

## EM FIT 75/220–240/550 D CS L G2

### Constant Current LED Power Supply

350mA - 400mA - 500mA- 550mA

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 92%
- Enable slim fixture design with flat 21mm height metal housing
- Long lasting and high reliability

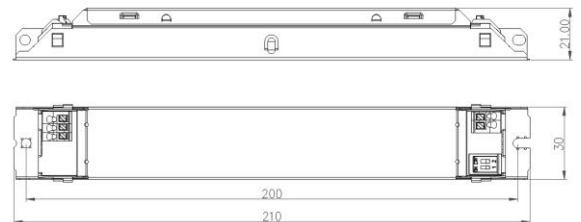
#### Applications

Linear and area lighting  
Office – industrial - shop

#### Approbations & Certifications

CE, ENEC, CCC, RCM, TISI, BIS

In preparation, if not already printed on the label



### Product Features

- Output current: 350/400/500/550mA
- Low THD < 20% @ full load
- Output power : 31.5-75.6W
- Input voltage: 220 – 240V<sub>AC</sub>
- Ambient temp range Ta: -25 to +50°C
- Wide output voltage range
- Low ripple < 10%
- Very high efficiency up to 92%
- Fixed output ( no dimming)

	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	349	mA	230V, Refer to Table 1 for details
	Total Harmonic Distortion (THD)	< 20	%	Full load
	Power factor	0.98		Full load, 220 – 240 V, 50 Hz / see graphs
	Efficiency	92	%	Full load, 220 – 240 V, 50 Hz / see graphs
	Power loss	6.5	W	At 230V, Refer to Table 1 for details
	Protection class	I		Suitable for class I/II luminaire
	Inrush current	60	A	$t_{width} = 170 \mu s$ typical (measured at 50% I <sub>peak</sub> )
	OUTPUT	Nominal voltage range	90-136	V
90-150			500mA	
90-188			400mA	
90-216			350mA; output current, Refer to Table 1 for details	
Maximum voltage		250	V <sub>dc</sub>	Open Circuit
Nominal current range		350/400	mA	
		500/550		
Current accuracy		+/- 7.5	%	
Current ripple 100Hz		< 10	%	
Nominal power range		31.5-75.6	W	Partial Load. Refer to Table 1 for details
Maximum power		75.6	W	
Galvanic isolation		Non-isolated		
Output PSTLM		≤1		
Output SVM	≤0.4			
ENVIRONMENT	Ambient temperature range $t_a$	-25 ... +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 ... 95	%	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	50'000	h	$t_{cmax} = 75^{\circ}C$ , 10% failure rate
100'000		$t_{cmax} = 65^{\circ}C$ , 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



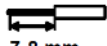
### Output under voltage

NA

## Wiring Diagram

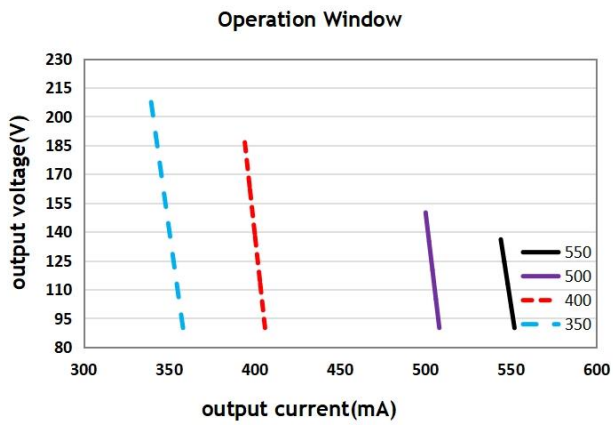
Terminal:	Push in terminals
Max. cable length :	2 m
Geometry (l x b x h):	210 x 30 x 21 mm
Weight:	140g

### Wire preparation:

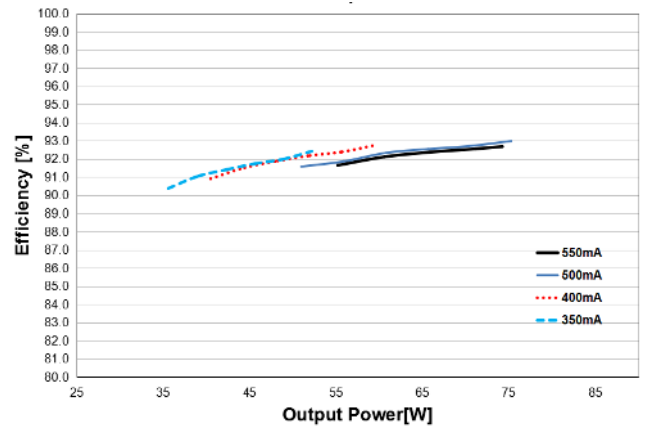
Push in  
s: 0.5-1.5   
f: 0.75-1.5   
  
7-8 mm

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

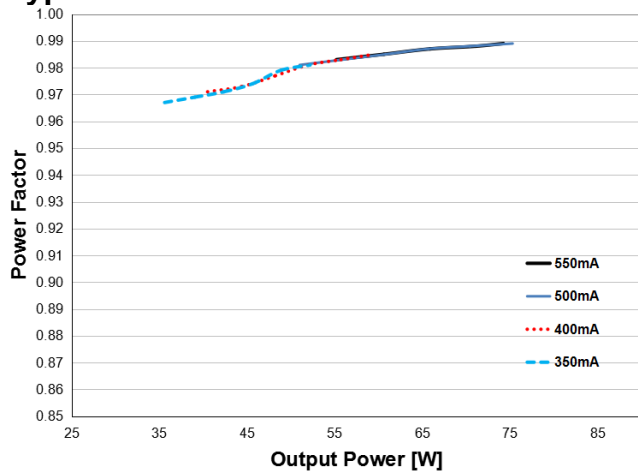
### Typical Operating window



### Typical Efficiency vs load



### Typical Power factor vs load



### Typical THD vs load

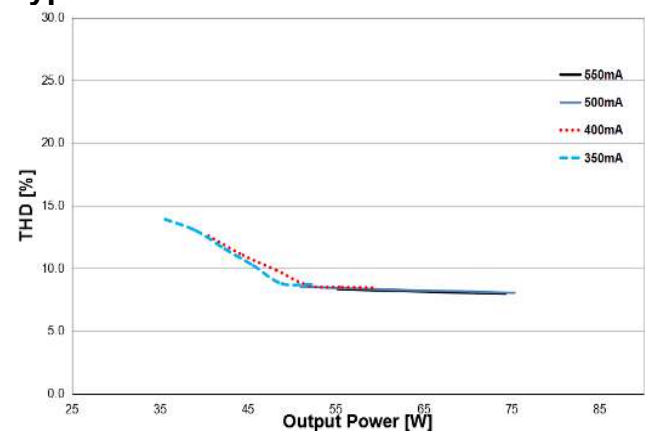


Table 1 - Rated output power and current sets				
<b>I<sub>out</sub> [mA]</b>	<b>350</b>	<b>400</b>	<b>500</b>	<b>550</b>
<b>U<sub>min</sub> [V]</b>	90	90	90	90
<b>U<sub>max</sub> [V]</b>	216	188	150	136
<b>P<sub>min</sub> [W]</b>	31.5	36	45	49.5
<b>P<sub>max</sub> [W]</b>	75.6	75.2	75	74.8
<b>T<sub>a</sub> [°C]</b>	50	50	50	50
<b>T<sub>c</sub> [°C]</b>	75	75	75	75
<b>Line Current, nominal @230V</b>	341	343	355	349
<b>Max Power Loss @230V [W]</b>	6.5	6.5	6.5	6.5
<b>Input Power @230V [W]</b>	82.1	81.3	81.5	81.3

<b>PIN1</b>	<b>PIN2</b>	<b>I<sub>rated</sub>[mA]</b>
OFF	OFF	350
OFF	ON	400
ON	OFF	500
ON	ON	550

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

<b>Product name</b>	<b>EAN10</b>	<b>EAN40</b>	<b>Pieces / box</b>
EM FIT 75/220-240/350 D CS L G2	6977078992572	6977078992589	20

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