

Light is OSRAM

OSRAM

## Product data sheet: OTi DALI 10/220-240/700 NFC

Compact Constant Current LED driver

Wide operating area 150-700mA, 2.5-45V, 1-100% dimmable

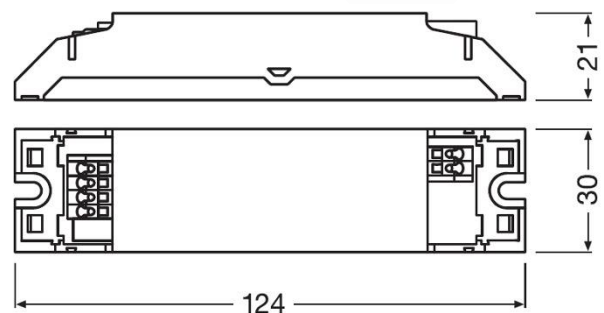
OPTOTRONIC® LED Compact SELV Power Supply  
with high reliability in extra mini size.

### Benefits:

Versatile DALI LED driver 10W  
Ideal for very small housings / ceiling holes  
Very low output voltage, suitable even for 1 LED  
Fast programming/current setting thanks to NFC  
High quality amplitude dimming 1-100%  
Suitable for emergency lighting installations  
Optional cable clamps for independent installations

### Applications

Shop/Retail, hospitality



### Approval marks and Symbols

ENEC, VDE, VDE-EMC, EL, CE, DALI2, CCC, EAC

### Product Features

- Output currents: 150-700mA
- Output voltage: 2.5V<sub>DC</sub> – 45V<sub>DC</sub>
- Output power: 1.5W – 10W
- Suitable for class I and II luminaires
- DALI dimming
- Extra small housing
- Low output current ripple <2%
- Typ. Efficiency: 82%
- SELV
- Up to 100'000 hours lifetime

## Electrical Specifications

	Item	Value	Unit	Remarks
INPUT	Nominal Voltage	220-240	Vac	
	Nominal frequency	0 / 50 / 60	Hz	
	AC voltage range	198-264	Vac	
	DC voltage range	176-276	V	
	Maximum voltage	280	V	2 h maximum, unit might not operate in this abnormal condition
	Nominal current	40	mA	
	Total Harmonic Distortion (THD)	15	%	At full load, 220...240 V, 50 Hz
	Power factor	>0.98 / >0.94		At Pmax, 220...240 V, 50 Hz/At 50% Pmax, 220...240 V, 50 Hz
	Efficiency	82	%	At full load
	No-load power	n/a	W	Load switching on output side is safe but not permitted
	Power loss	3.5	W	
	Protection class	II		Suitable for class I and II luminaires
	Inrush current	5	A pk	Max, Th<100µs
	Max. units per circuit breaker	B16: 130 B10: 82		
	Leakage current	<0,7	mA	
OUTPUT	Nominal voltage range	2.5-45	Vdc	
	Maximum voltage	60	Vdc	
	Nominal current range	150-700	mA	
	Current accuracy	±3	%	
	Current ripple	<2	%	
	Nominal power range	1.5-10	W	
	Maximum power	10	W	
	Galvanic isolation	SELV		
DIM	Dimming control	DALI		
	Dimming range	1-100	%	
	Dimming technique	Amplitude		
	Frequency	---	Hz	
	Galvanic isolation	basic / double		Basic DALI to Primary / Double DALI to Secondary
ENVIRONMENT	Ambient temperature range t <sub>a</sub>	-20...+50	°C	
	Max. case temperature t <sub>c</sub> max	75	°C	
	Max. case temp. in fault condition	110	°C	
	Storage temperature range	-25 ...+85	°C	
	Relative humidity	5-85	%	
	Surge transient protection	1	kV	L/N acc to. EN 61547
	Environmental rating	Indoor		
	IP rating	IP20		
	Mains switching cycles	>150,000		
	Expected lifetime	50,000 100,000	h	At max tc At tc = 65°C

## Protections

Overtemperature, Overload, No load, Short-circuit, Input overvoltage, Output overvoltage, Output undervoltage

## Wiring Diagram

Terminal:

Max. cable length

Geometry

Weight:

Push in terminals

2 m

123 x 31 x 21 mm

50g

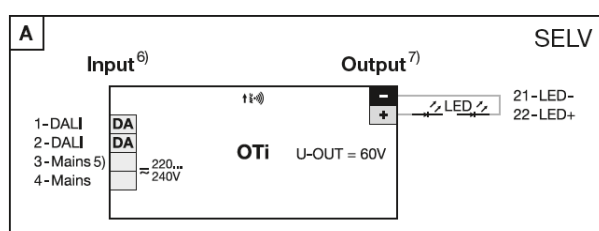
Wire preparation:

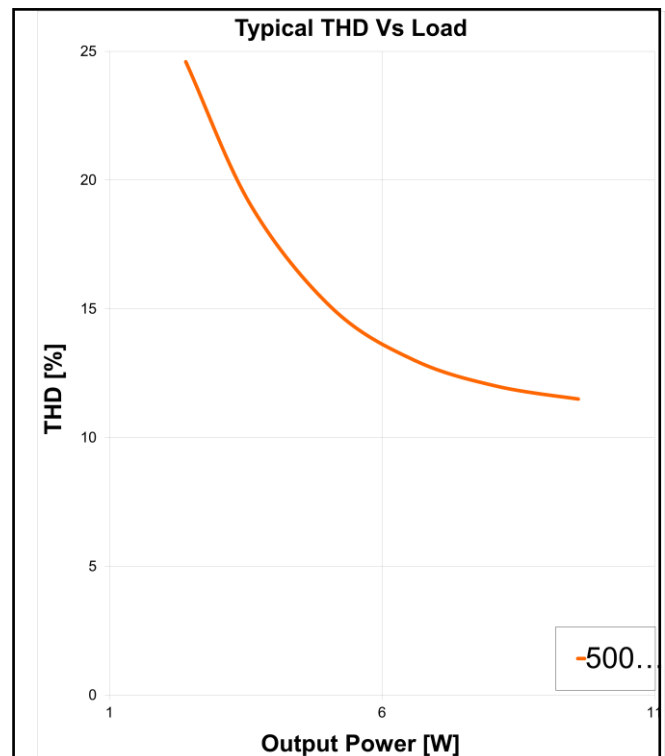
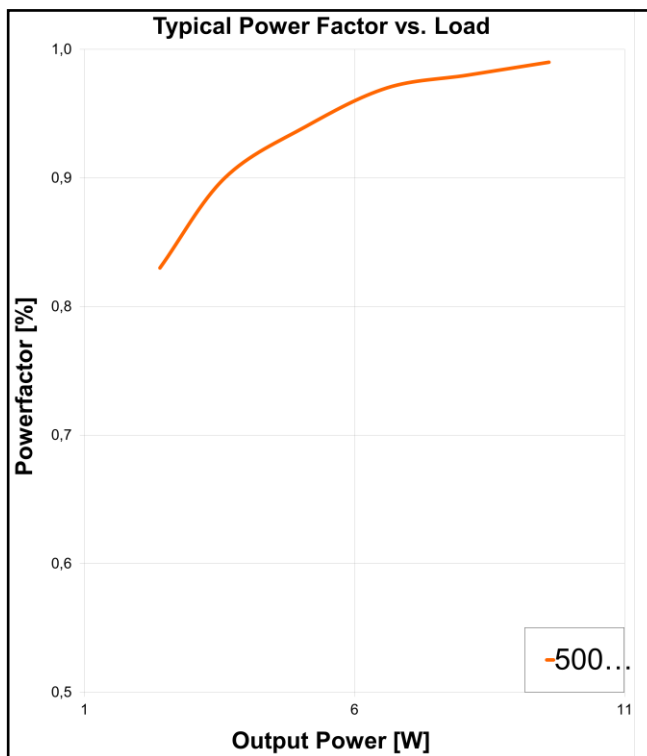
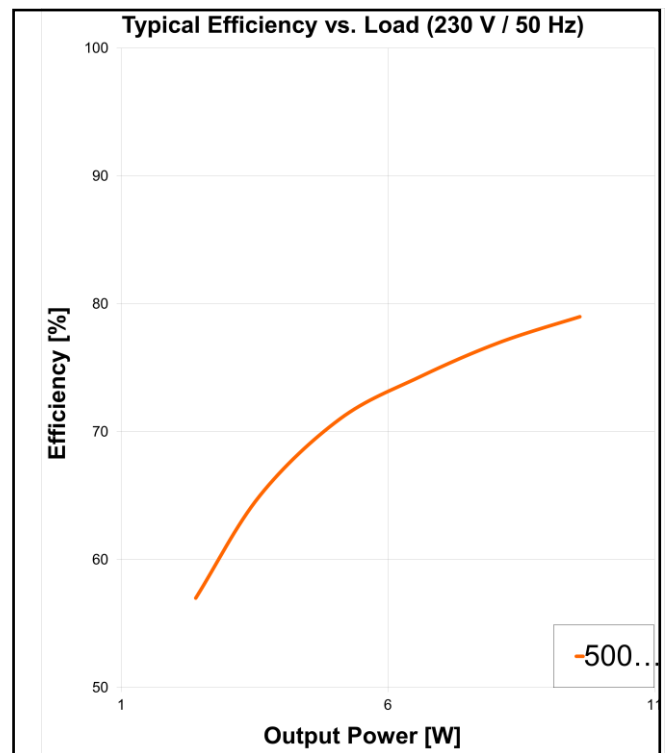
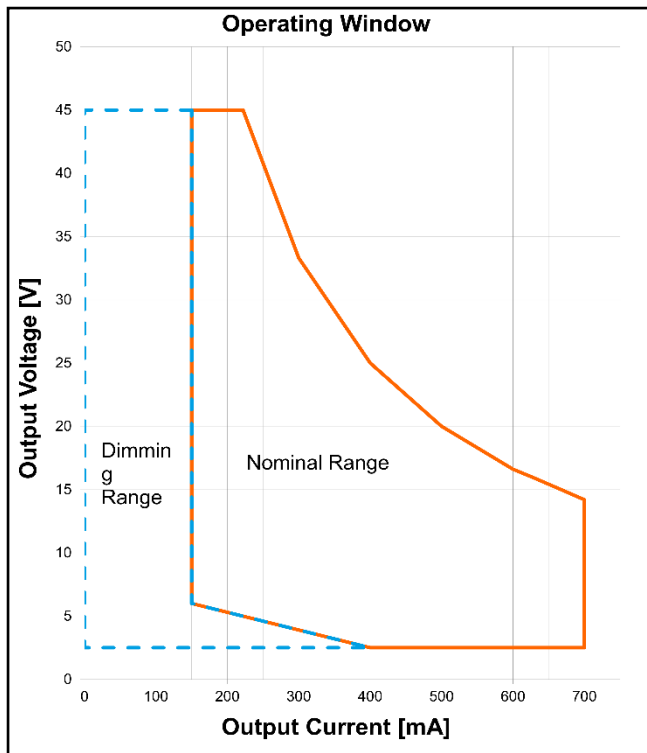
Push in

s:0.5-1.5

f:0.75-1.5

7-8 mm





## Remarks

- **Input over voltage protection: mains up to 280 Vac**, for 2 hours maximum, will not destroy both the unit and the load; shut down of load might occur in this condition.
- **Output short circuit / under voltage protection:** shut down of load happens if  $U_{\text{rated}}$  is below 2V. The unit automatically tries to switch on the load again every 4-5 sec for 0.1 sec the selected nominal current.
- **Output overload protection:** the unit automatically reduces the output current to keep the output power below 10W .
- **Output over voltage protection:** the unit tries to stabilize the voltage by reducing the current as necessary down to 50%; if  $U_{\text{rated}}$  still exceeds 45V shutdown will occur; the unit tries to automatically switch on the load again every 4-5 sec for 0.1 sec delivering the selected nominal output current.
- **No load operation:** the unit tries to automatically switch on the load again every 4-5 sec for 0.1 sec delivering the selected nominal output current; this operation mode is safe for the unit but is not recommended. Do not put a switch between load and unit.
- **Over temperature protection:** the unit is protected against temporary overheating by automatic reduction of the output current (up to a complete power off) when  $t_c > 75^\circ\text{C}$  (typically  $80^\circ\text{C}$ ). The protection is self-restoring.
- **Touch current:** lower than 0.7 mA, according to EN 60598-1 ann. G and EN 61347-1 annex A
- **Emergency lighting:** this LED power supply is suitable for emergency lighting fixtures acc. to EN 60598-2-22., with emergency output factor  $\text{EOF}_i=0.15$  (default value, can be programmed up to  $\text{EOF}_i=1$ ) and related duration time of 10h at least. Function in emergency is ensured up to  $t_a=80^\circ\text{C}$ .

## Standards

Safety:

Performance:

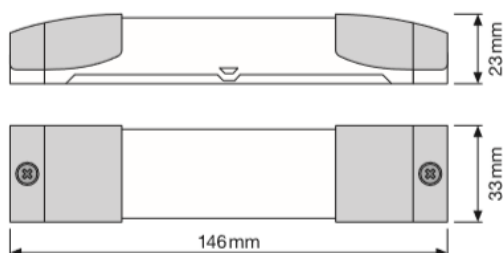
Harmonic content:

Immunity:

Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 55015/Acc. to EN 61547/Acc. to EN 61000-3-2/Acc. to EN 62384/Acc. to EN 62386/Acc. to IEC 62386-101:Ed2/Acc. to IEC 62386-102:Ed2/Acc. to IEC 62386-207:Ed1

EAN10	Product name	Pcs/ box
4052899562639	OTI DALI 10/220-240/700 NFC	20

## Accessoires



EAN10	Product name	Pcs/ box
4062172046732	OT CABLE CLAMP N- STYLE	100

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