

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})

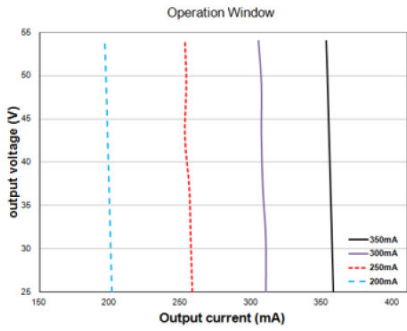
⁵⁾ L/N - PE acc to EN 61547 Clause 5.7

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

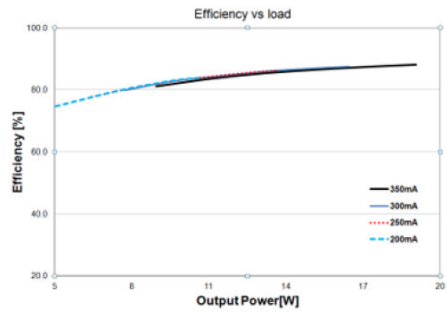
⁷⁾ ± 7.5 %

⁸⁾ At full load

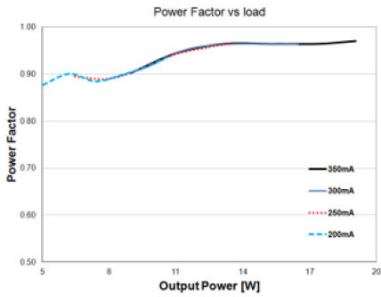
⁹⁾ Ripple average at 100 Hz



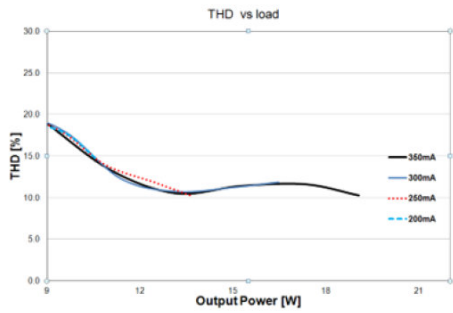
EM FIT 18 220 240 350 D CS L Operating Window



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 |
|------------------------|-------|

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⁾ |
|---------------------|-------------------------------|

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 |
|--------------|----|

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 | 850440839000 |
|----------------|--------------|

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.