OT FIT 8/220...240/180 CS I MINI

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 luminaries
- Suitable for luminaires of protection classes I and II
- Suitable for indoor SELV installations

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Technical data

Electrical data

Nominal input voltage	220…240 V
Mains frequency	50/60 Hz
Input voltage AC	198…264 V [1)]
Total harmonic distortion	< 15 % [2)]
Power factor λ	0.50C…0.95 [3)]
Efficiency in full-load	86 % [4)]
Device power loss	1.2 W [5)]
Protective conductor current	<0.7 mA
Inrush current	< 16 A
Max. ECG no. on circuit breaker 10 A (B)	36
Max. ECG no. on circuit breaker 10 A (C)	62
Max. ECG no. on circuit breaker 16 A (B)	60
Max. ECG no. on circuit breaker 16 A (C)	100
Surge capability (L/N-Ground)	2 kV
Surge capability (L-N)	1 kV
Nominal output voltage	30…42 V
U-OUT (working voltage)	60 V
Nominal output current	90/120/150/180 mA [6)]
Output current tolerance	±7.5 % [7)]
Default output current	180 mA
Output ripple current (100 Hz)	< 3 % [8)]
Output PSTLM	≤1
Output SVM	≤0.4
Nominal output power	2.7…7.6 W
Maximum output power	7.6 W
Galvanic isolation primary/secondary	SELV
Galvanic isolation	SELV
Current set	DipSwitch

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

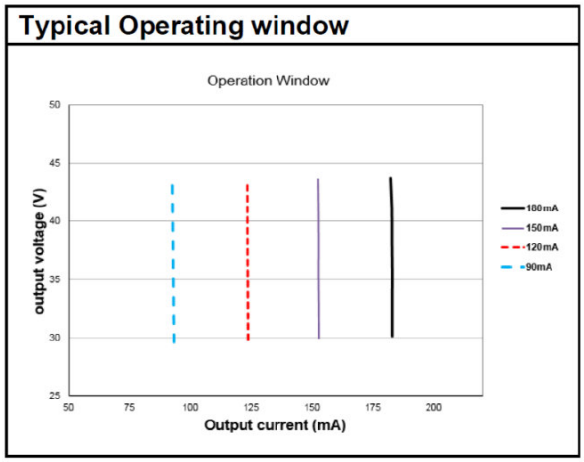
5) At 230 V, Input power 8.8 W max.

6) ±7.5%

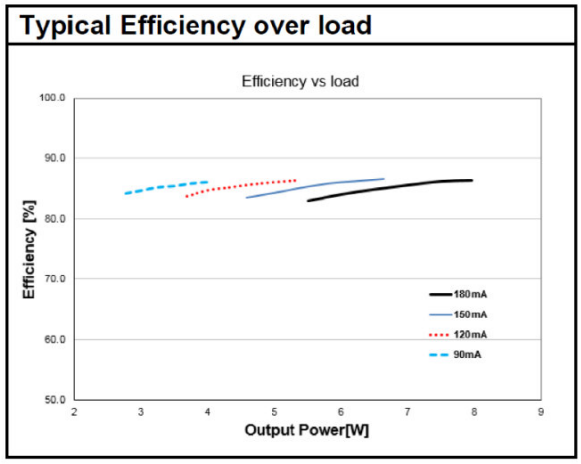
7) I out = 90mA < +/- 10 %

8) Ripple average at 100 Hz

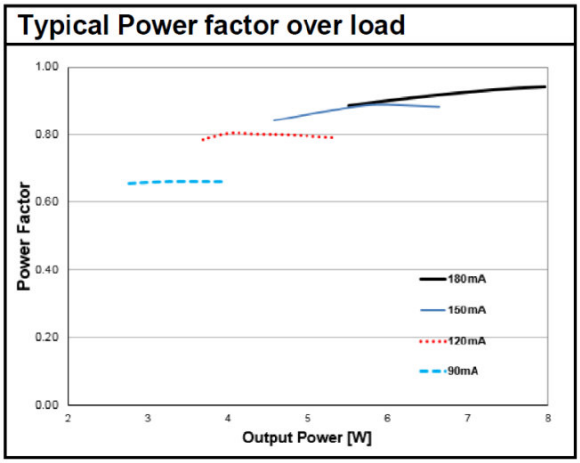
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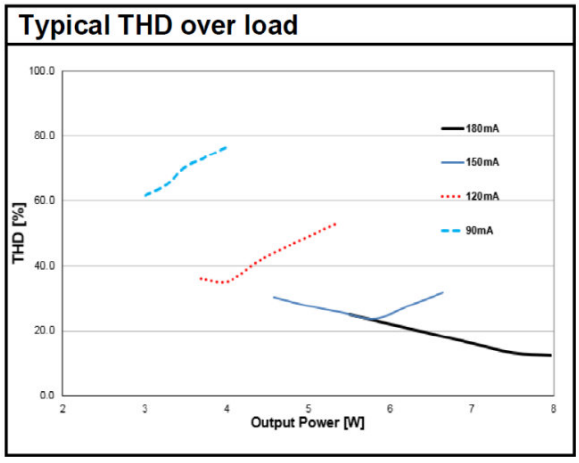
OT FIT 8220-240180 CS I MINI Operating Window



OT FIT 8220-240180 CS I MINI Typical Efficiency vs. Load (230 V 50 Hz)



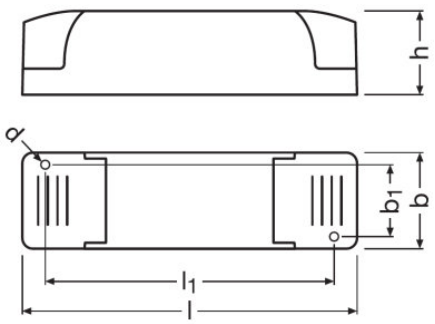
OT FIT 8220-240180 CS I MINI Typical Power Factor vs. Load



OT FIT 8220-240180 CS I MINI Typical THD Vs Load

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Dimensions & weight



Mounting hole spacing, length	89.4 mm
Mounting hole spacing, width	22.0 mm
Product weight	50.00 g
Cable cross-section, input side	0.5…1.5 / 0.75…1.5 mm² [1]
Cable cross-section, output side	0.5…1.5 / 0.75…1.5 mm² [1]
Wire preparation length, input side	7…8 mm
Wire preparation length, output side	7…8 mm
Length	104.0 mm
Width	30.0 mm
Height	26.0 mm

[1] Solid/ Flexible Leads

Colors & materials

Casing material	Plastic

Temperatures & operating conditions

Ambient temperature range	-20…+55 °C
Maximum temperature at tc test point	70 °C [1]
Max.housing temperature in case of fault	110 °C
Temperature range at storage	-20…80 °C
Permitted rel. humidity during operation	5…85 % [2]

[1] Measured on tc point indicated on the product label.

[2] Maximum 56 days/year at 85 %

Lifespan

ECG lifetime	50000 h [1]

[1] At maximum T_c = 70°C / 10% failure rate

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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 / II
Type of connection, input side	Push terminal
Type of connection, output side	Push terminal
Suitable for through-wiring	No
Number of channels	1

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

Programming

Programming device	DIPswitch

Certificates & standards

Approval marks – approval	ENEC 05 / CCC / CE / RCM
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 61000-3-3/Acc. to IEC 61547
Type of protection	IP20
Protection class	1/2

Logistical data

Commodity code	85044083900

Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh)	
Date of Declaration	24-05-2023
Primary Article Identifier	4052899587946
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	109d6b27-6e6d-47b2-b97d-046b95b869da

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Download Data

	File
	User instruction OPTOTRONIC LED Power Supply
	Declarations of conformity OT FIT CS MINI UK DoC 4294808 220322
	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
	CAD data PDF 3D CAD drawing open OT FIT MINI 8W

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
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

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.

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