Light is OSRAM

Product Datasheet

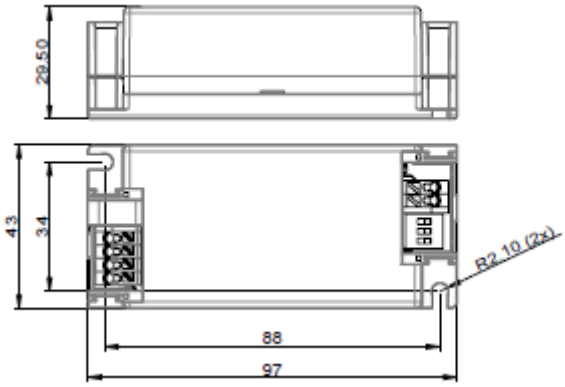
IT DALI 42/220-240/1050 CS

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:
700/750/800/850/900/950/1000/1050 mA
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 (with cable clamp)
With Touch DIM functionality



Size (L x W x H) mm: 97 x 43 x 29.5
Housing material: plastic, white
Product Weight: 137.5g

Applications

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

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

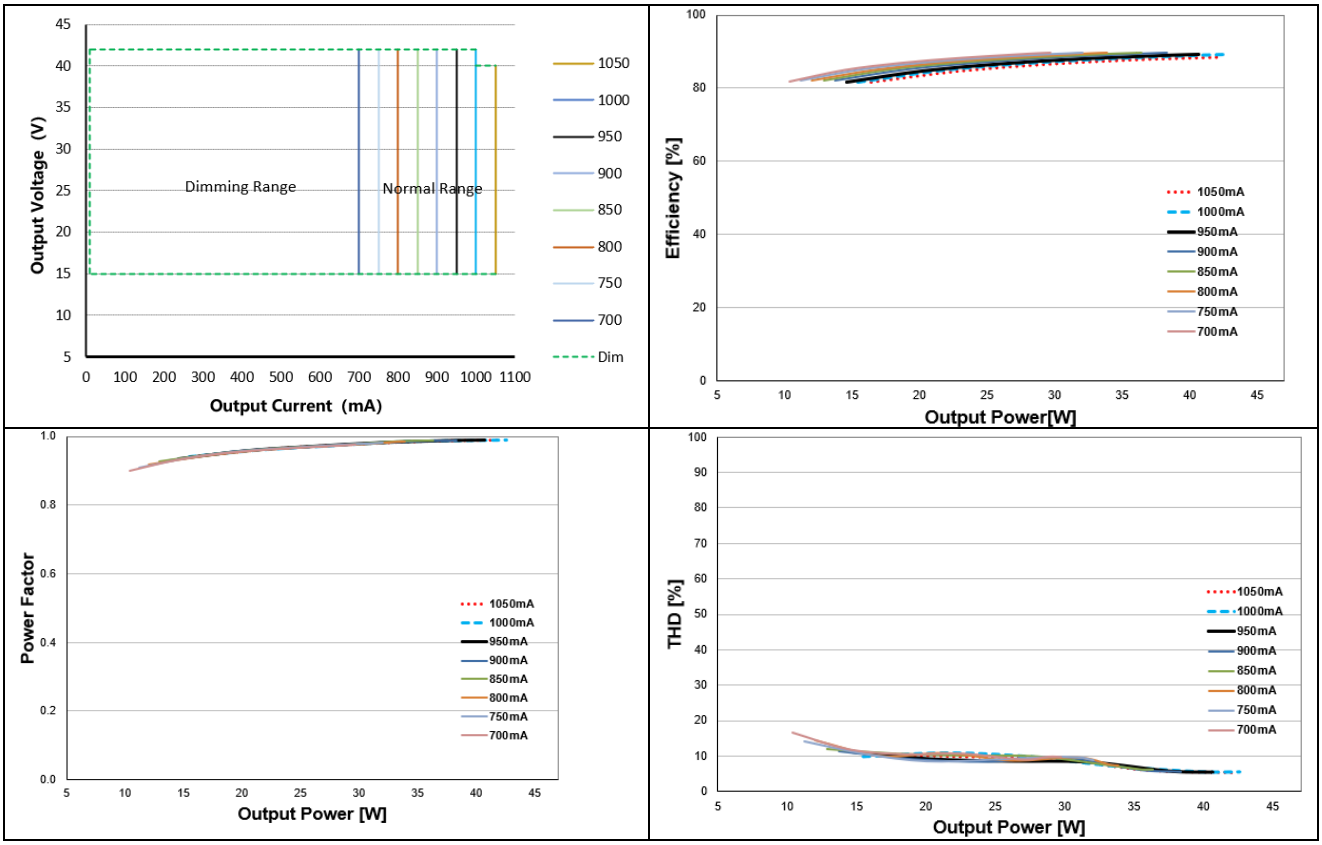
Product Features

- Output currents: 700/750/800/850/900/950/1000/1050 mA
- Output voltage: 15 VDC – 42 VDC
- Amplitude dimming 1...100%
- Typ. Efficiency: 89 %
- Low stand-by consumption < 0.5 W
- 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.

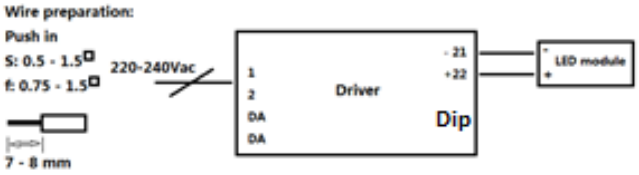
Electrical Specifications

	Item	Value	Unit	Remarks
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	0.226	A	Full load, 230V, 50Hz
	DC Nominal current	0.112	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	89	%	Full load, 230 V, 50 Hz, typical / see graphs
	Power losses	5.4	W	@230V, Input power 47.2W max.
	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: 18; C10: 27 B16: 28; C16: 42 B25: 44; C25: 66	pcs	
OUTPUT	Nominal voltage range	15 – 42	V	
	Maximum voltage	⩽ 60	V	Open circuit
	Nominal current range	700/750/800/850/900/950/1000/1050	mA	Default current: 900mA
	Current accuracy	+/- 5	%	
	Current ripple	< 5	%	Ripple / average @ 100 Hz
	Pst LM	≤ 1		Full load
	SVM	≤ 0.4		Full load
	Nominal power range	10.5 – 42	W	Partial Load.
	Maximum power	42	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/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		
ENVIRONMENT	Ambient temperature range ta	-20 …+50 -20 …+45	°C	700/750/800/850/900mA 950/1000/1050mA
	Maximum case temperature tc	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		
	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



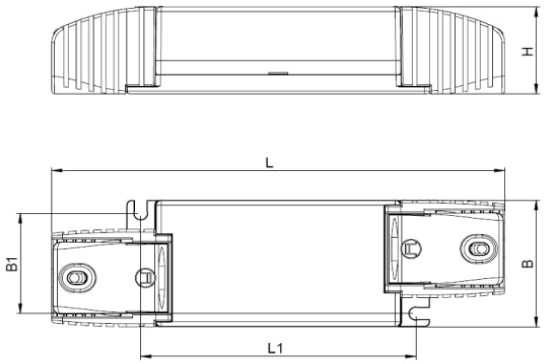
Wiring Diagram



For built-in: 0.5-1.5 mm^2, for independent: 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	700
OFF	OFF	OFF	750
OFF	ON	OFF	800
OFF	ON	ON	850
ON	OFF	OFF	900
ON	OFF	ON	950
ON	ON	OFF	1000
ON	ON	ON	1050
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)	**700**	**750**	**800**	**850**	**900**	**950**	**1000**	**1050**
U min (V)	15	15	15	15	15	15	15	15
U max (V)	42	42	42	42	42	42	42	40
P min (W)	10.5	11.3	12.0	12.8	13.5	14.3	15.0	15.8
P max (W)	29.4	31.5	33.6	35.7	37.8	39.9	42.0	42.0
Ta (°C)	50	50	50	50	50	45	45	45
Tc (°C)	80	80	80	80	80	80	80	80
AC Line Current, nominal@230V (A)	0.160	0.170	0.182	0.193	0.203	0.215	0.226	0.226
Max power Loss@230V (W)	3.4	3.6	3.9	4.3	4.4	4.8	5.1	5.4
Input Power@230V (W)	32.8	35.1	37.5	40.0	42.2	44.7	47.1	47.4
DC Line Current, nominal@230VDC (A) EOFi=15%	0.027	0.028	0.030	0.032	0.034	0.036	0.037	0.038
DC Line Current, nominal@230VDC (A) EOFi=50%	0.078	0.084	0.090	0.095	0.100	0.106	0.112	0.112

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 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 61000-3-3
IEC 62384

Product name	EAN10	EAN40	Pieces / box
IT DALI 42/220-240/1A0 CS	4062172306256	4062172306263	20
OT Cable Clamp D-style	4052899077904	4052899077911	40

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