

OTi DALI 25/220...240/700 Box

OPTOTRONIC Intelligent - DALI Box | Compact constant current LED driver Kits



Areas of application

- Installation in emergency lighting systems according to IEC 61347-2-13, appendix J
- Suitable for use in luminaires with flexible current setting
- Suitable for indoor SELV installations
- Suitable for luminaires of protection classes I and II
- Suitable for downlights, spotlights and LED panels

Product family benefits

- Versatile DALI window driver due to flexible output characteristic
- Very high efficiency
- Protection of the system thanks to thermal management and Smart Control
- High-quality dimming of 1...100 % by amplitude dimming
- Driver with cable clamps, including resistors for typical output current set
- Easy and fast output current setting via NFC

Versatile scope of application due to OSRAM DALI Technology:

- 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





Product family features

- Supply voltage: 220...240 V
- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Line voltage: 198...264 V
- According to EN 61347-1, 61347-2-13, 62384
- RI suppression according to EN 55015:2007+A1:2007/CDN
- Line harmonics according to EN 61000-3-2
- Immunity according to EN 61547
- Lifetime: up to 100,000 h
- Type of protection: IP20



Technical data

Electrical data

Mains frequency0/50/60 HzInput voltage AC198264 V ¹)Total harmonic distortion< 20 % ²)Power factor λ> 0.95ECG efficiency88 % ³)Device power loss4.5 WPower loss in stand-by mode0.1 WInrush current< 20 A ⁴)Max. ECG no. on circuit breaker 10 A (E)50Max. ECG no. on circuit breaker 10 A (C)-Max. ECG no. on circuit breaker 16 A (B)80Max. ECG no. on circuit breaker 16 A (C)-Max. ECG no. on circuit breaker 16 A (C)-Surge capability (L/N-Ground)2 kVSurge capability (L/N-Ground)2 kVSurge capability (L/N-Ground)2 kVOutput turrent180700 mA ⁶)Output current 100 Hz)1 %Nominal output power27 W ⁷)Galvanic isolationSELVInput voltage DC176276 VCurrent setDALL / LEDset 2 / NFCOutput current LEDset shorted500 mA	Nominal input voltage	220240 V	
Total harmonic distortion< 20 % 2)	Mains frequency	0/50/60 Hz	
Power factor λ> 0.95ECG efficiency88 % 3)Device power loss4.5 WPower loss in stand-by mode0.1 WInrush current< 20 A 4)Max. ECG no. on circuit breaker 10 A (B)50Max. ECG no. on circuit breaker 10 A (C)-Max. ECG no. on circuit breaker 16 A (B)80Max. ECG no. on circuit breaker 16 A (C)-Max. ECG no. on circuit breaker 25 A (B)-Surge capability (L/N-Ground)2 k/VSurge capability (L-N)1 k/VNominal output voltage1254 V 5)U-OUT (working voltage)60 VNominal output current180700 mA 6)Output current tolerance45 %Output current (100 Hz)1 %Nominal output power27 W 7)Galvanic isolationSELVInput voltage DC176276 VCurrent setDALI / LEDset2 / NFCOutput current LEDset open90 mAOutput current LEDset shorted500 mA	Input voltage AC	198264 V ¹⁾	
ECG efficiency88 % 3)Device power loss4.5 WPower loss in stand-by mode0.1 WInrush current< 20 A 4)	Total harmonic distortion	< 20 % ²)	
Device power loss4.5 WPower loss in stand-by mode0.1 WInrush current< 20 A 4)	Power factor λ	> 0.95	
Power loss in stand-by mode0.1 WInrush current< 20 A 4)	ECG efficiency	88 % ³⁾	
Inrush current< 20 A 4)	Device power loss	4.5 W	
Max. ECG no. on circuit breaker 10 A (B)50Max. ECG no. on circuit breaker 10 A (C)-Max. ECG no. on circuit breaker 16 A (B)80Max. ECG no. on circuit breaker 16 A (C)-Max. ECG no. on circuit breaker 25 A (B)-Surge capability (L/N-Ground)2 kVSurge capability (L-N)1 kVNominal output voltage1254 V ⁵)U-OUT (working voltage)60 VNominal output current180700 mA ⁶)Output current tolerance±3 %Galvanic isolationSELVInput voltage DC176276 VCurrent LEDset open90 mAOutput current LEDset shorted500 mA	Power loss in stand-by mode	0.1 W	
Max. ECG no. on circuit breaker 10 A (C)-Max. ECG no. on circuit breaker 16 A (B)80Max. ECG no. on circuit breaker 16 A (C)-Max. ECG no. on circuit breaker 25 A (B)-Surge capability (L/N-Ground)2 kVSurge capability (L-N)1 kVNominal output voltage1254 V ⁵⁾ U-OUT (working voltage)60 VNominal output current180700 mA ⁶⁾ Output current tolerance±3 %Output ripple current (100 Hz)1 %Nominal output power27 W ⁷⁾ Galvanic isolationSELVInput voltage DC176276 VOutput current LEDset open90 mAOutput current LEDset shorted500 mA	Inrush current	< 20 A ⁴)	
Max. ECG no. on circuit breaker 16 A (B)80Max. ECG no. on circuit breaker 16 A (C)-Max. ECG no. on circuit breaker 25 A (B)-Surge capability (L/N-Ground)2 kVSurge capability (L-N)1 kVNominal output voltage1254 V ⁵)U-OUT (working voltage)60 VNominal output current180700 mA ⁶)Output current tolerance±3 %Output ripple current (100 Hz)1 %Nominal output power27 W ⁷)Gatvanic isolationSELVInput voltage DC176276 VOutput current LEDset open90 mAOutput current LEDset shorted500 mA	Max. ECG no. on circuit breaker 10 A (B)	50	
Max. ECG no. on circuit breaker 16 A (C)-Max. ECG no. on circuit breaker 25 A (B)-Surge capability (L/N-Ground)2 kVSurge capability (L/N)1 kVNominal output voltage1254 V ⁵)U-OUT (working voltage)60 VNominal output current180700 mA ⁶)Output current tolerance±3 %Output ripple current (100 Hz)1 %Nominal output power27 W ⁷)Galvanic isolationSELVInput voltage DC176276 VOutput current LEDset open90 mAOutput current LEDset shorted500 mA	Max. ECG no. on circuit breaker 10 A (C)	·	
Max. ECG no. on circuit breaker 25 A (B)-Surge capability (L/N-Ground)2 kVSurge capability (L-N)1 kVNominal output voltage1254 V 5)U-OUT (working voltage)60 VNominal output current180700 mA 6)Output current tolerance±3 %Output ripple current (100 Hz)1 %Nominal output power27 W 7)Galvanic isolationSELVInput voltage DC176276 VOutput current LEDset open90 mAOutput current LEDset shorted500 mA	Max. ECG no. on circuit breaker 16 A (B)	80	
Surge capability (L/N-Ground)2 kVSurge capability (L-N)1 kVNominal output voltage1254 V 5)U-OUT (working voltage)60 VNominal output current180700 mA 6)Output current tolerance±3 %Output ripple current (100 Hz)1 %Nominal output power27 W 7)Galvanic isolationSELVInput voltage DC176276 VOutput current LEDset open90 mAOutput current LEDset shorted500 mA	Max. ECG no. on circuit breaker 16 A (C)	•	
Surge capability (L-N)1 kVNominal output voltage1254 V 5)U-OUT (working voltage)60 VNominal output current180700 mA 6)Output current tolerance±3 %Output ripple current (100 Hz)1 %Nominal output power27 W 7)Galvanic isolationSELVInput voltage DC176276 VOutput current LEDset open90 mAOutput current LEDset shorted500 mA	Max. ECG no. on circuit breaker 25 A (B)	-	
Nominal output voltage1254 V 5)U-OUT (working voltage)60 VNominal output current180700 mA 6)Output current tolerance±3 %Output ripple current (100 Hz)1 %Nominal output power27 W 7)Galvanic isolationSELVInput voltage DC176276 VOutput current LEDset open90 mAOutput current LEDset shorted500 mA	Surge capability (L/N-Ground)	2 kV	
U-OUT (working voltage)60 VNominal output current180700 mA 6)Output current tolerance±3 %Output ripple current (100 Hz)1 %Nominal output power27 W 7)Galvanic isolationSELVInput voltage DC176276 VCurrent setDALI / LEDset 2 / NFCOutput current LEDset open90 mAOutput current LEDset shorted500 mA	Surge capability (L-N)	1 kV	
Nominal output current180700 mA 6)Output current tolerance±3 %Output ripple current (100 Hz)1 %Nominal output power27 W 7)Galvanic isolationSELVInput voltage DC176276 VCurrent setDALI / LEDset2 / NFCOutput current LEDset open90 mAOutput current LEDset shorted500 mA	Nominal output voltage	1254 V ⁵⁾	
Output current tolerance±3 %Output ripple current (100 Hz)1 %Nominal output power27 W 7)Galvanic isolationSELVInput voltage DC176276 VCurrent setDALI / LEDset2 / NFCOutput current LEDset open90 mAOutput current LEDset shorted500 mA	U-OUT (working voltage)	60 V	
Output ripple current (100 Hz)1 %Nominal output power27 W 7)Galvanic isolationSELVInput voltage DC176276 VCurrent setDALI / LEDset 2 / NFCOutput current LEDset open90 mAOutput current LEDset shorted500 mA	Nominal output current	180700 mA ⁶⁾	
Nominal output power27 W 7)Galvanic isolationSELVInput voltage DC176276 VCurrent setDALI / LEDset 2 / NFCOutput current LEDset open90 mAOutput current LEDset shorted500 mA	Output current tolerance	±3 %	
Galvanic isolationSELVInput voltage DC176276 VCurrent setDALI / LEDset2 / NFCOutput current LEDset open90 mAOutput current LEDset shorted500 mA	Output ripple current (100 Hz)	1 %	
Input voltage DC 176276 V Current set DALI / LEDset 2 / NFC Output current LEDset open 90 mA Output current LEDset shorted 500 mA	Nominal output power	27 W ⁷⁾	
Current set DALI / LEDset2 / NFC Output current LEDset open 90 mA Output current LEDset shorted 500 mA	Galvanic isolation	SELV	
Output current LEDset open 90 mA Output current LEDset shorted 500 mA	Input voltage DC	176276 V	
Output current LEDset shorted 500 mA	Current set	DALI / LEDset2 / NFC	
	Output current LEDset open	90 mA	
	Output current LEDset shorted	500 mA	
Default output current 500 mA ⁸	Default output current	500 mA ⁸⁾	

¹⁾ Permitted voltage range

 $^{2)}$ At full load, 220...240 V, 50 Hz / see graphs

 $^{3)}$ Typical / At full load and 230 V

⁴⁾ t = 50 µs (measured at 50 % I peak)

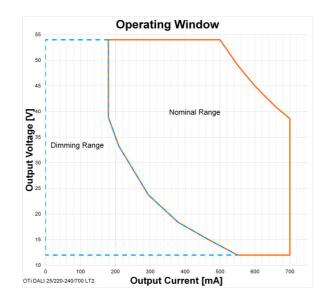
⁵⁾ Maximum 60 V

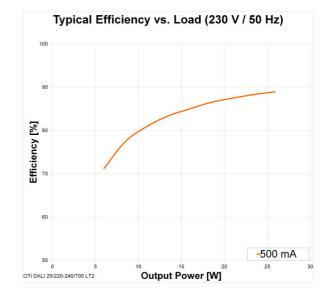
6) _{±3%}

7) Partial load 7...27 W

8) LEDset deactivated





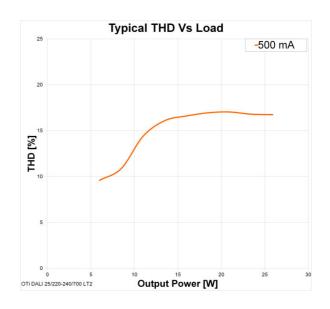


Operating Window



Typical Power Factor v Load



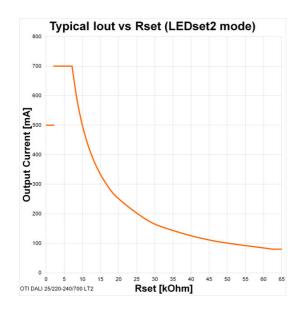


Typical THD v Load



Intelligent LED Solutions, Unit 2, Berkshire Business Centre, Berkshire Drive, Thatcham, Berkshire, RG19 4EW Telephone: +44 (0)1635 294606 Email: info@i-led.co.uk Web: www.i-led.co.uk A division of Intelligent Group Solutions Ltd

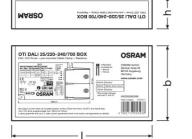
July 22, 2020, 07:21:18 OTi DALI 25/220...240/700 Box

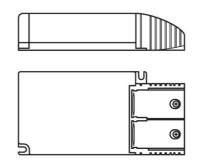


Typical lout v Rset LEDset2 mode

Dimensions & weight







Mounting hole spacing, length	94.0 mm
Mounting hole spacing, width	58.0 mm
Product weight	175.00 g
Cable cross-section, input side	0.21.5 mm ² ¹⁾
Cable cross-section, output side	0.21.5 mm ² ¹⁾
Wire preparation length, input side	8.09.0 mm
Wire preparation length, output side	8.09.0 mm
Length	138.0 mm
Width	67.0 mm
Height	29.5 mm



¹⁾ Solid or flexible leads

Colors & materials

Temperatures & operating conditions

Ambient temperature range	-20+50 °C
Maximum temperature at tc test point	75 °C ¹⁾
Max.housing temperature in case of fault	110 °C
Temperature range at storage	-40+85 °C
Permitted rel. humidity during operation	585 % ²⁾

¹⁾ Maximum at the Tc-point

²⁾ Maximum 56 days/year at 85 %

Lifespan

ECG lifetime	50000 / 100000 h ¹⁾
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¹⁾ $T_c = 75$ °C, 0.2% / 1,000 h failure rate / $T_c = 65$ °C, 0.1% / 1,000 h failure rate

Additional product data

Encapsulated	No

Capabilities

Dimmable	Yes	
Dimming interface	DALI / Touch DIM / Touch DIM Sensor	
Dimming range	1100 % ¹⁾	
Dimming method	Amplitude Modulation	
Overheating protection	Automatic reversible	
Overload protection	Automatic reversible	
Short-circuit protection	Automatic reversible	
No-load proof	Yes	
Max. cable length to lamp/LED module	2.0 m	
Suitable for fixtures with prot. class	1/11	
Type of connection, input side	Push terminal	
Type of connection, output side	Push terminal	
Accessories	Resistors for current setting at LEDset2 terminal: 350mA, 700mA	
Suitable for through-wiring	Yes	
Suitable for emergency lighting	Yes	
Constant lumen function	Programmable	
Programming interface	DALI, NFC, LEDset	



Number of channels	1

 $^{1)}\,\mathrm{For}$ maximum nominal output current

Programming

Tuner4TRONIC	Yes
Tuner4TRONIC Field App	Yes
Programming device	DALI / LEDset / NFC

Programmable features

Operating Current	Yes
Tuning Factor	Yes
Constant Lumen	Yes
Lamp Operating Time	Yes
Driver Guard	Yes
DALI Settings	Yes
Emergency Mode	Yes
DALI-2 Luminaire Data	No
Configuration Lock	Yes
Soft Switch Off	Yes
Dim to Dark	Yes
TouchDIM + Sensor	Yes
Corridor Functionality	Yes
Tunable White CCT	No
Tunable White High precision	No
ОЕМ Кеу	No

Certificates & standards

Approval marks – approval	ENEC 10 / VDE / EMC / EL / CE / DALI-2
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/Acc. to IEC 62386- 101:Ed2/Acc. to IEC 62386-102:Ed2/Acc. to IEC 62386-207:Ed1
Protection class	Ш
Type of protection	IP20

Logistical data

Commodity	v code
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850440829000

Download Data



	File
*	User instruction OPTOTRONIC LED Power Supply
*	Product Datasheet 350858_Datasheet OT CABLE CLAMP B-STYLE
*	Certificates OT ENEC 40038447 030720
≍	Declarations of conformity EATON(CEAG) Conformity declaration AM12229_OTi_DALI_25_220-240_700_LT2_NFC
*	Declarations of conformity INOTEC Conformity declaration AM12229_OTi_DALI_25_220-240_700_LT2_NFC
1	Declarations of conformity EU Declaration of Conformity 3758701
7	Declarations of conformity OTi DALI LT2 CE 3365628 121119

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4062172058438	OTi DALI 25/220240/700 Box	Shipping carton box 10	188 mm x 163 mm x 181 mm	5.55 dm³	2094.00 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.

