

OT FIT 18/220...240/350 D CS L

OPTOTRONIC FIT D CS L (Dip Switch) EL | Linear / Area Constant Current – Non dimmable



Product family features

- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Supply voltage: 220...240 V
- Line voltage: 198...264 V
- DC detection (0 Hz, pulsating DC), on/off switchable
- Wide output current range
- Lifetime: up to 100,000 h (temperature at $T_c = 65\text{ °C}$, max. 10 % failure rate)
- Non-isolated drivers

Product family benefits

- Flexible current setting (DIPswitch – 6 currents)
- Higher quality of light thanks to low output ripple current
- High efficiency
- User flexibility with six different output currents from one driver
- Safety requirement due to overload, overtemperature, short-circuit protection
- Long reliable life at maximum permitted temperatures
- Enable slim fixture design with flat 21 mm height metal housing

Areas of application

- Linear and area lighting
- Office, industrial and shop lighting
- Suitable for luminaires of protection class I
- 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

Technical data

Electrical data

Nominal input voltage	220...240 V
Mains frequency	0/50/60 Hz
Input voltage AC	198...264 V
Input voltage DC	176...276 V
Current set	DipSwitch
Total harmonic distortion	< 15 %
Power factor λ	0.78C...0.97
Efficiency in full-load	86 % ¹⁾
Device power loss	3.08 W ²⁾
Inrush current	7.4 A ³⁾
Max. ECG no. on circuit breaker 10 A (B)	40
Max. ECG no. on circuit breaker 16 A (B)	64
Surge capability (L/N-Ground)	2 kV ⁴⁾
Surge capability (L-N)	1 kV
Nominal output voltage	32...54 V
U-OUT (working voltage)	250 V
Nominal output current	100 mA / 150 mA / 200 mA / 250 mA / 300 mA / 350 mA ⁵⁾
Output current tolerance	±5 %
Output ripple current (100 Hz)	< 3 %
Output PSTLM	≤1
Output SVM	≤0.4
Nominal output power	5...18.9 W ⁶⁾
Maximum output power	18.9 W
Galvanic isolation	Non isolated

1) at 230 V, 50 Hz

2) Full load, 230 Vac, 50Hz / 60Hz

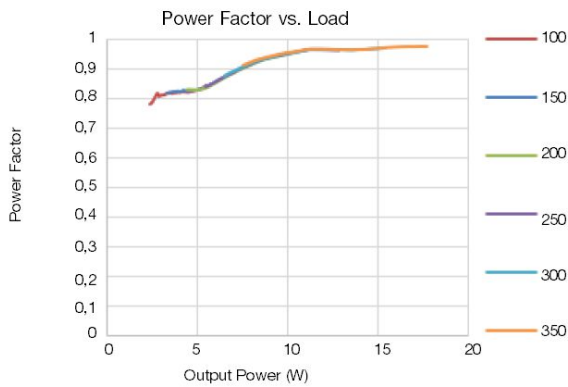
3) At 258 μ s

4) L/N – PE acc to EN 61547 Cluase 5.7

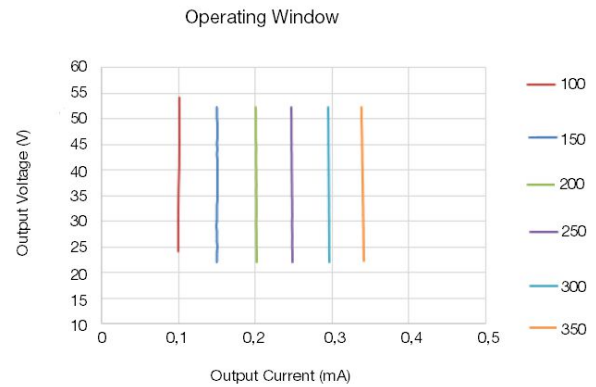
5) Default current 350 mA

6) Partial load

Typical Power Factor v Load



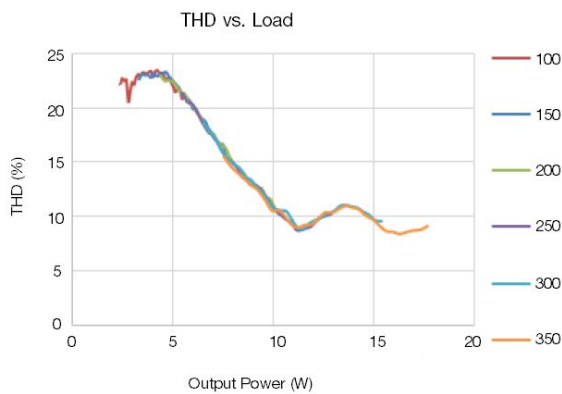
Operating Window



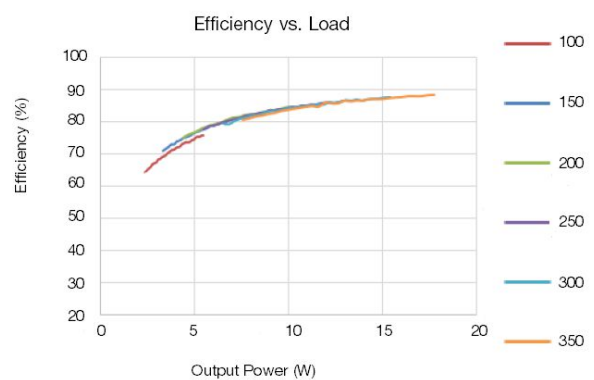
OT FIT 18 220-240 350 D CS L Typical Power Factor vs Load

OT FIT 18 220-240 350 D CS L Operating Window

Typical THD v Load



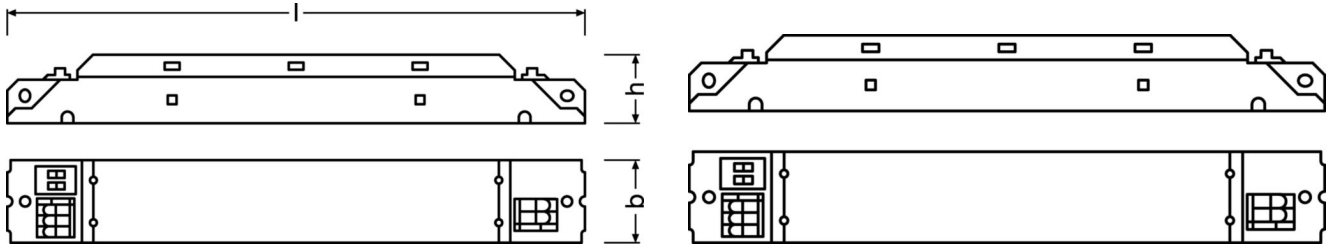
Typical Efficiency v Load 230 V 50 Hz



OT FIT 18 220-240 350 D CS L Typical THD vs Load

OT FIT 18 220-240 350 D CS L Typical Efficiency vs Load

Dimensions & weight



Length	210.0 mm
Width	30.0 mm
Height	21.0 mm
Mounting hole spacing, length	200.0 mm
Cable cross-section, input side	0.5...1.5 mm ²
Wire preparation length, input side	8.0...9.0 mm
Wire preparation length, output side	8.0...9.0 mm
Product weight	116.00 g

Colors & materials

Casing material	Metal
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Temperatures & operating conditions

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

1) Non-condensing

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 maximum $T_c = 65^\circ\text{C}$ / 10% failure rate

Capabilities

Programming interface	Dipswitch
Dimmable	No
Max. cable length to lamp/LED module	2.0 m ¹⁾
Suitable for fixtures with prot. class	I
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	DIPswitch
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Certificates & standards

Approval marks – approval	CE / ENEC / CCC / RCM / UKCA / BIS / EAC
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 / Acc. to EN 55015
Type of protection	IP20
Protection class	I

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	4062172285254
Declaration No. in SCIP database	In work

Additional product information

- Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.
- Indication that the lamp control gear relies upon the luminaire enclosure for protection against accidental contact with live parts.
- The control gear is not intended for use in luminaires for high-risk task area lighting.
- Input overvoltage protection: the driver withstands an input voltage up to 305 Vac for a maximum of two hours, shut down of the output load might occur in case the supply voltage exceeds the declared input voltage range.
- Input surge protection: the unit is protected against surge up to 1kV between L-N (symmetric surge) and 2 kV L/N-PE (asymmetric surge). During an asymmetric surge, the voltage between the LED outputs and PE is equal or lower than the applied surge voltage.
- Output short circuit / undervoltage protection: shut down of the load happens if V_{out} is out of the operating range.
- Output over voltage protection: shut down of the load might happen if V_{out} exceeds the output maximum voltage (depending on current).
Step 1: output current reduction to decrease V_{out} ;
Step 2: shut down of the load at longer or extreme overvoltage.
- No load protection: the driver automatically adjusts the output voltage to the maximum output voltage which is auto defined by output current setting if no load is connected. Auto-reversible with the correct load connected;
- Over temperature protection: the unit is protected against temporary overheating by automatic reduction of the output current when $t_c > 75^\circ\text{C}$.
- Switch over time: lower than 0.5 s, from AC to DC mains and viceversa.
- Output power hold time: > 4 ms, in case of mains dips.
- Emergency lighting: this LED power supply is suitable for emergency lighting fixtures acc. to EN 60598-2-22; according to EN 61347-2-13 Annex J.

Download Data

File		
Certificates	PDF	▶ OT FIT 18 D CS L CCC 2022171002004624 102122
Certificates	PDF	▶ OT FIT D CS L ENEC 35-124598 102122
Mandatory Publications	PDF	▶ OT FIT D CS L CE 4424929 100822
Mandatory Publications	PDF	▶ OT FIT D CS L UK DoC 4308625 100822
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
4062172285254	OT FIT 18/220...240/350 D CS L	Shipping carton box 20 Pieces	237 x 162 x 130 mm	4.99 dm ³	2629.00 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.