

## EM FIT 60/220...240/1A2 CS L

ELEMENT EM FIT SELV | Linear / Area Constant Current – Non dimmable



### Product family features

- Line frequency: 50 Hz | 60 Hz
- Supply voltage: 220...240 V
- Lifetime: up to 50,000 h (temperature at  $T_c$  max. = -10 °C, max 10% failure rate)
- SELV driver
- Wide output voltage range
- Fixed output (no dimming)

### Product family benefits

- Small housing design
- Flexible current setting (DIPswitch – 4 currents)
- Enhanced safety due to overload, overtemperature, short-circuit protection
- High efficiency
- Long lasting and high reliability
- High light quality due to low ripple current

### Areas of application

- Linear and area lighting
- Shop lighting
- Industry lighting
- Offices, Public buildings, Supermarkets
- Suitable for luminaires of protection class I and II

## Technical data

### Electrical data

Nominal input voltage	220...240 V
Mains frequency	50/60 Hz
Input voltage AC	198...264 V
Current set	DipSwitch
Power factor $\lambda$	0.95 <sup>1)</sup>
Efficiency in full-load	88 % <sup>2)</sup>
Device power loss	7.7 W <sup>3)</sup>
Inrush current	50 A <sup>4)</sup>
Max. ECG no. on circuit breaker 10 A (B)	13
Max. ECG no. on circuit breaker 10 A (C)	19
Max. ECG no. on circuit breaker 16 A (B)	20
Max. ECG no. on circuit breaker 16 A (C)	30
Max. ECG no. on circuit breaker 25 A (B)	32
Max. ECG no. on circuit breaker 25 A (C)	47
Surge capability (L/N-Ground)	2 kV <sup>5)</sup>
Surge capability (L-N)	1 kV
Nominal output voltage	27...51 V <sup>6)</sup>
Nominal output current	900 / 1050 / 1100 / 1200 mA <sup>7)</sup>
Output PSTLM	$\leq 1$
Output SVM	$\leq 0.4$
Nominal output power	24.3...61.2 W
Maximum output power	61.2 W
U-OUT (working voltage)	< 60 V
Total harmonic distortion	< 20 % <sup>8)</sup>
Output current tolerance	$\pm 7.5$ %
Galvanic isolation	SELV
Output ripple current (100 Hz)	< 10 % <sup>9)</sup>

<sup>1)</sup> Full load at 230 V/50 Hz

<sup>2)</sup> at 230 V, 50 Hz

<sup>3)</sup> At 230 V

<sup>4)</sup>  $t_{width} = 140 \mu s$  typical, (measured at 50 %  $I_{peak}$ )

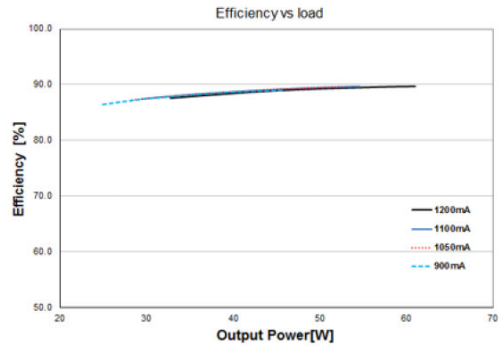
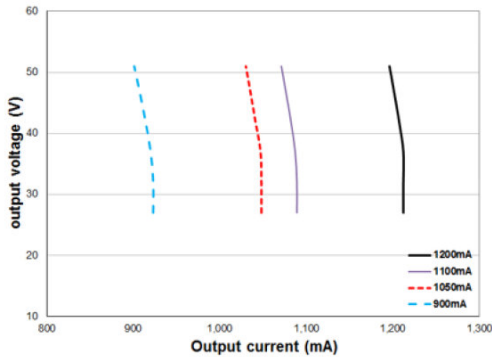
<sup>5)</sup> L/N – PE acc to EN 61547 Clause 5.7

<sup>6)</sup> At 900/1050/1100/1200 mA output current

<sup>7)</sup>  $\pm 7.5$  %

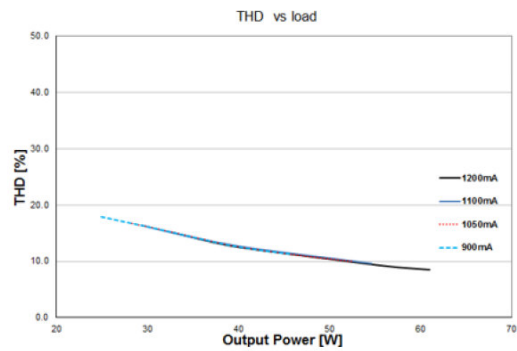
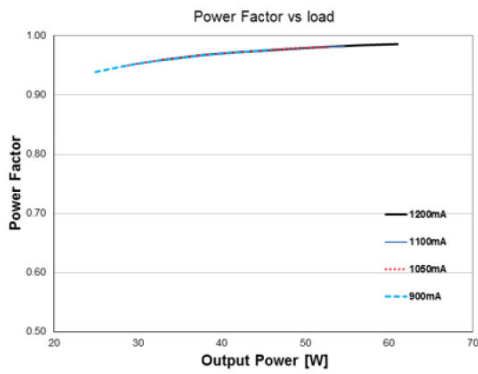
<sup>8)</sup> At full load, 230 V, 50 Hz / see graphs

<sup>9)</sup> Ripple average at 100 Hz



EM FIT 60 220-240 1A2 CS L Operating Window

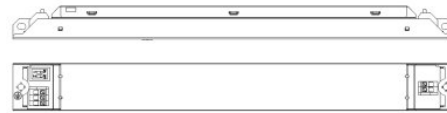
EM FIT 60 220-240 1A2 CS L Typical Efficiency vs. Load



EM FIT 60 220-240 1A2 CS L Typical Power Factor vs. Load

EM FIT 60 220-240 1A2 CS L Typical THD vs Load

## Dimensions & weight



<b>Mounting hole spacing, length</b>	270.0 mm
<b>Product weight</b>	190.00 g
<b>Cable cross-section, input side</b>	0.5...1.5 / 0.75...1.5 mm <sup>2 1)</sup>
<b>Cable cross-section, output side</b>	0.5...1.5 / 0.75...1.5 mm <sup>2 1)</sup>
<b>Wire preparation length, input side</b>	7...8 mm
<b>Wire preparation length, output side</b>	7...8 mm
<b>Length</b>	280.0 mm
<b>Width</b>	30.0 mm
<b>Height</b>	21.0 mm

<sup>1)</sup> Solid or flexible leads

## Colors & materials

<b>Casing material</b>	Metal
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## Temperatures & operating conditions

<b>Ambient temperature range</b>	-20...+50 °C
<b>Maximum temperature at tc test point</b>	75 °C
<b>Max.housing temperature in case of fault</b>	110 °C
<b>Temperature range at storage</b>	-40...+85 °C
<b>Permitted rel. humidity during operation</b>	5...90 % <sup>1)</sup>

<sup>1)</sup> Non-condensing

## Lifespan

<b>ECG lifetime</b>	35000 / 50000 h <sup>1)</sup>
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<sup>1)</sup> At maximum  $T_c = 75^\circ\text{C}$  / 10% failure rate / At maximum  $T_c = 65^\circ\text{C}$  / 10% failure rate

## Additional product data

<b>Encapsulated</b>	No
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## Capabilities

Dimmable	No
Overheating protection	Automatic reversible
Overload protection	Automatic reversible
Short-circuit protection	Automatic reversible
No-load proof	Yes
Intended for no-load operation	No
Max. cable length to lamp/LED module	2.0 m <sup>1)</sup>
Suitable for fixtures with prot. class	I
Number of channels	1

<sup>1)</sup> Output wires must be routed as close as possible to each other

## Programming

Box programming	No
Tuner4TRONIC	No
Tuner4TRONIC Field App	No
Programming device	DIPswitch

## Certificates & standards

Approval marks – approval	CE / CCC / EAC / ENEC / RCM / UKCA
Standards	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to IEC 61000-3-2/Acc. to IEC 61547/CISPR 15/EN 55015
Type of protection	IP20

## Logistical data







Commodity code	850440839000
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## Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)	
Date of Declaration	14-04-2022
Primary Article Identifier	4062172220019
Candidate List Substance 1	Lead
CAS No. of substance 1	7439-92-1
Safe Use Instruction	The identification of the Candidate List substance is sufficient to allow safe use of the article.
Declaration No. in SCIP database	28c8f5bd-7a58-41f7-9794-2d66a11ce6b8

## Product datasheet

### Download Data

File	
	User instruction ELEMENT LED Power Supply
	Certificates OT constant current EAC DE PA01 B 34987 21 071221
	Certificates EM FIT CS L CB NL 74845 071221
	Certificates EM FIT CS L&D CS L ENEC 35 120653 071221
	Certificates EM FIT 60 75 CS L CCC 2021171002004191 071221
	Certificates NSW27964 2 certificate of EM FIT CS L

### 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.

### Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4062172220019	EM FIT 60/220...240/1A2 CS L	Shipping carton box 20	375 mm x 320 mm x 75 mm	9.00 dm <sup>3</sup>	4379.00 g

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

### Disclaimer

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.