

Light is OSRAM

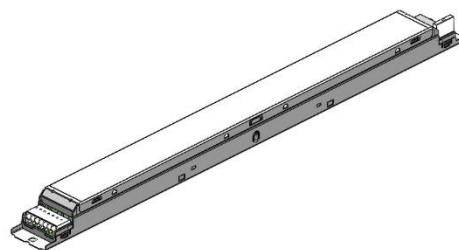
OSRAM

**Product data sheet: OTi DALI 100/220-240/700 D LT2 IND L**

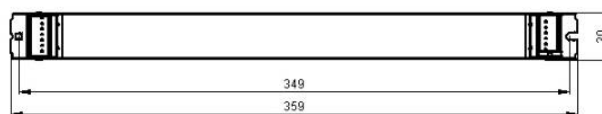
Constant current LED driver w NFC incl. OSRAM DALI features – non isolated  
Wide operating area up to 700mA, 1...100% dimmable

**Made for Industry applications**

Very high robustness, reliability, operating area & energy saving potential, DALI dimmable & programmable, embedded corridor functionality and advanced TouchDIM with daylight harvesting, constant lumen output, enhanced options like Driver Guard / Soft Switch Off / Dim to Dark. DALI & NFC (wireless) interface for fast programming. Automatic current set through the LEDset interface.

**Benefits**

Wide operating range: 200 – 700 mA , 64 – 300 V  
Wide ambient temperature range: -40...+70 °C  
Programmable via DALI or NFC, LED current via LEDset  
In-rush current limiter integrated  
Extreme long lasting & high reliability (Industry application)  
4kV surge capability (symmetric and asymmetric)  
Possibility of Analysis Using Luminaire Data:  
(Power, Energy, Operating Hours)  
Suitable for emergency lighting units  
Smart analogue dimming 1...100%  
Compliant to DALI Ed. 2



Housing material: metal, white painted

**Applications**

Linear and Highbay industrial lighting  
Trunking systems – Battens – Light Lines – Waterproof - Highbay

**Approval marks & Symbols**

CE, ENEC, VDE-EMC, RMC, CCC,  ,  In preparation, if not already printed on product label

**Product Features**

- 100W output current range 200 – 700 mA
- 100'000 h lifetime at  $t_c = 75^\circ\text{C}$
- Analogue dimming down to 1%
- Very high efficiency up to 95%
- In-rush current limiter integrated
- Low stand-by consumption  $<0.2\text{ W}$
- Suitable for emergency lighting
- Very wide  $t_a$  range up to  $-40\dots+70^\circ\text{C}$
- $t_c \text{ max} = 85^\circ\text{C}$
- Very low ripple  $\leq 1\%$
- Fully programmable, DALI/NFC
- 4kV surge protection
- 200'000 switching cycles
- 8 years guarantee @  $t_c -10^\circ\text{C}$

# 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	V <sub>AC</sub>	2 h maximum, unit might not operate in this abnormal condition
	Nominal current	0.47	A	
	Total Harmonic Distortion (THD)	7	%	Typical value, full load
	Power factor	> 0.98		Full load, 220 – 240 V, 50 Hz / see graphs
	Efficiency	Up to 95	%	Full load, 220 – 240 V, 50 Hz / see graphs
	Starting time	≤ 0.6	s	
	Stand-by power	0.16	W	Typical value, 230V, 50Hz
	Power loss	9	W	Maximum full load
	Protection class	I		PE can be connected either to terminal or housing
	Inrush current	5	A pk	T <sub>h</sub> = 870 μs
Max. units per circuit breaker	B16: 36; B10: 21			
PE current	< 0.5	mA	Through PE	
OUTPUT	Nominal voltage range	64 – 300	V	
	Maximum voltage	< 310	V <sub>DC</sub>	w/ no load
	Nominal current range	200 – 700	mA	LEDset open: 100 mA; LEDset short: 200 mA
	Current accuracy	+/- 3	%	With LEDset: +/- 5%
	Current ripple	< 1	%	LF ripple <1%, HF ripple <4%
	Nominal power range	28 – 100	W	
	Maximum power	100	W	
DIM	DC Output current (EL)	15	%	Preset value, adjustable via software, at DC or RAC
	Galvanic isolation	no		Non-isolated
	Dimming control	Yes		DALI and TouchDIM
	Dimming range	1...100	%	Complete analogue Dimming
ENVIRONMENT	Dimming standard	DALI-2		
	Ambient temperature range t <sub>a</sub>	-40 ... +70 -40 ... +65	°C	200-500mA >500mA
	Maximum case temperature t <sub>c</sub>	85	°C	Measured on t <sub>c</sub> 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	4   4	kV	L/N   LN/PE acc. To. EN 61547 Clause 5.7
	Environmental rating	Indoor		
	IP rating	IP 20		
	Mains switching cycles	> 200'000		
Expected lifetime	50'000	hrs	t <sub>c</sub> = 85°C, 0.2% / 1'000 h failure rate, 24h ON	
	100'000		t <sub>c</sub> = 75°C, 0.2% / 1'000 h failure rate, 24h ON	

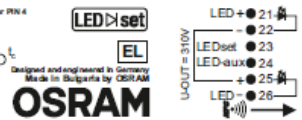
● 1 - 230V  
● 2 - 240V  
○ 3  
○ 4  
○ 5  
● 6 DA  
● 7 DA

**OPTOTRONIC® INTELLIGENT**  
**OT/ DALI 100/220-240/700 D NFC IND L**  
Constant current LED Power Supply

I <sub>LED</sub> (mA)	P <sub>LED</sub> (W)	U <sub>LED</sub> (V)	U <sub>LED</sub> (%)	I <sub>LED</sub> (A)	λ	U <sub>LED</sub> (°C)	U <sub>LED</sub> (°C)
200...300	100	64...300	220-240V	0.47	0.99	85	-40...+70
400...700	100	64...300	(95)80 Hz				-40...+85



Connect PE to case or PIN 4  
wire preparation  
max. 1.5 mm

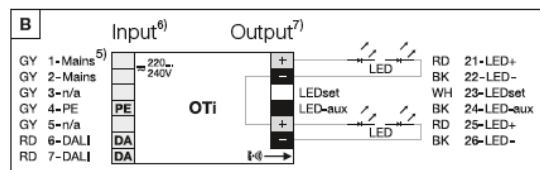
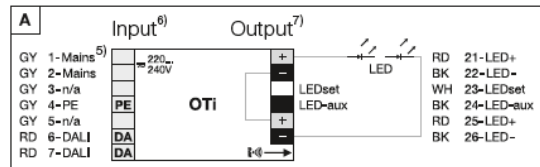


## Wiring Diagram

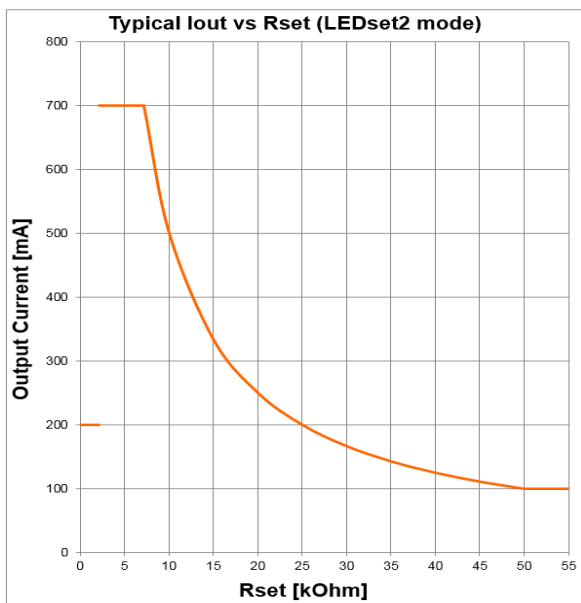
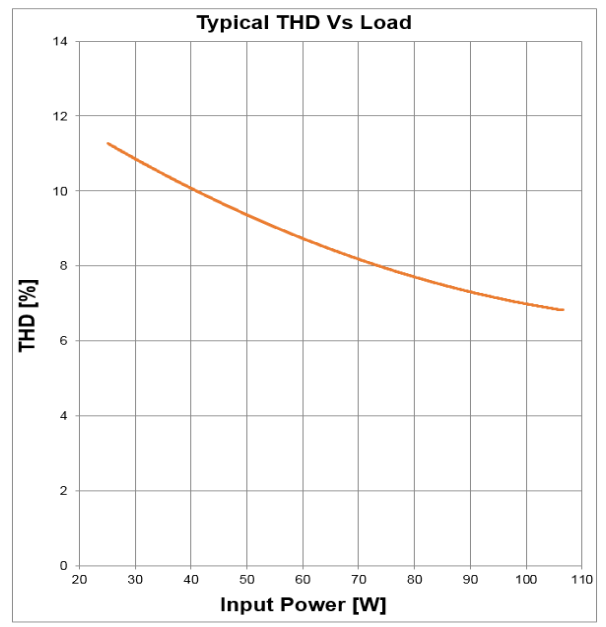
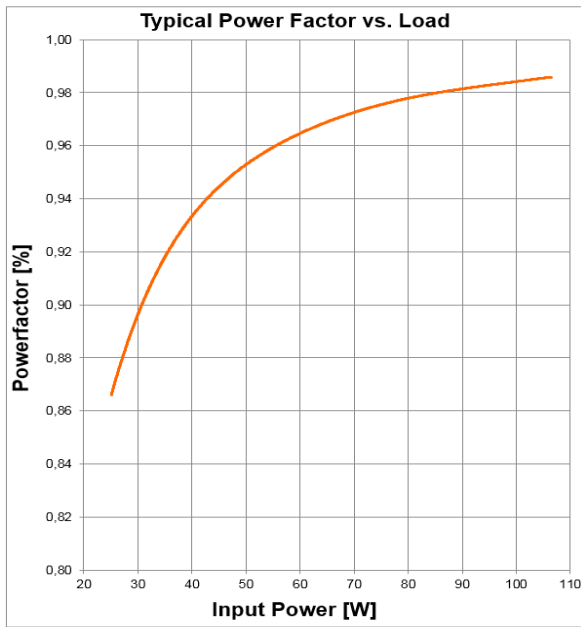
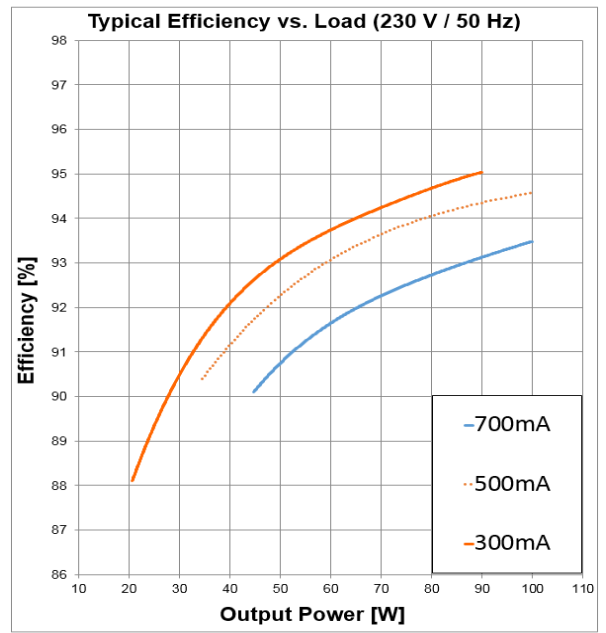
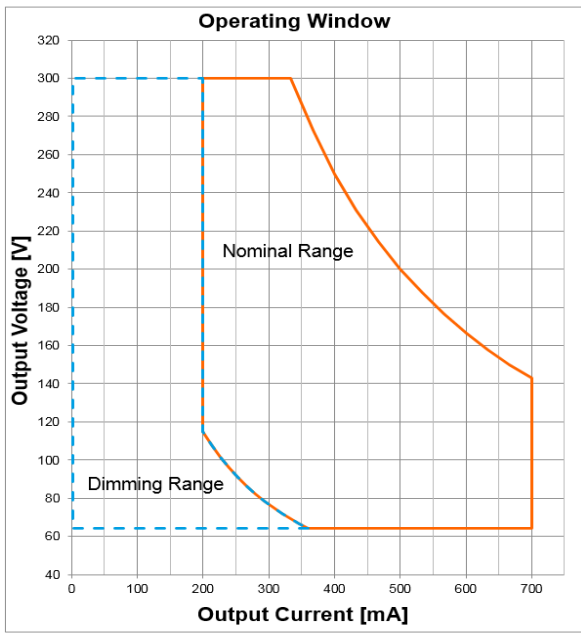
Terminal:  
Max. cable length - system:  
Geometry (l x b x h):  
Weight:

Push in terminals  
2 m  
360 x 30 x 21 mm  
260 g

Wire preparation:  
Push in  
s: 0.5-1.5 mm  
f: 0.75-1.5 mm  
7-8 mm



5.) Mains – 6.) Input – 7.) Output



## Remarks

- **Input overvoltage protection:** mains up to 350 Vac, for two hours maximum, will not destroy both the unit and the load; shut down of the load might occur in this condition.
- **Input surge protection:** the unit is protected against surge up to 4kV between L-N (symmetric surge) and L/N-PE (asymmetric surge). During an asymmetric surge, the voltage between the LED outputs and PE is equal or lower than the applied surge voltage.
- **Output short circuit / undervoltage protection:** shut down of the load happens if  $V_{out}$  is out of the operating range.
- **Output overload protection:** the unit automatically reduces the output current to keep the output power below 100W.
- **Output over voltage protection:** shut down of the load might happen if  $V_{out}$  exceeds 300V
  - o **Step 1:** output current reduction to decrease  $V_{out}$ ;
  - o **Step 2:** shut down of the load at longer or extreme overvoltage.
- **No load operation:** the unit automatically switches off, the maximum output voltage is <310V.
- **Overtemperature protection:** the unit is protected against temporary overheating by automatic reduction of the output current when  $t_c > 85^{\circ}\text{C}$ .
- **Enhanced programmable options:**
  - o **Driver Guard:** when active, the unit limits the maximum temperature of the driver according the prestart derating range.
  - o **Soft Switch Off:** when active, at DALI switch-off the LED current goes smoothly to zero.
  - o **Dim to dark:** when active, the minimum dimming current is the minimum physical one provided by the unit. Compliance with local regulations must be checked.
- **Enhanced analyzing options:**
  - o **Luminaire Data:** Possibility of Analysis Using Luminaire Data (Power, Energy, Operating Hours) Suitable for emergency lighting units
- **Switchover time:** lower than 0.5 s, from AC to DC mains and viceversa.
- **Output power hold time:** > 4 ms, in case of mains dips.
- **Emergency lighting:** this LED power supply is suitable for emergency lighting fixtures acc. to EN 60598-2-22; according to IEC 61347-2-13 Annex J.
- **Emergency Escape Lighting:** this LED power supply is suitable for emergency escape lighting systems acc. to EN 50172.

## 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
OTi DALI 100/220-240/700 D LT2 NFC IND L	4052899559516	4052899559523	20

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