

AHP-25 Series, 25Watt

FEATURES:

- ✓ Universal AC input range
- ✓ Low ripple and nosize
- ✓ Short circuit, and over load protections
- ✓ Board in-line type installation
- ✓ 100% burn-in test
- ✓ 3 year warranty



Model	Input voltage (Vac)	Output voltage (Vdc)	Output current (A)	Efficiency Typ.
AHP25-3	90-264	3.3	5	73%
AHP25-5		5	5	79%
AHP25-9		9	2.7	82%
AHP25-12		12	2.05	84%
AHP25-15		15	1.66	85%
AHP25-24		24	1.05	87%

Note: Other input and output models may available on request.

ELECTRICAL

Input						
Parameters	Test Conditions / Comment	Min.	Typ.	Max.	Units	
Input voltage	---	85	--	264	Vac	
		70	--	370	Vdc	
Input frequency	---	47	--	440	Hz	
Input current	Vin=115Vac	--	410	--	mA	
	Vin=230Vac	--	260	--	mA	
Inrush current	Cold start, Vin=115Vac	--	20	--	A	
	Cold start, Vin=230Vac	--	40	--	A	
Leakage current	265Vac/50Hz	--	--	0.5	mA	
Recommend external fuse	T3.15A/250V					

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Output

Parameters	Test Conditions / Comment	Min.	Typ.	Max.	Units
Output voltage accuracy	--	--	±2	--	%
Line regulation	--	--	±1	--	%
Load regulation	--	--	±2	--	%
Set-up rise time	Full load, Vin =115Vac	--	50	--	ms
	Full load, Vin =230Vac	--	20	--	ms
Hold-up time	Full load, Vin =115Vac	--	15	--	ms
	Full load, Vin =230Vac	--	40	--	ms
Ripple	Vout=3.3V, 5V, 9V, 12V, 24V	--	50	--	mV
	Vout=15V	--	100	--	mV

Protection

Over load	Hiccup mode, it will auto-recovery after fault condition is removed
Short circuit	Hiccup mode, it will auto-recovery after fault condition is removed

Environment

Storage	Humidity: 10% RH to 95% RH	-40	--	+85	°C
Ambient operating temperature	Startup at rated voltage (refer to derating curve)	-40	--	+70	°C
Operating relative humidity	Non condensing	--	--	85	%
MTBF	Full load, 230Vac input, MIL-HDBK-217F(25°C)	168	--	--	kHrs
Temperature coefficient	0.03%/ (0~ 50°C)				
Vibration coefficient	10~500Hz, 2G10min./1cycle, 60min.each along X, Y, Z axes				
Dimension(LxWxH)	62 x 45 x 22.5mm				
Weight	80g/pcs, 112pcs/carton, 9.8kg/carton				
Package	Carton size: 360x300x250mm				

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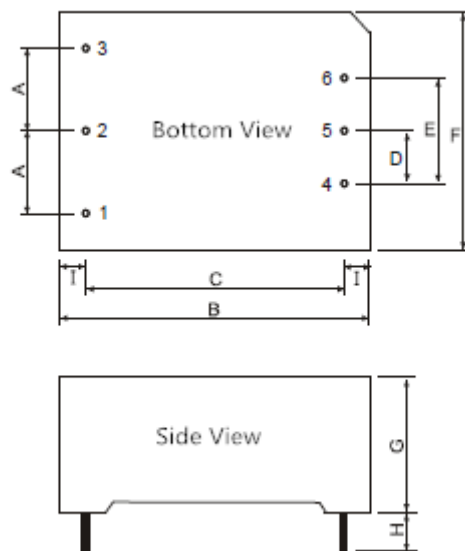
Safety

Safety standards	Design refer to EN60950, UL60950, UL1012
Isolation voltage	I/P-O/P:3000VAC, I/P-FG: 1500VAC, O/P-FG: 500VAC
Insulation Resistance	I/P-O/P>100M Ohms/500VDC 25°C 70% RH
EMI / EMC	EN55011, EN55022 (CISPR22) (refer to below application circuit)
ESD	IEC/EN 61000-4-2 level 4 8KV/15KV (refer to below application circuit)
RF Immunity	IEC/EN 61000-4-3 (refer to below application circuit)
Electrical Fast Transient	IEC/EN 61000-4-4 level 4 4KV (refer to below application circuit)
Surge	IEC/EN 61000-4-5 level 4 2KV

Notes: 1. Unless otherwise specified, all the above parameters are measured at ambient temperature of 25°C and input nominal voltage 230Vac;

2. Ripple & Noise are measured at 20MHZ of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µF & 47µF parallel capacitor.

MECHANICAL



CONNECTION

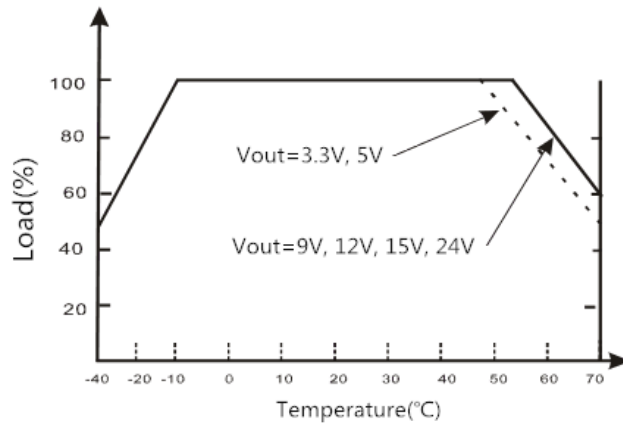
PIN #	SINGLE
1	FG
2	AC(N)
3	AC(L)
4	-Vo
5	No Pin
6	+Vo

A	B	C	D	E	F	G	I
17.5	62	54	10	20	45	22.5	>=4

Note: Unit is mm.

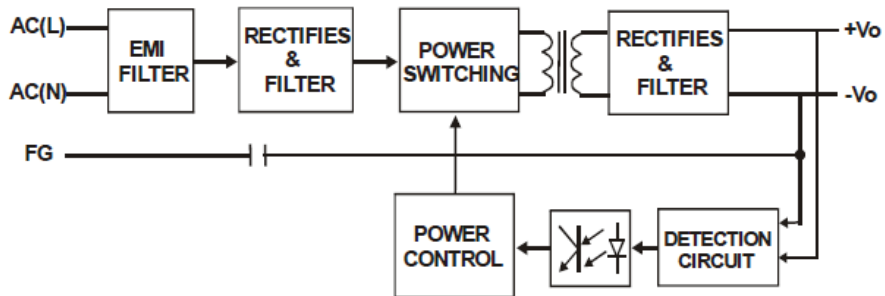
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DERATING CURVE

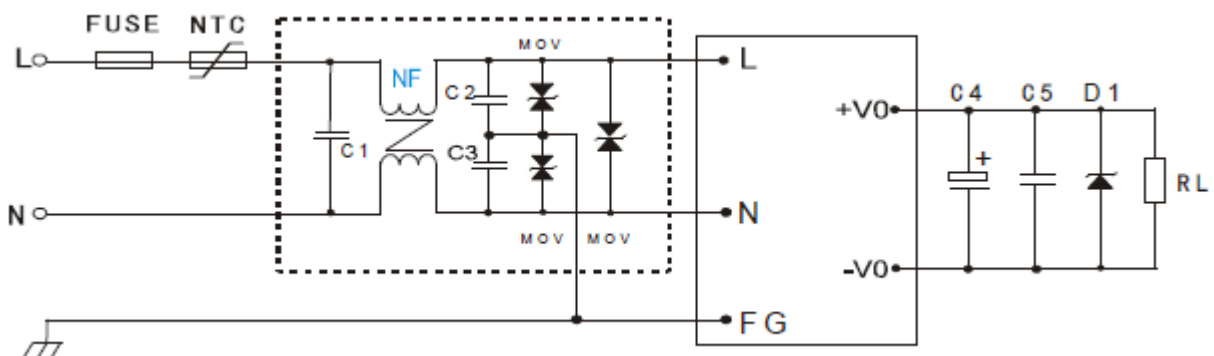


NOTE

BLOCK DIAGRAM



RECOMMENDED TEST AND APPLICATION CIRCUIT



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EMC RECOMMENDED APPLICATION CIRCUIT

	3.3VDC	5VDC	9VDC	12VDC	15VDC	24VDC
FUSE	T3.15A/250V					
R	10D-9					
NF	L=3-10mH,I=0.2-0.5A					
MOV	14D471K					
C1	104K/275V					
C2, C3	102K/400V					
C4	470uF/16V	470uF/16V	150uF/16V	120uF/16V	120uF/25V	100uF/35V
C5	104K/50V					
D1	P6KE6.8A	P6KE6.8A	P6KE16A	P6KE16A	P6KE20A	P6KE33A