EN-800-XX-F Series

## **Product Feature**

- 1. Full range AC input voltage: 90-264VAC
- 2. Built in power factor correction circuit, with a power factor of up to 0.95
- 3. LED power indicator light
- 4. Built in DC fan for forced cooling, with fan temperature control design
- 5. Support remote voltage compensation and ON/OFF control for output
- 6. -30~+70 °C working temperature (please refer to the derating curve for details)
- 7. Short circuit/overload/over voltage/over temperature protection function
- 8. 3-year warranty

### Describe

EN-800-XX-F series is an industrial control power supply with a single 800W constant voltage output. The voltage input range is 90~264VAC, and the output voltages include 12V, 15V, 24V, 27V, 36V, 42V, 48V, etc. It also has built-in output ON/OFF control, which can be applied to various industrial fields such as industrial control systems, mechanical and electrical equipment, electronic instruments and meters, industrial automation, household appliances, etc. Ultra high efficiency and good heat dissipation ensure that this series of products can work stably for a long time.

Design meet EN55035\EN61000-4-2,3,4,5,6,8,11\GB17625.1\EN61000-3-2,-3\ EN55032\GB4943\IEC62368-1.



## **Application areas**

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

	Model	EN-800-12-F	EN-800-15-F	EN-800-24-F	EN-800-27-F	EN-800-36-F	EN-800-42-F	EN-800-48-F	
Input	Voltage range	90~264VAC							
	Rated voltage range	100~240Vac							
	AC input	≤11A							
	Efficiency	90	9%	91%		91.50%			
	Frequency range	47~63HZ							
	Leakage current	≤1mA (Input 240Vac; Frequency 63Hz)							
	Inrush current	50A@230Vac							
	DC voltage	12V	15V	24V	27V	36V	42V	48V	
	Rated current	0-63A	0-51A	0-33A	0-29.3A	0-22A	0-18.8A	0-16.6A	
	Power	756W	765W	792W	791.1W	792W	789.6W	796.8W	
	Voltage adjust range	10.8~13.2V	13.5~16.5V	21.6~26.4V	25~29V	32.4~39.6V	39.5~44V	43.2~52.8V	
Output	Factory voltage setting range (10% load)	12.0-12.2V	15.0-15.2V	24-24.3V	27-27.3V	36.0-36.4V	42.0-42.4V	48.0-48.4V	
	Ripple and noise	150mVpk-pk	150mVpk-pk	240mVpk-pk	240mVpk-pk	300mVpk-pk	300mVpk-pk	300mVpk-pk	
	Set up,rise time	2000ms, 50ms/220VAC load 100%							
	Hold up time	16ms/220VAC load 100%							
	Line regulation	±0.5%							

## **Electrical Specifications**

EN-800-XX-F

## **MCHARD** SWITCHING POWER SUPPLY—PFC SERIS

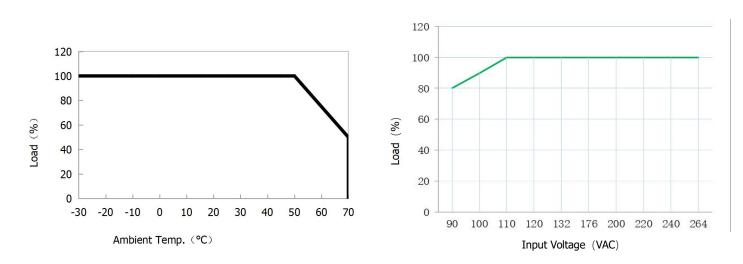
AM	CHARD	SWIT	CHING PO	OWER SU	PPLY—PF	C SERIS		Series	
	Load regulation	±2.0% ±1.0%							
	Output Voltage accuracy	±2.0% ±1.0%							
	Temperature coefficient			±(	0.03% (0-50°C	:)			
	Electromagnetic tolerance	Reference:EN61000-4-2,3,4,5,6,8,119							
EMC	Harmonic current	Reference:GB17625.1;EN61000-3-2 A 类							
	EMC	Reference:EN55032(CISPR32) Class B							
	Safety	Reference:GB4943/UL62368-1							
Safety	Withstand voltage	I/P-O/P:3KVac; I/P-CASE:1.8KVac; O/P-CASE:0.5KVac Each testing time:1min							
	Insulation	500VDC; I/P-O/P: 10M ohms; I/P-Case:10M ohms; O/P-Case:10M ohms							
	Over voltage	13.8-16.2V	17-23V	27.5-32.5V	30-35V	41.5-49V	45-50V	57-68V	
	(10%loading)	Constant voltage, after the fault is removed, the power supply automatically returns to normal							
	Over load	105-150% hiccup mode, automatically resumes normal operation after eliminating overload							
Protections	Over temperature	When the power supply is over temperature protected, the power supply shuts off the output; After the temperature drops, the output automatically returns to normal							
	Short circuit	Power protection after short circuit at the output end, automatically restoring output after eliminating the short circuit							
Function	ON/OFF control		RC+/RC-; Short circuit power on; Open circuit power shutdown (optional)						
	Cooling method	Comes with a fan, forced air cooling							

	Cooling method	Comes with a fan, forced air cooling					
Environment	Working	-30~70°C 20%~95%RH No condensation (please refer to the derating curve for details)					
	Storage	-40°C~80°C; 10%~95%RH No condensation					
	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 (Above 2000m, for every 100m increase, the ambient temperature decreases by 0.5 $^{\circ}\mathrm{C})$					
Reliability	MTBF	25°C:100000Hrs, Telcordia SR-332 issue3 Method					
	Dimension	230 * 127 * 40.5mm (L*W*H)					
Other	Weight	0.97KG/PCS 14PCS/15.7KG/cartons					
requirements	Cooling method	□ Free air convection 🗹 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°C 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. All our EMC tests are carried out by mounting samples on metal plates.						

# AMCHARD SWITCHING POWER SUPPLY-PFC SERIS

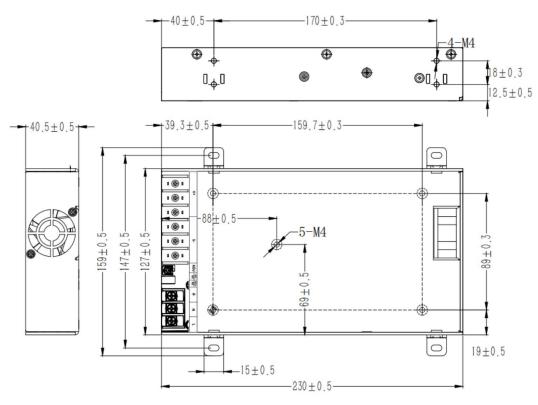
## **Derating Curve**

**Output Derating VS Input Voltage** 



## **Mechanical Specification**

Unit:mm



#### Input and Output Terminals Description

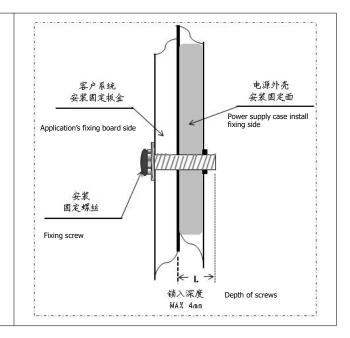
Pin number	Pin function	Pin number	Pin function
(L)	EARTH	V+	DC Vo+
N	AC NETURAL	V-	DC Vo-
L	AC LINE	NC	
		NC	
		RC+	Control signal+
		RC-	Control signal-

## Installation

#### Warning

Use mounting screws by M3\*6mm,Max depth of screws into housing is 4mm

Right picture with more details.



## Instructions

 $1_{\scriptscriptstyle \rm N}$  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.

## DONGGUAN AMCHARD-POWER TECHNOLOGY CO., LTD.

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