

IT FIT 20/220-240/500 CS I HE

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



Product family features

- Output current range 250-1050 mA
- Output voltage range 23-40V
- DIP switches
- Low LF-ripple < 3%

Product family benefits

- Higher 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 (up to 93%)
- Long lasting and high reliability
- Safety ensured by Inventronics (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⁾
Nominal input current at 230 V	0.11 A
Total harmonic distortion	< 10 % ²⁾
Power factor λ	0.78C...0.98
Efficiency in full-load	93 % ³⁾
Device power loss	1.5 W ⁴⁾
Inrush current	20 A ⁵⁾
Max. ECG no. on circuit breaker 10 A (B)	39
Max. ECG no. on circuit breaker 16 A (B)	63
Surge capability (L-N)	1 kV ⁶⁾
Surge capability (L/N-Ground)	2 kV ⁷⁾
Protective conductor current	<0.7 mA
Nominal output voltage	23...40 V
U-OUT (working voltage)	60 V
Nominal output current	250 mA / 350 mA / 450 mA / 500 mA ⁸⁾
Default output current	500 mA
Output current tolerance	± 5 %
Output ripple current (100 Hz)	< 3 % ⁹⁾
Output PSTLM	≤ 1
Output SVM	≤ 0.4
Nominal output power	5.75...20 W
Maximum output power	20 W
Galvanic isolation primary/secondary	SELV

1) Permitted voltage range

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

3) at 230 V, 50 Hz

4) At 230 V, Input power 21.5 W max.

5) $t_{width} = 120 \mu s$ typical (measured at 50 % I_{peak})

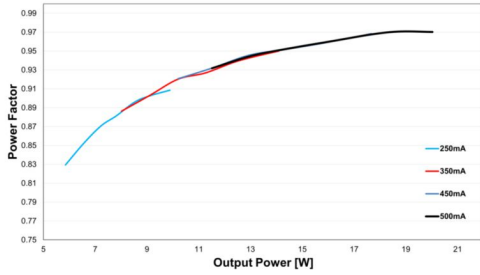
6) L/N

7) L/N – PE acc to EN 61547 Clause 5.7

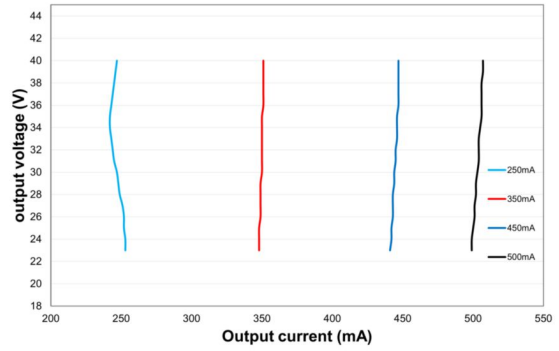
8) $\pm 5\%$

9) Ripple average at 100 Hz

Typical Power Factor v Load



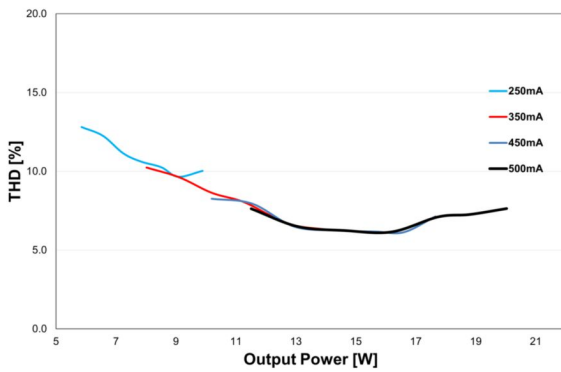
Operating Window



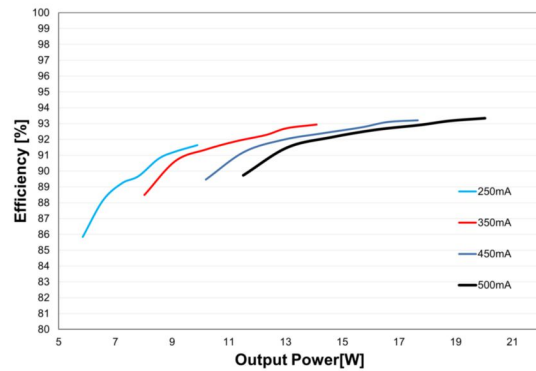
IT FIT 20 CS I HE Typical Power Factor Vs Load

IT FIT 20 CS I HE Operating window

Typical THD v Load



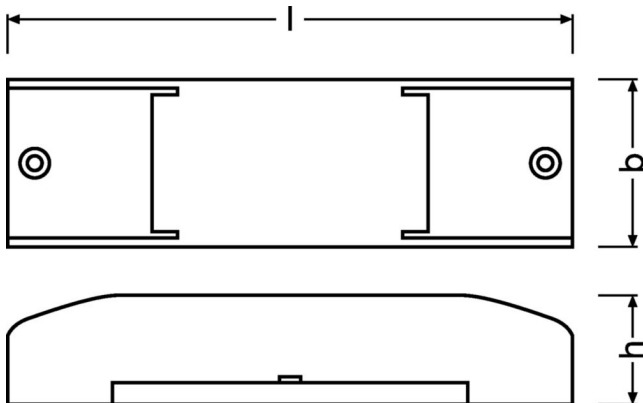
Typical Efficiency v Load 230 V 50 Hz



IT FIT 20 CS I HE Typical THD Vs Load

IT FIT 20 CS I HE Typical Efficiency vs. Load

Dimensions & weight



Product weight	112.00 g
Length	145.0 mm
Width	43.0 mm
Height	28.0 mm
Mounting hole spacing, length	108.0 mm
Mounting hole spacing, width	not relevant mm
Cable cross-section, input side	0.75...1.5 mm ²
Cable cross-section, output side	0.75...1.5 mm ²
Wire preparation length, input side	7...8 mm
Wire preparation length, output side	7...8 mm
Cable/wire length, input side	not relevant mm
Cable/wire length, output side	2000 mm

Colors & materials

Casing material	Plastic
Product color	White

Temperatures & operating conditions

Ambient temperature range	-20...+45 °C
Maximum temperature at tc test point	65 °C ¹⁾
Max.housing temperature in case of fault	110 °C
Temperature range at storage	-40...+85 °C ²⁾
Permitted rel. humidity during operation	5...95 % ³⁾

1) Measured on tc point indicated on the product label.

2) Cool down before operating

3) Non-condensing

Lifespan

ECG lifetime	50000 h / 100000 h ¹⁾
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1) At T_c = 65°C / 10% failure rate / At T_c = 55°C / 10% failure rate

Additional product data

Encapsulated	No
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Capabilities

Programming interface	Dipswitch
Dimmable	No
Constant lumen function	No
Max. cable length to lamp/LED module	2.0 m ¹⁾
Suitable for fixtures with prot. class	II
Suitable for emergency lighting	No
EL CEAG STAR compatible	No
EL DC detection selectable	No
EL EOFi – default value	No
EL EOFi – rated value	No
EL Joker Voltage	No
EL stable current	No
EL switch-over time	No
Type of connection, input side	Push terminal
Type of connection, output side	Push terminal
Suitable for through-wiring	No
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	No
Tuner4TRONIC Field App	No
Box programming	No

Certificates & standards

Approval marks – approval	CE / CCC / ENEC / VDE
Standards	IEC 61347-1 / IEC 61347-2-13 / IEC 62384 / CISPR 15 / IEC 61000-3-2 / IEC 61000-3-3 / IEC 61547
Type of protection	IP20

Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)	
Date of Declaration	31-03-2026
Primary Article Identifier	6937186110145
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	9f14c37e-8019-4e77-9ac8-9493d1812193
SCIP_ID	

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		
Addon Technical Information	Image	▶ IT FIT 20 CS I HE Output currents
Addon Technical Information	Image	▶ IT FIT 20 CS (I) HE DIP switches
CAD data 3-dim	Compressed	▶ IT FIT CS I CAD3PDF 250226
CAD data	Compressed	▶ IT FIT CS I STEP 300425
User instruction	PDF	▶ UI IT FIT CS I HE

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
6937186110145 INVENTRONICS	IT FIT 20/220-240/500 CS I HE	Shipping carton box 50 Pieces	310 x 225 x 170 mm	11.86 dm ³	119.81 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 I HE	OT CABLE CLAMP D-STYLE	▶ 6977770432086
IT FIT 20/220-240/500 CS I HE	OT CABLE CLAMP D-STYLE TL	▶ 6977770432109