

Light is OSRAM

OSRAM

ELEMENT 180/220-240/24 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 91%
Class II design for wide application possibilities
Excellent price / quality / watt ratio

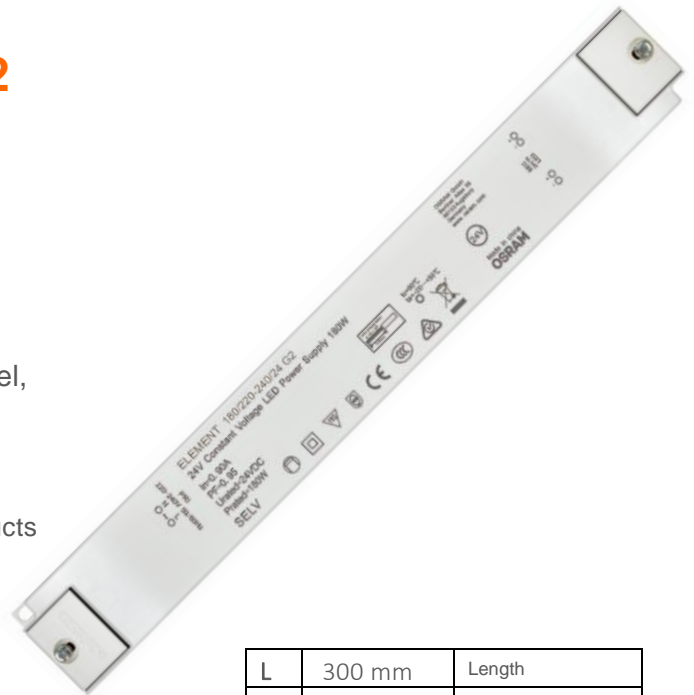
Applications

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	300 mm	Length
L1	292 mm	Holes interaxis
B	40 mm	Width
H	31 mm	Height

Housing materials: plastic, white

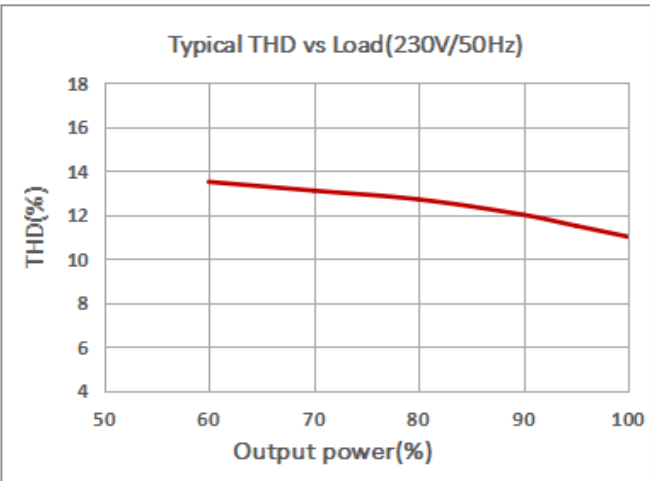
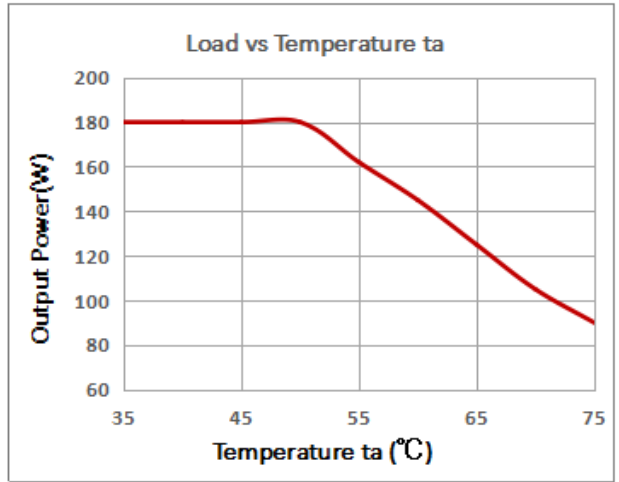
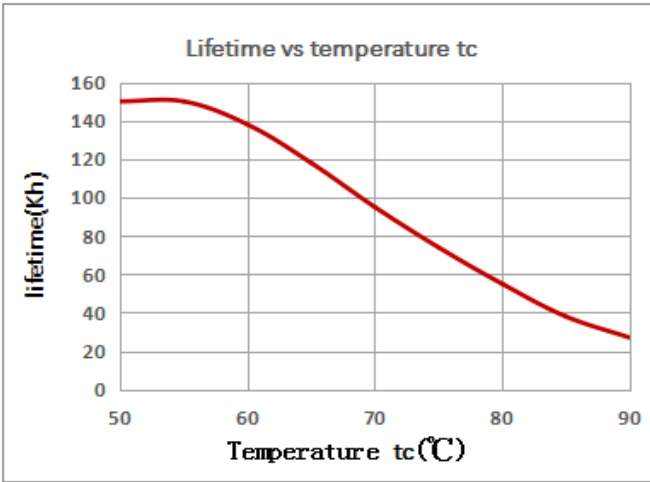
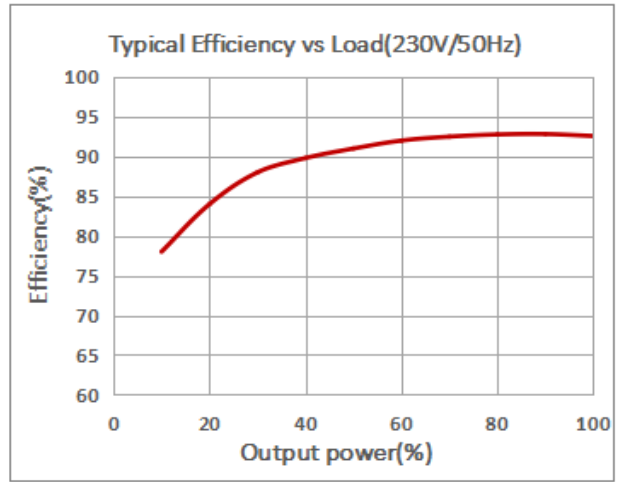
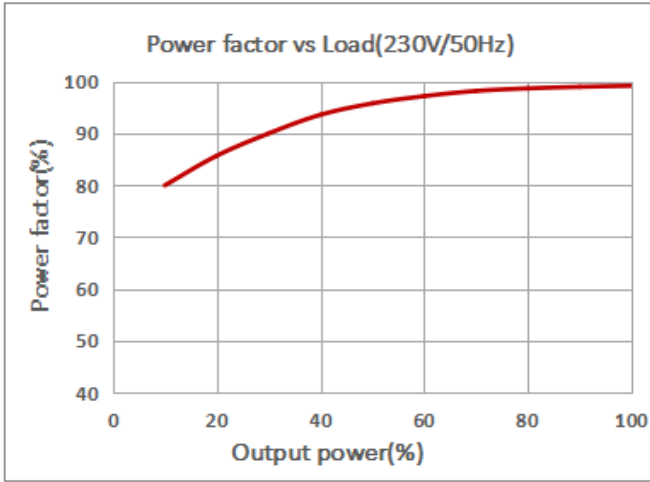
Product Features

- SELV 24 V constant output voltage
- Output power up to 180W
- Wide t_a range -20 ... +50 °C
- Mains voltage: 220 – 240 V_{AC}
- High efficiency up to 91%
- 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	0,9	A	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
	Efficiency in full load	91	%	Typical, Full load, 230Vac, 50Hz, see graphs
	Power loss	17.8	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	< 40 Apk / 240 μ s		
	Max. units per circuit breaker 10A	B10: 3 C10: 5		
	Max. units per circuit breaker 16A	B16: 5 C16: 9		
	Max. units per circuit breaker 25A	B25: 8 C25: 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 output power	180	W	LED output, at steady state
	Capacitive load	20	μ F/A	
	Galvanic isolation	SELV		
	U-OUT	25		
ENVIRONMENTAL	Ambient temperature range	-20 / +50	$^{\circ}$ C	
	Max. temperature at t_c test point	90	$^{\circ}$ C	Measured on t_c point of the product label, t_a not exceeded
	Max. case temp. in fault condition	110	$^{\circ}$ C	
	Storage temperature range	-40 ...+85	$^{\circ}$ 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 $^{\circ}$ 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 ²
DIMENSIONS	Height	31	mm	
	Length	300	mm	
	Width	40	mm	
	Mounting hole spacing, length	292	mm	
	Product weight	472	g	
	Casing material	Plastic		
	Wire prep. length, input side	5	mm	

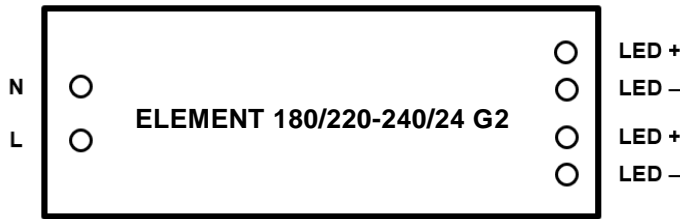
Wire prep. length, output side	5	mm
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— ELEMENT 180/220-240/24 G2

Protection

Over temperature, Overload, Short-circuit. Reversible.



Wiring

- Input wires cross section: 0.75 - 1,5 mm²
- Output wires cross section: 0.75 - 1.5 mm²
- Wire peeling length: input 5 mm; output 5 mm
- Cable recommendation: H05VVH2-F 2*0.75mm²; H05VVH2-F 2*1.0mm²; H03VVH2-F 2x0.75mm²
- 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

Ordering information

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

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

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