

## Element LD 45/220...240/1A0

ELEMENT LD | Compact constant current LED driver – Non dimmable



### Product family features

- Available with wattages up to 60 W
- Constant output current
- Integrated cable clamp for luminaire and independent installation
- Operated with Safety extra-low voltage (SELV): < 60 V
- Reversible overtemperature, overload, short-circuit and open-circuit protection

### Product family benefits

- Compatible with LEDs with Chip-On-Board technology and discrete LEDs
- High efficiency
- Simple installation and wiring

### Areas of application

- Spotlight and downlight installations for shops
- Recessed luminaires
- Suitable for luminaires of protection classes I and II
- Suitable for indoor SELV installations

## Technical data

### Electrical data

Nominal input voltage	220...240 V
Mains frequency	50/60 Hz
Input voltage AC	220...240 V <sup>1)</sup>
Total harmonic distortion	< 20 %
Power factor $\lambda$	0.98 <sup>2)</sup>
Efficiency in full-load	> 90 % <sup>3)</sup>
Device power loss	6.7 W <sup>4)</sup>
Inrush current	< 16 A <sup>5)</sup>
Max. ECG no. on circuit breaker 10 A (B)	16
Max. ECG no. on circuit breaker 16 A (B)	25
Max. ECG no. on circuit breaker 25 A (B)	-
Surge capability (L/N-Ground)	1 kV
Surge capability (L-N)	1 kV
Nominal output voltage	21...42 V <sup>6)</sup>
U-OUT (working voltage)	60 V
Nominal output current	1050 mA
Output current tolerance	±10 %
Output ripple current (100 Hz)	40 % <sup>7)</sup>
Output PSTLM	≤1
Output SVM	≤0.8
Nominal output power	45 W
Maximum output power	45 W
Galvanic isolation	SELV

<sup>1)</sup> V<sub>AC</sub>

<sup>2)</sup> Full load at 230 V/50 Hz

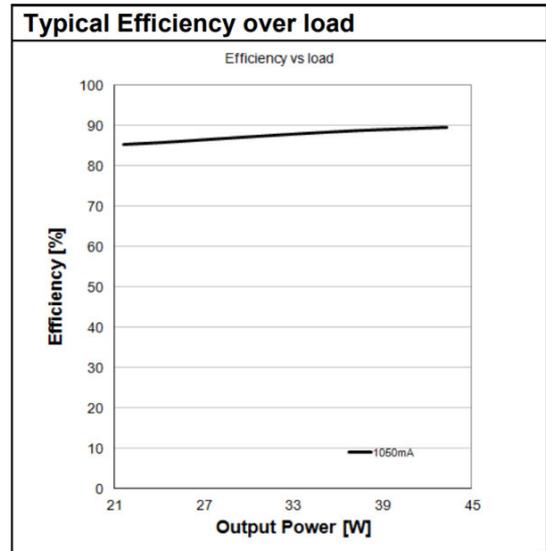
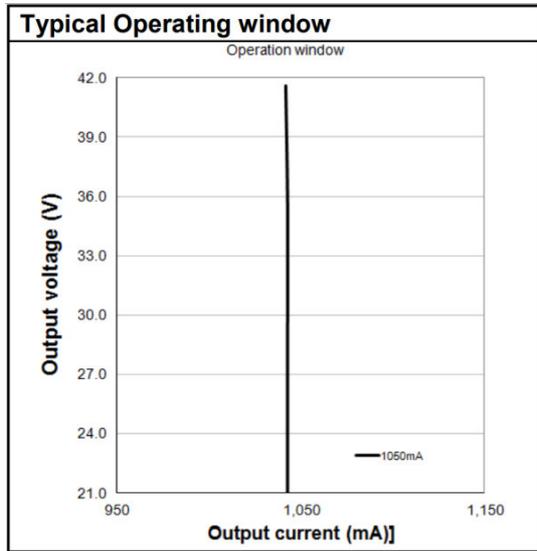
<sup>3)</sup> at 230 V, 50 Hz

<sup>4)</sup> At 230 V / Input power 51.7 W max.

<sup>5)</sup>  $t_{width} = 50 \mu s$  (measured at 50 % I<sub>peak</sub>)

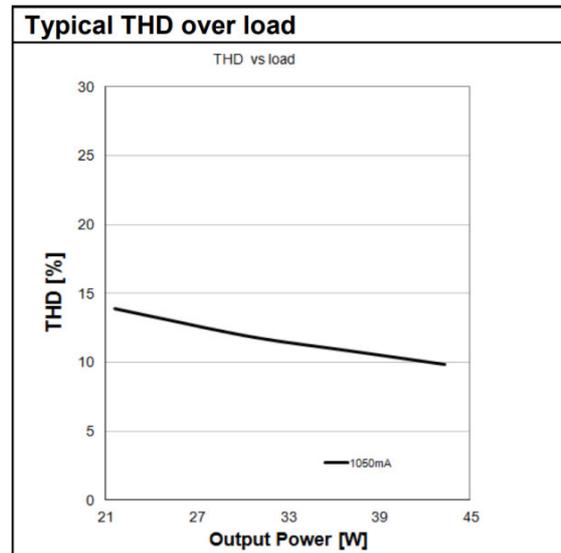
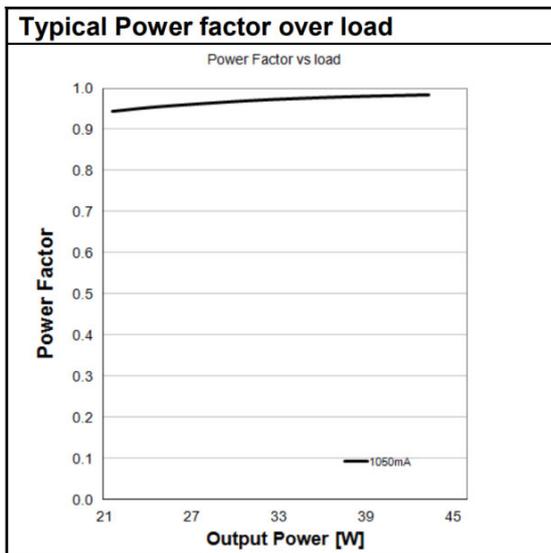
<sup>6)</sup> DC voltage

<sup>7)</sup> Ripple average at 100 Hz



ELEMENT LD 45220-2401A0 Operating Window

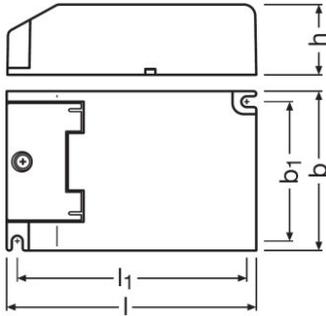
ELEMENT LD 45220-2401A0 Typical Efficiency vs. Load (230 V 50 Hz)



ELEMENT LD 45220-2401A0 Typical Power Factor vs. Load

ELEMENT LD 45220-2401A0 Typical THD Vs Load

## Dimensions & weight



Mounting hole spacing, length	94.0 mm
Mounting hole spacing, width	58.0 mm
Product weight	170.00 g
Cable cross-section, input side	0.5...1.5 mm <sup>2</sup>
Cable cross-section, output side	0.5...1.5 mm <sup>2</sup>
Wire preparation length, input side	8.0...9.0 mm
Wire preparation length, output side	8.0...9.0 mm
Length	103.0 mm
Width	67.0 mm
Height	29.5 mm

## Colors & materials

Casing material	Plastic
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## Temperatures & operating conditions

Ambient temperature range	-10...+50 °C
Maximum temperature at tc test point	80 °C
Max.housing temperature in case of fault	110 °C
Temperature range at storage	-10...80 °C
Permitted rel. humidity during operation	5...85 % <sup>1)</sup>

<sup>1)</sup> Maximum 56 days/year at 85 %

## Lifespan

ECG lifetime	30000 h <sup>1)</sup>
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<sup>1)</sup> At  $T_{case} = 80^{\circ}C$  at  $T_c$  point / 10% failure rate

## Product datasheet

### Expected Lifetime

Product name				
Element LD 45/220...240/1A0	ECG ambient temperature [ta]	50	-	-
	Temperature at tc-point [°C]	80	-	-
	Lifetime [h]	30000 <sup>1)</sup>	-	-

<sup>1)</sup> Max. 10% failure rate at tc max

### Additional product data

Successor EAN	4052899553057
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### Capabilities

Dimmable	No
Overheating protection	Automatic reversible
Overload protection	Automatic reversible
Short-circuit protection	Automatic reversible
No-load proof	Yes
Intended for no-load operation	No
Max. cable length to lamp/LED module	2.0 m
Suitable for fixtures with prot. class	I / II
Type of connection, output side	Push terminal

### Certificates & standards

Approval marks – approval	CCC / CE / ENEC 10 / RCM
Standards	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to IEC 61000-3-2/Acc. to CISPR 15/Acc. to IEC 61000-3-3/Acc. to IEC 61547
Protection class	II
Type of protection	IP20

### Logistical data

Commodity code	850440829000
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### Download Data

File
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## Product datasheet

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	Certificates OT ENEC 40038447 210721
	Certificates 612430_ELEMENT CE declaration
	Declarations of conformity ELEMENT LD CE 3377285 230821
	CAD data 3-dim 642298_Element LD 45 38 30 STEP

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### 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.

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### Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899947122	Element LD 45/220...240/1A0	Shipping carton box 20	346 mm x 216 mm x 80 mm	5.98 dm <sup>3</sup>	3715.00 g

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The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

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### Disclaimer

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.