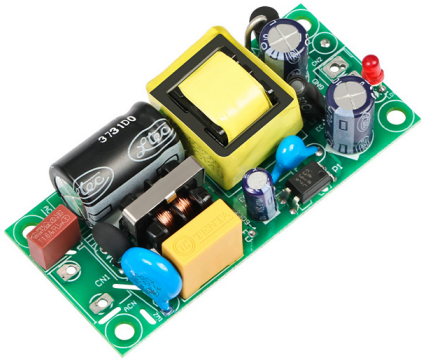
TPS-YS12SFD Series

Single Output Open Frame Power Supply



Features

- Wide Input Voltage Range
- Overload, short-circuit, and over-voltage protection
- Small Size, High Efficiency
- Ultra-low output ripple
- Meets safety standards

Electrical Specifications

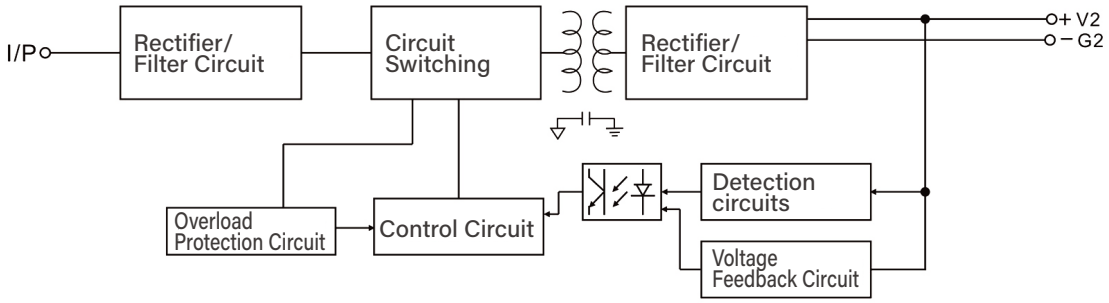
Specifications		TPS-YS12SFD-3.3V	TPS-YS12SFD-5V	TPS-YS12SFD-9V	TPS-YS12SFD-12V	TPS-YS12SFD-15V	TPS-YS12SFD-24V	TPS-YS12SFD-36V
Output	Output Voltage	3.3V	5V	9V	12V	15V	24V	36V
	Rated Current	2500mA	2000mA	1330mA	1000mA	800mA	500mA	330mA
	Current Range	0-2500mA	0-2000mA	0-1330mA	0-1000mA	0-800mA	0-500mA	0-330mA
	Ripple	<60mVp-p	<60mVp-p	<55mVp-p	<60mVp-p	<100mVp-p	<100mVp-p	<160mVp-p
	Output Accuracy	±1%	±1%	±1%	±1%	±1%	±1%	±1%
	Voltage Regulation Rate	±1%	±1%	±1%	±1%	±1%	±1%	±1%
	Load Regulation Rate	±1%	±1%	1%	±1%	±1%	±1%	±1%
	Rated Power	8.25	10W	12W	12W	12W	12W	12W
	Adjustable Output Range	Not adjustable						
	Startup/Rise/Hold Time	300ms、20ms、20ms/220VAC						
Input	Input Voltage Range	100~264VAC						
	Input Current	<0.2A(average current0.03~0.1A)						
	Frequency Range	47~63Hz						
	Efficiency	77%	79%	81%	82.5%	83%	84.5%	86%
	Inrush Current	COLD START 30A/230VAC						
	Leakage Current	<2mA/220VAC						
Protection	Over-power Protection	130~160% of rated power, auto recovery after fault is removed						
	Over-voltage Protection	VH1:>160%						
	DC short-circuit protection	Hiccup mode, auto-recovery after short is removed						
Environment	Operating Temperature and Humidity	-15℃~+45℃@100%LOAD,+60℃@60%LOAD: 20%-90%RH						
	Storage Temperature and Humidity	-20℃~+8510%-95%RH						
Safety and EMC	Safety Standards	EN55032:2015;						
	Withstand Voltage	I/P-O/P:2.5KVAC 1min. (For 3kV withstand voltage requirements, please contact customer service)						
	Insulation Resistance	I/P-O/P:500VDC/50M Ohms						
Mechanical Mharacteristics	Dimensions (LxWxH)	67×31×19mm						
	Weight	28.5g						

Notes

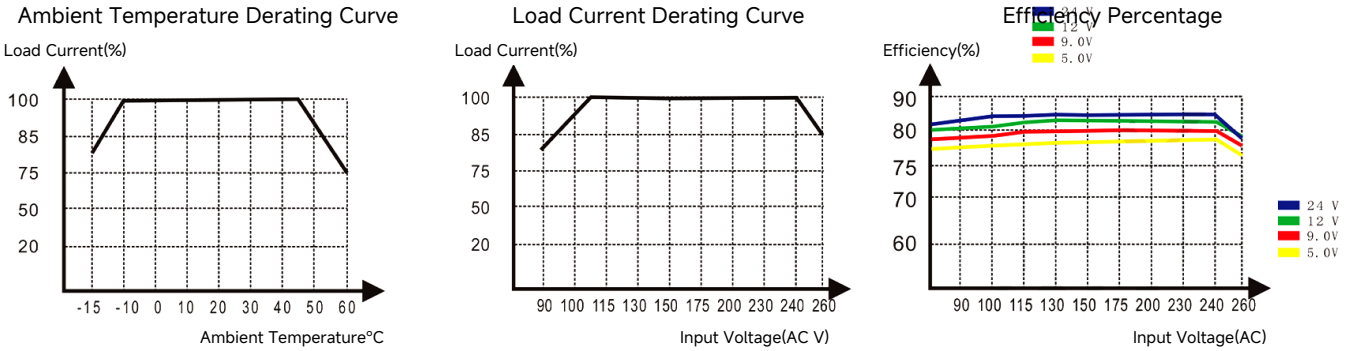
1. All parameters are measured at a rated input voltage of 220VAC, rated load, 25℃, and 70% humidity.
2. Accuracy includes setup error, voltage regulation, and load regulation.
3. Ripple measurement: Power supply and load are connected with 30cm twisted wires, with 0.1μF and 47μF capacitors at the load end, measured by a 20MHz oscilloscope.
4. Voltage adjustment rate is measured by changing the input voltage from low to high with rated load.
5. Load regulation is measured from 0% to 100% load.
6. Each output can deliver the maximum current, but the total load should not exceed the maximum rated power.

Block Diagram

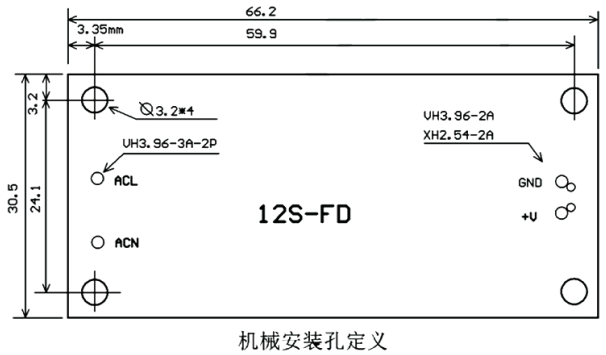
Frequency: 47~63Hz



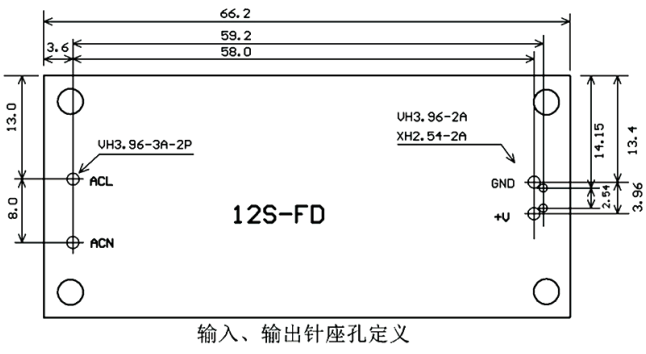
Full Voltage Efficiency Curve



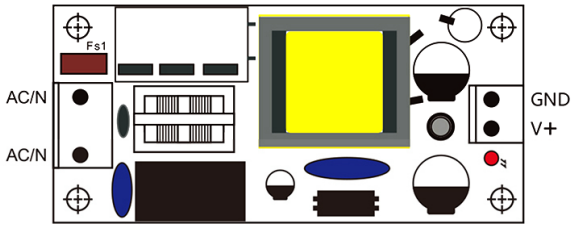
Dimensions (mm)

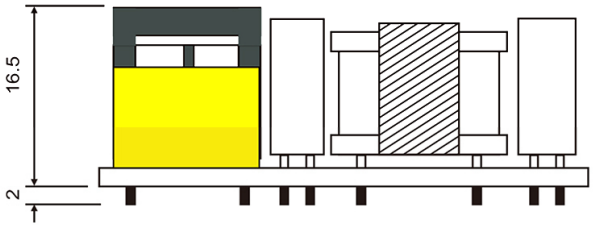


机械安装孔定义



输入、输出针座孔定义





This electronic device must not be disposed of in the household waste at the end of its service life. For your return, there are free collection points for electrical appliances and, if necessary, additional points of acceptance for the reuse of the devices in your area.The addresses an be obtained from your city or cummunal administration. If the old electrical or electronic device contains personal data, you are esponsible for deleting it before you return it. Further information: www.elektrogesetz.de