

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

1) At full load

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

3) at 230 V, 50 Hz

4) At 230 V

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

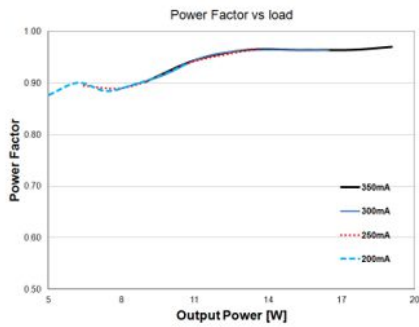
6) L/N – PE acc to EN 61547 Clause 5.7

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

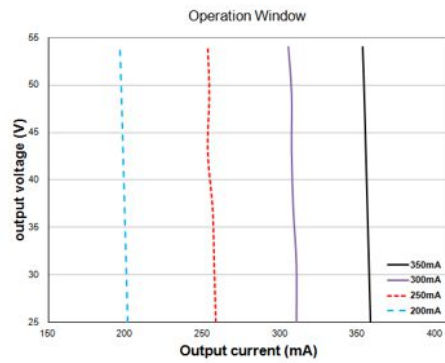
8) ± 7.5 %

9) Ripple average at 100 Hz

Typical Power Factor v Load



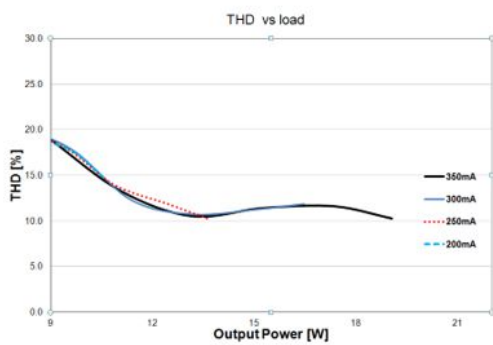
Operating Window



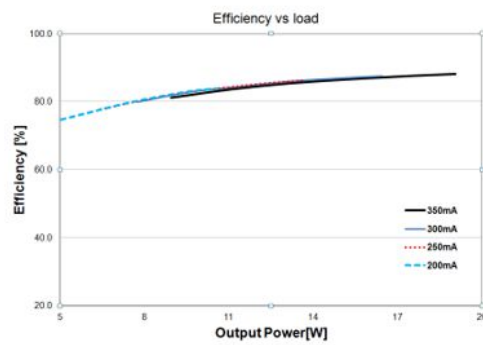
EM FIT 18 220-240 350 D CS L Typical Power Factor vs. Load

EM FIT 18 220 240 350 D CS L Operating Window

Typical THD v Load



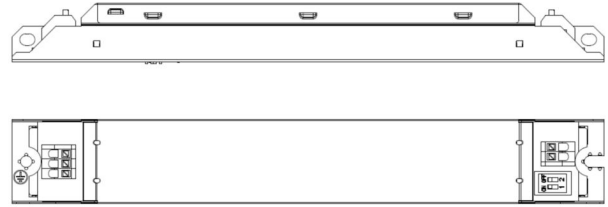
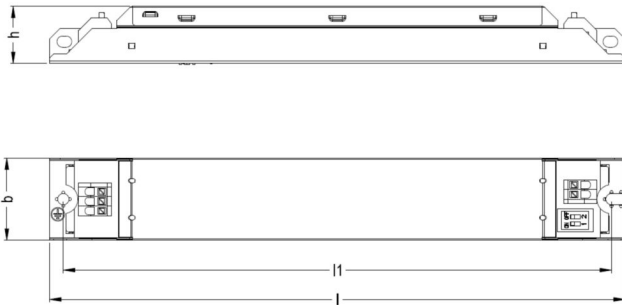
Typical Efficiency v Load 230 V 50 Hz



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

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

Dimensions & weight



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

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

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]			

Lifespan

ECG lifetime	35000 h / 50000 h ¹⁾
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1) At maximum $T_c = 65^\circ\text{C}$ / 10% failure rate / At maximum $T_c = 60^\circ\text{C}$ / 10% failure rate

Additional product data

Encapsulated	No
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Capabilities

Programming interface	Dipswitch
Dimmable	No
Constant lumen function	No
Max. cable length to lamp/LED module	2.0 m ¹⁾
Suitable for fixtures with prot. class	I
Type of connection, input side	Terminal
Type of connection, output side	Terminal
Number of channels	1
Overheating protection	Automatic reversible
Overload protection	Automatic reversible
Short-circuit protection	Automatic reversible
Intended for no-load operation	No
No-load proof	Yes

1) Output wires must be routed as close as possible to each other

Programming

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

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
Protection class	I

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	09-05-2024
Primary Article Identifier	4062172219891
Declaration No. in SCIP database	In work

Download Data

File		
Certificates	PDF	▶ OT constant current EAC DE PA01 B 34987 21 071221
Certificates	PDF	▶ EM FIT CS L&D CS L ENEC 35 120653 071221
Certificates	PDF	▶ EM FIT 18 D CS L CCC 2021171002004138 071221
Certificates	PDF	▶ NSW27963 2 certificate of EM FIT D CS L
Mandatory Publications	PDF	▶ EM FIT D CS L CE 4332160 161023
Mandatory Publications	PDF	▶ EM FIT D CS L UK DoC 4332161 280721
User instruction	PDF	▶ ELEMENT LED Power Supply

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
4062172219891	EM FIT 18/220-240/350 D CS L	Shipping carton box 20 Pieces	375 x 250 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.