

# OT FIT 20/220-240/500 CS T-B

OPTOTRONIC FIT CS Track | Compact constant current LED driver - Non dimmable



#### Product family features

Supply voltage: 220...240 VLine frequency: 50 Hz | 60 HzLine voltage: 198...264 V

- Lifetime: up to 50,000 h (temperature at  $T_c = 75$  °C, max. 10 % failure rate)

### Product family benefits

- High quality of light thanks to low output ripple current
- High flexibility due to four different output currents per type
- Short housing for minimum distance between spotlights
- SELV system

#### Areas of application

- Track lights
- Shops and hospitality: retail, hotels, restaurants

#### Technical data

### **Electrical data**

Nominal input voltage       220240 V         Input voltage AC       198264 V         Total harmonic distortion       < 10 % ¹)         Power factor λ       0.93 C0.98 ²)         Efficiency in full-load       85 % ³)         Device power loss       3.7 W ⁴)         Protective conductor current       < 0.7 mA         Inrush current       ≤ 16 A ⁵)         Max. ECG no. on circuit breaker 10 A (B)       30         Max. ECG no. on circuit breaker 16 A (B)       50         Surge capability (L-N-Ground)       2 kV         Surge capability (L-N)       1 kV         Nominal output voltage       2542 V         U-OUT (working voltage)       60 V         Nominal output current       250 / 350 / 450 / 500 mA         Output current tolerance       ±7.5 %         Default output current       500 mA         Output PSTLM       ≤1         Output SVM       ≤0.4         Nominal output power       6.321 W		222 2424
Input voltage AC         198264 V           Total harmonic distortion         < 10 % ¹¹           Power factor λ         0.93C0.98 ²⟩           Efficiency in full-load         85 % ³⟩           Device power loss         3.7 W ⁴⟩           Protective conductor current         <0.7 mA           Inrush current         ≤ 16 A ⁵⟩           Max. ECG no. on circuit breaker 10 A (B)         30           Max. ECG no. on circuit breaker 16 A (B)         50           Surge capability (L/N-Ground)         2 kV           Surge capability (L-N)         1 kV           Nominal output voltage         2542 V           U-OUT (working voltage)         60 V           Nominal output current         250 / 350 / 450 / 500 mA           Output current tolerance         ±7.5 %           Default output current         500 mA           Output ripple current (100 Hz)         < 5 % ⁶⟩           Output SVM         ≤0.4	Nominal input voltage	220240 V
Total harmonic distortion         < 10 % ¹)           Power factor λ         0.93C0.98 ²)           Efficiency in full-load         85 % ³)           Device power loss         3.7 W ⁴)           Protective conductor current         < 0.7 mA           Inrush current         ≤ 16 A ⁵)           Max. ECG no. on circuit breaker 10 A (B)         30           Max. ECG no. on circuit breaker 16 A (B)         50           Surge capability (L/N-Ground)         2 kV           Surge capability (L-N)         1 kV           Nominal output voltage         2542 V           U-OUT (working voltage)         60 V           Nominal output current         250 / 350 / 450 / 500 mA           Output current tolerance         ±7.5 %           Default output current         500 mA           Output ripple current (100 Hz)         < 5 % ⁶)           Output SVM         ≤0.4	Mains frequency	50/60 Hz
Power factor λ         0.93C0.98 ²)           Efficiency in full-load         85 % ³)           Device power loss         3.7 W ⁴)           Protective conductor current         <0.7 mA           Inrush current         ≤ 16 A ⁵)           Max. ECG no. on circuit breaker 10 A (B)         30           Max. ECG no. on circuit breaker 16 A (B)         50           Surge capability (L/N-Ground)         2 kV           Surge capability (L-N)         1 kV           Nominal output voltage         2542 V           U-OUT (working voltage)         60 V           Nominal output current         250 / 350 / 450 / 500 mA           Output current tolerance         ±7.5 %           Default output current         500 mA           Output ripple current (100 Hz)         < 5 % ⁶)           Output SVM         ≤0.4	Input voltage AC	198264 V
Efficiency in full-load       85 % ³)         Device power loss       3.7 W ⁴)         Protective conductor current       <0.7 mA         Inrush current       ≤ 16 A ⁵)         Max. ECG no. on circuit breaker 10 A (B)       30         Max. ECG no. on circuit breaker 16 A (B)       50         Surge capability (L/N-Ground)       2 kV         Surge capability (L-N)       1 kV         Nominal output voltage       2542 V         U-OUT (working voltage)       60 V         Nominal output current       250 / 350 / 450 / 500 mA         Output current tolerance       ±7.5 %         Default output current       500 mA         Output ripple current (100 Hz)       < 5 % ⁶)         Output SVM       ≤0.4	Total harmonic distortion	< 10 % 1)
Device power loss         3.7 W ⁴)           Protective conductor current         <0.7 mA           Inrush current         ≤ 16 A ⁵)           Max. ECG no. on circuit breaker 10 A (B)         30           Max. ECG no. on circuit breaker 16 A (B)         50           Surge capability (L/N-Ground)         2 kV           Surge capability (L-N)         1 kV           Nominal output voltage         2542 V           U-OUT (working voltage)         60 V           Nominal output current         250 / 350 / 450 / 500 mA           Output current tolerance         ±7.5 %           Default output current         500 mA           Output ripple current (100 Hz)         < 5 % ⁶)           Output PSTLM         ≤1           Output SVM         ≤0.4	Power factor λ	0.93C0.98 <sup>2)</sup>
Protective conductor current         <0.7 mA           Inrush current         ≤ 16 A <sup>5)</sup> Max. ECG no. on circuit breaker 10 A (B)         30           Max. ECG no. on circuit breaker 16 A (B)         50           Surge capability (L/N-Ground)         2 kV           Surge capability (L-N)         1 kV           Nominal output voltage         2542 V           U-OUT (working voltage)         60 V           Nominal output current         250 / 350 / 450 / 500 mA           Output current tolerance         ±7.5 %           Default output current         500 mA           Output ripple current (100 Hz)         < 5 % <sup>6)</sup> Output PSTLM         ≤1           Output SVM         ≤0.4	Efficiency in full-load	85 % <sup>3)</sup>
Inrush current         ≤ 16 A 5)           Max. ECG no. on circuit breaker 10 A (B)         30           Max. ECG no. on circuit breaker 16 A (B)         50           Surge capability (L/N-Ground)         2 kV           Surge capability (L-N)         1 kV           Nominal output voltage         2542 V           U-OUT (working voltage)         60 V           Nominal output current         250 / 350 / 450 / 500 mA           Output current tolerance         ±7.5 %           Default output current         500 mA           Output ripple current (100 Hz)         < 5 % 6)           Output PSTLM         ≤1           Output SVM         ≤0.4	Device power loss	3.7 W <sup>4)</sup>
Max. ECG no. on circuit breaker 10 A (B)       30         Max. ECG no. on circuit breaker 16 A (B)       50         Surge capability (L/N-Ground)       2 kV         Surge capability (L-N)       1 kV         Nominal output voltage       2542 V         U-OUT (working voltage)       60 V         Nominal output current       250 / 350 / 450 / 500 mA         Output current tolerance       ±7.5 %         Default output current       500 mA         Output ripple current (100 Hz)       < 5 % 6)         Output PSTLM       ≤1         Output SVM       ≤0.4	Protective conductor current	<0.7 mA
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Surge capability (L/N-Ground)         2 kV           Surge capability (L-N)         1 kV           Nominal output voltage         2542 V           U-OUT (working voltage)         60 V           Nominal output current         250 / 350 / 450 / 500 mA           Output current tolerance         ±7.5 %           Default output current         500 mA           Output ripple current (100 Hz)         < 5 % 6)           Output PSTLM         ≤1           Output SVM         ≤0.4	Max. ECG no. on circuit breaker 10 A (B)	30
Surge capability (L-N)       1 kV         Nominal output voltage       2542 V         U-OUT (working voltage)       60 V         Nominal output current       250 / 350 / 450 / 500 mA         Output current tolerance       ±7.5 %         Default output current       500 mA         Output ripple current (100 Hz)       < 5 % 6)         Output PSTLM       ≤1         Output SVM       ≤0.4	Max. ECG no. on circuit breaker 16 A (B)	50
Nominal output voltage       2542 V         U-OUT (working voltage)       60 V         Nominal output current       250 / 350 / 450 / 500 mA         Output current tolerance       ±7.5 %         Default output current       500 mA         Output ripple current (100 Hz)       < 5 % 6)         Output PSTLM       ≤1         Output SVM       ≤0.4	Surge capability (L/N-Ground)	2 kV
U-OUT (working voltage)       60 V         Nominal output current       250 / 350 / 450 / 500 mA         Output current tolerance       ±7.5 %         Default output current       500 mA         Output ripple current (100 Hz)       < 5 % 6)         Output PSTLM       ≤1         Output SVM       ≤0.4	Surge capability (L-N)	1 kV
Nominal output current         250 / 350 / 450 / 500 mA           Output current tolerance         ±7.5 %           Default output current         500 mA           Output ripple current (100 Hz)         < 5 % 6)           Output PSTLM         ≤1           Output SVM         ≤0.4	Nominal output voltage	2542 V
Output current tolerance $\pm 7.5 \%$ Default output current $500 \text{ mA}$ Output ripple current (100 Hz) $< 5 \% ^{6)}$ Output PSTLM $\leq 1$ Output SVM $\leq 0.4$	U-OUT (working voltage)	60 V
Default output current         500 mA           Output ripple current (100 Hz)         < 5 % 6)           Output PSTLM         ≤1           Output SVM         ≤0.4	Nominal output current	250 / 350 / 450 / 500 mA
Output ripple current (100 Hz)         < 5 % 6)           Output PSTLM         ≤1           Output SVM         ≤0.4	Output current tolerance	±7.5 %
Output PSTLM         ≤1           Output SVM         ≤0.4	Default output current	500 mA
Output SVM ≤0.4	Output ripple current (100 Hz)	< 5 % <sup>6)</sup>
	Output PSTLM	≤1
Nominal output power 6.321 W	Output SVM	≤0.4
	Nominal output power	6.321 W
Maximum output power 21 W	Maximum output power	21 W
Galvanic isolation primary/secondary SELV	Galvanic isolation primary/secondary	SELV
Current set DipSwitch	Current set	DipSwitch

<sup>1)</sup> Full load, 230V, 50 Hz

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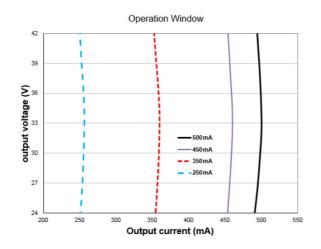
 $<sup>^{2)}</sup>$  Full load at 230 V/50 Hz

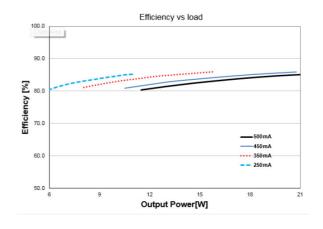
<sup>&</sup>lt;sup>3)</sup> at 230 V, 50 Hz

 $<sup>^{4)}</sup>$  At 230 V, Input power 24.7 W max.

 $<sup>^{5)}</sup>$ t = 200 µs (measured at 50 % I peak)

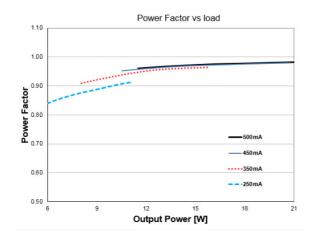
<sup>6)</sup> Ripple / average @ 100 Hz

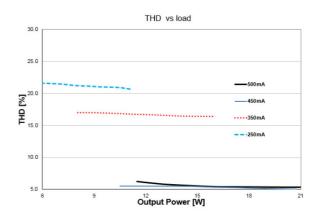




OT FIT 20 CS T Operating Window

OT FIT 20 CS T Typical Efficiency vs. Load (230 V 50 Hz)

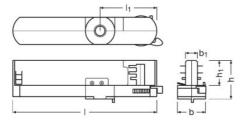




OT FIT 20 CS T Typical Power Factor vs. Load

OT FIT 20 CS T Typical THD Vs Load

## Dimensions & weight



Product weight	44.80 g
Cable cross-section, output side	0.20.75 mm <sup>2</sup>
Wire preparation length, output side	78 mm
Length	162.0 mm
Width	32.0 mm
Height	41 mm

### Colors & materials

Casing material	Plastic
Product color	BLACK RAL 9011

### Temperatures & operating conditions

Ambient temperature range	-20+35 °C
Maximum temperature at tc test point	75 °C <sup>1)</sup>
Max.housing temperature in case of fault	110 °C
Temperature range at storage	-2080 °C <sup>2)</sup>
Permitted rel. humidity during operation	585 % <sup>3)</sup>

 $<sup>^{1)}</sup>$  Measured on tc point indicated of the product label.

### Lifespan

ECG LIFETIME 50000 II /
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 $<sup>^{1)}</sup>$  At maximum T  $_{c}$  = 75°C / 10% failure rate

### Additional product data

Successor EAN	4062172379847

<sup>2)</sup> Cool down before operating

<sup>3)</sup> Non-condensing

Compatible track systems	Nuco / Ivela / EUTRAC / GLOBAL / STAFF / NORLUX

<sup>1)</sup> The compatibility may become invalid when the critical track dimension is modified by the brand owner in case of engineering change or optimization in the future

### **Capabilities**

Dimmable	No
Overheating protection	Automatic reversible
Overload protection	Yes
Short-circuit protection	Yes
No-load proof	Yes
Intended for no-load operation	No
Max. cable length to lamp/LED module	2.0 m <sup>1)</sup>
Suitable for fixtures with prot. class	II
Type of connection, input side	-
Type of connection, output side	Push terminal
Number of channels	1

 $<sup>^{1)}</sup>$  Output wires must be routed as close as possible to each other

### **Programming**

#### Certificates & standards

Approval marks – approval	CE / ENEC / EAC / CQC / RCM 1)
Standards	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to CISPR 15/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547
Type of protection	IP20
Protection class	П

 $<sup>^{1)}</sup>$  In preparation

### Logistical data

Commodity code	85044083900

#### **Environmental information**

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh)	
Date of Declaration	21-11-2023
Primary Article Identifier	4052899617230
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	c06d8145-d1e7-4f76-a928-c70eae2705bb

#### Download Data

	File
太	User instruction OPTOTRONIC LED Power Supply
<b>大</b>	Certificates OT FIT CS T ENEC 35 112153 180423
<b>大</b>	Declarations of conformity OT FIT CS T CE 4177698 220322
太	Declarations of conformity OT FIT CS T UK DoC 4281105 220322
<u></u>	CAD data OT FIT 20 30 40 CS T STEP 210521

#### 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
4052899617230	OT FIT 20/220-240/500 CS T-B	Shipping carton box 20	425 mm x 241 mm x 141 mm	14.44 dm³	1443.00 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.

#### **Accessories Optional**

Product description Accessory name Accessory	ssory code
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OT FIT 20/220-240/500 CS T-B	Track Joint	<b>4</b> 062172228183
OT FIT 20/220-240/500 CS T-B	BLACK RING	4062172138567

### Disclaimer

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.