

Product Feature

- 1. Full range AC voltage input
- 2. Small size,ultra-thin type,thickness 30mm
- 3. No-load power consumption < 0.2W
- 4. Protection type:Output short circuit/over load/over voltage
- 5. Natural air cooling
- Complies with IEC/BS EN/EN60335-1(PD3) and IEC/BS EN/EN61558-1,2-16 6.
- 7. It can be operated at an altitude of 5000m
- 8. High efficiency, long life and high reliability
- 9. Power start LED indication
- 10. Overvoltage level III
- 100% full load aging test











Describe

The EN-75 series is a full-range 85V-264V AC input, with 5V, 12V, 15V, 24V, 36V and 48V outputs available throughout the series. With 30mm ultra-thin design, single output closed switching power supply.

In addition to the efficiency of more than 87%, the design of the metal mesh housing enhances the heat dissipation capacity, so that the EN-75 series products can operate in the temperature range of-30°C++70°C without a fan. Provides ultra-low no-load power consumption (less than 0.2W), making it easy for the end system to meet international energy requirements. The EN-75 is fully protected and complies with international safety regulations IEC/BSEN/EN60335-1(PD3)and IEC/BSEN/EN 61558-1,2-16,UL62368-1 and GB4943.

The EN-75 series provides a cost-effective solution for a wide range of industrial applications.

Application areas

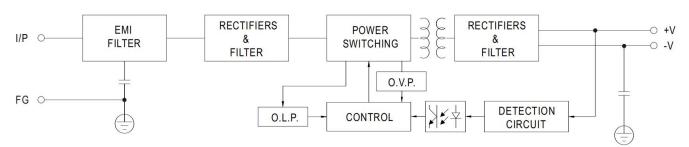
- Industrial automation machinery
- Mechanical and electrical equipment
- Industrial control system
- Electronic instruments and equipment

Electrical Specifications

Model number	EN-75-05	EN-75-12	EN-75-15	EN-75-24	EN-75-36	EN-75-48
DC output	5V	12V	15V	24V	36V	48V
Current	14A	6A	5A	3.2A	2.1A	1.6A
Current range	0-14A	0-6A	0-5A	0-3.2A	0-2.1A	0-1.6A
Rated power	70W	72W	75W	76.8W	75.6W	76.8W
Ripple and Noise(Max)(20MHZ)	80mVp-p	120mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p
Voltage adjustment range	4.5-5.5V	10.2-13.8V	13.5-18V	21.6-28.8V	32.4-39.6V	43.2-52.8V
Voltage accuracy	±2%	±1%	±1%	±1%	±1%	士1%
Linear adjustment rate	±1%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
Load adjustment rate	±1%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
Start/rise time	1000ms,30ms/240VAC 2000ms,30ms/100VAC at full load					
Holding time(Typ.)	30ms/230VAC 12ms/115VAC at full load					
Input voltage range	AC 85V-264V DC 120V-373V					
Frequency range	47-63Hz					
Efficiency	80%	85%	85%	86%	86%	88%
Input current	1.4A typ.@115V					

Surge current (cold start)	65A typ.@230V						
Leakage current	<0.75mA @240V						
Overload protection	110-150% of rated output power						
	Protected mode:hiccup mode.the converter should re-work after fault disappear						
Overvoltage protection	5.75-6.9V	13.8-16.2V	18.7-21.7V	28.8-33.6V	41.4-48.6V	55.2-64.8V	
	Protected mode:hiccup mode.the converter should re-work after fault disappear						
Short circuit protection	Output terminal short circuit						
	Protected mode:hiccup mode.the converter should re-work after fault disappear						
Operating temperature/humidity	-30°C-+70°C/20-90%RH,No condensation (see "Derating curve")						
Storage temperature/humidity	-40°C-+85°C/10-95%RH,No condensation						
Temperature coefficient	±0.03%/°C(0-50°C)						
Overvoltage level	III;According to EN61558, EN50178, EN60664-1,EN62477-1;It can reach altitudes of up to 2000 meters						
Safety specification	Compliance with UL62368-1,TUVBS EN/EN62368-1,BS EN/EN61558-1/-2-16,CCC GB4943.1,BSMI						
- Carety openinguistr	CNS14336-1,EAC TPTC004						
Withstand voltage	I/P-O/P:4KVAC I/P-FG:2KVAC O/P-FG:1.25KVAC						
Insulation impedance	I/P-O/P,I/P-FG,O/P-FG:100M Ohm/500VDC						
Electromagnetic compatibility	Compliance with EN55032,EN55014,EN61000-3-2,GB/T9254,BSMI CNS13438,FCC Class B						
dimension	Reference structure diagram						
weight	250g						
Heat dissipation mode	Natural convection						
MTBF	>60Khours MIL-HDBK-217F(25°C)						

Block Diagram



70 (HORIZONTAL)

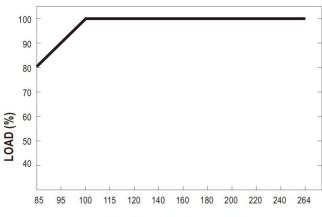
Derating Curve

-30 -25 0

230VAC 100 75 100VAC Input only 60 **LOAD** (%) 40 20

AMBIENT TEMPERATURE (°C)

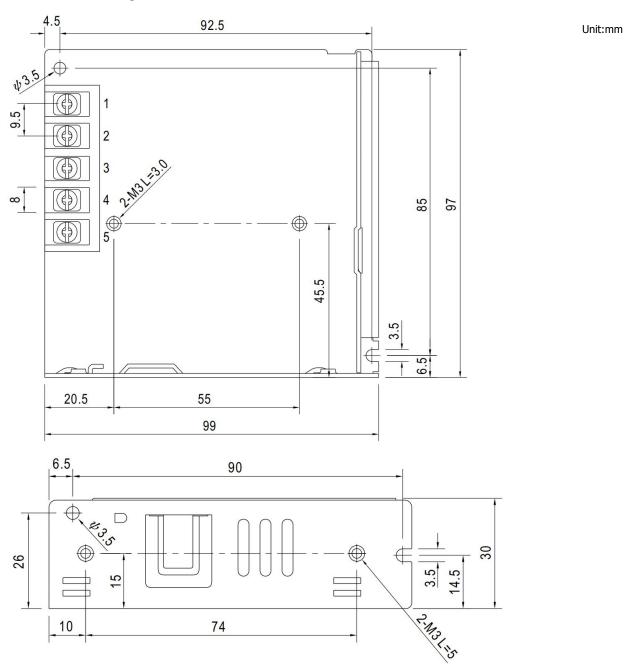
Output Derating VS Input Voltage



INPUT VOLTAGE (VAC) 60Hz

AMCHARD Ultra-thin industrial standard power supply

Mechanical Specification



Terminal Pin No. Assignment

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

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