

OT FIT 20/220-240/500 CS S 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

Technical data

Electrical data

Nominal input voltage	220...240 V
Mains frequency	50/60 Hz
Input voltage AC	198...264 V ¹⁾
Current set	DipSwitch
Total harmonic distortion	< 10 % ²⁾
Power factor λ	0.74C...0.95 ³⁾
Efficiency in full-load	89 % ⁴⁾
Device power loss	2.6 W ⁵⁾
Protective conductor current	not relevant
Inrush current	16.5 A
Max. ECG no. on circuit breaker 10 A (B)	34
Max. ECG no. on circuit breaker 16 A (B)	56
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	400/450/475/500 mA ⁶⁾
Default output current	500 mA
Output current tolerance	± 7.5 %
Output ripple current (100 Hz)	< 3 % ⁷⁾
Output PSTLM	≤ 1
Output SVM	≤ 0.4
Nominal output power	12...21 W
Maximum output power	21 W
Galvanic isolation	SELV

1) Safety voltage range

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

3) Full load at 230 V / 50 Hz

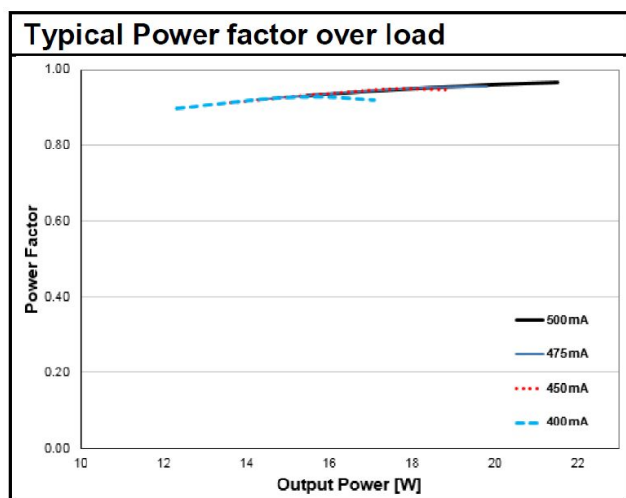
4) at 230 V, 50 Hz

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

6) ± 7.5 %

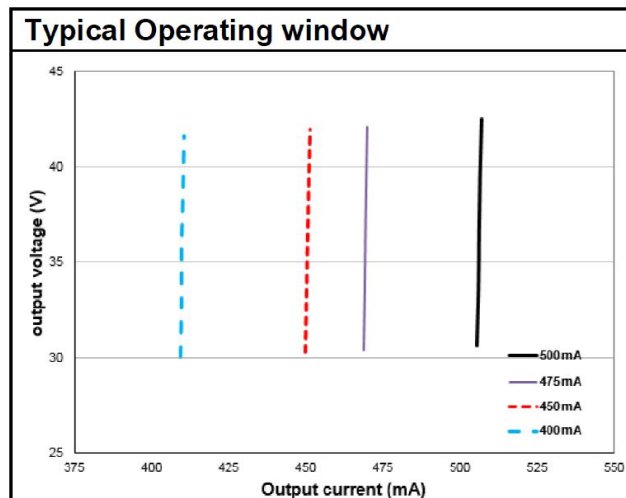
7) Ripple average at 100 Hz

Typical Power Factor v Load



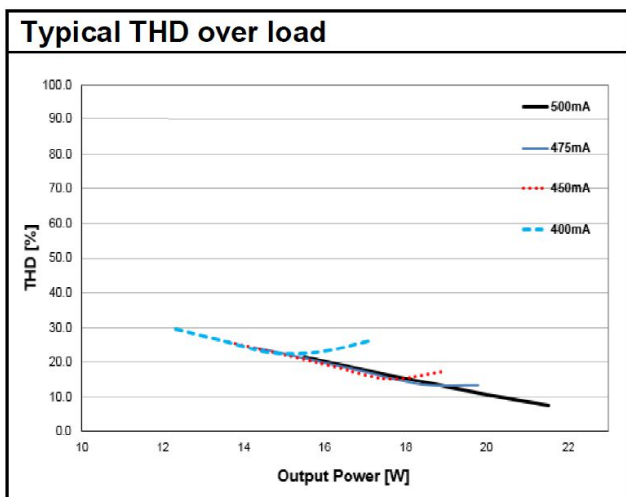
OT FIT 20/220-240/500 CS S MINI Typical Power Factor vs. Load

Operating Window



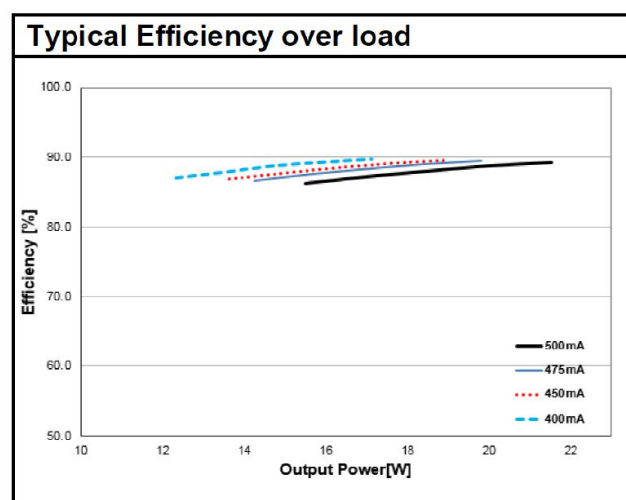
OT FIT 20/220-240/500 CS S MINI Operating Window

Typical THD v Load



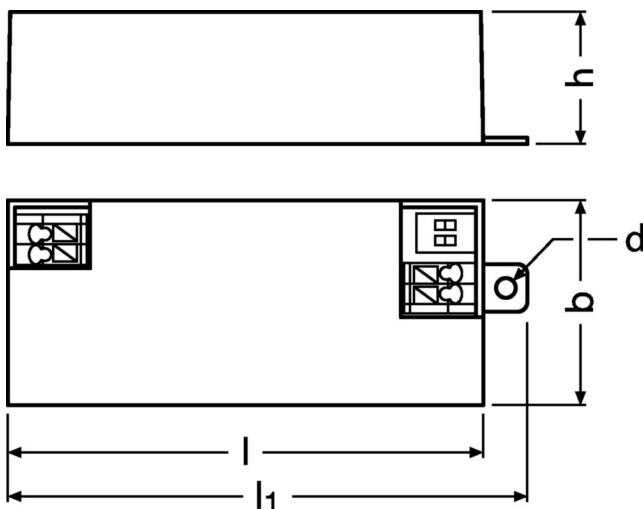
OT FIT 20/220-240/500 CS S MINI Typical THD Vs Load

Typical Efficiency v Load 230 V 50 Hz



OT FIT 20/220-240/500 CS S MINI Typical Efficiency vs. Load (230 V / 50 Hz)

Dimensions & weight



Length	87.0 mm
Width	35.0 mm
Height	22.0 mm
Mounting hole spacing, length	not relevant mm
Mounting hole spacing, width	not relevant mm
Cable cross-section, input side	0.5...1.5 mm ² / 0.75...1.5 mm ² ¹⁾
Cable cross-section, output side	0.5...1.5 mm ² / 0.75...1.5 mm ² ¹⁾
Wire preparation length, input side	7...8 mm
Wire preparation length, output side	7...8 mm
Product weight	54.00 g

1) Solid/ Flexible Leads

Colors & materials

Casing material	Plastic
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Temperatures & operating conditions

Ambient temperature range	-20...+50 °C
Maximum temperature at tc test point	80 °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) Non-condensing

Lifespan

ECG lifetime	50000 h ¹⁾
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1) At maximum $T_c = 80^\circ\text{C}$ / 10% failure rate

Capabilities

Dimmable	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
Overheating protection	Automatic reversible
Overload protection	Automatic reversible
Short-circuit protection	Automatic reversible
Intended for no-load operation	No
No-load proof	Yes

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

Programming

Programming device	DIPswitch
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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
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Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)	
Date of Declaration	22-03-2024
Primary Article Identifier	4052899587960
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	4f99c0a2-8355-4cf4-b679-149698d028e9

Download Data

File		
Certificates	PDF	▶OT FIT CS S MINI ENEC 35 106287 221019
CAD data 3-dim	Compressed	▶OT FIT MINI CS S - built in 3D
CAD data	Compressed	▶OT FIT MINI CS S - built in step
Declarations of conformity	PDF	▶OT FIT CS MINI UK DoC 4294808 220322
Declarations of conformity	PDF	▶OT FIT CS MINI CE 3669357 220322
User instruction	PDF	▶OPTOTRONIC LED Power Supply

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
4052899587960	OT FIT 20/220-240/500 CS S MINI	Shipping carton box 20 Pieces	187 x 186 x 64 mm	2.23 dm ³	1256.00 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.