

OPTOTRONIC® OTi DALI 150/220-240/1A0 D NFC HV L

Constant current DALI LED driver incl. DALI parts 251, 252, 253 – non isolated

Wide operating area up to 1000mA, 1...100% dimmable

Flexible, reliable solution for energy saving lighting.
DALI dimmable & programmable
Embedded corridor functionality and advanced TouchDIM with daylight harvesting and constant lumen output (CLO).
Fully programmable by DALI / NFC.

Benefits

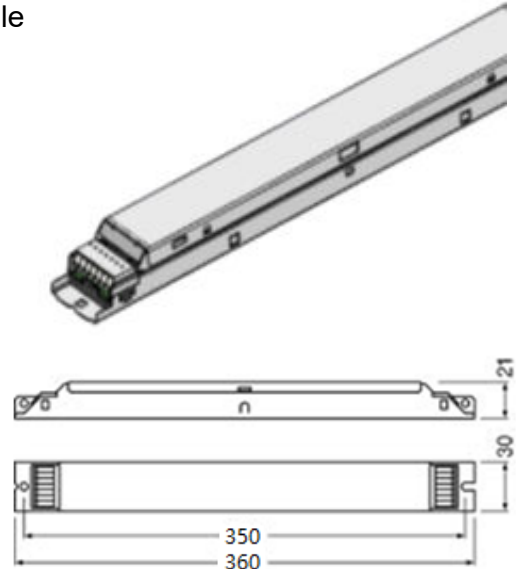
Wide operating range: 250 – 1000mA
Adjustable current via DALI or NFC
Small, slim white metal housing 30 x 21 mm
Suitable for emergency lighting units
Smart analogue dimming 1...100%
DiiA specification, DALI parts 251, 252, 253
DALI-2 certified

Applications

Linear and area lighting
Office – industrial – shop

Approbations

CE, ENEC, CCC, EAC, BIS, RCM
In preparation, if not already printed on the label



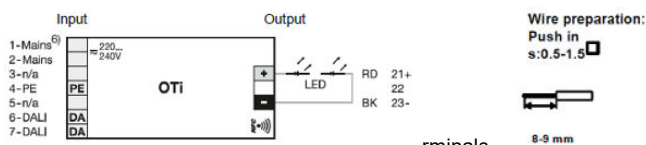
Housing material: metal, white painted

Product Features

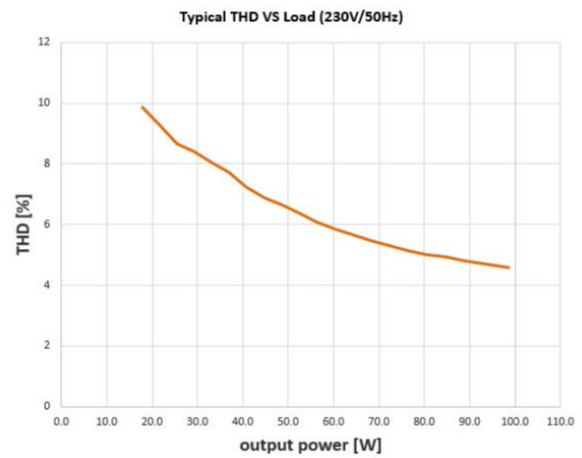
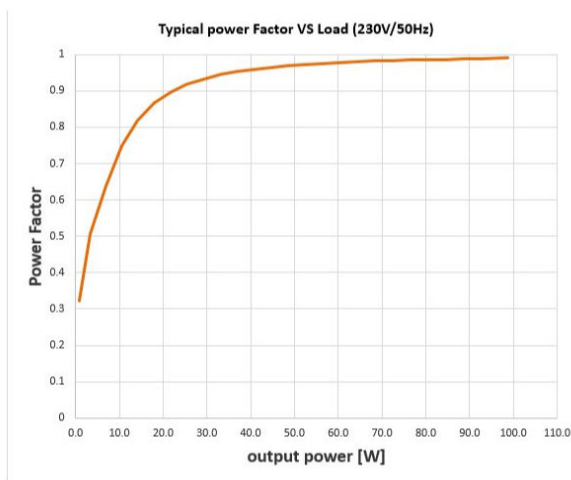
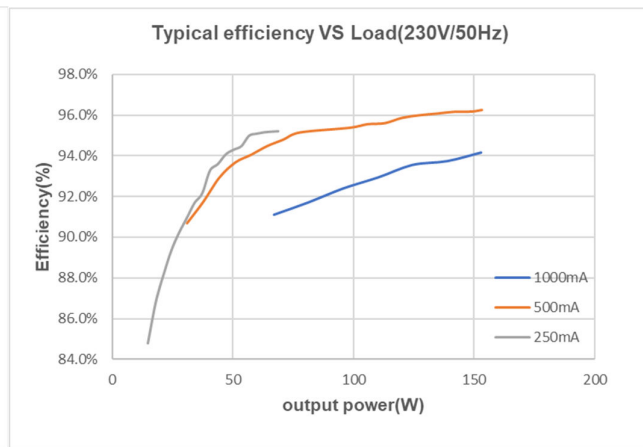
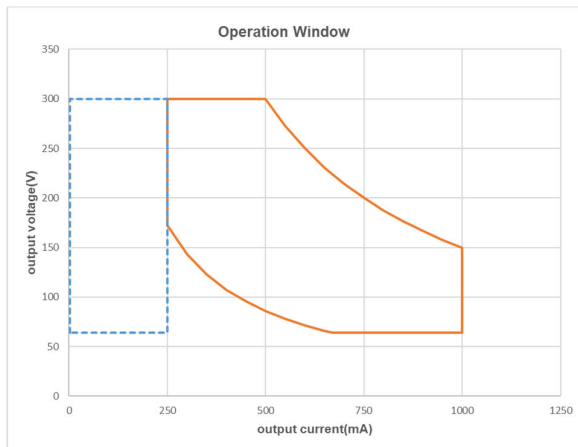
- Output current range 250 – 1000mA
- Fully programmable DALI/NFC
- Analogue dimming down to 1%
- Very high efficiency up to 96%
- Low network standby cons. ≤ 0.25 W
- Output power up to 150 W
- Suitable for emergency lighting
- DALI parts -251, -252, -253
- Overload & temperature protection
- Very low ripple $\leq 1\%$
- 100'000 h lifetime at $t_c = 75^\circ\text{C}$
- t_c max = 85°C
- Wide t_a range $-25 - +55^\circ\text{C}$
- 5 years guarantee

Electrical Specifications

	Item	Value	Unit	Remarks
INPUT	Rated voltage	220 – 240	V	
	Rated frequency	0 / 50 / 60	Hz	
	AC voltage range	198 – 264	V	Permitted voltage range
	DC voltage range	176 – 276	V	Permitted voltage range
	Maximum voltage	350	Vac	2 h maximum, unit might not operate in this abnormal condition
	Nominal current	0.75	A	
	Total Harmonic Distortion (THD)	< 7	%	Full load
	Power factor	> 0.99		Full load, 220 – 240 V, 50 Hz / see graphs
	Efficiency	Up to 96	%	Full load, 220 – 240 V, 50 Hz / see graphs
	Starting time	≤ 0.6	s	
	Power losses	6.5	W	Maximum, full load
	Standby power	N/A,		Not applicable
	No load power	N/A,		Not applicable, control gear not intended to operate in no-load mode
	Networked standby power	≤ 0.25	W	
	Protection class	N/A,		Suitable for Class I luminaire
	Inrush current	44.6	A pk	th = 214 μs
Max. units per circuit breaker	B16: 13 B10: 8			
PE current	< 0.5	mA	Through PE	
OUTPUT	Nominal voltage range	64 – 300	V	
	Maximum voltage	310	V	
	Nominal current range	250 – 1000	mA	
	Current accuracy	+/- 3	%	
	Current ripple	< 1	%	100 Hz., low freq. ripple is negligible
	PsT	≤ 1		At full load
	SVM	≤ 0.4		At full load
	Nominal power range	43 – 150	W	
	Maximum power	150	W	
	DC Output current (EL)	100	%	Preset value 15%, adjustable via software, at DC or RAC ta = -25...+55°C: EOFI = 1; ta = +55...+80°C: EOFI = 0.18
Galvanic isolation	No		Non-isolated	
Dimming	Dimming control	yes		DALI, Acc. IEC 62386
	Dimming range	1...100	%	Complete AM or AM/PWM selectable
	Dimming Standard	DALI2		
	Noise Level	≤ 21 dB (A)		at any dim level, microphone 20cm on top of the driver
ENVIRONMENT	Ambient temperature range t_a	-25 ... +55	°C	
	Maximum case temperature t_c	85	°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	$t_c = 85^\circ\text{C}$, 0.2% / 1'000 h failure rate, 24h ON $t_c = 75^\circ\text{C}$, 0.1% / 1'000 h failure rate, 24h ON	



terminals.
 Max. Cable length – system: 2m
 Dimensions: 360x30x21 (LxWxH)
 Weight: 280 g



NFC compatible with MD SIG standard

Additional Features

Soft Switch Off (in analogue mode) – Driver Guard – Tuning Factor – Dim to Dark
 Luminaire Info (acc. Part 251), monitoring Data (acc. Part 252&253), Configuration Lock

Data privacy

This OSRAM driver can be configured using the Tuner4TRONIC software. This requires registering on www.myosram.com and downloading the Tuner4TRONIC software from the Internet. The Tuner4TRONIC software enables users to access and view the operational data of a luminaire or driver via the corresponding programming interfaces. A password key (Config Lock) must be set up in the driver via the Tuner4TRONIC software in order to control which users can access and view operational data. Follow the instructions for password setup. To grant an external person or company rights to access or view operational data, you can assign password keys. In this case, however, you are responsible for ensuring that the third party concerned takes notice of the information described here. However, OSRAM can read out operating data from devices for maintenance and service purposes even when a password key has been assigned. In individual cases, OSRAM will also use its access rights in order to optimize or improve driver hardware and driver functions. In accordance with data privacy principles, any user of operating data (luminaire manufacturers, third parties with access rights) must ensure that personal data (e.g. name, address, location IDs) are only merged with the prior written consent of the person (end user) concerned. The respective user of the operating data is responsible for providing evidence of consent.

Remarks – Operating the Control Gear:

- LED driver is not suitable for luminaires designed to be connected to the supply by means of a plug
- The control gear is designed for constant current LED light sources that fit into the operating window of the control gear
- Compatibility with light sources when dimming: The forward voltage must be within the operating window of the control gear in all dimming position
- The lamp control gear relies upon the luminaire enclosure for protection against accidental contact with living parts.
- The DALI terminal have basic insulation with LV supply voltage
- The control gear is not intended for use in luminaires for high-risk task area lighting
- Default EOFI is 1

Remarks – Protections & Behaviour:

- **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 1kV between L-N (symmetric surge) and 2kV between 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 155W.
- **Output over voltage protection:** shut down of the load might happen if Vout exceeds 310V.
 - **Step 1:** output current reduction to decrease Vout;
 - **Step 2:** shut down of the load at longer or extreme overvoltage.
- **No load operation:** Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs..
- **Overtemperature protection:** the unit is protected against temporary overheating by automatic reduction of the output current when $t_c > 85^{\circ}\text{C}$.
- **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. , with emergency output factor EOFI=0.15 (default value, can be programmed up to EOFI=1) and related duration time of 1h at least. Function in emergency is ensured up to $t_a=80^{\circ}\text{C}$.

Standards

IEC 61347-1
IEC 61347-2-13
IEC 62384
IEC 62386
IEC 61000-3-2
IEC 61000-3-3
IEC 61547

Ordering information

Product name	EAN10	NAED	Pieces / box
OTi DALI 150/220-240/1A0 D NFC HV L	4062172125116	n.a.	20

Recommendations on how to dispose of it at the end of its life in line with Directive 2012/19/EU:

Separate control gear must be disposed of, in accordance with WEEE, at certified waste disposal companies. For this purpose, recycling centres and take-back systems (CRSO) collection points are available in the trade or at private disposal companies that accept separate control gears free of charge. In this way, raw materials are conserved, and materials are recycled.

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