

Driver LCA 100W 24V one4all SC PRE
premium series 24 V – dimmable (IP20)

**Product description**

- _ NEW: lumDATA (Luminaire data, Energy reporting and Diagnostics & Maintenance)
- _ 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)
- _ The strain relief is included in both packaging variants. In the single packaging (SP) each Driver has also an individual packaging.
- _ One4all interface and ready2mains enable different dimming options
- _ 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 years 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

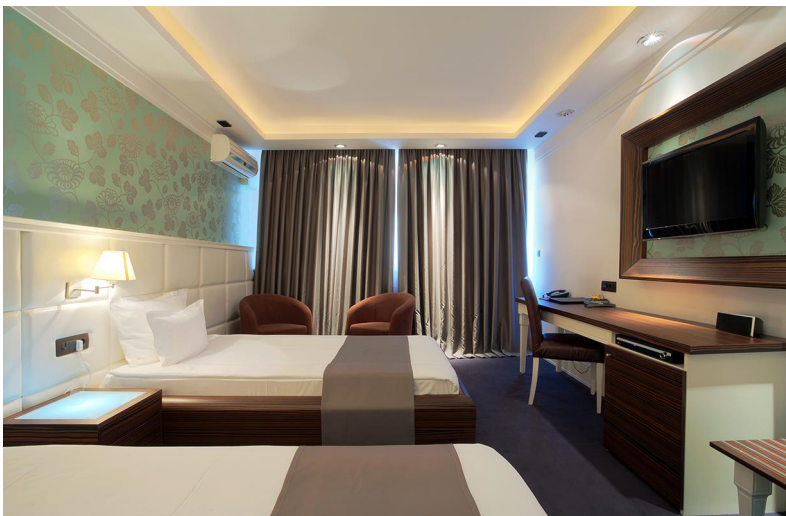
- _ one4all (DALI DT 6, DSI, switchDIM, corridorFUNCTION)
- _ ready2mains (configuration and dimming via mains)
- _ Terminal blocks: 45° push terminals

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
- _ Test the function of third party light sources before use at low dimming levels to ensure the dimming function works perfectly

Website

<http://www.tridonic.com/28001253>



Spotlights



Downlights



Linear



Area



Floor | Wall



Free-standing



Street



Decorative

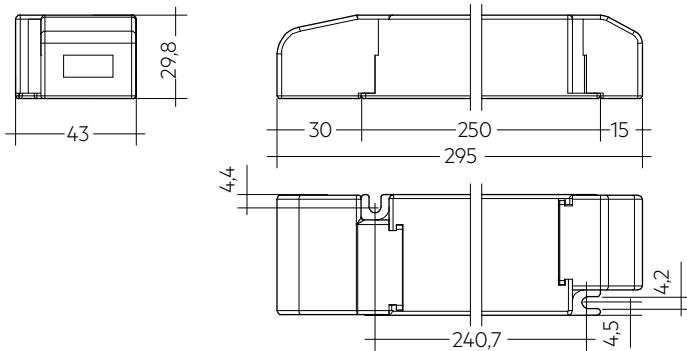


High bay

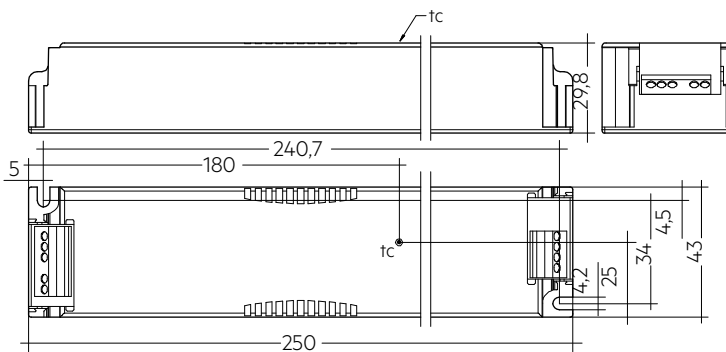
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The complete data sheet for this product is available in the Downloads section.



With strain-relief



Without strain-relief

Ordering data

| Type | Article number | Packaging, carton | Packaging, pallet | Weight per pc. |
|-----------------------------|----------------|-------------------|-------------------|----------------|
| Multi packaging | | | | |
| LCA 100W 24V one4all SC PRE | 28001253 | 10 pc(s). | 390 pc(s). | 0.254 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 consumption on stand-by ^② | < 0.2 W |
| Typ. input current in no-load operation | 40.4 mA |
| Typ. input power in no-load operation ^② | 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) ^③ | < 0.35 s |
| Starting time (DC mode) | < 0.32 s |
| Switchover time (AC/DC) ^③ | < 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-OUT) | 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 |
| Lifetime | up to 50,000 h |
| Guarantee | 5 Year(s) |
| 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, EN 62386-101 (DALI-2), EN 62386-102 (DALI-2), EN 62386-207 (DALI-2), according to EN 50172, according to EN 60598-2-22

Specific technical data

| Type | Load | Output voltage | Output current | Max. output power (at full load) | Typ. power consumption (at full load) | Typ. current consumption (at full load) | tc point max. | Ambient temperature ta |
|-----------------------------|-------|----------------|----------------|----------------------------------|---------------------------------------|---|---------------|------------------------|
| LCA 100W 24V one4all SC PRE | 10 % | 24 V | 417 mA | 10 W | 12.9 W | 75 mA | 73 °C | -25 ... +50 °C |
| LCA 100W 24V one4all SC PRE | 20 % | 24 V | 833 mA | 20 W | 23.3 W | 119 mA | 73 °C | -25 ... +50 °C |
| LCA 100W 24V one4all SC PRE | 30 % | 24 V | 1,250 mA | 30 W | 33.8 W | 163 mA | 73 °C | -25 ... +50 °C |
| LCA 100W 24V one4all SC PRE | 40 % | 24 V | 1,667 mA | 40 W | 44.3 W | 206 mA | 73 °C | -25 ... +50 °C |
| LCA 100W 24V one4all SC PRE | 50 % | 24 V | 2,083 mA | 50 W | 54.8 W | 250 mA | 73 °C | -25 ... +50 °C |
| LCA 100W 24V one4all SC PRE | 60 % | 24 V | 2,500 mA | 60 W | 65.2 W | 294 mA | 78 °C | -25 ... +50 °C |
| LCA 100W 24V one4all SC PRE | 70 % | 24 V | 2,917 mA | 70 W | 75.7 W | 337 mA | 78 °C | -25 ... +50 °C |
| LCA 100W 24V one4all SC PRE | 80 % | 24 V | 3,333 mA | 80 W | 86.2 W | 381 mA | 80 °C | -25 ... +50 °C |
| LCA 100W 24V one4all SC PRE | 90 % | 24 V | 3,750 mA | 90 W | 96.6 W | 425 mA | 80 °C | -25 ... +45 °C |
| LCA 100W 24V one4all SC PRE | 100 % | 24 V | 4,167 mA | 100 W | 107.1 W | 468 mA | 80 °C | -25 ... +45 °C |

① Valid at 100 % dimming level.

② Depending on the DALI traffic at the interface.

③ Valid for immediate change of power supply type otherwise the starting time is valid.