Product Feature

1. Universal AC input range 90 ~264VAC
2. Built-in active PFC function，PFC>0.95
3. LED indicator for power on
4. Forced air cooling by built-in DC fan
5. Support output remote voltage compensation
6. and output on / off control（Optional）
7. Support 3+1 parallel redundancy, current sharing
8. 5V/2A auxiliary source output
9. -30~+70℃ working temperature
10. Short circuit/Over load/Over voltage/Over temperature
11. 3 years warranty

RoHS CE 3 years Warranty 1160g/Typ.

Describe

EN-1000-XX-F is an industrial control power supply with 1000W single channel constant-voltage output. The input voltage range is 90-264 VAC, and the output voltage is 12v, 15v, 24v,27v, 36v, 48v, 55v etc. Built in output on/off control and output remote voltage compensation function. 5V/2A auxiliary source output. It also supports output stream sharing backup. It can be applied to various industrial fields such as industrial control system, mechanical and electrical equipment, electronic instruments, industrial automation, etc. The ultra-high efficiency, compact profile design, good heat dissipation, guarantee the long-term stable work of this series of products.

Design meet EN61000-4-2,3,4,5,6,8,11\GB17625.1\EN61000-3-2,-3\EN55032\ GB4943\UL62368-1\IEC62368-1 standards

Application areas

- Industrial automation machinery
- Mechanical and electrical equipment
- Industrial control system
- Electronic instruments

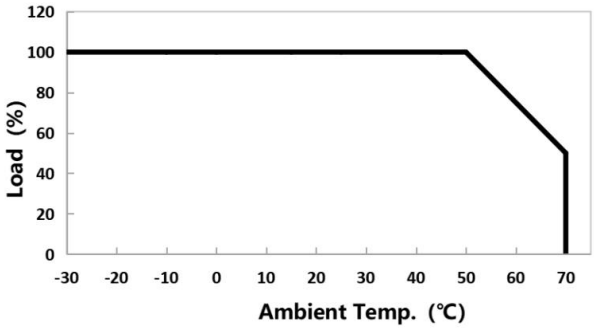
Electrical Specifications

Models		EN-1000-12-F	EN-1000-15-F	EN-1000-24-F	EN-1000-27-F
Input	Input Voltage range	90～264VAC			
	Rated Input voltage	100～240VAC			
	Max. Input Current	≤6A@115VAC			
		≤12A@115VAC			
	Efficiency（Typ.） 220VAC,Full load）	90%	90%	92%	92%
	Frequency range	47～63HZ			
	Leakage current	≤ 1 mA（Input: 240VAC/63Hz)			
	Inrush current	<40A/220VAC			
Output	DC Voltage	12V	15V	24V	27V

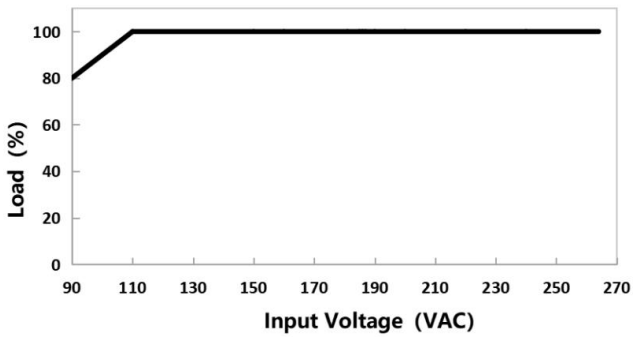
	Rated current	0-80A	0-64A	0-41.6A	0-37A
	Output Power	960W	960W	998W	999W
	Voltage adjust range	10.8～13.2V	13.5～16.5V	21.6～26.4V	24.3～29.7V
	Voltage setting range（10%loading）	12.0-12.2V	15-15.2V	24-24.3V	27.0-27.4V
	Ripple and noise (pk-pk)	200mV	200mV	200mV	200mV
	Turn on delay time	<3000ms/220VAC，100% load			
	Rise time	<100ms/220VAC，100% load			
	Hold up time	>10ms/220VAC，100% load			
	Line regulation	±0.5%			
	Load regulation	±2.0%			
	Output Voltage Accuracy	±2.0%			
	Temperature coefficient	±0.03%（0-50°C）			
	Aux	5V/0~2A			
EMC	EMS	ESD	IEC/EN61000-4-2: Contact ±4KV, Air ±8KV; Criteria B		
		Radiated Susceptibility	IEC/EN61000-4-3: 10V/m; Criteria B		
		EFT	IEC/EN61000-4-4: ±2KV; Criteria B		
		Surge	IEC/EN61000-4-5: line to line ±2KV/line to ground ±4KV ; Criteria B		
		Conducted Susceptibility	IEC/EN61000-4-6: 10Vr.m.s; Criteria B		
		Voltage Dips	IEC/EN61000-4-11: 0%,70%; Criteria B		
	Harmonic current	Design refer to:GB17625.1;EN61000-3-2 Class A			
	EMI	Design refer to::EN55032(CISPR32) Class B			
Safety	Safety specification	Design refer to:GB4943/UL62368-1			
	Withstand	I/P-O/P：3KVac/10mA； I/P-CASE：1.5KVac/10mA；			
	voltage	O/P-CASE：0.5KVac/10mA Each testing time:1min			
	Insulation impedance	500VDC：I/P-O/P：100M ohms；I/P-Case：100M ohms；O/P-Case：100M ohms			
Protections	Over voltage	≤16.5V	≤21V	≤33V	≤35V
	(10%loading)	Constant voltage，recovers automatically after fault condition removed			
	Over load	110～150% rated current，Hiccup mode, recovers automatically after fault condition is removed			
	Over temperature	Shut down output voltage； recovers automatically after temperature decreases			

	Short circuit	Hiccup mode, recovers automatically after fault condition is removed
Function	ON/OFF control	RC + / RC -; 0-0.6v or open circuit power on; 1-10v power off (optional)
	Remote voltage compensation	S + / S -; s + and S - are respectively connected to the positive and negative ends of the load,the maximum line voltage drop can be compensated to 0.2V (optional)
	Cooling method	Forced air cooling by built-in DC fan
Environment	Working Temp&humidity	-30~70℃：20%~95%RH non-condensing （Refer to Derating Curve）
	Storage Temp&humidity	-40~80℃；10%~95%RH non-condensing
	Vibration	10~500Hz,2G，10min/1 cycle,60min.each along X,Y, Z axes
	Impact	20G，last 11mS，3 impacts along X, y and Z axes
	Altitude	5000m, the ambient temperature derating of 0.5 ℃/100m for operating altitude higher than 2000m
Reliability	MTBF	Under 25℃：100000Hrs, Telcordia SR-332 issue3 Method
Other requirements	Size	230*127*40.5mm（L*W*H）
	Packing	1.16Kg/PCS：9 PCS/CTN
	Cooling method	☐free air convection ☑with fan
	More options	☑ PCB double side conformal coating ☑ Terminal with cover ☐ Other
Notes	*In order to extend the service life, it is recommended to leave 30% more allowance when loading. For example, if the equipment needs 100W power, please choose the power supply over 130W. *Ripple&noise are measured at 20MHz of bandwidth by using a 12” twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. *All parameters NOT specially mentioned are measured at 230VAC input,rated load and 25℃ of ambient temperature. *The power supply is considered a component which will be installed into a final equipment.The final equipment must be re-confirmed that it still meets EMC directives.	

Derating Curve

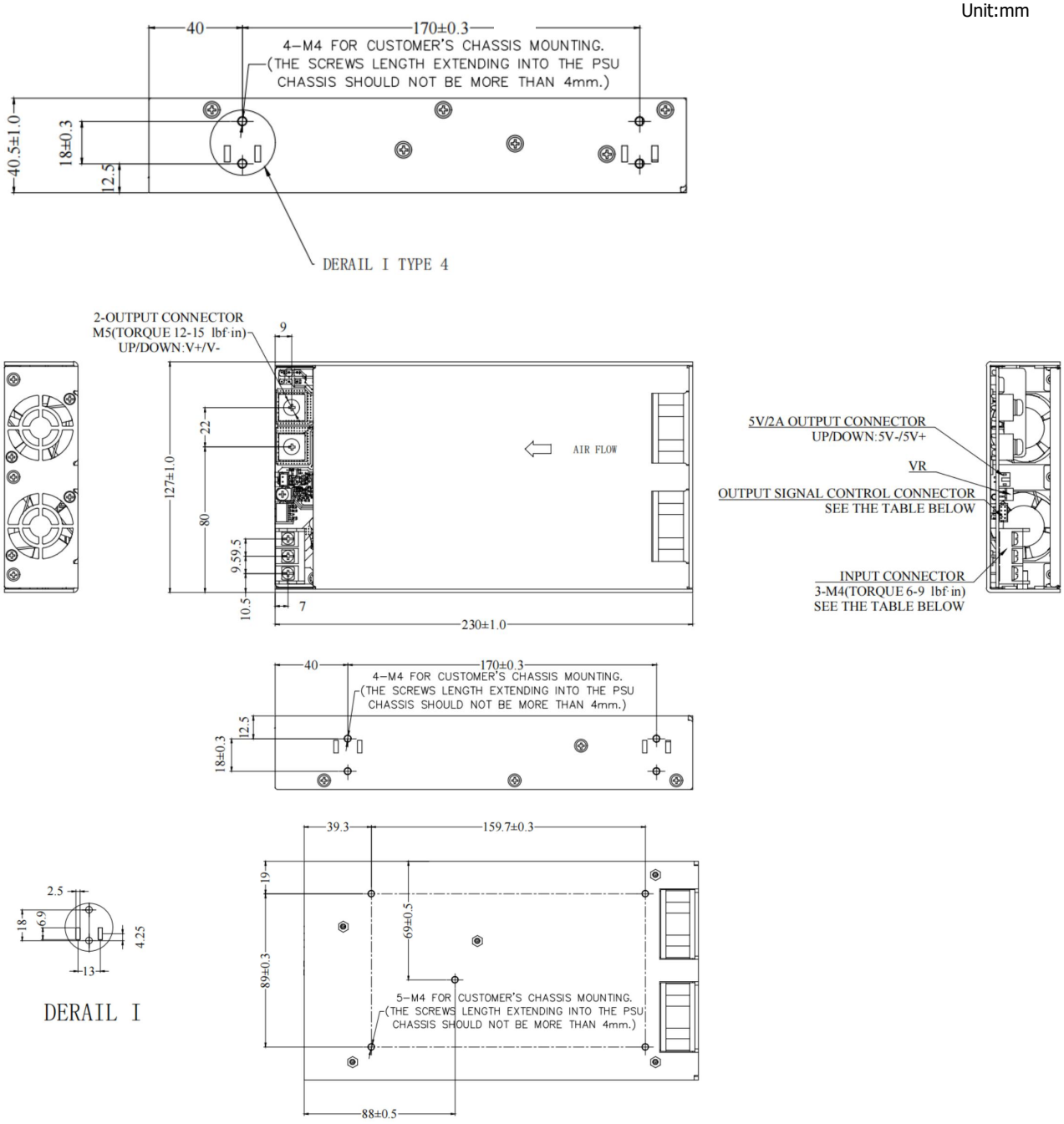


Output Derating VS Input Voltage



Mechanical Specification

Unit:mm

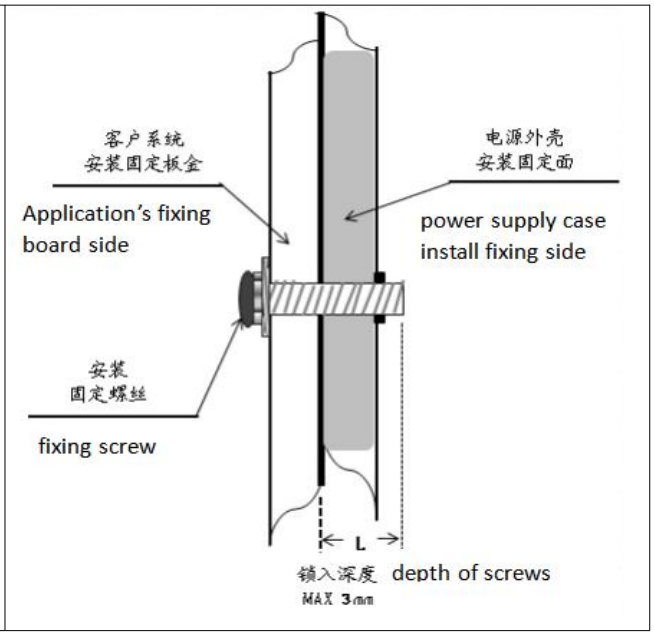


Input terminals		Functional terminals		Output terminal	
PIN Number	**PIN Function**	**PIN Number**	**PIN Function**	**PIN Number**	**PIN Function**
⏚	EARTH	SHARE	Share control	V+	DC output +
N	AC NETURAL	PG	Power Good	V-	DC output -
L	AC LINE	ON/OF	External ON/OFF pin	V-	DC output -
		V-	DC Vo-	5V	5VDC output+
		V-	DC Vo-		
		S+	Remote sense function signal+		
		S-	Remote sense function signal -		

Installation

Warning

- ✓ Use mounting screws by M4*6mm,
- ✓ Max depth of screws into housing is 3mm
- ✓ Right picture with more details.



Instructions

1、please follow the installation instructions when use the power supply.

2、Before power on test run after installation, please check and proofread the wiring on each terminal, make sure that the input and output, AC and DC, positive and negative, voltage and current values are correct, prevent the occurrence of wrong connection, and avoid damaging the power supply and user equipment。

3、Before power on, please use a multi meter to measure whether the live wire, zero wire and ground wire are short circuited, and whether the output terminal is short circuited; it is better to start without load when power on.

4、Do not exceed the nominal value of the power supply when using, so as not to affect the reliability of the product. If you need to change the output parameters of the power supply, please consult our technical department before using.

5、In order to ensure the safety of use and reduce interference, please ensure that the grounding terminal is reliably grounded（ground wire please thicker than AWG18#）。

6、If the power supply fails, please do not repair it without permission.

Transport、storage：

1、Transport:

The package is suitable for shipping by automobiles, ships, airs, trains, etc. During transportation, it shall be rain proof,loaded and unloaded gently。

2、Storage：

When the product is not in use, it shall be placed in the packing box. The storage environment temperature and relative humidity shall meet the requirements of the product. No corrosive gas or product in the warehouse, and no strong mechanical vibration, impact and strong magnetic field. The packing box shall be padded at least 20cm above the ground, and not be soaked. If the storage time is too long (more than 1 year), it shall be rechecked by professionals before use.