

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

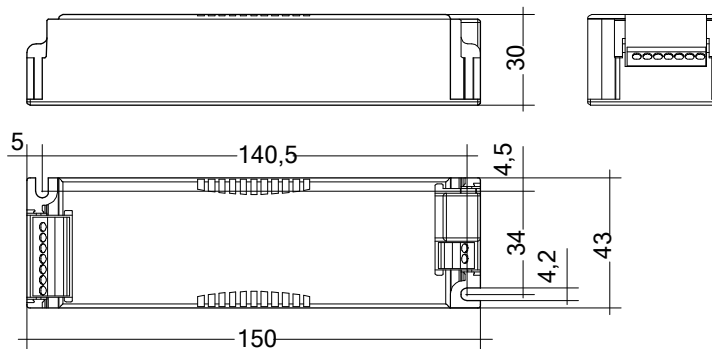


High bay

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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)	< 0.3 s
Turn off time (at 230 V, 50 Hz, full load)	< 20 ms
Output current tolerance ^{①④}	± 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)	tc point max.	Ambient temperature ta	I-select 2 resistor value
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 Output current is mean value.

⑤ 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.

⑥ Not compatible with I-select (generation 1).