

OPTOTRONIC FIT CS MINI

Compact constant current LED driver – Non dimmable



Product family features

- Supply voltage: 220...240 V
- Line frequency: 50 Hz | 60 Hz
- Line voltage: 198...264 V
- According to EN 61347-1, 61347-2-13, 62384
- RI suppression according to CISPR 15
- Line harmonics according to IEC 61000-3-2
- Immunity according to IEC 61547

Product family benefits

- Small housing for flexible luminaire designs
- Higher quality of light thanks to < 3% output ripple current
- Operating temperature: up to 60 °C
- User flexibility with four different output currents from one driver
- Flexible current selection via DIP switch
- Reversible overtemperature, overload, short-circuit and open-circuit protection
- High efficiency (up to 90%)

Areas of application

- Extra small design for downlights, spotlights and other indoor luminaires
- Suitable for luminaires of protection classes I and II
- Suitable for indoor SELV installations

Product family datasheet

Technical data

Product description	Electrical data					
	Nominal input voltage	Mains frequency	Input voltage AC	Total harmonic distortion	Power factor λ	Efficiency in full-load
OT FIT 8/220...240/180 CS S MINI	220...240 V	50/60 Hz	198...264 V ¹⁾	< 15 % ²⁾	0.95 ³⁾	86 % ⁴⁾
OT FIT 8/220...240/180 CS I MINI	220...240 V	50/60 Hz	198...264 V ¹⁾	< 15 % ²⁾	0.50C...0.95 ³⁾	86 % ⁴⁾
OT FIT 15/220-240/350 CS S MINI	220...240 V	50/60 Hz	198...264 V ¹⁾	< 10 % ²⁾	0.95 ³⁾	88 % ⁴⁾
OT FIT 20/220-240/500 CS S MINI	220...240 V	50/60 Hz	198...264 V ¹⁾	< 10 % ²⁾	0.95...0.98 ³⁾	89 % ⁴⁾
OT FIT 30/220-240/700 CS S MINI	220...240 V	50/60 Hz	198...264 V ¹⁾	< 10 % ²⁾	0.95 ³⁾	89 % ⁴⁾
OT FIT 38/220-240/900 CS S MINI	220...240 V	50/60 Hz	198...264 V ¹⁾	< 10 % ²⁾	0.95 ³⁾	90 % ⁴⁾

Product description	Device power loss	Protective conductor current	Inrush current	Max. ECG no. on circuit breaker 10 A (B)	Max. ECG no. on circuit breaker 10 A (C)	Max. ECG no. on circuit breaker 16 A (B)
OT FIT 8/220...240/180 CS S MINI	1.2 W ⁵⁾	<0.7 mA	< 16 A	36	62	60
OT FIT 8/220...240/180 CS I MINI	1.2 W ⁵⁾	<0.7 mA	< 16 A	36	62	60
OT FIT 15/220-240/350 CS S MINI	2.1 W ¹⁶⁾		16.5 A	34	58	56
OT FIT 20/220-240/500 CS S MINI	2.6 W ¹⁷⁾		16.5 A	34	58	56
OT FIT 30/220-240/700 CS S MINI	3.6 W ¹⁹⁾		13.4 A	16	26	26
OT FIT 38/220-240/900 CS S MINI	4.2 W ²¹⁾		13.4 A	16	26	26

Product description	Max. ECG no. on circuit breaker 16 A (C)	Surge capability (L/N-Ground)	Surge capability (L-N)	Nominal output voltage	U-OUT (working voltage)
OT FIT 8/220...240/180 CS S MINI	100	2 kV	1 kV	30...42 V	60 V
OT FIT 8/220...240/180 CS I MINI	100	2 kV	1 kV	30...42 V	60 V
OT FIT 15/220-240/350 CS S MINI	94	2 kV	1 kV	30...42 V	60 V
OT FIT 20/220-240/500 CS S MINI	94	2 kV	1 kV	30...42 V	60 V
OT FIT 30/220-240/700 CS S MINI	43	2 kV	1 kV	30...42 V	60 V
OT FIT 38/220-240/900 CS S MINI	43	2 kV	1 kV	30...42 V	60 V

Product description	Nominal output current	Output current tolerance	Default output current	Output ripple current (100 Hz)	Output PSTLM
OT FIT 8/220...240/180 CS S MINI	90/120/150/180 mA ⁶⁾	±7.5 % ⁷⁾	180 mA	< 3 % ⁸⁾	≤1
OT FIT 8/220...240/180 CS I MINI	90/120/150/180 mA ⁶⁾	±7.5 % ⁷⁾	180 mA	< 3 % ⁸⁾	≤1
OT FIT 15/220-240/350 CS S MINI	225/250/325/350 mA ⁶⁾	±7.5 %	350 mA	< 3 % ⁸⁾	≤1

Product family datasheet

Product description	Nominal output current	Output current tolerance	Default output current	Output ripple current (100 Hz)	Output PSTLM
OT FIT 20/220-240/500 CS S MINI	400/450/475/500 mA ⁶⁾	±7.5 %	500 mA	< 3 % ⁸⁾	≤1
OT FIT 30/220-240/700 CS S MINI	550/600/650/700 mA ⁶⁾	±7.5 %	700 mA	< 3 % ⁸⁾	≤1
OT FIT 38/220-240/900 CS S MINI	800/850/875/900 mA ⁶⁾	±7.5 %	900 mA	< 3 % ⁸⁾	≤1

Product description	Output SVM	Nominal output power	Maximum output power	Galvanic isolation
OT FIT 8/220...240/180 CS S MINI	≤0.4	2.7...7.6 W	7.6 W	SELV
OT FIT 8/220...240/180 CS I MINI	≤0.4	2.7...7.6 W	7.6 W	SELV
OT FIT 15/220-240/350 CS S MINI	≤0.4	6.7...14.7 W	14.7 W	SELV
OT FIT 20/220-240/500 CS S MINI	≤0.4	12...21 W	21 W	SELV
OT FIT 30/220-240/700 CS S MINI	≤0.4	17...29 W	29 W	SELV
OT FIT 38/220-240/900 CS S MINI	≤0.4	27...37.8 W	37.5 W	SELV

Product description	Galvanic isolation primary/secondary	Current set	Dimensions & weight		
			Product weight	Cable cross-section, input side	Cable cross-section, output side
OT FIT 8/220...240/180 CS S MINI	SELV	DipSwitch	40.00 g	0.5...1.5 / 0.75...1.5 mm ² ⁹⁾	0.5...1.5 / 0.75...1.5 mm ² ⁹⁾
OT FIT 8/220...240/180 CS I MINI	SELV	DipSwitch	50.00 g	0.5...1.5 / 0.75...1.5 mm ² ⁹⁾	0.5...1.5 / 0.75...1.5 mm ² ⁹⁾
OT FIT 15/220-240/350 CS S MINI	SELV	DipSwitch	54.00 g	0.5...1.5 / 0.75...1.5 mm ² ⁹⁾	0.5...1.5 / 0.75...1.5 mm ² ⁹⁾
OT FIT 20/220-240/500 CS S MINI	SELV	DipSwitch	54.00 g	0.5...1.5 / 0.75...1.5 mm ² ⁹⁾	0.5...1.5 / 0.75...1.5 mm ² ⁹⁾
OT FIT 30/220-240/700 CS S MINI	SELV	DipSwitch	90.20 g	0.5...1.5 / 0.75...1.5 mm ² ⁹⁾	0.5...1.5 / 0.75...1.5 mm ² ⁹⁾
OT FIT 38/220-240/900 CS S MINI	SELV	DipSwitch	90.20 g	0.5...1.5 / 0.75...1.5 mm ² ⁹⁾	0.5...1.5 / 0.75...1.5 mm ² ⁹⁾

Product description	Wire preparation length, input side	Wire preparation length, output side	Height	Width	Length
OT FIT 8/220...240/180 CS S MINI	7...8 mm	7...8 mm	20.0 mm	30.0 mm	87.0 mm
OT FIT 8/220...240/180 CS I MINI	7...8 mm	7...8 mm	26.0 mm	30.0 mm	104.0 mm
OT FIT 15/220-240/350 CS S MINI	7...8 mm	7...8 mm	22.0 mm	35.0 mm	87.0 mm

Product family datasheet

Product description	Wire preparation length, input side	Wire preparation length, output side	Height	Width	Length
OT FIT 20/220-240/500 CS S MINI	7...8 mm	7...8 mm	22.0 mm	35.0 mm	87.0 mm
OT FIT 30/220-240/700 CS S MINI	7...8 mm	7...8 mm	22.0 mm	35.0 mm	87.0 mm
OT FIT 38/220-240/900 CS S MINI	7...8 mm	7...8 mm	22.0 mm	35.0 mm	87.0 mm

Product description	Mounting hole spacing, length	Mounting hole spacing, width	Colors & materials	Temperatures & operating conditions	
			Casing material	Ambient temperature range	Maximum temperature at tc test point
OT FIT 8/220...240/180 CS S MINI			Plastic	-20...+55 °C	75 °C ¹⁰⁾
OT FIT 8/220...240/180 CS I MINI	89.4 mm	22.0 mm	Plastic	-20...+55 °C	70 °C ¹⁰⁾
OT FIT 15/220-240/350 CS S MINI			Plastic	-20...+55 °C	75 °C ¹⁰⁾
OT FIT 20/220-240/500 CS S MINI			Plastic	-20...+55 °C	80 °C ¹⁰⁾
OT FIT 30/220-240/700 CS S MINI			Plastic	-20...+60 °C	90 °C ¹⁰⁾
OT FIT 38/220-240/900 CS S MINI			Plastic	-20...+55/-20...+60 °C ²²⁾	95 °C ¹⁰⁾

Product description	Max.housing temperature in case of fault	Temperature range at storage	Permitted rel. humidity during operation	Lifespan	Capabilities
				ECG lifetime	Dimmable
OT FIT 8/220...240/180 CS S MINI	110 °C	-20...80 °C	5...85 % ¹¹⁾	50000 h ¹²⁾	No
OT FIT 8/220...240/180 CS I MINI	110 °C	-20...80 °C	5...85 % ¹⁴⁾	50000 h ¹⁵⁾	No
OT FIT 15/220-240/350 CS S MINI	110 °C	-20...80 °C	5...85 % ¹¹⁾	50000 h ¹²⁾	No
OT FIT 20/220-240/500 CS S MINI	110 °C	-20...80 °C	5...85 % ¹¹⁾	50000 h ¹⁸⁾	No
OT FIT 30/220-240/700 CS S MINI	110 °C	-20...80 °C	5...85 % ¹¹⁾	50000 h ²⁰⁾	No
OT FIT 38/220-240/900 CS S MINI	110 °C	-20...80 °C	5...85 % ¹¹⁾	35000 / 50000 h ²³⁾	No

Product description	Overheating protection	Overload protection	Short-circuit protection	No-load proof
OT FIT 8/220...240/180 CS S MINI	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OT FIT 8/220...240/180 CS I MINI	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OT FIT 15/220-240/350 CS S MINI	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OT FIT 20/220-240/500 CS S MINI	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OT FIT 30/220-240/700 CS S MINI	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OT FIT 38/220-240/900 CS S MINI	Automatic reversible	Automatic reversible	Automatic reversible	Yes

Product family datasheet

Product description	Intended for no-load operation	Max. cable length to lamp/LED module	Suitable for fixtures with prot. class	Type of connection, input side
OT FIT 8/220...240/180 CS S MINI	No	2.0 m ¹³⁾	I / II	Push terminal
OT FIT 8/220...240/180 CS I MINI	No	2.0 m ¹³⁾	I / II	Push terminal
OT FIT 15/220-240/350 CS S MINI	No	2.0 m ¹³⁾	I / II	Push terminal
OT FIT 20/220-240/500 CS S MINI	No	2.0 m ¹³⁾	I / II	Push terminal
OT FIT 30/220-240/700 CS S MINI	No	2.0 m ¹³⁾	I / II	Push terminal
OT FIT 38/220-240/900 CS S MINI	No	2.0 m ¹³⁾	I / II	Push terminal

Product description	Type of connection, output side	Number of channels	Suitable for through-wiring	Programming
				Programming device
OT FIT 8/220...240/180 CS S MINI	Push terminal	1	No	DIPswitch
OT FIT 8/220...240/180 CS I MINI	Push terminal	1	No	DIPswitch
OT FIT 15/220-240/350 CS S MINI	Push terminal	1	No	DIPswitch
OT FIT 20/220-240/500 CS S MINI	Push terminal	1	No	DIPswitch
OT FIT 30/220-240/700 CS S MINI	Push terminal	1	No	DIPswitch
OT FIT 38/220-240/900 CS S MINI	Push terminal	1	No	DIPswitch

Product description	Certificates & standards			
	Approval marks – approval	Standards	Type of protection	Protection class
OT FIT 8/220...240/180 CS S MINI	ENEC 05 / CCC / CE / RCM	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547	IP20	1/2
OT FIT 8/220...240/180 CS I MINI	ENEC 05 / CCC / CE / RCM	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547	IP20	1/2
OT FIT 15/220-240/350 CS S MINI	ENEC 05 / CCC / CE / RCM	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547	IP20	1/2
OT FIT 20/220-240/500 CS S MINI	ENEC 05 / CCC / CE / RCM	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547	IP20	1/2

Product family datasheet

Product description	Certificates & standards			
	Approval marks – approval	Standards	Type of protection	Protection class
OT FIT 30/220-240/700 CS S MINI	ENEC 05 / CCC / CE / RCM	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547	IP20	1/2
OT FIT 38/220-240/900 CS S MINI	ENEC 05 / CCC / CE / RCM	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547	IP20	1/2

Product description	Logistical data	Environmental information Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)		
	Commodity code	Date of Declaration	Primary Article Identifier	Candidate List Substance 1
OT FIT 8/220...240/180 CS S MINI	850440839000	28-04-2023	4052899587922	Lead
OT FIT 8/220...240/180 CS I MINI	850440839000	24-05-2023	4052899587946	Lead
OT FIT 15/220-240/350 CS S MINI	850440839000	19-05-2023	4062172013406	Lead
OT FIT 20/220-240/500 CS S MINI	850440839000	24-05-2023	4052899587960	Lead
OT FIT 30/220-240/700 CS S MINI	850440839000	19-05-2023	4062172013420	Lead
OT FIT 38/220-240/900 CS S MINI	850440839000	19-05-2023	4052899587984	Lead

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
OT FIT 8/220...240/180 CS S MINI	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	a6a32600-4284-4dfc-89f6-df908cab4a3b
OT FIT 8/220...240/180 CS I MINI	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	109d6b27-6e6d-47b2-b97d-046b95b869da
OT FIT 15/220-240/350 CS S MINI	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	dfb7353f-ad78-40b1-9be1-697c100ed116

Product family datasheet

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
OT FIT 20/220-240/500 CS S MINI	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	4f99c0a2-8355-4cf4-b679-149698d028e9
OT FIT 30/220-240/700 CS S MINI	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	abbe2869-9a91-4476-87e6-342c6ffd9e93
OT FIT 38/220-240/900 CS S MINI	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	6ff72b6a-09a9-45dd-b92a-61ba704f609c

1) Safety voltage range

2) At full load, 230 V, 50 Hz / see graphs

3) Full load at 230 V/50 Hz

4) at 230 V, 50 Hz

5) At 230 V, Input power 8.8 W max.

6) $\pm 7.5\%$

7) $I_{out} = 90\text{mA} < \pm 10\%$

8) Ripple average at 100 Hz

9) Solid/ Flexible Leads

10) Measured on tc point indicated on the product label.

11) Non-condensing

12) At maximum $T_c = 75^\circ\text{C}$ / 10% failure rate

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

14) Maximum 56 days/year at 85 %

15) At maximum $T_c = 70^\circ\text{C}$ / 10% failure rate

16) At 230 V, Input power 16.8 W max.

17) At 230 V, Input power 23.6 W max.

18) At maximum $T_c = 80^\circ\text{C}$ / 10% failure rate

19) At 230 V, Input power 33 W max.

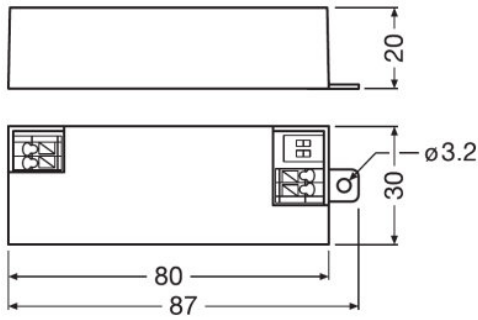
20) At maximum $T_c = 90^\circ\text{C}$ / 10% failure rate

21) At 230 V, Input power 42 W max.

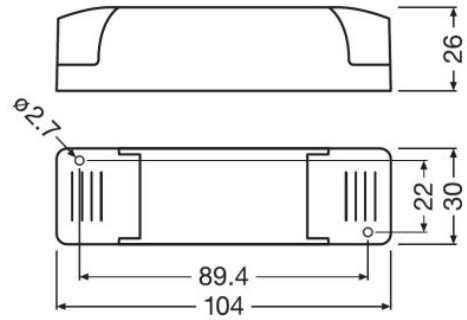
22) At output currents 850/875/900 mA/At output currents 800 mA

23) At maximum $T_c = 95^\circ\text{C}$ / 10% failure rate

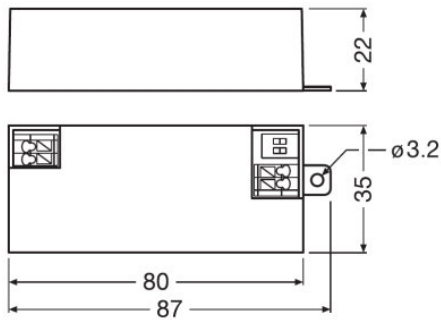
Product family datasheet



Line Drawing of OT FIT 8220-240180 CS S MINI



Line Drawing of OT FIT 8220-240180 CS I MINI



Line Drawing of OT FIT 15203538 CS I MINI



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 OPTOTRONIC LED Power Supply
	Declarations of conformity OT FIT CS MINI UK DoC 4294808 220322

Product family datasheet

	Declarations of conformity OT FIT CS MINI CE 3669357 220322
	CAD data STEP file OT FIT Mini 8W
	CAD data PDF 3D CAD drawing OT FIT MINI 8W
	User instruction OPTOTRONIC LED Power Supply
	CAD data STEP file OT FIT MINI 8W
	CAD data PDF 3D CAD drawing OT FIT MINI 8W
	CAD data PDF 3D CAD drawing open OT FIT MINI 8W
	Certificates OT FIT CS S MINI ENEC 35 106287 221019
	CAD data OT FIT MINI CS S - built in step
	CAD data 3-dim OT FIT MINI CS S - built in 3D

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
4052899587922	OT FIT 8/220...240/180 CS S MINI	Shipping carton box 20	186 mm x 162 mm x 63 mm	1.90 dm ³	947.00 g
4052899587946	OT FIT 8/220...240/180 CS I MINI	Shipping carton box 20	220 mm x 162 mm x 72 mm	2.57 dm ³	1085.00 g
4062172013406	OT FIT 15/220-240/350 CS S MINI	Shipping carton box 20	187 mm x 186 mm x 67 mm	2.33 dm ³	1256.00 g

Product family datasheet

Logistical Data

4052899587960	OT FIT 20/220-240/500 CS S MINI	Shipping carton box 20	187 mm x 186 mm x 64 mm	2.23 dm ³	1256.00 g
4062172013420	OT FIT 30/220-240/700 CS S MINI	Shipping carton box 20	187 mm x 186 mm x 64 mm	2.23 dm ³	1980.00 g
4052899587984	OT FIT 38/220-240/900 CS S MINI	Shipping carton box 20	187 mm x 186 mm x 67 mm	2.33 dm ³	1980.00 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.