OTi DALI 90/220...240/700 D LT2 L

OPTOTRONIC Intelligent – DALI (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)

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Product family benefits

- Fully programmable via software (DALI Interface)
- Flexible current setting (LEDset2)
- Lifetime: up to 100,000 h (temperature at T_c = 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

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

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

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Technical data

Electrical data

Nominal input voltage	220…240 V
Mains frequency	0/50/60 Hz
Input voltage AC	198…264 V [1)]
Input voltage DC	176…276 V
Current set	DALI / LEDset / Programmable
Total harmonic distortion	< 10 %
Power factor λ	0.64C…0.99 [2)]
Efficiency in full-load	93 % [3)]
Device power loss	9.0 W [4)]
Inrush current	25 A
Max. ECG no. on circuit breaker 10 A (B)	15
Max. ECG no. on circuit breaker 16 A (B)	24
Max. ECG no. on circuit breaker 25 A (B)	-
Surge capability (L/N-Ground)	2 kV
Surge capability (L-N)	1 kV
Nominal output voltage	54…240 V [5)]
U-OUT (working voltage)	< 250 V
Nominal output current	250…700 mA
Output current LEDset open	125 mA
Output current LEDset shorted	250 mA
Default output current	125 mA [6)]
Output current tolerance	±3 % [7)]
Output ripple current (100 Hz)	< 1 %
Output PSTLM	≤1
Output SVM	≤0.4
Nominal output power	13.5…90 W
Maximum output power	90 W
Galvanic isolation	Non isolated
Power loss in stand-by mode	<0.25 W
Protective conductor current	<0.5 mA

1) Permitted voltage range

2) Full load at 230 V

3) at 230 V, 50 Hz

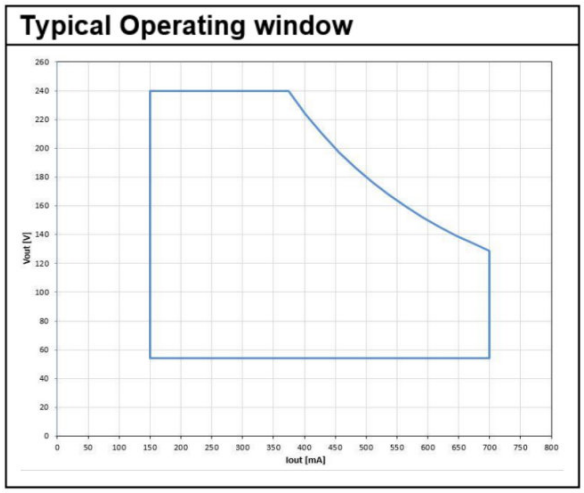
4) Maximum

5) Maximum 250 V

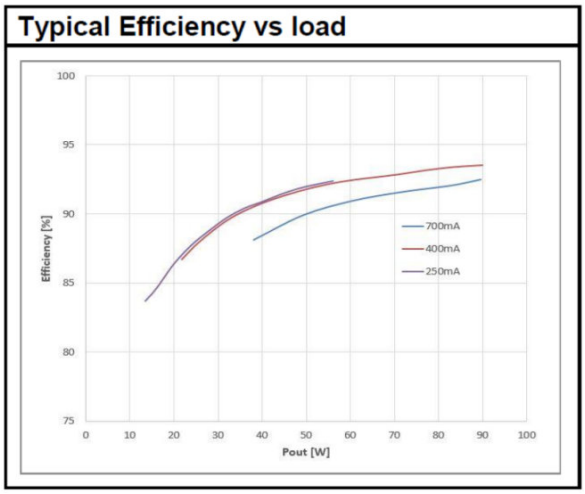
6) LEDset deactivated

7) When use DALI

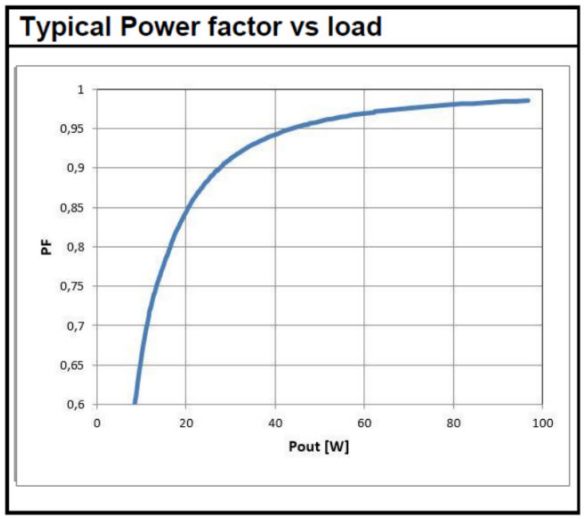
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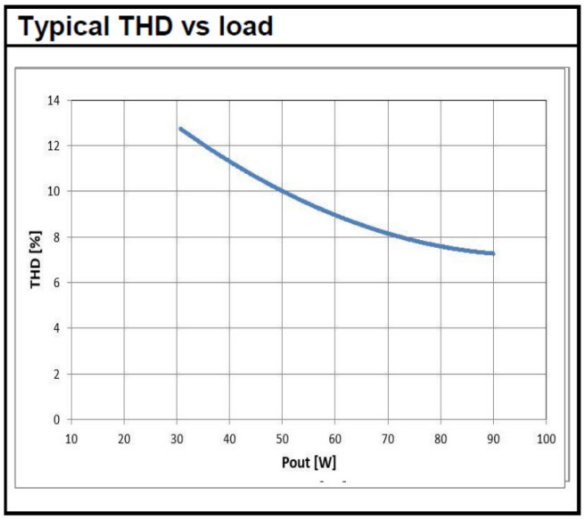
OTI DALI 90220-240700 D LT2 L Operating Window



OTI DALI 90220-240700 D LT2 L Typical Efficiency vs. Load (230 V 50 Hz)

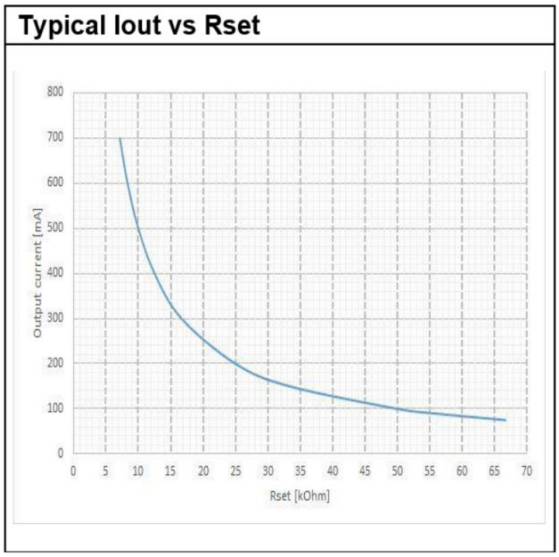


OTI DALI 90220-240700 D LT2 L Typical Power Factor vs. Load



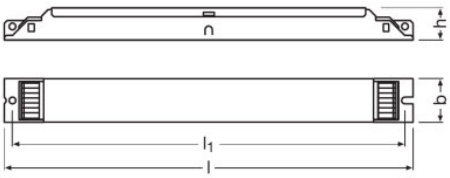
OTI DALI 90220-240700 D LT2 L Typical THD Vs Load

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OTI DALI 90220-240700 D LT2 L Typical Iout vs Rset (LEDset2 mode)

Dimensions & weight



Mounting hole spacing, length	270.0 mm
Product weight	205.00 g
Cable cross-section, input side	0.5…1.5 mm²
Cable cross-section, output side	0.5…1.5 mm²
Wire preparation length, input side	8.5…9.5 mm
Wire preparation length, output side	8.5…9.5 mm
Length	280.0 mm
Width	30.0 mm
Height	21.0 mm

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Colors & materials

Casing material	Metal

Temperatures & operating conditions

Ambient temperature range	-25…+50 °C
Maximum temperature at tc test point	75 °C
Max.housing temperature in case of fault	110 °C
Temperature range at storage	-25…85 °C
Permitted rel. humidity during operation	5…85 % [1)]

[1)] Maximum 56 days/year at 85 %

Lifespan

ECG lifetime	50000 / 100000 h [1)]

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

Capabilities

Programming interface	DALI, LEDset
Dimmable	Yes
Dimming interface	DALI-2 / Touch DIM / Touch DIM Sensor
Dimming range	1…100 % [1)]
Dimming method	Full analogue dimming
Overheating protection	Automatic reversible
Overload protection	Automatic reversible
Short-circuit protection	Automatic reversible
No-load proof	Yes
Intended for no-load operation	No
Max. cable length to lamp/LED module	2.0 m [2)]
Suitable for fixtures with prot. class	I
Type of connection, input side	Push terminal
Type of connection, output side	Push terminal
Constant lumen function	Programmable
Control interface	DALI
Number of channels	1
DALI-2 Energy Data	Yes
DALI-2 Diagnostic Data	Yes

[1)] For maximum nominal output current

[2)] Output wires must be routed as close as possible to each other

Programming

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Programming device	DALI magic
Tuner4TRONIC Field App	Yes

Programmable features

DALI-2 Luminaire Data	Yes
TouchDIM + Sensor	Yes

Certificates & standards

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

Logistical data

Commodity code	85044083900

Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh)	
Date of Declaration	21-07-2023
Primary Article Identifier	4052899494244 | 4062172082242
Candidate List Substance 1	Lead
CAS No. of substance 1	7439-92-1
Safe Use Instruction	The identification of the Candidate List substance is sufficient to allow safe use of the article.
Declaration No. in SCIP database	22fd91df-871b-4ef4-83c1-f8687c2d872e | f263eb8d-280f-453d-8872-873f59bdd1b2

Download Data

	File
	User instruction OPTOTRONIC LED Power Supply
	Certificates OTI DALI OT FIT D LT2 L CB DE1 58970 040320
	Certificates OT ENEC 40038085 010322
	Certificates LED drivers EMC 40011668 300922

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	Declarations of conformity EATON(CEAG)-Conformity declaration AN00951 OTI DALI 90220-240700 D LT2 L
	Declarations of conformity INOTEC-Conformity declaration AN00951 OTI DALI 90220-240700 D LT2 L
	Declarations of conformity 727247_EC OTi
	Declarations of conformity OTi DALI D LT2 L UK DoC 4281086 180221
	Declarations of conformity OTI DALI D LT2 L CE 3667898 210921
	Declarations of conformity EATON(CEAG)-Conformity declaration AM00140_OTiDALI90_220_240_700_D_LT2_L
	Declarations of conformity INOTEC- Conformity declaration AM00140_OTiDALI90_220_240_700_D_LT2_L
	CAD data OTI DALI D LT2 L IGS 270220
	CAD data OTI DALI D LT2 L STEP 270220
	CAD Data 2-dim OTI DALI D LT2 L CAD2PDF 270220
	CAD data 3-dim OTI DALI D LT2 L CAD3PDF 270220

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.

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899494244	OTi DALI 90/220...240/700 D LT2 L	Shipping carton box 20	305 mm x 161 mm x 104 mm	5.11 dm^3	4277.00 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.

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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.

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