



◆Feature

- .Constant voltage design
- .Universal AC input / Full range
- .Small dimension, High efficiency, High reliability, Long lifetime
- Ip67 design for outdoor installation
- Working temperature: -25°C~+50°C
- .Protections: Overload, Over voltage, Short-circuit, etc.
- Typical efficiency: 89%
- CE\UL\IP67 certified, RoHS/REACH compliant
- 100% full load burn-in test.

SPECIFICATION

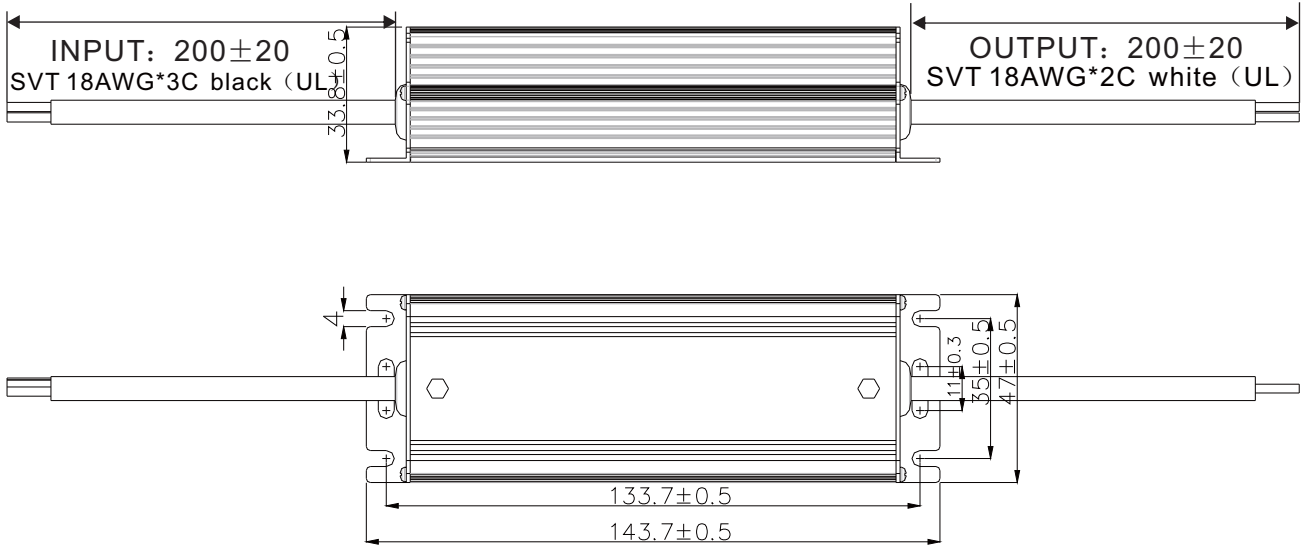
MODEL		VF-12060D1310	VF-24060D1310	VF-36060D1310		
Output	DC Voltage	12V	24V	36V		
	Rated current	5A	2.5A	1.67A		
	Current range	0-5A	0-2.5A	0-1.67A		
	Rated power	60W	60W	60W		
	Ripple and Noise(max.) Note4	120mVp-p	240mVp-p	360mVp-p		
	Voltage tolerance Note3	±4%	±2%	±2%		
	Line regulation	±1%	±0.5%	±0.5%		
	Load regulation	±1.5%	±1%	±1%		
	Output groups	1	1	1		
	Set up time Note6	2000ms, 50ms(at full load) 110Vac/230Vac				
Holding time(Typ.)	15ms(at full load) 110Vac/230Vac					
Input	Voltage range Note 2	90~305Vac or 127~432Vdc				
	Frequency range	47~63Hz				
	Power factor(Typ.)	PF≥0.50/110V(at full load) PF≥0.45/230V(at full load)				
	Efficiency(Typ.)	87%	88%	89%		
	AC current	1.35A/110Vac 0.65A/230Vac				
	Inrush current(Typ.)	Cold start: 55A/230Vac				
	Leakage current	<0.75mA/240Vac				
Protection	Over load	102%-130% of the rated output power Protection mode: constant current limiting, recovers automatically after the load reduced.				
	Short circuit	Protection type: Hiccup mode, recovers automatically after fault conditions removed				
	Over voltage	13.0-18.0V	24.5-35.0V	37.5-50.0V		
	Over temperature	Ta:55°C-65°C Protection type: Shut down O/P voltage, recovers automatically after temperature goes down.				
Environment	Working temperature	-25°C~+50°C				
	Working humidity	10%~90%RH, non-condensing				
	Storage temp. and humidity	-25°C~+75°C, 5%~95%RH				
	Temp. coefficient	±0.05%/°C (0~40°C)				
	Vibration	10-300Hz, 1G 10min./cycle, period for 60min. each along X, Y, Z axes				
Safe&EMC	Safety standards	Compliance to UL8750,EN61347-1, EN61347-2-13, Ip67 waterproof rating.				
	Withstand voltage	I/P-O/P: 3.75KVAC I/P-FG: 1.875KVAC O/P-FG: 0.5KVAC				
	Insolation resistance	I/P-O/P, I/P-FG, O/P-FG: 100Mohms/500Vdc 25°C/70%RH				
	EMC Emission	/				
	EMC Immunity	/				
Others	MTBF	≥200Khrs, MIL-HDBK-217F(25°C)				
	Dimension	143.7X47X33.8mm(L*W*H)				
	Packing	0.37Kg/PCS, 50PCS/18.5Kg/box, (415X325X205mm)				

NOTE

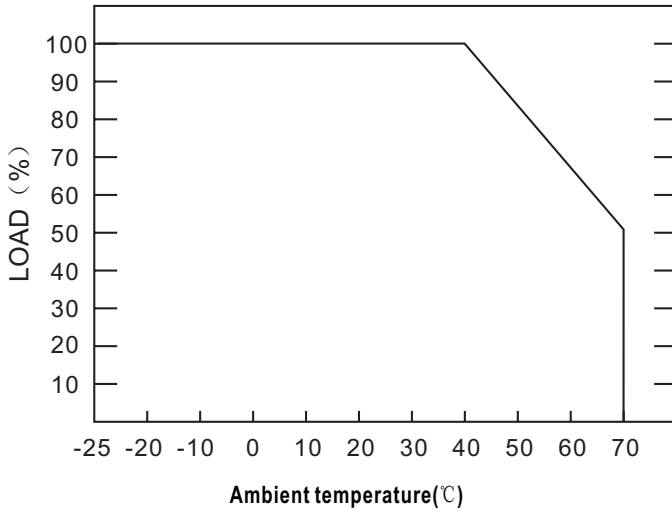
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Derating may be needed under low input voltages. Please check the static characteristics for more details.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. Ripple & noise are measured at 20MHZ of bandwidth by using twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
- 5.The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-confirm EMC Directive on the complete installation.
- 6.The start time was tested under the situation of cold star, continuous switching on/off may raise the start time.

■ Mechanical Specification

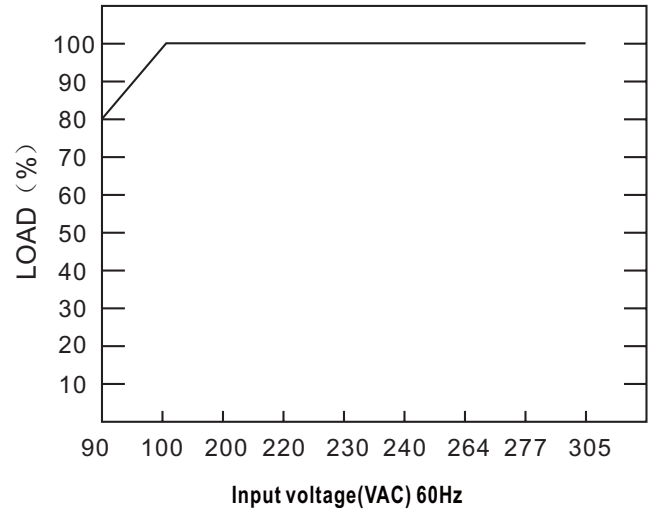
Case No.D1310 Unit:mm



■ Derating Curve



■ Static Characteristics



Designed by		Standardization		D1310 type	Version: 2.0
Corrected by		Approved by		SHENZHEN STARWELL TECHNOLOGY CO., LTD	
Checked by					