

OPTOTRONIC Intelligent – DALI LEDset LT2 (SELV)

Linear constant current LED driver – Dimmable



Product family features

- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Versatile DALI window driver up to 80 W due to flexible output characteristic
- Supply voltage: 220...240 V
- Available with output current range: up to 2,100 mA
- Constant Lumen Output (CLO)
- Integrated customizable thermal management (Driver Guard)
- DALI-2 certified (Part -101,-102 and -207)

Product family datasheet

Product family benefits

- Fully programmable via software (DALI Interface)
- Flexible current setting (LEDset2)
- Lifetime: up to 100,000 h (temperature at $T_c = 65^\circ\text{C}$, 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: < 0.15 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, storage areas and retail
- Installation in emergency lighting systems according to IEC 61347-2-13, appendix J
- Suitable for luminaires of protection class I

Product family datasheet

Technical data

Product description	Electrical data					
	Nominal input voltage	Mains frequency	Input voltage AC	Input voltage DC	Current set	Total harmonic distortion
OTi DALI 35/220...240/700 LT2 L G2	220...240 V	0/50/60 Hz	198...264 V	176...276 V	DALI / LEDset / Programmable	< 15 %
OTi DALI 50/220...240/1A4 LT2 L G2	220...240 V	0/50/60 Hz	198...264 V	176...276 V	DALI / LEDset / Programmable	< 15 %
OTi DALI 80/220...240/1A6 LT2 L	220...240 V	0/50/60 Hz	198...264 V ⁷⁾	176...276 V	DALI / LEDset / Programmable	< 20 %
OTi DALI 80/220...240/2A1 LT2 L	220...240 V	0/50/60 Hz	198...264 V ⁷⁾	176...276 V	DALI / LEDset / Programmable	< 20 %

Product description	Power factor λ	Efficiency in full-load	Device power loss	Protective conductor current	Inrush current	Max. ECG no. on circuit breaker 10 A (B)
OTi DALI 35/220...240/700 LT2 L G2	045C...098	90 % ¹⁾	4.0 W	<0.5 mA	20 A	15
OTi DALI 50/220...240/1A4 LT2 L G2	076C099	90 % ¹⁾	6.0 W	<0.5 mA	20 A	13
OTi DALI 80/220...240/1A6 LT2 L	078C098 ⁸⁾	90 % ¹⁾	8.5 W ⁹⁾	<2.0 mA	53 A ¹⁰⁾	8
OTi DALI 80/220...240/2A1 LT2 L	091C...099 ⁸⁾	90 % ¹⁾	10 W ⁹⁾	<2.0 mA	53 A ¹⁰⁾	8

Product description	Max. ECG no. on circuit breaker 16 A (B)	Max. ECG no. on circuit breaker 25 A (B)	Surge capability (L/N-Ground)	Surge capability (L-N)	Nominal output voltage
OTi DALI 35/220...240/700 LT2 L G2	24	-	2 kV	1 kV	15...54 V
OTi DALI 50/220...240/1A4 LT2 L G2	20	-	2 kV	1 kV	15...54 V
OTi DALI 80/220...240/1A6 LT2 L	13	-	2 kV	1 kV	20...54 V ¹¹⁾
OTi DALI 80/220...240/2A1 LT2 L	13	-	2 kV	1 kV	20...54 V ¹¹⁾

Product description	U-OUT (working voltage)	Nominal output current	Output current LEDset open	Output current LEDset shorted	Default output current
OTi DALI 35/220...240/700 LT2 L G2	< 60 V	200...700 mA	100 mA	700 mA	100 mA ²⁾
OTi DALI 50/220...240/1A4 LT2 L G2	< 60 V	600...1400 mA	300 mA	1400 mA	300 mA ²⁾
OTi DALI 80/220...240/1A6 LT2 L	< 60 V	600...1550 mA ¹²⁾	300 mA	1400 mA	300 mA ²⁾
OTi DALI 80/220...240/2A1 LT2 L	< 60 V	1000...2100 mA ¹²⁾	500 mA	2100 mA	500 mA ²⁾

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Product description	Output current tolerance	Output ripple current (100 Hz)	Output PSTLM	Output SVM	Nominal output power
OTi DALI 35/220...240/700 LT2 L G2	±3 % ³⁾	< 1 %	≤1	≤0.4	4...37 W
OTi DALI 50/220...240/1A4 LT2 L G2	±3 % ³⁾	< 1 %	≤1	≤0.4	12...50 W
OTi DALI 80/220...240/1A6 LT2 L	±3 % ³⁾	< 1 %	≤1	≤0.4	32...80 W
OTi DALI 80/220...240/2A1 LT2 L	±3 % ³⁾	< 1 %	≤1	≤0.4	32...80 W

Product description	Maximum output power	Galvanic isolation	Power loss in stand-by mode	Galvanic isolation primary/secondary	Dimensions & weight
					Mounting hole spacing, length
OTi DALI 35/220...240/700 LT2 L G2	37 W	SELV	<0.15 W		350.0 mm
OTi DALI 50/220...240/1A4 LT2 L G2	50 W	SELV	<0.15 W		350.0 mm
OTi DALI 80/220...240/1A6 LT2 L	80 W	SELV	<0.5 W	3,75 kV ¹³⁾	350.0 mm
OTi DALI 80/220...240/2A1 LT2 L	80 W	SELV	<0.5 W	3,75 kV ¹³⁾	350.0 mm

Product description	Product weight	Cable cross-section, input side	Cable cross-section, output side	Wire preparation length, input side	Wire preparation length, output side
OTi DALI 35/220...240/700 LT2 L G2	24000 g	0.5...1.5 mm ²	0.5...1.5 mm ²	8.0...9.0 mm	8.0...9.0 mm
OTi DALI 50/220...240/1A4 LT2 L G2	24000 g	0.5...1.5 mm ²	0.5...1.5 mm ²	8.0...9.0 mm	8.0...9.0 mm
OTi DALI 80/220...240/1A6 LT2 L	28500 g	0.5...1.5 mm ² ¹⁴⁾	0.5...1.5 mm ² ¹⁴⁾	8.5...9.5 mm	8.5...9.5 mm
OTi DALI 80/220...240/2A1 LT2 L	27000 g	0.5...1.5 mm ² ¹⁴⁾	0.5...1.5 mm ² ¹⁴⁾	8.5...9.5 mm	8.5...9.5 mm

Product description	Height	Width	Length	Colors & materials	Temperatures & operating conditions
				Casing material	Ambient temperature range
OTi DALI 35/220...240/700 LT2 L G2	210 mm	300 mm	3600 mm	Metal	-25...+60 °C
OTi DALI 50/220...240/1A4 LT2 L G2	210 mm	300 mm	3600 mm	Metal	-25...+50 °C
OTi DALI 80/220...240/1A6 LT2 L	210 mm	300 mm	3600 mm	Metal	-25...+50 °C
OTi DALI 80/220...240/2A1 LT2 L	210 mm	300 mm	3600 mm	Metal	-25...+45 °C

Product family datasheet

Product description	Maximum temperature at tc test point	Max.housing temperature in case of fault	Temperature range at storage	Permitted rel. humidity during operation	Lifespan
					ECG lifetime
OTi DALI 35/220...240/700 LT2 L G2	75 °C	110 °C	-40...+85 °C	5...85 % ⁴⁾	50000 / 100000 h ⁵⁾
OTi DALI 50/220...240/1A4 LT2 L G2	75 °C	110 °C	-40...+85 °C	5...85 % ⁴⁾	50000 / 100000 h ⁵⁾
OTi DALI 80/220...240/1A6 LT2 L	80 °C	120 °C	-25...85 °C	5...85 % ⁴⁾	50000 / 100000 h ⁵⁾
OTi DALI 80/220...240/2A1 LT2 L	80 °C	120 °C	-25...85 °C	5...85 % ⁴⁾	50000 / 100000 h ⁵⁾

Product description	Additional product data		Capabilities		
	Predecessor EAN	Encapsulated	Programming interface	Dimmable	Dimming interface
OTi DALI 35/220...240/700 LT2 L G2	4052899245389		DALI, LEDset	Yes	DALI-2 / Touch DIM / Touch DIM Sensor
OTi DALI 50/220...240/1A4 LT2 L G2	4052899028098	No	DALI, LEDset	Yes	DALI-2 / Touch DIM / Touch DIM Sensor
OTi DALI 80/220...240/1A6 LT2 L			DALI, LEDset	Yes	DALI-2 / Touch DIM / Touch DIM Sensor
OTi DALI 80/220...240/2A1 LT2 L		No	DALI, LEDset	Yes	DALI-2 / Touch DIM / Touch DIM Sensor

Product description	Dimming range	Dimming method	Constant lumen function	Overheating protection
OTi DALI 35/220...240/700 LT2 L G2	1...100 %	Amplitude Modulation	Programmable	Automatic reversible
OTi DALI 50/220...240/1A4 LT2 L G2	1...100 %	Amplitude Modulation	Programmable	Automatic reversible
OTi DALI 80/220...240/1A6 LT2 L	1...100 % ¹⁵⁾	Amplitude Modulation / Pulse Width Modulation	Programmable	Automatic reversible
OTi DALI 80/220...240/2A1 LT2 L	1...100 % ¹⁵⁾	Amplitude Modulation / Pulse Width Modulation	Programmable	Automatic reversible

Product description	Overload protection	Short-circuit protection	No-load proof
OTi DALI 35/220...240/700 LT2 L G2	Non-reversible	Automatic reversible	Yes

Product family datasheet

Product description	Overload protection	Short-circuit protection	No-load proof
OTi DALI 50/220...240/1A4 LT2 L G2	Non-reversible	Automatic reversible	Yes
OTi DALI 80/220...240/1A6 LT2 L	Automatic reversible	Automatic reversible	Yes
OTi DALI 80/220...240/2A1 LT2 L	Automatic reversible	Automatic reversible	Yes

Product description	Intended for no-load operation	Max. cable length to lamp/LED module	Suitable for fixtures with prot. class	Suitable for emergency lighting
OTi DALI 35/220...240/700 LT2 L G2	No	2.0 m ⁶⁾	I	Yes
OTi DALI 50/220...240/1A4 LT2 L G2	No	2.0 m ⁶⁾	I	Yes
OTi DALI 80/220...240/1A6 LT2 L	No	2.0 m ⁶⁾	I	
OTi DALI 80/220...240/2A1 LT2 L	No	2.0 m ⁶⁾	I	Yes

Product description	Type of connection, input side	Type of connection, output side	DALI-2 Diagnostic Data	DALI-2 Energy Data
OTi DALI 35/220...240/700 LT2 L G2	Push terminal	Push terminal	Yes	Yes
OTi DALI 50/220...240/1A4 LT2 L G2	Push terminal	Push terminal	Yes	Yes
OTi DALI 80/220...240/1A6 LT2 L	Push terminal	Push terminal	Yes	Yes
OTi DALI 80/220...240/2A1 LT2 L	Push terminal	Push terminal	Yes	Yes

Product description	Number of channels	Programming	Programmable features	
		Programming device	Constant Lumen	DALI Settings
OTi DALI 35/220...240/700 LT2 L G2	1	DALI magic	Yes	Yes
OTi DALI 50/220...240/1A4 LT2 L G2	1	DALI magic	Yes	Yes
OTi DALI 80/220...240/1A6 LT2 L	1	DALI magic		Yes
OTi DALI 80/220...240/2A1 LT2 L	1	DALI magic	Yes	Yes

Product description	DALI-2 Luminaire Data	Operating Current	Lamp Operating Time	Driver Guard
OTi DALI 35/220...240/700 LT2 L G2	Yes			
OTi DALI 50/220...240/1A4 LT2 L G2	Yes	Yes	Yes	Yes
OTi DALI 80/220...240/1A6 LT2 L	Yes	Yes	Yes	
OTi DALI 80/220...240/2A1 LT2 L	Yes	Yes	Yes	

Product description	Emergency Mode	Soft Switch Off	Dim to Dark	TouchDIM + Sensor
OTi DALI 35/220...240/700 LT2 L G2				
OTi DALI 50/220...240/1A4 LT2 L G2	Yes	Yes	Yes	Yes
OTi DALI 80/220...240/1A6 LT2 L	Yes			Yes
OTi DALI 80/220...240/2A1 LT2 L	Yes			Yes

Product family datasheet

				Certificates & standards
Product description	Corridor Functionality	OEM Key	Configuration Lock	Approval marks – approval
OTi DALI 35/220...240/700 LT2 L G2				CE / EL / VDE-ENEC / VDE-EMC / EAC / CCC / RCM / BIS
OTi DALI 50/220...240/1A4 LT2 L G2	Yes	Yes		CE / EL / VDE-ENEC / VDE-EMC / EAC / CCC / RCM / BIS
OTi DALI 80/220...240/1A6 LT2 L			Yes	CE / EL / VDE-ENEC / VDE-EMC / EAC / CCC / RCM
OTi DALI 80/220...240/2A1 LT2 L	Yes		Yes	CE / EL / VDE-ENEC / VDE-EMC / EAC / CCC / RCM

			Logistical data	Environmental information Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)
Product description	Standards	Type of protection	Commodity code	Date of Declaration
OTi DALI 35/220...240/700 LT2 L G2	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	IP20	85044083900	21-07-2023
OTi DALI 50/220...240/1A4 LT2 L G2	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	IP20	85044083900	19-05-2023
OTi DALI 80/220...240/1A6 LT2 L	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	IP20	85044083900	28-04-2023
OTi DALI 80/220...240/2A1 LT2 L	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	IP20	85044083900	05-05-2023

Product family datasheet

Product description	Primary Article Identifier	Candidate List Substance 1	CAS No. of substance 1	Safe Use Instruction
OTi DALI 35/220...240/700 LT2 L G2	4052899551763 4062172082341	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.
OTi DALI 50/220...240/1A4 LT2 L G2	4052899551787 4062172082501	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.
OTi DALI 80/220...240/1A6 LT2 L	4052899028074	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.
OTi DALI 80/220...240/2A1 LT2 L	4052899028050	Lead	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.

Product description	Declaration No. in SCIP database
OTi DALI 35/220...240/700 LT2 L G2	fff784d8-5a31-4626-bdef-990232432665 fc402325-ae3c-4083-9399-64c08ab4db49
OTi DALI 50/220...240/1A4 LT2 L G2	dbbedbb7-6b4a-4fe5-a147-6f04dc010c9f 6111931f-971b-4e02-bd7e-bdb46d261c54
OTi DALI 80/220...240/1A6 LT2 L	cbb3b8e1-e2f1-4b9c-94d0-cb312e04ec0b
OTi DALI 80/220...240/2A1 LT2 L	43b5ca1e-8a2a-441d-8886-2cd1700417ee

- 1) at 230 V, 50 Hz
- 2) LEDset deactivated
- 3) When use DALI
- 4) Maximum 56 days/year at 85 %
- 5) At maximum $T_c = 75^{\circ}\text{C}$ / 10% failure rate
- 6) Output wires must be routed as close as possible to each other
- 7) Permitted voltage range
- 8) Full load at 230 V

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9) Maximum

10) At 200 μ s

11) Maximum 60 V

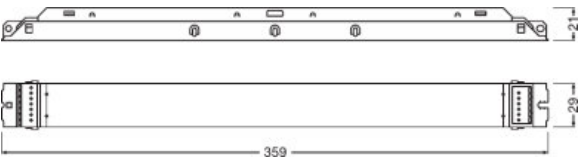
12) $\pm 2\%$

13) SELV-equivalent

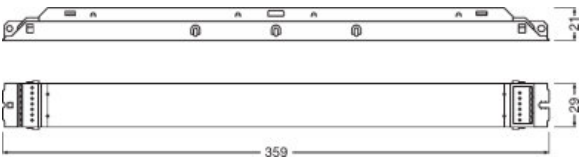
14) Solid or flexible leads

15) For maximum nominal output current

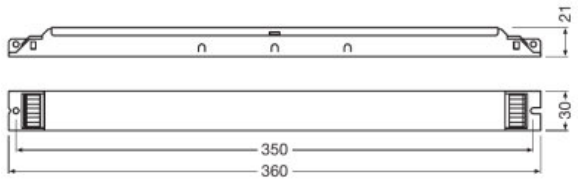
Product family datasheet



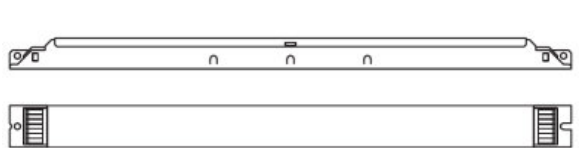
OTI DALI 35220-240700 LT2L G2



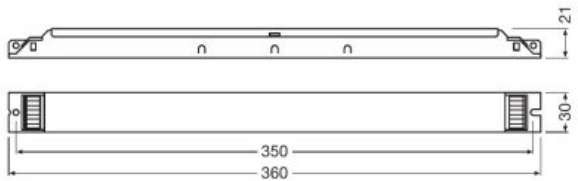
OTI DALI 50220-2401A4 LT2L G2



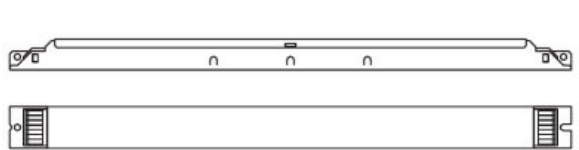
502044_OTI DALI 80220-2401A6 LT2 L



462140_OPTOTRONIC OTi DALI 80220-2401A6 LT2 L



502045_OTI DALI 80220-2402A1 LT2 L



462142_OPTOTRONIC OTi DALI 80220-2402A1 LT2 L

Product family datasheet

Application advice

For more detailed application information and graphics please see product datasheet.

Sales and Technical Support

Sales and Technical Support www.osram.com

Download Data

File	
	User instruction OPTOTRONIC LED Power Supply
	Certificates OTI DALI LT2 L G2 CB DE1 60134 040320
	Certificates OT ENEC 40038447 260623
	Declarations of conformity EATON(CEAG)-Conformity declaration AN00953 OTI DALI 35220-240700 LT2 L G2
	Declarations of conformity INOTEC-Conformity declaration AN00953 OTI DALI 35220-240700 LT2 L G2
	Declarations of conformity OTi DALI LT2 L G2 UK DoC 4281083 040923
	Declarations of conformity OTI DALI LT2 L G2 CE 3634324 030921
	Declarations of conformity EATON(CEAG)-Conformity declaration AM06315_OTiDALI35_220-240_700_LT2_L_G2
	Declarations of conformity INOTEC- Conformity declaration AM06315_OTiDALI35_220-240_700_LT2_L_G2
	CAD data OTI DALI LT2L G2 IGS 060220
	CAD data OTI DALI LT2L G2 STEP 060220
	CAD Data 2-dim OTI DALI LT2L G2 CAD2PDF 060220
	CAD data 3-dim OTI DALI LT2L G2 CAD3PDF 060220
	Declarations of conformity EATON(CEAG)-Conformity declaration AN00954 OTI DALI 50220-2401A4 LT2 L G2
	Declarations of conformity INOTEC-Conformity declaration AN00954 OTI DALI 50220-2401A4 LT2 L G2
	Declarations of conformity EATON(CEAG)-Conformity declaration AM06314_OTiDALI50_220-240_1A4_LT2_L_G2

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	Declarations of conformity INOTEC- Conformity declaration AM06314_OTiDALI50_220-240_1A4_LT2_L_G2
	User instruction OPTOTRONIC LED Power Supply
	Certificates OTI DALI 80 1A6 LT2 L INOTEC AM20234 270420
	Certificates OT FIT OTI DALI LT2 CB DE1 63464 060520
	Certificates 489311_CB Certificate OTi DALI LT2 L
	Certificates 494640_CE Declaration OTi DALI linear
	Certificates OT EMC 40038827 300922
	Declarations of conformity OTi DALI LT2 L CE 3366462 230821
	CAD data OTI DALI 80 LT2 L IGS 270220
	CAD data OTI DALI 80 LT2 L STEP 270220
	CAD Data 2-dim OTI DALI 80 LT2 L CAD2PDF 270220
	CAD data 3-dim OTI DALI 80 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
4052899551763	OTi DALI 35/220...240/700 LT2 L G2	Shipping carton box 20	385 mm x 160 mm x 100 mm	6.16 dm ³	4975.00 g

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Logistical Data

4052899551787	OTi DALI 50/220...240/1A4 LT2 L G2	Shipping carton box 20	385 mm x 160 mm x 100 mm	6.16 dm ³	5146.00 g
4052899028074	OTi DALI 80/220...240/1A6 LT2 L	Shipping carton box 20	385 mm x 160 mm x 100 mm	6.16 dm ³	5943.00 g
4052899028050	OTi DALI 80/220...240/2A1 LT2 L	Shipping carton box 20	385 mm x 160 mm x 100 mm	6.16 dm ³	5971.00 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.