

Light is OSRAM

## Product Datasheet

### IT DALI 30/220-240/700 CS Constant Current DALI LED driver

The reliable driver for energy saving lighting.  
DALI-2 certified; Embedded with Touch DIM/Corridor function; High flexibility thanks to wide operating range;  
Simple and easy current setting via dipswitch interface.

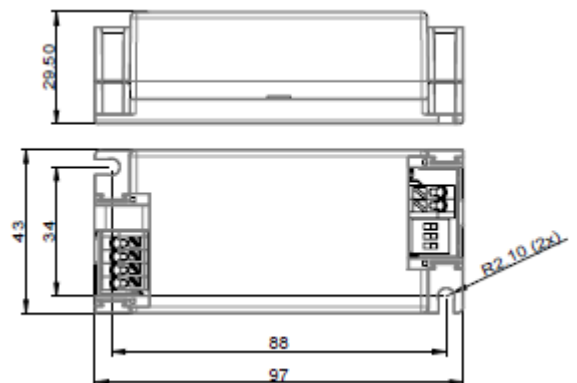
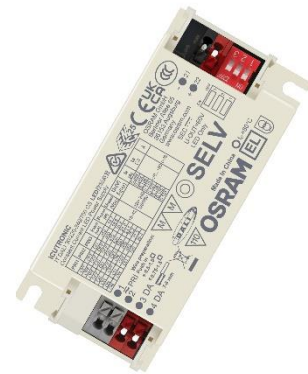
#### Benefits

Wide operating range: 350/400/450/500/550/600/650/700mA  
Simple and easy current setting via dipswitch  
High quality of light with low ripple current < 5%  
Small size enables compact fixture design  
Built in and independent mounting options (with cable clamp)  
With Touch DIM functionality

#### Applications

Office - Shop - Hospitality  
Spotlights, Downlights  
Panels and other indoor luminaires

**Approvals** (In preparation, if not printed on product label)



Size (L x W x H) mm: 97 x 43 x 29.5  
Housing material: plastic, white  
Product Weight: 112.5g

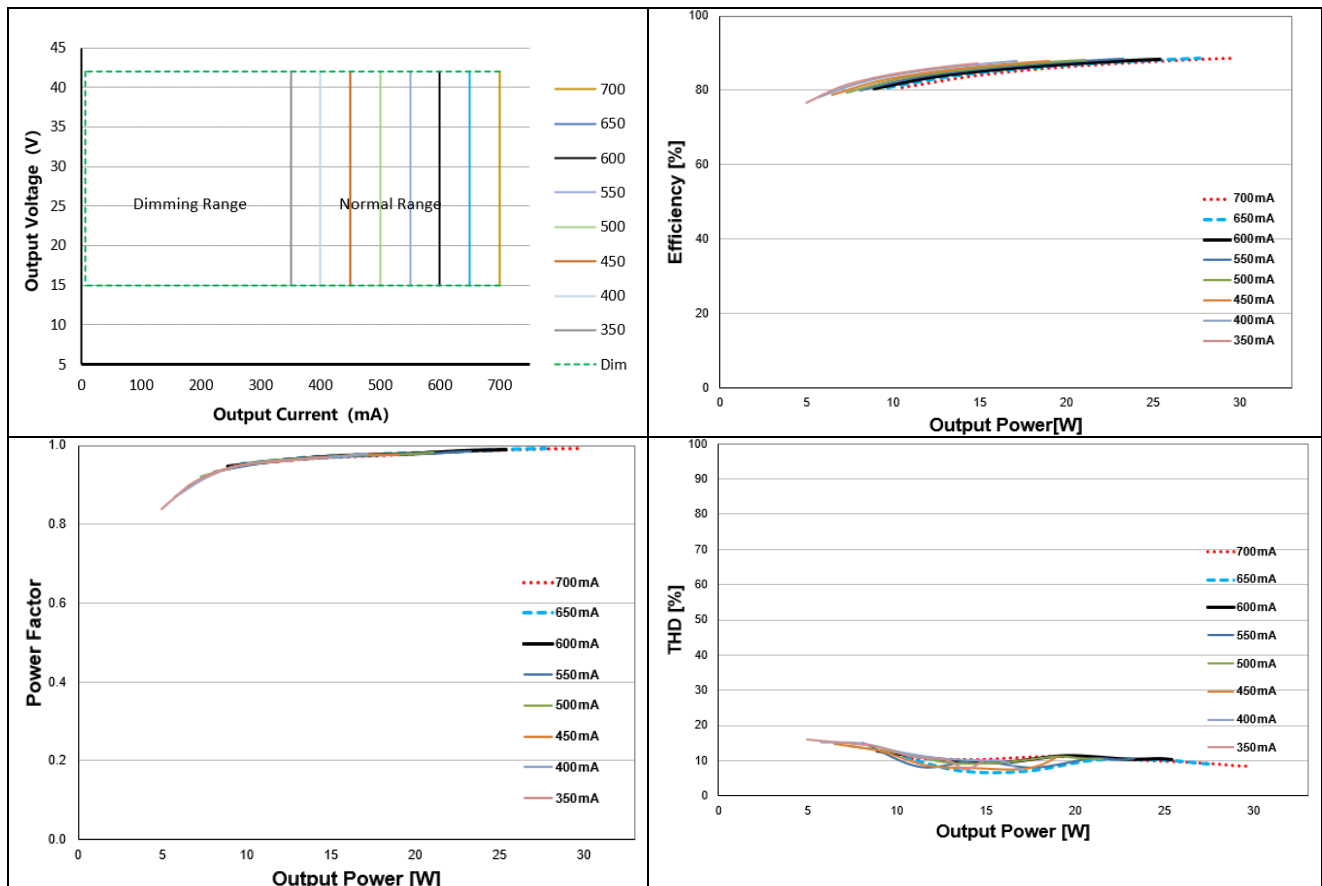
## Product Features

- Output currents: 350/400/450/500/550/600/650/700 mA
- Output voltage: 15 VDC – 42 VDC
- Amplitude dimming 1...100%
- Typ. Efficiency: 88 %
- Low stand-by consumption < 0.5 W
- Ambient temp range, ta: -20°C to + 50°
- Dipswitch interface
- Touch DIM/Corridor Function
- Low ripple < 5 %
- Low THD < 10 %
- Suitable for class I and II luminaires
- 50,000 hours lifetime at tc max.

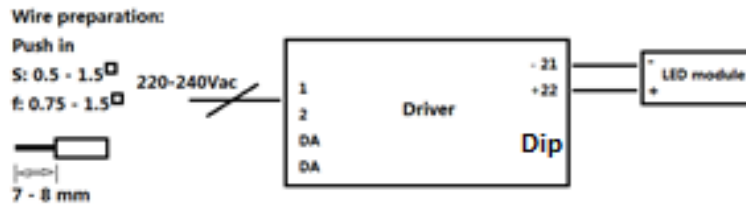
## Electrical Specifications

	Item	Value	Unit	Remarks
<b>INPUT</b>	Nominal Voltage	220 - 240	V	
	Nominal frequency	0 / 50 / 60	Hz	
	AC voltage range	198 – 264	V	
	DC voltage range	176 – 276	V	
	Maximum voltage	275	VAC	48hrs maximum
	AC Nominal current	0.161	A	Full load, 230V, 50Hz
	DC Nominal current	0.078	A	50% load, 230V, 0Hz
	Total Harmonic Distortion (THD)	< 10	%	Full load, 230 V, 50 Hz / see graphs
	Power factor	0.98		Full load, 230 V, 50 Hz / see graphs
	Efficiency	88	%	Full load, 230 V, 50 Hz, typical / see graphs
	Power losses	3.8	W	Maximum, full load
	No-load power	n/a	W	Load switching on output side is not permitted
	Network stand-by power	< 0.5	W	
	Protection class	II		Suitable for class I & II luminaires
	Leakage current	< 0.7	mA	Output floating
Inrush current	30	A pk	twidth = 100µs typical (measured at 50% Ipeak)	
Max. units per circuit breaker	B10: 25; C10: 37 B16: 40; C16: 60 B25: 62; C25: 93	pcs		
<b>OUTPUT</b>	Nominal voltage range	15 – 42	V	
	Maximum voltage	≤ 60	V	Open circuit
	Nominal current range	350/400/450/500/550/600/650/700	mA	Default current: 700mA
	Current accuracy	+/- 5	%	
	Current ripple	< 5	%	Ripple / average @ 100 Hz
	Pst LM	≤ 1		Full load
	SVM	≤ 0.4		Full load
	Nominal power range	5.3 – 29.4	W	Partial Load.
	Maximum power	29.4	W	Ta ≤ Max.
	Emergency output factor (EL)	0.15 – 0.5		EOFi = 0.15 – 0.5, @Ta=80 °C No hazard
	Galvanic isolation	SELV		3,75 kVrms. Output to mains - Touch current < 0.7 mA
<b>DIM</b>	Dimming control	Yes		DALI-2/TouchDIM/Corridor Function
	Dimming range	1 -100	%	@ Maximum nominal output current.
	Dimming technique	Analog dimming		
	PWM frequency	n/a	Hz	
	Galvanic isolation DALI/mains	Basic		
	Galvanic isolation DALI/output	SELV		
TouchDIM	Yes			
<b>ENVIRONMENT</b>	Ambient temperature range ta	-20...+50	°C	
	Maximum case temperature tc	80	°C	
	Max. case temp. in fault condition	110	°C	
	Storage temperature range	-25...+85	°C	
	Relative humidity	5...85	%	Not condensing
	Surge transient protection	1	kV	L/N
	Environmental rating	Indoor		
	IP rating	IP 20		
	Mains switching cycles	> 100'000		
	Expected lifetime	50,000	hrs	@tcmax = 80°C, 10% failure rate
<b>PROTECTIONS</b>	Over temperature	Yes		
	Overload	Yes		Automatic, reversible
	No load	Yes		Limitation of Output voltage ≤ 60V
	Short-circuit	Yes		Automatic, reversible
	Output overvoltage	Yes		Limitation of Output voltage ≤ 60V

## Electrical characteristics



## Wiring Diagram



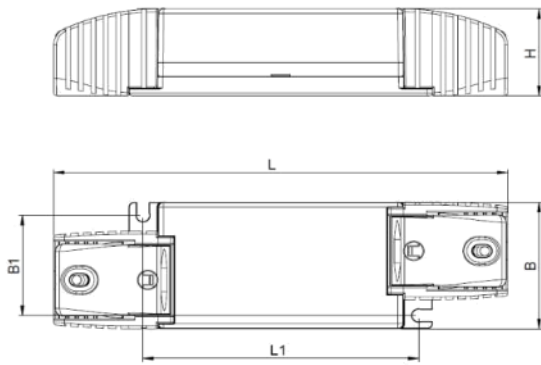
For built-in: 0.5-1.5 mm<sup>2</sup>, for independent: 0.75-1.5 mm<sup>2</sup>

Max. cable length -system: 2m

Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs

DIP1	DIP2	DIP3	Current (mA)
OFF	OFF	ON	350
OFF	OFF	OFF	400
OFF	ON	OFF	450
OFF	ON	ON	500
ON	OFF	OFF	550
ON	OFF	ON	600
ON	ON	OFF	650
ON	ON	ON	700
Current selected by Dip switch			

**For independent type**



L	145mm
L1	88mm
B	43mm
B1	34mm
H	29.5mm

An optional cable clamp is available. This cable clamp can be snapped into the driver and thus converts it into an independent installation.

Rated output power and current sets								
I out (mA)	350	400	450	500	550	600	650	700
U min (V)	15	15	15	15	15	15	15	15
U max (V)	42	42	42	42	42	42	42	42
P min (W)	5.3	6.0	6.8	7.5	8.3	9.0	9.8	10.5
P max (W)	14.7	16.8	18.9	21.0	23.1	25.2	27.3	29.4
Ta (°C)	50	50	50	50	50	50	50	50
Tc (°C)	80	80	80	80	80	80	80	80
AC Line Current, nominal@230V (A)	0.084	0.094	0.106	0.116	0.127	0.138	0.149	0.161
Max power Loss@230V (W)	2.2	2.5	2.6	2.8	3.1	3.3	3.6	3.8
Input Power@230V (W)	16.9	19.3	21.5	23.8	26.2	28.5	30.9	33.2
DC Line Current, nominal@230VDC (A) EOFi=15%	0.016	0.017	0.019	0.020	0.023	0.024	0.026	0.028
DC Line Current, nominal@230VDC (A) EOFi=50%	0.040	0.045	0.050	0.056	0.061	0.067	0.072	0.078

## Remarks

— For built-in type: Controlgear relies upon the luminaire enclosure for protection against accidental contact with live parts.



: Double or reinforced insulation between live parts and external parts which contact with the luminaire.

— Emergency lighting

This LED power supply is suitable for emergency lighting fixtures acc. to EN 60598-2-22., with emergency output factor EOFI=0.15 (default value, can be programmed up to EOFI=0.5) and related duration time of 1h at least. Function in emergency is ensured up to  $t_a=80^{\circ}\text{C}$ .

— Recommendations on how to dispose of it at the end of its life in line with Directive 2012/19/EU:

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 centers 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.

— 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 centers 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.

### Standards

IEC 61347-1  
IEC 61347-2-13  
CISPR 15/EN 55015  
IEC 61547  
IEC 61000-3-2  
IEC 62384

### Ordering information

Product name	Type	EAN10	EAN40	Units per shipping box
IT DALI 30/220-240/700 CS	CC	4062172306232	4062172306249	20
OT Cable Clamp D-style		4052899077904	4052899077911	40

### Disclaimer

Subject to change without notice. Errors and omission accepted. Always make sure to use the most recent release. The latest release of the datasheet is available under the following link [www.osram.com](http://www.osram.com)

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