

OPTOTRONIC Intelligent – DALI Box

Compact constant current LED driver – Dimmable



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 datasheet

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: to EN 55015/CISPR 15
- Line harmonics according to EN 61000-3-2
- Immunity according to EN 61547
- Lifetime: up to 100,000 h
- Type of protection: IP20

Product family datasheet

Technical data

Electrical data

Product description	Nominal input voltage	Mains frequency	Input voltage AC	Total harmonic distortion	Power factor λ	ECG efficiency
OTi DALI 15/220...240/1A0 Box	220...240 V	0/50/60 Hz	198...264 V ¹⁾	< 10 % ²⁾	0.95	88 % ³⁾
OTi DALI 25/220...240/700 Box	220...240 V	0/50/60 Hz	198...264 V ¹⁾	< 20 % ²⁾	> 0.95	88 % ³⁾
OTi DALI 35/220...240/1A0 Box	220...240 V	0/50/60 Hz	198...264 V ¹⁾	< 20 %	> 0.95	89 % ³⁾
OTi DALI 50/220...240/1A4 Box	220...240 V	0/50/60 Hz	198...264 V ¹⁾	< 10 % ²⁾	> 0.95	91 % ³⁾

Product description	Device power loss	Power loss in stand-by mode	Inrush current	Max. ECG no. on circuit breaker 10 A (C)	Max. ECG no. on circuit breaker 10 A (B)	Max. ECG no. on circuit breaker 16 A (B)
OTi DALI 15/220...240/1A0 Box	2.4 W	<0.27 W	5 A ⁴⁾	-	82	130
OTi DALI 25/220...240/700 Box	4.5 W	0.1 W	< 20 A ¹⁰⁾	-	50	80
OTi DALI 35/220...240/1A0 Box	5.7 W	0.1 W	< 20 A ¹⁰⁾	-	35	55
OTi DALI 50/220...240/1A4 Box	7.5 W	0.15 W	30 A ¹³⁾	-	12	20

Product description	Max. ECG no. on circuit breaker 16 A (C)	Max. ECG no. on circuit breaker 25 A (B)	Surge capability (L/N-Ground)	Surge capability (L-N)
OTi DALI 15/220...240/1A0 Box	-	-	2 kV	1 kV
OTi DALI 25/220...240/700 Box	-	-	2 kV	1 kV
OTi DALI 35/220...240/1A0 Box	-	-	2 kV	1 kV
OTi DALI 50/220...240/1A4 Box	-	-	2 kV ¹⁴⁾	1 kV

Product description	Nominal output voltage	U-OUT (working voltage)	Nominal output current	Output current tolerance	Output ripple current (100 Hz)
OTi DALI 15/220...240/1A0 Box	7.5...54 V ⁵⁾	60 V	150...1050 mA ⁶⁾	±3 %	< 2 % ⁷⁾
OTi DALI 25/220...240/700 Box	12...54 V ⁵⁾	60 V	180...700 mA ⁶⁾	±3 %	1 % ⁷⁾
OTi DALI 35/220...240/1A0 Box	15...54 V ⁵⁾	60 V	350...1050 mA ⁶⁾	±3 %	< 2 % ⁷⁾
OTi DALI 50/220...240/1A4 Box	15...54 V ⁵⁾	60 V	600...1400 mA ¹⁵⁾	±3 %	< 2 % ⁷⁾

Product description	Output PSTLM	Output SVM	Nominal output power	Galvanic isolation
OTi DALI 15/220...240/1A0 Box	≤1	≤0.4	18 W ⁸⁾	SELV
OTi DALI 25/220...240/700 Box	≤1	≤0.4	27 W ¹¹⁾	SELV
OTi DALI 35/220...240/1A0 Box	≤1	≤0.4	35 W ¹²⁾	SELV
OTi DALI 50/220...240/1A4 Box	≤1	≤0.4	55 W ¹⁶⁾	SELV

Product description	Output current LEDset shorted	Input voltage DC	Output current LEDset open
OTi DALI 15/220...240/1A0 Box	350 mA	176...264 V	75 mA

Product family datasheet

Product description	Output current LEDset shorted	Input voltage DC	Output current LEDset open
OTi DALI 25/220...240/700 Box	500 mA	176...276 V	90 mA
OTi DALI 35/220...240/1A0 Box	700 mA	176...276 V	175 mA
OTi DALI 50/220...240/1A4 Box	1050 mA	176...276 V	300 mA

Product description	Default output current	Current set
OTi DALI 15/220...240/1A0 Box	350 mA ⁹⁾	DALI / LEDset2 / NFC
OTi DALI 25/220...240/700 Box	500 mA ⁹⁾	DALI / LEDset2 / NFC
OTi DALI 35/220...240/1A0 Box	700 mA ⁹⁾	DALI / LEDset2 / NFC
OTi DALI 50/220...240/1A4 Box	1050 mA ⁹⁾	DALI / LEDset2 / NFC

1) Permitted voltage range

2) At full load, 220...240 V, 50 Hz / see graphs

3) Typical / At full load and 230 V

4) $t_{\text{width}} = 220 \mu\text{s}$ (measured at 50 % I_{peak})

5) Maximum 60 V

6) $\pm 3\%$

7) Ripple average at 100 Hz

8) Partial load 3...18 W

9) LEDset deactivated

10) $t_{\text{width}} = 50 \mu\text{s}$ (measured at 50 % I_{peak})

11) Partial load 7...27 W

12) Partial load 15...35 W

13) $t_{\text{width}} = 200 \mu\text{s}$ (measured at 50 % I_{peak})

14) Functional Earth

15) $\pm 5\%$

16) Partial load 22...55 W

Dimensions & weight

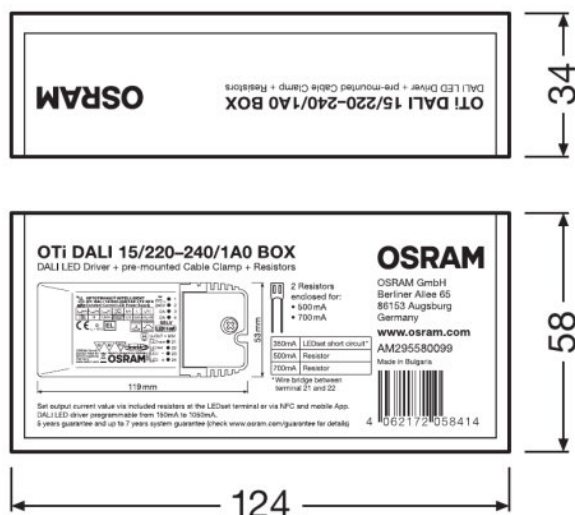
Product description	Mounting hole spacing, length	Mounting hole spacing, width	Product weight	Cable cross-section, input side	Cable cross-section, output side
OTi DALI 15/220...240/1A0 Box	-	-	116.00 g	0.2...1.5 mm ² ¹⁾	0.2...1.5 mm ² ¹⁾
OTi DALI 25/220...240/700 Box	94.0 mm	58.0 mm	175.00 g	0.2...1.5 mm ² ¹⁾	0.2...1.5 mm ² ¹⁾
OTi DALI 35/220...240/1A0 Box	94.0 mm	58.0 mm	175.00 g	0.2...1.5 mm ² ¹⁾	0.2...1.5 mm ² ¹⁾
OTi DALI 50/220...240/1A4 Box	99.0 mm	64.0 mm	209.00 g	0.2...1.5 mm ² ¹⁾	0.2...1.5 mm ² ¹⁾

Product description	Wire preparation length, input side	Wire preparation length, output side	Length	Width	Height
OTi DALI 15/220...240/1A0 Box	8.0...9.0 mm	8.0...9.0 mm	119.0 mm	53.0 mm	31.0 mm
OTi DALI 25/220...240/700 Box	8.0...9.0 mm	8.0...9.0 mm	138.0 mm	67.0 mm	29.5 mm
OTi DALI 35/220...240/1A0 Box	8.0...9.0 mm	8.0...9.0 mm	138.0 mm	67.0 mm	29.5 mm
OTi DALI 50/220...240/1A4 Box	8.0...9.0 mm	8.0...9.0 mm	145.0 mm	75.0 mm	25.0 mm

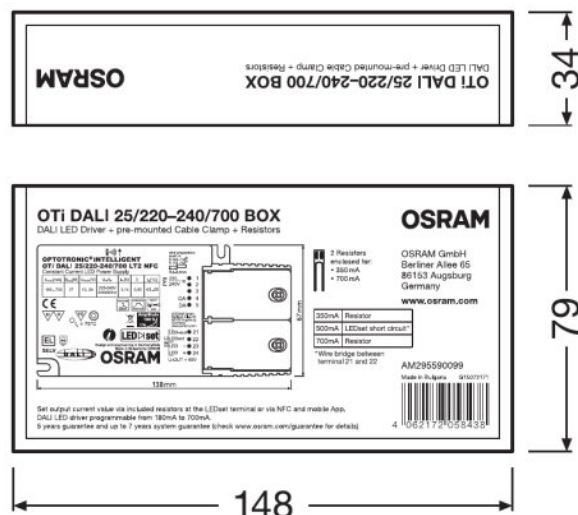
1) Solid or flexible leads

Product family datasheet

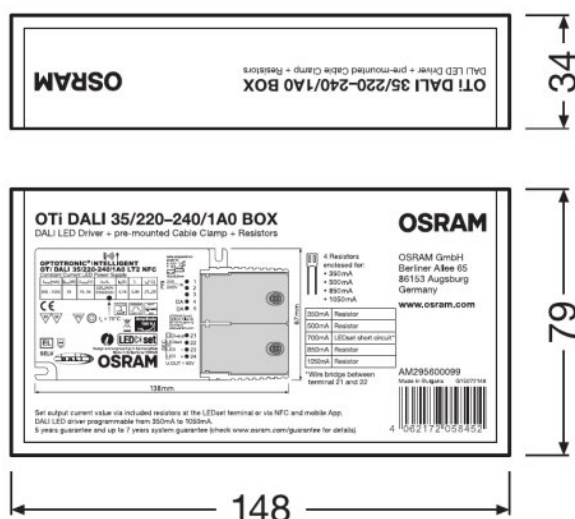
Product line drawing



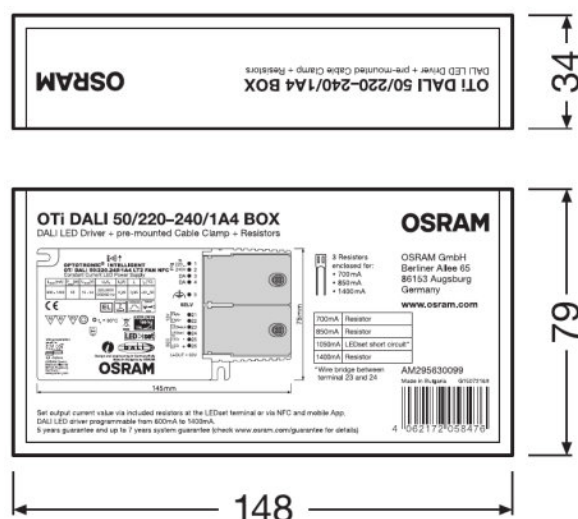
OTi DALI 15/220...240/1A0 Box



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



OTi DALI 35/220...240/1A0 Box



OTi DALI 50/220...240/1A4 Box

Colors & materials

Product description	Casing material
OTi DALI 15/220...240/1A0 Box	Plastic
OTi DALI 25/220...240/700 Box	Plastic
OTi DALI 35/220...240/1A0 Box	Plastic
OTi DALI 50/220...240/1A4 Box	Plastic

Temperatures & operating conditions

Product description	Ambient temperature range	Maximum temperature at tc test point	Max.housing temperature in case of fault	Temperature range at storage
OTi DALI 15/220...240/1A0 Box	-20...+50 °C	80 °C ¹⁾	110 °C	-40...+85 °C
OTi DALI 25/220...240/700 Box	-20...+50 °C	75 °C ¹⁾	110 °C	-40...+85 °C
OTi DALI 35/220...240/1A0 Box	-20...+50 °C	75 °C ¹⁾	110 °C	-40...+85 °C
OTi DALI 50/220...240/1A4 Box	-20...+50 °C	80 °C ¹⁾	110 °C	-40...+85 °C

Product description	Permitted rel. humidity during operation
OTi DALI 15/220...240/1A0 Box	5...85 % ²⁾
OTi DALI 25/220...240/700 Box	5...85 % ²⁾
OTi DALI 35/220...240/1A0 Box	5...85 % ²⁾
OTi DALI 50/220...240/1A4 Box	5...85 % ²⁾

¹⁾ Maximum at the Tc-point

²⁾ Maximum 56 days/year at 85 %

Lifespan

Product description	ECG lifetime
OTi DALI 15/220...240/1A0 Box	50000 / 100000 h ¹⁾
OTi DALI 25/220...240/700 Box	50000 / 100000 h ²⁾
OTi DALI 35/220...240/1A0 Box	50000 / 100000 h ²⁾
OTi DALI 50/220...240/1A4 Box	50000 / 100000 h ¹⁾

¹⁾ T_c = 80°C, 0.2% / 1,000 h failure rate / T_c = 70°C, 0.1% / 1,000 h failure rate

²⁾ T_c = 75°C, 0.2% / 1,000 h failure rate / T_c = 65°C, 0.1% / 1,000 h failure rate

Capabilities

Product description	Dimming interface	Dimming range	Dimming method
OTi DALI 15/220...240/1A0 Box	DALI / Touch DIM / Touch DIM Sensor	1...100 % ¹⁾	Amplitude Modulation
OTi DALI 25/220...240/700 Box	DALI / Touch DIM / Touch DIM Sensor	1...100 % ¹⁾	Amplitude Modulation
OTi DALI 35/220...240/1A0 Box	DALI / Touch DIM / Touch DIM Sensor	1...100 % ¹⁾	Amplitude Modulation
OTi DALI 50/220...240/1A4 Box	DALI / Touch DIM / Touch DIM Sensor	1...100 % ¹⁾	Amplitude Modulation

Product description	Overheating protection	Overload protection	Short-circuit protection	No-load proof
OTi DALI 15/220...240/1A0 Box	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OTi DALI 25/220...240/700 Box	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OTi DALI 35/220...240/1A0 Box	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OTi DALI 50/220...240/1A4 Box	Automatic reversible	Automatic reversible	Automatic reversible	Yes

Product description	Max. cable length to lamp/LED module	Suitable for fixtures with prot. class	Type of connection, input side	Type of connection, output side
OTi DALI 15/220...240/1A0 Box	2.0 m	I / II	Push terminal	Push terminal
OTi DALI 25/220...240/700 Box	2.0 m	I / II	Push terminal	Push terminal
OTi DALI 35/220...240/1A0 Box	2.0 m	I / II	Push terminal	Push terminal
OTi DALI 50/220...240/1A4 Box	2.0 m	I / II	Push terminal	Push terminal

Product description	Programming interface	Constant lumen function	Accessories
OTi DALI 15/220...240/1A0 Box	DALI, NFC, LEDset	Programmable	Resistors for current setting at LEDset2 terminal: 500mA, 700mA
OTi DALI 25/220...240/700 Box	DALI, NFC, LEDset	Programmable	Resistors for current setting at LEDset2 terminal: 350mA, 700mA
OTi DALI 35/220...240/1A0 Box	DALI, NFC, LEDset	Programmable	Resistors for current setting at LEDset2 terminal: 350mA, 500mA, 850mA, 1050mA
OTi DALI 50/220...240/1A4 Box	DALI, NFC, LEDset	Programmable	Resistors for current setting at LEDset2 terminal: 700mA, 850mA, 1400mA

Product description	Number of channels
OTi DALI 15/220...240/1A0 Box	1
OTi DALI 25/220...240/700 Box	1
OTi DALI 35/220...240/1A0 Box	1
OTi DALI 50/220...240/1A4 Box	1

¹⁾ For maximum nominal output current

Programming

Product description	Programming device	Tuner4TRONIC Field App
OTi DALI 15/220...240/1A0 Box	DALI / LEDset / NFC	Yes
OTi DALI 25/220...240/700 Box	DALI / LEDset / NFC	Yes
OTi DALI 35/220...240/1A0 Box	DALI / LEDset / NFC	Yes
OTi DALI 50/220...240/1A4 Box	DALI / LEDset / NFC	Yes

Programmable features

Product description	Constant Lumen	Lamp Operating Time	Driver Guard
OTi DALI 15/220...240/1A0 Box	Yes	Yes	Yes
OTi DALI 25/220...240/700 Box	Yes	Yes	Yes
OTi DALI 35/220...240/1A0 Box	Yes	Yes	Yes
OTi DALI 50/220...240/1A4 Box	Yes	Yes	Yes

Product description	DALI Settings	Emergency Mode	Configuration Lock
OTi DALI 15/220...240/1A0 Box	Yes	Yes	Yes
OTi DALI 25/220...240/700 Box	Yes	Yes	Yes
OTi DALI 35/220...240/1A0 Box	Yes	Yes	Yes
OTi DALI 50/220...240/1A4 Box	Yes	Yes	Yes

Product description	Soft Switch Off	Dim to Dark	TouchDIM + Sensor
OTi DALI 15/220...240/1A0 Box	Yes	Yes	Yes
OTi DALI 25/220...240/700 Box	Yes	Yes	Yes
OTi DALI 35/220...240/1A0 Box	Yes	Yes	Yes
OTi DALI 50/220...240/1A4 Box	Yes	Yes	Yes

Product description	Corridor Functionality	OEM Key
OTi DALI 15/220...240/1A0 Box	Yes	No
OTi DALI 25/220...240/700 Box	Yes	No
OTi DALI 35/220...240/1A0 Box	Yes	No
OTi DALI 50/220...240/1A4 Box	Yes	No

Certificates & standards

Product description	Approval marks – approval	Standards	Protection class	Type of protection
OTi DALI 15/220...240/1A0 Box	ENEC 10 / VDE / EMC / EL / CE / DALI-2	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	II	IP20
OTi DALI 25/220...240/700 Box	ENEC 10 / VDE / EMC / EL / CE / DALI-2	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	II	IP20
OTi DALI 35/220...240/1A0 Box	ENEC 10 / VDE / EMC / EL / CE / DALI-2	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	II	IP20
OTi DALI 50/220...240/1A4 Box	ENEC 10 / VDE / EMC / EL / CE / DALI-2	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	II	IP20

Logistical data

Product description	Commodity code
OTi DALI 15/220...240/1A0 Box	850440829000
OTi DALI 25/220...240/700 Box	850440829000
OTi DALI 35/220...240/1A0 Box	850440829000
OTi DALI 50/220...240/1A4 Box	850440829000

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
	Product Datasheet 637617_Preliminary DS OT CABLE CLAMP F-STYLE (GB)
	Certificates OT ENEC 40038447 210721
	Certificates OT EMC 40044675 010321
	Declarations of conformity OTI DALI NFC UK DoC 4291512 240221
	Declarations of conformity EATON(CEAG)-Conformity declaration AM12411 DALI 15220-2401A0 LT2 NFC
	Declarations of conformity INOTEC-Conformity Declaration AM12411 OTi DALI 15220-2401A0 LT2 NFC
	Declarations of conformity OTI DALI NFC CE 3758701 240221
	Declarations of conformity OTI DALI LT2 CE 3365628 180221
	User instruction OPTOTRONIC LED Power Supply
	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
	Declarations of conformity EATON(CEAG) Conformity declaration AM12412_OTi_DALI_35_220-240_1A0_LT2_NFC
	Declarations of conformity INOTEC Conformity declaration AM12412_OTi_DALI_35_220-240_1A0_LT2_NFC
	User instruction OPTOTRONIC LED Power Supply
	Product Datasheet Cable clamp A style DS 101219 (EN)

Product family datasheet



Declarations of conformity
EATON(CEAG) Conformity declaration AM12413_OTi_DALI_50_220-240_1A4_LT2_FAN_NFC



Declarations of conformity
INOTEC Conformity declaration AM12413_OTi_DALI_50_220-240_1A4_LT2_FAN_NFC

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4062172058414	OTi DALI 15/220...240/1A0 Box	Shipping carton box 10	188 mm x 138 mm x 141 mm	3.66 dm ³	1424.00 g
4062172058438	OTi DALI 25/220...240/700 Box	Shipping carton box 10	188 mm x 163 mm x 181 mm	5.55 dm ³	2091.00 g
4062172058452	OTi DALI 35/220...240/1A0 Box	Shipping carton box 10	188 mm x 163 mm x 181 mm	5.55 dm ³	2091.00 g
4062172058476	OTi DALI 50/220...240/1A4 Box	Shipping carton box 10	188 mm x 163 mm x 181 mm	5.55 dm ³	2431.00 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 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.

Disclaimer

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