

IT DIM 20/220-240/500 CS I (NEW)

ICUTRONIC DIM CS I (0-10V) | Compact constant current LED driver – Dimmable

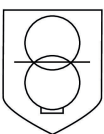


Product family features

- Dimmable via 0-10V interface
- Cable clamp housing for independent mounting
- Flexible current setting (DIPswitch – 8 currents)

Product family benefits

- 1-100% dimming
- Dim to off
- Compact housing for mounting in very tight spaces
- Flicker-free dimming
- Higher quality of light thanks to < 3% output ripple current



Areas of application

- Decorative illumination
- Downlights, flat luminaires
- Hospitality
- Living areas
- Museums, residential buildings
- Offices
- Shop lighting
- Suitable for indoor SELV installations
- Suitable for luminaires of protection class I and II

Technical data

Electrical data

Max. ECG no. on circuit breaker 10 A (B)	50
Max. ECG no. on circuit breaker 16 A (B)	80
Maximum output power	21 W ¹⁾
Nominal output current	150 mA / 200 mA / 250 mA / 300 mA / 350 mA / 400 mA / 450 mA / 500 mA ²⁾
Nominal output power	3.5...21 W
Nominal output voltage	23...42 V ³⁾
Nominal input voltage	220...240 V
Input voltage AC	198...264 V ⁴⁾
Input voltage DC	not relevant
Device power loss	3.8 W ⁵⁾
Efficiency in full-load	84 % ⁶⁾
Galvanic isolation dimming/mains	Double
Galvanic isolation dimming/output	Basic
Galvanic isolation primary/secondary	SELV
Inrush current	26 A ⁷⁾
Networked standby power	<0.50 W
Power factor λ	0.73C...0.97 ⁸⁾
Mains frequency	50/60 Hz
Surge capability (L-N)	1 kV
Surge capability (L/N-Ground)	2 kV
U-OUT (working voltage)	60 V
Output current tolerance	±5 %
Output ripple current (100 Hz)	< 3 % ⁹⁾
Protective conductor current	<0.7 mA
Total harmonic distortion	< 15 % ¹⁰⁾
Default output current	500 mA

1) Partial load 3.5...21 W

2) ±5%

3) Maximum 60 V

4) Permitted voltage range

5) Maximum

6) at 230 V, 50 Hz

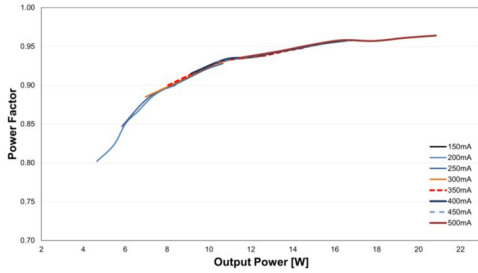
7) $t_{width} = 1.4 \mu s$ (measured at 50 % I_{peak})

8) Full load at 230 V / Minimum load at 230 V

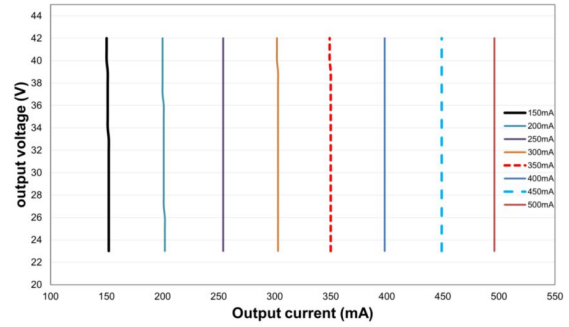
9) Ripple / average @ 100 Hz

10) Full load, 230V, 50 Hz

Typical Power Factor v Load

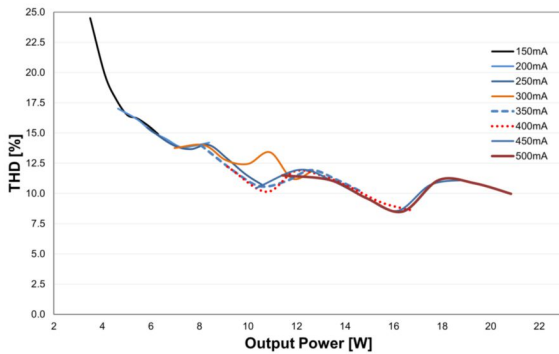


Operating Window



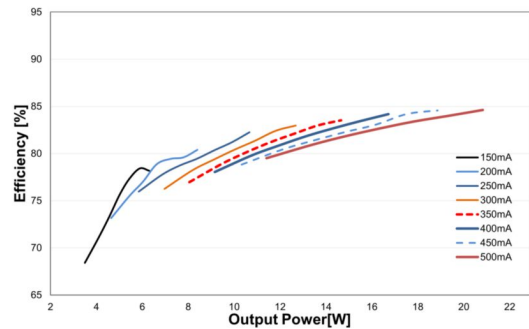
IT DIM 20 CS | Typical Power Factor vs. Load

Typical THD v Load



IT DIM 20 CS | Operating window

Typical Efficiency v Load 230 V 50 Hz



IT DIM 20 CS | Typical THD Vs Load

IT DIM 20 CS | Typical Efficiency vs. Load

Dimensions & weight



Product weight	112.50 g
Length	150.0 mm
Height	28.0 mm
Width	43.0 mm
Cable cross-section, input side	0.75...1.5 mm ² ¹⁾
Cable cross-section, output side	0.75...1.5 mm ² ¹⁾
Mounting hole spacing, length	136.0 mm
Mounting hole spacing, width	27.5 mm
Wire preparation length, input side	7...8 mm
Wire preparation length, output side	7...8 mm

1) Flexible / Solid leads

Colors & materials

Casing material	Plastic
Product color	White

Temperatures & operating conditions

Ambient temperature range	-20...+50 °C
Max.housing temperature in case of fault	110 °C
Maximum temperature at tc test point	80 °C ¹⁾
Permitted rel. humidity during operation	5...85 % ²⁾
Temperature range at storage	-40...+85 °C

1) Maximum at the Tc-point

2) Maximum 56 days/year at 85 %

Lifespan

ECG lifetime	50000 h ¹⁾
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1) At maximum $T_c = 80^\circ\text{C}$ / 10% failure rate

Additional product data

Encapsulated	No
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Capabilities

Max. cable length to lamp/LED module	2.0 m ¹⁾
Number of channels	1
Dimmable	Yes
Dimming interface	0-10V
Dimming method	Amplitude Modulation
Dimming range	1...100 %
Overload protection	Automatic reversible
Overheating protection	Automatic reversible
Short-circuit protection	Automatic reversible
Suitable for through-wiring	No
Suitable for emergency lighting	No
Suitable for fixtures with prot. class	I / II
Type of connection, input side	Push terminal
Type of connection, output side	Push terminal
Constant lumen function	No
No-load proof	Yes
Programming interface	Dipswitch

1) Output wires must be routed as close as possible to each other

Certificates & standards

Type of protection	IP20
Standards	Acc. to IEC 61347-1 / Acc. to IEC 61347-2-3 / Acc. to IEC 62384 / Acc. to IEC 61000-3-2 / Acc. to IEC 61547 / Acc. to IEC 61000-3-3
Approval marks – approval	CE / UKCA / CCC / RCM / ENEC

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	16-09-2024
Primary Article Identifier	4062172321402
Declaration No. in SCIP database	In work
SCIP_STATUS	In work
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		
Certificates	PDF	▶IT DIM CS I ENEC 35 126718 02 221023
Certificates	PDF	▶IT DIM 20 CCC 2022171002004778 040324
Certificates	PDF	▶IT DIM 20 40 CS I Safety cert. 130123
Certificates	PDF	▶IT DIM CS I NSW 28523 4 240123
CAD data 3-dim	Compressed	▶IT DIM 20 40 CS I CAD3PDF 110724
CAD data	Compressed	▶IT DIM 20 40 CS I STEP 110724
Mandatory Publications	PDF	▶IT DIM CS I CE 4453914 02 120724
Mandatory Publications	PDF	▶IT DIM CS I UK DoC 4453916 02 120724
User instruction	PDF	▶UI IT DIM CS I

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4062172321402	IT DIM 20/220-240/500 CS I	Shipping carton box 20 Pieces	225 x 170 x 139 mm	5.32 dm ³	235.00 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.