the ECG to the LED module at full load.

Wiring longer than 3 m from ECG to LED module is possible, but site installation conditions may interfere with EMI with these longer cables. EMI is therefore not verified in this condition.

For longer lengths than 3 m, appropriate cable cross section must be carefully selected to reduce voltage drop.

## Remarks

- **Output short circuit protection:** auto reversible when fault removed
- **Output overload protection:** auto reversible when fault removed
- **Over temperature protection:** the unit is protected against temporary overheating by shut down the unit, auto reversible when fault removed
- **Dimming compatibility:** the ELEMENT driver is able work with OSRAM dimmer as dimmable solution. For example: OTi DALI DIM, OT DIM, OT RGBW DIM, OT BLE DIM. It is recommended to check the performance of total system in design-in stage.
- Intended for use with LED modules.
- The forward voltage of the LED light source shall be within the defined operating window of the control gear in all operating conditions including dimming if applicable.
- **Ecodesign regulation information:**  
Intended for use with LED modules. The forward voltage of the LED light source shall be within the defined operating window of the control gear in all operating conditions including dimming if applicable. Separate control gear and light sources must be disposed of at certified disposal companies in accordance with Directive 2012/19/EU (WEEE) in the EU and with Waste Electrical and Electronic Equipment (WEEE) Regulations 2013 in the UK. For this purpose, collection points for recycling centres and take-back systems (CRSO) are available from retailers or private disposal companies, which accept separate control gear and light sources free of charge. In this way, raw materials are conserved and materials are recycled.

## Standards

## Safety:

EN/IEC 61347-1

EN/IEC 61347-2-13

## Performance:

EN/IEC 62384

## Harmonic content:

EN/IEC 61000-3-2

## Immunity:

EN/IEC 61000-3-3

EN/IEC 61547

## Radio interference:

CISPR 15

## Ordering information

Product name	EAN 10	EAN 40	Pieces / Box
ELEMENT 120/220-240/24 G2	4052899605541	4052899605558	20

## OSRAM GmbH

## Head Office:

Marcel-Breuer-Strasse 6

80807 Munich, Germany

Phone +49 89 6213-0

www.osram.com

KPS GLOBAL TRADE CO.,LTD

19/23 Kanchanapisek3 Laksong Bankae Bangkok 10160

Tel: 097-145-4444,02-101-0491,061-445-4963

Email:info.kps.trade@gmail.com

**OSRAM**