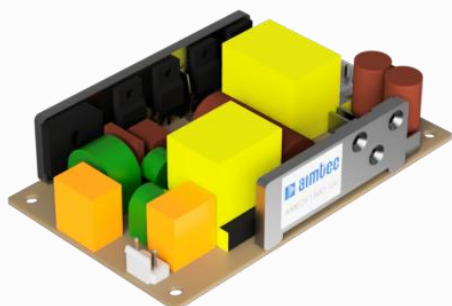


AMEOF150D-UU

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Open Frame/Enclosed

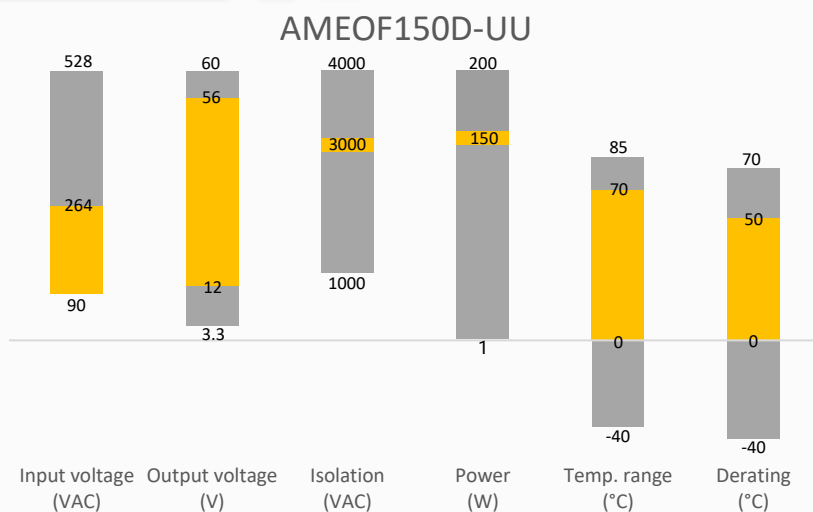
The AMEOF150D-UU series is one of Aimtec's compact (5"x3"x1.24") 150W AC/DC converter and is suitable for medical equipment. It features a universal AC input, which also accepts a DC input voltage, is cost-effective, has a high efficiency and high reliability.

These converters offer excellent EMC and safety performance, meet IEC/EN/UL62368-1, IEC/EN/UL60950-1 standards and can be widely used in industrial automation machinery, industrial control system, mechanical and electrical equipment, electronic instruments, equipment or apparatus and power sourcing equipment of POE.

Features

- Universal Input: 90 - 264VAC/120 - 370VDC
- Low leakage current: 3mA max.
- High isolation voltage: 3000VAC
- Output short circuit, over-current, over-voltage protection
- Designed to meet IEC/EN/UL62368-1, IEC/EN/UL60950-1

Summary



Training



Product Training Video
(click to open)



Press Release

Coming Soon!

Application Notes

Applications



Power Grid



Industrial



Telecom

Models & Specifications



Single Output

Model	Input Voltage (VAC/Hz)	Input Voltage (VDC)	Max Output wattage (W)	Output Voltage (V)	Max Output Current (A)	Maximum capacitive load (μF)	Efficiency @230VAC Typ. (%)
AMEOF150D-12SUU	90-264/47-63	120-370	150	12	12.5	8000	84
AMEOF150D-15SUU	90-264/47-63	120-370	150	15	10	6000	85
AMEOF150D-24SUU	90-264/47-63	120-370	151.2	24	6.3	3000	88
AMEOF150D-48SUU	90-264/47-63	120-370	153.6	48	3.2	1500	88
AMEOF150D-54SUU	90-264/47-63	120-370	150	54	2.78	1300	88
AMEOF150D-56SUU	90-264/47-63	120-370	151.2	56	2.7	1300	88

Input Specifications

Parameters	Conditions	Typical	Maximum	Units
Input current	90VAC, full load		2.2	A
Inrush current	230VAC, cold start		130	A
Leakage current			3	mA

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy	0-100% load	±5		%
Line regulation	Full load	±0.5		%
Load regulation	0-100% load	±0.5		%
Ripple & Noise*	12V output	120		mV p-p
	15V output	150		mV p-p
	24V output	240		mV p-p
	48V output	480		mV p-p
	54V output	540		mV p-p
	56V output	560		mV p-p
Hold up time	115VAC input, full load	10		ms

* Ripple and Noise are measured at 20MHz bandwidth with a 0.1μF ceramic capacitor and a 10μF E.L. capacitor to the output connector.

Isolation Specification

Parameters	Conditions	Typical	Maximum	Units
Tested I/O voltage		3000		VAC
Tested I/PE voltage		1768		VAC
Resistance I/O	500VDC	>100		MΩ

General Specifications

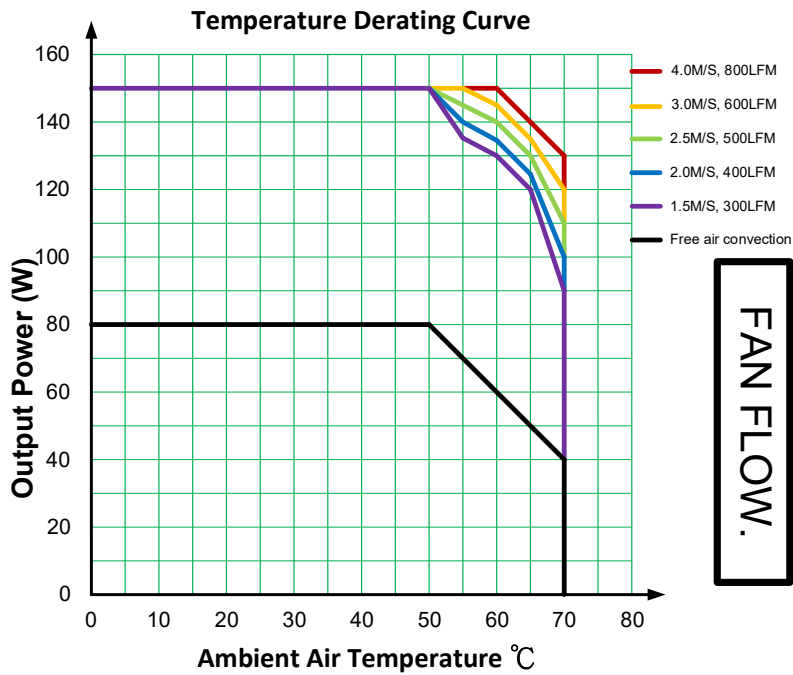
Parameters	Conditions	Typical	Maximum	Units
Over current protection		≥ 120	200	% of Iout
Over voltage protection		≥ 110	140	% of Vout
Short circuit protection	Auto recovery			
Operating temperature	See derating graph	0 to +70		°C
Storage temperature		-40 to +85		°C
Power Derating	+50 °C to +70 °C, free air convection	2		W/°C
Cooling	Free air convection, forced air convection 300- 600LFM			
Humidity	Non-condensing	≥ 5	95	% RH
Operating altitude			5000	M
Weight	Open frame	305		g
Dimensions (L x W x H)	Open frame	5.00 x 3.00 x 1.24 inches (127.0 x 76.2 x 31.6 mm)		
MTBF	> 550 000 hrs Telcordia SR-332			

NOTE: All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.

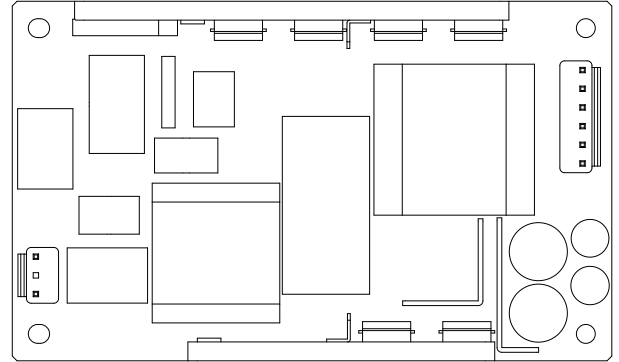
Safety Specifications

Parameters		
Standards	Designed to meet IEC/EN/UL 62368-1, IEC/EN/UL60950-1	
	EMC - Conducted and radiated emission	CISPR32/EN55032, CNS13438, Class B
	EMC - Harmonic current emissions	EN 61000-3-2, Class D
	EMC – Voltage flicker	EN 61000-3-3
	Electrostatic Discharge Immunity	EN 61000-4-2 Level 2, Contact ±4KV, Level 3, Air ±8KV, Criteria A
	RF, Electromagnetic Field Immunity	EN 61000-4-3 Level 2, 3V/m, Criteria A
	Electrical Fast Transient/Burst Immunity	EN 61000-4-4 Level 2, ±1KV, Criteria A
	Surge Immunity	EN 61000-4-5 L-L ±1KV L-G ±2KV, Criteria A
	RF, Conducted Disturbance Immunity	EN 61000-4-6 Level 2, 3Vr.m.s, Criteria A
	Power Frequency Magnetic Field	EN 61000-4-8 Level 1, 1A/m, Criteria A
	Voltage dips, Short Interruptions Immunity	EN 61000-4-11 >95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250 periods

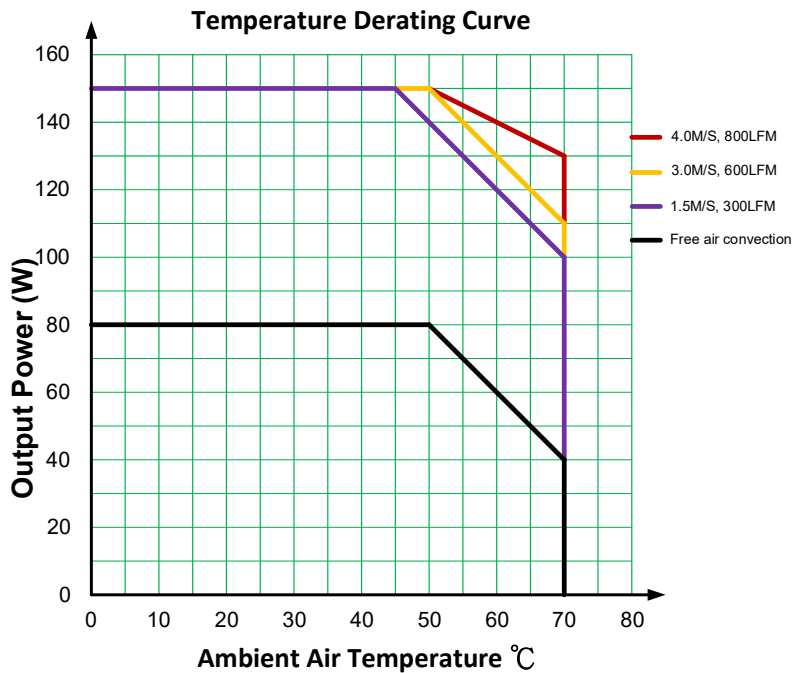
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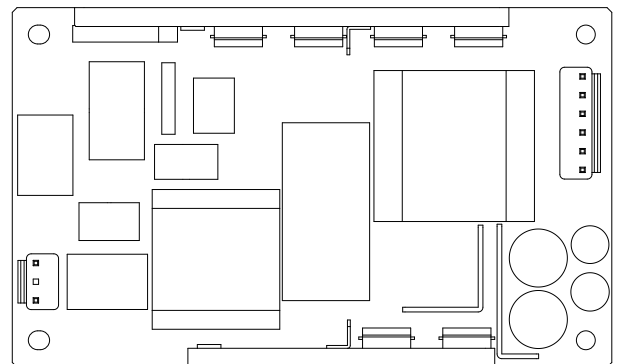
FAN FLOW.



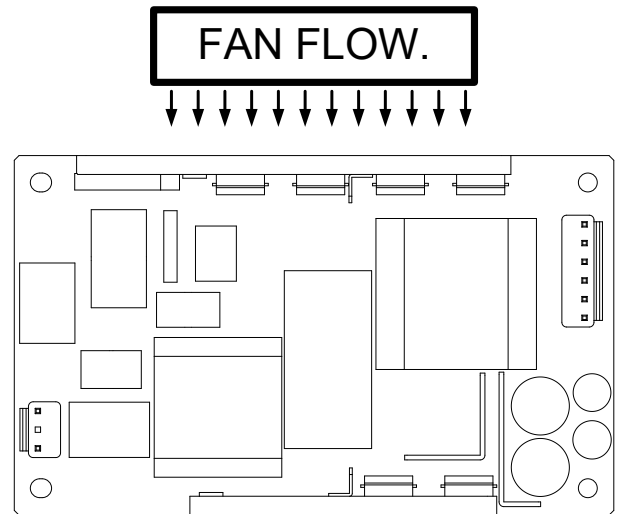
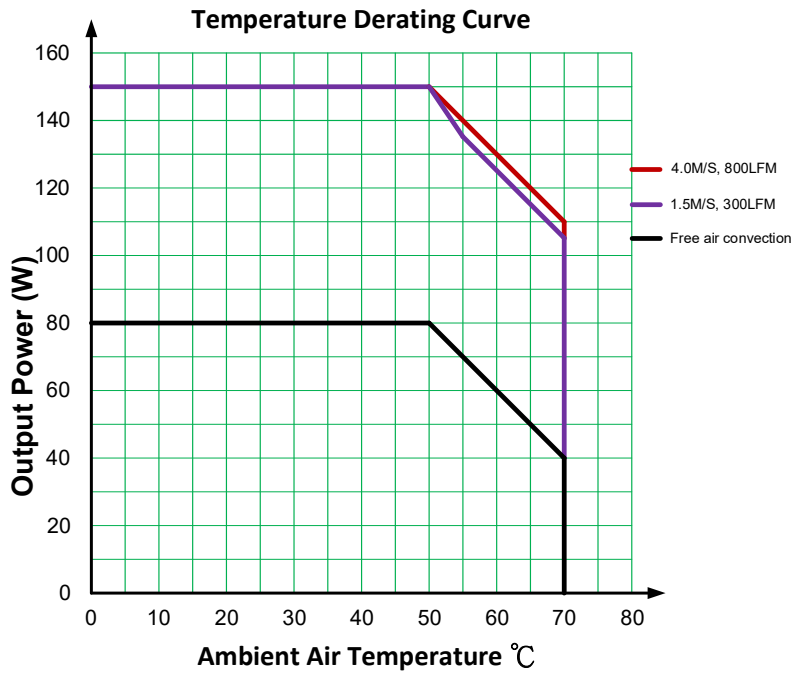
※ Output power vs Temperature with Forced Air Cooling with Airflow Direction from Input to Output
Vin=90Vac



FAN FLOW.

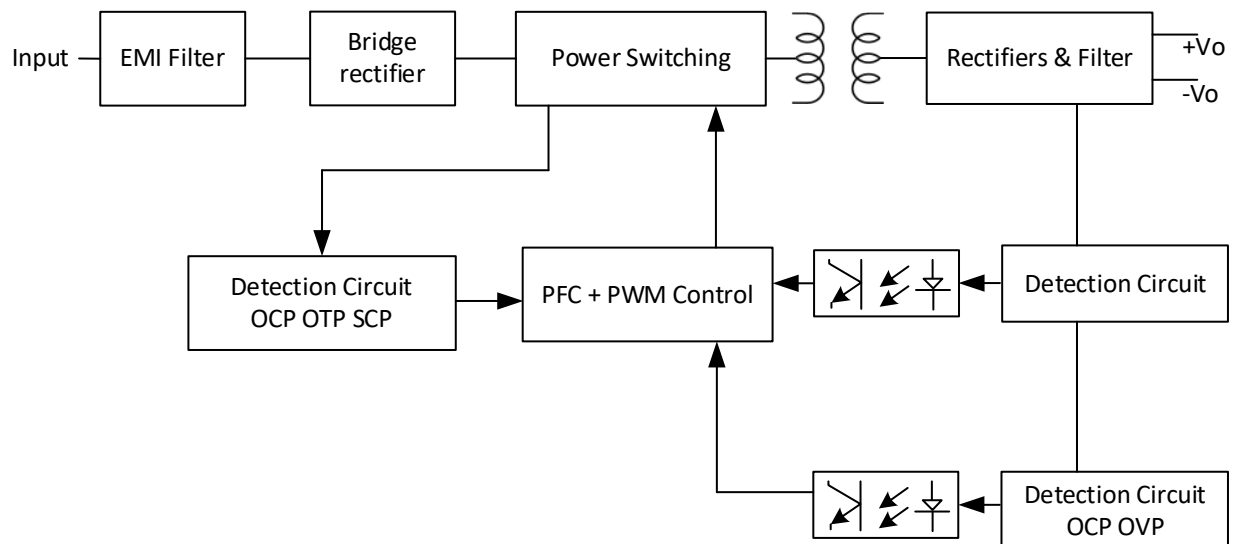


※ Output power vs Temperature with Forced Air Cooling with Airflow Direction from HS2 to HS1
Vin=90Vac



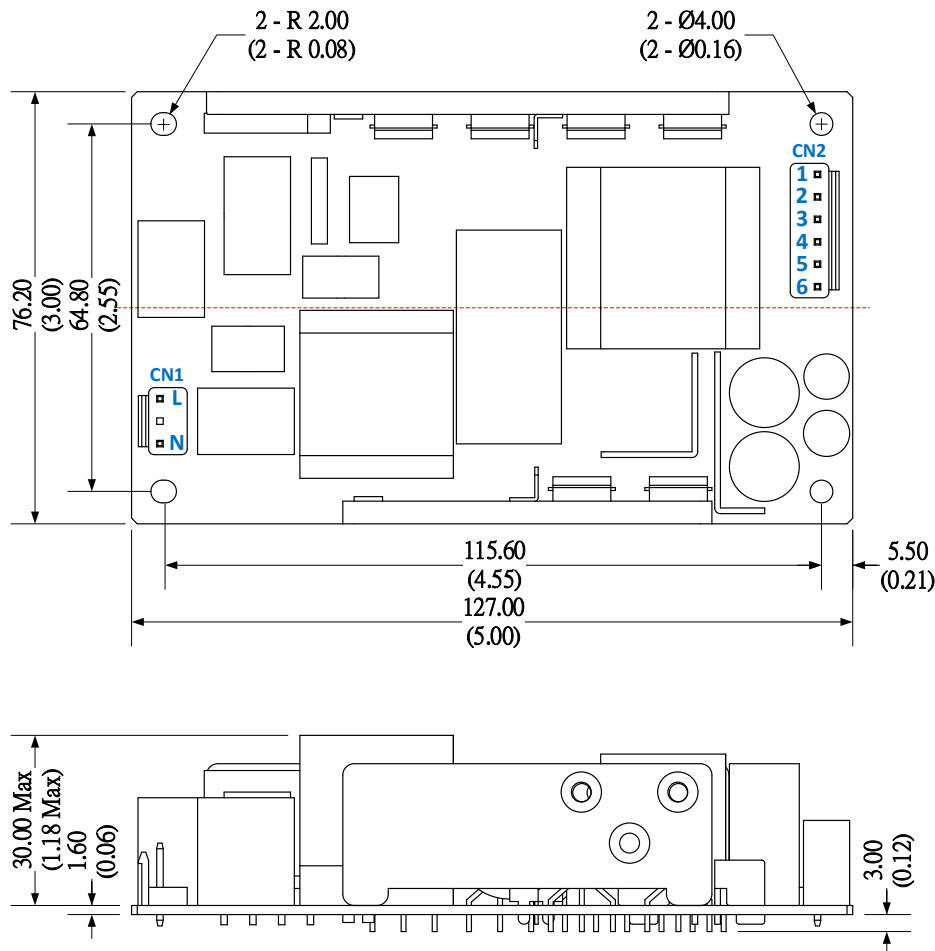
※ Output power vs Temperature with Forced Air Cooling with Airflow Direction from HS1 to HS2
Vin=90Vac

Block Diagram



Dimensions

Open frame model



CN1 JST B 3P-VH with second pin removed or equivalent	
Pin	Function
1	AC L
2	NP
3	AC N

CN2 JST B 6P-VH 6 Pin or equivalent	
Pin	Function
1	-V output
2	-V output
3	-V output
4	+V output
5	+V output
6	+V output

Note:

Unit: mm(inch)

General tolerance: ± 1.00 (0.04)

Tolerance between screw holes: ± 0.5 (0.02)

NOTE: 1. Datasheets are updated as needed and as such, specifications are subject to change without notice. Once printed or downloaded, datasheets are no longer controlled by Aimtec; refer to www.aimtec.com for the most current product specifications. 2. Product labels shown, including safety agency certifications on labels, may vary based on the date manufactured. 3. Mechanical drawings and specifications are for reference only. 4. All specifications are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified. 5. Aimtec may not have conducted destructive testing or chemical analysis on all internal components and chemicals at the time of publishing this document. CAS numbers and other limited information are considered proprietary and may not be available for release. 6. This product is not designed for use in critical life support systems, equipment used in hazardous environments, nuclear control systems or other such applications which necessitate specific safety and regulatory standards other the ones listed in this datasheet. 7. Warranty is in accordance with Aimtec's standard Terms of Sale available at www.aimtec.com.