

# IT DALI 12/220...240/300 CS

ICUTRONIC DALI CS | Constant Current Compact - Dimmable



#### Product family features

Supply voltage: 220...240 VLine 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 OSRAM (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





### 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	220240 V
Mains frequency	0/50/60 Hz
Input voltage AC	198264 V <sup>1)</sup>
Input voltage DC	176276 V
Total harmonic distortion	< 10 % <sup>2)</sup>
Power factor $\lambda$	0.51C0.98
Efficiency in full-load	81 % <sup>3)</sup>
Device power loss	3.0 W <sup>4)</sup>
Protective conductor current	<0.7 mA
Inrush current	25 A <sup>5)</sup>
Max. ECG no. on circuit breaker 10 A (B)	34
Max. ECG no. on circuit breaker 10 A (C)	56
Max. ECG no. on circuit breaker 16 A (B)	54
Max. ECG no. on circuit breaker 16 A (C)	90
Max. ECG no. on circuit breaker 25 A (B)	84
Surge capability (L/N-Ground)	2 kV
Surge capability (L-N)	1 kV
Nominal output voltage	942 V <sup>6)</sup>
U-OUT (working voltage)	60 V
Nominal output current	90 / 100 / 120 / 150 / 180 / 200 / 250 / 300 mA <sup>7)</sup>
Output current tolerance	±5 %
Output ripple current (100 Hz)	< 5 % <sup>8)</sup>
Output PSTLM	≤1
Output SVM	≤0.4
Nominal output power	0.812.6 W <sup>9)</sup>
Maximum output power	12.6 W
Power loss in stand-by mode	<0.5 W
Galvanic isolation primary/secondary	SELV
Current set	DipSwitch
Default output current	300 mA
Galvanic isolation DALI/mains	Basic
Galvanic isolation DALI/output	SELV
Networked standby power	<0.50 W <sup>3)</sup>

<sup>1)</sup> Permitted voltage range

 $<sup>^{2)}</sup>$  At full load, 220...240 V, 50 Hz / see graphs

<sup>&</sup>lt;sup>3)</sup> at 230 V, 50 Hz

 $<sup>^{4)}</sup>$  Maximum / Full load, 230 Vac, 50Hz / 60Hz

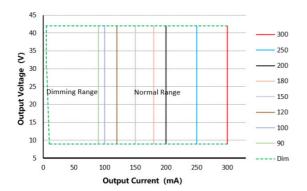
 $^{5)}$  t width = 100  $\mu$ s (measured at 50 % I peak)

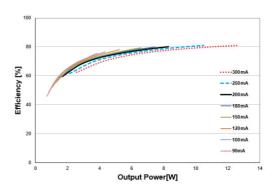
6) Maximum 60 V

7) Default current: 300 mA

8) Ripple average at 100 Hz

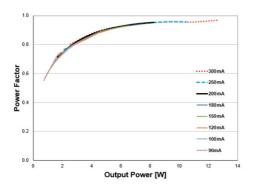
9) Partial load 0.8...12.6 W

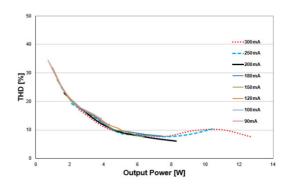




IT DALI 12 220 240 300 CS Typical Operating Window

IT DALI 12 220 240 300 CS Typical Efficiency Vs Load 230V 50Hz

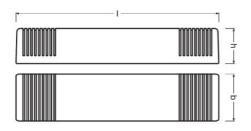


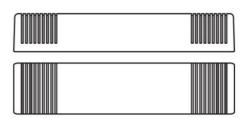


IT DALI 12 220 240 300 CS Typical Power Factor Vs Load

IT DALI 12 220 240 300 CS Typical THD Vs Load

### **Dimensions & weight**





Mounting hole spacing, length	116.0 mm
Mounting hole spacing, width	-
Product weight	68.50 g
Cable cross-section, input side	0.751.5 mm <sup>2</sup> 1)
Cable cross-section, output side	0.751.5 mm <sup>2</sup> 1)
Wire preparation length, input side	78 mm
Wire preparation length, output side	78 mm
Length	130.0 mm
Width	30.0 mm
Height	22.2 mm

### Colors & materials

Casing material	80% recycled plastic
-----------------	----------------------

## Temperatures & operating conditions

Ambient temperature range	-20+50/-20+45 °C <sup>1)</sup>
Maximum temperature at tc test point	80 °C <sup>2)</sup>
Max.housing temperature in case of fault	110 °C
Temperature range at storage	-2085 °C
Permitted rel. humidity during operation	585 % <sup>3)</sup>

 $<sup>^{1)}\,90/100/120/150/180/200/250</sup>$  mA/300 mA/-20...+45 °C @ 300mA

### Lifespan

	ECG lifetime	50000 h <sup>1)</sup>
--	--------------	-----------------------

 $<sup>^{1)}</sup>$  At maximum T  $_{c}$  = 80°C / 10% failure rate

### Additional product data

Encapsulated	No
Predecessor EAN	4052899617131

# **Capabilities**

Dimmable	Yes
Dimming interface	DALI-2 / Touch DIM / Corridor
Dimming range	1100 % 1)
Dimming method	Amplitude Modulation
Overheating protection	Automatic reversible
Overload protection	Automatic reversible
Short-circuit protection	Automatic reversible
No-load proof	Yes
Intended for no-load operation	No
Max. cable length to lamp/LED module	2.0 m <sup>2)</sup>
Suitable for fixtures with prot. class	1/11
Type of connection, input side	Push terminal
Type of connection, output side	Push terminal
Suitable for through-wiring	No
Suitable for emergency lighting	Yes
Constant lumen function	No

<sup>1)</sup> Solid or flexible leads

<sup>2)</sup> Maximum at the Tc-point

<sup>3)</sup> Maximum 56 days/year at 85 %

Programming interface	Dipswitch
Control interface	DALI-2
Detection angle (Light sensor)	
Detection angle (PIR)	
Number of channels	1
DALI-2 Energy Data	
DALI-2 Diagnostic Data	-

 $<sup>^{1)}</sup>$  For maximum nominal output current

### **Programming**

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

# Programmable features

Constant Lumen	No
Lamp Operating Time	No
End of Life	No
Driver Guard	No
DALI Settings	Yes
Emergency Mode	Yes
DALI-2 Luminaire Data	
Configuration Lock	Yes
Soft Switch Off	No
Dim to Dark	No
TouchDIM + Sensor	Yes
Corridor Functionality	Yes
OEM Key	

## **Certificates & standards**

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

<sup>1)</sup> In preparation

<sup>2)</sup> Output wires must be routed as close as possible to each other

# Logistical data

Commodity code	85044083900
----------------	-------------

### **Environmental information**

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh)				
Date of Declaration	17-07-2023			
Primary Article Identifier	4062172306218			
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	b8149fd9-1450-4c22-9372-902dd18850cc			

#### Download Data

	File
<u> </u>	User instruction ICUTRONIC LED Power Supply
<b>7</b>	Product Datasheet Technical Datasheet IT DALI 12 CS
大	Certificates SG PSB LE 04172 CB of IT DALI CS-20220606
大	Certificates U6 084117 0120 ENEC of IT DALI CS 20220610
太	Certificates CCC of IT DALI 12 CS 9C1 4414876 EN
大	Certificates NSW28035 of IT DALI CS 9C1 4420862 EN 00
<u> </u>	CAD data OT FIT PC STEP 270722
<u> </u>	CAD data 3-dim OT FIT PC CAD3PDF 270722

#### 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
4062172306218	IT DALI 12/220240/300 CS	Shipping carton box 20	396 mm x 162 mm x 67 mm	4.30 dm <sup>3</sup>	1535.00 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.

#### Data privacy

This OSRAM driver can be configured using the Tuner4TRONIC software. This requires registering on www.myosram.com and downloading theTuner4TRONIC 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, OSRAM can read out operating data from devices for maintenance and service purposes even when a password key has been assigned. In individual cases, OSRAM 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.