## Light is OSRAM

# **OSRAM**

## ELEMENT 180/220-240/24 G2

24V Constant Voltage LED driver

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

## **Benefits**

Well design for Flex and Signage High efficiency up to 91% Class II design for wide application 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

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In preparation, if not already printed on product label

## **Product Features**

- 24V constant output voltage
- Output power up to 180W
- SELV
- Main voltage 220-240V
- High efficiency up to 91%
- PF>0.95
- Screw terminal
- Cable clamp integrated

Ver 14

Over load protection

В

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40mm

31mm

- Over temperature protection
- Short circuit protection
- Suitable for Class I/II luminaires,
- build-in & independent installation
- Wide Ta range -20 +50 °C
- 30'000 h @ Tc max
- 3Y guarantee



build-in & ind

## **Electrical specifications**

	Item	Value	Unit	Remarks
	Nominal voltage	220 – 240	V	
Input	Mains frequency	50 / 60	Hz	
	Input voltage AC	198 – 264	V	
	Maximum voltage	280	Vac	2 h maximum, unit might not operate in this abnormal condition
	Nominal current	0.9	Α	At 230 Vac
	Total Harmonic Distortion (THD)	< 15	%	Full load, 230 Vac, 50 Hz / 60 Hz see graphs
	Power factor λ	0,95		Typical, Full load, 230 Vac, 50 Hz / 60 Hz, see graphs
	ECG Efficiency	91	%	Typical, Full load, 230Vac, 50Hz, see graphs
	Power loss	17.8	W	Full load, 230 Vac, 50/60Hz
	Power loss in no load condition	<1	W	230Vac, 50Hz typical
	Protection class	II		Suitable for safety class I and II luminaires
	Suitable for fixtures with prot. Class	1711		
	Inrush current	<40 Apk / 765 us		
	Max ECG no. on circuit breaker 10A	B:3 C:5		
	Max ECG no. on circuit breaker 16A	B:5 C:9		
	Max ECG no. on circuit breaker 25A	B:8 C:14		
Output	Nominal output voltage	24	V	
	Voltage accuracy	+/- 3	%	
	Voltage ripple	< 3	%	Ripple / average @ 100 Hz; Full load
	Nominal output power	180	W	
	Maximum power	180	W	LED output
	Capacitive load	20	uF/A	
	Galvanic isolation	SELV		
	U-OUT (working voltage)	25	V	
	Ambient temperature range	-20 - +50	°C	
	Max. temperature at tc test point operation	90	°C	Measured on tc point indicated of the prod label, ta not exceeded
	Max. case temp. in fault condition	110	°C	
ENVIRONMENTAL	Storage temperature range	-40 - +85	°C	
	Permitted rel. humidity during	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 lifetime	30'000 50'000	h	At tc max with 10% failure rate At tc-10°C with 10% failure rate
	No-load proof	Yes		
	Overheating protection	Yes		Automatically restart
	Overload protection	Yes		Automatically restart
	Short-circuit protection	Yes		Automatically restart
	Dimension	300x40x31	mm	LxWxH
	Weight	472	g	
	Casing material	Plastic		

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## Protections

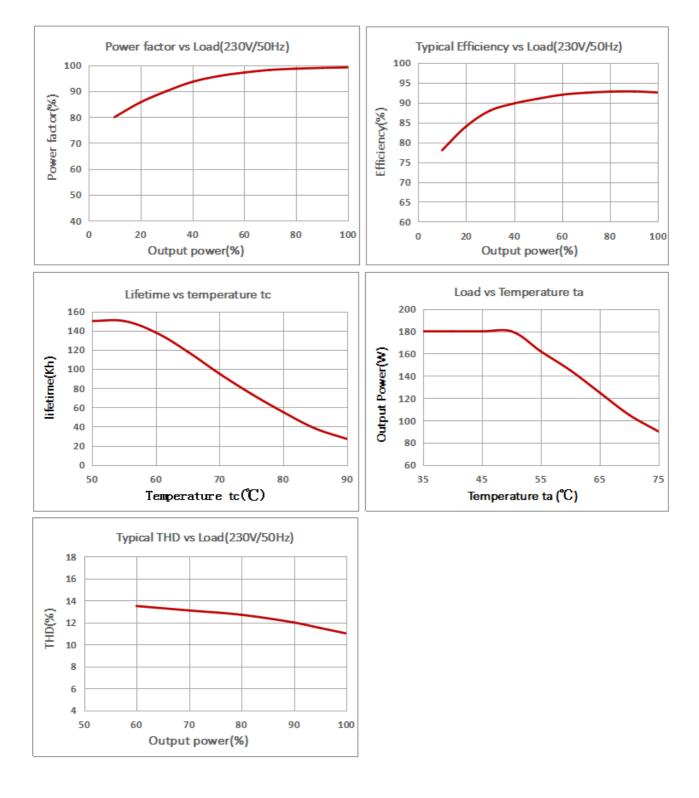
Over temperature, Overload, Short-circuit. Reversible



## Cable and wire preparation

- 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
- Load wires length: 3 m verified
- 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>



## 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.
- Distance away of wall/wooden board: put the driver 2cm (side and top) away from wall / wooden board.

## Ordering information

Product name	EAN 10	EAN 40	Pieces / box
ELEMENT 180/220-240/24 G2	4052899605565	4052899605572	20

#### Standards

#### **OSRAM GmbH**

Head Office:

Marcel-Breuer-Strasse 6 80807 Wunich, Germany Phone +49 89 6213-0 Fax +49 89 6213-2020 www.osram.com

