

OT FIT 30/220...240/700 CS

OPTOTRONIC FIT CS | Compact Constant Current LED Drivers – Non dimmable



Areas of application

- Suitable for downlights, spotlights and LED panels
- Suitable for luminaires of protection classes I and II

Product family benefits

- High quality of light thanks to low output ripple current
- High flexibility due to four different output currents
- Small housing for flexible luminaire designs
- High efficiency



Product datasheet

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: to EN 55015
- Line harmonics according to EN 61000-3-2
- Immunity according to EN 61547
- Lifetime: up to 50.000 h (temperature at $T_c = 70^\circ\text{C}$, max. 10 % failure rate)
- Cable clamp kit for independent mounting

Technical data

Electrical data

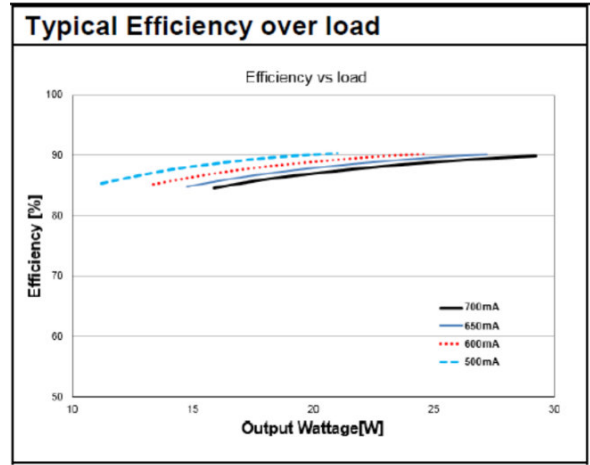
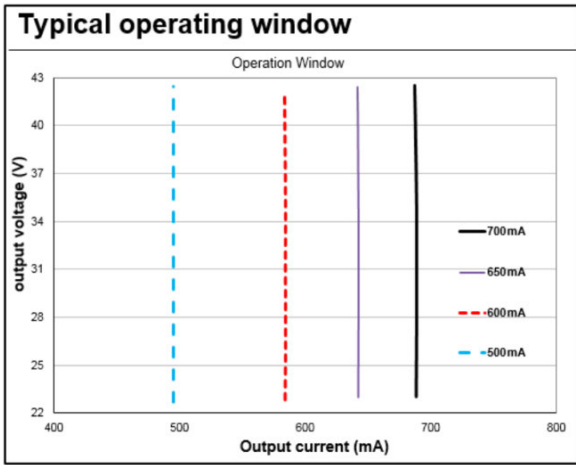
Nominal input voltage	220...240 V
Mains frequency	50/60 Hz
Input voltage AC	198...264 V
Total harmonic distortion	< 10 % ¹⁾
Power factor λ	0.98
ECG efficiency	89 % ²⁾
Device power loss	3.5 W ³⁾
Protective conductor current	<0.7 mA
Inrush current	< 16 A ⁴⁾
Max. ECG no. on circuit breaker 10 A (B)	16
Max. ECG no. on circuit breaker 16 A (B)	25
Max. ECG no. on circuit breaker 25 A (B)	-
Surge capability (L/N-Ground)	2 kV
Surge capability (L-N)	1 kV
Nominal output voltage	23...42 V
U-OUT (working voltage)	60 V
Nominal output current	500 / 600 / 700 / 850 mA
Output current tolerance	±7.5 %
Output ripple current (100 Hz)	< 5 %
Nominal output power	11.5...29.4 W
Galvanic isolation	SELV
Current set	DipSwitch

¹⁾ At full load, 230 V, 50 Hz / see graphs

²⁾ At full load and 230 V / At 50 Hz

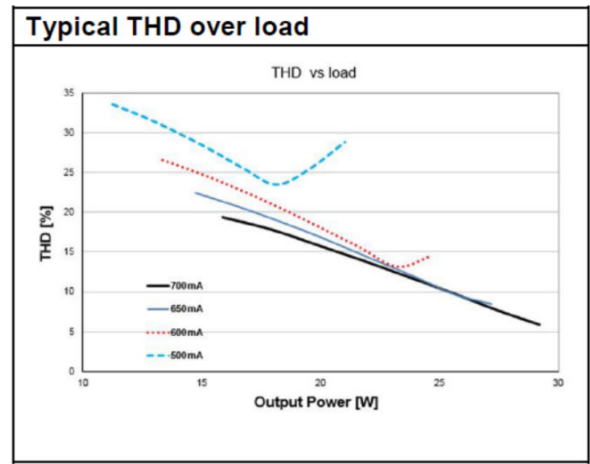
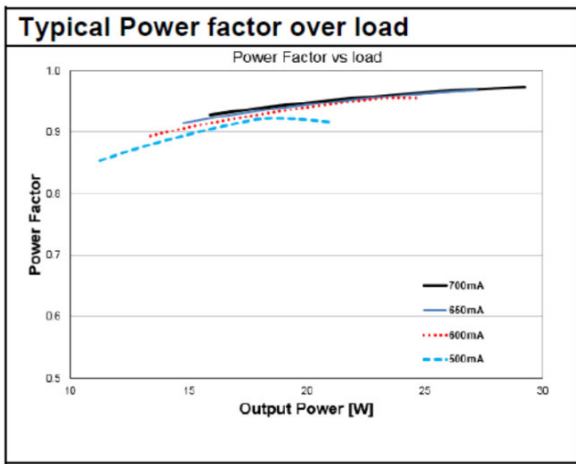
³⁾ At 230 V, Input power 34 W max.

⁴⁾ $t_{width} = 100 \mu s$ (measured at 50 % I_{peak})



Operating Window

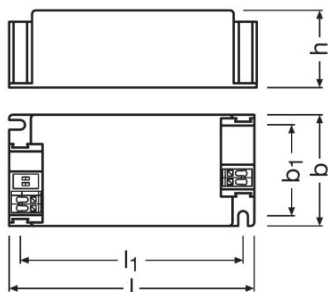
Typical Efficiency v Load 230 V 50 Hz



Typical Power Factor v Load

Typical THD v Load

Dimensions & weight



Mounting hole spacing, length	88.0 mm
Mounting hole spacing, width	34.0 mm
Product weight	90.00 g
Cable cross-section, input side	0.5...1.5 mm ²
Cable cross-section, output side	0.5...1.5 mm ²
Wire preparation length, input side	7...8 mm
Wire preparation length, output side	7...8 mm
Length	97.0 mm
Width	43.0 mm
Height	29.5 mm

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
Max.housing temperature in case of fault	110 °C
Temperature range at storage	-20...80 °C
Permitted rel. humidity during operation	5...85 % ¹⁾

¹⁾ Maximum 56 days/year at 85 %

Lifespan

ECG lifetime	50000 / 30000 h ¹⁾
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¹⁾ T_c = 70°C, with max. 10% failure rate / T_c = 80°C, with max. 10% failure rate

Additional product data

Product datasheet

Encapsulated	No
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Capabilities

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

Programming

Tuner4TRONIC	No
Tuner4TRONIC Field App	No
Programming device	DIPswitch






Certificates & standards

Approval marks – approval	CCC / CE / RCM / ENEC 05
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

Logistical data

Commodity code	850440829000
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Download Data

File	
	User instruction OPTOTRONIC LED Power Supply
	User instruction OPTOTRONIC LED Power Supply
	User instruction OPTOTRONIC LED Power Supply
	Product Datasheet 730300_OT FIT 30220-240700 CS
	Certificates OT FIT 20 30 40 CS EMC 4330577 01 221019

Product datasheet

	Certificates OT FIT 20 30 40 CS ENEC 35 104727 221019
	Certificates Certificate 2196588.02 ENEC
	Certificates CCC Certificate 2018171002002233
	Certificates CCC Certificate 2018171002002234
	Declarations of conformity 489246_DoC_OT FIT CS
	Declarations of conformity OT FIT CS CE 3667905 190220
	CAD data CAD Data OT FIT 30,40220-240CS.IGS
	CAD data CAD Data OT FIT 30,40220-240CS.STEP
	CAD data PDF CAD Data OT FIT 30,40220-240CS.pdf

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899435636	OT FIT 30/220...240/700 CS	Shipping carton box 20	228 mm x 208 mm x 78 mm	3.70 dm ³	1906.00 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.

CERTIFICATE

Issued to:
Applicant:
Osram GmbH
Marcel-Breuer-Straße 6
80807 München, Germany

Licensee:
Osram GmbH
Marcel-Breuer-Straße 6
80807 München, Germany

Product : LED drivers (With cable clamp: independent type; without cable clamp: built-in type)
Trade name(s) : OSRAM
Type(s)/model(s) : OT FIT 20/220-240/500 CS, OT FIT 30/220-240/600 CS,
OT FIT 30/220-240/700 CS and OT FIT 40/220-240/1A0 CS

The product and any acceptable variation thereto is specified in the Annex to this certificate and the documents therein referred to.

DEKRA hereby declares that the above-mentioned product has been certified on the basis of:

- **a type test according to the standard EN 61347-1:2015, EN 61347-2-13:2014, EN 61347-2-13:2014/A1:2017, EN 62384:2006 and EN 62384:2006/A1:2009.**
- an inspection of the production location according to CENELEC Operational Document CIG 021
- a certification agreement with the number 2196588

DEKRA hereby grants the right to use the ENEC certification mark.

The ENEC certification mark may be applied to the product as specified in this certificate for the duration of the ENEC certification agreement and under the conditions of the ENEC certification agreement.

This certificate is issued on 26 June 2018 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 35-104727

DEKRA Certification B.V.



drs. G.J. Zoetbrood
Managing Director



Rosa Zhou
Certification Manager

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DUTCH ACCREDITATION
COUNCIL



SPECIFICATION OF THE CERTIFIED PRODUCT**Product data**

Product	: LED drivers (With cable clamp: independent type; without cable clamp: built-in type)
Trade name(s)	: OSRAM
Type(s)/model(s)	: OT FIT 20/220-240/500 CS, OT FIT 30/220-240/600 CS, OT FIT 30/220-240/700 CS and OT FIT 40/220-240/1A0 CS
Rated input voltage	: 220-240 V~
Rated frequency	: 50/60 Hz
Class of insulation	: Class II (For independent type)
Degree of protection	: IP20 (For independent type)
Additional information	: SELV; Safety isolating non-inherently shorted circuit proof; 110 °C thermal protection

Product data – type OT FIT 20/220-240/500 CS

Rated input current	: Output 1: 0,08 A; Output 2: 0,10 A; Output 3: 0,11 A; Output 4: 0,13 A
Output current	: Output 1: 250 mA; Output 2: 350 mA; Output 3: 450 mA; Output 4: 500 mA
Output voltage	: 25-42 Vdc, max. 60 Vdc
Max. output watt	: Output 1: 11 W; Output 2: 15 W; Output 3: 19 W; Output 4: 21 W
Ambient temperature (ta)	: 50 °C
Max. case temperature (tc)	: 80 °C
Power factor	: Output 1: 0,95; Output 2, Output 3, Output 4: 0,98

Product data – type OT FIT 30/220-240/600 CS

Rated input current	: 0,14 A
Output current	: 600 mA
Output voltage	: 23-42 Vdc, max. 60 Vdc
Max. output watt	: 25 W
Ambient temperature (ta)	: 50 °C
Max. case temperature (tc)	: 80 °C
Power factor	: 0,98

Product data – type OT FIT 30/220-240/700 CS

Rated input current	: Output 1: 0,12 A; Output 2: 0,14 A; Output 3: 0,15 A; Output 4: 0,16 A
Output current	: Output 1: 500 mA; Output 2: 600 mA; Output 3: 650 mA; Output 4: 700 mA
Output voltage	: 23-42 Vdc, max. 60 Vdc
Max. output watt	: Output 1: 21 W; Output 2: 25 W; Output 3: 27 W; Output 4: 30 W
Ambient temperature (ta)	: 50 °C
Max. case temperature (tc)	: 80 °C
Power factor	: Output 1: 0,95; Output 2, Output 3, Output 4: 0,98

Product data – type OT FIT 40/220-240/1A0 CS

Rated input current	: Output 1: 0,19 A; Output 2: 0,21 A; Output 3: 0,22 A; Output 4: 0,24 A
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Output current	: Output 1: 800 mA; Output 2: 900 mA; Output 3: 950 mA; Output 4: 1050 mA
Output voltage range	: Output 1, Output 2, Output 3: 25-42 Vdc; Output 4: 30-42 Vdc
Max. open load voltage	: 60 Vdc
Max. output watt	: Output 1: 34 W; Output 2: 38 W; Output 3: 40 W; Output 4: 44 W
Ambient temperature (ta)	: Output 1, Output 2, Output 3: 50 °C; Output 4: 45 °C
Max. case temperature (tc)	: 80 °C
Power factor	: 0,98

TESTS

Test requirements

EN 61347-1:2015
EN 61347-2-13:2014
EN 61347-2-13:2014/A1:2017
EN 62384:2006
EN 62384:2006/A1:2009

Test result

The test results are laid down in DEKRA test file 434132500.

Additional information

The products also consider EN 60598-1:2015.

This certificate replaces certificate No. 35-102577 which we herewith declare invalid.

The list of components is laid down at test report 4341325A.50.

Conclusion

The examination proved that all requirements were met.

Factory locations

Sichuan Changhong Component Technology Co. Ltd.
Shiqiaopu, High-Tech Park
621000 Mianyang City, Sichuan Province, China

Osram EOOD
Village of Trud, Maritsa Municipality, Plovdiv Region,
Koshovete Area, Quarter 225, No.879
4199 Trud, Bulgaria

Intelligent Components Technology Zhuhai Ltd. (China)
No.9, Dexiang Road, Pingsha Town
519055 Zhuhai City, Guangdong, China

ATTESTATION OF CONFORMITY



Issued to: OSRAM GmbH
Marcel-Breuer-Straße 6, 80807 München, Germany

For the product: LED Controlgear

Trade name: OSRAM

Type/Model: OT FIT 40/220-240/1A0 CS, OT FIT 30/220-240/700 CS,
OT FIT 20/220-240/500 CS

Ratings: 220-240 Vac, 50/60 Hz
OT FIT 40/220-240/1A0 CS: 30-42Vdc, 1050mA;
OT FIT 30/220-240/700 CS: 23-42Vdc, 700mA;
OT FIT 20/220-240/500 CS: 25-42Vdc, 500mA;

Manufactured by: OSRAM GmbH
Marcel-Breuer-Straße 6, 80807 München, Germany

Requirements: EN 55015:2013
EN 61547:2009
EN 61000-3-2:2014
EN 61000-3-3:2013

This Attestation is granted on account of an examination by DEKRA, the results of which are laid down in a confidential file no. 4330577.50.

This Attestation implies that the examined types are in accordance with the standards designated under the Electromagnetic Compatibility Directive (EMC) 2014/30/EU.

The examination has been carried out on one single specimen or several specimens of the product, submitted by the manufacturer. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

Guangzhou, 5 August 2016

Number: 4330577.01AOC

DEKRA Testing and Certification (Shanghai) Ltd.,
Guangzhou branch

Rosa Zhou
Certification Manager

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