



**TW300V5**

**Product Main Specification**

# 01

## APPEARANCE

Model : TW300V5



# 02

## Introduction

- The power supply has the characteristics of small volume, high efficiency, stable operation and high reliability. The power supply has input under-voltage, output current limiting, output short circuit and so on. The synchronous rectifier circuit greatly improves the efficiency of the power supply and saves energy consumption.

# 03

## Product Main

Output Power (W)	Rated Input Voltage (Vac)	Rated Output Voltage (Vdc)	Output Current Range (A)	Precision	Ripple and Noise (mVp-p)
300	150-264	+5.0	0-60.0	±2%	≤150

## 04

## Environment condition

Item	Description	Tech Spec	Unit	Remark
1	Working temperature	-30 -50	°C	
2	Storing temperature	-40 -80	°C	
3	Relative humidity	10—90	%	No condensation
4	Heat dissipation method	Fan cooling		The power supply should be installed on the metal plate to dissipate heat
5	Air pressure	80—106	Kpa	
6	Height of sea level	2000	m	

## 05

## Electrical character

### 1. Input Character

Item	Description	Tech Spec	Unit	Remark
1.1	Rated Voltage Range	200-240	Vac	Refer to the diagram of input voltage and load relation
1.2	Input Frequency Range	47-63	Hz	
1.3	Efficiency	≥ 85.0	%	Vin=220Vac 25°C Output Full Load (at room temperature)
1.4	Efficiency factor	≥0.45		Vin=220Vac Rated input voltage, output full load
1.5	Max input current	≤3.5	A	
1.6	Dash Current	≤ 120	A	@220Vac Cold state test @220Vac

## 2. Output Character

Item	Description	Tech Spec	Unit	Remark
2.1	Output Voltage Rating	+5.0	VDC	
2.2	Output Current Range	0—60.0	A	
2.3	Output voltage adjustable range	/	VDC	
2.4	Output voltage range	±2	%	
2.5	Load regulation	±2	%	
2.6	Voltage stability accurary	±2	%	
2.7	Output ripple and noise	≤150	mVp-p	Rated input, output full load, 20MHz bandwidth, load side and 47uf / 104 capacitor
2.8	Start output delay	≤5.0	S	Vin=220Vac @25°C
2.9	Output voltage raise time	≤50	ms	Vin=220Vac @25°C
2.10	Switch machine overshoot	±5	%	conditions: full load, CR mode
2.11	Output Dynamic	The voltage change is less than ±10% VO, the dynamic response time is less than 250us.	mV	LOAD 25%-50%-25% 50%-75%-50%

## 3. Protection Character

Item	Description	Tech Spec	Unit	Remark
3.1	Input under-voltage protection	140-175	VAC	Test conditions: full load
3.2	Input under-voltage recovery point	160-180	VAC	
3.3	Output current limiting protection point	72-90	A	HI-CUP hiccups self-recovery, avoid long-term damage to power after a short-circuit power.
3.4	Output short circuit protection	Self-Recovery	A	

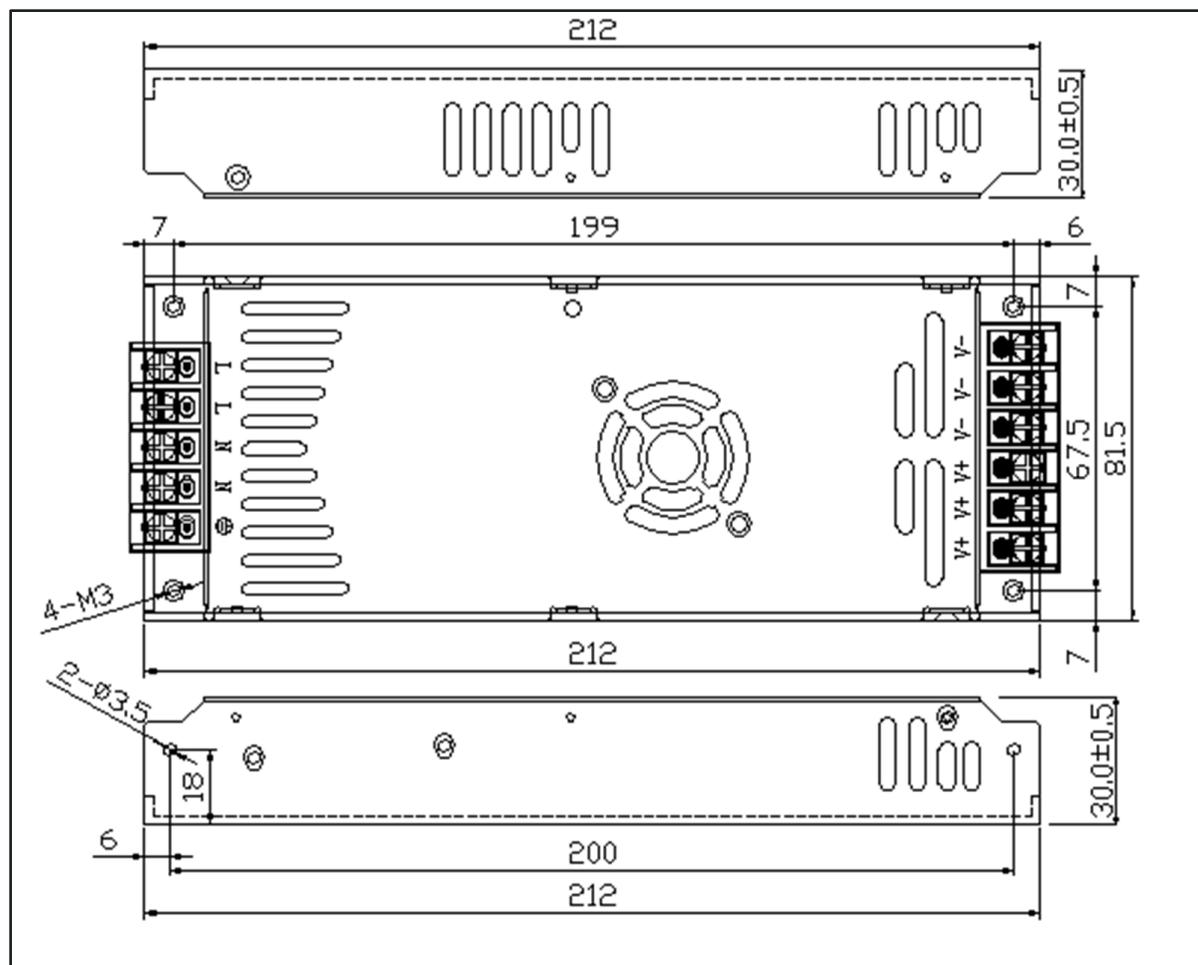
#### 4. Other Character

Item	Description	Tech Spec	Unit	Remark
4.1	MTBF	$\geq 40.000$	H	
4.2	Leakage Current	$< 3.0(V_{in}=230Vac)$	mA	

06

## Production Compliance characteristics

Item	Description	Tech Spec	Remark
1	Electric Strength Input to output	3000Vac/10mA/1min	No arcing, no breakdown
2	Electric Strength Input to ground	1500Vac/10mA/1min	No arcing, no breakdown
3	Electric Strength Output to ground	500Vac/10mA/1min	No arcing, no breakdown



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