

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 ta : -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	Vac	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	Vdc	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	
Dimming	Galvanic isolation	Non-isolated		
	Dimming control	No		
	Dimming method	NA		
	Dimming range	NA	%	
	Dimming Standard	NA		
ENVIRONMENT	Galvanic isolation	NA		
	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

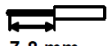
### Output under voltage

NA

## Wiring Diagram

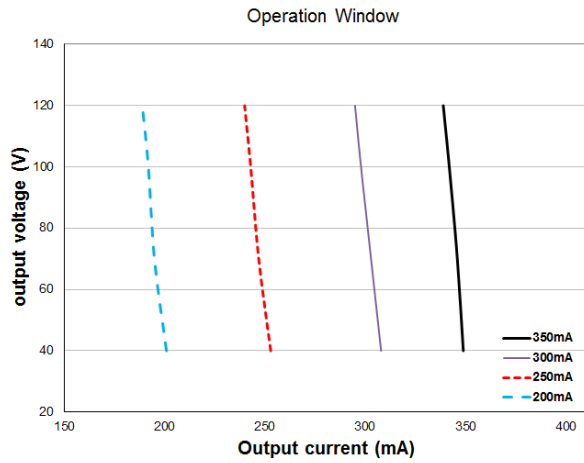
Terminal:	Push in terminals
Max. cable length :	2 m
Geometry (l x b x h):	210 x 30 x 21 mm
Weight: g	120g +/-10g

### Wire preparation:

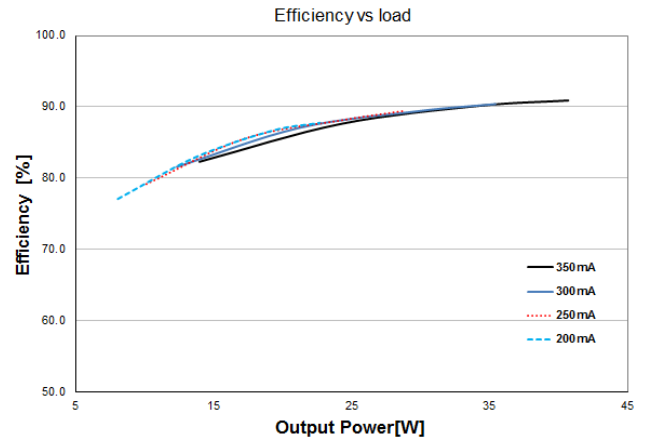
Push in  
s:0.5-1.5  
f:0.75-1.5  
  
7-8 mm

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

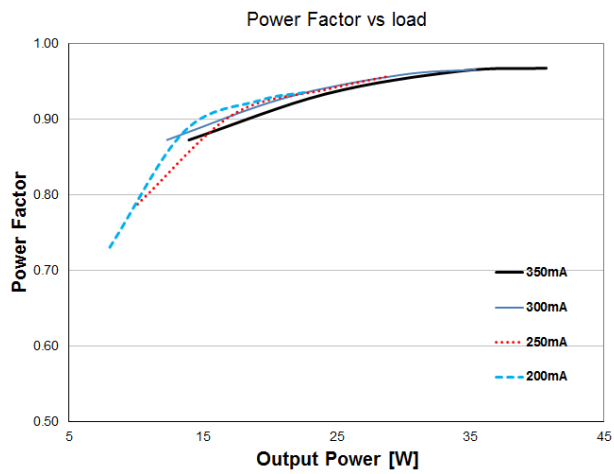
## Typical Operating window



## Typical Efficiency vs load



## Typical Power factor vs load



## Typical THD vs load

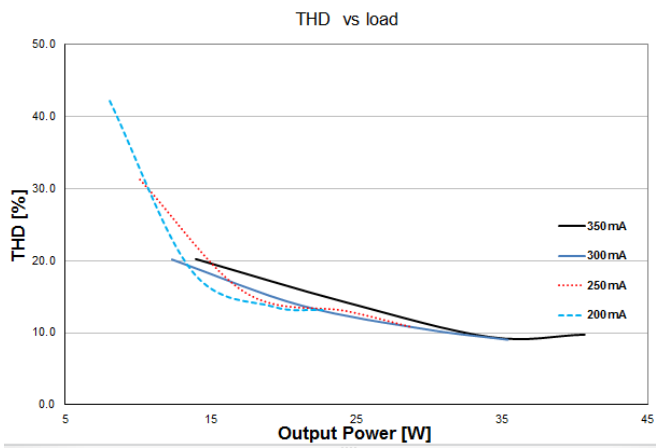


Table 1 - Rated output power and current sets				
I <sub>out</sub> [mA]	200	250	300	350
U <sub>min</sub> [V]	40	40	40	40
U <sub>max</sub> [V]	120	120	120	120
P <sub>min</sub> [W]	8	10	12	14
P <sub>max</sub> [W]	24	30	36	42
T <sub>a</sub> [°C]	60	60	60	60
T <sub>c</sub> [°C]	75	75	75	75
Line Current,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

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

IEC 61547

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

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