

Driver LC 100W 24V bDW SC PRE2
LED Driver premium constant voltage



System solution

Product description

- _ Dimmable 24 V constant voltage LED Driver for flexible constant voltage strips
- _ Can be either used built-in or independent with clip-on strain-relief (see data sheet chapter: 1. Standards)
- _ basicDIM Wireless enables different dimming options
- _ Forms automatically a wireless communication network with up to 250 nodes
- _ Dimming range 1 to 100 %
- _ No additional external dimmer is needed
- _ Suitable for emergency escape lighting systems acc. to EN 50172
- _ Nominal lifetime up to 50,000 h
- _ 5-year guarantee

Typical applications

- _ Cove lighting, facade accent lighting, ceiling integration

Technical details

- _ 24 V, 100 W
- _ Small design (295 x 43 x 30 mm) with stretched-compact strain relief
- _ Small cross section
- _ Push terminals for simple wiring
- _ Output terminals (+/-) equipped twice for more flexibility in the application

Interfaces

- _ basicDIM Wireless
- _ ready2mains (configuration via mains)
- _ Terminal blocks: 45° push terminals

System solution

- _ Tridonic LLE-FLEX ADV 600, 1,200, 1,800 lm/m
- _ Tridonic LLE-FLEX EXC 600, 1,200, 1,800, 2,500 lm/m
- _ In connection with Flex accessories wire to PCB plug

Website

<http://www.tridonic.com/28002417>



Spotlights



Downlights



Linear



Area



Floor | Wall



Free-standing



Street



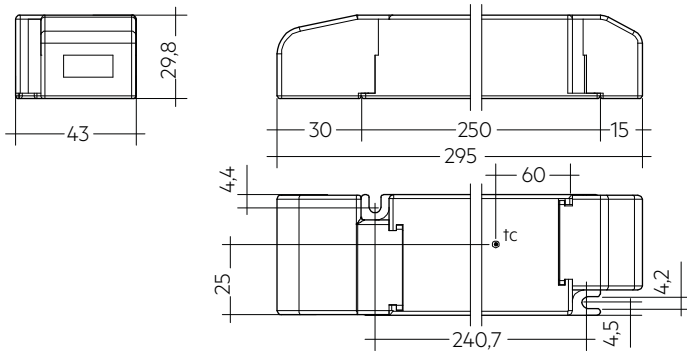
Decorative



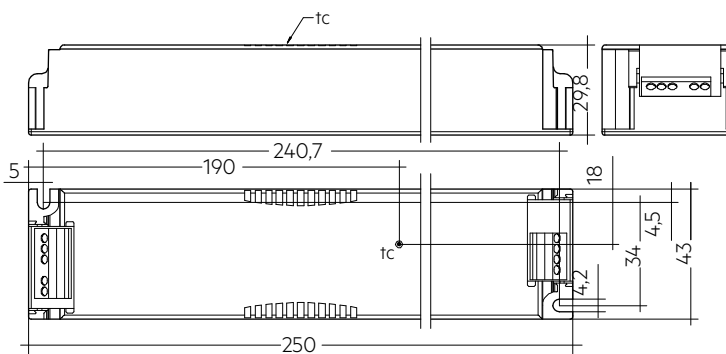
High bay

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The complete data sheet for this product is available in the Downloads section.



With strain-relief



Without strain-relief

Ordering data

Type	Article number	Packaging, carton [®]	Packaging, pallet	Weight per pc.
Multi packaging				
LC 100/24V bDW SC PRE2	28002417	10 pc(s).	390 pc(s).	0.255 kg

Technical data

Rated supply voltage	220 – 240 V
AC voltage range	198 – 264 V
DC voltage range	176 – 280 V
Mains frequency	0 / 50 / 60 Hz
Typ. rated current (at 230 V, 50 Hz, full load) ^①	468 mA
Typ. current (220 V, 0 Hz, full load, 15 % dimming level)	93 mA
Leakage current (at 230 V, 50 Hz, full load) ^①	< 260 µA
Max. input power	111 W
Typ. efficiency (at 230 V, 50 Hz, full load)	93 %
λ (at 230 V, 50 Hz, full load) ^①	0.99
Typ. power input on stand-by	< 0.37 W
Typ. input current in no-load operation	40.4 mA
Typ. input power in no-load operation	2.6 W
In-rush current (peak / duration)	43 A / 280 µs
THD (at 230 V, 50 Hz, full load) ^①	< 5.7 %
Starting time (at 230 V, 50 Hz, full load) ^①	< 0.35 s
Starting time (DC mode)	< 0.32 s
Switchover time (AC/DC) ^②	< 0.3 s
Turn off time (at 230 V, 50 Hz, full load)	< 20 ms
Output voltage tolerance	± 1 V
Output LF voltage ripple (< 120 Hz)	± 5 %
Max. output voltage (U-OVT)	60 V
PWM frequency	≥ 1 kHz
Dimming range	1 – 100 %
Mains surge capability (between L - N)	1 kV
Mains surge capability (between L/N - PE)	2 kV
Type of protection	IP20
Radio transceiver operating frequencies	2.4 – 2.483 GHz
Max. output power radio transceiver	+ 4 dBm
Lifetime	up to 50,000 h
Dimensions L x W x H	295 x 43 x 29.8 mm

Approval marks



Standards

EN 55015, EN 61000-3-2, EN 61000-3-3, EN 61347-1, EN 61347-2-13, EN 62384, EN 61547, ETSI EN 301 489-1, according to EN 50172, according to EN 60598-2-22

Specific technical data

Type	Load	Forward voltage	Output current	Max. output power (at 24 V, full load)	Typ. power consumption (at 24 V, full load)	Typ. current consumption (at 24 V, full load)	t _c point max.	Ambient temperature t _a
LC 100/24V bDW SC PRE2	10 %	24 V	417 mA	10 W	12.9 W	75 mA	65 °C	-25 ... +50 °C
LC 100/24V bDW SC PRE2	20 %	24 V	833 mA	20 W	23.3 W	119 mA	65 °C	-25 ... +50 °C
LC 100/24V bDW SC PRE2	30 %	24 V	1,250 mA	30 W	33.8 W	163 mA	65 °C	-25 ... +50 °C
LC 100/24V bDW SC PRE2	40 %	24 V	1,667 mA	40 W	44.3 W	206 mA	65 °C	-25 ... +50 °C
LC 100/24V bDW SC PRE2	50 %	24 V	2,083 mA	50 W	54.8 W	250 mA	65 °C	-25 ... +50 °C
LC 100/24V bDW SC PRE2	60 %	24 V	2,500 mA	60 W	65.2 W	294 mA	70 °C	-25 ... +50 °C
LC 100/24V bDW SC PRE2	70 %	24 V	2,917 mA	70 W	75.7 W	337 mA	70 °C	-25 ... +50 °C
LC 100/24V bDW SC PRE2	80 %	24 V	3,333 mA	80 W	86.2 W	381 mA	70 °C	-25 ... +50 °C
LC 100/24V bDW SC PRE2	90 %	24 V	3,750 mA	90 W	96.6 W	425 mA	70 °C	-25 ... +50 °C
LC 100/24V bDW SC PRE2	100 %	24 V	4,167 mA	100 W	107.1 W	468 mA	70 °C	-25 ... +50 °C

① Valid at 100 % dimming level.

② Valid for immediate change of power supply type otherwise the starting time is valid.

③ The strain relief is included in both packaging variants. In the single packaging each Driver has also an individual packaging.