

Element 18 / 220 – 240 / 350 D CS L

Constant Current LED Power Supply

200mA - 250mA - 300mA- 350mAyES

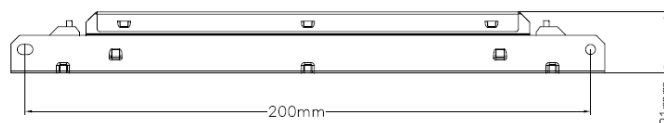
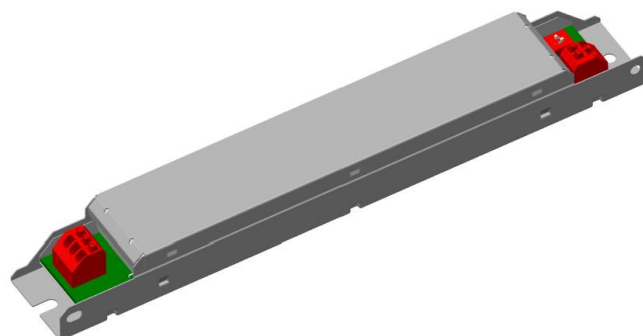
Element linear LED Power Supply is the reliable choice for linear and area fixtures for office - industrial - shop lighting;

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
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: 5W – 18.9W
- Low THD < 20% @ full load
- Power Factor up to 0.95
- Fixed output (no dimming)
- Overload, short & open circuit protection
- Efficiency up to 88%
- 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	300V	V _{AC}	2hours
Nominal current	0.09	A	
Total Harmonic Distortion (THD)	<20	%	Full load, 230 V, 50 Hz / see graphs
Power factor	0.97		Full load, 230 V, 50 Hz / see graphs
Efficiency	88	%	Full load, 230 V, 50 Hz, typical / see graphs
No-load power	<0.5	W	230V, typical
Stand-by power	NA	W	
Power loss	2.4	W	at 230V, Input power 20.9W max.
Protection class	class I		Suitable for class I luminaires
Inrush current	8.6	A	t _{width} = 126 μs typical (measured at 50% I _{peak})
Max. units per circuit breaker	B16:70; B10:40 C16:116 ; C10: 70		
Leakage current	<0.7	mA	Output floating
Nominal voltage range	25-54	V _{DC}	
Maximum voltage	80	V _{DC}	Open circuit
Nominal current range	200/250/300/350	mA	
Current accuracy	+/- 7.5%		
Current ripple (typical)	<30%		Ripple / average @ 100 Hz
Nominal power range	5 -18.9	W	Partial Load. Refer to Table 1 for details
Maximum power	18.9	W	T _a ≤ 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 61547
Environmental rating	Indoor		
IP rating	IP20		
Mains switching cycles	> 100'000		
Expected lifetime	35000 50000	hrs	t _c Max =75°C, 10% failure rate 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/ 2 hours

Output overvoltage

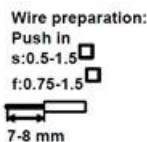
Yes, Limitation of Output voltage < 80V

Output under voltage

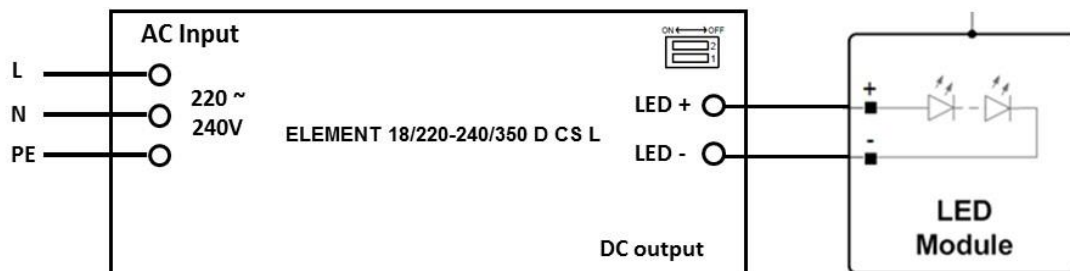
Yes, protected under 20V

Wiring Diagram

Terminal: Push in terminals
 Max. cable length excl. modules: TBD
 Geometry (l x b x h): 210X30X21 mm
 Weight: 102g



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



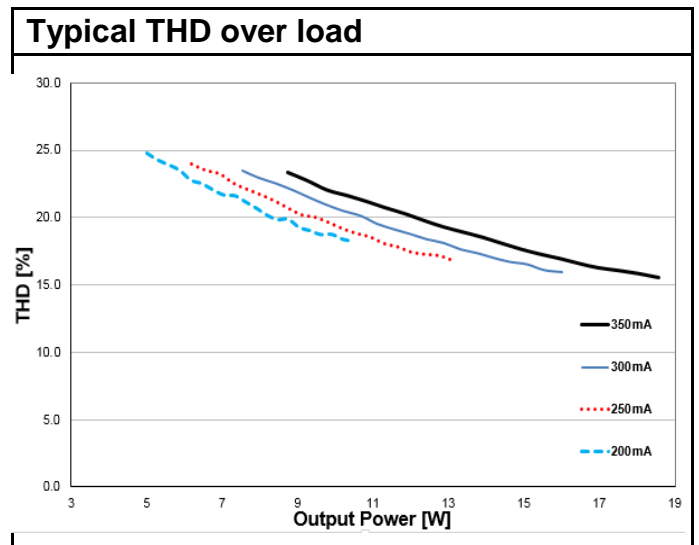
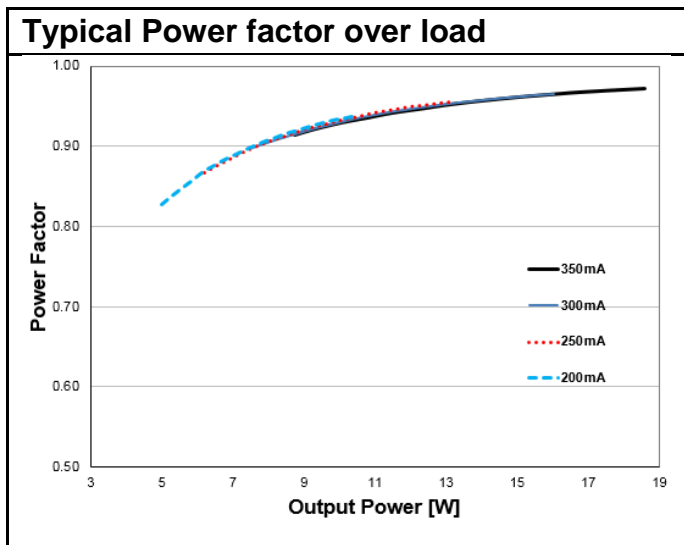
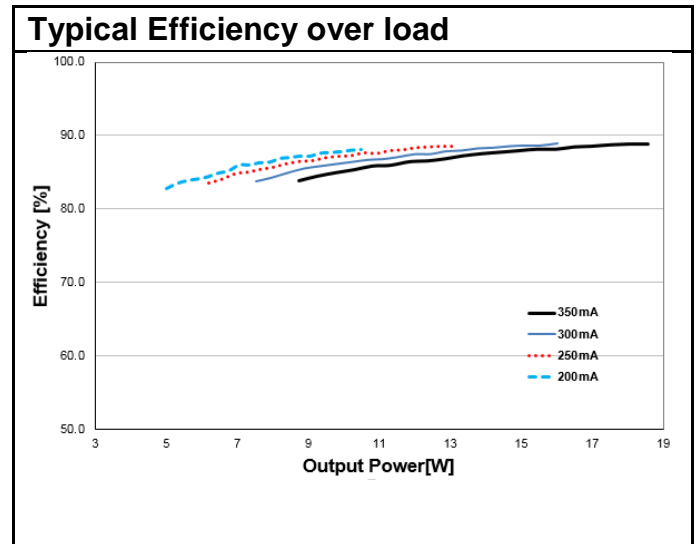
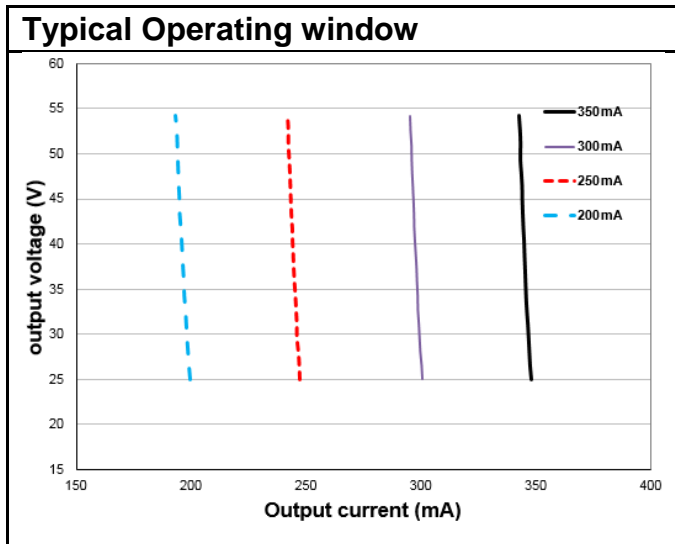


Table 1 - Rated output power and current sets

	200	250	300	350
I_{out} (mA)	200	250	300	350
U_{min} [V]	25	25	25	25
U_{max} [V]	54	54	54	54
P_{min} [W]	5	6.2	7.5	8.7
P_{max} [W]	10.5	13.1	16	18.6
T_a [°C]	50	50	50	50
T_c [°C]	75	75	75	75
Line Current, nominal@230V A	0.056	0.068	0.082	0.095
Max Power Loss@230V [W]	1.4	1.7	2.0	2.4
Input Power @230V [W]	11.9	14.8	18	20.9

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 18/220-240/350 D CS L	4052899553071	4052899553088	20

OSRAM GmbH

Head Office:

Marcel-Breuer-Strasse 6
80807 Munich, Germany
Phone +49 89 6213-0
Fax +49 89 6213-XXXX
www.osram.com

OSRAM