### OSRAM

product - technical datasheet

## OTi DALI 90/220-240/1A0 LT2 L

OPTOTRONIC Intelligent – DALI LEDset LT2 (non-isolated) | Linear constant current LED driver – Dimmable



### Product family features

- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Versatile DALI window driver up to 90 W due to flexible output characteristic
- Supply voltage: 220...240 V
- Available with output current range: up to 1,050 mA
- Constant Lumen Output (CLO)
- Integrated customizable thermal management (Driver Guard)
- DALI-2 certified (Part -101,-102 and -207)

### Product family benefits

- Fully programmable via software (DALI Interface)
- Flexible current setting (LEDset2)
- Lifetime: up to 100,000 h (temperature at T = 65 °C, max. 10 % failure rate)
- High-quality dimming of 1...100 % by amplitude dimming (except 80 W versions)
- High quality of light thanks to <1% output ripple current
- Very high efficiency
- Very low standby power consumption: < 0.25 W
- Fulfill safety requirement due to overload, overtemperature, Hot Plug protection

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### Areas of application

- Linear lighting for office, education, industry, storage areas and retail
- Installation in emergency lighting systems according to IEC 61347-2-13, appendix J
- Suitable for luminaires of protection class I

#### Versatile scope of application due to OSRAM DALI Technology:

- Easy to use in corridors and restrooms because of three-level Corridor function
- Touch DIM® application: easy to control via pushbutton or sensor
- Energy efficient Touch DIM® operation due to automatic switch-off at sufficient residual light
- Suitable for emergency Installations (acc. to EN 60598-2-22 and IEC 61347-2-13, appendix J) thanks to DC detection (0 Hz, pulsating DC), on/off switchable
- Feedback of power consumption and operating hours (Fit for SMART GRID)
- Suitable for buildings according to EPBD/BREEAM/LEED due to automatic Constant Lumen Output setting
- Luminaire information for easy maintenance

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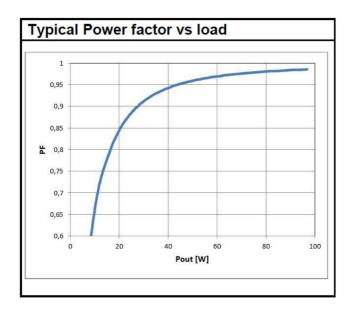
#### Technical data

### **Electrical data**

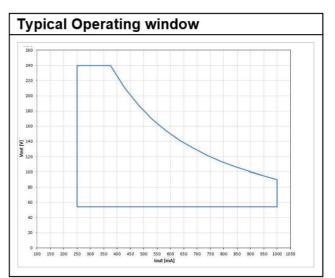
Device power loss	9.0 W <sup>1)</sup>
Nominal output voltage	54240 V <sup>2)</sup>
Input voltage DC	176276 V
Nominal output current	2501000 mA
Inrush current	25 A <sup>3)</sup>
Max. ECG no. on circuit breaker 10 A (B)	15
Max. ECG no. on circuit breaker 16 A (B)	24
Nominal output power	13.590 W
Input voltage AC	198264 V <sup>4)</sup>
Power factor λ	0.62C0.99 <sup>5)</sup>
U-OUT (working voltage)	< 250 V
Surge capability (L-N)	1 kV
Surge capability (L/N-Ground)	2 kV
Mains frequency	0/50/60 Hz
Protective conductor current	<0.5 mA
Nominal input voltage	220240 V
Total harmonic distortion	< 10 %
Output current tolerance	±3 % <sup>6)</sup>
Maximum output power	90 W
Galvanic isolation	Non isolated
Output ripple current (100 Hz)	< 1 %
Current set	DALI / LEDset / Programmable

- 1) Maximum
- 2) Maximum 250 V
- 3) At 280 µs
- 4) Permitted voltage range
- 5) Full load at 230 V
- 6) When use DALI

### Typical Power Factor v Load

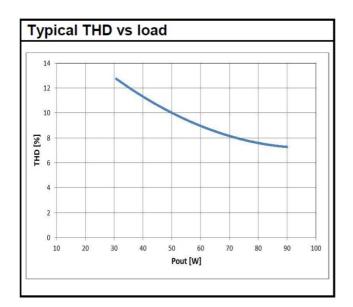


**Operating Window** 



OTI DALI 90/220-240/1A0 LT2 L Typical Power Factor vs. Load

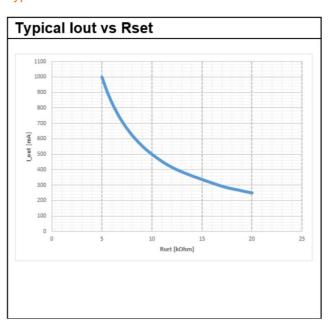
# Typical THD v Load



OTI DALI 90/220-240/1A0 LT2 L Typical THD Vs Load

OTI DALI 90/220-240/1A0 LT2 L Operating Window

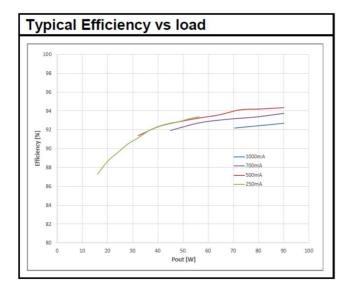
### Typical lout v Rset LEDset2 mode



OTI DALI 90/220-240/1A0 LT2 L Typical lout vs Rset (LEDset2 mode)

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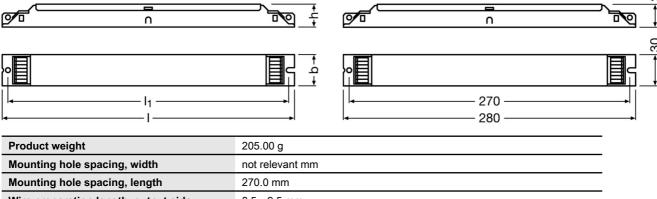
Typical Efficiency v Load 230 V 50 Hz



OTI DALI 90/220-240/1A0 LT2 L Typical Efficiency vs. Load (230 V / 50 Hz)

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### **Dimensions & weight**



Product weight	205.00 g	
Mounting hole spacing, width	not relevant mm	
Mounting hole spacing, length	270.0 mm	
Wire preparation length, output side	8.59.5 mm	
Wire preparation length, input side	8.59.5 mm	
Cable/wire length, output side	2000 mm	
Cable cross-section, output side	0.51.5 mm <sup>2</sup> 1)	
Cable cross-section, input side	0.51.5 mm <sup>2</sup> 1)	
Length	280.0 mm	
Height	21.0 mm	

<sup>1)</sup> Solid or flexible leads

### **Colors & materials**

Product color	White
Casing material	Metal

### Temperatures & operating conditions

Max.housing temperature in case of fault	110 °C
Maximum temperature at tc test point	75 °C
Ambient temperature range	-25+50 °C
Temperature range at storage	-2585 °C
Permitted rel. humidity during operation	585 % <sup>1)</sup>

<sup>1)</sup> Maximum 56 days/year at 85 %

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### Lifespan

ECG lifetime	50000 h / 100000 h <sup>1)</sup>

1) At maximum  $T_c = 75$ °C / 10% failure rate / At  $T_c = 65$ °C / 10% failure rate

### Additional product data

Encapsulated	No
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### Capabilities

Max. cable length to lamp/LED module	2.0 m <sup>1)</sup>			
Dimming range	1100 % <sup>2)</sup>			
Dimming method	Full analogue dimming			
Dimming interface	DALI-2 / Touch DIM / Touch DIM Sensor			
Suitable for emergency lighting	Yes			
Short-circuit protection	Automatic reversible			
Overload protection	Automatic reversible			
Overheating protection	Automatic reversible			
Dimmable	Yes			
Suitable for fixtures with prot. class	I			
No-load proof	Yes			
Type of connection, input side	Push terminal			
Type of connection, output side	Push terminal			
Constant lumen function	Programmable			
Programming interface	DALI, LEDset			

<sup>1)</sup> Output wires must be routed as close as possible to each other

<sup>2)</sup> For maximum nominal output current

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### **Programmable features**

DALI Settings	Yes
Emergency Mode	Yes
DALI-2 Luminaire Data	Yes
TouchDIM + Sensor	Yes
Corridor Functionality	Yes

### Certificates & standards

Standards	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
Approval marks – approval	CE / EL / VDE-ENEC / VDE-EMC / EAC / CCC / BIS / RCM
Type of protection	IP20

### Logistical data

Commodity code	85044083900

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### **Download Data**

File			
Certificates	PDF	►EATON(CEAG)-Conformity declaration AN00952 OTI DALI 90/220-240/1A0 D LT2 L	
Certificates	PDF	►INOTEC-Conformity declaration AN00952 OTI DALI 90/220-240/1A0 D LT2 L	
Certificates	PDF	►OT ENEC 40038085 111023	
Certificates	PDF	►EATON(CEAG)-Conformity declaration AM00141_OTiDALI90_220_240_1A0_D_LT2_L	
Certificates	PDF	►INOTEC- Conformity declaration AM00141_OTiDALI90_220_240_1A0_D_LT2_L	
CAD data 3-dim	Compressed	►OTI DALI D LT2 L CAD3PDF 270220	
CAD data 2-dim	Compressed	►OTI DALI D LT2 L CAD2PDF 270220	
CAD data	Compressed	►OTI DALI D LT2 L IGS 270220	
CAD data	Compressed	►OTI DALI D LT2 L STEP 270220	
Mandatory Publications	PDF	►OTI DALI D LT2 L UK DoC 4281086 01 090623	
Mandatory Publications	PDF	►OTI DALI D LT2 L CE 3667898 06 060523	
User instruction	PDF	►UI OTI DALI D LT2 L	

### 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 centres 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.





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### **Logistical Data**

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899494268	OTi DALI 90/220-240/1A0 LT2 L	Shipping carton box 20 Pieces	305 x 161 x 104 mm	5.11 dm³	177.00 g

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit

### Data privacy

This OSRAM driver can be configured using the Tuner4TRONIC software. This requires registering on www.myosram.com and downloading theTuner4TRONIC 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.

#### Disclaimer

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.