CLP–1000 series

1000W single Output Switching Power Supply

Features:

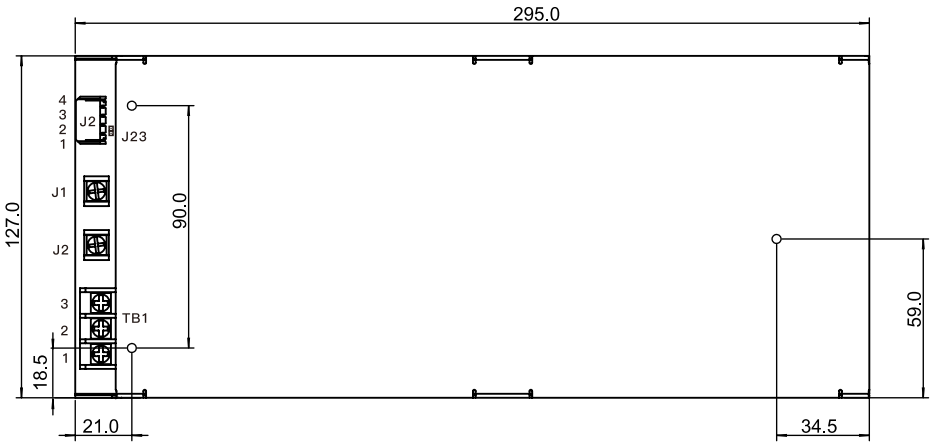
- Universal AC input / Full range
- Built–in active PFC function
- High efficiency up to 90%
- Forced air cooling by built–in DC fan
- Built–in remote control switch
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Dampproof function
- 3 years warranty

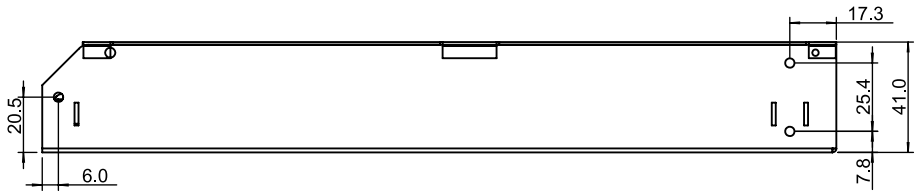
Specification

MODEL		CLP–1000–24	CLP–1000–48
INPUT	VOLTAGE RANGE	90~264VAC	
	FREQUENCY RANGE	47–63Hz	
	POWER FACTOR(Typ.)	0.95/230VAC	
	EFFICIENCY(Typ.)	88%	90%
	AC CURRENT(Typ.)	6A/115VAC	
	INRUSH CURRENT(Typ.)	40A/230VAC	
	LEAKAGE CURRENT	<3.5mA/240VAC	
OUTPUT	DC VOLTAGE	24V	48V
	RATED CURRENT	40A	20A
	CURRENT RANGE	0–40A	0–20A
	RATED POWER	960W	960W
	RIPPLE&NOISE (max.)	240mVp–p	240mVp–p
	VOLTAGE TOLERANCE	⩽±1%	⩽±1%
	LINE REGULATION	⩽±0.5%	⩽±0.5%
	LOAD REGULATION	⩽±0.5%	⩽±0.5%
	SETUP, RISE TIME	3000ms,50ms at full load	
	HOLD UP TIME(Typ.)	16ms/115VAC at full load	
PROTECTION	OVER LOAD	105%~140% rated output power	
		Protection type: Shutdown, recovers automatically after repower on	
	OVER VOLTAGE	30–36V	52.8–62.4V
		Protection type: Shutdown, resume after restart	
	OVER TEMPERATURE	Protection type: Shutdown, recovers automatically after temperature goes down	
FUNCTION	Auxiliary Power Supply	5V@0.5A	
	REMOTE CONTROL	Power start: short circuit, Voltage Close: Open Circuit, please refer to the functional manual	
ENVIRONIMENT	WORKING TEMP	–20~+60℃(Refer to "Derating curve")	
	WORKING HUMIDITY	20~90%RH non–condensing	
	STORAGE TEMP., HUMIDITY	–40~+85℃, 10~95%RH	
	TEMP. COEFFICIENT	±0.02%(0–50℃)	
	VIBRATION	5 ~ 9 Hz, amplitude 3.5 mm, 9 ~ 200 Hz, acceleration 10 m/s 2,3 axial direction, sweep frequency vibration 5 times (3.50 minutes) in each direction, power supply is not damaged	
Safety and electromagnetic compatibility	Safety standards	Refer to UL62368–1, CSA C22.2 No. 62368–1, TUV BS EN/EN62368–1, CCC GB4943.1, BSMI CNS14336–1,AS/NZS62368.1, IS13252(Part1)/IEC60950–1, EAC TP TC 004	
	Withstand voltage and isolation resistance	I/P–O/P: 3KVac : 100MΩ / 500Vdc / 25℃ / 70%RH	
		I/P–FG: 2KVac 100MΩ / 500Vdc / 25℃ / 70%RH	
		O/P–FG: 0.5KVac 100MΩ / 500Vdc / 25℃ / 70%RH	
	Electromagnetic compatibility emission	**Parameter**	**Standard** / **Test Level / Note**
		Conducted	BS EN/EN55032(CISPR32) / Class A
		Radiated	BS EN/EN55032(CISPR32) / Class A
		Harmonic Current	BS EN/EN61000–3–2 / ----
		Voltage Flicker	BS EN/EN61000–3–2 / ----
	Electromagnetic compatibility immunity	BS EN/EN55035 , BS EN/EN61000–6–2, CCC GB17625.1, GB/T9254, BSMI CNS13438	
		Parameter	**Standard** / **Test Level / Note**
		ESD	BS EN/EN61000–4–2 / Level 3, 8KV air ; Level 2, 4KV contact
		Radiated	BS EN/EN61000–4–3 / Level 3
		EFT/Burst	BS EN/EN61000–4–4 / Level 3
		Surge	BS EN/EN61000–4–5 / Level 4, 4KV/Line–Earth ;2KV/Line–Line
		Conducted	BS EN/EN61000–4–6 / Level 3
		Magnetic Field	BS EN/EN61000–4–8 / Level 4
		Voltage Dips and Interruptions	BS EN/EN61000–4–11 / >95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250 periods

OTHERS	MTBF	100000H
	DIMENSION	295*127*41(1U)mm
	PACKING	
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor. 3. Tolerance: includes set up tolerance, line regulation and load regulation. 4. Under the condition of low voltage input, please refer to the Derating curve. 5. The ambient temperature derating of 5℃/1000m is needed for operating altitude great than 2000m(6500ft). 6. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives..	

Mechanical specification

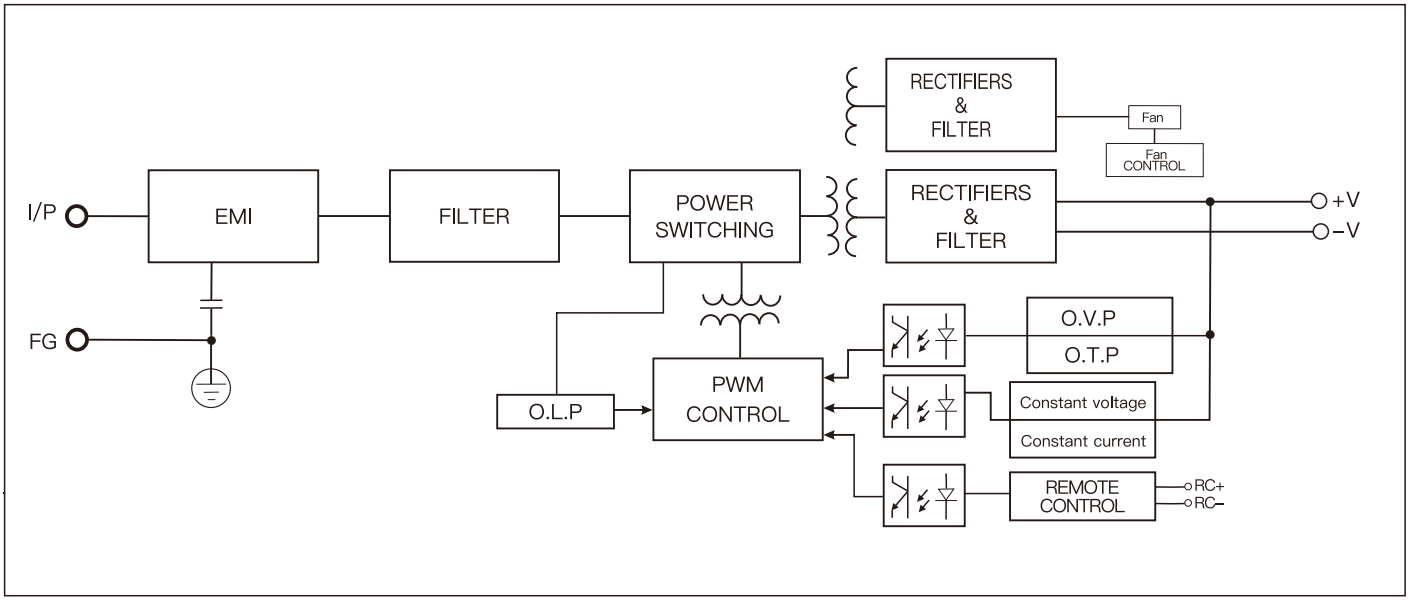




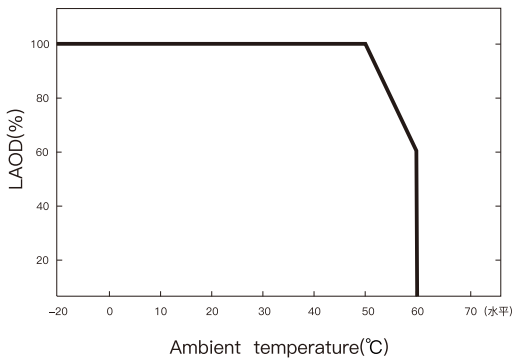
NOTE:
Unit: mm
TOL: ±1.0
J23 two pin plus short-circuit cap, short-circuit power output;
J9 and J23 two terminals can only choose one control power switch;

	Pin No.	Assignment
TB1	1	FG
	2	AC/L
	3	AC/N
J1		DC output -V
J2		DC output +V
CN1 CN2	1	ON-OFF
	2	5V-AUX
	3	G-AUX
	4	-S
J23	ON-OFF	

Block diagram



Derating curve



Static characteristics