

Light is OSRAM

OSRAM

## EM FIT 75 / 220 – 240 / 1600 CS L

Constant Current LED Power Supply

1300mA - 1400mA - 1500mA- 1600mA

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

### Benefits

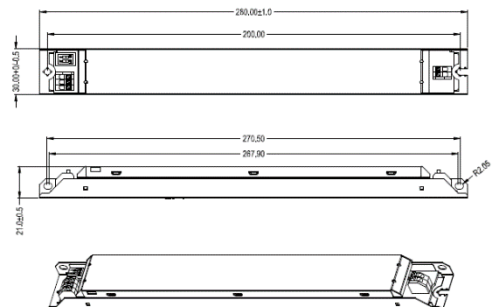
Flexible with 1 driver offers 4 output currents;  
High quality light with very low ripple;  
Very high efficiency up to 89%  
Enable slim fixture design with flat 21mm height metal housing  
Long lasting and high reliability  
SELV driver

### 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:  
1300/1400/1500/1600mA
- Low THD < 20% @ full load
- Output power : 35.1W – 81.6W
- Input voltage: 220 – 240V<sub>AC</sub>
- Ambient temp range ta : -20 to +50°C
- Wide output voltage range
- Low ripple < 10%
- Very high efficiency up to 89%
- 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	480	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	89	%	Full load, 220 – 240 V, 50 Hz / see graphs
	Power loss	9.7	W	At 230V, Refer to Table 1 for details
	Protection class	I		Suitable for class I/II luminaire
	Inrush current	60	A	$t_{width} = 190 \mu s$ typical (measured at 50% I <sub>peak</sub> )
OUTPUT	Max. units per circuit breaker	B25:18 B16:12 B10:7 C25:31 C16:20 C10:12		
	Nominal voltage range	27-51	V	@ 1300/1400/1500/1600mA output current, Refer to Table 1 for details
	Maximum voltage	< 60	Vdc	w/ Open Circuit
	Nominal current range	1300/1400 1500/1600	mA	
	Current accuracy	+/- 7.5	%	
	Current ripple 100Hz	< 10	%	
	Nominal power range	35.1-81.6	W	Partial Load. Refer to Table 1 for details
	Maximum power	81.6	W	
	Galvanic isolation	SELV		
	Output PSTLM	≤1		
ENVIRONMENT	Output SVM	≤0.4		
	Ambient temperature range $t_a$	-20 ...+50	°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 < 60Vrms

### Output under voltage

NA

## Wiring Diagram

Terminal:	Push in terminals
Max. cable length :	2 m
Geometry (l x b x h):	280 x 30 x 21 mm
Weight:	200g+/-10g

### Wire preparation:

Push in

s:0.5-1.5

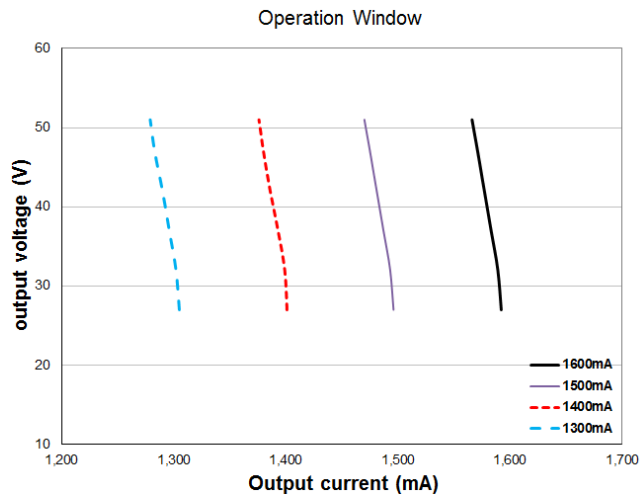
f:0.75-1.5



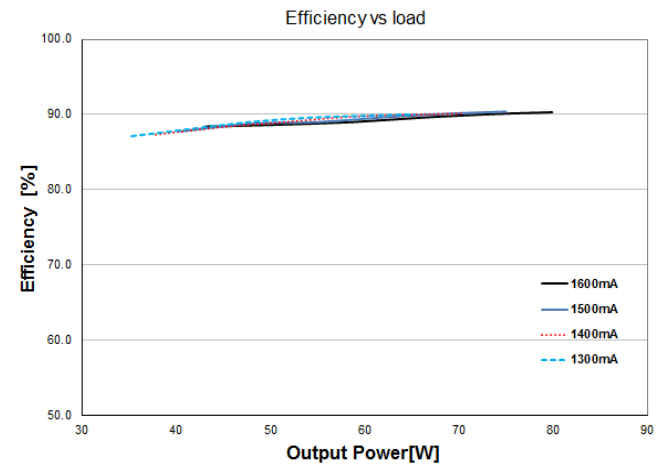
7-8 mm

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

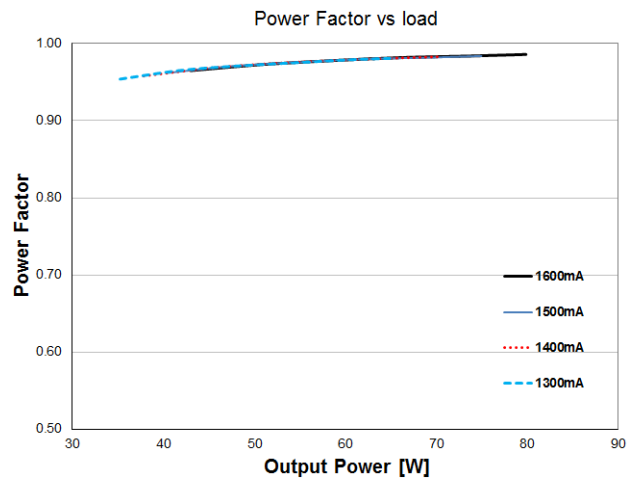
## Typical Operating window



## Typical Efficiency vs load



## Typical Power factor vs load



## Typical THD vs load

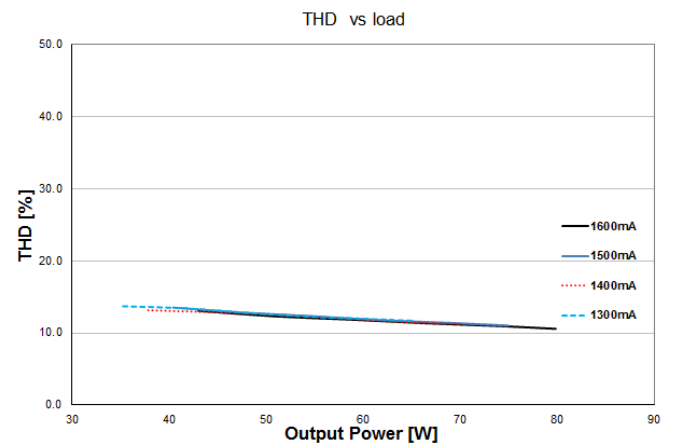


Table 1 - Rated output power and current sets				
<b>I<sub>out</sub> [mA]</b>	<b>1300</b>	<b>1400</b>	<b>1500</b>	<b>1600</b>
<b>U<sub>min</sub> [V]</b>	27	27	27	27
<b>U<sub>max</sub> [V]</b>	51	51	51	51
<b>P<sub>min</sub> [W]</b>	35.1	37.8	40.5	43.2
<b>P<sub>max</sub> [W]</b>	66.3	71.4	76.5	81.6
<b>T<sub>a</sub> [°C]</b>	50	50	50	50
<b>T<sub>c</sub> [°C]</b>	70	70	73	75
<b>Line Current,</b>	390	420	450	480
<b>Max Power Loss@230V [W]</b>	7.9	8.5	9.1	9.7
<b>Input Power @230V [W]</b>	79.2	85.3	91.3	97.5

PIN1	PIN2	I <sub>rated</sub> [mA]
OFF	OFF	1300
OFF	ON	1400
ON	OFF	1500
ON	ON	1600

Current selection by DIP-switch

Ecodesign regulation information

Intended for use with LED modules.

The forward voltage of the LED light source shall be within the defined operating window of the control gear in all operating conditions including dimming if applicable.

Separate control gear and light sources must be disposed of at certified disposal companies in accordance with Directive 2012/19/EU (WEEE) in the EU and with Waste Electrical and Electronic Equipment (WEEE) Regulations 2013 in the UK. For this purpose, collection points for recycling centres and take-back systems (CRSO) are available from retailers or private disposal companies, which accept separate control gear and light sources free of charge. In this way, raw materials are conserved and materials are recycled.

## 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 75 / 220 – 240 / 1600 CS L	4062172220033	4062172220040	20

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Version: Final – Sep 2021