

SPECIFICATION

75W LED DRIVER

Issued date: Aug.20.2016

Model: SS-75H

REV : V02

Description: 75W AC to DC LED Driver

Customer : _____

Customer Approval Signature	Shenzhen City SOSEN Electronics co., LTD.		
	WRITTEN	CHECKED	APPROVED

SHENZHEN SOSEN ELECTRONICS CO LTD

【1. Applications】

- LED Advertising Sign
- LED Architectural Lighting
- LED Commercial Industrial Lighting
- LED General Luminaries



Figure1

【2. Features】

- ◆ Built-in Active PFC Function
- ◆ High efficiency up to 91%
- ◆ Optional dimming function: 1-10Vdc or PWM
- ◆ IP67 design for indoor or outdoor installations
- ◆ Protections: short circuit/over temperature/over voltage
- ◆ Cooling by free air convection
- ◆ CE, TUV, UL, BIS approved

【3. Model Listing】

ITEM	MODEL	Output Voltage	Output rated current	output power	Output current tolerance	Output voltage (No load)	Power factor (Vin=230Vac)	Efficiency (typ.) (Vin=230Vac)
3.1	SS-75H-33	24-33V	2.3A	75.9W	±5%	35V	0.96	89.5%
3.2	SS-75H-36	24-36V	2.1A	75.6W	±5%	38V	0.96	89.5%
3.3	SS-75H-42	30-42V	1.8A	75.6W	±5%	45V	0.96	90%
3.4	SS-75H-48	36-48V	1.6A	76.8W	±5%	50V	0.96	90.5%
3.5	SS-75H-54	42-54V	1.4A	75.6W	±5%	56V	0.96	90.5%
3.6	SS-75H-72	48-72V	1.05A	75.6W	±5%	75V	0.96	91%
3.7	SS-75H-108	65-108V	0.7A	75.6W	±5%	112V	0.96	91.5%

【4. Model naming rules】

SS-75H-33■	■ : Stands for the last letter
The last letter as empty	Based model, Through external potentiometer to adjustable output current, output current adjusting range is 70% to 100%.
The last letter for B	DIM the lighting, 1-10V dimming and PWM signal dimming by the outer DIM .DIM the lighting, 1-10V dimming and PWM signal dimming by the outer DIM .
The last letter for C	Timing dimmer, through the preset program timing dimmer.
The last letter for D	Remote control dimmer, adjusting the output current through an external remote control.
The last letter for T	A single timing dimmer, the product internal timer, time has eight kinds of optional: such as 5 hours, 6 hours, 7 hours, 8 hours,, work mode: 24 hours implementation a cycle.

【5. Input characteristics】

ITEM	Parameter	Min	Typ	Max	Remarks
5.1	Rated AC input range	100 Vac		277Vac	
5.2	AC input range	90 Vac		305 Vac	
5.3	Input frequency range	47Hz		63Hz	
5.4	Max input current			1.0A	Vin=90Vac, full load
5.5	Inrush current			60A	Vin=230Vac/50Hz,cold start
5.6	Power factor	0.96			Vin=230Vac/50Hz, full load
		0.9			100-277Vac, 70-100% full load
5.7	THD			10%	Vin=230Vac/50Hz,full load
				25%	100-277Vac, 70-100% full load

【6. Output】

ITEM	Parameter	Min	Typ	Max	Remarks
6.1	Output current tolerance	-5%		+5%	
6.2	Current adjustable range	70%		100%	
6.3	Ripple & noise			1%Vo	Measurement is done by 20MHz bandwidth oscilloscope and the output paralleled a 0.1uF ceramic capacitor and a 10uF electrolysis capacitor. Ta=25°C
6.4	Efficiency	SS-75H-33	88.5%	89.5%	Vin=230Vac/50Hz, full load, Ta=25°C
		SS-75H-36	88.5%	89.5%	
		SS-75H-42	89%	90%	
		SS-75H-48	89%	90.5%	
		SS-75H-54	89%	90.5%	
		SS-75H-72	90%	91%	
		SS-75H-108	90.5%	91.5%	
6.5	Efficiency	SS-75H-33	86.5%	87.5%	Vin=120Vac/60Hz, full load, Ta=25°C
		SS-75H-36	86.5%	87.5%	
		SS-75H-42	87%	88%	
		SS-75H-48	87.5%	88.5%	
		SS-75H-54	87.5%	88.5%	
		SS-75H-72	88%	89%	
		SS-75H-108	88.5%	89.5%	
6.6	Overshoot / Undershoot	-10%		+10%	Test with lamp LED load, Ta=25°C
6.7	Turn - on Delay Time		1.0S	2.0S	Vin=120Vac
			0.5S	1.0S	Vin=230ac

【7. PROTECTION FUNCTION】

ITEM	Parameter	Min	Typ	Max	Remarks
7.1	Over Voltage Protection	108%	115%	120%	latch off
7.2	Short Circuit Protection	A long time short circuit is not damaged, Pin: ≤5W			Auto-recovery, hiccup
7.3	Over Temperature Protection	90°C	100°C	110°C	Case temperature, Auto-recovery

【8. Environment requirement】

ITEM	Parameter	Min	Typ	Max	Remarks
8.1	Operating Temperature	-40°C	25°C	+60°C	Refer to Derating Curve, Figure 2
8.2	Storage Temperature	-40°C	25°C	+85°C	
8.3	Operation Humidity	10%RH		90%RH	
8.4	Storage Humidity	5%RH		95%RH	
8.5	Altitude	-65m		4000m	
8.6	Cooling Method	Air Cooling			

【9. Other Requirements】

ITEM	Parameter	Min	Typ	Max	Remarks
9.1	Life time		100,000 hours		230Vac, 100% on Load, Tc=60°C,
9.2	MTBF Estimation		500,000 hours		230Vac, Ta=25°C, 100% on load (MIL-HDBK-217F)
9.3	Temperature coefficient			0.02%/°C	
9.4	Case temperature			90°C	
9.5	Weight		600g		
9.6	Size	152mm*61mm*35mm			

【10. Safety Standards &EMI/EMS Standards】

10.1 Safety Standards			
certification	Safety Standards	State	Remarks
CE	EN 61347-2-13:2014 EN61347-1:2008+A1:2011+A 2:2013	■	
TUV	EN 61347-2-13:2014 EN61347-1:2008+A1:20 11+A2:2013 EN62493:2010	□	
UL/CUL	UL8750	■	
CQC/CCC	GB 19510.14-2009	■	
10.2 Safety Requirements			
ITEM	Technical requirements	Remarks	
Insulation strength	Input-output	3200Vac/5mA Max/60 seconds	Reinforced insulation ;No flashover and breakdown
	Primary- Earth	1600Vac/5mA Max / 60second	Based insulation ; No flashover and breakdown
	Secondary- Earth	1000Vac/5mA Max / 60second	Function insulation ; No flashover and breakdown
Insulation resistance	Input-output	≥10 MΩ	Testing Voltage: 500Vdc
Ground resistor		≤0.1Ω	25A/1min
Leakage current		≤0.75mA	Vin=277Vac
10.3 EMI/EMS Requirements			
ITEM	Standards	Criterion	
CE	EN55015:2006+A1:2007+A2: 2009	CLASS B	
RE	EN55015:2006+A1:2007+A2: 2009	CLASS B	
Harmonic current emissions		IEC/EN 61000-3-2	
SURGE		IEC/EN61000-4-5 Difference mode±4KV, common mode ±6KV Criterion B	

【11. Characteristics of figure】

Figure 2: Derating Curve

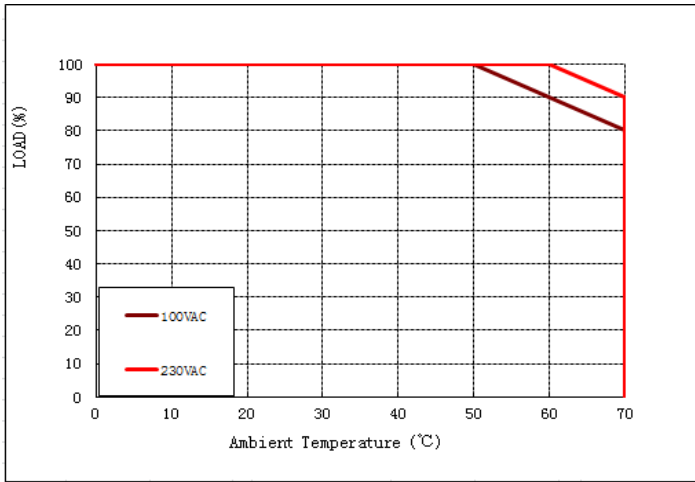


Figure 3: Static Characteristics

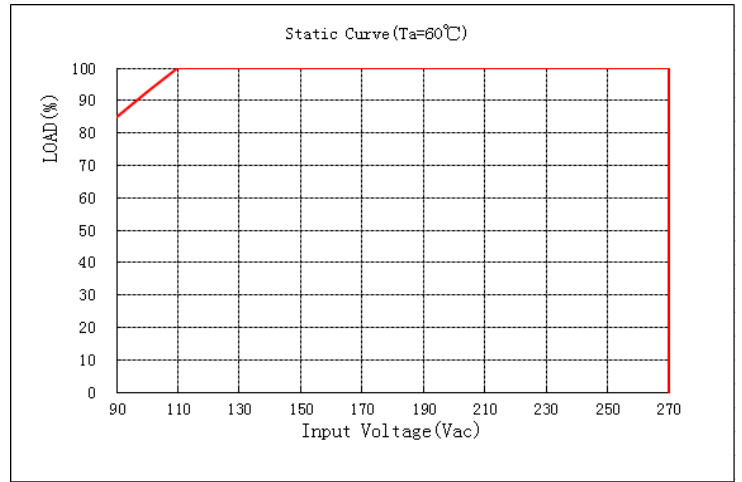


Figure 4: PF Curve(full load)

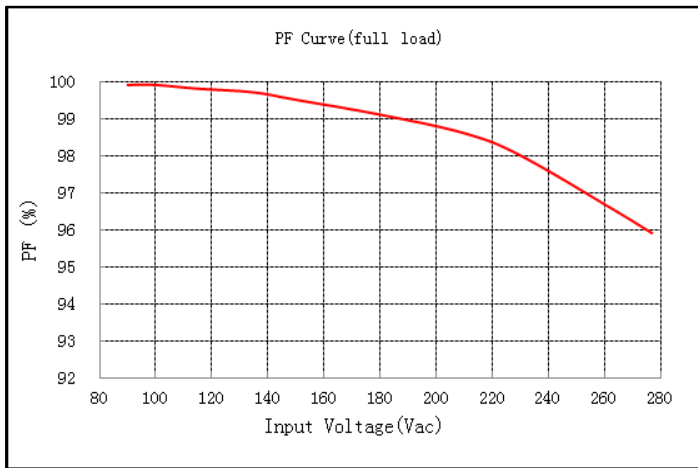


Figure 5: Efficiency Curve (full load)

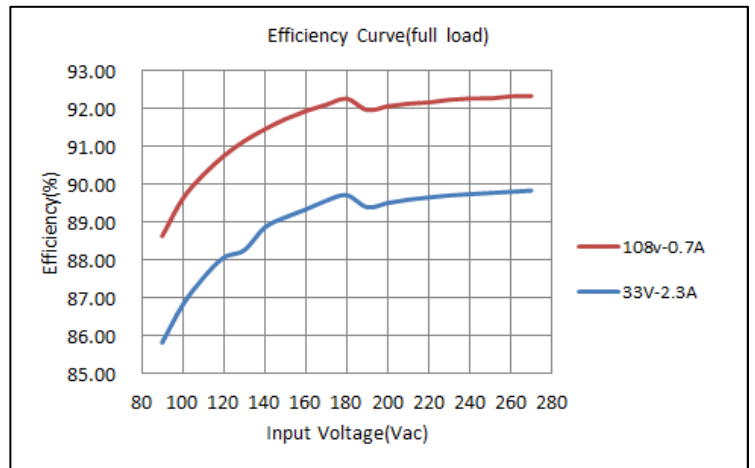


Figure 6: dimming Curve

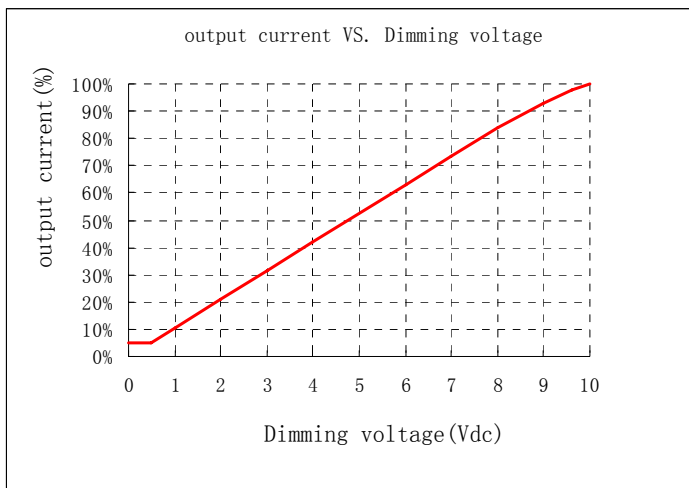
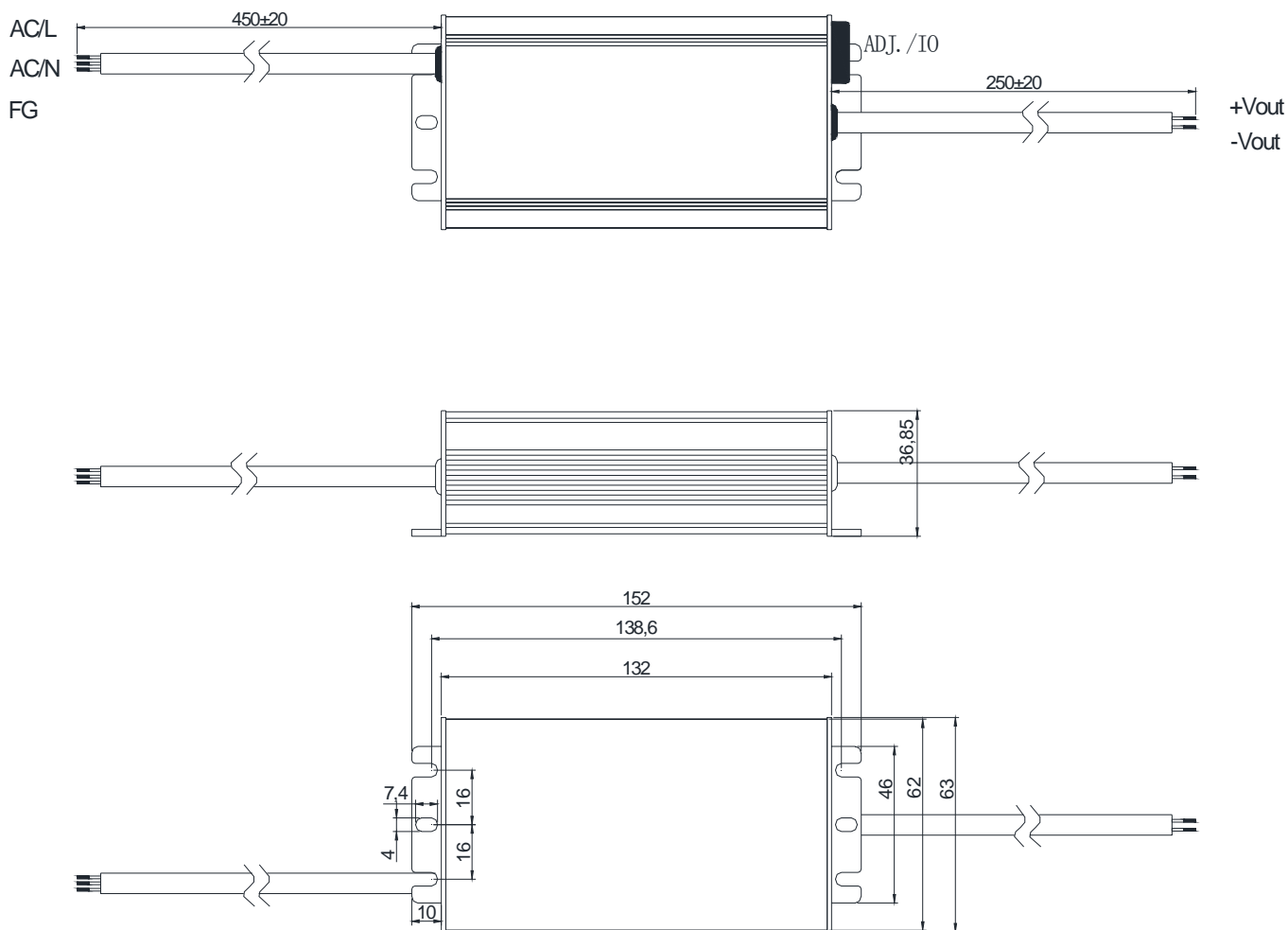


Figure 8 : Based model (SS-75H-XX)



Remarks:

AC input cable	<ol style="list-style-type: none"> 1. American standard cable: UL SJTW #18AWG 3*0.824mm², Outer diameter:7.8mm; Green: PE, Black: L, White: N 2. European standard cable: VDE H05RN-F 3*1.0mm², Outer diameter: 7.4mm, Brown: L, Blue: N, Yellow& Green: PE
DC output cable	<ol style="list-style-type: none"> 1. American standard cable: UL SJTW #18AWG 2*0.824mm², Outer diameter:7.3mm; Red: V+, Black: V- 2. European standard cable: VDE H05RN-F 2*1.0mm², Outer diameter: 7.0mm; Brown: V+, Blue: V-
DIM	1. SJTW #18AWG 2*0.824 mm ² , Outer diameter: 7.3mm, White: DIM+, Black: DIM-
Auxiliary +DIM	1. SJTW #18AWG 3*0.824mm ² , Outer diameter:7.8mm, Green: VCC, White: DIM+, Black: DIM-

【15. Installation considerations】

If the power supply has adjustable external potentiometer, after adjust output current, suggest using 704 silicone sealing good the hole and plug waterproof rubber.

- 14.1 Lightning protection level to meeting IEC61000-4-5 standard requirement, if you use the lightning occurs or the area of power grid environment is relatively complex, suggest in the power supply of the AC input terminal equipped with professional lightning protection module.

【16. Package,Transportation & Storage】

15.1 Package

- a、package box outside dimension: $L \times W \times H = 522 \times 234 \times 197$ (unit: mm);
- b、product number in each box: 20PCS;
- c、single product net weight: 0.6 kg; whole box gross weight: 13kg;
- d、There are product name, model, mark of manufacturer, certificate of safety approval and manufacturing date on the carton and packing list inside..

15.2 Transportation

Packaging is designed suitable for transportation by truck, ship, and plane. The products should be shielded from sunshine, and loaded and unloaded carefully..

15.3 Storage

The product storage meet the standard of the GB 3873—83.

Product should be rechecked over 1 year.