

DALI-Driver for DC-LED lamps or modules

DRIVER DALI 15W/100-350mA IP20

Radium

Product Datasheet Date: 04.07.2022



General Data

Article No.	OTDA4030
Code	DRIVER DC DALI 15W/100-350mA IP20
Product EAN	4003556010826
Customs tariff no.	85044082
Box quantity (pcs.)	48
EAN Box	4003556410824
Gross weight of box in kg	7.33
Length of box in m	0.385
Width of box in m	0.285
Height of box in m	0.21
ETIM class	EC002710
ETIM class name	LED driver
Weight	150 g
Product status	● Active

Electric Parameters

Rated value output power max.	15 W
Power factor	≥0,95

Electric Parameters

Input voltage (range)	200-264 V
Output voltage	16-42 V
Surge voltage resistance (L - N)	2 kV
Inrush current	60 A
Output current	100-350 mA
Supply frequency	50/60 Hz
Suitable for DC-voltage (primary side)	Yes
Content of harmonics (THD)	15 %
dimnable	Yes
Dimming with push-button	Yes
Dimming interface	DALI
DALI Device Type	DALI2 DT6

Light Application Parameters

Dimming range	0 - 100 %
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Service Life

Service life	70000 h
Lifetime @Tc max.	50000 h
Tc Temperature max.	66 °C
Lifetime @Tc mean	70000 h
Tc mean	62 °C
Lifetime @Tc low	100000 h
Tc low	57 °C
Guarantee up to	5 years

Specification

Mean efficiency	84.5 %
Length	195 mm
Length	195 mm
Height	21 mm
Width	30 mm
Material	metal
Weight	150 g

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Notes on Operation

Degree of protection (IP)	IP20
Type of connection	spring clamp
Range of storage temperature	-30...+80 °C
Ambient temperatures	-30...+50 °C
Tc Temperature max.	66 °C
max. relative air humidity	90 %

Notes

External constant current driver for installation in luminaire (e.g. for DC LED tubes), dimmable via DALI interface, for indoor use.

Please, refer to www.radium.de/recycling for notes on disposal of burned-out lamps as well as lamp breakage.

The "lifespan L70" described for LED lamps indicates the number of hours when the luminous flux has decreased to 70% of its initial value. The optimal field 'info about service life' contains the frame conditions according to standards based on which the specific service life has been determined. So, for example, "12B50, 50Hz" means that the mean service life (B50) has been determined with a 12h switching cycle at mains (frequency 50Hz), "3B50, HF" is based on a 3h switching cycle at electronic control gear (high frequency).

Special features



All technical data without guarantee.

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Technical information

DRIVER DALI 15W/100-350mA IP20

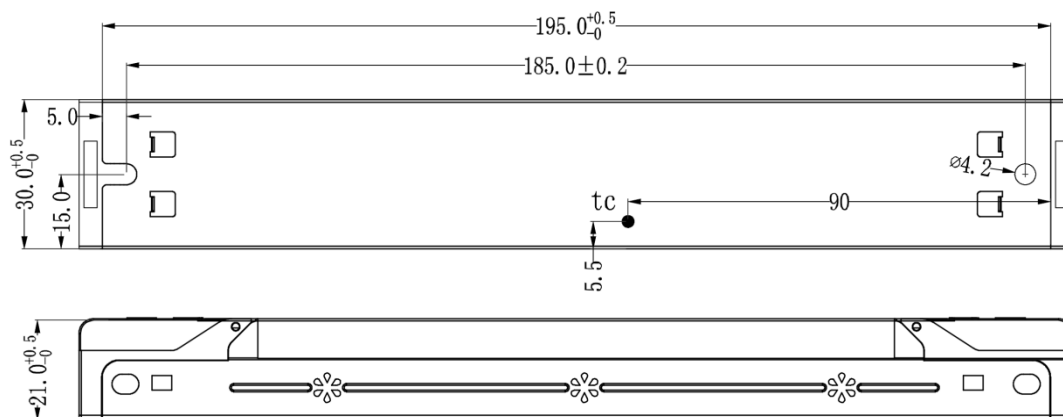
Constant current LED driver for LED modules with an adjustable operating current of 100-350mA and an output voltage between 16V and 42V. Suitable for protection class I and protection class II luminaires. Flicker free with high efficiency and long service life of 70,000h @T_c 62°C. For AC operation at 230V 50-60Hz.



Recommended for the following Radium LED T8 Neo Tube:

- 43719848 LED T8 NEO 18 840/G13
- 43719849 LED T8 NEO 18 865/G13

Drawing



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General Data

Code	DRIVER DALI 15W/100-350mA IP20
Article No.	OTDA4030
EAN10	4003556010826
EAN40	4003556410824
Weight [g]	150 g
Length [mm]	195 mm
Width [mm]	30 mm
Height [mm]	21 mm
Service Life @T _c 66°C	50,000 h
Service Life @T _c 62°C	70,000 h
Service Life @T _c 57°C	100,000 h
Guarantee	5 years

Operating conditions

Permissible ambient temperature T _a [°C]	-30°C...+50°C
Permissible storage temperature [°C]	-30°C...+80°C
Permissible T _c temperature [°C]	-30°C...+66°C
Max. permissible T _c temperature [°C]	+66°C
Permissible air moisture	10-90%RH
Degree of protection (IP)	IP20
Protection class	I

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Information no. 9907-01-2112

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Technical information

Electrical Parameter Output

Rated power [W]	2 – 14,7 W
Permissible voltage [V DC]	16 – 42 V
Output current [mA]	100 – 350 mA
Output current tolerance [mA]	± 5 %
Output P_ST_LM	≤ 1
Output SVM	≤ 0,4
Offset time @ AC 230V	<1 s
Kind of protection embodied	Short-circuit proof, open-circuit-proof

Electrical Parameter Input

Mains voltage range [V AC]	220 – 240 V
Alternating voltage range [V AC]	200 – 264 V
Direct voltage range [V DC]	200 – 264 V
Mains frequency [Hz]	50 – 60 Hz
Nominal current [A]	0,1 A
Mains power factor [λ]	≥0.94 @ 230 V _{ac} & 100% Load
THD	≤15 %
Efficiency	≥84 % @ 350mA
Inrush current	≤60A & 350 μ s @ 230 V _{ac}
Power consumption in Stand-by	≤0.5 W
Surge voltage strength L-N	1 kV
Surge voltage strength L/N-PE	2 kV

Safety and electromagnetic compatibility

Certificates	ENEC, CE
Safety standards	EN61347
EMI	EN55015, EN61000-3-2
EMS	EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547
RoHS	RoHS 2.0 (EU) 2015/863
DALI	IEC 62386-101, 102, 207: DALI2.0

Operating current table

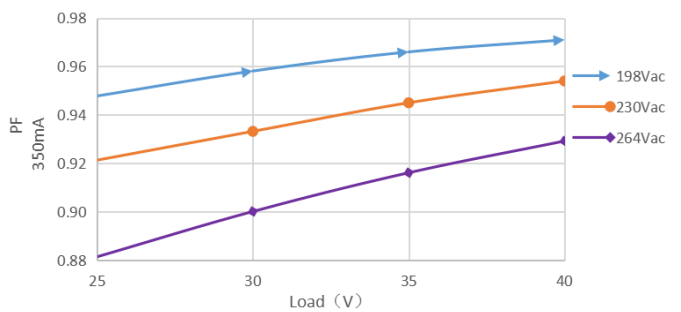
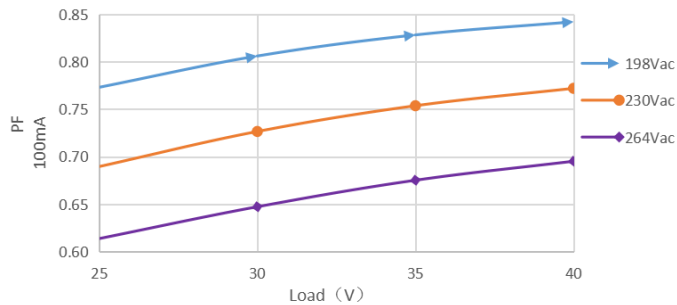
Parameter			DIP-Switches		
Min. Voltage	Max. Voltage	Current	1	2	3
16V	42V	350mA	—	—	—
16V	42V	300mA	—	—	ON
16V	42V	250mA	—	ON	—
16V	42V	200mA	—	ON	ON
16V	42V	150mA	ON	—	—
20V	42V	100mA	ON	—	ON

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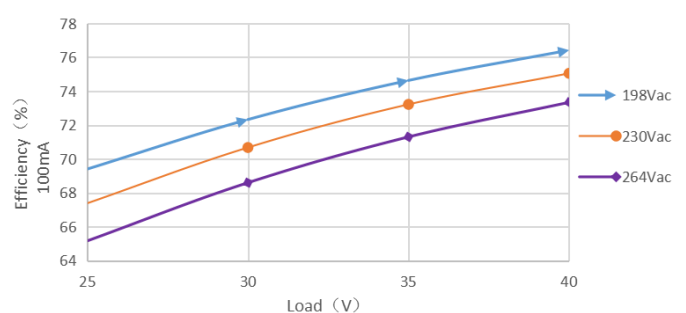
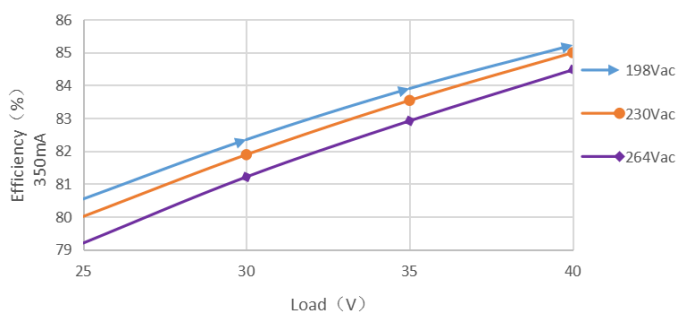
Technical information

Electrotechnical Parameter

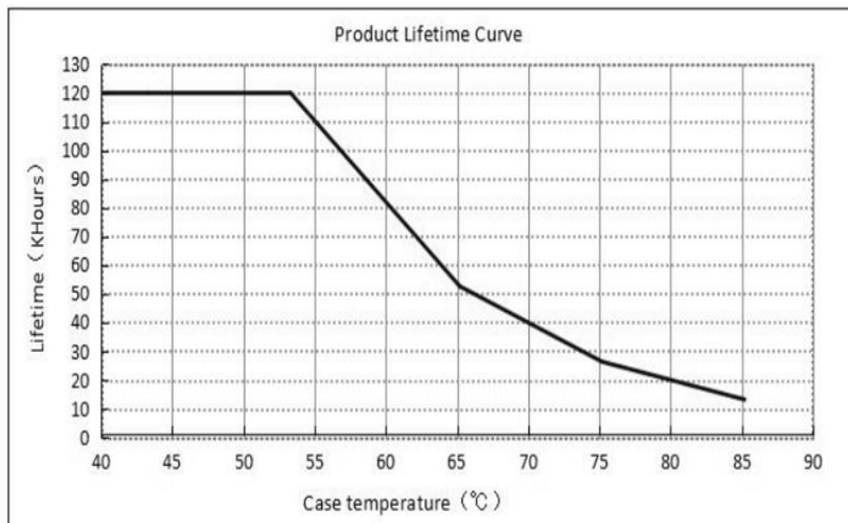
Mains power factor λ



Efficiency



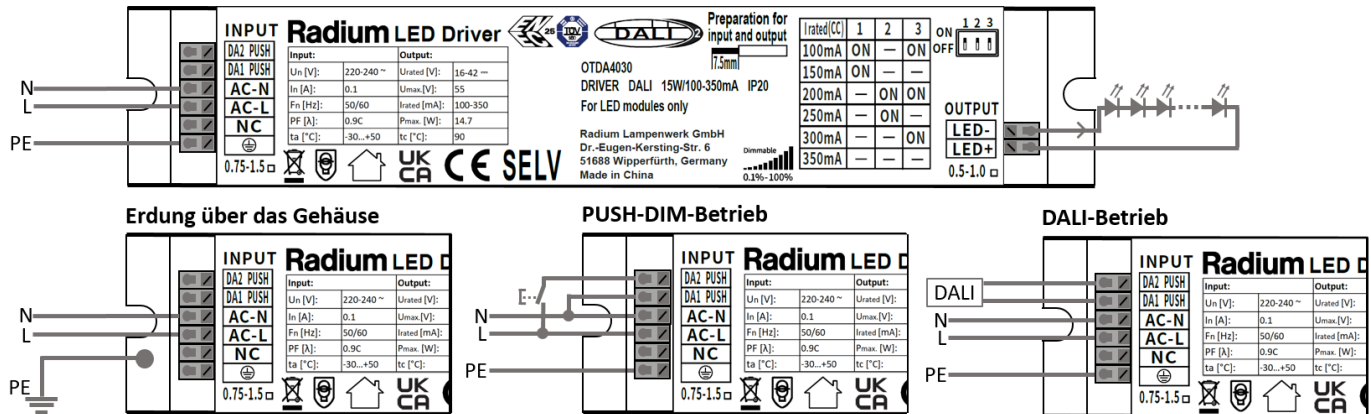
Service Life



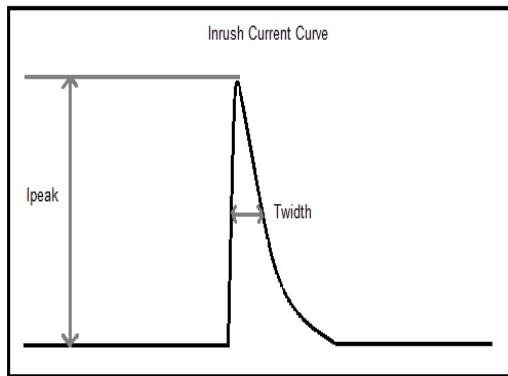
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Technical information

Wiring diagram



Fuse rating



Characteristic	Current	Max. no. of devices
B	10A	40
	16A	64
	20A	80
	25A	100
C	10A	66
	16A	108
	20A	133
	25A	166
I _{peak} / T _{width}		

Notes

- It is recommended to install overvoltage and undervoltage protection devices and surge protection devices in the power supply circuits of the light fixtures to ensure safety before connecting to electricity.
- Please disconnect the AC input before switching the output current via the DIP switch.
- The DALI dimming function and the push dimming function cannot be used at the same time, in this case the DALI dimmer will be damaged.
- The maximum wire length between the push dimming switch and the farthest LED driver is 135m at a wire diameter of 0,5-2,5mm²
- The minimum dimming level of the push dimming is 4% (I_{out}).
- As an accessory, the LED driver is not the only factor determining the EMC performance of the LED light fixture. The structure and the wiring of the light fixture are also relevant.
- Unless otherwise stated, the parameters of the power factor, harmonics and efficiency were test results under the conditions ambient temperature of 25°C, humidity of 50%, input voltage of 230V_{ac} (50Hz) and full load.
- Use this product according to the specifications, please. Otherwise there may be malfunction.
- Use of light fixtures that have not been certified or are not compatible with the LED drivers may cause fire or other hazards.
- Man-made damage, any use beyond the specification and non-original-factory modification are not covered by warranty.

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