

## Element LD 20/220...240/500

ELEMENT LD | Compact Constant Current LED Drivers – Non dimmable



### 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

### Product family benefits

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

### 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

## 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	< 30 %
Power factor $\lambda$	0.98 <sup>2)</sup>
ECG efficiency	>87 % <sup>3)</sup>
Device power loss	3.7 W <sup>4)</sup>
Inrush current	< 16 A <sup>5)</sup>
Max. ECG no. on circuit breaker 10 A (B)	38
Max. ECG no. on circuit breaker 16 A (B)	60
Max. ECG no. on circuit breaker 25 A (B)	-
Surge capability (L/N-Ground)	1 kV
Surge capability (L-N)	0.5 kV
Nominal output voltage	21...42 V <sup>6)</sup>
U-OUT (working voltage)	60 V
Nominal output current	500 mA
Output current tolerance	±10 %
Output ripple current (100 Hz)	40 %
Output PSTLM	≤1
Output SVM	≤0.9
Nominal output power	20 W
Galvanic isolation	SELV

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

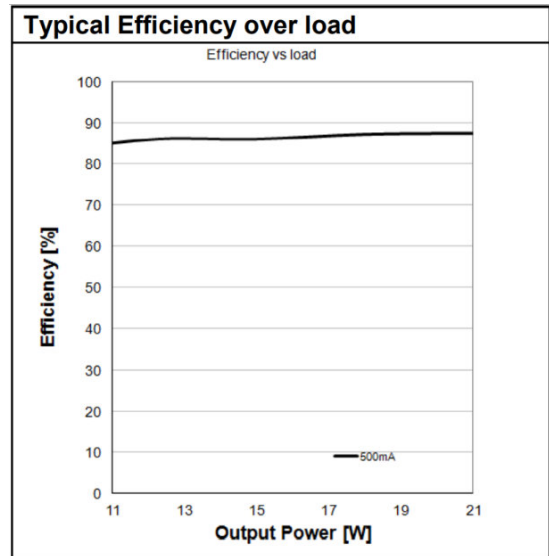
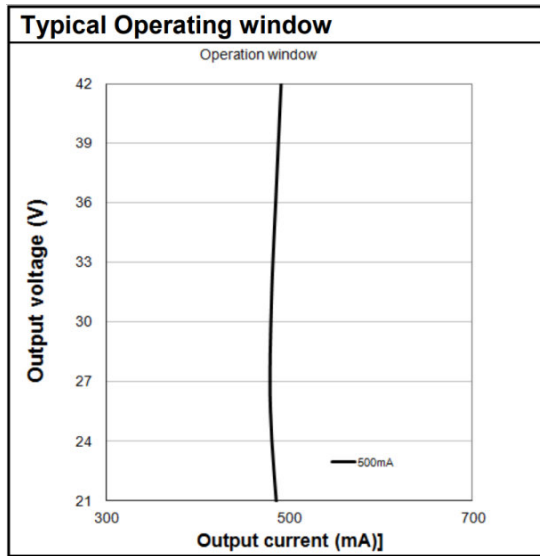
<sup>2)</sup> Full load at 230 V/50 Hz

<sup>3)</sup> At full load and 230 V / Typical / At 50 Hz

<sup>4)</sup> At 230 V / Input power 24.7 W max.

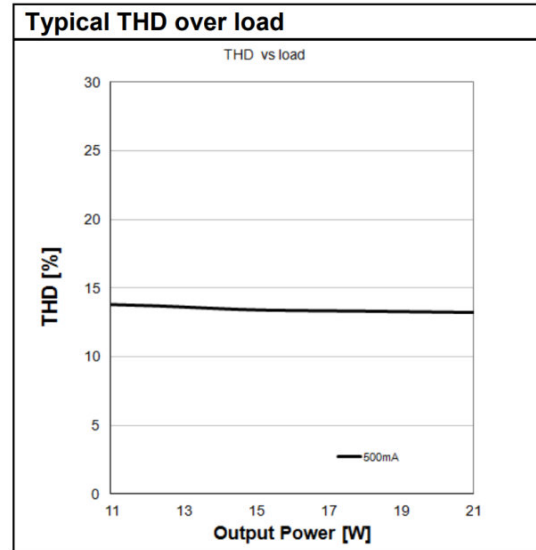
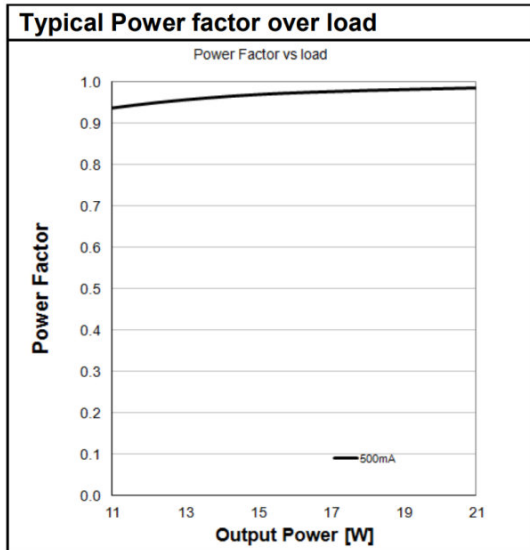
<sup>5)</sup>  $t_{width} = 50 \mu s$  (measured at 50 %  $I_{peak}$ )

<sup>6)</sup> DC voltage



Operating Window

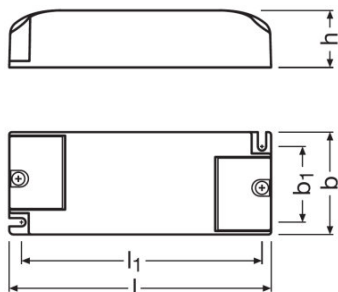
Typical Efficiency v Load 230 V 50 Hz



Typical Power Factor v Load

Typical THD v Load

## Dimensions & weight



Mounting hole spacing, length	105.0 mm
Mounting hole spacing, width	33.0 mm
Product weight	90.00 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	115.0 mm
Width	45.0 mm
Height	25.0 mm

## Colors & materials

Casing material	Plastic
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## Temperatures & operating conditions

Ambient temperature range	-10...+45 °C
Maximum temperature at tc test point	85 °C
Max.housing temperature in case of fault	110 °C
Temperature range at storage	-10...85 °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  $T_{case} = 85^{\circ}C$  at  $T_c$  point / 10% failure rate

## Product datasheet

### Expected Lifetime

Product name				
Element LD 20/220...240/500	ECG ambient temperature [ta]	45	-	-
	Temperature at tc-point [°C]	85	-	-
	Lifetime [h]	30000 <sup>1)</sup>	-	-

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

### Additional product data

Encapsulated	No
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### Capabilities

Dimmable	No
Overheating protection	Automatic switch off, reversible by manual mains reset
Overload protection	Automatic switch off, reversible by manual mains reset
Short-circuit protection	Automatic reversible
No-load proof	Yes
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

### Programming

Tuner4TRONIC	No
Tuner4TRONIC Field App	No

### 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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## Product datasheet

### Download Data

File	
	Product Datasheet 608213_Element Technical datasheet 20W
	Certificates OT ENEC 40038447 030720
	Certificates 612430_ELEMENT CE declaration
	Declarations of conformity ELEMENT LD CE 3377285 121119
	CAD data 3-dim 642297_Element LD 20 15 8 STEP

### Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899947092	Element LD 20/220...240/500	Shipping carton box 20	240 mm x 237 mm x 72 mm	4.10 dm <sup>3</sup>	1984.00 g

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.

### Disclaimer

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