

Features

- Output current and parameters adjustable via external resistor or Lifud programmer
- Supports 7-step time dimming
- Protective features: input overvoltage, input undervoltage, output open circuit, over-temperature and output short circuit protection
- Surge protection: L-N: 4kV; L/N-PE: 6kV
- According to Zhaga Book 13
- IP20; suitable for Class I/II light fixtures (IP>54)
- Lifetime up to 100,000h



Applications

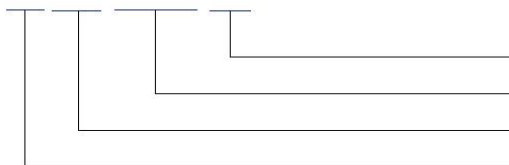
· Street lighting · area lighting · industry lighting

Descriptions

LF-ACD075C-1050-115 is a 75W (max.) constant current LED driver. Its rated input voltage ranges from 220 to 240Vac. Its output current is adjustable from 200 to 1050mA. It has protective features of input over/under voltage, output open circuit, over-temperature, output short circuit protection.

Product Model

LF - ACD 075C -1050 - 115



- 115: max. output voltage: 115Vdc
- 1050: max. output current: 1050mA
- 075: output power: 75W; C: on/off series
- ACD: LED driver series

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■ Electrical Characteristics

Model		LF-ACD075C-1050-115				
Output	Output Voltage	35-115V				
	Output Current	200-1050mA ^① (default: 700mA ^②)				
	Ripple Current (≤100Hz)	± 3.3%				
	Flicker Index	IEC-Pst≤1, CIE SVM≤0.4, according to IEEE Std 1789-2015				
	Current Tolerance	± 5%				
	Temperature Drift	± 10%				
	Start-up time	<1.5s				
Input	Rated Input Voltage	220-240Vac				
	Input Voltage Range	180-264Vac				
	DC Input Voltage	180-264Vdc ^③				
	Input Frequency	0/50/60Hz				
	Input Current	0.5A max.@AC input 0.1-0.5A@DC input				
	PF	≥0.95				
	THD	≤10%				
	Efficiency	≥91.5%				
	Inrush Current	≤75A&250uS				
	Loading Quantity on Circuit Breaker	Model	B10	C10	B16	C16
		Quantity (pcs)	11	14	19	23
	Leakage Current	≤3.5mA				
Environment Descriptions	Operating Temperature	-40°C~+55°C				
	Operating Humidity	20-90%RH (no condensation)				
	Storage Temperature/Humidity	-40°C~+80°C (6 months in Class I environment); 10-90%RH (no condensation)				
	Atmospheric Pressure	86-106kPa				
Surge	L-N	4kV				
	L/N-PG	6kV				

■ Electrical Characteristics

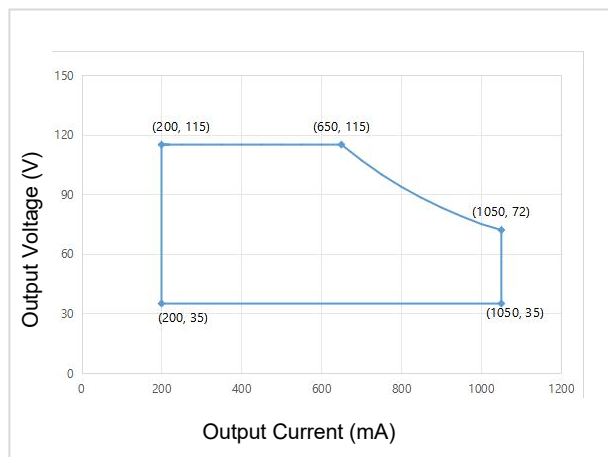
Safety and EMC	Certifications	ENEC, CE, CB, UKCA, RCM, SAA
	Withstanding Voltage	I/P-O/P: 3.75kV&5mA&60S; I/P-PE: 1.5KVac&5mA&60S; O/P-PE: 1.5KVac&5mA&60S
	Insulation Resistance	I/P-O/P: >100MΩ@500Vdc; I/P-PE: >100MΩ@500Vdc; O/P-PE: >100MΩ@500Vdc
	Safety Standards	CB: IEC61347-1:2015, IEC61347-1:2015/AMD1:2017, IEC61347-2-13:2014, IEC61347-2-13:2014/AMD1:2016 CE-LVD: EN 61347-2-13:2014/A1:2017, EN 61347-1:2015, EN 62493:2015 ENEC: EN61347-1:2015, EN 61347-2-13:2014/A1:2017, EN 62384:2020 RCM: AS 61347.2-13:2018 SAA:AS 61347.1:2016+A1:2018 AS 61347.2.13:2018 UKCA-LVD: EN 61347-1:2015/A1:2021, EN 61347-2-13:2014/A1:2017
	EMI	CE-EMC: EN55015, EN61000-3-2, EN61000-3-3
	EMS	CE-EMC/RCM: EN61000-4-2,3,4,5,6,11
Other Parameters	IP Rating	IP20
	RoHS	RoHS 2.0 (EU) 2015/863
	Tc Max	90°C
	Lifetime	Up to 100,000h (refer to the service life table)
	Warranty Condition	8 years (Tc≤88°C)
	Noise Level	≤25dB (The noise collector should be placed at 10cm away from the LED driver during the test in a quiet room)
Testing Equipment	AC power source: CHROMA6530, digital power meter: CHROMA66202, oscilloscope: Tektronix DPO3014, DC electronic load: M9712B, LED board, constant temperature and humidity chamber; Everfine EMS61000-5B, fast transient generator: Everfine EMS61000-4A, spectroanalyzer: KH3935, hi-pot tester: EEC SE7440, flicker tester (flicker-free coefficient test): Everfine LFA-3000, etc.	
Testing Remark	If there are no special remarks, the above parameters are tested at the ambient temperature of 25°C, humidity of 50%, maximum output power and input voltage of 230Vac/50Hz.	

■ Electrical Characteristics

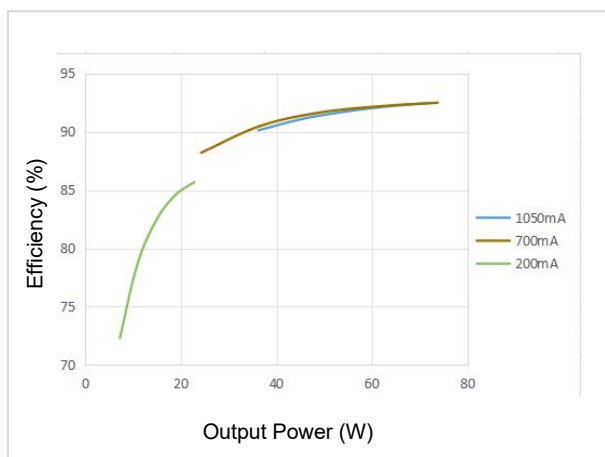
Additional Remarks	1. It is recommended that user install the over voltage protection, under voltage protection and surge protection devices in the power supply circuits of light fixtures to ensure electricity safety. 2. The LED driver used in combination with the end device is one of the accessories of the whole light fixture, and the EMC of the whole light fixture is not only susceptible to the driver itself, but to the LED light fixture and the whole light fixture's wiring. Thus, the manufacturer of LED light fixture should re-confirm the EMC of the whole light fixture before the whole light fixture is finished. 3. The PC cover, casing and end cap for assembling the LED driver in the light fixture must meet the fire rating of UL94-V0 or above. 4. The total output power of the driver can not exceed the rated maximum power during use, otherwise it can not be guaranteed. 5. The test conditions of the circuit breaker configuration quantity are the same as those of the inrush current. 6. Lifud reserves the right to interpret any of the above parameters. Remark: ① When the output current is 1050mA, the load voltage of LED driver ranges from 35 to 72Vdc; when the load voltage is >72Vdc, the LED driver outputs with the maximum power of 75W. Please see the chart. ② The default current of LED driver is 700mA and its output current can be set by Lifud programmer and programming software. ③ DC input is only for emergency.
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■ Product Characteristic Curves

Working Window Curve



Efficiency Curve



■ Product Characteristic Curves

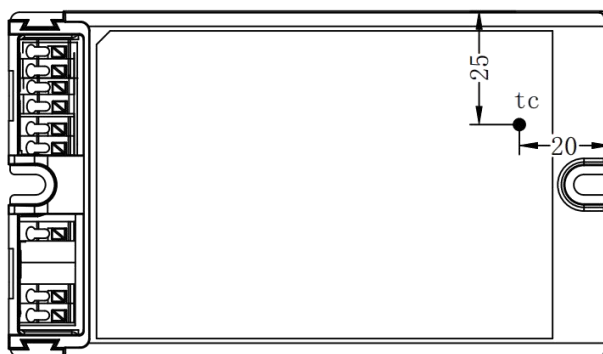
Service Life

Model	Iout	Pout	Ta	45°C	50°C	55°C
LF-ACD075C-1050-115	1050mA	75W	Tc	78°C	83°C	88°C
			Lifetime	>100,000h	>99,000h	>70,000h

Note: The design life of the LED driver is as described above under reference conditions. The failure probability is less than 10%.

The relationship between T_c and T_a also depends on the design of the luminaire.

Tc Point (unit: mm)

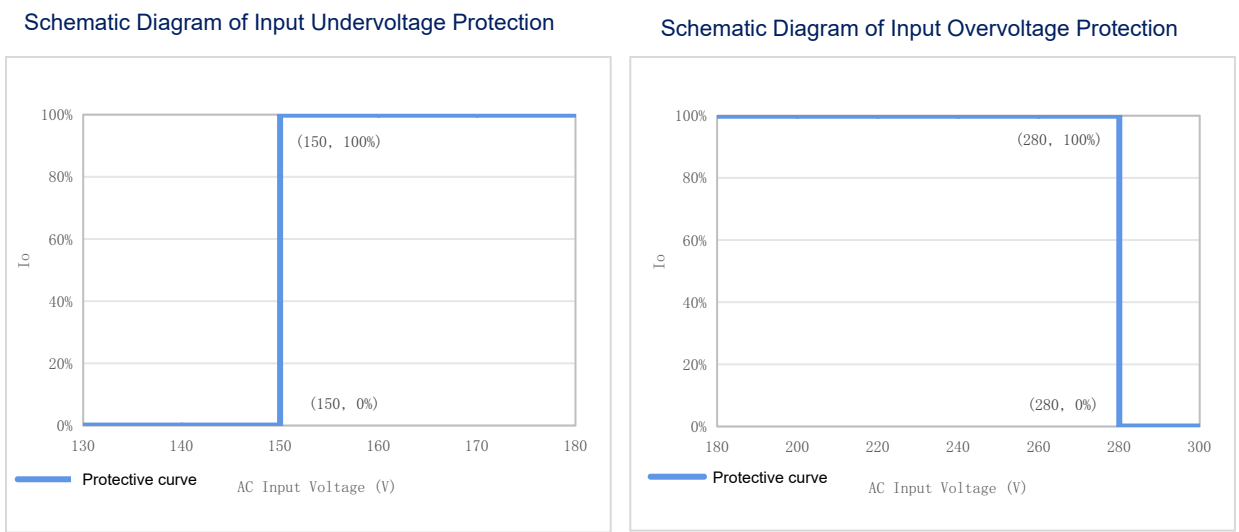


The Tc point is at the bottom of the LED driver

■ Protective Characteristics

Protective Type			Min.	Typ.	Max.	Introduction
Internal over-temperature protection	If the temperature is too high, the light will be off.	T1 (Turn off the light)	91℃	93℃	96℃	When the internal temperature rises above T1, the light will be turned off, which can only be turned on via software.
Open Circuit			<150V			
Short Circuit			Hiccup mode (auto-recovery)			
Input undervoltage protection	Protective voltage	145Vac	150Vac	155Vac	When the input voltage is lower than the protective voltage, the light will be off.	
	Restore method	Power off and then reconnect AC power.				
Input overvoltage protection	Protective voltage	270Vac	280Vac	290Vac	When the input voltage is higher than the protective voltage, the light will be off.	
	Restore method	Power off and then reconnect AC power.				

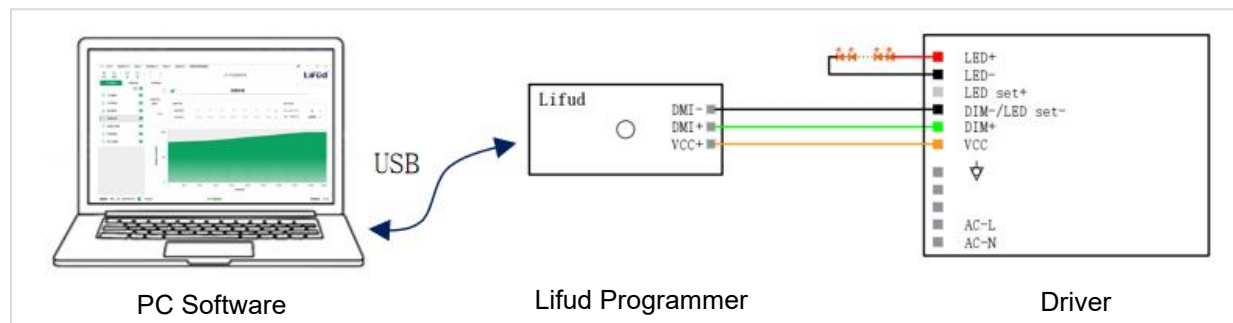
■ Protective Characteristics Schematic



Remark: It is not allowed to operate outside the input voltage range for a long time.

■ Programmer Setting Methods

Lifud Programmer



Note: When using the programmer, the driver doesn't need to be powered on with AC.

Programmer Tools and Software

Type	Name	Brand	Model
Tool	Lifud programmer	LIFUD	LF-SCS080C
Software	PC software	LIFUD	Lifud SmartSet

Read/write and Parameter Configuration

Programming project	Default settings	Parameters settings	Read/Write
Product information	-	No	Read
Output current	700mA (default)	Yes	Read/Write
Time dimming	Inactivated	Yes	Read/Write
Over-Temperature Protection	Activated	Yes	Write

■ Product Terminal Definition

Product Terminals

Input		Output	
PE (Grey)	Earth wire	LED+ (Red)	Positive terminal output of LED driver
/	/	LED- (Black)	Negative terminal output of LED driver
/	/	LEDset+ (White)	Terminal of Reset resistor
AC-N (Grey)	AC neutral wire input	LEDset-/DIM- (Black)	Shared terminal of resistor and programmer
AC-L (Grey)	AC live wire input	DIM+ (Green)	Terminal of programmer
/	/	VCC (Orange)	Supply terminal of programmer

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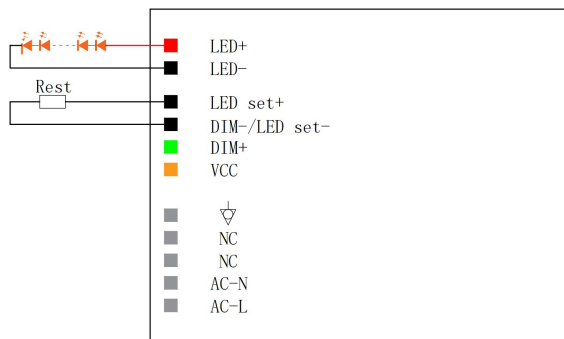
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■ LEDset Current Setting Instructions

Wiring Diagram of LEDset



Reference Table for Output Current of Resistor Connected at LEDset

R(KΩ)	0-4.76	4.81	4.85	4.90	4.95	5.00	5.05	5.10	5.15	5.21	5.26	5.32
Iout(mA)	1050	1040	1030	1020	1010	1000	990	980	970	960	950	940
5.38	5.43	5.49	5.56	5.62	5.68	5.75	5.81	5.88	5.95	6.02	6.10	6.17
930	920	910	900	890	880	870	860	850	840	830	820	810
6.25	6.33	6.41	6.49	6.58	6.67	6.76	6.85	6.94	7.04	7.14	7.25	7.35
800	790	780	770	760	750	740	730	720	710	700	690	680
7.46	7.58	7.69	7.81	7.94	8.06	8.20	8.33	8.47	8.62	8.77	8.93	9.09
670	660	650	640	630	620	610	600	590	580	570	560	550
9.26	9.43	9.62	9.80	10.00	10.20	10.42	10.64	10.87	11.2	11.36	11.63	11.90
540	530	520	510	500	490	480	470	460	450	440	430	420
12.20	12.50	12.82	13.16	13.51	13.89	14.4	14.71	15.15	15.63	16.13	16.67	17.24
410	400	390	380	370	360	350	340	330	320	310	300	290
17.86	18.52	20.5	23-40									
280	270	250	200									

- The LED driver outputs with the maximum current of 1050mA when the resistance value of LEDset ranges from 0 to 4.76KΩ.
- The LED driver outputs with the minimum current of 200mA when the resistance value of LEDset ranges from 23-40KΩ.
- The LED driver outputs with the default current when the resistance value of LEDset is >40KΩ or it is not connected.
- The current set by the LEDset resistor has a higher priority than the current set by the programmer.

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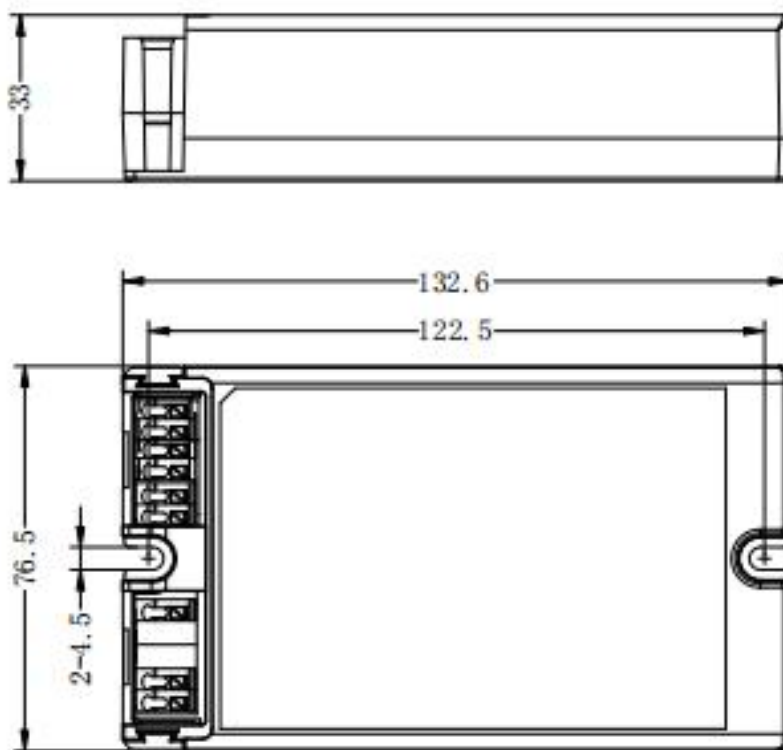
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■ Structure & Dimensions (unit: mm)

Model	Overall Appearance (L*W*H)	Distance Between 2 Locating Holes (L)	Diameter of Locating Hole (D)
LF-ACD075C-1050-115	132.6*76.5*33 mm (±0.5mm)	122.5 mm (±0.5mm)	4.5 mm



■ Packaging Specifications

Model	LF-ACD075C-1050-115
Carton Size	280*217*95mm (L*W*H)
Quantity	12 pcs/layer; 1 layers/ctn; 12 pcs/ctn
Weight	0.25 kg±5% /pc; 3.408 kg±5% /ctn

■ Transportation and Storage

1. Transportation

- Suitable transportation means: vehicles, boats and aeroplanes.
- In transit, it is necessary to prepare awnings for rain or sun protection. Moreover, please keep civilized loading and unloading to prevent the vibration or impact on LED driver as much as possible.

2. Storage

- The storage of LED driver shall conform to the standard of Class I environment. When using LED drivers which have been stored for more than 6 months, please re-test them firstly. Do not use them unless they are tested to be qualified.

Cautions

- Please use Lifud LED driver according to its parameters in the specification, otherwise the LED driver may malfunction.
- Using any incompatible light fixtures or those that have not been certified may cause fire, explosion or other risks.
- Man-made damage is beyond the scope of Lifud warranty service.

Remark: Lifud Technology Co., Ltd. reserves the right to interpret any content of this specification.