

Driver LCA 50W 350–1050mA one4all Ip PRE
premium series SELV



Product description

- _ Dimmable built-in constant current LED Driver
- _ Dimming range 1 to 100 %
- _ For luminaires of protection class I and protection class II
- _ Output current adjustable between 350 – 1,050 mA via ready2mains Programmer, I-SELECT 2 plugs or DALI
- _ Max. output power 50 W
- _ Up to 91 % efficiency
- _ Power input on stand-by < 0.15 W
- _ Nominal life-time up to 100,000 h
- _ 5-year guarantee

Housing properties

- _ Low profile metal casing with white cover
- _ Type of protection IP20

Interfaces

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

Functions

- _ Adjustable output current in 1-mA-steps (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)
- _ Intelligent Voltage Guard (overvoltage and undervoltage monitoring)
- _ 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
- _ Reliability proven by life-time up to 100,000 h and 5-year guarantee

Typical applications

- _ For linear/area lighting in office applications

Website

<http://www.tridonic.com/28000656>



Spotlights



Downlights



Linear



Area



Floor | Wall



Free-standing



Street



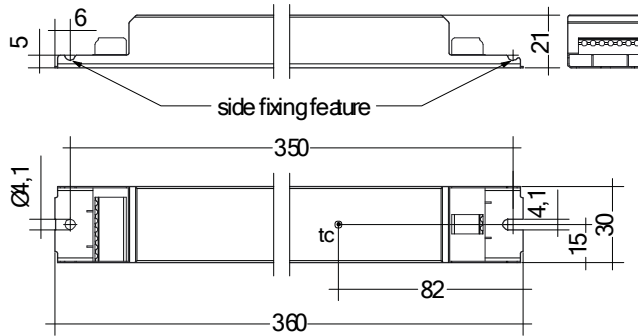
Decorative



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 50W 350-1050mA one4all Ip PRE	28000656	10 pc(s).	760 pc(s).	0.244 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}	102 – 248 mA
Typ. current (220 V, 0 Hz, full load, 15 % dimming level) ^②	71.5 mA
Leakage current (at 230 V, 50 Hz, full load) ^{①②}	< 440 µA
Max. input power	56.5 W
Typ. efficiency (at 230 V, 50 Hz, full load) ^②	91 %
λ (at 230 V, 50 Hz, full load) ^①	0.98
Typ. power input on stand-by ^③	< 0.15 W
Typ. input current in no-load operation	33 mA
Typ. input power in no-load operation	0.42 W
In-rush current (peak / duration)	35 A / 170 µs
THD (at 230 V, 50 Hz, full load) ^①	< 6.1 %
Starting time (at 230 V, 50 Hz, full load) ^①	< 0.6 s
Starting time (DC mode)	< 0.3 s
Switchover time (AC/DC) ^④	< 0.2 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)	± 5 %
Output P_ST_LM	≤ 1
Output SVM	≤ 0.4
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	360 x 30 x 21 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 ^⑥	Min. forward voltage	Max. forward voltage	Max. output power	Typ. power consumption n (at 230 V, 50 Hz, full load)	Typ. current consumption n (at 230 V, 50 Hz, full load)	tc point max.	Ambient temperature ta	I-SELECT 2 resistor value ^⑦
LCA 50W 350-1050mA one4all Ip PRE	350 mA	20 V	50 V	17.5 W	20.9 W	102 mA	85 °C	-25 ... +70 °C	-
LCA 50W 350-1050mA one4all Ip PRE	400 mA	20 V	50 V	20.0 W	23.5 W	112 mA	85 °C	-25 ... +70 °C	12.50 kΩ
LCA 50W 350-1050mA one4all Ip PRE	450 mA	20 V	50 V	22.5 W	26.2 W	123 mA	85 °C	-25 ... +70 °C	11.11 kΩ
LCA 50W 350-1050mA one4all Ip PRE	500 mA	20 V	50 V	25.0 W	28.8 W	133 mA	85 °C	-25 ... +70 °C	10.00 kΩ
LCA 50W 350-1050mA one4all Ip PRE	550 mA	20 V	50 V	27.5 W	31.4 W	144 mA	85 °C	-25 ... +70 °C	9.09 kΩ
LCA 50W 350-1050mA one4all Ip PRE	600 mA	20 V	50 V	30.0 W	34.0 W	155 mA	85 °C	-25 ... +70 °C	8.33 kΩ
LCA 50W 350-1050mA one4all Ip PRE	650 mA	20 V	50 V	32.5 W	36.6 W	166 mA	85 °C	-25 ... +70 °C	7.69 kΩ
LCA 50W 350-1050mA one4all Ip PRE	700 mA	20 V	50 V	35.0 W	39.2 W	177 mA	85 °C	-25 ... +70 °C	7.14 kΩ
LCA 50W 350-1050mA one4all Ip PRE	750 mA	20 V	50 V	37.5 W	41.9 W	188 mA	80 °C	-25 ... +65 °C	6.67 kΩ
LCA 50W 350-1050mA one4all Ip PRE	800 mA	20 V	50 V	40.0 W	44.6 W	200 mA	80 °C	-25 ... +65 °C	6.25 kΩ
LCA 50W 350-1050mA one4all Ip PRE	850 mA	20 V	50 V	42.5 W	47.2 W	211 mA	80 °C	-25 ... +65 °C	5.88 kΩ
LCA 50W 350-1050mA one4all Ip PRE	900 mA	20 V	50 V	45.0 W	49.9 W	223 mA	80 °C	-25 ... +65 °C	5.56 kΩ
LCA 50W 350-1050mA one4all Ip PRE	950 mA	20 V	50 V	47.5 W	52.4 W	233 mA	80 °C	-25 ... +65 °C	5.26 kΩ
LCA 50W 350-1050mA one4all Ip PRE	1,000 mA	20 V	50 V	50.0 W	55.3 W	245 mA	80 °C	-25 ... +65 °C	5.00 kΩ
LCA 50W 350-1050mA one4all Ip PRE	1,050 mA	20 V	48 V	50.0 W	56.0 W	248 mA	80 °C	-25 ... +65 °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.