Product Features

- Input voltage range 176~264Vac;
- High efficiency, low temperature rise, high reliability;
- Built-in EMI filter, lower ripple & low noise;
- Protections: over current protection, over load protection, short circuit protection.



1. Electric Characteristic

1	Input				
No.	Item	Technical Requirements	Unit	Note	
1.1	Rated Input Voltage	200~240	Vac		
1.2	Input Voltage Range	176~264	Vac	Refer to derating curve	
1.3	Rated Frequency	50/60	Hz		
1.4	Frequency Range	47~63	Hz		
1.5	Max. Input Current	1.2	А	Vin=190Vac, rated load	
1.6	Inrush Current	≤50	А	240Vac input, 25°C, cold start	
2	Output				
No.	Item	Technical Requirements	Unit	Note	
2.1	Rated output voltage	12	Vdc		
2.2	Rated output current	8.3	А		
2.3	Max Output power	99.6	W	Refer to derating curve	
2.4	Efficiency	≥86%	-	25°C, 230Vac input, rated load	
2.5	Line regulation	±1%			
2.6	Load regulation	±2%			
2.7	Voltage tolerance	±2%			
2.8	Ripple & Noise	≤300	mVp-p	25°C, rated input, rated load, bandwidth of 20MHz, connected a 10uF electrolytic capacitor and a 0.1uF ceramic capacitor in parallel to the output terminals.	
2.9	Dynamic Response Overshoot	≤5	%	5%~50%~25%, 50%~75%~50 load dynamics, half-wave period is 4mS, current change slope is 0.1A/uS	
2.10	Dynamic Response Recovery Time	200	us		
2.11	Turn-on Delay Time	≤3	S	200~240Vac input, rated load	
2.12	Output Voltage Rise Time	≤70	ms	200~240Vac input, rated load,25°C	
2.13	Turn-on/off Overshoot	≤±10%			
3	Protection				
No.	Item	Technical Requirements	Unit	Note	
3.1	Over Current Protection	9.5~12	А	Hiccup model, recovers automatically after fault condition is removed	
3.2	Short Circuit Protection	Long time short-circuit protection without damage, recovers automatically after fault condition is removed.			

2. Environment

No.	Item	Specs	Unit	Note
1	Working temperature range	-25~ +70(Typ. 25)	°C	Refer to derating curving
2	Max case temperature	90	°C	Тс
3	Storage temperature range	-40~ +80(Typ. 25)	°C	
4	Relative humidity	20~95	%	No condensing
5	Altitude	0~5000	m	
6	Protection Rating	IP67		The power supply shall not be immersed in water for more than 0.5 hours (less than 1 meter in depth); It shall not be buried underground for use.
7	Cooling method	Ventilation cooling		

3. Reliability Requirement

MTBF≥100Khours.

Test condition: 25°C, rated input, rated load, MIL-HDBK-217F Notice 2

4. Safety standards

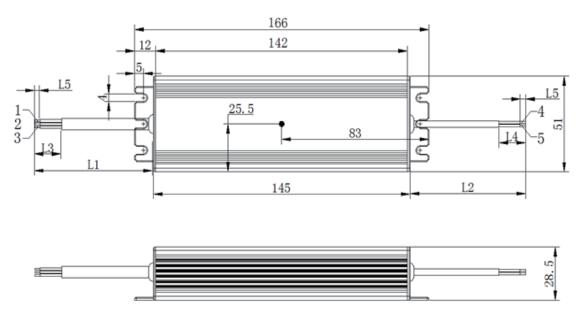
No.	Item		Testing Condition	Note	
4.1.	Dielectric Strength (Hi-Pot)	I/P-O/P	3750Vac, 60S, current≤10mA		
		I/P-FG	1750Vac, 60S, current≤10mA	No arcing,no breakdown	
		O/P-FG	500Vac, 60S, current≤10mA		
4.2	Insulation Resistance	I/P-O/P	≥10MΩ@ 500Vdc	90% RH, 1 atm	
		I/P-FG	≥10MΩ@ 500Vdc		
		O/P-FG	≥10MΩ@ 500Vdc		
4.3	Leakage Current		<0.75mA	240Vac/60Hz	
4.4	Safety Standard		GB19510.1,.14/EN61347-1,-2-13/EN62384/UL8750/IP67		
4.5	Electromagnetic Interference		EN61547; EN61000-4-2,3,4,5,6,8,11; (surge immunity Line-Earth 4KV, Line-Line 2KV)		

5. Mechanic Specification

5.1 Terminals (Unit: mm)

No.	Item	Parameters/mm	Note
5.1.1	Overall Dimension	166(L)*51 (W)*28.5(H)	
5.1.2	Three core input cable	Length:300mm	Brown(L) Blue(N) Yellow-Green (G)
5.1.3	Two-core output cable	Length:200mm	Brown(V+) Blue(V-)

5.2 Dimension (Unit: mm)



Note: L1=300±5mm; L2=200±5mm; L3=30±2mm; L4=30±2mm; L5=5±1mm

6. Derating Curve

In order to ensure that the product can achieve the expected design service life, please configure the AC supply voltage and load of the power supply according to the derating requirements of the following curve. When the ambient temperature rises to a certain value, the output power also needs to be derated.

