IT FIT 20/220…240/500 CS

ICUTRONIC FIT CS | Compact constant current LED driver – Non dimmable

Product family features

- Supply voltage: 220…240 V
- Line frequency: 50 Hz | 60 Hz
- Line voltage: 198…254 V
- According to EN 61347-1, 61347-2-13, 62384
- RI suppression according to CISPR 15
- Line harmonics according to IEC 61000-3-2
- Immunity according to IEC 61547
- Fixed output (no dimming)

Product family benefits

- Higher quality of light thanks to low output ripple current
- High flexibility due to eight different output currents
- Small housing for flexible luminaire designs
- High efficiency
- Long lasting and high reliability
- Safety ensured by OSRAM (SELV)

Areas of application

- Suitable for downlights, spotlights and LED panels
- Suitable for indoor SELV installations
- Installation and independent mounting via Cable Clamp Kit possible

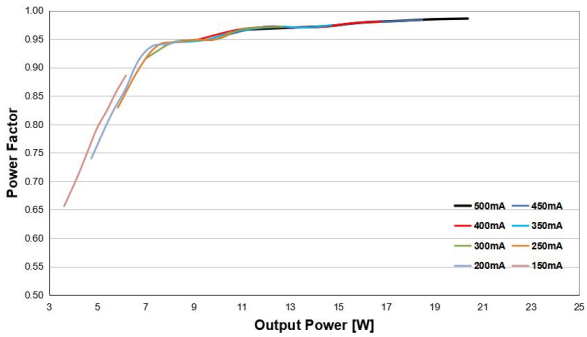
Technical data

Electrical data

Nominal input voltage	220…240 V
Mains frequency	50/60 Hz
Input voltage AC	198…264 V [1)]
Input voltage DC	not relevant
Current set	DipSwitch
Total harmonic distortion	< 10 % [2)]
Power factor λ	0.75C...0.98 [3)]
Efficiency in full-load	87 % [4)]
Device power loss	3.1 W [5)]
Protective conductor current	<0.7 mA
Inrush current	18 A [6)]
Max. ECG no. on circuit breaker 10 A (B)	21
Max. ECG no. on circuit breaker 16 A (B)	33
Surge capability (L/N-Ground)	2 kV [7)]
Surge capability (L-N)	1 kV [8)]
Nominal output voltage	23…42 V
U-OUT (working voltage)	60 V
Nominal output current	150 mA / 200 mA / 250 mA / 300 mA / 350 mA / 400 mA / 450 mA / 500 mA [9)]
Default output current	500 mA
Output current tolerance	±5 %
Output ripple current (100 Hz)	< 3 % [10)]
Output PSTLM	≤1
Output SVM	≤0.4
Nominal output power	3.45…21 W
Maximum output power	21 W
Galvanic isolation	SELV [11)]

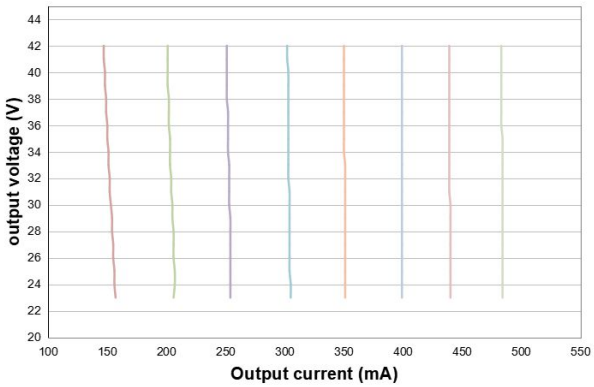
1) Permitted voltage range
2) At full load, 230 V, 50 Hz / see graphs
3) Full load at 230 V / 50 Hz
4) at 230 V, 50 Hz
5) At 230 V, Input power 24.1 W max.
6) t_{width} = 134 µs typical (measured at 50 % I peak)
7) L/N – PE acc to EN 61547 Cluase 5.7
8) L/N
9) ±7.5% / ±5%
10) Ripple average at 100 Hz
11) 3.75 kVrms. Output to mains - Touch current < 0.7 mA

Typical Power Factor v Load



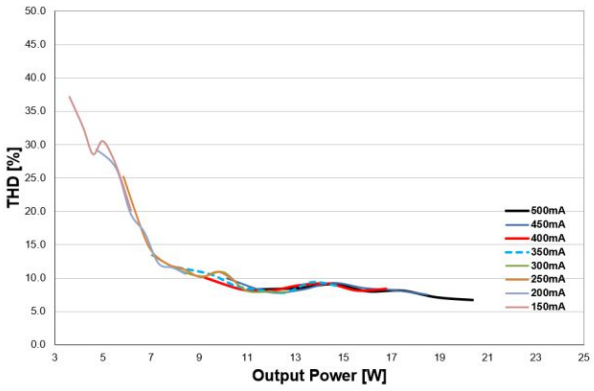
IT FIT 20 500 CS Independent Typical Power Factor vs Load

Operating Window



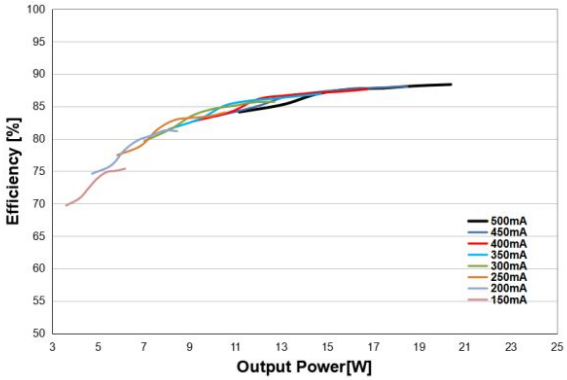
IT FIT 30 700 CS Independent Operating Window

Typical THD v Load



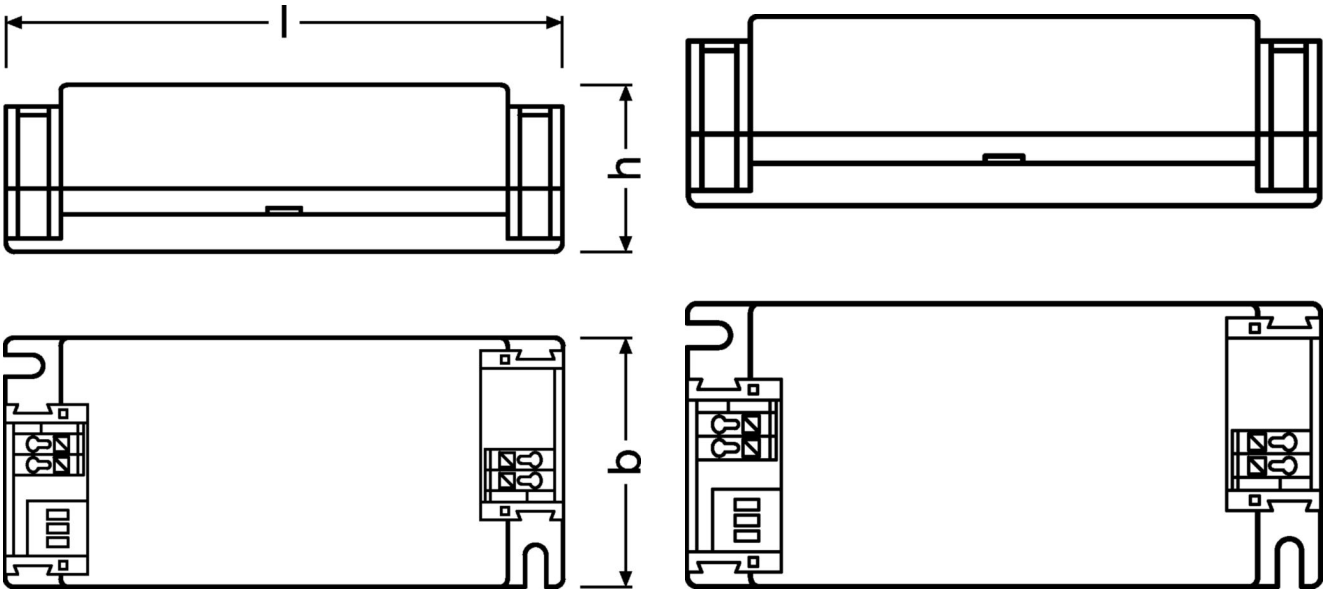
IT FIT 20 500 CS Independent Typical THD vs Load

Typical Efficiency v Load 230 V 50 Hz



IT FIT 20 500 CS Independent Typical Efficiency vs Load

Dimensions & weight



Length	97.0 mm
Width	43.0 mm
Height	29.5 mm
Mounting hole spacing, length	88.0 mm
Mounting hole spacing, width	34.0 mm
Cable cross-section, input side	0.5…1.5 mm²
Cable cross-section, output side	0.5…1.5 mm²
Wire preparation length, input side	7…8 mm
Wire preparation length, output side	7…8 mm
Product weight	92.50 g

Colors & materials

Casing material	Plastic
Product color	White

Temperatures & operating conditions

Ambient temperature range	-20…+50 °C
Maximum temperature at tc test point	70 °C [1)]
Max.housing temperature in case of fault	110 °C
Temperature range at storage	-20…80 °C [2)]
Permitted rel. humidity during operation	5…85 % [3)]

1) Measured on tc point indicated on the product label.
2) Cool down before operating
3) Maximum 56 days/year at 85 %

Lifespan

ECG lifetime	50000 h [1)]

1) At maximum T_c = 70°C / 10% failure rate

Additional product data

Encapsulated	No

Capabilities

Programming interface	Dipswitch
Dimmable	No
Max. cable length to lamp/LED module	2.0 m [1)]
Suitable for fixtures with prot. class	I / II
Type of connection, input side	Push terminal
Type of connection, output side	Push terminal
Suitable for through-wiring	Yes with optional cable clamp
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
Tuner4TRONIC	not relevant
Tuner4TRONIC Field App	not relevant
Box programming	not relevant

Certificates & standards

Approval marks – approval	CE / CCC / RCM / UKCA / ENEC 25
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	I,II

Logistical data

Commodity code	85044083900

Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh)	
Date of Declaration	24-03-2024
Primary Article Identifier	4062172326346 | 6977078991759
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.

Download Data

File		
Certificates	PDF	►IT FIT 20 30 40 CS ENEC U6 084117 0135 210423
CAD data 3-dim	Compressed	►IT FIT 220-240 CS CAD3PDF 120122
Mandatory Publications	PDF	►IT FIT CS CE 4304021 161023
Mandatory Publications	PDF	►IT FIT CS UK DoC 4304027 141222
User instruction	PDF	►IT FIT 220-240 CS UI 15116985 120122

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
4062172326346	IT FIT 20/220…240/500 CS	Shipping carton box 50 Pieces	225 x 214 x 180 mm	8.67 dm³	4930.00 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.

Accessories Optional

Product description	Accessory name	Accessory code
IT FIT 20/220…240/500 CS	OT CABLE CLAMP D-STYLE	►4052899077904
IT FIT 20/220…240/500 CS	OT CABLE CLAMP D-STYLE	►4062172345507
IT FIT 20/220…240/500 CS	OT CABLE CLAMP D-STYLE TL	►4062172349185