

Element 40 / 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;

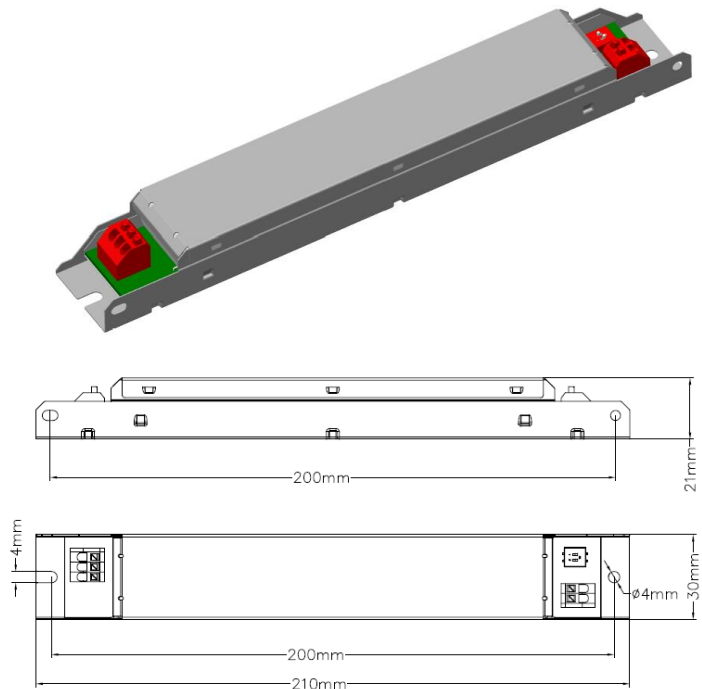
Benefits

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 93%
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: 55 -120V
- Output power: 11W – 40W
- Low THD < 20% @ full load
- Power Factor up to 0.98
- Fixed output (no dimming)
- Overload, short & open circuit protection
- Efficiency up to 92%
- Ambient temp range t_a : -20 to +50°C
- Up to 50,000 hours lifetime

Electrical Specifications

Item	Value	Unit	Remarks
INPUT	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	0.19	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	93	% Full load, 230 V, 50 Hz, typical / see graphs
	No-load power	<0.5	W 230V, typical
	Stand-by power	NA	W
	Power loss	2.6	W at 230V
	Protection class	class I	Suitable for class I luminaries
	Inrush current	18	A t _{width} = 100 μs typical (measured at 50% I _{peak})
	Max. units per circuit breaker	B16:48; B10:30 C16:48 ; C10:30	
OUTPUT	Leakage current	< 0.7	mA Output floating
	Nominal voltage range	55-120	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%	Ripple / average @ 100Hz
	Nominal power range	11 - 42	W Partial Load. Refer to Table 1 for details
	Maximum power	42	W Ta ≤ 50°C, Refer to Table 1 for details
ENVIRONMENT	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	110	°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	> 100'000	
	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/ 2 hours

Output overvoltage

Yes, Limitation of Output voltage <160V

Output under voltage

Yes, protected under 48 V

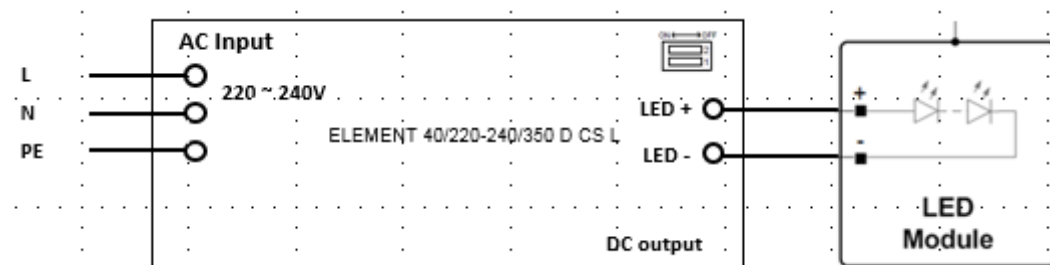
Wiring Diagram

Terminal:
Max. cable length excl. modules: 2m
Geometry (l x b x h): 210X30X21 mm
Weight: 126 g

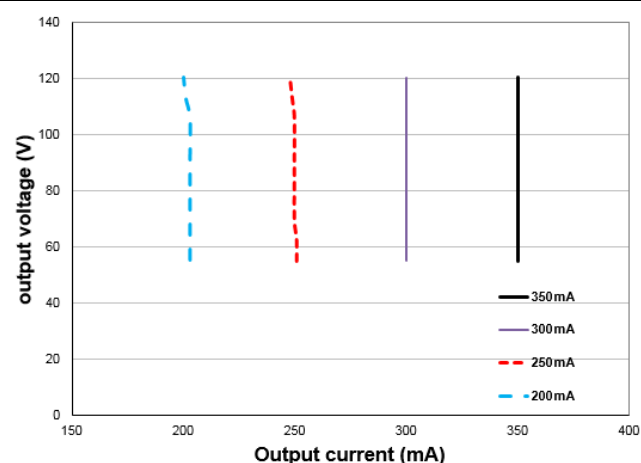
Wire preparation:

Push in
s:0.5-1.5
f:0.75-1.5
7-8 mm

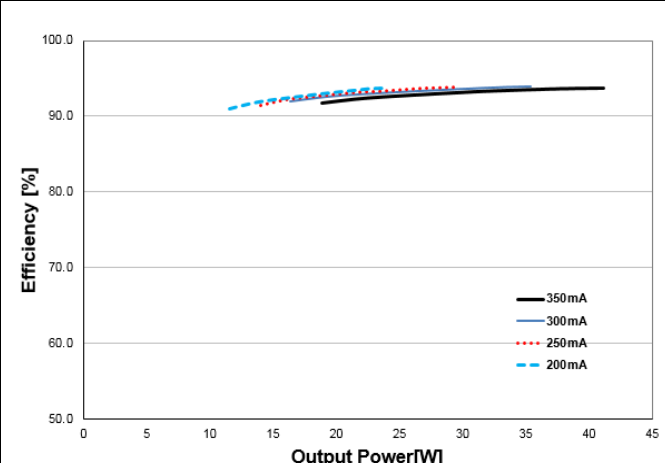
Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.



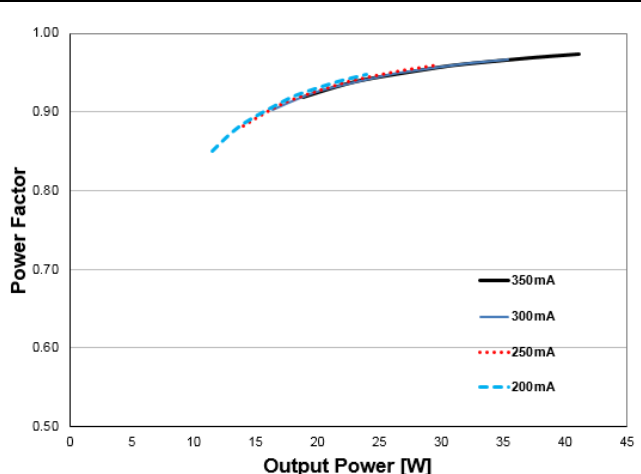
Typical Operating window



Typical Efficiency over load



Typical Power factor over load



Typical THD over load

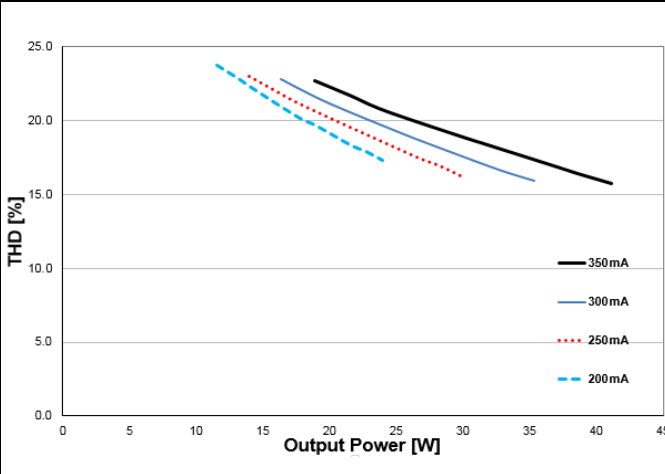


Table 1 - Rated output power and current sets

I _{out} (mA)	200	250	300	350
U _{min} [V]	55	55	55	55
U _{max} [V]	120	120	120	120
P _{min} [W]	11	14	16.5	19.5
P _{max} [W]	24	30	36	42
T _a [°C]	50	50	50	50
T _c [°C]	75	75	75	75
Line Current, nominal@230V A	0.117	0.143	0.169	0.196
Max Power Loss@230V [W]	1.5	1.7	2.0	2.8
Input Power @230V [W]	25.5	31.7	38.0	44.8

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 40/220-240/350 D CS L	4052899553095	4052899553101	20

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