

ICUTRONIC DALI CS

Constant Current Compact – Dimmable



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

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



Product family datasheet

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

Technical data

Electrical data

Product description	Nominal input voltage	Mains frequency	Input voltage AC	Input voltage DC	Total harmonic distortion	Power factor λ
IT DALI 12/220...240/300 CS	220...240 V	0/50/60 Hz	198...264 V ¹⁾	176...276 V	< 10 % ²⁾	051C098
IT DALI 30/220...240/700 CS	220...240 V	0/50/60 Hz	198...264 V ¹⁾	176...276 V	< 10 % ²⁾	093098
IT DALI 42/220...240/1A0 CS	220...240 V	0/50/60 Hz	198...264 V ¹⁾	176...276 V	< 10 % ²⁾	098

Product description	Efficiency in full-load	Device power loss	Protective conductor current	Inrush current	Max. ECG no. on circuit breaker 10 A (C)
IT DALI 12/220...240/300 CS	81 % ³⁾	3.0 W ⁴⁾	<0.7 mA	25 A ⁵⁾	56
IT DALI 30/220...240/700 CS	88 % ³⁾	3.8 W ⁴⁾	<0.7 mA	30 A ⁵⁾	37
IT DALI 42/220...240/1A0 CS	89 % ³⁾	5.4 W ¹²⁾	<0.7 mA	30 A ⁵⁾	27

Product description	Max. ECG no. on circuit breaker 10 A (B)	Max. ECG no. on circuit breaker 16 A (B)	Max. ECG no. on circuit breaker 16 A (C)	Max. ECG no. on circuit breaker 25 A (B)	Surge capability (L/N-Ground)
IT DALI 12/220...240/300 CS	34	54	90	84	2 kV
IT DALI 30/220...240/700 CS	25	40	60	62	2 kV
IT DALI 42/220...240/1A0 CS	18	28	42	44	2 kV

Product description	Surge capability (L-N)	Nominal output voltage	U-OUT (working voltage)	Nominal output current	Output current tolerance
IT DALI 12/220...240/300 CS	1 kV	9...42 V ⁶⁾	60 V	90 / 100 / 120 / 150 / 180 / 200 / 250 / 300 mA ⁷⁾	±5 %
IT DALI 30/220...240/700 CS	1 kV	15...42 V ⁶⁾	60 V	350 / 400 / 450 / 500 / 550 / 600 / 650 / 700 mA ¹⁰⁾	±5 %
IT DALI 42/220...240/1A0 CS	1 kV	15...42 V ⁶⁾	60 V	700 / 750 / 800 / 850 / 900 / 950 / 1000 / 1050 mA ¹³⁾	±5 %

Product description	Output ripple current (100 Hz)	Output PSTLM	Output SVM	Nominal output power
IT DALI 12/220...240/300 CS	< 5 % ⁸⁾	≤1	≤0.4	0.8...12.6 W ⁹⁾
IT DALI 30/220...240/700 CS	< 5 % ⁸⁾	≤1	≤0.4	5.3...29.4 W ¹¹⁾
IT DALI 42/220...240/1A0 CS	< 5 % ⁸⁾	≤1	≤0.4	10.5...42 W ¹⁴⁾

Product family datasheet

Product description	Maximum output power	Galvanic isolation primary/secondary	Default output current	
IT DALI 12/220...240/300 CS	12.6 W	SELV	300 mA	
IT DALI 30/220...240/700 CS	29.4 W	SELV	700 mA	
IT DALI 42/220...240/1A0 CS	42 W	SELV	900 mA	

Product description	Current set	Galvanic isolation DALI/output	Galvanic isolation DALI/mains	Power loss in stand-by mode
IT DALI 12/220...240/300 CS	DipSwitch	SELV	Basic	<0.5 W
IT DALI 30/220...240/700 CS	DipSwitch	SELV	Basic	<0.5 W
IT DALI 42/220...240/1A0 CS	DipSwitch	SELV	Basic	<0.5 W

Product description	Networked standby power
IT DALI 12/220...240/300 CS	<0.50 W ³⁾
IT DALI 30/220...240/700 CS	<0.50 W ³⁾
IT DALI 42/220...240/1A0 CS	<0.50 W ³⁾

- 1) Permitted voltage range
- 2) At full load, 220...240 V, 50 Hz / see graphs
- 3) at 230 V, 50 Hz
- 4) 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
- 10) Default current 700 mA
- 11) Partial load 5.3...29.4 W
- 12) At 230 V, Input power 42.7 W max.
- 13) Default current: 900 mA
- 14) Partial load 10.5...42 W

Dimensions & weight

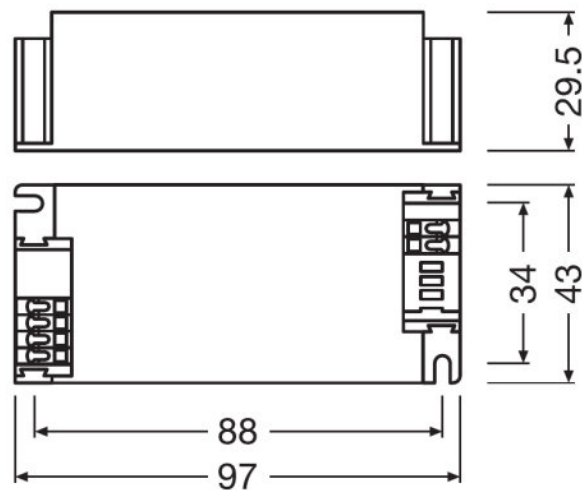
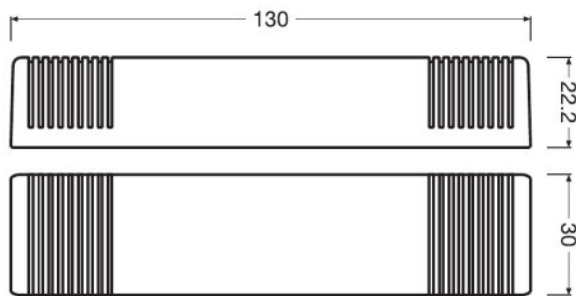
Product description	Mounting hole spacing, length	Mounting hole spacing, width	Product weight	Cable cross-section, input side	Cable cross-section, output side
IT DALI 12/220...240/300 CS	116.0 mm	-	6850 g	0.75...1.5 mm ² ¹⁾	0.75...1.5 mm ² ¹⁾
IT DALI 30/220...240/700 CS	88.0 mm	34.0 mm	11250 g	0.5...1.5 / 0.75...1.5 mm ² ²⁾	0.5...1.5 / 0.75...1.5 mm ² ²⁾
IT DALI 42/220...240/1A0 CS	88.0 mm	34.0 mm	13750 g	0.5...1.5 / 0.75...1.5 mm ² ²⁾	0.5...1.5 / 0.75...1.5 mm ² ²⁾

Product description	Wire preparation length, input side	Wire preparation length, output side	Length	Width	Height
IT DALI 12/220...240/300 CS	7...8 mm	7...8 mm	1300 mm	300 mm	222 mm
IT DALI 30/220...240/700 CS	7...8 mm	7...8 mm	970 mm	430 mm	295 mm
IT DALI 42/220...240/1A0 CS	7...8 mm	7...8 mm	970 mm	430 mm	295 mm

Product family datasheet

- 1) Solid or flexible leads
- 2) Build in/ Independent

Product line drawing



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

IT DALI 30/220...240/700 CS, IT DALI 42/220...240/1A0 CS

Colors & materials

Product description	Casing material
IT DALI 12/220...240/300 CS	80% recycled plastic
IT DALI 30/220...240/700 CS	Plastic
IT DALI 42/220...240/1A0 CS	Plastic

Temperatures & operating conditions

Product description	Ambient temperature range	Maximum temperature at tc test point	Max.housing temperature in case of fault	Temperature range at storage
IT DALI 12/220...240/300 CS	-20...+50/-20...+45 °C ¹⁾	80 °C ²⁾	110 °C	-20...85 °C
IT DALI 30/220...240/700 CS	-20...+50 °C	80 °C ²⁾	110 °C	-20...85 °C
IT DALI 42/220...240/1A0 CS	-20...+50/-20...+45 °C ⁴⁾	80 °C ²⁾	110 °C	-25...85 °C

Product family datasheet

Product description	Permitted rel. humidity during operation
IT DALI 12/220...240/300 CS	5...85 % ³⁾
IT DALI 30/220...240/700 CS	5...85 % ³⁾
IT DALI 42/220...240/1A0 CS	5...85 % ³⁾

1) 90/100/120/150/180/200/250 mA/300 mA/-20...+45 °C @ 300mA
2) Maximum at the Tc-point
3) Maximum 56 days/year at 85 %
4) -20...+50 °C @ 700/750/800/850/900 mA/-20...+45 °C @ 950/1000/1050mA

Lifespan

Product description	ECG lifetime
IT DALI 12/220...240/300 CS	50000 h ¹⁾
IT DALI 30/220...240/700 CS	50000 h ¹⁾
IT DALI 42/220...240/1A0 CS	50000 h ¹⁾

1) At maximum T_c = 80°C / 10% failure rate

Additional product data

Product description	Encapsulated	Predecessor EAN
IT DALI 12/220...240/300 CS	No	4052899617131
IT DALI 30/220...240/700 CS	No	4052899617148
IT DALI 42/220...240/1A0 CS	No	4052899617155

Capabilities

Product description	Dimmable	Dimming interface	Dimming range	Dimming method
IT DALI 12/220...240/300 CS	Yes	DALI-2 / Touch DIM / Corridor	1...100 % ¹⁾	Amplitude Modulation
IT DALI 30/220...240/700 CS	Yes	DALI-2 / Touch DIM / Corridor	1...100 % ¹⁾	Amplitude Modulation
IT DALI 42/220...240/1A0 CS	Yes	DALI-2 / Touch DIM / Corridor	1...100 % ¹⁾	Amplitude Modulation

Product description	Overheating protection	Overload protection	Short-circuit protection	No-load proof
IT DALI 12/220...240/300 CS	Automatic reversible	Automatic reversible	Automatic reversible	Yes
IT DALI 30/220...240/700 CS	Automatic reversible	Automatic reversible	Automatic reversible	Yes
IT DALI 42/220...240/1A0 CS	Automatic reversible	Automatic reversible	Automatic reversible	Yes

Product description	Intended for no-load operation	Max. cable length to lamp/LED module	Suitable for fixtures with prot. class	Type of connection, input side
IT DALI 12/220...240/300 CS	No	2.0 m ²⁾	I / II	Push terminal
IT DALI 30/220...240/700 CS	No	2.0 m ²⁾	I / II	Push terminal

Product family datasheet

Product description	Intended for no-load operation	Max. cable length to lamp/LED module	Suitable for fixtures with prot. class	Type of connection, input side
IT DALI 42/220...240/1A0 CS	No	2.0 m ²⁾	I / II	Push terminal

Product description	Type of connection, output side	Number of channels	Constant lumen function	Suitable for emergency lighting
IT DALI 12/220...240/300 CS	Push terminal	1	No	Yes
IT DALI 30/220...240/700 CS	Push terminal	1	No	Yes
IT DALI 42/220...240/1A0 CS	Push terminal	1	No	Yes

Product description	Programming interface	Control interface	Suitable for through-wiring
IT DALI 12/220...240/300 CS	Dipswitch	DALI-2	No
IT DALI 30/220...240/700 CS	Dipswitch	DALI-2	No
IT DALI 42/220...240/1A0 CS	Dipswitch	DALI-2	No

¹⁾ For maximum nominal output current
²⁾ Output wires must be routed as close as possible to each other

Programming

Product description	Box programming	Tuner4TRONIC	Tuner4TRONIC Field App
IT DALI 12/220...240/300 CS	No	Yes	No
IT DALI 30/220...240/700 CS	No	Yes	No
IT DALI 42/220...240/1A0 CS	No	Yes	No

Product description	Programming device
IT DALI 12/220...240/300 CS	DALI / DIPswitch
IT DALI 30/220...240/700 CS	DALI / DIPswitch
IT DALI 42/220...240/1A0 CS	DALI / DIPswitch

Programmable features

Product description	Constant Lumen	Lamp Operating Time	End of Life
IT DALI 12/220...240/300 CS	No	No	No
IT DALI 30/220...240/700 CS	No	No	No
IT DALI 42/220...240/1A0 CS	No	No	No

Product description	Driver Guard	DALI Settings	Emergency Mode
IT DALI 12/220...240/300 CS	No	Yes	Yes
IT DALI 30/220...240/700 CS	No	Yes	Yes
IT DALI 42/220...240/1A0 CS	No	Yes	Yes

Product description	Configuration Lock	Soft Switch Off	Dim to Dark
IT DALI 12/220...240/300 CS	Yes	No	No
IT DALI 30/220...240/700 CS	Yes	No	No
IT DALI 42/220...240/1A0 CS	Yes	No	No

Product family datasheet

Product description	TouchDIM + Sensor	Corridor Functionality	OEM Key
IT DALI 12/220...240/300 CS	Yes	Yes	No
IT DALI 30/220...240/700 CS	Yes	Yes	No
IT DALI 42/220...240/1A0 CS	Yes	Yes	No

Certificates & standards

Product description	Approval marks – approval	Standards	Protection class	Type of protection
IT DALI 12/220...240/300 CS	CE / ENEC / EL / RCM / UKCA / CCC / KC / BIS	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	II	IP20
IT DALI 30/220...240/700 CS	CE / ENEC / EL / RCM / UKCA / CCC / KC / BIS	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	II	IP20
IT DALI 42/220...240/1A0 CS	CE / ENEC / EL / RCM / UKCA / CCC / KC / BIS	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	II	IP20

Logistical data

Product description	Commodity code
IT DALI 12/220...240/300 CS	85044083900
IT DALI 30/220...240/700 CS	85044083900
IT DALI 42/220...240/1A0 CS	85044083900

Environmental information
Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)

Product description	Date of Declaration	Primary Article Identifier	Candidate List Substance 1
IT DALI 12/220...240/300 CS	29-11-2023	4062172306218	Lead
IT DALI 30/220...240/700 CS	29-11-2023	4062172306232	Lead
IT DALI 42/220...240/1A0 CS	29-11-2023	4062172306256	Lead
Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
IT DALI 12/220...240/300 CS	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	b8149fd9-1450-4c22-9372-902dd18850cc
IT DALI 30/220...240/700 CS	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	a153d929-18ae-459c-8bd2-fe717f4a6d6e

Product family datasheet

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
IT DALI 42/220...240/1A0 CS	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	be3927d7-050d-4994-a4d4-e36cd628fc30

Application advice

For more detailed application information and graphics please see product datasheet.

Sales and Technical Support

Sales and Technical Support www.osram.com

Download Data

File
 User instruction ICUTRONIC LED Power Supply
 Product Datasheet Technical Datasheet IT DALI 12 CS
 Certificates SG PSB LE 04172 CB of IT DALI CS-20220606
 Certificates U6 084117 0120 ENEC of IT DALI CS 20220610
 Certificates CCC of IT DALI 12 CS 9C1 4414876 EN
 Certificates NSW28035 of IT DALI CS 9C1 4420862 EN 00
 CAD data OT FIT PC STEP 270722
 CAD data 3-dim OT FIT PC CAD3PDF 270722
 User instruction ICUTRONIC LED Power Supply
 Product Datasheet Technical Datasheet IT DALI 30 CS
 Certificates CCC of IT DALI 30 42 CS 9C1 4418206 EN
 CAD data IT DALI CS STEP 050623
 CAD data PDF IT DALI CS CAD3PDF 050623

Product family datasheet

	Product Datasheet Technical Datasheet IT DALI 42 CS
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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 12/220...240/300 CS	Shipping carton box 20	396 mm x 162 mm x 67 mm	4.30 dm³	1535.00 g
4062172306232	IT DALI 30/220...240/700 CS	Shipping carton box 20	228 mm x 208 mm x 78 mm	3.70 dm³	2453.00 g
4062172306256	IT DALI 42/220...240/1A0 CS	Shipping carton box 20	228 mm x 208 mm x 78 mm	3.70 dm³	2953.00 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.

Accessories Optional

Product description	Accessory name	Accessory code
IT DALI 30/220...240/700 CS	OT CABLE CLAMP D-STYLE	▶ 4052899077904
IT DALI 42/220...240/1A0 CS	OT CABLE CLAMP D-STYLE	▶ 4052899077904

Data privacy

Product family datasheet

This OSRAM driver can be configured using the Tuner4TRONIC software. This requires registering on www.myosram.com 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, 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.