



120W, Single Output, 2 Channel, Class 2 LED Drivers

ALD120 series



- Single Outputs
- Universal Input
- 8VDC to 48VDC Outputs
- Short Circuit Protection
- Full Safety Approvals for Class 2, Outdoor Wet Locations and LED Lighting



Model Number	I/P Voltage	O/P Voltage	O/P Amps Chan1/Chan2	Combined Current max.	O/P Watts max.	Ripple/Noise max.
ALD120-208VFC	90-264 VAC	8 VDC	5 / 5	10A	80W	80mV
ALD120-210VFC	90-264 VAC	10 VDC	5 / 5	10A	100W	100mV
ALD120-212VFC	90-264 VAC	12 VDC	5 / 5	10A	120W	120mV
ALD120-215VFC	90-264 VAC	15 VDC	5 / 5	8A	120W	150mV
ALD120-218VFC	90-264 VAC	18 VDC	5 / 5	6.67A	120W	180mV
ALD120-221VFC	90-264 VAC	21 VDC	4.57 / 4.57	5.7A	120W	210mV
ALD120-224VFC	90-264 VAC	24 VDC	4.0 / 4.0	5.0A	120W	240mV
ALD120-227VFC	90-264 VAC	27 VDC	3.55 / 3.55	4.44A	120W	270mV
ALD120-236VFC	90-264 VAC	36 VDC	2.66 / 2.66	3.33A	120W	360mV
ALD120-248VFC	90-264 VAC	48 VDC	2.0 / 2.0	2.5A	120W	480mV

*Note: All noise measurements made at the output terminals, connected to a 20MHz low pass filter



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INPUT SPECIFICATIONS

Input Voltage ALD120	90-264 VAC (120/240 VAC Nominal)
Max. In	1.6A @ 100 VAC Input
Input Frequency	47-63Hz
Max. Inrush Current	30A @ 230VAC Input
	25°C, cold start-up
Power Factor	99%, typ.

OUTPUT SPECIFICATIONS

Output Voltage/Current	See Model Chart
Output Voltage Adjust	+10/-25%
Max. Output Power	See Model Chart
Ripple / Noise	See Model Chart
Efficiency	80% min. @ FL, 230 VAC Input
Hold Up Time	16mS @ FL, 100 VAC Input
Start Up Time	1 Second, typ.
Transient Response	4mS, FL to 1/2L, 100 VAC Input
Line Regulation	±1% max.
Voltage Mode Load Regulation	±5% max., (Voltage setting Adjustable via on board pot +5/-25%)
Over Current Protection	105% Max per channel (Hiccup-mode, Auto-Recovery upon removal of over current condition.*
Constant Current Mode Regulation	±3% max., (Current setting Adjustable via on board pot +5/-90%)
Over Voltage Protection	132% max. *
Short Circuit Protection	Hiccup Mode, Auto Recovery upon removal of over current condition. *

* These are stress ratings. Exposure of the devices to any of these conditions may adversely affect long term reliability. Proper operation under conditions other than the standard operating conditions is neither warranted nor implied.

All specifications are typical at nominal input, full load, and 25DegC unless otherwise noted

ENVIRONMENTAL SPECIFICATIONS

MTBF	55K Hrs, FL @ 25°C ambient, Based on MIL-217F
Cooling	Convection
Operating Temp.	-20°C to +60°C FL
Storage Temperature	-40°C to +85°C
Relative Humidity	5% to 95%

PHYSICAL SPECIFICATIONS

Case / Design / Material	NEMA 3 Design / Aluminum / Potted with AC and DC Wiring Compartments
Mounting and Connection	Flange Mount, AC/DC Conduit Entries, Knockouts for 1/2" Conduit and Fittings
Size	11"L x 3.37"W x 2.19"H
Weight	3.6 lb (1633g)

COMPLIANCE / SAFETY

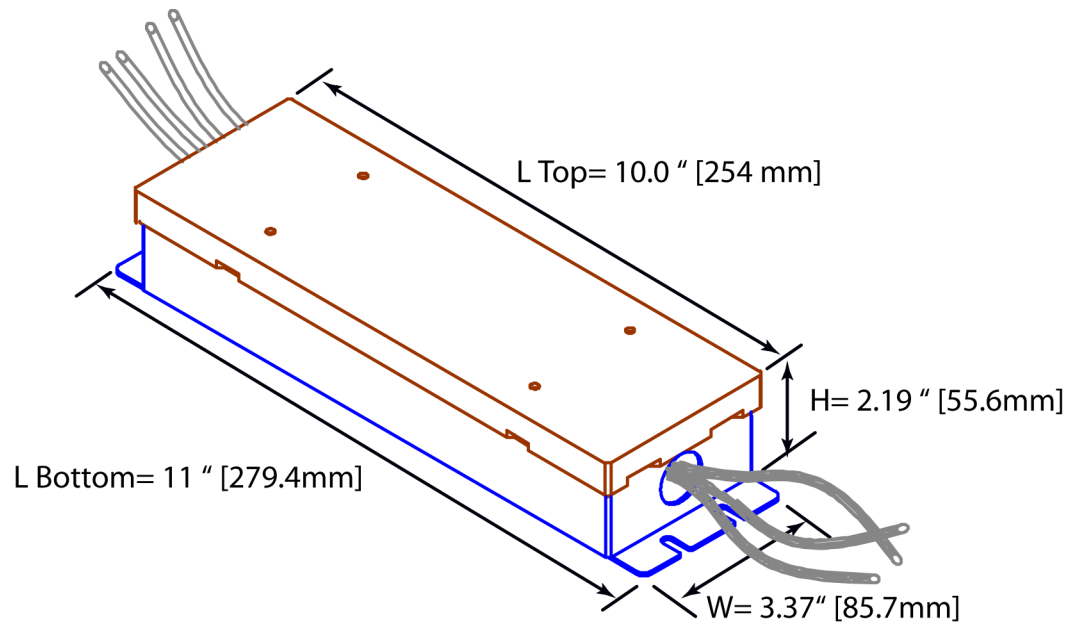
EMI / RFI	CISPR-22B, FCC-15B EMC EN61000-3-2 (EMC)
Safety Standards	UL/CUL 1310/1585, Class 2, Outdoor Wet Locations for UL 48 LED Lighting, CE
Weatherability Standard	EN60529 - Weatherability of an Enclosure - Rated to IP65

Astrodyne products are not authorized or warranted for use as critical components in life support systems, equipment used in hazardous environments, nuclear controls systems, or other mission-critical applications.

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MECHANICAL DIMENSIONS



DC Output Wires		AC Input Wires	
Color	Output	Color	Input
Red	Channel 1	White	Neutral
Red	Channel 2	Black	Line
Black	DC Gnd Return	Green/Yellow	AC Gnd
Black	DC Gnd Return		