

Light is OSRAM

OSRAM

## EM FIT 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

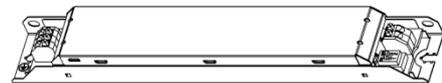
Flexible with 1 driver offers 4 output currents;  
Simple current selection via dip switch  
Enable slim fixture design with flat 21mm height metal housing  
Very high efficiency up to 90%  
OSRAM quality and reliability

### Applications

Linear and area lighting  
Office – industrial - shop

### Approbations & Certifications

CE, ENEC, CCC, RCM, UKCA, TISI, EAC  
In preparation, if not already printed on the label



## Product Features

- Output current: 200/250/300/350mA
- Low THD < 20% @ full load
- Output power : 8 W–42W
- Input voltage: 220 – 240V<sub>AC</sub>
- Ambient temp range  $t_a$  : -20 to +60°C
- Wide output voltage range
- Low ripple < 10%
- Very high efficiency up to 90%
- Fixed output ( no dimming)
- 3 years guarantee

	Item	Value	Unit	Remarks
INPUT	Nominal voltage	220 – 240	V	
	Nominal frequency	50 / 60	Hz	
	AC voltage range	198 – 264	V	
	DC voltage range	NA	V	
	Maximum voltage	300	V <sub>ac</sub>	2 h maximum, unit might not operate in this abnormal condition
	Nominal current	250	mA	230V, Refer to Table 1 for details
	Total Harmonic Distortion (THD)	< 20	%	Full load
	Power factor	≥ 0.95		Full load, 220 – 240 V, 50 Hz / see graphs
	Efficiency	90	%	Full load, 220 – 240 V, 50 Hz / see graphs
	Power loss	5	W	At 230V, Refer to Table 1 for details
	Protection class	I		Suitable for class I/II luminaire
	Inrush current	50	A	$t_{width} = 120 \mu s$ typical (measured at 50% I <sub>peak</sub> )
OUTPUT	Max. units per circuit breaker	B25:34 B16:22 B10:13 C25:57 C16:36 C10:23		
	Nominal voltage range	40-120	V	@ 200/250/300/350mA output current, Refer to Table 1 for details
	Maximum voltage	250	V <sub>dc</sub>	w/ Open Circuit
	Nominal current range	200/250/300/ 350	mA	
	Current accuracy	+/- 7.5	%	
	Current ripple 100Hz	< 10	%	
	Nominal power range	8-42	W	Partial Load. Refer to Table 1 for details
Maximum power	42	W		
Galvanic isolation	Non-isolated			
Dimming	Dimming control	No		
	Dimming method	NA		
	Dimming range	NA	%	
	Dimming Standard	NA		
	Galvanic isolation	NA		
ENVIRONMENT	Ambient temperature range $t_a$	-20 ...+60	°C	
	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	-40 ...+85	°C	
	Relative humidity	5 ... 90	%	Not condensing
	Surge transient protection	1   2	kV	L/N   LN/PE acc to. EN 61547 Clause 5.7
	Environmental rating	Indoor		
	IP rating	IP 20		
	Mains switching cycles	> 100'000		
Expected lifetime	35'000 50'000	h	$t_{cmax} = 75^{\circ}C$ , 10% failure rate $t_{cmax} = 65^{\circ}C$ , 10% failure rate	

## Protections

### Over temperature

Automatic, reversible

### Overload

Automatic, reversible

### Short-circuit

Automatic, reversible

### No load

Yes

### Input overvoltage

Maximum allowed input voltage 300V AC/ 2hr

### Output overvoltage

Yes, Limitation of Output voltage < 250Vrms

### Output under voltage

NA

## Wiring Diagram

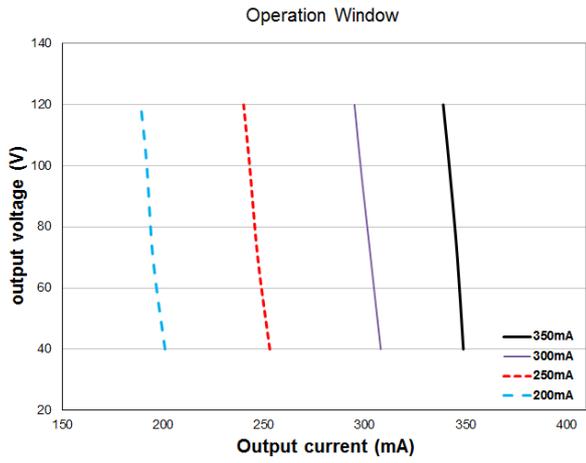
Terminal:	Push in terminals
Max. cable length :	2 m
Geometry (l x b x h):	210 x 30 x 21 mm
Weight: g	120g +/-10g

### Wire preparation:

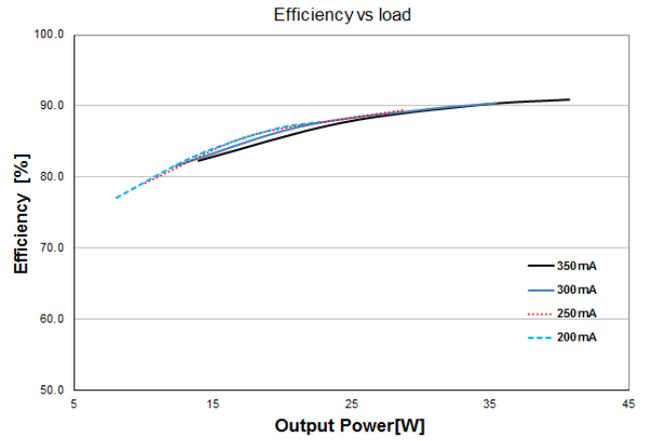
Push in  
s:0.5-1.5   
f:0.75-1.5   
  
7-8 mm

Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs. Indication that the lamp controlgear relies upon the luminaire enclosure for protection against accidental contact with live part

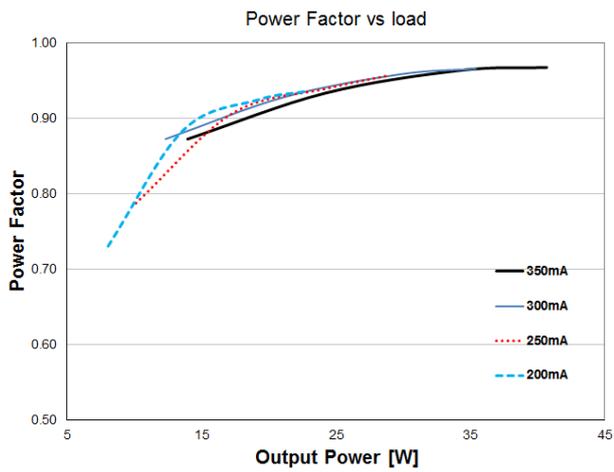
### Typical Operating window



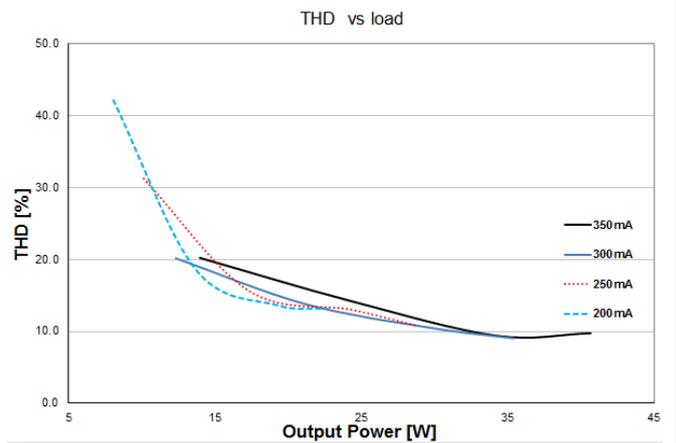
### Typical Efficiency vs load



### Typical Power factor vs load



### Typical THD vs load



<b>Table 1 - Rated output power and current sets</b>				
<b>I<sub>out</sub> [mA]</b>	<b>200</b>	<b>250</b>	<b>300</b>	<b>350</b>
<b>U min [V]</b>	40	40	40	40
<b>U max [V]</b>	120	120	120	120
<b>P min [W]</b>	8	10	12	14
<b>P max [W]</b>	24	30	36	42
<b>T<sub>a</sub> [°C]</b>	60	60	60	60
<b>T<sub>c</sub> [°C]</b>	75	75	75	75
<b>Line Current, nominal@230V[mA]</b>	150	190	220	250
<b>Max Power Loss@230V [W]</b>	3.9	4.0	4.5	5.0
<b>Input Power @230V [W]</b>	30.0	36.5	43.0	50.0

<b>PIN1</b>	<b>PIN2</b>	<b>I<sub>rated</sub>[mA]</b>
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 61000-4-5

IEC 61547

<b>Product name</b>	<b>EAN10</b>	<b>EAN40</b>	<b>Pieces / box</b>
<b>EM FIT 40 / 220 – 240 / 350 D CS L</b>	<b>4062172219914</b>	<b>4062172219921</b>	<b>20</b>

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