

ELEMENT EM FIT SELV

Linear / Area Constant Current – Non dimmable



Areas of application

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

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

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 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 CS L	220...240 V	50/60 Hz	198...264 V	DipSwitch	0.95 ¹⁾
EM FIT 40/220...240/800 CS L	220...240 V	50/60 Hz	198...264 V	DipSwitch	0.95 ¹⁾
EM FIT 60/220...240/1A2 CS L	220...240 V	50/60 Hz	198...264 V	DipSwitch	0.95 ¹⁾
EM FIT 75/220...240/1A6 CS L	220...240 V	50/60 Hz	198...264 V	DipSwitch	0.95 ¹²⁾

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 CS L	84 % ²⁾	3.4 W ³⁾	35 A ⁴⁾	30	50
EM FIT 40/220...240/800 CS L	87 % ²⁾	6.1 W ³⁾	45 A ⁸⁾	14	24
EM FIT 60/220...240/1A2 CS L	88 % ²⁾	7.7 W ³⁾	50 A ¹⁰⁾	13	19
EM FIT 75/220...240/1A6 CS L	89 % ²⁾	9.7 W ³⁾	60 A ¹³⁾	7	12

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)
EM FIT 18/220...240/350 CS L	48	80	75	125
EM FIT 40/220...240/800 CS L	23	39	36	61
EM FIT 60/220...240/1A2 CS L	20	30	32	47
EM FIT 75/220...240/1A6 CS L	12	20	18	31

Product description	Surge capability (L/N-Ground)	Surge capability (L-N)	Nominal output voltage	Nominal output current
EM FIT 18/220...240/350 CS L	2 kV ⁵⁾	1 kV	27...51 V ⁶⁾	200 / 250 / 300 / 350 mA ⁷⁾
EM FIT 40/220...240/800 CS L	2 kV ⁵⁾	1 kV	27...51 V ⁹⁾	500 / 600 / 700 / 800 mA ⁷⁾
EM FIT 60/220...240/1A2 CS L	2 kV ⁵⁾	1 kV	27...51 V ¹¹⁾	900 / 1050 / 1100 / 1200 mA ⁷⁾
EM FIT 75/220...240/1A6 CS L	2 kV ⁵⁾	1 kV	27...51 V ¹⁴⁾	1300 / 1400 / 1500 / 1600 mA ⁷⁾

Product description	Output PSTLM	Output SVM	Nominal output power	Maximum output power
EM FIT 18/220...240/350 CS L	≤1	≤0.4	5.4...17.85 W	17.8 W
EM FIT 40/220...240/800 CS L	≤1	≤0.4	13.5...40.8 W	40.8 W

Product family datasheet

Product description	Output PSTLM	Output SVM	Nominal output power	Maximum output power
EM FIT 60/220...240/1A2 CS L	≤1	≤0.4	24.3...61.2 W	61.2 W
EM FIT 75/220...240/1A6 CS L	≤1	≤0.4	35.1...81.6 W	81.6 W

Product description	Galvanic isolation
EM FIT 18/220...240/350 CS L	SELV
EM FIT 40/220...240/800 CS L	SELV
EM FIT 60/220...240/1A2 CS L	SELV
EM FIT 75/220...240/1A6 CS L	SELV

1) Full load at 230 V/50 Hz

2) at 230 V, 50 Hz

3) At 230 V

4) $t_{width} = 80 \mu s$ 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) $t_{width} = 130 \mu s$ typical, (measured at 50 % I_{peak})

9) At 500/600/700/800 mA output current

10) $t_{width} = 140 \mu s$ typical, (measured at 50 % I_{peak})

11) At 900/1050/1100/1200 mA output current

12) Half load at 230 V/50 Hz

13) $t_{width} = 190 \mu s$ typical, (measured at 50 % I_{peak})

14) At 1300/1400/1500/1600 mA output current

Dimensions & weight

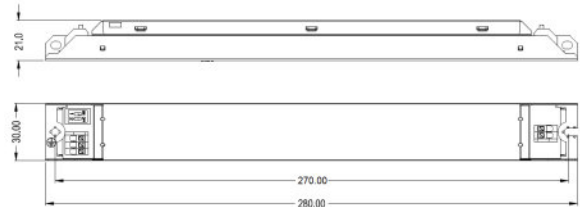
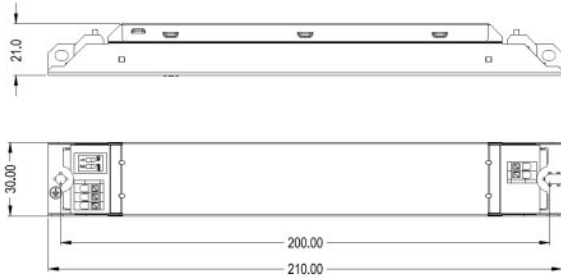
Product description	Mounting hole spacing, length	Product weight	Cable cross-section, input side	Cable cross-section, output side	Wire preparation length, input side
EM FIT 18/220...240/350 CS L	200.0 mm	140.00 g	0.5...1.5 / 0.75...1.5 mm ² 1)	0.5...1.5 / 0.75...1.5 mm ² 1)	7...8 mm
EM FIT 40/220...240/800 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
EM FIT 60/220...240/1A2 CS L	270.0 mm	190.00 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...240/1A6 CS L	270.0 mm	210.00 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	Height	Length
EM FIT 18/220...240/350 CS L	30.0 mm	21.0 mm	210.0 mm
EM FIT 40/220...240/800 CS L	30.0 mm	21.0 mm	210.0 mm
EM FIT 60/220...240/1A2 CS L	30.0 mm	21.0 mm	280.0 mm
EM FIT 75/220...240/1A6 CS L	30.0 mm	21.0 mm	280.0 mm

1) Solid or flexible leads

Product family datasheet

Product line drawing



EM FIT 18/220...240/350 CS L, EM FIT 40/220...240/800 CS L

EM FIT 60/220...240/1A2 CS L, EM FIT 75/220...240/1A6 CS L

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 CS L	-20...+50 °C	65 °C	110 °C	-40...+85 °C
EM FIT 40/220...240/800 CS L	-20...+50 °C	75 °C	110 °C	-40...+85 °C
EM FIT 60/220...240/1A2 CS L	-20...+50 °C	75 °C	110 °C	-40...+85 °C
EM FIT 75/220...240/1A6 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 CS L	5...90 % ¹⁾
EM FIT 40/220...240/800 CS L	5...90 % ¹⁾
EM FIT 60/220...240/1A2 CS L	5...90 % ¹⁾
EM FIT 75/220...240/1A6 CS L	5...90 % ¹⁾

¹⁾ Non-condensing

Product family datasheet

Lifespan

Product description	ECG lifetime
EM FIT 18/220...240/350 CS L	35000 / 50000 h ¹⁾
EM FIT 40/220...240/800 CS L	35000 / 50000 h ²⁾
EM FIT 60/220...240/1A2 CS L	35000 / 50000 h ²⁾
EM FIT 75/220...240/1A6 CS L	35000 / 50000 h ²⁾

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

²⁾ 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

Product description	Encapsulated
EM FIT 18/220...240/350 CS L	No
EM FIT 40/220...240/800 CS L	No
EM FIT 60/220...240/1A2 CS L	No
EM FIT 75/220...240/1A6 CS L	No

Capabilities

Product description	Dimmable	Overheating protection	Overload protection
EM FIT 18/220...240/350 CS L	No	Automatic reversible	Automatic reversible
EM FIT 40/220...240/800 CS L	No	Automatic reversible	Automatic reversible
EM FIT 60/220...240/1A2 CS L	No	Automatic reversible	Automatic reversible
EM FIT 75/220...240/1A6 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 CS L	Automatic reversible	Yes	No	2.0 m
EM FIT 40/220...240/800 CS L	Automatic reversible	Yes	No	2.0 m
EM FIT 60/220...240/1A2 CS L	Automatic reversible	Yes	No	2.0 m
EM FIT 75/220...240/1A6 CS L	Automatic reversible	Yes	No	2.0 m

Product description	Suitable for fixtures with prot. class	Number of channels
EM FIT 18/220...240/350 CS L	I	1
EM FIT 40/220...240/800 CS L	I	1
EM FIT 60/220...240/1A2 CS L	I	1
EM FIT 75/220...240/1A6 CS L	I	1

Product family datasheet

Programming

Product description	Programming device	Tuner4TRONIC Field App	Tuner4TRONIC
EM FIT 18/220...240/350 CS L	DIPswitch	No	No
EM FIT 40/220...240/800 CS L	DIPswitch	No	No
EM FIT 60/220...240/1A2 CS L	DIPswitch	No	No
EM FIT 75/220...240/1A6 CS L	DIPswitch	No	No

Product description	Box programming
EM FIT 18/220...240/350 CS L	No
EM FIT 40/220...240/800 CS L	No
EM FIT 60/220...240/1A2 CS L	No
EM FIT 75/220...240/1A6 CS L	No

Certificates & standards

Product description	Approval marks – approval	Standards	Type of protection
EM FIT 18/220...240/350 CS L	CE / CCC / EAC / ENEC / RCM / UKCA	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...240/800 CS L	CE / ENEC / RCM / EAC / CCC / UKCA	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 60/220...240/1A2 CS L	CE / CCC / EAC / ENEC / RCM / UKCA	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 75/220...240/1A6 CS L	CE / CCC / ENEC / RCM / EAC / UKCA	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

Logistical data

Product description	Commodity code
EM FIT 18/220...240/350 CS L	850440829000
EM FIT 40/220...240/800 CS L	850440829000
EM FIT 60/220...240/1A2 CS L	850440829000
EM FIT 75/220...240/1A6 CS L	850440829000

Product family datasheet

Environmental information

Product description	Date of Declaration	Primary Article Identifier	Candidate List Substance 1
EM FIT 18/220...240/350 CS L	23-12-2021	4062172219976	Lead
EM FIT 40/220...240/800 CS L	23-12-2021	4062172219990	Lead
EM FIT 60/220...240/1A2 CS L	04-01-2022	4062172220019	Lead
EM FIT 75/220...240/1A6 CS L	04-01-2022	4062172220033	Lead

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
EM FIT 18/220...240/350 CS L	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	5b901256-bd87-4bc1-aece-197ebf3f6049
EM FIT 40/220...240/800 CS L	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	0f2e8723-240b-4c89-8961-460351104ac1
EM FIT 60/220...240/1A2 CS L	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	28c8f5bd-7a58-41f7-9794-2d66a11ce6b8
EM FIT 75/220...240/1A6 CS L	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	f147ac9f-d15a-4212-a6de-928f6505bbac




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 CS L CB NL 74845 071221

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	Certificates EM FIT CS L&D CS L ENEC 35 120653 071221
	Certificates EM FIT 18 CS L CCC 2021171002004173 071221
	Certificates NSW27964 2 certificate of EM FIT CS L
	Certificates EM FIT 40 CS L CCC 2021171002004174 071221
	Certificates EM FIT 60 75 CS L CCC 2021171002004191 071221

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
4062172219976	EM FIT 18/220...240/350 CS L	Shipping carton box 20	375 mm x 250 mm x 75 mm	7.03 dm ³	3234.00 g
4062172219990	EM FIT 40/220...240/800 CS L	Shipping carton box 20	375 mm x 250 mm x 75 mm	7.03 dm ³	3234.00 g
4062172220019	EM FIT 60/220...240/1A2 CS L	Shipping carton box 20	375 mm x 320 mm x 75 mm	9.00 dm ³	4379.00 g
4062172220033	EM FIT 75/220...240/1A6 CS L	Shipping carton box 20	375 mm x 320 mm x 75 mm	9.00 dm ³	4779.00 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.