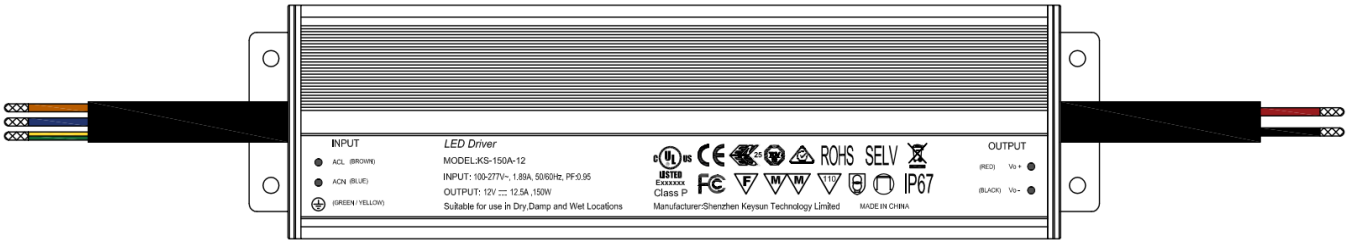
96-150 W Constant Voltage Mode LED Driver



■ Features

- Constant Voltage mode output
- Metal housing design with functional Ground
- Built-in active PFC function
- IP67 / IP65 rating for indoor or outdoor installations
- Function options:

1. No dimmable ,
2. TRIAC Dimming
3. 4 in 1 dimmable (0-10V,1-10V,,PWM.resistance)
4. 5 in 1 dimmable (0-10V,1-10V,TRIAC,PWM.resistance)

- Typical lifetime>50000 hours
- 5 years warranty

■ Applications

- Wall Washer
- LED Strip Light
- LED Tube
- Underground Light
- AR111 Venture Light

■ Description

LD-150 Series is one150W LEDAC variable DC driver, with constant current output and constant voltage output design as the main characteristics. This series The model can work at input voltage 100~277 VAC, and provide a variety of output rated voltage between 12 V~48 V. With a maximum conversion efficiency of up to 93%, the fan-free design can work in the temperature range of-40℃~+50℃ under natural air cooling and heat dissipation.

Metal case and IP67/IP65 high protection grade design make LD-150 suitable for indoor or outdoor applications.LD-150 with a variety of functional options (such as dimming mode) to provide the best design flexibility for the lighting system.

■ Model Encoding

LD - 150 **A** - 12 **#**

- Dimming Mode: Blank(NO dimmable). T(TRIAC DIMMING). O(4 IN 1). P(5 IN 1)
- Rated output voltage
- name :A .AW
- Output wattage
- Series name

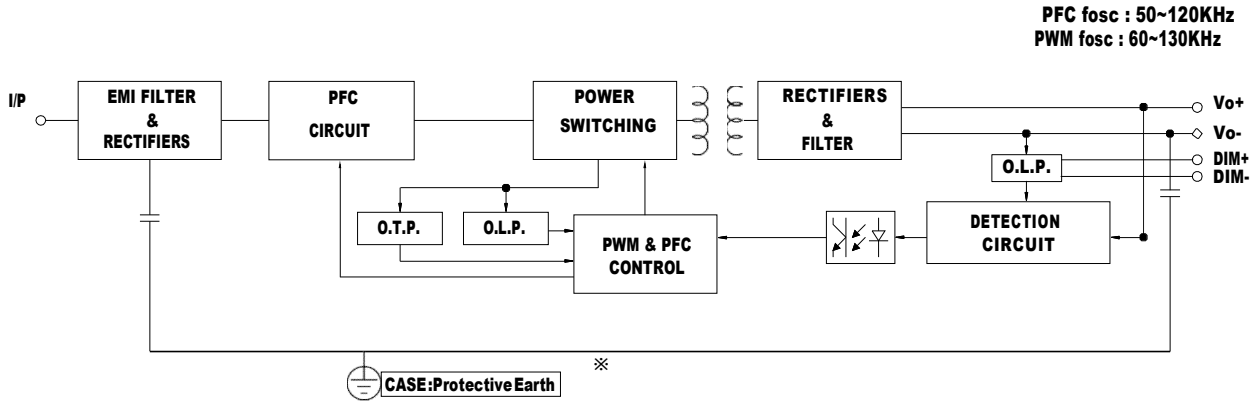
Type	Function	Note
Blank	NO dimmable	standard
O	4 in 1 dimming function (0/1~10Vdc, 10V PWM signal and resistance)	standard
P	5 in 1 dimming function (0/1~10Vdc, 10V PWM signal, TRIAC and resistance)	standard
T	TRIAC DIMMABLE	standard

MODEL			LD-100□-12□ LD-120□-12□ LD-150□-12□	LD-100□-24□ LD-120□-24□ LD-150□-24□ LD-96□-24□	LD-100□-36□ LD-120□-36□ LD-150□-36□	LD-100□-48□ LD-120□-48□ LD-150□-48□
OUTPUT	Output Voltage		12V	24V	36V	48V
	Rated current		8.33A 10.0A 12.5A	4.16A 5.0A 6.25A， 4.0 A	2.78A 3.33A 4.16A	2.08A 2.5A 3.13A
	Rated power		100W，120W，150W	100W,120W,150W,96W	100W，120W，150W	100W，120W，150W
	Ripple & Noise (max.)		200mVp-p	250mVp-p	250mVp-p	250mVp-p
	Voltage accuracy		±2.0%	±2.0%	±2.0%	±2.0%
	Linear adjustment rate		±0.5%	±0.5%	±0.5%	±0.5%
	Load adjustment rate		±0.5%	±0.5%	±0.5%	±0.5%
	Start, rise time		500ms, 100ms/230VAC， 1000ms, 100ms/115VAC			
	Hold time		10ms/115VAC, 230VAC			
INPUT	Voltage range		100 ~ 277VAC			
	Frequency range		47 ~ 63Hz			
	Power factor		PF≧0 98/115VAC, PF≧0 95/230VAC，PF≧0.9/277VAC， Full load			
	Total harmonic distortion		THD< 20%(@ load ≧50%/115VC,230VAC; @ load ≧75%/277VAC)			
	Efficiency	Vin: 115VAC	≧88%	≧90%	≧90%	≧90%
		Vin: 230VAC	≧90%	≧92%	≧93%	≧93%
	AC current		1.6A/ 115VAC 0.8A / 230VAC			
	Inrush current		Cold start 75A(twidth=350us measured at 50% Ipeak)/230Vac			
	Leakage current		< 1mA			
	No load/standby power consumption		< 1.0W			
Protection	Over current		95 ~ 110% Constant current limit, load abnormal condition can be removed after automatic recovery			
	Short circuit		Burp mode, load abnormal conditions can be removed after automatic recovery			
	Over voltage		13 ~ 16 V	26 ~ 32V	39 ~ 47V	52 ~ 63V
			Turn off the output voltage, restart and resume			
	Over temperature		Turn off the output voltage, restart and resume			
Environment	Working Temp		Tcase=-40 ~ +50℃			
	Max.Case Temp		Tcase=+90℃			
	Working Humidity		20 ~ 95% RH, non-condensing			
	Storage Temp.,Humidity		-40 ~ +90℃, 10 ~ 95% RH			
	Temp.Coefficient		±0.03%/℃ (0 ~60℃)			
	Vibration		10~500Hz,5G12min./1cycle,periodfor72min.eachalongX,Y,Zaxes			
SAFETY&EMC	Safety Standards		UL8750;IEC/EN61347-1, IEC/EN/AS/NZS 61347-2-13 independent, EN62384			
	Withstand voltage		I/P-O/P:3.75KVAC I/P-FG:2.0KVAC			
	Isolationresistance		I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃/ 70% RH			
	EMC EMISSION		Compliance to EN55015, EN61000-3-2 Class C (@ load≧50%) ; EN61000-3-3			
	EMC IMMUNITY		Compliance to EN61000-4-2,3,4,5,6,8,11			
OTHERS	Dimension		213*58*36 mm (L*W*H)			
	Packing					

NOTE

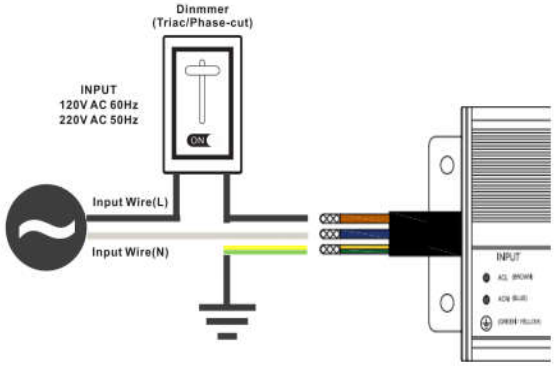
1. Unless otherwise specified, all specifications and parameters shall be measured at the input of 230VAC, rated load and ambient temperature of 25℃.
2. Ripple and noise measurement method: A 12" twisted-pair line with 0.1uF and47uF capacitors in parallel should be used for measurement under 20MHZ bandwidth.
3. Accuracy: includes setting error, linear adjustment rate and load adjustment rate.
4. The start time is measured under the starting of the cold machine. Frequent switching on and off may increase the start time.
5. No-load or standby power consumption is limited to 230VAC input.
6. The driver is regarded as a component used in combination with the terminal equipment. Since the EMC is affected by the whole device, the manufacturer of the terminal equipment needs to reconfirm the EMC of the whole device.
7. When the maximum temperature point Tc of the shell of this series of models is lower than 70℃, the service life is more than 50000 hours.
8. When the altitude exceeds 2,000 m (6,500 ft), the ambient temperature of the fan-less model decreases at a ratio of 35℃/ 1,000m, while that of the fan model decreases at a ratio of 5℃/ 1,000

■ BLOCK DIAGRAM



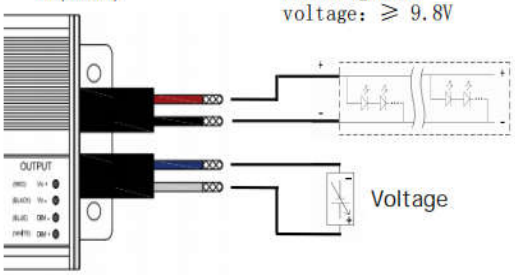
■ dimming operation

◎ Input external TRIAC controlled dimmer



ACL
(brown)
ACN (blue)
ACG (Kelly)

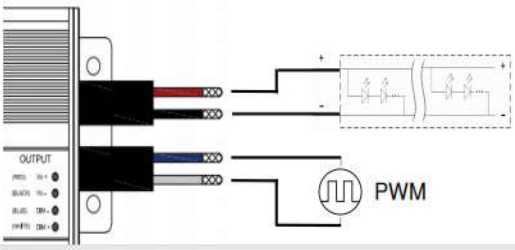
◎Add 0/1-10VDC voltage, dimming port output current: 0.5mA(typical value))



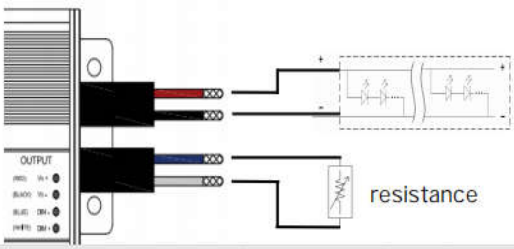
DIM-
(BLUE)
DIM+
(WHITE)

Do not connect "DIM-" to "Vo-"

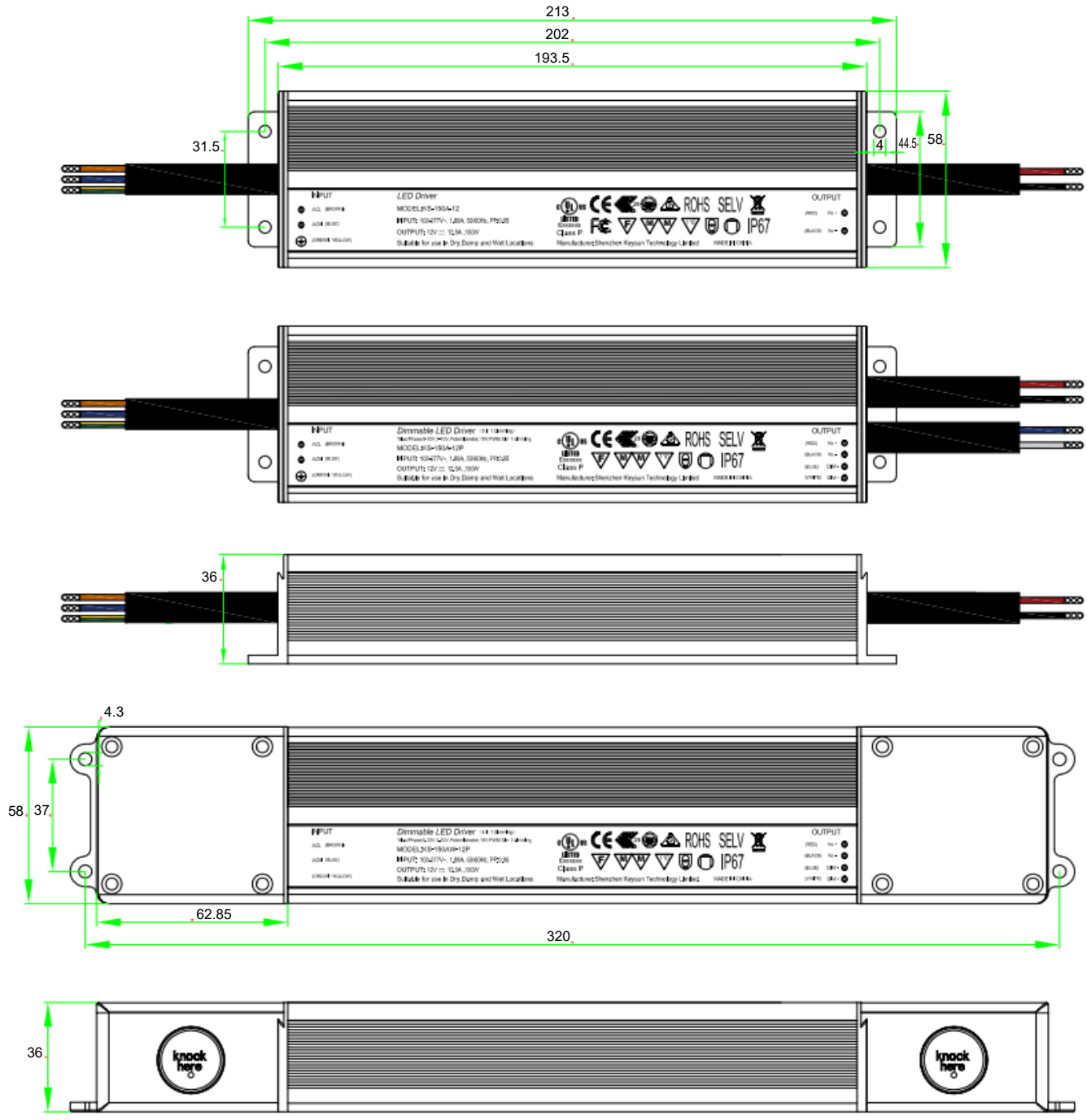
◎ Added 10V PWM signal (frequency range: 100Hz, 3KHz)



◎ added the resistance: 0R ~100K



■ Dimension


213
202
193.5
31.5
4
44.5
58
36
4.3
58
37
62.85
320
36
knock here
knock here