

SA2M1000 Series , 1000W AC/DC Power Supply



Dimensions: 10.63 x 5.00 x 1.61"

- Universal AC input / Full range
- AC input active surge current limiting
- Built-in 5V/0.5A auxiliary power
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Output voltage can be trimmed between 40 ~ 110% of the rated output voltage
- Forced air cooling by built-in DC fan
- Active current sharing up to 4000W(3+1)
- DC OK Signal , remote ON-OFF control , remote sense function



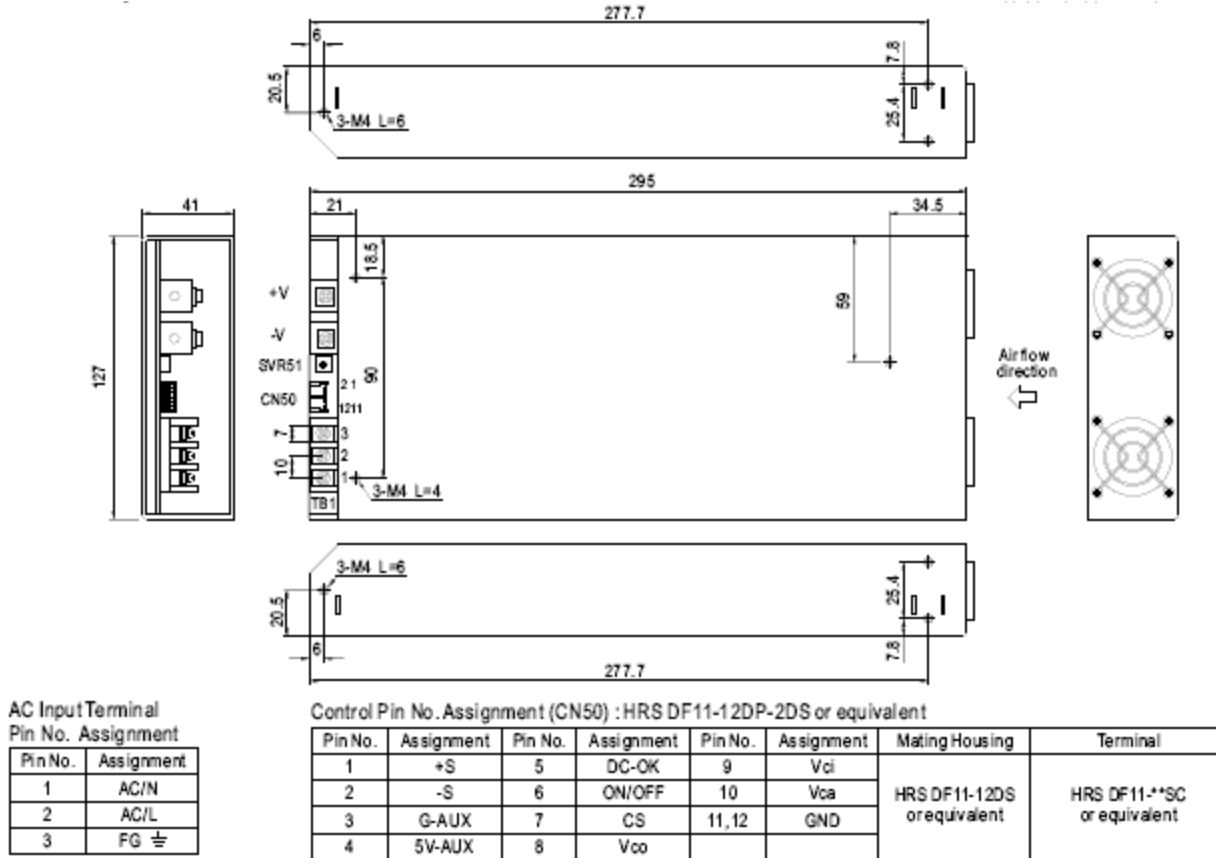
Description

With power factor correction and parallel function this series targets 1U low profile and high wattage applications. Featuring 10.67W/in³ extremely high power density SA2M- 1000 series can provide rated output wattage even at 100VAC input because of its high efficiency design. With built in trimming function the output voltage can be adjusted between 40% and 110% rated value by adding an external voltage source or resistors. Other standard features include remote sense, remote ON/OFF control, 5V/0.5A auxiliary output and DC OK signal. Using constant current limiting as the overload protection makes it a suitable unit for capacitive/inductive loads and if you need more power the built in active current sharing function allows up to 3 units to be connected in parallel.

Specifications

Input Voltage	90 ~ 264Vac 127 ~ 370Vdc	DC OK Signal	between on/off(pin6) & -S(pin2) on CN50
Input Frequency	47 ~ 63Hz	Output Voltage Trim	Open collector signal low when PSU turns on, Max. sink current :10mA
Input Current	12A/115Vac 6A/230Vac	Current Sharing	40 ~ 110% of rated output
Inrush Current	25A/115Vac 40A/230Vac	Working Temperature	Refer to function manual
Leakage Current		Working Humidity	-20°C to +60°C (Refer to output load derating curve)
Power Factor	0.95/230Vac 0.98/115Vac at full load	Storage Temperature,	20 ~ 90% RH non- condensing
Set Up, Rise Time	300ms, 50ms at full load	Humidity	-40°C to +85°C, 10 ~ 95% RH
Hold Tme	16ms/230Vac 16ms/115Vac, at full load	Temperature Coefficient	±0.02%/°C (0 ~ 50°C)
Over Load Protection	105 ~ 125% rated output power Constant current limiting, recovers automatically after fault condition is removed	Vibration	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes
Over Voltage Protection	Shut down o/p voltage, re-power on to recover	Withstand Voltage	I/P-O/P:3KVAC I/P- FG:1.5KVAC O/P- FG:0.5KVAC
Over Temperature Protection	85°C ±5°C (TSW2) Detect on heatsink of O/P diode; 75°C ±5°C (TSW1) Detect on heatsink of power transistor Shut down o/p voltage, recovers automatically after temperature goes down	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC
Auxiliary Power (AUX)	5V @ 0.5A (+5%, - 8%)	Safety Standards	UL60950-1, TUV EN60950-1 Approved
Remote ON/OFF Control	Power on : short between on/off(pin6) & -S(pin2) on CN50 Power off : open	EMC	Compliance to EN55022 (CISPR22); EN61000-3-2,-3; ENV50204;EN61000-4-2,3,4,5,6,8,11; EN55024; EN61000-6-2; EN61204-3 Heavy Industry Level, Criteria A
		MTBF	35K hrs min. MIL-HDBK-217F (25°C)

Mechanical Drawing



Model Selection Table

Part Number	Vout / Vout Range	Current	Power	Features
SA2M1000-12	12V	60	720W	low profile , high power density
SA2M1000-15	15V	50A	750W	low profile , high power density
SA2M1000-24	24V	40A	960W	low profile , high power density
SA2M1000-27	27V	37A	1000W	low profile , high power density
SA2M1000-48	48V	21A	1000W	low profile , high power density