

OT FIT 50/220-240/250 D L

OPTOTRONIC FIT D L | Linear / Area Constant Current – Non dimmable



Product family features

- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Versatile scope of application due to output power range of up to 50 W
- Supply voltage: 220...240 V
- Available with output current range: up to 350 mA
- Non-isolated drivers

Product family benefits

- Small housing design
- Fixed current
- Lifetime: up to 100,000 h (temperature at $T_c = 65\text{ °C}$, max. 10 % failure rate)
- High quality of light thanks to low output ripple current
- High efficiency
- Fulfill safety requirement due to overload, overtemperature, Hot Plug protection

Areas of application

- Linear lighting for office, education, industry, storage areas and retail
- Installation in emergency lighting systems according to IEC 61347-2-13, appendix J
- Suitable for installation in emergency lighting systems according to EN 60598-2-22
- Suitable for luminaires of protection class I

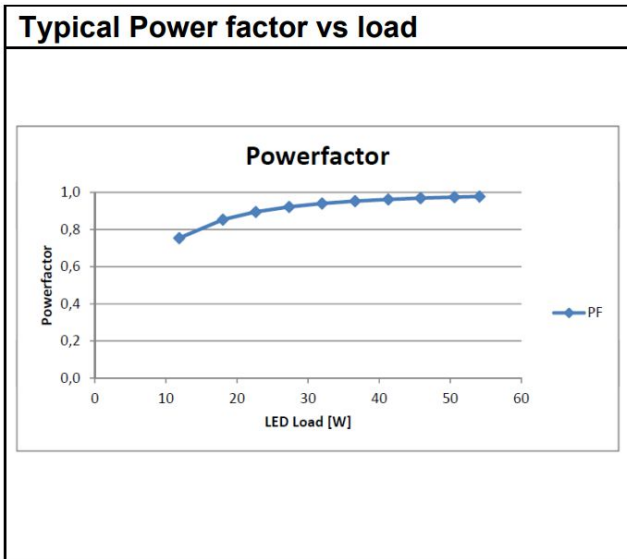
Technical data

Electrical data

Nominal input voltage	220...240 V
Mains frequency	0/50/60 Hz
Input voltage AC	198...264 V ¹⁾
Input voltage DC	176...276 V
Current set	Fixed current
Total harmonic distortion	< 20 %
Power factor λ	> 0.95 ²⁾
Efficiency in full-load	90 % ³⁾
Device power loss	5.0 W ⁴⁾
Protective conductor current	<2.0 mA
Inrush current	not relevant
Max. ECG no. on circuit breaker 10 A (B)	35
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	54...216 V
U-OUT (working voltage)	< 250 V
Nominal output current	250 mA ⁵⁾
Default output current	250 mA
Output current tolerance	± 10 %
Output ripple current (100 Hz)	< 10 % ⁶⁾
Output PSTLM	≤ 1
Output SVM	≤ 0.4
Nominal output power	13.5...54 W ⁷⁾
Maximum output power	54 W
Galvanic isolation	Non isolated

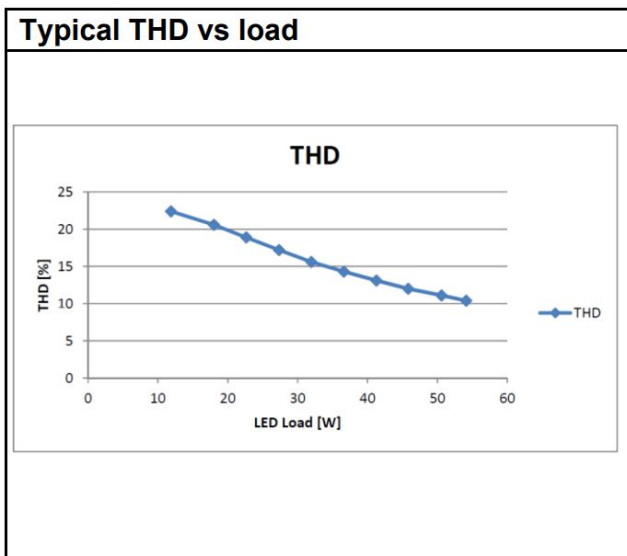
- 1) Permitted voltage range
- 2) Full load at 230 V
- 3) at 230 V, 50 Hz
- 4) Maximum
- 5) ± 10 %
- 6) up to 5% @ 120V
- 7) Partial load 14...54 W

Typical Power Factor v Load



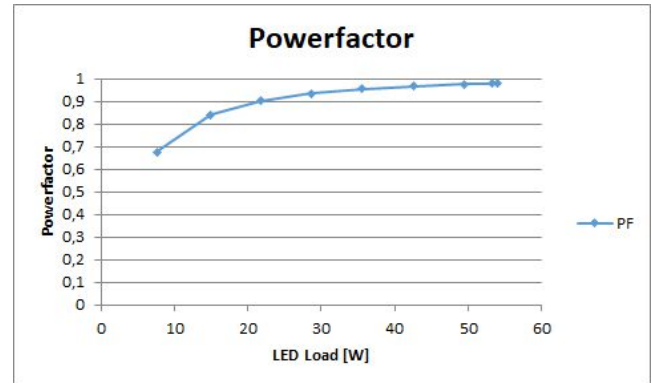
OT FIT 50/220-240/250 D L Typical Power Factor vs. Load

Typical THD v Load



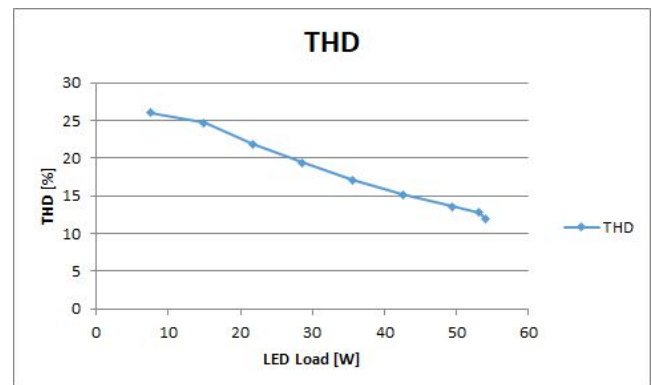
OT FIT 50/220-240/250 D L Typical THD Vs Load

Typical Power Factor v Load



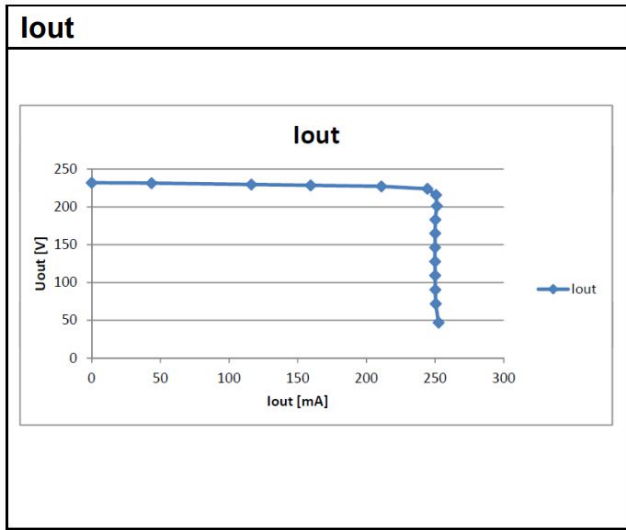
OT FIT 50/220-240/D L Typical Power Factor vs. Load

Typical THD v Load

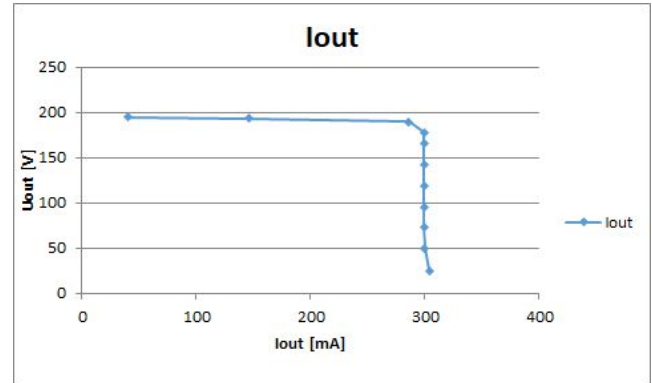


OT FIT 50/220-240/D L Typical THD Vs Load

Typical Iout v Rset LEDset2 mode



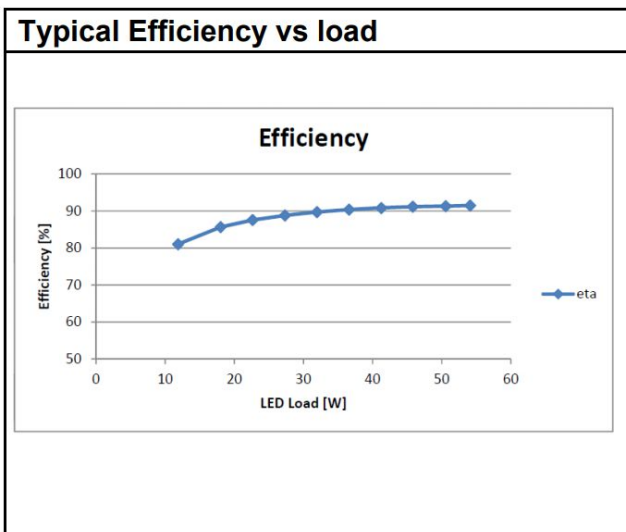
Typical Iout v Rset LEDset2 mode



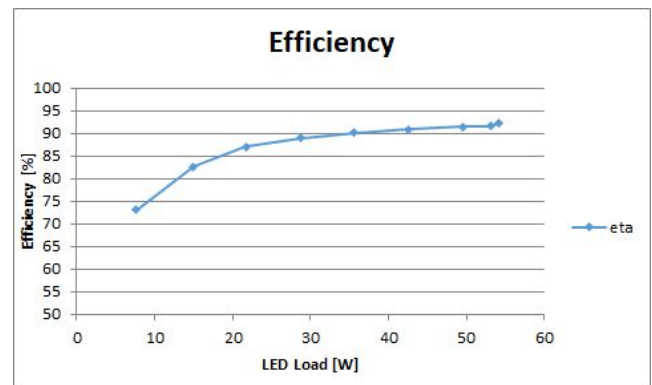
OT FIT 50/220-240/250 D L Typical Iout vs Rset (LEDset2 mode)

OT FIT 50/220-240/D L Typical Iout vs Rset (LEDset2 mode)

Typical Efficiency v Load 230 V 50 Hz



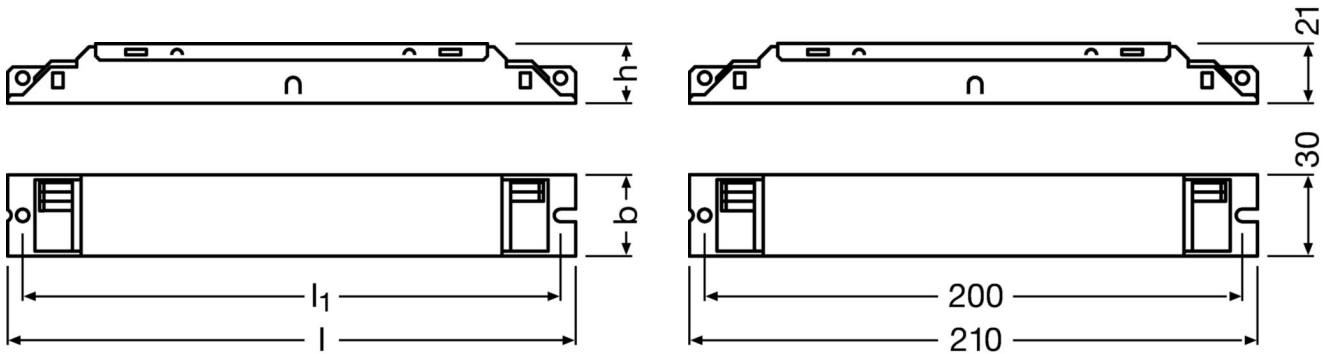
Typical Efficiency v Load 230 V 50 Hz



OT FIT 50/220-240/250 D L Typical Efficiency vs. Load (230 V / 50 Hz)

OT FIT 50/220-240/D L Typical Efficiency vs. Load (230 V / 50 Hz)

Dimensions & weight



Length	210.0 mm
Width	30.0 mm
Height	21.0 mm
Mounting hole spacing, length	200.0 mm
Mounting hole spacing, width	not relevant mm
Cable cross-section, input side	0.5...1.5 mm ^{2 1)}
Cable cross-section, output side	0.5...1.5 mm ^{2 1)}
Wire preparation length, input side	8.5...9.5 mm
Wire preparation length, output side	8.5...9.5 mm
Product weight	125.00 g

1) Solid or flexible leads

Colors & materials

Casing material	Metal
Product color	White

Temperatures & operating conditions

Ambient temperature range	-15...+50 °C
Maximum temperature at tc test point	75 °C ¹⁾
Max.housing temperature in case of fault	110 °C
Temperature range at storage	-25...85 °C
Permitted rel. humidity during operation	5...85 % ²⁾

1) Maximum at the Tc-point

2) Maximum 56 days/year at 85 %

Lifespan

ECG lifetime	50000 h / 100000 h ¹⁾
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1) At maximum $T_c = 75^\circ\text{C}$ / 10% failure rate / At $T_c = 65^\circ\text{C}$ / 10% failure rate

Capabilities

Dimmable	No
Constant lumen function	No
Max. cable length to lamp/LED module	2.0 m ¹⁾
Suitable for fixtures with prot. class	I
Suitable for emergency lighting	Yes
Type of connection, input side	Push terminal
Type of connection, output side	Push terminal
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	not relevant
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Certificates & standards

Approval marks – approval	CE / EL / VDE-ENEC / VDE-EMC / EAC / CCC / BIS / RCM
Standards	Acc. to EN 61347-1 / Acc. to EN 61347-2-13 / Acc. to EN 55015 / Acc. to EN 61547 / Acc. to EN 61000-3-2 / Acc. to EN 62384 / Acc. to EN 62386
Type of protection	IP20
Protection class	1

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	17-06-2024
Primary Article Identifier	4052899222571
Declaration No. in SCIP database	In work

Download Data

File		
Certificates	PDF	▶ INOTEC Certificate OT FIT 50/250 D L
Certificates	PDF	▶ INOTEC Certificate OT FIT 50/250 D L appendix
Certificates	PDF	▶ OT ENEC 40038085 111023
CAD data 3-dim	Compressed	▶ OT FIT D L CAD3PDF 261119
Brochures	PDF	▶ Poster OPTOTRONIC LED drivers (EN)
CAD data 2-dim	Compressed	▶ OT FIT D L CAD2PDF 261119
CAD data	Compressed	▶ OT FIT D L IGS 261119
CAD data	Compressed	▶ OT FIT D L STEP 261119
Mandatory Publications	PDF	▶ OT FIT D L CE 4292770 04 160523
Mandatory Publications	PDF	▶ OT FIT D L UK DoC 4289774 01 140222

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
4052899222571	OT FIT 50/220-240/250 D L	Shipping carton box 20 Pieces	234 x 161 x 101 mm	3.81 dm ³	165.00 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.