

## 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  $T_c = 65^\circ\text{C}$ , 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
Nominal output current	250 mA <sup>1)</sup>
Nominal output power	13.5...54 W <sup>2)</sup>
Nominal output voltage	54...216 V
Maximum output power	54 W
Mains frequency	0/50/60 Hz
Input voltage AC	198...264 V <sup>3)</sup>
Input voltage DC	176...276 V
Default output current	250 mA
Device power loss	5.0 W <sup>4)</sup>
Efficiency in full-load	90 % <sup>5)</sup>
Inrush current	not relevant
Max. ECG no. on circuit breaker 10 A (B)	35
Max. ECG no. on circuit breaker 16 A (B)	56
Output current tolerance	±10 %
Output PSTLM	≤1
Output ripple current (100 Hz)	< 10 % <sup>6)</sup>
Output SVM	≤0.4
Power factor λ	> 0.95 <sup>7)</sup>
Protective conductor current	<2.0 mA
Surge capability (L-N)	1 kV
Surge capability (L/N-Ground)	2 kV
Total harmonic distortion	< 20 %
U-OUT (working voltage)	< 250 V
Current set	Fixed current

1) ±10%

2) Partial load 14...54 W

3) Permitted voltage range

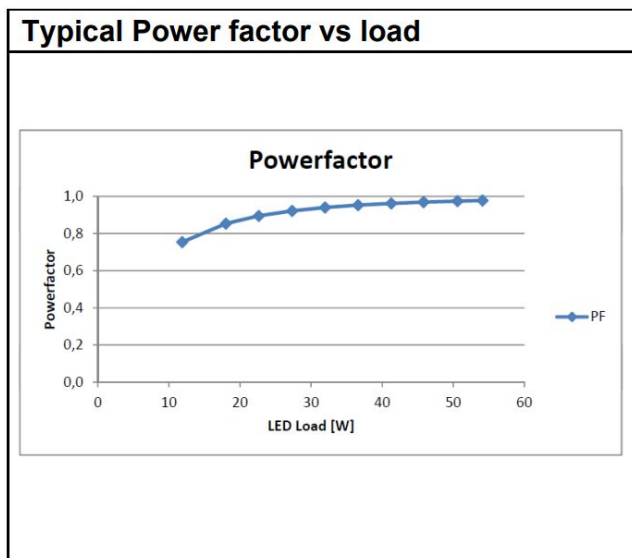
4) Maximum

5) at 230 V, 50 Hz

6) up to 5% @ 120V

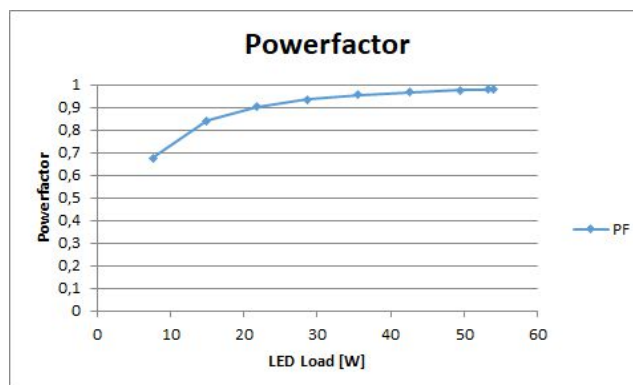
7) Full load at 230 V

## Typical Power Factor v Load



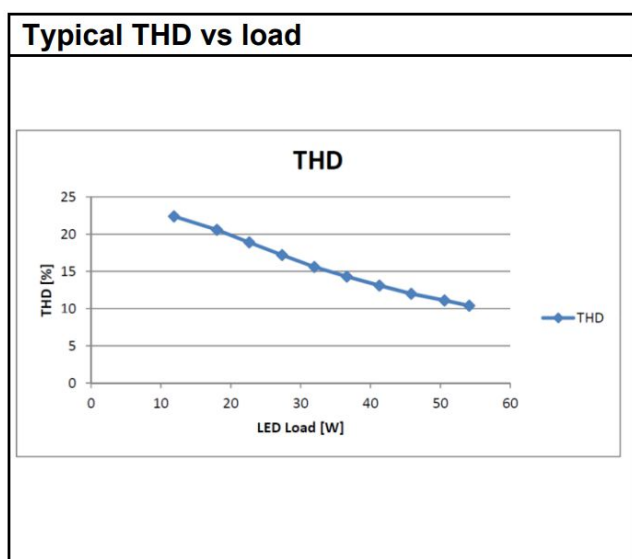
OT FIT 50/220-240/250 D L Typical Power Factor vs. Load

## Typical Power Factor v Load



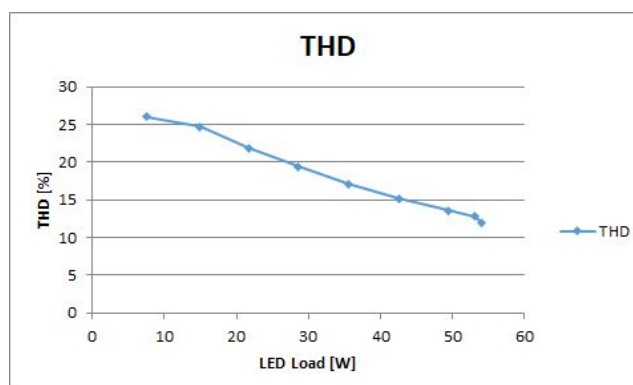
OT FIT 50/220-240/D L Typical Power Factor vs. Load

## Typical THD v Load



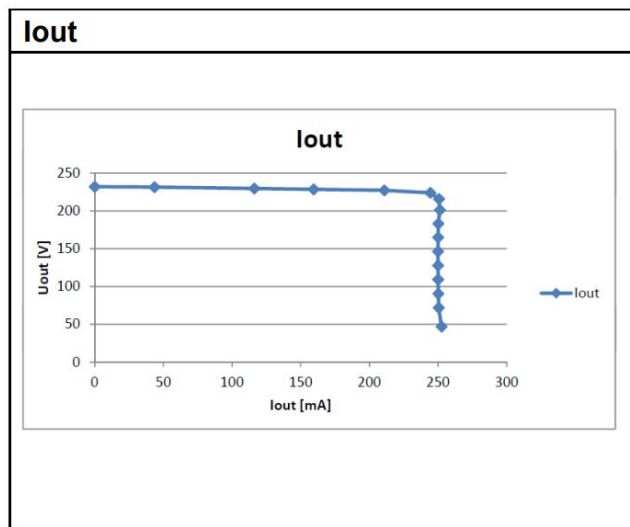
OT FIT 50/220-240/250 D L Typical THD Vs Load

## Typical THD v Load



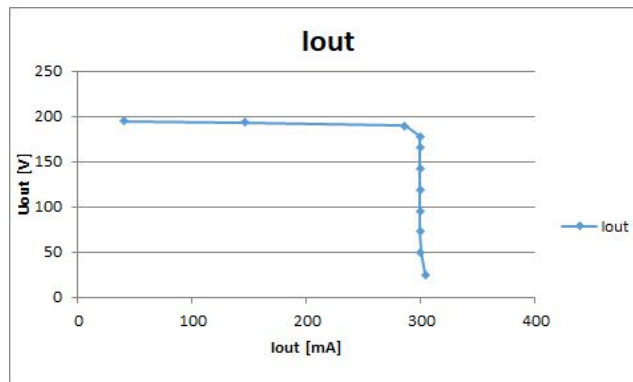
OT FIT 50/220-240/D L Typical THD Vs Load

Typical Iout v Rset LEDset2 mode



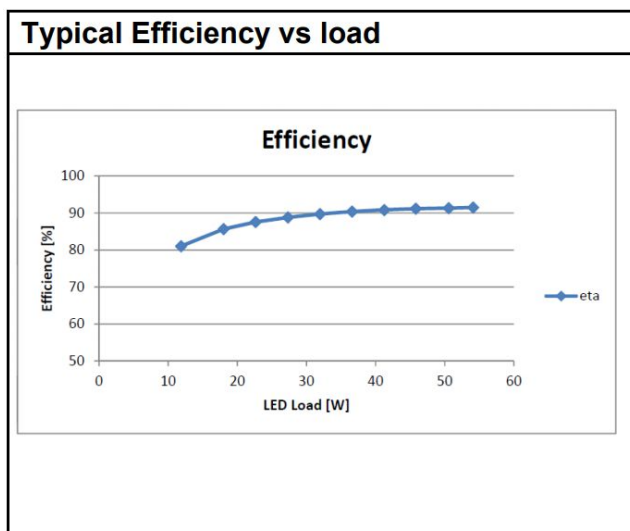
OT FIT 50/220-240/250 D L Typical Iout vs Rset (LEDset2 mode)

Typical Iout v Rset LEDset2 mode



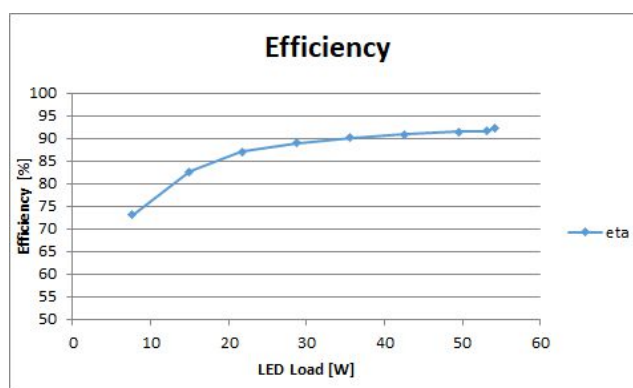
OT FIT 50/220-240/D L Typical Iout vs Rset (LEDset2 mode)

Typical Efficiency v Load 230 V 50 Hz



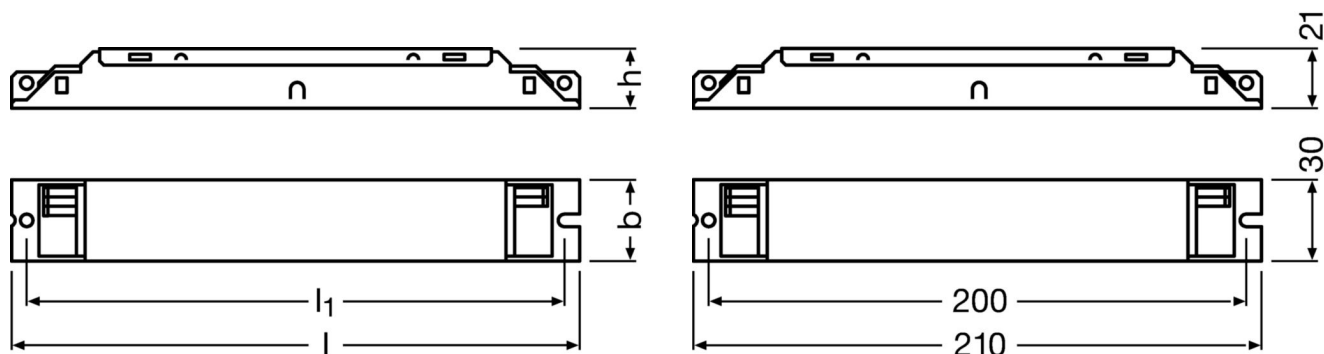
OT FIT 50/220-240/250 D L Typical Efficiency vs. Load (230 V / 50 Hz)

Typical Efficiency v 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
Height	21.0 mm
Width	30.0 mm
Product weight	125.00 g
Cable cross-section, input side	0.5...1.5 mm <sup>2</sup> <sup>1)</sup>
Cable cross-section, output side	0.5...1.5 mm <sup>2</sup> <sup>1)</sup>
Cable/wire length, output side	2000 mm
Wire preparation length, input side	8.5...9.5 mm
Wire preparation length, output side	8.5...9.5 mm
Mounting hole spacing, length	200.0 mm
Mounting hole spacing, width	not relevant mm

1) Solid or flexible leads

## Colors & materials

Casing material	Metal
Product color	White

## Temperatures & operating conditions

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

1) Maximum at the Tc-point

2) Maximum 56 days/year at 85 %

### Lifespan

ECG lifetime	50000 h / 100000 h <sup>1)</sup>
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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
Max. cable length to lamp/LED module	2.0 m <sup>1)</sup>
Overload protection	Automatic reversible
Overheating protection	Automatic reversible
Suitable for emergency lighting	Yes
Suitable for fixtures with prot. class	I
Type of connection, input side	Push terminal
Type of connection, output side	Push terminal
Constant lumen function	No
Intended for no-load operation	No
No-load proof	Yes
Number of channels	1
Short-circuit protection	Automatic reversible

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

## Programming

Programming device	not relevant
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## Certificates & standards

Type of protection	IP20
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

## Logistical data

Commodity code	85044083900
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## Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)	
Declaration No. in SCIP database	In work
Date of Declaration	17-06-2024
Primary Article Identifier	4052899222571



### 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.

### 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

### 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 <sup>3</sup>	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.