

Product Feature

- 1. Universal AC input range 90 ~264VAC
- 2. DC output voltage adjustable
- 3. LED indicator for power on
- 4. Cooling by free air convection, -30~+70°C working temperature
- 5. Protection: Short circuit/Over load/Over voltage/Over temperature
- 6. Can be installed on DIN rail TS-35/7.5 or 15
- 7. 3 years warranty

Describe

EN-150-XX-F series is an economical DIN-rail power supply with 120W single channel output. It can be installed on DIN rain TS-35/7.5 or TS-35/15. The input voltage range is 90-264 VAC, and the output voltage is 12V, 24V,36V,48V etc. 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 and good heat dissipation guarantee the long-term stable work of this series of products.

Design meetEN61000-4-2,3,4,5,6,8,11\GB17625.1\EN61000-3-2,-3\EN55032\ GB4943\UL62368-1\IEC62368-1 standards







3 years



Application areas

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

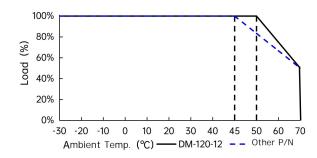
Electrical Specifications

	Models	DM-120-12-F	DM-120-24-F	DM-120-48-F	DM-120-55-F	
Input	Voltage range	90∼264VAC				
	Rated voltage	100∼240VAC				
	Current	<3A@100VAC				
	Efficiency (Typ)	85%	87%	88%	89%	
	Frequency range	47∼63Hz				
	Leakage current	<1mA@240VAC				
	Inrush current	<40A@220VAC				
Output	DC Voltage	12V	24V	48V	55V	
	Rated current	0-10A	0-5A	0-2.5A	0-2.2A	
	Power	120W	120W	120W	121W	
	Voltage adjust range	10.8~13.2V	21.6~26.5V	44∼53V	48-57V	
	Voltage setting range(10%loading)	12.0-12.2V	24-24.3V	48.0-48.4V	52.0-56.0V	
	Ripple and noise	120mVpk-pk	150mVpk-pk	240mVpk-pk	200mVpk-pk	
	Set up,rise time time	1500ms,50ms/220VAC,100% loading				
	Hold up time	10ms/110VAC,16ms/220VA 100%loading				
	Line regulation	±0.5%				
	Load regulation	±1%				
	Output Voltage Accuracy	±2%				
	temperature coefficient	±0.03% (0-50°C)				

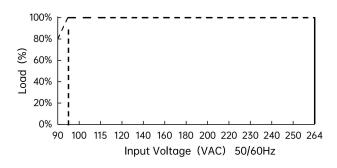
SWITCHING POWER SUPPLY—PFC SERIS

EMC	EMS	Design refer to:EN61000-4-2,3,4,5,6,8,11				
	Harmonic current	Design refer to:GB17625.1;EN61000-3-2 A				
	EMC	Design refer to:EN55032(CISPR32) Class B				
	Safety specification	Design refer to:GB4943/UL62368-1				
Safety	Withstand voltage	I/P-O/P: 3KVac/10mA: I/P-CASE: 1.5KVac/10mA; O/P-CASE: 0.5KVac/10mA Each testing time: 1min				
	Insulation impedance	500VDC: I/P-O/P: 10M ohms: I/P-Case: 10M ohms: O/P-Case: 10M ohms				
	Over voltage	13.8-17V 27.5-32.5V 56-65V 63-72V				
	(10%loading)	Constant voltage, recovers automatically after fault condition removed				
Protection	Over load	$105{\sim}130\%$ rated current, constant current mode; when the output voltage $<$ 50% Vo, 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				
	Working	-30~70°C; 20%~95%RH non-condensing (Refer to Derating Curve)				
	Temp&humidity	The state of the s				
Environment	Storage Temp&humidity	-40~80°C; 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	5000mtrs, the ambient temperature derating of 0.6 °C/100m for operating altitude higher than 2000m				
Reliability	MTBF	Under 25°C: 100000Hrs, Telcordia SR-332 issue3 Method				
	Size	125*113*42m (L*H*W)				
Other	Packing	0.5kg/pcs 20PCS/11Kg/CTN				
requirements	Cooling method	☑free air convection □with fan				
	More options	□ Terminal with cover □ Other				
	*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.					
Notes	*All parameters NOT specially mentioned are measured at 230VAC input,rated load and 25°C of ambient temperature					
	*the auxiliary heat dissipation of aluminum plate with an area of 400 * 400 * 3mm must be used when full load working.					
	*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.					

Load and Temperature curve



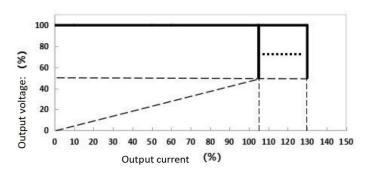
Output Derating VS Input Voltage



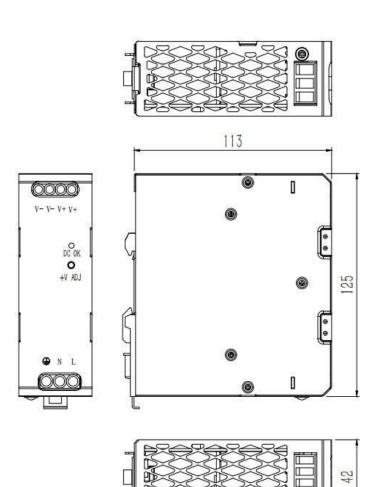
Unit:mm



Output voltage and Loading curve



Mechanical Specification



Pin No. Pin function Pin No. Pin function (<u>I</u>) **EARTH** V+ +Vo Ν AC NETURAL +Vo ٧+ L AC LINE -Vo -Vo

Input / output terminal pin definition

Instructions:

- $1_{\scriptscriptstyle \searrow}$ please follow the installation instructions when use the power supply $_{\scriptscriptstyle \odot}$
- 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 multimeter 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. Please contact our customer service department as soon as possible, customer service line: 86-519-85215050.

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.