Product Feature

1. Standard ultra-thin product, height 30mm
2. Built in power factor correction circuit, with a power factor of up to 0.95
3. Working temperature: -25~+70 ℃
4. Short circuit/over load/over voltage/over temperature protection function
5. 3-year warranty

Describe

EN-75-XX series is a 75W output industrial control power supply with a voltage input range of 90~264VAC and output voltages of 12V, 24V, 36V, 48V, etc. It is suitable for various industrial fields such as industrial control systems, mechanical and electrical equipment, electronic instruments and meters, industrial automation, household appliances, etc. This series of products is designed with low power consumption, which can easily meet the requirements of international energy conservation and environmental protection for terminal equipment systems. The ultra-high efficiency, compact shell design, 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.

RoHS CE 3 years Warranty 350g/Typ.

Application areas

- Industrial automation machinery
- Mechanical and electrical equipment
- Industrial control system
- Electronic instruments
- Household appliances, etc

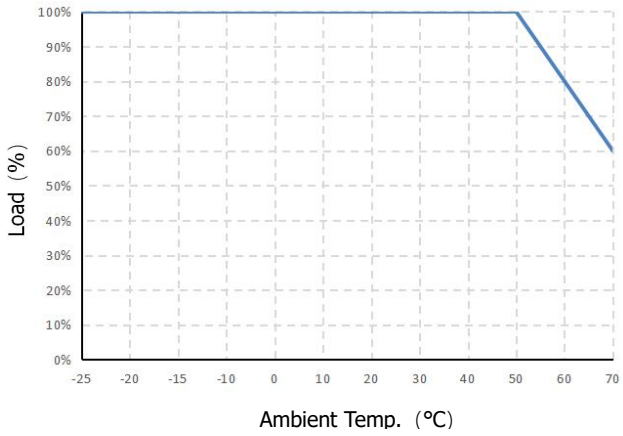
Electrical Specifications

Model		EN-75-12	EN-75-15	EN-75-24	EN-75-36	EN-75-48
Input	Voltage range	90～264VAC				
	AC input	230VAC/0.5A、115VAC/0.95A				
	Efficiency	≥84%	≥85%	≥86%	≥87%	≥87%
	Frequency range	47～63HZ				
	Leakage current	<2mA/240VAC				
	Inrush current	35A（Based on 230VAC, phase angle of 90 °,and cold start）				
Output	DC voltage	12V	15V	24V	36V	48V
	Rated current	6.3A	5A	3.2A	2.1A	1.6A
	Power	75.6W	75W	76.8W	75.6W	76.8W
	Voltage adjust range	10.8~13.2V	13.5~16.5V	21.6~26.4V	32.4~39V	43.2~52V
	Ripple and noise	≤120mVp-p	≤120mVp-p	≤120mVp-p	≤120mVp-p	≤200mVp-p
	Set up,rise time	2000ms，60ms/230VAC load 100%				
	Hold up time	≥16ms/230VAC load 100%				
	Line regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Output Voltage accuracy	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%

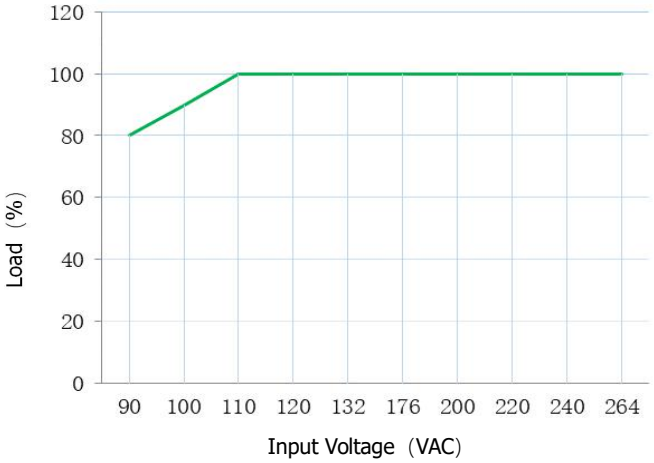
	Temperature coefficient	0.03%/°C （Environmental temperature=0 ° C~Ta maximum value）				
EMI	Conductive	Reference : EN 55032 Class B				
	Radiation	Reference : EN 55032 Class B				
	Harmonic current	Reference : EN/IEC 61000-3-2 Class D				
	Voltage fluctuations and flicker	Reference: EN/IEC 61000-3-3				
EMS	Radiation immunity	Reference: EN/IEC 61000-4-3 80MHz~1000MHz 10V/m Criterion A				
	Conductive immunity	Reference: EN/IEC 61000-4-6 0.15MHz~80MHz 10VRms Criterion A				
	Electricity	Reference: EN/IEC 61000-4-2 Contact discharge ± 4KV air discharge ± 6KV Criterion A				
	Fast pulse group	Reference: EN/IEC 61000-4-4 ±2KV 5KHz/100KHz Criterion B				
	Lightning surge	Reference: EN/IEC 61000-4-5 Line to line ± 2KV Line to ground ± 4KV				
		Criterion B				
	Voltage drop, interruption	Reference:EN/IEC 61000-4-11				
		Falling to 70% UT for 500mS Criterion C, falling to 0% UT for 10mS Criterion B				
		Drop to 0% UT for 20mS Criterion B Drop to 0% UT for 5000mS Criterion C				
Safety	Safety	Reference:GB4943/UL62368-1				
	Withstand voltage	I/P-O/P:4KVAC/10mA; I/P-CASE:2KVAC/10mA;O/P-CASE:0.5KVAC/10mA Each test lasts for 1 minute				
	Ground Impedance	≤100mΩ 8V/40A Each test lasts for 1 minute				
	Insulation	I/P-O/P:100M ohms; I/P-Case:100M ohms; O/P-Case:100M ohms				
Protection	Over voltage protection	13.2-17.4V	16.5-20.25V	26.4-32.4V	39.6-48.6V	52.8-64.8V
		Hiccup mode, self recovering				
	Overload protection	105-150% rated constant current limit, can automatically resume normal operation after eliminating overload				
	Over temperature protection	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 protection	Constant current limit, can automatically restore normal operation after eliminating short circuit				
Environment	Working	-25~70°C 20%~95%RH non-condensing (Refer to Derating Curve)				
	Storage	-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				
Reliability	MTBF	Under 25°C:100000Hrs, MIL-217 Method				
Other requirements	Size	159*97*30mm（L*W*H）				
	Weight	0.35Kg/PCS，40 PCS/CTN				
	Cooling method	☑ Free air convection □ Fan				
	More options	□ PCB double side conformal coating ☑ Terminal with cover				
		□ low temp start （ -40°C） □ 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.All our EMC tests are carried out by mounting samples on metal plates.

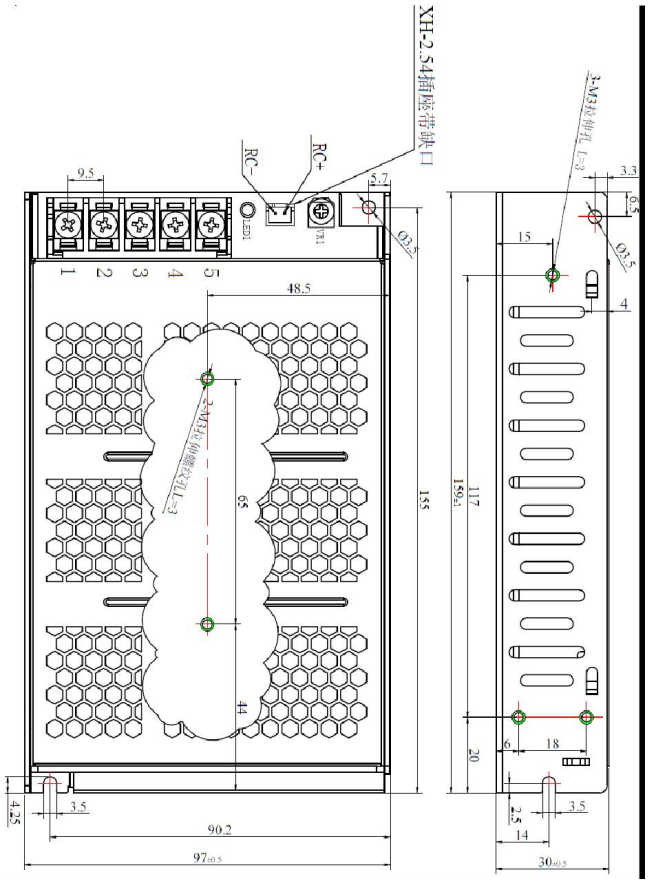
Derating Curve



Output Derating VS Input Voltage



Mechanical Specification



Terminal Pin No. Assignment

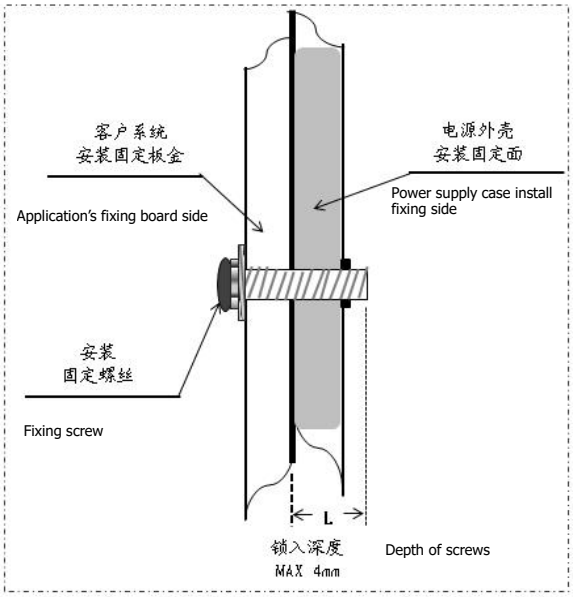
Pin	Function
1	AC/L
2	AC/N
3	⏚
4	DC output -V
5	DC output +V

Installation

Unit:mm

Warning

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