# Element 60 / 220 - 240 / 350 D CS L

## Constant Current LED Power Supply

200mA - 250mA - 300mA- 350mA

Element linear LED Power Supply is the reliable choice for linear and area fixtures for office industrial - shop lighting;

#### **Benefits**

Flexible with 1 driver offers 4 output currents; Simple current selection via dip switch Enable slim fixture design with flat 21mm height metal housing Very high efficiency up to 94% OSRAM quality and reliability

### **Applications**

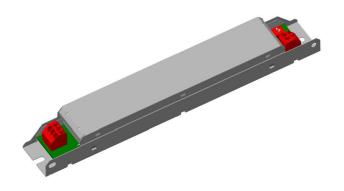
Linear and area lighting Office - industrial - shop

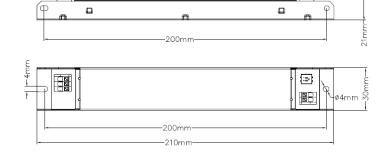
### Approval marks (under preparation if not on label)











White metal housing

## **Product features**

- Output current: 200/250/300/350mA
- Wide Output voltage range
- Output power: 18W 65W
- Low THD < 10% @ full load
- Power Factor up to 0.98

- Fixed output (no dimming)
- Overload, short & open circuit protection
- Efficiency up to 94%
- 50,000 hours lifetime at tc= 65C
- Ambient temp range t<sub>a</sub>: -20 to +50°C

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## **Electrical Specifications**

	Item	Value	Unit	Remarks
	Nominal voltage	220 – 240	$V_{AC}$	
	Nominal frequency	50 / 60	Hz	
	AC voltage range	198 – 264	$V_{AC}$	Permitted voltage range
	DC voltage range	NA	V	
	Maximum voltage	300	$V_{AC}$	2hrs
	Nominal current	0.31	Α	230V
	Total Harmonic Distortion (THD)	<20	%	Full load, 230 V, 50 Hz / see graphs
5	Power factor	0.98		Full load, 230 V, 50 Hz / see graphs
INPUT	Efficiency	94	%	Full load, 230 V, 50 Hz, typical / see graphs
<b>=</b>	No-load power	<0.5	W	230V, typical
	Stand-by power	NA	W	
	Power loss	4.1	W	at 230V, full load
	Protection class	class I		Suitable for class I luminaries
	Inrush current	13.5	Α	t <sub>width</sub> = 170 μs typical
	Max. units per circuit breaker	B16:40 ; B10:25 C16:40 ; C10:25		
	Leakage current	<0.7	mΑ	Output floating
	Nominal voltage range	90-190	$V_{DC}$	@ 200/250/300/350mA output current, Refer to Table 1 for details
	Maximum voltage	250	$V_{DC}$	Open circuit
5	Nominal current range	200/250/300/350	mΑ	
百	Current accuracy	+/- 7.5%		
OUTPUT	Current ripple (typical)	<30%		Full load, Ripple / average @ 100 Hz
0	Nominal power range	20 – 63	W	Partial Load. Refer to Table 1 for details
	Maximum power	63	W	Ta ≤ 50°C, Refer to Table 1 for details
	Galvanic isolation	Non Isolated		
	Ambient temperature range t <sub>a</sub>	-20+50	°C	Refer to Table 1 for details
	Maximum case temperature t <sub>c</sub>	75	°C	Measured on $t_{\mbox{\tiny c}}$ point indicated of the product label.
١.	Max. case temp. in fault condition	TBD	°C	
ENVIRONMENT	Storage temperature range	-25+85	°C	Cool down before operating
	Relative humidity during operation	585	%	Not condensing
	Surge transient protection	1/2	kV	L/N   LN/PE acc. IEC 61000-3-2
	Environmental rating	Indoor		
	IP rating	IP20		
	Mains switching cycles	>100000		- 14
	Expected lifetime	35000	hrs	t <sub>c</sub> Max =75°C, 10% failure rate.
		50000		t <sub>c</sub> Max =65°C, 10% failure rate.

#### **Protections**

Overload

Yes, reversible

No load

Yes, reversible

**Short-circuit** 

Yes, reversible

Input overvoltage

Maximum allowed input voltage 300 V AC/2hours

**Output overvoltage** 

Yes, Limitation of Output voltage <250V

Output under voltage

Yes, protected under 85V

Wire preparation: Push in s:0.5-1.5

f:0.75-1.5 7-8 mm

### **Wiring Diagram**

Terminal: Max. cable length excl. modules

Geometry (I x b x h):

Weight:

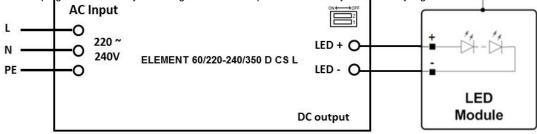
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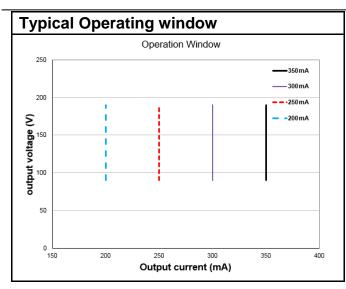
**TBD** 

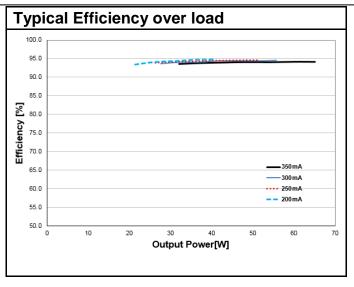
Push in terminals

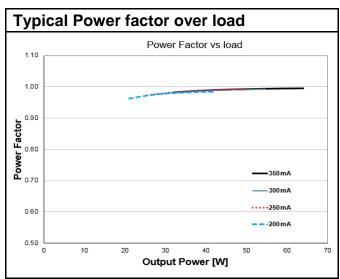
210X30X21 mm

Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.









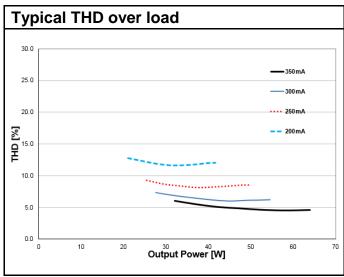


Table 1 - Rated output power and current sets						
lout (mA)	200	250	300	350		
U min [V]	90	90	90	90		
U max [V]	190	190	190	190		
P min [W]	18	23	27	31.5		
P max [W]	38	47.5	57	65		
<b>Ta [</b> °C ]	50	50	50	50		
<b>Tc [</b> °C ]	75	75	75	75		
Line Current, nominal@230V A	0.18	0.23	0.27	0.31		
Max Power Loss@230V [W]	2.0	3.0	3.0	4.1		
Input Power @230V [W]	40	50.5	60	69.1		

Pin1	Pin2	Currents (mA)
OFF	OFF	200
OFF	ON	250
ON	OFF	300
ON	ON	350

Current selection by DIP-switch

Edition: Jan, 2018

### **Standards**

Safety: IEC 61347-1, IEC 61347-2-13 Performance: IEC 62384

Harmonic content: IEC 61000-3-2 Immunity: IEC 61000-3-3 IEC 61547

Product name	EAN10	EAN40	Pieces / box
ELEMENT 60/220-240/350 D CS L	4052899553118	4052899553125	20

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Edition: Jan, 2018 Ver.: 1.2 Status: draft Misprints and technical changes excepted