

Light is OSRAM

OSRAM

Product data sheet: OTi DALI 150/220-240/1A0 D NFC IND L

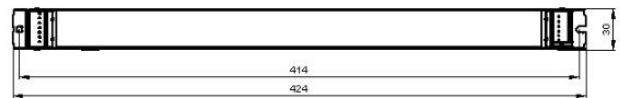
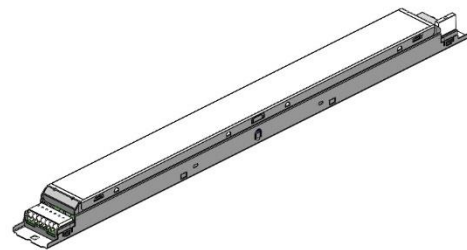
Constant current LED driver w NFC incl. OSRAM DALI features – non isolated
Wide operating area up to 1000mA, 1...100% dimmable

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: 250 – 1000 mA , 64 – 300 V
Wide ambient temperature range: -40...+65 °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 250 – 1000 mA | – Very wide ta range -40...+65 °C |
| – 100'000 h lifetime at $t_c = 75^\circ\text{C}$ | – $t_c \text{ max} = 85^\circ\text{C}$ |
| – Analogue dimming down to 1% | – Very low ripple $\leq 1\%$ |
| – Very high efficiency up to 95% | – Fully programmable, DALI/NFC |
| – In-rush current limiter integrated | – 4kV surge protection |
| – Low stand-by consumption $<0.2 \text{ W}$ | – 200'000 switching cycles |
| – Suitable for emergency lighting | – 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 _{AC}	2 h maximum, unit might not operate in this abnormal condition
	Nominal current	0.68	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	11	W	Maximum full load
	Protection class	I		PE can be connected either to terminal or housing
	Inrush current	5	A pk	T _h = 900 μs
	Max. units per circuit breaker	B16: 32; B10: 18		
OUTPUT	PE current	< 0.5	mA	Through PE
	Nominal voltage range	64 – 300	V	
	Maximum voltage	< 310	V _{DC}	w/ no load
	Nominal current range	250 – 1000	mA	LEDset open: 125 mA; LEDset short: 250 mA
	Current accuracy	+/- 3	%	With LEDset: +/- 5%
	Current ripple	< 1	%	LF ripple <1%, HF ripple <4%
	Nominal power range	43 – 150	W	
	Maximum power	150	W	
	DC Output current (EL)	15	%	Preset value, adjustable via software, at DC or RAC
	Galvanic isolation	No		Non-isolated
DIM	Dimming control	Yes		DALI and TouchDIM
	Dimming range	1...100	%	Complete analogue Dimming
	Dimming standard	DALI-2		
ENVIRONMENT	Ambient temperature range t _a	-40 ... +65	°C	250-700mA
	Maximum case temperature t _c	-40 ... +60	°C	>700mA
	Max. case temp. in fault condition	85	°C	Measured on t _c point indicated of the product label.
	Storage temperature range	110	°C	
	Relative humidity	-25 ... +85	°C	
	Surge transient protection	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 _c = 85°C, 0.2% / 1'000 h failure rate, 24h ON
		100'000		t _c = 75°C, 0.2% / 1'000 h failure rate, 24h ON

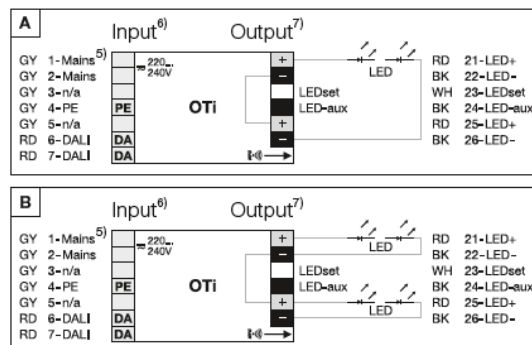
● 1 220-240V	● 2 240V	● 3	● 4	● 5	● 6 DA	● 7 DA
OPTOTRONIC® INTELLIGENT						
OT; DALI 150/220-240/1A0 D NFC IND L						
Constant current LED Power Supply						
Input	Output	Power	Efficiency	THD	PF	Temp.
220-240V	150mA	15W	95%	7%	0.98	85°C
220-240V	250mA	25W	95%	7%	0.98	85°C
220-240V	500mA	50W	95%	7%	0.98	85°C
220-240V	1000mA	100W	95%	7%	0.98	85°C



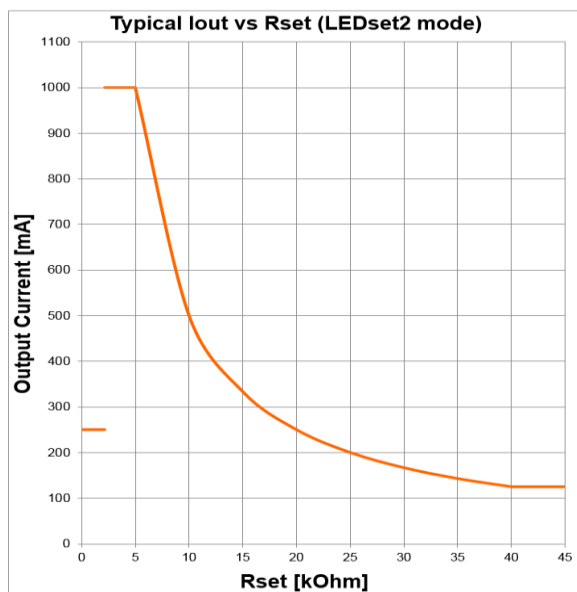
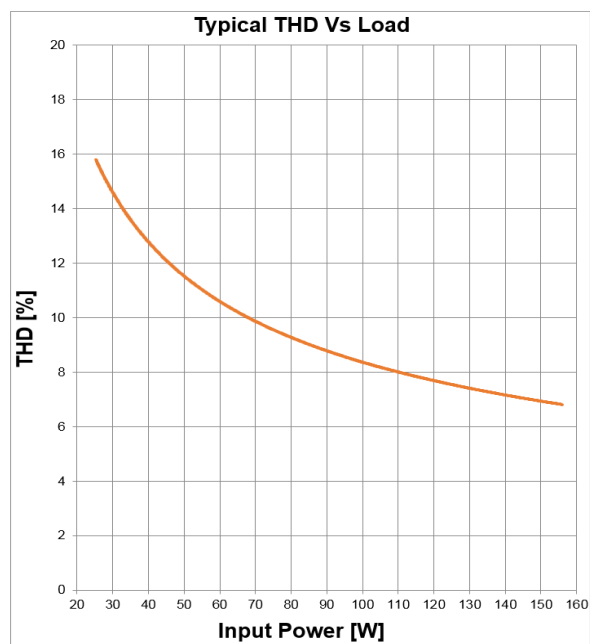
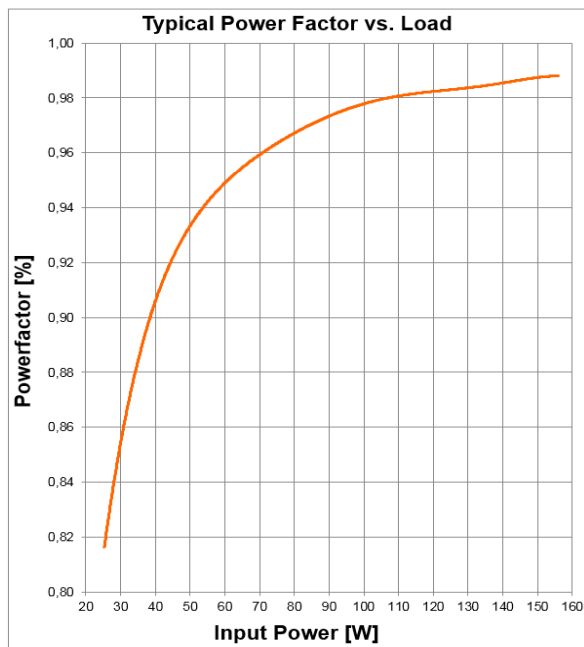
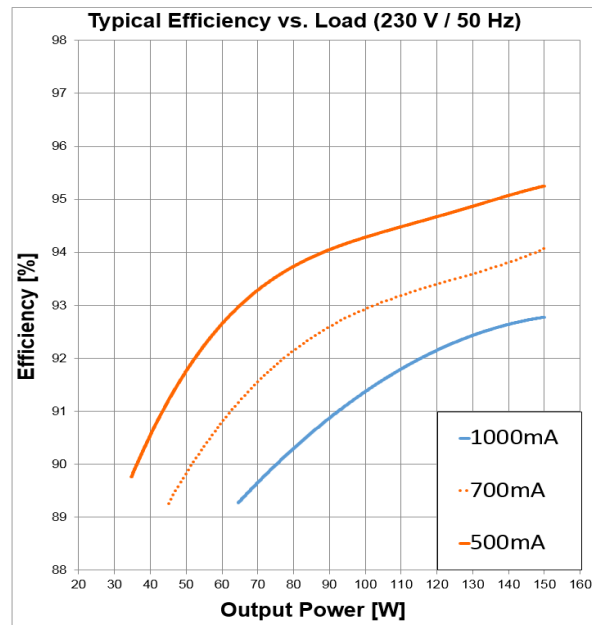
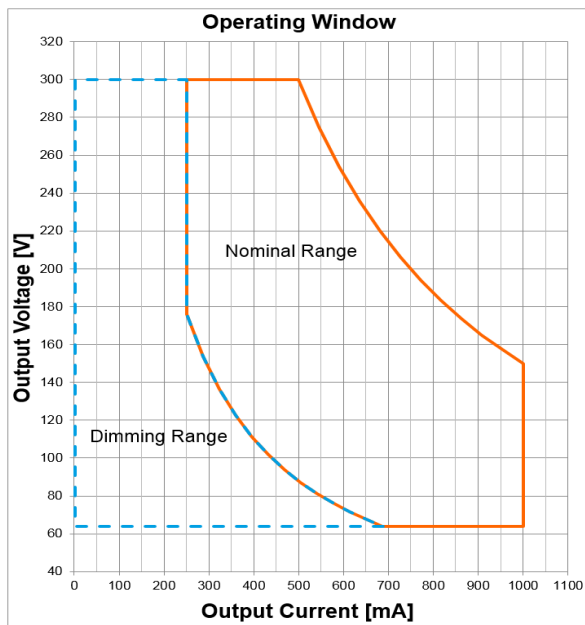
Wiring Diagram

Terminal:
Max. cable length - system: 2 m
Geometry (l x b x h): 425 x 30 x 21 mm
Weight: 306 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 Vout 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 Vout exceeds 300V
 - **Step 1:** output current reduction to decrease Vout;
 - **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:**
 - **Driver Guard:** when active, the unit limits the maximum temperature of the driver according the prestart derating range.
 - **Soft Switch Off:** when active, at DALI switch-off the LED current goes smoothly to zero.
 - **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:**
 - **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 150/220-240/1A0 D LT2 NFC IND L	4052899559530	4052899559547	20

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Created on: September 2018