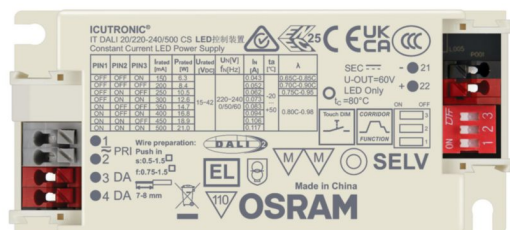


The trusted value of OSRAM Digital Systems continues with Inventronics Global – where experience meets innovation.

IT DALI 20/220-240/500 CS

ICUTRONIC DALI CS | Constant Current Compact – Dimmable



Product family features

- Supply voltage: 220...240 V
- Line voltage: 198...264 V
- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Lifetime: up to 50,000 h (temperature at max. t_c)
- Type of protection: IP20

Product family benefits

- Safety ensured by Inventronics (SELV)
- DALI-2 certified
- High flexibility due to eight different output currents
- Touch DIM application: easy to control via pushbutton or sensor
- Easy to use in corridors and restrooms because of three-level Corridor function
- Higher quality of light thanks to low output ripple current
- Small housing for flexible luminaire designs
- Housing from 80% recycled plastic



Specifications are subject to changes without notice.

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support@inventronicsglobal.com

Areas of application

- Offices
- Shops
- Hospitality
- Panels, spotlight, downlight, and other indoor LED luminaires
- Suitable for indoor SELV equivalent installations
- Suitable for luminaires of protection classes I and II
- Installation in emergency lighting systems according to IEC 61347-2-3, appendix J

Technical data

Electrical data

Nominal input voltage	220...240 V
Mains frequency	0/50/60 Hz
Input voltage AC	198...264 V ¹⁾
Input voltage DC	176...276 V
Nominal input current at 230 V	0.117 A ²⁾
Total harmonic distortion	< 10 % ³⁾
Power factor λ	0.65C...0.98
Efficiency in full-load	87 % ⁴⁾
Device power loss	3.0 W ⁵⁾
Networked standby power	<0.50 W ⁴⁾
Inrush current	20 A ⁶⁾
Max. ECG no. on circuit breaker 10 A (B)	34
Max. ECG no. on circuit breaker 16 A (B)	55
Surge capability (L-N)	1 kV
Surge capability (L/N-Ground)	2 kV
Protective conductor current	<0.7 mA
Nominal output voltage	15...42 V ⁷⁾
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
Default output current	500 mA
Output current tolerance	±5 %
Output ripple current (100 Hz)	< 5 % ⁸⁾
Output PSTLM	≤1
Output SVM	≤0.4
Nominal output power	2.3...21 W
Maximum output power	21 W
Galvanic isolation primary/secondary	SELV
Galvanic isolation DALI/mains	Basic
Galvanic isolation DALI/output	SELV

1) Permitted voltage range

2) At full load, steady operation

3) At full load, 220...240 V, 50 Hz / see graphs

4) at 230 V, 50 Hz

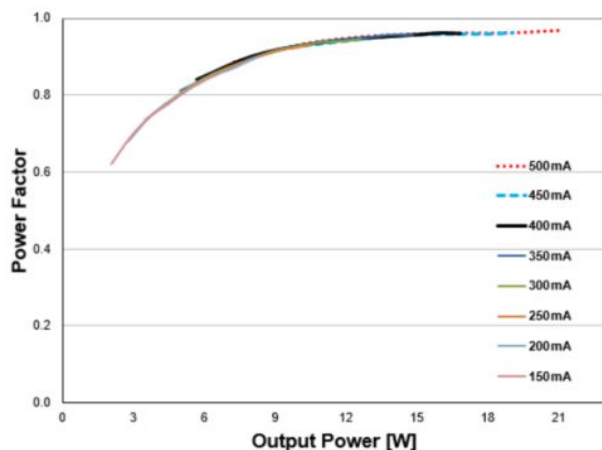
5) Maximum / Full load, 230 Vac, 50Hz / 60Hz

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

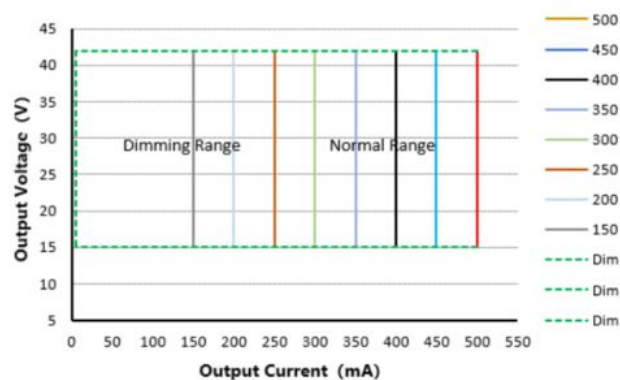
7) Maximum 60 V

8) Ripple average at 100 Hz

Typical Power Factor v Load

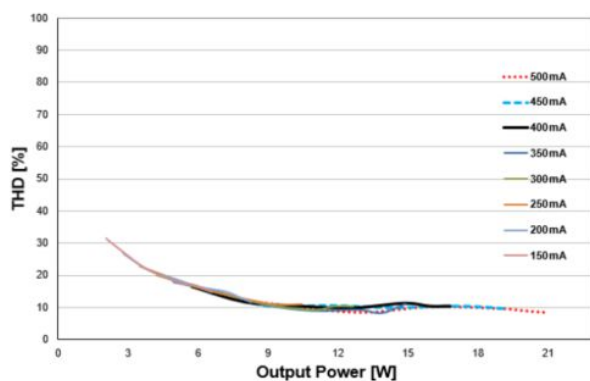


Operating Window



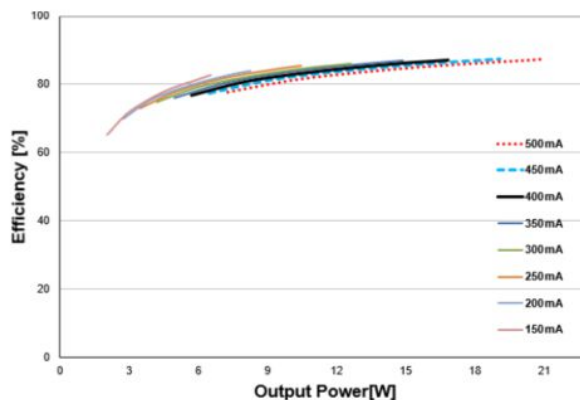
IT DALI 20 CS Typical Power Factor Vs Load

Typical THD v Load



IT DALI 20 CS Typical Operating Window

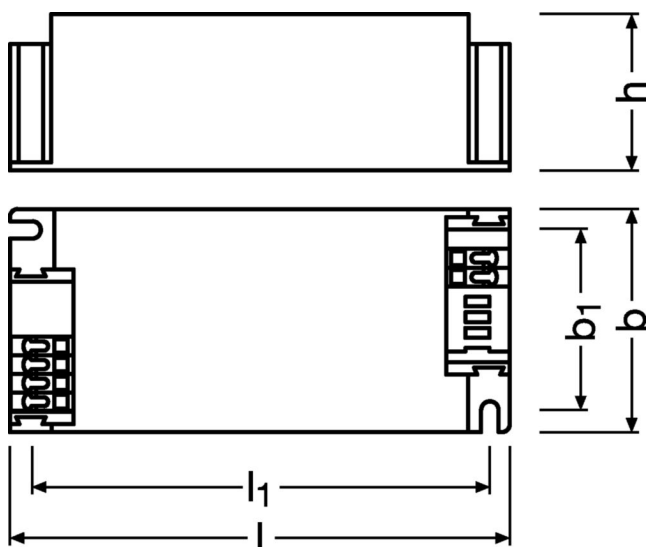
Typical Efficiency v Load 230 V 50 Hz



IT DALI 20 CS Typical THD Vs Load

IT DALI 20 CS Typical Efficiency Vs Load 230V 50Hz

Dimensions & weight



Product weight	96.80 g
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 mm ² / 0.75...1.5 mm ² ¹⁾
Cable cross-section, output side	0.5...1.5 mm ² / 0.75...1.5 mm ² ¹⁾
Wire preparation length, input side	7...8 mm
Wire preparation length, output side	7...8 mm
Cable/wire length, output side	2000 mm

1) Build in/ Independent

Colors & materials

Casing material	Plastic
Product color	White

Temperatures & operating conditions

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

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

Programming interface	Dipswitch, DALI
Control interface	DALI-2, Touch DIM, Corridor
Dimmable	Yes
Dimming interface	DALI-2 / Touch DIM / Corridor
Dimming range	1...100 % ¹⁾
Dimming method	Amplitude Modulation
Constant lumen function	No
Max. cable length to lamp/LED module	2.0 m ²⁾
Suitable for fixtures with prot. class	I / II
Suitable for emergency lighting	Yes
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) For maximum nominal output current

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

Programming

Programming device	DALI / DIPswitch
Tuner4TRONIC	Yes
Tuner4TRONIC Field App	No
Box programming	No

Programmable features

DALI Settings	Yes
TouchDIM + Sensor	Yes
Corridor Functionality	Yes
Dim to Dark	No
Soft Switch Off	No
Tuning Factor	No
Configuration Lock	Yes
Driver Guard	No
Emergency Mode	Yes

Certificates & standards

Approval marks – approval	CE / ENEC / EL / RCM / UKCA / CCC / KC / BIS
Standards	IEC 61347-1 / IEC 61347-2-13 / EN 55015 / IEC 61547 / IEC 61000-3-2 / IEC 62384
Type of protection	IP20

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	12-08-2025
Primary Article Identifier	4062172373920 6977078994019
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 DALI CS CB SG PSB LE 05577 240124
Certificates	PDF	▶ IT DALI CS CB SG PSB LE 05578 240124
Certificates	PDF	▶ IT DALI CS ENEC 64142225005704 U6 310124
Product Datasheet	PDF	▶ Technical Datasheet IT DALI 20 CS V1.0
CAD data	Compressed	▶ IT DALI CS STEP 050623
CAD data PDF	Compressed	▶ IT DALI CS CAD3PDF 050623
Mandatory Publications	PDF	▶ IT DALI CS CE 4414207 05 240125
Mandatory Publications	PDF	▶ IT DALI CS UK DoC 4414208 01 120623
User instruction	PDF	▶ UI IT DALI 20 30 42 CS

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4062172373920 OSRAM	IT DALI 20/220-240/500 CS	Shipping carton box 20 Pieces	228 x 208 x 78 mm	3.70 dm ³	106.95 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

Data privacy

This Inventronics driver can be configured using the Tuner4TRONIC software. This requires registering on www.inventronicsglobal.com/ds and downloading the Tuner4TRONIC software from the Internet. The Tuner4TRONIC software enables users to access and view the operational data of a luminaire or driver via the corresponding programming interfaces. A password key (Config Lock) must be set up in the driver via the Tuner4TRONIC software in order to control which users can access and view operational data. Follow the instructions for password setup. To grant an external person or company rights to access or view operational data, you can assign password keys. In this case, however, you are responsible for ensuring that the third party concerned takes notice of the information described here.

However, Inventronics can read out operating data from devices for maintenance and service purposes even when a password key has been assigned. In individual cases, Inventronics will also use its access rights in order to optimize or improve driver hardware and driver functions. In accordance with data privacy principles, any user of operating data (luminaire manufacturers, third parties with access rights) must ensure that personal data (e.g. name, address, location IDs) are only merged with the prior written consent of the person (end user) concerned. The respective user of the operating data is responsible for providing evidence of consent.

Disclaimer

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