

ELEMENT EM FIT Non SELV

Linear / Area Constant Current – Non dimmable



Areas of application

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

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

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 datasheet

Technical data

Electrical data

Product description	Nominal input voltage	Mains frequency	Input voltage AC	Current set	Power factor λ
EM FIT 18/220...240/350 D CS L	220...240 V	50/60 Hz	198...264 V	DipSwitch	≥ 0.95 ¹⁾
EM FIT 40/220...240/350 D CS L	220...240 V	50/60 Hz	198...264 V	DipSwitch	≥ 0.95 ¹⁾
EM FIT 60/220...240/350 D CS L	220...240 V	50/60 Hz	198...264 V	DipSwitch	≥ 0.95 ¹⁾
EM FIT 75/220...240/550 D CS L	220...240 V	50/60 Hz	198...264 V	DipSwitch	≥ 0.95 ¹⁾

Product description	Efficiency in full-load	Device power loss	Inrush current	Max. ECG no. on circuit breaker 10 A (B)	Max. ECG no. on circuit breaker 10 A (C)
EM FIT 18/220...240/350 D CS L	88 % ²⁾	3.4 W ³⁾	35 A ⁴⁾	31	52
EM FIT 40/220...240/350 D CS L	90 % ²⁾	5.0 W ³⁾	50 A ¹⁰⁾	13	23
EM FIT 60/220...240/350 D CS L	91 % ²⁾	6.0 W ³⁾	40 A ¹¹⁾	13	20
EM FIT 75/220...240/550 D CS L	92 % ²⁾	6.5 W ³⁾	60 A ¹¹⁾	8	14

Product description	Max. ECG no. on circuit breaker 16 A (B)	Max. ECG no. on circuit breaker 16 A (C)	Max. ECG no. on circuit breaker 25 A (B)	Max. ECG no. on circuit breaker 25 A (C)	Surge capability (L/N-Ground)
EM FIT 18/220...240/350 D CS L	50	84	79	132	2 kV ⁵⁾
EM FIT 40/220...240/350 D CS L	22	36	34	57	2 kV ⁵⁾
EM FIT 60/220...240/350 D CS L	21	31	35	49	2 kV ⁵⁾
EM FIT 75/220...240/550 D CS L	13	22	21	35	2 kV ⁵⁾

Product description	Surge capability (L-N)	Nominal output voltage	Nominal output current	Output PSTLM
EM FIT 18/220...240/350 D CS L	1 kV	27...54 V ⁶⁾	200 / 250 / 300 / 350 mA ⁷⁾	≤ 1
EM FIT 40/220...240/350 D CS L	1 kV	40...120 V ⁶⁾	200 / 250 / 300 / 350 mA ⁷⁾	≤ 1
EM FIT 60/220...240/350 D CS L	1 kV	90...175 V ⁶⁾	200 / 250 / 300 / 350 mA ⁷⁾	≤ 1
EM FIT 75/220...240/550 D CS L	1 kV	90...216 V ¹²⁾	350 / 400 / 500 / 550 mA ⁷⁾	≤ 1

Product description	Output SVM	Nominal output power	Maximum output power	Output current tolerance
EM FIT 18/220...240/350 D CS L	≤ 0.4	5...18.9 W	18.9 W	± 7.5 %
EM FIT 40/220...240/350 D CS L	≤ 0.4	8...42 W	42 W	± 7.5 %
EM FIT 60/220...240/350 D CS L	≤ 0.4	18...61.25 W	61.2 W	± 7.5 %

Product family datasheet

Product description	Output SVM	Nominal output power	Maximum output power	Output current tolerance
EM FIT 75/220...240/550 D CS L	≤0.4	31.5...75.6 W	75.6 W	±7.5 %

Product description	Total harmonic distortion	Output ripple current (100 Hz)	Galvanic isolation	U-OUT (working voltage)
EM FIT 18/220...240/350 D CS L	< 20 % ⁸⁾	< 10 % ⁹⁾	Non isolated	250 V
EM FIT 40/220...240/350 D CS L	< 20 % ⁸⁾	< 10 % ⁹⁾	Non isolated	250 V
EM FIT 60/220...240/350 D CS L	< 20 % ⁸⁾	< 10 % ⁹⁾	Non isolated	< 250 V
EM FIT 75/220...240/550 D CS L	< 20 % ⁸⁾	< 10 % ⁹⁾	Non isolated	< 250 V

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

10) $t_{width} = 120 \mu s$ typical (measured at 50 % I_{peak})

11) $t_{width} = 170 \mu s$ (measured at 50 % I_{peak})

12) At 550 mA output / At 500 mA output / At 400 mA output / At 350 mA output

Dimensions & weight

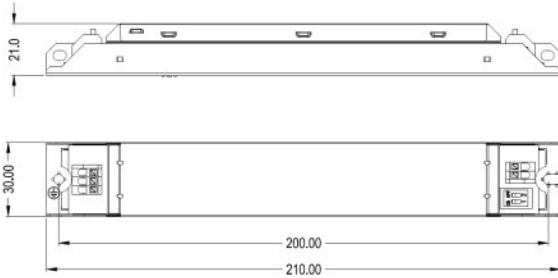
Product description	Mounting hole spacing, length	Product weight	Cable cross-section, input side	Cable cross-section, output side	Wire preparation length, input side
EM FIT 18/220...240/350 D CS L	200.0 mm	120.00 g	0.5...1.5 / 0.75...1.5 mm ² 1)	0.5...1.5 / 0.75...1.5 mm ² 1)	7...8 mm
EM FIT 40/220...240/350 D CS L	200.0 mm	130.00 g	0.5...1.5 / 0.75...1.5 mm ² 1)	0.5...1.5 / 0.75...1.5 mm ² 1)	7...8 mm
EM FIT 60/220...240/350 D CS L	200.0 mm	130.00 g	0.5...1.5 / 0.75...1.5 mm ² 1)	0.5...1.5 / 0.75...1.5 mm ² 1)	7...8 mm
EM FIT 75/220...240/550 D CS L	200.0 mm	140.00 g	0.5...1.5 / 0.75...1.5 mm ² 1)	0.5...1.5 / 0.75...1.5 mm ² 1)	7...8 mm

Product description	Width	Length	Height	Wire preparation length, output side
EM FIT 18/220...240/350 D CS L	30.0 mm	210.0 mm	21.0 mm	7...8 mm
EM FIT 40/220...240/350 D CS L	30.0 mm	210.0 mm	21.0 mm	7...8 mm
EM FIT 60/220...240/350 D CS L	30.0 mm	210.0 mm	21.0 mm	7...8 mm
EM FIT 75/220...240/550 D CS L	30.0 mm	210.0 mm	21.0 mm	7...8 mm

1) Solid or flexible leads

Product family datasheet

Product line drawing



EM FIT 18/220...240/350 D CS L, EM FIT 40/220...240/350 D CS L, EM FIT 60/220...240/350 D CS L, EM FIT 75/220...240/550 D CS L

Colors & materials

Product description	Casing material
EM FIT 18/220...240/350 D CS L	Metal
EM FIT 40/220...240/350 D CS L	Metal
EM FIT 60/220...240/350 D CS L	Metal
EM FIT 75/220...240/550 D CS L	Metal

Temperatures & operating conditions

Product description	Ambient temperature range	Maximum temperature at tc test point	Max.housing temperature in case of fault	Temperature range at storage
EM FIT 18/220...240/350 D CS L	-20...+50 °C	60 °C	110 °C	-40...+85 °C
EM FIT 40/220...240/350 D CS L	-20...+50 °C	75 °C	110 °C	-40...+85 °C
EM FIT 60/220...240/350 D CS L	-20...+50 °C	75 °C	110 °C	-40...+85 °C
EM FIT 75/220...240/550 D CS L	-20...+50 °C	75 °C	110 °C	-40...85 °C

Product description	Permitted rel. humidity during operation
EM FIT 18/220...240/350 D CS L	5...90 % ¹⁾
EM FIT 40/220...240/350 D CS L	5...90 % ¹⁾

Product family datasheet

Product description	Permitted rel. humidity during operation
EM FIT 60/220...240/350 D CS L	5...90 % ¹⁾
EM FIT 75/220...240/550 D CS L	5...90 % ¹⁾

¹⁾ Non-condensing

Lifespan

Product description	ECG lifetime
EM FIT 18/220...240/350 D CS L	35000 / 50000 h ¹⁾
EM FIT 40/220...240/350 D CS L	35000 / 50000 h ¹⁾
EM FIT 60/220...240/350 D CS L	35000 / 50000 h ¹⁾
EM FIT 75/220...240/550 D CS L	35000 / 50000 h ¹⁾

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

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]	-	-	-
EM FIT 40/220...240/350 D CS L	ECG ambient temperature [ta]	-	-	-
	Temperature at tc-point [°C]	75	-	-
	Lifetime [h]	-	-	-
EM FIT 60/220...240/350 D CS L	ECG ambient temperature [ta]	-	-	-
	Temperature at tc-point [°C]	75	-	-
	Lifetime [h]	-	-	-
EM FIT 75/220...240/550 D CS L	ECG ambient temperature [ta]	-	-	-
	Temperature at tc-point [°C]	75	-	-
	Lifetime [h]	-	-	-

Additional product data

Product description	Encapsulated
EM FIT 18/220...240/350 D CS L	No
EM FIT 40/220...240/350 D CS L	No
EM FIT 60/220...240/350 D CS L	No
EM FIT 75/220...240/550 D CS L	No

Product family datasheet

Capabilities

Product description	Dimmable	Overheating protection	Overload protection
EM FIT 18/220...240/350 D CS L	No	Automatic reversible	Automatic reversible
EM FIT 40/220...240/350 D CS L	No	Automatic reversible	Automatic reversible
EM FIT 60/220...240/350 D CS L	No	Automatic reversible	Automatic reversible
EM FIT 75/220...240/550 D CS L	No	Automatic reversible	Automatic reversible

Product description	Short-circuit protection	No-load proof	Intended for no-load operation	Max. cable length to lamp/LED module
EM FIT 18/220...240/350 D CS L	Automatic reversible	Yes	No	2.0 m ¹⁾
EM FIT 40/220...240/350 D CS L	Automatic reversible	Yes	No	2.0 m ¹⁾
EM FIT 60/220...240/350 D CS L	Automatic reversible	Yes	No	2.0 m ¹⁾
EM FIT 75/220...240/550 D CS L	Automatic reversible	Yes	No	2.0 m ¹⁾

Product description	Suitable for fixtures with prot. class	Number of channels
EM FIT 18/220...240/350 D CS L	I	1
EM FIT 40/220...240/350 D CS L	I	1
EM FIT 60/220...240/350 D CS L	I	1
EM FIT 75/220...240/550 D CS L	I	1

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

Programming

Product description	Programming device
EM FIT 18/220...240/350 D CS L	DIPswitch
EM FIT 40/220...240/350 D CS L	DIPswitch
EM FIT 60/220...240/350 D CS L	DIPswitch
EM FIT 75/220...240/550 D CS L	DIPswitch

Product family datasheet

Certificates & standards

Product description	Approval marks – approval	Standards	Type of protection
EM FIT 18/220...240/350 D CS L	CE / ENEC / CCC / UKCA / RCM / EAC / TISI	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	IP20
EM FIT 40/220...240/350 D CS L	CE / ENEC / CCC / UKCA / RCM / EAC / TISI	Acc. to IEC 61000-3-2/Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 61547/Acc. to IEC 62384/CISPR 15/EN 55015	IP20
EM FIT 60/220...240/350 D CS L	CE / ENEC / CCC / UKCA / RCM / EAC / TISI	Acc. to IEC 61000-3-2/Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 61547/Acc. to IEC 62384/CISPR 15/EN 55015	IP20
EM FIT 75/220...240/550 D CS L	CE / CCC / EAC / ENEC / RCM / UKCA / TISI	Acc. to IEC 61000-3-2/Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 61547/Acc. to IEC 62384/CISPR 15/EN 55015	IP20

Logistical data

Product description	Commodity code
EM FIT 18/220...240/350 D CS L	85044083900
EM FIT 40/220...240/350 D CS L	85044083900
EM FIT 60/220...240/350 D CS L	85044083900
EM FIT 75/220...240/550 D CS L	85044083900

Environmental information Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)

Product description	Date of Declaration	Primary Article Identifier	Candidate List Substance 1
EM FIT 18/220...240/350 D CS L	19-05-2023	4062172219891	Lead
EM FIT 40/220...240/350 D CS L	19-05-2023	4062172219914	Lead
EM FIT 60/220...240/350 D CS L	28-04-2023	4062172219938	Lead
EM FIT 75/220...240/550 D CS L	19-05-2023	4062172219952	Lead

Product family datasheet

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
EM FIT 18/220...240/350 D CS L	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	fe969384-c9cc-47b0-b4e5-6bfb04faf705
EM FIT 40/220...240/350 D CS L	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	0541bdcf-bacb-45f4-964f-41e51d4bf36f
EM FIT 60/220...240/350 D CS L	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	aece7444-1480-4f34-82b1-0e7dca128a5d
EM FIT 75/220...240/550 D CS L	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	6ec88280-aa9f-48f1-b3a5-b20d0342994b









Application advice

For more detailed application information and graphics please see product datasheet.

Sales and Technical Support

- Sales and Technical Support www.osram.com

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
 Certificates EM FIT 40 D CS L CCC 2021171002004163 071221
 Certificates EM FIT 60 75 D CS L CCC 2021171002004162 071221

Product family datasheet

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	375 mm x 250 mm x 75 mm	7.03 dm ³	2834.00 g
4062172219914	EM FIT 40/220...240/350 D CS L	Shipping carton box 20	375 mm x 250 mm x 75 mm	7.03 dm ³	3034.00 g
4062172219938	EM FIT 60/220...240/350 D CS L	Shipping carton box 20	375 mm x 250 mm x 75 mm	7.03 dm ³	3034.00 g
4062172219952	EM FIT 75/220...240/550 D CS L	Shipping carton box 20	375 mm x 250 mm x 75 mm	7.03 dm ³	3234.00 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.