

EM FIT 18/220...240/350 D CS L

ELEMENT EM FIT Non 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)
- Wide output voltage range
- Fixed output (no dimming)

Product family benefits

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

Areas of application

- Linear and area lighting
- Shop lighting
- Offices, Public buildings, Supermarkets
- Industry lighting
- 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 λ	≥ 0.95 ¹⁾
Efficiency in full-load	88 % ²⁾
Device power loss	3.4 W ³⁾
Inrush current	35 A ⁴⁾
Max. ECG no. on circuit breaker 10 A (B)	31
Max. ECG no. on circuit breaker 10 A (C)	52
Max. ECG no. on circuit breaker 16 A (B)	50
Max. ECG no. on circuit breaker 16 A (C)	84
Max. ECG no. on circuit breaker 25 A (B)	79
Max. ECG no. on circuit breaker 25 A (C)	132
Surge capability (L/N-Ground)	2 kV ⁵⁾
Surge capability (L-N)	1 kV
Nominal output voltage	27...54 V ⁶⁾
Nominal output current	200 / 250 / 300 / 350 mA ⁷⁾
Output PSTLM	≤ 1
Output SVM	≤ 0.4
Nominal output power	5...18.9 W
Maximum output power	18.9 W
U-OUT (working voltage)	250 V
Total harmonic distortion	< 20 % ⁸⁾
Output current tolerance	± 7.5 %
Galvanic isolation	Non isolated
Output ripple current (100 Hz)	< 10 % ⁹⁾

1) Full load at 220...240 V_{AC} / 50 Hz

2) at 230 V, 50 Hz

3) At 230 V

4) $t_{width} = 75 \mu s$ typical (measured at 50 % I_{peak})

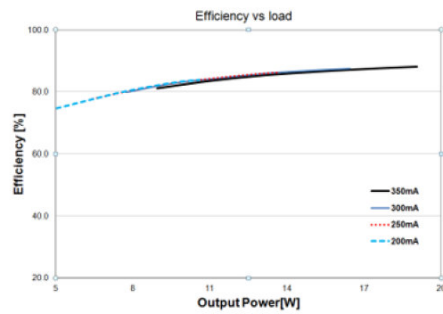
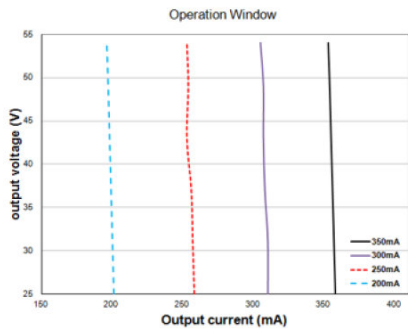
5) L/N - PE acc to EN 61547 Clause 5.7

6) At 200/250 mA output current / At 300/350 mA output current

7) ± 7.5 %

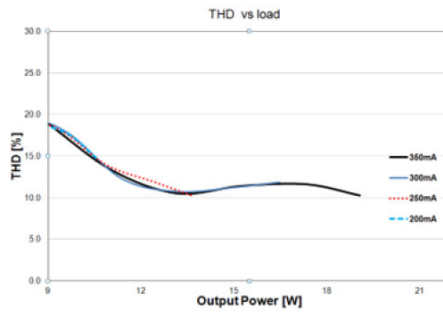
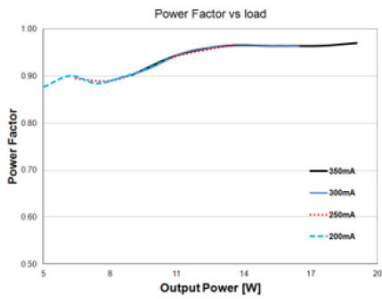
8) At full load

9) Ripple average at 100 Hz



EM FIT 18 220 240 350 D CS L Operating Window

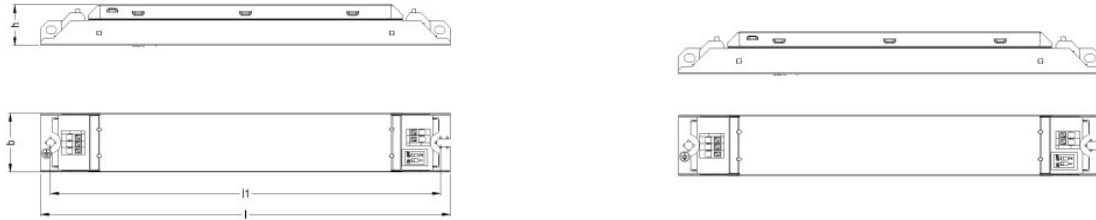
EM FIT 18 220-240 350 D CS L Typical Efficiency vs Load



EM FIT 18 220-240 350 D CS L Typical Power Factor vs. Load

EM FIT 18 220-240 350 D CS L Typical THD vs Load

Dimensions & weight



Mounting hole spacing, length	200.0 mm
Product weight	120.00 g
Cable cross-section, input side	0.5...1.5 / 0.75...1.5 mm ² ¹⁾
Cable cross-section, output side	0.5...1.5 / 0.75...1.5 mm ² ¹⁾
Wire preparation length, input side	7...8 mm
Wire preparation length, output side	7...8 mm
Length	210.0 mm
Width	30.0 mm
Height	21.0 mm

¹⁾ Solid or flexible leads

Colors & materials

Casing material	Metal
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Temperatures & operating conditions

Ambient temperature range	-20...+50 °C
Maximum temperature at tc test point	60 °C
Max.housing temperature in case of fault	110 °C
Temperature range at storage	-40...+85 °C
Permitted rel. humidity during operation	5...90 % ¹⁾

¹⁾ Non-condensing

Lifespan

ECG lifetime	35000 / 50000 h ¹⁾
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¹⁾ At maximum T_c = 65°C / 10% failure rate / At maximum T_c = 60°C / 10% failure rate

Product datasheet

Expected Lifetime

Product name				
EM FIT 18/220...240/350 D CS L	ECG ambient temperature [ta]	-	-	-
	Temperature at tc-point [°C]	75	-	-
	Lifetime [h]	-	-	-

Additional product data

Encapsulated	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 ¹⁾
Suitable for fixtures with prot. class	I
Number of channels	1

¹⁾ 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 / ENEC / CCC / UKCA / RCM / EAC / TISI
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	85044083900
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Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)	
Date of Declaration	19-05-2023
Primary Article Identifier	4062172219891
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	fe969384-c9cc-47b0-b4e5-6bfb04faf705

Download Data

File
 User instruction ELEMENT LED Power Supply
 Certificates OT constant current EAC DE PA01 B 34987 21 071221
 Certificates EM FIT D CS L CB NL 73951 M1 071221
 Certificates EM FIT CS L&D CS L ENEC 35 120653 071221
 Certificates EM FIT 18 D CS L CCC 2021171002004138 071221
 Certificates NSW27963 2 certificate of EM FIT D 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.

Product datasheet

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4062172219891	EM FIT 18/220...240/350 D CS L	Shipping carton box 20	375 mm x 250 mm x 75 mm	7.03 dm ³	2834.00 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.