Light is OSRAM

Product Datasheet

IT DALI 15/220-240/350 CS Preliminary

Constant Current DALI LED driver

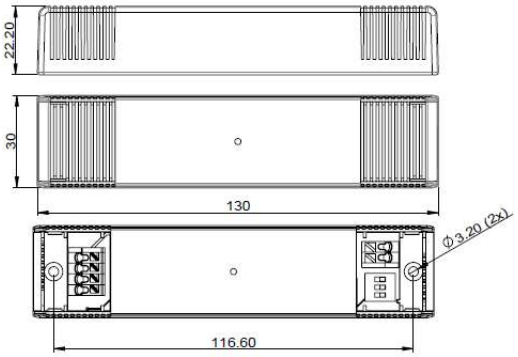
The reliable driver for energy saving lighting.
DALI-2 certified; Embedded with Touch DIM/Corridor function; High flexibility thanks to wide operating range; Simple and easy current setting via dipswitch interface.

Benefits

Wide operating range:100/120/150/180/200/250/300/350mA
Simple and easy current setting via dipswitch
High quality of light with low ripple current < 5%
Slim size enables compact fixture design
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: 130 x 30 x 22.2
Housing material: plastic, white
Product Weight：73g

Product Features

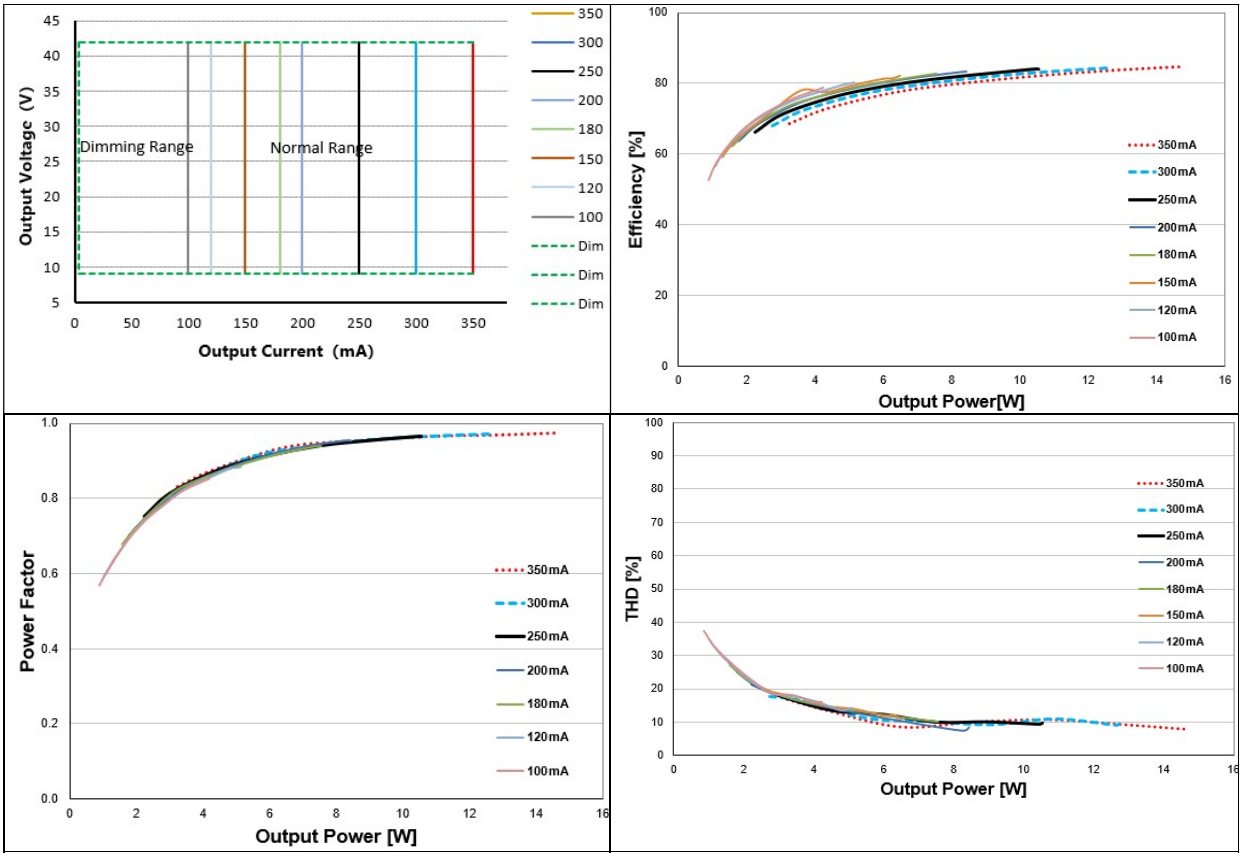
- Output currents: 100/120/150/180/200/250/300/350mA
- Output voltage: 9 VDC – 42 VDC
- Amplitude dimming 1...100% *
- Typ. Efficiency: 85 %
- Low stand-by consumption < 0.5 W
- Ambient temp range, ta: -20°C to + 50°C
- Dipswitch interface
- Touch DIM/Corridor Function
- Up to 14.7W
- Low ripple < 5 %
- Suitable for class I and II luminaires
- 50,000 hours lifetime

*：details please refer to page2

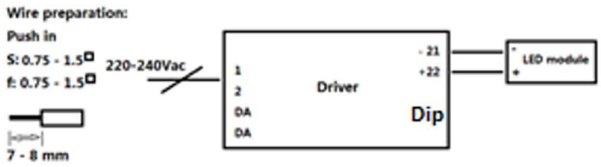
Electrical Specifications

	Item	Value	Unit	Remarks
INPUT	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	0.083	A	Full load, 230V, 50Hz
	DC Nominal current	0.036	A	50% of Full 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	85	%	Full load, 230 V, 50 Hz, typical / see graphs
	Power losses	2.7	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	18	A pk	twidth = 100 µs typical (measured at 50% Ipeak)
	Max. units per circuit breaker	B10: 46; C10: 72 B16: 74; C16: 116 B25: 116; C25: 181	pcs	
OUTPUT	Nominal voltage range	9 – 42	V	
	Maximum voltage	⩽ 60	V	Open circuit
	Nominal current range	100/120/150/180/200/250/300/350	mA	Default current: 350mA
	Current accuracy	+/- 5	%	
	Current ripple	< 5	%	Ripple / average @ 100 Hz
	Pst LM	≤ 1		Full load
	SVM	≤ 0.4		Full load
	Nominal power range	0.9 – 14.7	W	Partial Load.
	Maximum power	14.7	W	Ta ≤ Max.
	Emergency output factor (EL)	0.15 – 0.5		EOFi = 0.15 – 0.5, @Ta=80 ℃ No hazard
	Galvanic isolation	SELV		3,75 kVrms. Output to mains - Touch current < 0.7 mA
DIM	Dimming control	Yes		DALI-2/Touch DIM/Corridor Function
	Dimming range	1 -100	%	Maximum nominal output current
	Dimming technique	Analog Dimming		
	Galvanic isolation DALI/mains	Basic		
	Galvanic isolation DALI/output	SELV		
	Touch DIM	Yes		
ENVIRONMENT	Ambient temperature range ta	-20…+50	°C	100/120/150/180/200/250/300mA
		-20…+45	°C	350mA
	Maximum case temperature t_c	80	°C	Measured on tc point indicated on the product label.
	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
PROTECTIONS	Over temperature	Yes		
	Over load	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



Wire type: 0.75-1.5 mm^2
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	100
OFF	OFF	OFF	120
OFF	ON	OFF	150
OFF	ON	ON	180
ON	OFF	OFF	200
ON	OFF	ON	250
ON	ON	OFF	300
ON	ON	ON	350
Current selected by Dip switch			

Rated output power and current sets								
I out (mA)	**100**	**120**	**150**	**180**	**200**	**250**	**300**	**350**
U min (V)	9	9	9	9	9	9	9	9
U max (V)	42	42	42	42	42	42	42	42
P min (W)	0.9	1.1	1.4	1.6	1.8	2.3	2.7	3.2
P max (W)	4.2	5.0	6.3	7.6	8.4	10.5	12.6	14.7
Ta (°C)	50	50	50	50	50	50	50	45
Tc (°C)	80	80	80	80	80	80	80	80
AC Line Current, nominal@230V (A)	0.029	0.033	0.040	0.045	0.049	0.060	0.072	0.083
Max power Loss@230V (W)	1.1	1.3	1.5	1.6	1.7	2.0	2.3	2.7
Input Power@230V (W)	5.3	6.3	7.7	9.1	10.1	12.5	14.9	17.4
DC Line Current, nominal@230VDC (A) (EOFi=15%)	0.007	0.007	0.008	0.009	0.010	0.010	0.012	0.014
DC Line Current, nominal@230VDC (A) (EOFi=50%)	0.013	0.014	0.016	0.019	0.022	0.025	0.030	0.036

Remarks

— 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 ta=80°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
EN 55015
IEC 61547
IEC 61000-3-2
IEC 62384

Product name	EAN10	EAN40	Units per shipping box
IT DALI 15/220-240/350 CS	4062172373883	4062172373890	20

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

OSRAM GmbH

Head Office:

Marcel-Breuer-Strasse 6
80807 Munich, Germany
Phone +49 89 6213-0
www.osram.com