

Driver LCA 45W 500–1400mA one4all SC PRE premium series



With strain-relief

Product description

- _ Dimmable built-in constant current LED Driver
- _ Can be either used built-in or independent with clip-on strain-relief (see accessory)
- _ Output current adjustable between 500 – 1,400 mA
- _ Max. output power 45 W
- _ Up to 91 % efficiency
- _ Power input on stand-by < 0.15 W
- _ Dimming range 1 to 100 %
- _ For luminaires of protection class I and protection class II
- _ Nominal life-time up to 100,000 h
- _ 5-year guarantee

Housing properties

- _ Casing: polycarbonate, white
- _ Type of protection IP20

Interfaces

- _ one4all (DALI-2 DT 6, DSI, switchDIM, corridorFUNCTION)
- _ ready2mains (configuration and dimming via mains)
- _ Terminal blocks: 45° push terminals

Functions

- _ Adjustable output current (DALI, ready2mains, I-select 2)
- _ Constant light output function (CLO)
- _ Power-up fading at AC
- _ Configurable via ready2mains
- _ Service monitor to log certain events
- _ Protective features (overtemperature, short-circuit, overload, no-load, input voltage range, reduced surge amplification)
- _ Suitable for emergency escape lighting systems acc. to EN 50172

Benefits

- _ Application-oriented operating window for maximum compatibility
- _ Best energy savings due to low stand-by losses and high efficiency
- _ Flexible configuration via DALI, ready2mains and I-select 2

Typical applications

- _ For linear/area lighting in office applications

Website

<http://www.tridonic.com/28000676>



Spotlights



Downlights



Linear



Area



Floor | Wall



Free-standing



Street



Decorative

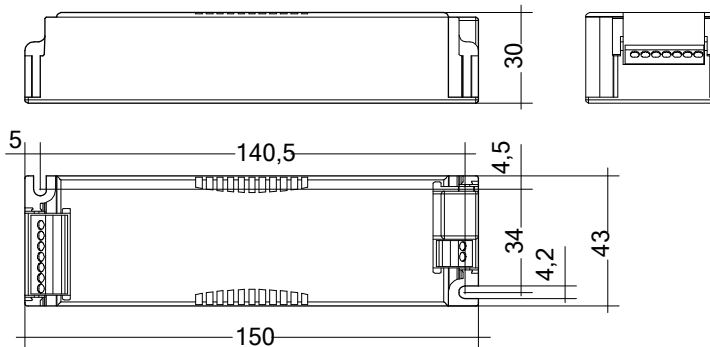


High bay

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premium series

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



Ordering data

Type	Article number	Packaging, carton	Packaging, pallet	Weight per pc.
LCA 45W 500-1400mA one4all SC PRE	28000676	10 pc(s).	1,000 pc(s).	0.145 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
Overvoltage protection	320 V AC, 48 h
Typ. current (at 230 V, 50 Hz, full load) ^{①②}	132 – 224 mA
Typ. current (220 V, 0 Hz, full load, 15 % dimming level) ^②	29 – 44 mA
Leakage current (at 230 V, 50 Hz, full load) ^{①②}	< 160 µA
Max. input power	50 W
Typ. efficiency (at 230 V, 50 Hz, full load) ^②	91 %
λ (at 230 V, 50 Hz, full load) ^①	0.98C
Typ. power input on stand-by ^③	< 0.15 W
Typ. input current in no-load operation	25.7 mA
Typ. input power in no-load operation	0.36 W
In-rush current (peak / duration)	23 A / 200 µs
THD (at 230 V, 50 Hz, full load) ^①	< 5 %
Starting time (at 230 V, 50 Hz, full load) ^①	< 0.3 s
Starting time (DC mode)	< 0.3 s
Switchover time (AC/DC) ^④	< 0.3 s
Turn off time (at 230 V, 50 Hz, full load)	< 20 ms
Output current tolerance ^{①⑤}	± 3 %
Max. output current peak (non-repetitive)	≤ output current + 40 %
Output LF current ripple (< 120 Hz)	± 2 %
Max. output voltage (U-OUT)	60 V
Dimming range	1 – 100 %
Mains surge capability (between L - N)	1 kV
Mains surge capability (between L/N - PE)	2 kV
Surge voltage at output side (against PE)	< 500 V
Type of protection	IP20
Dimensions L x W x H	150 x 43 x 30 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, EN 62386-101 (DALI-2), EN 62386-102 (DALI-2), EN 62386-207 (DALI-2), Acc. to EN 50172, Acc. to EN 60598-2-22

Specific technical data

Type	Output current ^①	Min. forward voltage	Max. forward voltage	Max. output power	Typ. power consumption (at 230 V, 50 Hz, full load)	Typ. current consumption (at 230 V, 50 Hz, full load)	t _c point max.	Ambient temperature t _a	I-select 2 resistor value ^⑦
LCA 45W 500-1400mA one4all SC PRE	500 mA	25 V	50.0 V	25.0 W	29.3 W	133 mA	80 °C	-25 ... +50 °C	-
LCA 45W 500-1400mA one4all SC PRE	550 mA	25 V	50.0 V	27.5 W	31.8 W	144 mA	80 °C	-25 ... +50 °C	9.09 kΩ
LCA 45W 500-1400mA one4all SC PRE	600 mA	25 V	50.0 V	30.0 W	34.4 W	150 mA	85 °C	-25 ... +50 °C	8.33 kΩ
LCA 45W 500-1400mA one4all SC PRE	650 mA	25 V	50.0 V	32.5 W	37.0 W	166 mA	85 °C	-25 ... +50 °C	7.69 kΩ
LCA 45W 500-1400mA one4all SC PRE	700 mA	25 V	50.0 V	35.0 W	39.5 W	176 mA	85 °C	-25 ... +50 °C	7.14 kΩ
LCA 45W 500-1400mA one4all SC PRE	750 mA	25 V	50.0 V	37.5 W	42.1 W	187 mA	85 °C	-25 ... +50 °C	6.67 kΩ
LCA 45W 500-1400mA one4all SC PRE	800 mA	25 V	50.0 V	40.0 W	44.7 W	198 mA	85 °C	-25 ... +50 °C	6.25 kΩ
LCA 45W 500-1400mA one4all SC PRE	850 mA	25 V	50.0 V	42.5 W	47.3 W	210 mA	85 °C	-25 ... +50 °C	5.88 kΩ
LCA 45W 500-1400mA one4all SC PRE	900 mA	25 V	50.0 V	45.0 W	49.9 W	221 mA	85 °C	-25 ... +50 °C	5.56 kΩ
LCA 45W 500-1400mA one4all SC PRE	950 mA	25 V	47.4 V	45.0 W	49.9 W	221 mA	85 °C	-25 ... +50 °C	5.26 kΩ
LCA 45W 500-1400mA one4all SC PRE	1,000 mA	25 V	45.0 V	45.0 W	49.8 W	220 mA	85 °C	-25 ... +50 °C	5.00 kΩ
LCA 45W 500-1400mA one4all SC PRE	1,050 mA	25 V	42.9 V	45.0 W	49.8 W	220 mA	85 °C	-25 ... +50 °C	4.76 kΩ
LCA 45W 500-1400mA one4all SC PRE	1,100 mA	25 V	40.9 V	45.0 W	49.7 W	220 mA	85 °C	-25 ... +50 °C	4.55 kΩ
LCA 45W 500-1400mA one4all SC PRE	1,150 mA	25 V	39.1 V	45.0 W	49.7 W	220 mA	85 °C	-25 ... +50 °C	4.35 kΩ
LCA 45W 500-1400mA one4all SC PRE	1,200 mA	25 V	37.5 V	45.0 W	49.8 W	220 mA	85 °C	-25 ... +50 °C	4.17 kΩ
LCA 45W 500-1400mA one4all SC PRE	1,250 mA	25 V	36.0 V	45.0 W	49.8 W	220 mA	85 °C	-25 ... +50 °C	4.00 kΩ
LCA 45W 500-1400mA one4all SC PRE	1,300 mA	25 V	34.6 V	45.0 W	49.9 W	221 mA	85 °C	-25 ... +50 °C	3.85 kΩ
LCA 45W 500-1400mA one4all SC PRE	1,350 mA	25 V	33.3 V	45.0 W	49.9 W	221 mA	85 °C	-25 ... +50 °C	3.70 kΩ
LCA 45W 500-1400mA one4all SC PRE	1,400 mA	25 V	32.1 V	44.9 W	50.0 W	221 mA	85 °C	-25 ... +50 °C	0.00 kΩ

① Valid at 100 % dimming level.

② Depending on the selected output current.

③ Depending on the DALI traffic at the interface.

④ Valid for immediate change of power supply type otherwise the starting time is valid.

⑤ Output current is mean value.

⑥ The table only lists a number of possible operating points but does not cover each single point. The output current can be set within the total value range in 1-mA-steps.

⑦ Not compatible with I-select (generation 1). Calculated resistor value.