

Features:

- 1. Ultra-wide input voltage range (100-1000VDC)
- 2. Size 92.3*76.3*60.5mm
- 3. No load power consumption < 0.06W
- 4. Protection type: short circuit/over temperature/over load/over voltage
- 5. Operating temperature range: -40°C to +70°C
- 6. 3000V isolation voltage
- 7. 100% high temperature burn-in and function test
- 8. 3 years warranty









Designed for Photovoltaic power generation, Renewable energy system, High voltage frequency conversion, Industrial control system, Semiconductor fabrication equipment, Electro-mechanical apparatus, DC bus centralized application, Energy storage system(ESS), Charging pile, Third rail.

Selection Guide

Model	Input Voltage	Rated Power (W)	Output Voltage (V)	Output Current (A)	Ripple & Noise (mVp-p)	Efficiency (%)
PV-DD60-600S12	600VDC	60	12	5	100	85
PV-DD60-600S15	(100-1000)	60	15	3.33	100	85
PV-DD60-600S24		60	24	2.5	100	85

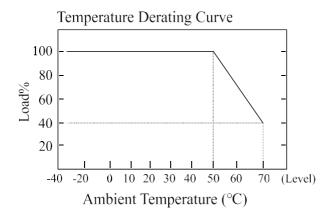


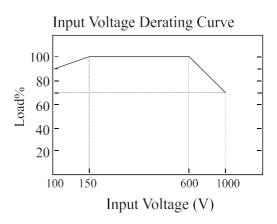
DC-DC Converter

	Voltage Tolerance	±1.0%		12V: ±2.0%			
OUTPUT	Line Regulation	±1.0%	±1.0%				
	Load Regulation	±1.0%	±1.0%				
	Setup, Rise Time (Typ.)	2000ms, 50ms/600	2000ms, 50ms/600VDC at full load				
	Hold Up Time (Typ.)	5ms/600VDC at f	5ms/600VDC at full load				
INPUT	Voltage Range	100-1000VDC	100-1000VDC				
	Nominal Voltage	600VDC	600VDC				
	Current (Typ.)	0.12A/600VDC					
	Inrush Current (Typ.)	60A/600VDC					
	External Fuse Recommended	4A/1500V	4A/1500V				
	Over Load	≥110% load, reco	≥110% load, recovers automatically after fault condition is removed				
PROTECTION	Short Circuit	Hiccup mode, reco	Hiccup mode, recovers automatically after fault condition is removed				
PROTECTION	Over Temperature	Output off	Output off				
		Over voltage lockir	Over voltage locking, power off and restart				
	Over Voltage	Voltage	12VDC	15VDC	24VDC		
		Range	≤16VDC	≤18VDC	≤32VDC		
	Working Temp.	-40°C to +70°C (R	-40°C to +70°C (Refer to "Derating curve")				
U /TDONIMENT	Working Humidity	85%RH max	85%RH max				
NVIRONMENT	Storage Temp., Humidity	-40°C to +85°C, 10	-40°C to +85°C, 10-95%RH				
	Temp. Coefficient	0.03%/ (0-50°C)	0.03%/ (0-50°C)				
	Vibration	10-500Hz, 2G, 10n	10-500Hz, 2G, 10min./1cycle, 60min.each along X, Y, Z axes				
	Safety Standards	EN62368, EN60603	EN62368, EN60601, UL62368				
	Isolation Voltage	I/P-O/P: 3000VAC					
AFETY & EMC (NOTE	Isolation Resistance	I/P-O/P: >100M O	I/P-O/P: >100M Ohms/500VDC 25°C 70% RH				
3.)	EMC Emission & Immunity	EN55011, EN55032	EN55011, EN55032 (CISPR32)				
	ESD	IEC/EN 61000-4-2	IEC/EN 61000-4-2 level 4 Contact ±8kV/Air ±15kV				
	RF	IEC/EN 61000-4-3	IEC/EN 61000-4-3				
	EFT	IEC/EN 61000-4-4	IEC/EN 61000-4-4 level 3 2kV				
	Surge	IEC/EN 61000-4-5	IEC/EN 61000-4-5 level 4 1kV/2kV				
OTHERS	MTBF	200K hrs min. MI	200K hrs min. MIL-HDBK-217F (25°C)				
	Dimension	92.3*76.3*60.5mn	92.3*76.3*60.5mm (L*W*H)				
	Weight	180g	180g				
	Carton	360*300*250mm	360*300*250mm				
NOTE	All parameters not specially mentioned are measured at nominal input, rated load and 25°C of ambient temperature.						
	2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.3 & 47uF parallel capacitor.						
	3. The power supply is considered as an independent unit, but the final equipment still need to re-confirm t the whole system complies with the EMC directives.						

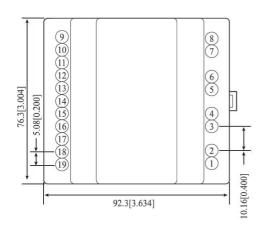


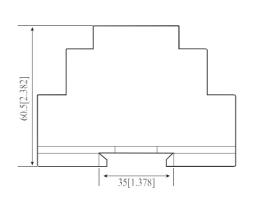
Derating Curve





Dimensions & Function

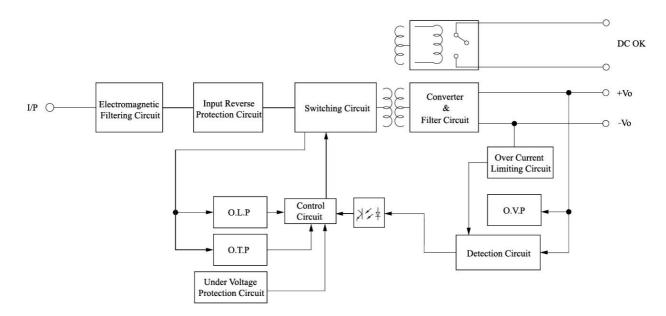




Pin	Function		
1	-Vin		
2	+Vin		
3	FG		
4-8	No Pin		
9-10	+Vo		
11-12	-Vo		
13-19	No Pin		

NOTE: Unit size: mm[inch] Unmarked tolerances: ±0.5mm

Product Schematic







Notes:

- 1. If the product works under the minimum required load, it cannot guarantee that the performance of the product complies with all the performance indicators in this manual;
- 2. The maximum capacitive load is tested under the input voltage range and full load condition;
- 3. Unless otherwise stated, all indexes in this manual are measured at Ta=25°C, humidity <75%RH, nominal input voltage and rated output load;
- 4. All index testing methods in this manual are based on the enterprise standards of the company;
- 5. Our company can provide product customization, specific needs can directly contact our technical staff;
- 6.AMCHARD reserves the right to make changes to the product at any time without notice.

DONGGUAN AMCHARD-POWER TECHNOLOGY CO., LTD.