

Element 60 / 220 – 240 / 350 D CS L

Constant Current LED Power Supply

200mA - 250mA - 300mA- 350mA

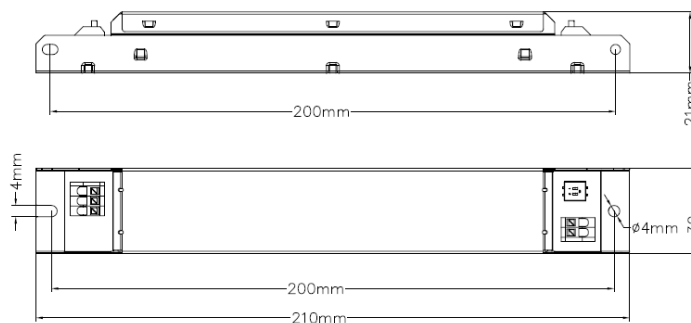
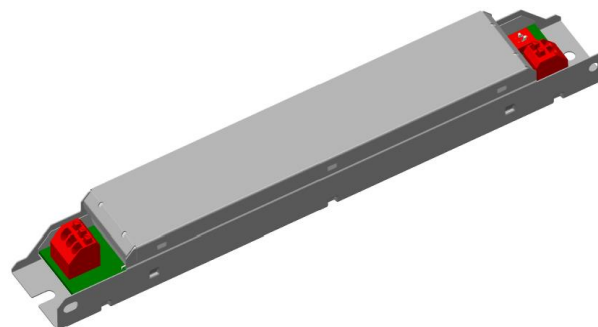
Element linear LED Power Supply is the reliable choice for linear and area fixtures for office - industrial - shop lighting;

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 $t_c = 65^\circ\text{C}$
- Ambient temp range t_a : -20 to +50°C

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	A	230V
Total Harmonic Distortion (THD)	<20	%	Full load, 230 V, 50 Hz / see graphs
Power factor	0.98		Full load, 230 V, 50 Hz / see graphs
Efficiency	94	%	Full load, 230 V, 50 Hz, typical / see graphs
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 luminaires
Inrush current	13.5	A	t _{width} = 170 μs typical
Max. units per circuit breaker	B16:40 ; B10:25 C16:40 ; C10:25		
Leakage current	<0.7	mA	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
Nominal current range	200/250/300/350	mA	
Current accuracy	+/- 7.5%		
Current ripple (typical)	<30%		Full load, Ripple / average @ 100 Hz
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 _a	-20 ...+50	°C	Refer to Table 1 for details
Maximum case temperature t _c	75	°C	Measured on t _c point indicated of the product label.
Max. case temp. in fault condition	TBD	°C	
Storage temperature range	-25 ...+85	°C	Cool down before operating
Relative humidity during operation	5...85	%	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		
Expected lifetime	35000	hrs	t _c Max =75°C, 10% failure rate.
	50000		t _c 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

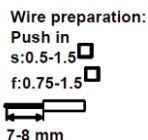
Output under voltage

Yes, protected under 85V

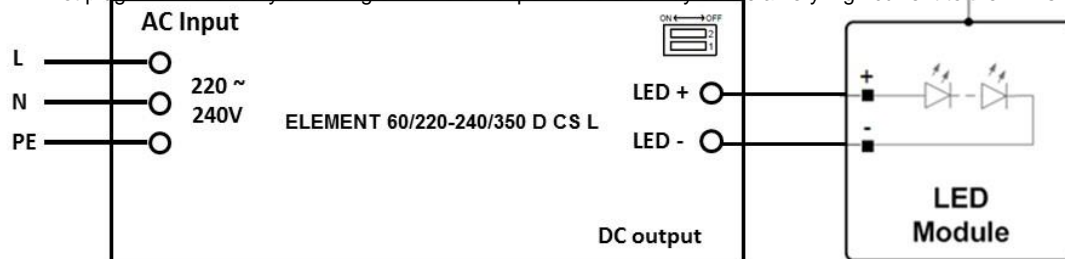
Wiring Diagram

Terminal:
Max. cable length excl. modules
Geometry (l x b x h):
Weight:

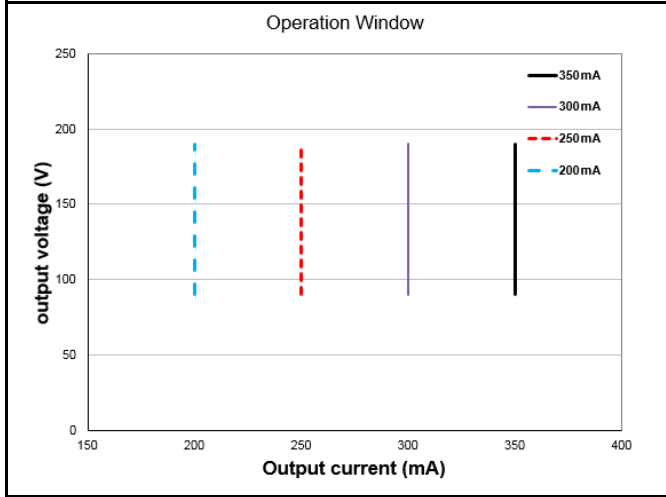
Push in terminals
TBD
210X30X21 mm
138 g



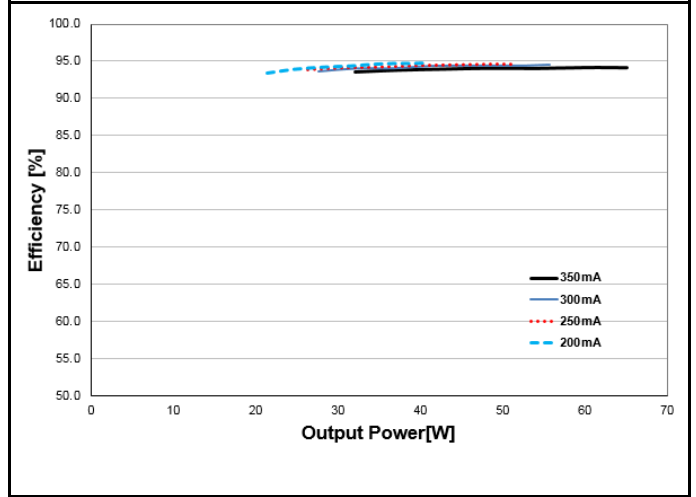
Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.



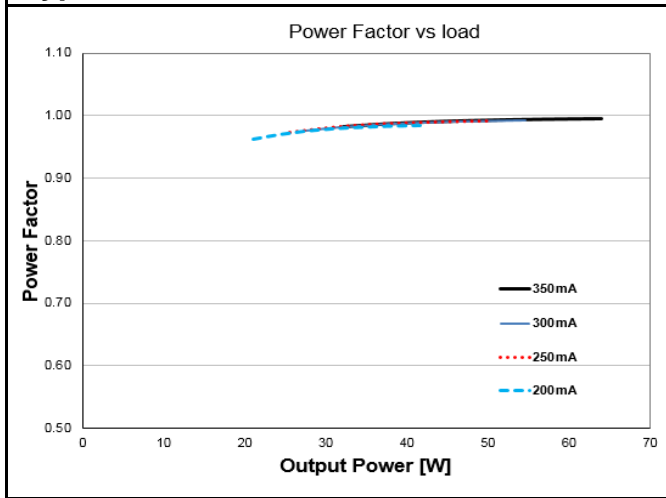
Typical Operating window



Typical Efficiency over load



Typical Power factor over load



Typical THD over load

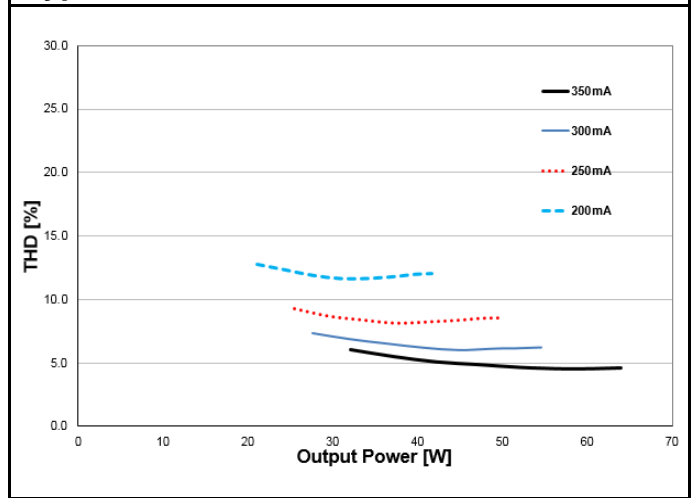


Table 1 - Rated output power and current sets

I_{out} (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
T_a [°C]	50	50	50	50
T_c [°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

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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