

ICUTRONIC IT DALI 40/220-240/450 D LT2 L

Constant current DALI LED driver – non isolated

Wide operating area up to 450mA, 3...100% dimmable*

DALI-2 certified. optimal performance / budget ratio.
High module flexibility thanks to wide operating area. Good dimming performance with low ripple.
Made for energy saving applications due to low standby consumption.
Flexible current setting with RSet interface.

Benefits

Wide operating range: 100 – 450mA
Adjustable current via DALI programmable or RSet
Small, slim white metal housing 30 x 21 mm
Suitable for emergency lighting units
Smart analogue dimming 3...100%*
With Touch DIM and Corridor Function
DALI-2 certificated.

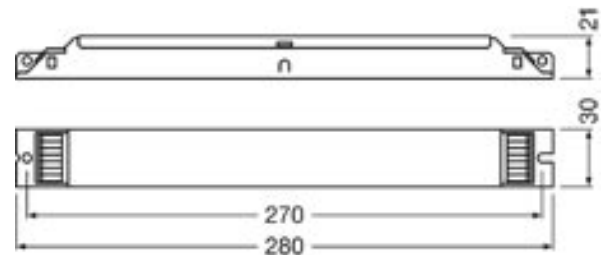
Applications

Linear and area lighting
Office – industrial – shop

Approbations

CE, ENEC, CCC, BIS, RCM

In preparation, if not already printed on the label



Housing material: metal, white painted

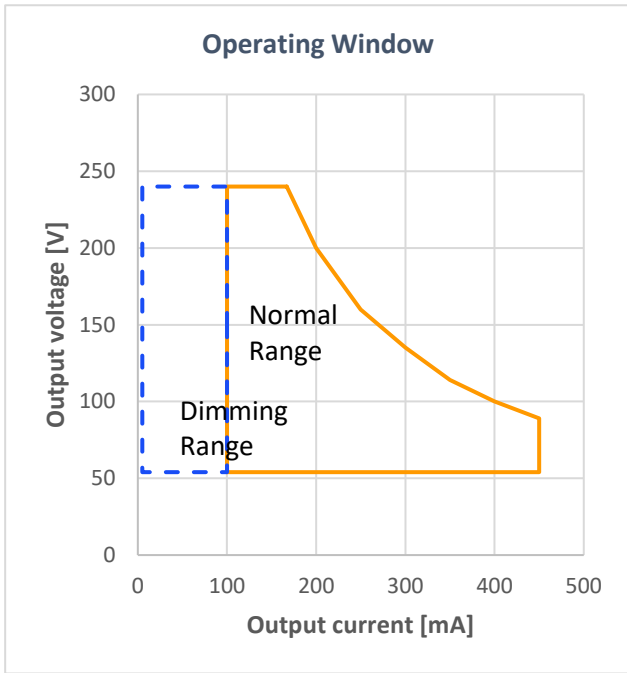
Product Features

- Output current range 100 – 450mA
- Fully digital programmable
- dimming down to 3%
- Very high efficiency up to 92%
- Low stand-by consumption <0.25 W
- Constant Lumen Output
- Suitable for emergency lighting
- Very wide operating window
- Overload & temperature protection
- Very low ripple $\leq 4\%$
- 100'000 h lifetime at $t_c = 65^\circ\text{C}$
- $t_c \text{ max} = 75^\circ\text{C}$
- Wide t_a range $-25 - +60^\circ\text{C}$
- 5 years guarantee

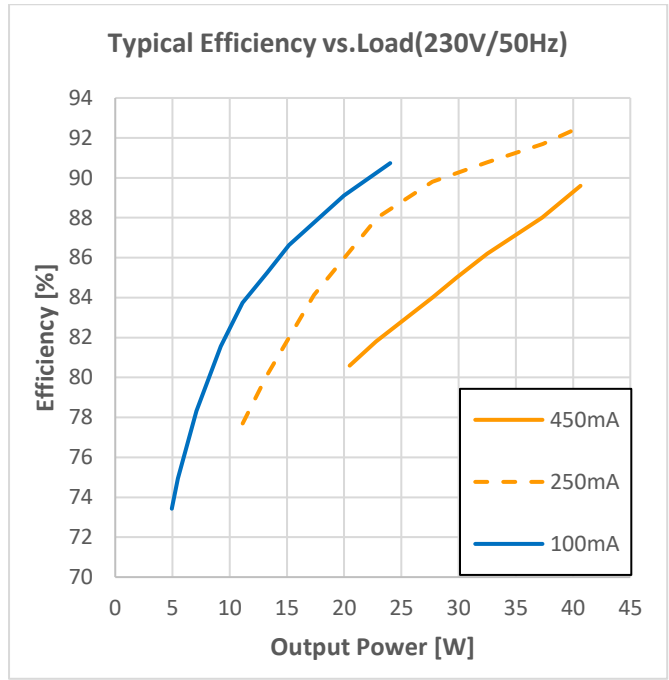
Electrical Specifications

	Item	Value	Unit	Remarks
INPUT	Nominal voltage	220 – 240	V	
	Nominal frequency	0 / 50 / 60	Hz	
	AC voltage range	198 – 264	V	AC or RAC
	DC voltage range	176 – 276	V	DC
	Maximum voltage	350	Vac	1 hour maximum, unit might not operate in this abnormal condition
	Nominal current	0.25	A	AC input
	Nominal current	0.11	A	DC input EOFi: 1
	Nominal current	0.04	A	DC input EOFi: 0.3
	Total Harmonic Distortion (THD)	< 10	%	Full load
	Power factor	> 0.97		Full load, 220 – 240 V, 50 Hz / see graphs
	Efficiency	Up to 92	%	Full load, 220 – 240 V, 50 Hz / see graphs
	Starting time	≤ 0.9	s	
	Power losses	4.6	W	Maximum, full load
	Network stand-by power	< 0.25	W	
	Protection class	I		PE can be connected either to terminal or housing
	Inrush current	33.6	A pk	Th = 120 μs
Max. units per circuit breaker	B16: 33 B10: 21			
OUTPUT	Nominal voltage range	54 – 240	V	
	Maximum voltage	≤250	Vdc	w/ Open Circuit
	Nominal current range	100 – 450	mA	
	Current accuracy	+/- 5	%	
	Current ripple	< 4	%	100 Hz., low freq. ripple is negligible
	PST	< 1		
	SVM	<0.4		
	Nominal power range	5.4 – 40	W	
	Maximum power	40	W	
	DC Output current (EL)	30-100	%	EOFi: 0.3-1 0.3 is preset value, adjustable via software, at DC or RAC
Galvanic isolation	Non-isolated		Non-isolated	
Dimming	Dimming control	yes		Touch Dim, DALI
	Dimming range	3...100*	%	
	Dimming Standard	DALI-2		
	insulation type for DALI circuit	Basic insulation		Galvanic isolation DALI VS input circuits, DALI VS output circuits:
LEDse	LEDset Open	100	mA	LEDset vs LEDsetGND open
	LEDset short	450	mA	LEDset vs LEDsetGND short
ENVIRONMENT	Ambient temperature range t_a	-25 ...+60	°C	
	Maximum case temperature t_c	75	°C	Measured on t_c point indicated of 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 2	kV	L/N LN/PE acc to. EN 61547 Clause 5.7
	Environmental rating	Indoor		
	IP rating	IP 20		
	Mains switching cycles	> 100'000		
Expected lifetime	50'000 100'000	h	$t_c = 75^{\circ}\text{C}$, 0.2% / 1'000 h failure rate, 24h ON $t_c = 65^{\circ}\text{C}$, 0.1% / 1'000 h failure rate, 24h ON	

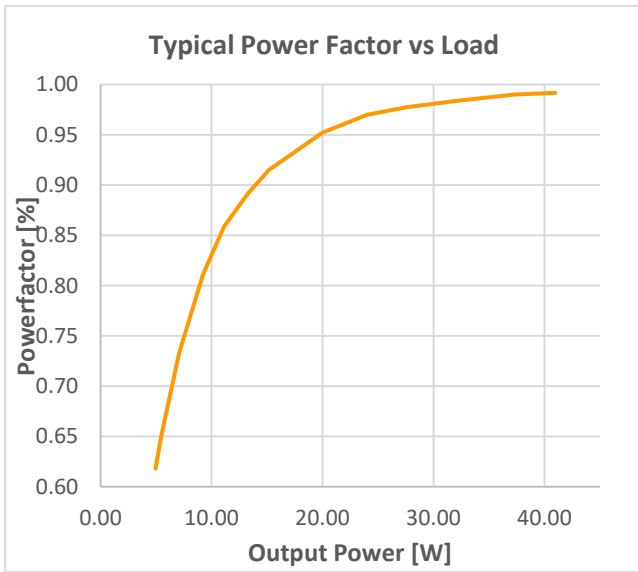
* 3...100% intelligent dimming ballast with DALI minimum current 5mA.



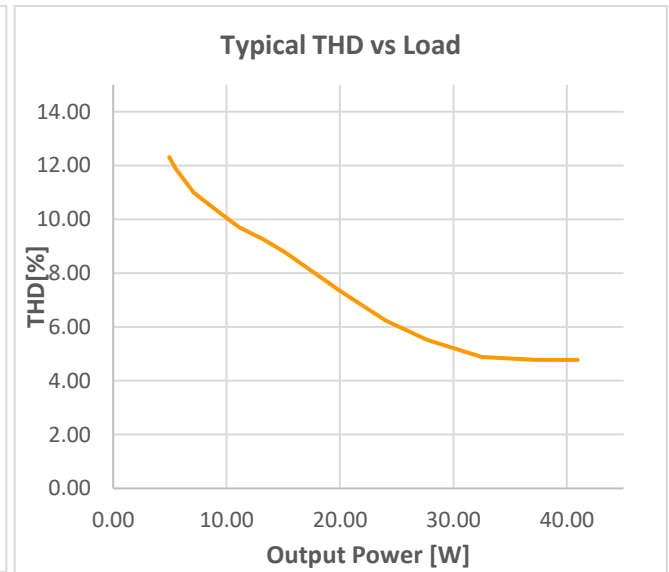
Operating Window IT DALI 40/220-240/450 D LT2 L



Typical Efficiency vs. Load (230 V 50 Hz) IT DALI 40/220-240/450 D LT2 L



Typical Power Factor vs. Load IT DALI 40/220-240/450 D LT2 L



Typical THD Vs Load IT DALI 40/220-240/450 D LT2 L

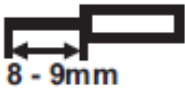
Wiring Diagram

Terminal:	Push in terminals
Max. cable length – system:	2 m
Geometry (l*b*h):	280*30*21 mm

wire preparation

push in

s: 0.5 - 1.5 \square



Product Weight: 167g

Protections

Over temperature

Automatic, reversible

Overload

Automatic, reversible

No load

Automatic, reversible

Short-circuit

Automatic, reversible

Input overvoltage

Maximum allowed input voltage 350V AC/ 1hour

Output overvoltage

Yes, limitation of Output voltage < 250Vrms

Output under voltage

NA

LED load protection

NA

Remark:

For Australia and New Zealand



Risk of electric shock

WARNING: FELV terminals marked "Risk of electric shock" are not safe to touch.

WARNING: Circuits connected to any FELV control terminal shall be insulated for the LV supply voltage of the control gear and any terminals connected to the FELV circuit shall be protected against accidental contact.

Safety Caution:

1. The lamp control gear relies upon the luminaire enclosure for protection against accidental contact with live parts.
2. Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.
3. Over temperature protection: the driver is protected against temporary overheating by reducing output current or shutting down until the overheating is eliminated.
4. The lamp control gear is not suitable for high-risk area lighting.

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
IEC 62384
IEC 61000-3-2
IEC 61000-3-3
IEC 61547

Product name	EAN10	EAN40	Pieces / box
IT DALI 40/220-240/450 D LT2 L	4062172380096	4062172380102	20

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The logo for Inventronics, featuring the word "inventronics" in a bold, lowercase, orange sans-serif font.