

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



Product description

- _ Independent dimmable LED Driver
- _ Dimmable via DALI / DALI-2
- _ Dimming range 1 – 100 % (whole operating window)
- _ Output current adjustable between 500 – 1,400 mA
- _ Max. output power 45 W
- _ Up to 90 % efficiency
- _ Power input on stand-by < 0.15 W
- _ Nominal life-time up to 100,000 h
- _ 5-year guarantee

Housing properties

- _ Casing: polycarbonate, white
- _ Type of protection IP20
- _ Strain relief with loop through function

Interfaces

- _ one4all (DALI-2 DT 6, DSI, switchDIM, corridorFUNCTION)
- _ ready2mains (configuration and dimming via mains)
- _ Terminal blocks: 0° / 45° push terminals (input / output)

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
- _ For cable cross-sections up to 2.5 mm²

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
- _ No tools required for installation

Typical applications

- _ For downlight, spotlight and decorative applications

Website

<http://www.tridonic.com/28000672>



Spotlights



Downlights



Linear



Area



Floor | Wall



Free-standing



Street



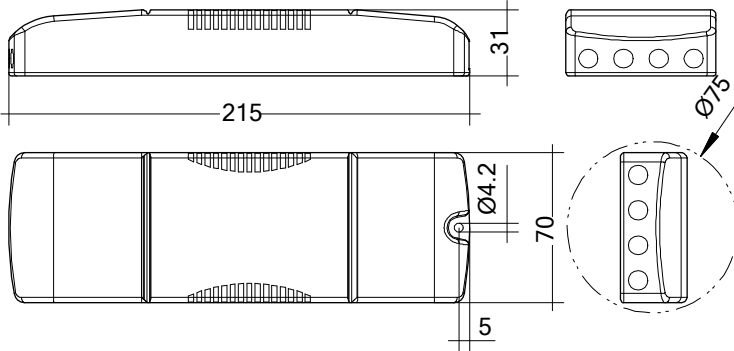
Decorative



High bay

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premium series



Ordering data

Type	Article number	Packaging, carton	Packaging, pallet	Weight per pc.
LCA 45W 500-1400mA one4all SR PRE	28000672	10 pc(s).	400 pc(s).	0.231 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	31 – 46 mA
Leakage current (at 230 V, 50 Hz, full load) ^{①②}	< 160 µA
Max. input power	50.6 W
Typ. efficiency (at 230 V, 50 Hz, full load) ^②	90 %
λ (at 230 V, 50 Hz, full load)	0.98C
Typ. power input on stand-by ^③	< 0.15 W
Typ. input current in no-load operation	22 mA
Typ. input power in no-load operation	0.38 W
In-rush current (peak / duration)	28 A / 195 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
Life-time	up to 100,000 h
Dimensions L x W x H	215 x 70 x 31 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. ^⑦	Ambient temperature ta	I-select 2 resistor value ^⑧
LCA 45W 500-1400mA one4all SR PRE	500 mA	25 V	50.0 V	25.0 W	30.1 W	136 mA	85 °C	-25 ... +50 °C	-
LCA 45W 500-1400mA one4all SR PRE	550 mA	25 V	50.0 V	27.5 W	32.5 W	146 mA	85 °C	-25 ... +50 °C	9.09 kΩ
LCA 45W 500-1400mA one4all SR PRE	600 mA	25 V	50.0 V	30.0 W	35.1 W	157 mA	85 °C	-25 ... +50 °C	8.33 kΩ
LCA 45W 500-1400mA one4all SR PRE	650 mA	25 V	50.0 V	32.5 W	37.6 W	168 mA	85 °C	-25 ... +50 °C	7.69 kΩ
LCA 45W 500-1400mA one4all SR PRE	700 mA	25 V	50.0 V	35.0 W	40.2 W	179 mA	85 °C	-25 ... +50 °C	7.14 kΩ
LCA 45W 500-1400mA one4all SR PRE	750 mA	25 V	50.0 V	37.5 W	42.8 W	189 mA	85 °C	-25 ... +50 °C	6.67 kΩ
LCA 45W 500-1400mA one4all SR PRE	800 mA	25 V	50.0 V	40.0 W	45.4 W	201 mA	85 °C	-25 ... +50 °C	6.25 kΩ
LCA 45W 500-1400mA one4all SR PRE	850 mA	25 V	50.0 V	42.5 W	48.0 W	212 mA	87 °C	-25 ... +50 °C	5.88 kΩ
LCA 45W 500-1400mA one4all SR PRE	900 mA	25 V	50.0 V	45.0 W	50.6 W	223 mA	87 °C	-25 ... +50 °C	5.56 kΩ
LCA 45W 500-1400mA one4all SR PRE	950 mA	25 V	47.4 V	45.0 W	50.6 W	223 mA	85 °C	-25 ... +50 °C	5.26 kΩ
LCA 45W 500-1400mA one4all SR PRE	1,000 mA	25 V	45.0 V	45.0 W	50.4 W	223 mA	85 °C	-25 ... +50 °C	5.00 kΩ
LCA 45W 500-1400mA one4all SR PRE	1,050 mA	25 V	42.9 V	45.0 W	50.5 W	223 mA	85 °C	-25 ... +50 °C	4.76 kΩ
LCA 45W 500-1400mA one4all SR PRE	1,100 mA	25 V	40.9 V	45.0 W	50.4 W	223 mA	85 °C	-25 ... +50 °C	4.55 kΩ
LCA 45W 500-1400mA one4all SR PRE	1,150 mA	25 V	39.1 V	45.0 W	50.3 W	223 mA	85 °C	-25 ... +50 °C	4.35 kΩ
LCA 45W 500-1400mA one4all SR PRE	1,200 mA	25 V	37.5 V	45.0 W	50.3 W	223 mA	85 °C	-25 ... +50 °C	4.17 kΩ
LCA 45W 500-1400mA one4all SR PRE	1,250 mA	25 V	36.0 V	45.0 W	50.3 W	223 mA	85 °C	-25 ... +50 °C	4.00 kΩ
LCA 45W 500-1400mA one4all SR PRE	1,300 mA	25 V	34.6 V	45.0 W	50.4 W	223 mA	85 °C	-25 ... +50 °C	3.85 kΩ
LCA 45W 500-1400mA one4all SR PRE	1,350 mA	25 V	33.3 V	45.0 W	50.4 W	224 mA	85 °C	-25 ... +50 °C	3.70 kΩ
LCA 45W 500-1400mA one4all SR PRE	1,400 mA	25 V	32.1 V	44.9 W	50.5 W	224 mA	87 °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 For the max. tc temperature for the total output current range in 1 mA steps refer to chapter 2.1 Expected life-time.

⑧ Not compatible with I-select (generation 1). Calculated resistor value.