



Features

- DC 12...48V input.
- IP42, standby power 0.5W
- Detect LED open, short, load changes, etc.
- LED constant current output, max 1A, 45V, 45W.
- Thermal protection, auto reduce or cut-off power on over-heat.
- Support DALI Data including input/output power, PF, time, etc.
- Global safety compliant, suitable for home and office.
- High-quality dimming of 0.1-100% by amplitude dimming.



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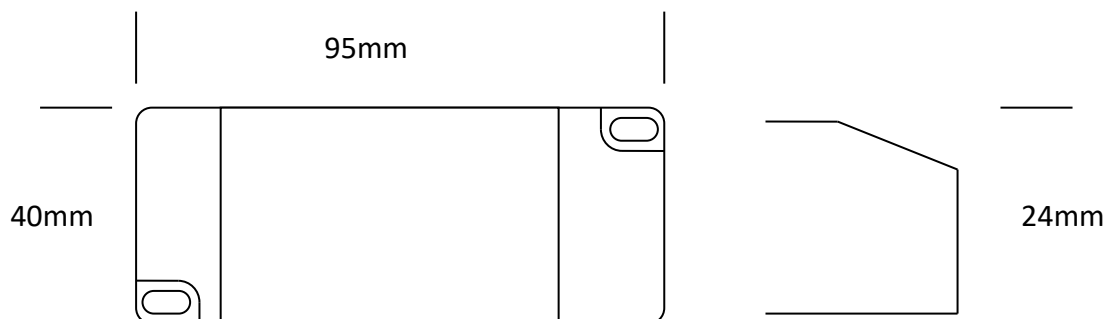
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2. Specification

Technical Data

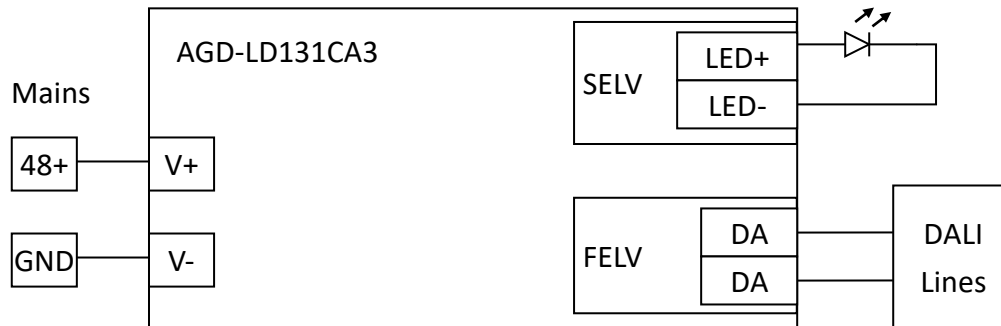
Model		AGD-LD131CA3
Input	Voltage/Hz	DC, 12...48V
	Leakage	< 0.25mA
	Standby W	< 0.5W
Output	Voltage	3...Input - 3V
	Current	Nominal 0.1...1A, default 300mA, programmable
	Power	Max 45W
	PSTLM	<= 1
	SVM	<= 0.4
Protection	Short	Programmable protection point
	Open	Programmable protection point
	Load Change	Realtime measure voltage and current
	Isolation	Main input/output None, output/DALI FELV, main input/DALI FELV
Environment	Temperature	Ta: -30...+50°C, Tc: 70°C
	Humidity	20...95%, Non-condensing
	Storage	-40...+80°C, 10...95%, Non-condensing
Dimming	DALI	DALI-2 IEC 62386 101, 102, 207, 251, 252, 253
	Dim Mode	Constant current, mixed dimming
Others	Det. & Data	Input/Output power, accumulated power, on time, etc.
	Dimension	95x40x24mm
	Weight	

Dimension



3. Installation

Wiring and circuit diagram



- For better EMC, keep wires between drivers and LEDs as short as possible.
- No invers-polarity protection of LEDs is supported.
- Wrong wiring of LED drivers may damage the driver, LEDs, and DALI bus.
- The wiring must be short-circuit protected from earth wire, to avoid dysfunction and damage.

Hot plug-in

Hot plug-in is not recommended due to the driver's residual output voltage. Hot plug-in will cause high inrush current and damage the LEDs. Power-off and 15 seconds of cold down is recommended for the installation.

Usage and install

Good ventilation and 10...15 cm distance from heat source is recommended.

LED current adjust

The LED driver's output current can be programmable with SmartLink tool. The minimum output current is varied over LED voltage. Please, check its operating window for its limitation.

4. Functions

Short-circuit protection

A short circuit at LED output will trigger the driver's safeguard and turn off its output. It can be restarted by reset its mains or dim off-and-on with DALI tools.

Open-circuit/no-load protection

An Open circuit at LED output will also trigger its safeguard and turn off its output. It can be restarted by reset its mains or dim off-and-on with DALI tools. Its output will constantly lower to about zero voltage. No-load or open-circuit will not cause harm to the driver, however, a hot-plug or change of LED engine or luminaires are not recommended. Residual voltage will cause permanent damage to LEDs.

Over-temperature protection

The driver is equipped with temperature sensor, and it will protect against over-temperatures by lowering its output or shutdown when over its curie point. When it is shutdown, you can restart only when its temperature is lower than its safeguard level (usually is $T_c - 30$). The temperature sensing points are usually located on the hottest points and micro-controller.

Power metering

The driver will monitor and accumulate its input and output power and save to its EEPROM. The driver is designed to accumulate and save the data at 60 second period for 10 years. A power interrupt may cause missing of some accumulated data.

Health diagnostic

The driver's electronic output and input data are measured and readable via DALI data protocol. These data are monitored at run-time and valid after 60 seconds of power-up.

Software

This driver is supported by SmartLink configuration tool. You can use SmartLink tool to download and program its parameters such as output current, thermal protecting point, dimming frequency and or many others.

5. Others

Warning / Caution !!

- Risk of electrical shock and energy hazard. All failure should be examined by a qualified technician. Please do not remove the case of the power supply by yourself!
- The openings should be protected from foreign objects or dripping liquids.
- Please do not install LED power supplies in places with high ambient temperature or close to fire source. Please refer to the specifications about the maximum ambient temperature limitations.
- Output current and output wattage must not exceed the rated values on the specifications.
- If the external flexible cable or cord of this switching power supply is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid a hazard.
- LED power supply needs to be disposed together with lighting equipment after the end of its life.
- The DALI is designed as FELV circuit, its terminal shall connect to FELV circuit. Connecting to SELV will lower its isolation level to FELV.