eldoLED
your product | *our drive*

Datasheet

SOLOdrive 1061/A

100W 0-10V 'Dim to Dark' LED Driver

SOLOdrive

SOLOdrive offers industry-best Natural Dimming to dark - LED dimming made beautiful! With any dimmer, in any application. Symbiosis on SOLOdrive stands for unity, for the SOLOdrive working seamlessly together with LED modules, controls and intelligent luminaire elements.

Product offering

SOLOdrive 1061/A

Part number (P/N)	SL1061A1
Product description	SOLOdrive AC, 100W, 0-10V, 1 control channel, constant current, 4x 57V outputs, side feed, long metal/plastic

Features & benefits

Natural dimming	Dim to dark, smooth brightness changes, excellent flicker performance, adaptable dimming curves, configurable minimum dimming level
Symbiosis	Seamless interoperability with LED modules, controls and in-luminaire intelligent devices
LEDcode	configurable design to work with most constant current LED modules and arrays, while providing a connection point to integrated peripheral controls
Programmable	Fine-tune your driver for any application
Performance	Universal input voltage range, low inrush current and total harmonic distortion (THD), high power factor and efficiency
Camera compatibility	Hybrid HydraDrive technology is proven to work in TV studios and security camera environments

AcuityBrands.

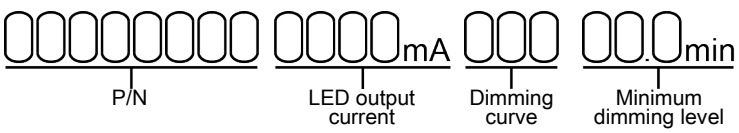
Programming tools

Programming interface	TOOLbox pro (TLU20504)
Programming cable set	TOOLbox pro to LED driver, programming cable, 5pcs (TLC03051)
Programming Hand-held, Touch-and-Go	PJ0035HH1
Programming software	FluxTool

Warranty

Warranty period	General Terms and Conditions

Order number configurator



P/N	LED driver part number.
LED output current	Enter value in 1mA increments, e.g. “811” for 811mA
Dimming curve	"LOG" for logarithmic (default) "LIN" for linear
Minimum dimming level	Leave blank for default minimum dimming level of 0.1%. Specify in 0.1% increments, e.g. "10.5" for 10.5%.

Input characteristics

Nominal input voltage range AC	120-250V (ENEC) 120-277V (UL)
Nominal input voltage range DC	120-275V
Maximum input current	1.05A @ 120V / 60Hz 0.5A @ 230V / 50Hz 0.45A @ 277V / 60Hz
Input frequency range	50 - 60Hz
Efficiency at full load	90%
Power factor at full load	>0.94
THD at full load	<10%
Maximum inrush current	35A 240µs @ 120V / 60Hz 67A 240µs @ 230V / 50Hz 75A 240µs @ 277V / 60Hz
Surge protection	3kV differential mode (DM) 4kV common mode (CM)
Maximum standby power	<0.5W

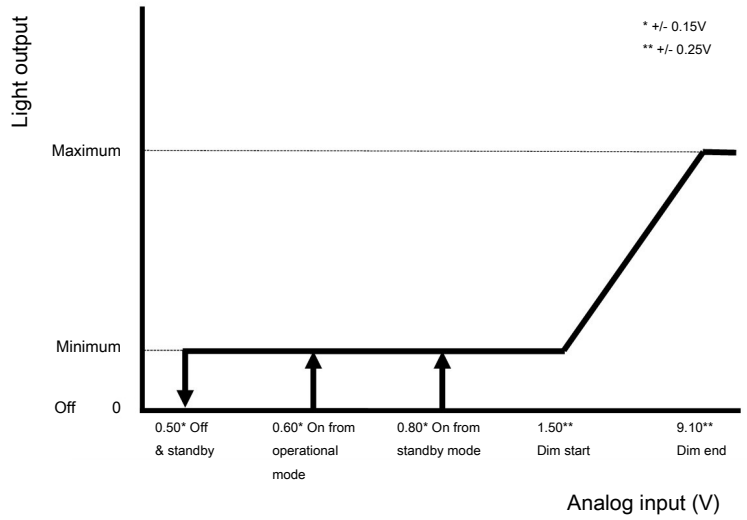
Output characteristics

Maximum LED output power	100W
Number of LED outputs	4 (UL Class 2)
Programmable LED output current range	200-1,050mA
LED output type	Programmable in 1mA increments within specified current range
LED output current tolerance	+/- 5% at programmed LED output current
LED output voltage range	2-57V

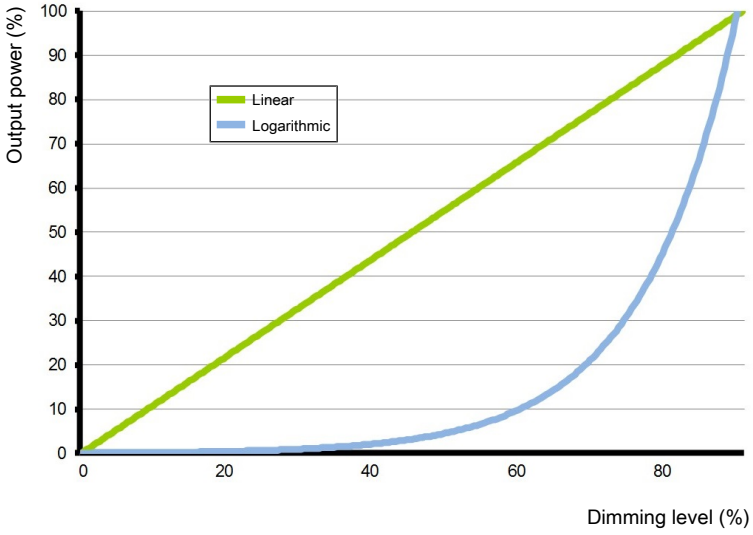
Control characteristics

Control channels	1
Control protocol	0-10V
Dimming range	100% - 0.1%
Dimming curve options	Logarithmic (default) Linear
Dimming method	Hybrid HydraDrive
0-10V current draw	<2mA
0-10V isolation	to line voltage input: 1500V to LED output: 3750V

0-10V dimming chart



Dimming curves



Environmental conditions

Operating ambient temperature (Ta) range	-40 ºC to +50 ºC
Maximum operating case temperature (Tc max)	90 ºC

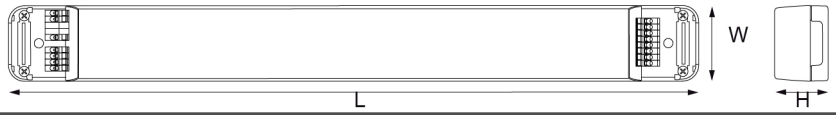
LED driver protection

Thermal	The LED output current is decreased whenever the internal LED driver temperature exceeds factory preset temperature. The LED output current is increased again once the internal LED driver temperature drops below this internal temperature threshold. If the internal LED driver temperature continues to increase, despite a decrease in output current, the LED driver will shut down.
LED output short circuit	The LED output current is cut off whenever the LED driver detects a short-circuit. The LED driver will attempt a restart every 400ms after a short-circuit is detected.
LED output overload	The LED driver decreases the LED output current sequentially, until it reaches its maximum rated power, whenever a load that exceeds the LED driver's maximum rated power is connected to the LED output.
Reverse polarity	The LED driver will not yield any current if the polarity of the load on the LED output is reversed. This situation will not damage the LED driver but may damage the LED load.

LED protection

Thermal protection LED	An external NTC thermistor, which is placed on a PCB near the LEDs, can be connected to the driver via the LEDcode/NTC terminals. The output current to the LEDs is then decreased by 75% whenever the NTC exceeds a maximum allowable temperature, which is specified by the user in the FluxTool software. The default NTC temperature limit is set to 70 °C.
Thermistor value	47kΩ
Suitable thermistors	leaded: Vishay, P/N 238164063473 screw: Vishay, P/N NTCASCWE3473J

LED driver mechanical details



Length (L)	typical: 388 mm / 15.27 in
Width (W)	typical: 42 mm / 1.65 in
Height (H)	typical: 30 mm / 1.18 in
3D files available on product web page	IGS
Weight	666 g

Packaging

Products per box	20 pcs

Connector layout

Wiring specifications

Wire type	solid or stranded copper
Wire core cross section	0.5 - 1.5 mm² AWG 20 – 16
Wire strip length	9.0 mm / 0.35 inch

Automatic circuit breakers (ACB)

Maximum loading	ACB type	B10	B13	B16	C10	C13	C16
	Number of LED drivers	5	6	8	8	10	13

Standards and compliance

ENEC safety	EN 61347-1 EN 61347-2-13 (Emergency lighting)
ENEC performance	EN 62384
0-10V	IEC/EN 60929 annex E NOTE: From 0.6V to 10V eldoLED LED drivers comply with IEC/EN 60929 annex E. Below 0.6V eldoLED LED drivers comply with ABL 0-10V Design Spec v1.2 enabling standby mode. For detailed dimming characteristics see 0-10V response chart in Control Characteristics.
Conducted emissions	EN 55015
Radiated emissions	EN 55015
Radio disturbance characteristics	EN 55022
Harmonic current emissions	EN 61000-3-2
Electromagnetic immunity	EN 61547
Restriction of hazardous substances	RoHS2
UL, recognized component	UL 1310 UL 8750 (Class 2 output)
FCC	47 CFR Part 15 class B

Certifications

E333135

Safety

	Risk of electrical shock. May result in serious injury or death. Disconnect power before servicing or installing.
	The LED driver may only be connected and installed by a qualified electrician. All applicable regulations, legislation, and building codes must be observed. Incorrect installation of the LED driver can cause irreparable damage to the LED driver and the connected LEDs. Pay attention when connecting the LEDs: polarity reversal results in no light output and often damages the LEDs.
	LED drivers are designed and intended to operate LED loads only. Powering non-LED loads may push the LED driver outside its specified design limits and is, therefore, not covered by any warranty.
	eldoLED products are designed to meet the performance specifications as outlined at certain operating conditions in the data sheet. It is the responsibility of the fixture manufacturer to test and validate the design and operation of the system under expected and potential use cases, including faults.
	Please observe voltage drop over long cable lengths. Longer cable lengths increase EMI susceptibility.
	Product renderings and dimensional drawings are generic for the housing type. Product label, connector type and quantity may vary.

Europe, Rest of World

eldoLED B.V.
Science Park Eindhoven 5125
5692 ED Son
The Netherlands

E: info@eldoled.com
W: www.eldoled.com

North America

eldoLED America
One Lithonia Way
Conyers, GA 30012
USA

E: info@eldoled.com
W: www.eldoled.com