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AMEOF24-UU



Open Frame

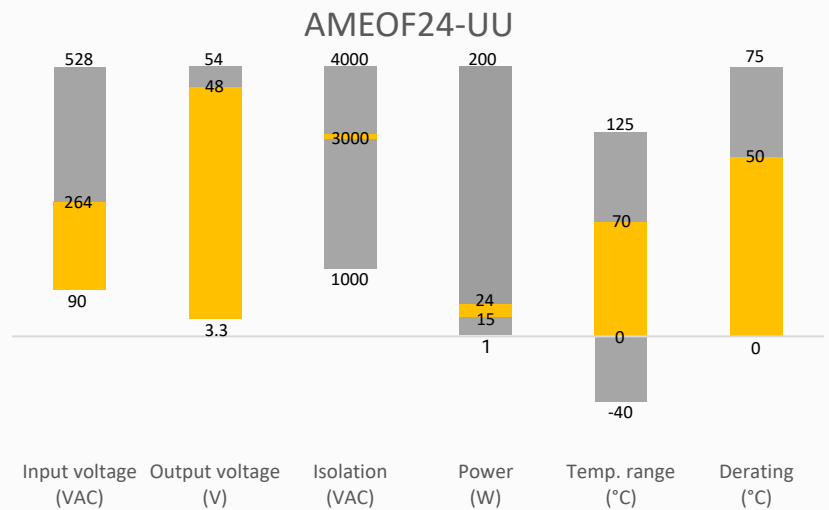
The AMEOF24-UU series is one of Aimtec's compact 24W AC/DC open frame converter. It features a universal 90~264VAC input, which also accepts a 120~370VDC input voltage, is cost-effective, has a high efficiency and high reliability.

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

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/UL62368-1

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 Typ. (%)
AMEOF24-3SUU	90-264/47-63	120-370	15	3.3	4.5	2700	70
AMEOF24-5SUU	90-264/47-63	120-370	20	5	4.0	2400	77
AMEOF24-9SUU	90-264/47-63	120-370	24	9	2.6	1500	78
AMEOF24-12SUU	90-264/47-63	120-370	24	12	2.0	1200	80
AMEOF24-15SUU	90-264/47-63	120-370	24	15	1.6	900	82
AMEOF24-18SUU	90-264/47-63	120-370	24	18	1.3	700	82
AMEOF24-24SUU	90-264/47-63	120-370	24	24	1.0	600	82
AMEOF24-48SUU	90-264/47-63	120-370	24	48	0.5	300	83

Input Specifications

Parameters	Conditions	Typical	Maximum	Units
Input current	90VAC, full load	--	0.6	A
Inrush current	230VAC, cold start	--	30	A
Leakage current	--	--	3	mA

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy	0-100% load	±4	--	%
Ripple & Noise*	3.3V / 5V output	50	--	mV _{p-p}
	9V output	90	--	mV _{p-p}
	12V output	120	--	mV _{p-p}
	15V output	150	--	mV _{p-p}
	18V output	180	--	mV _{p-p}
	24V output	240	--	mV _{p-p}
	48V output	480	--	mV _{p-p}
Hold up time	115VAC input, full load	10	--	ms

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

Isolation Specification

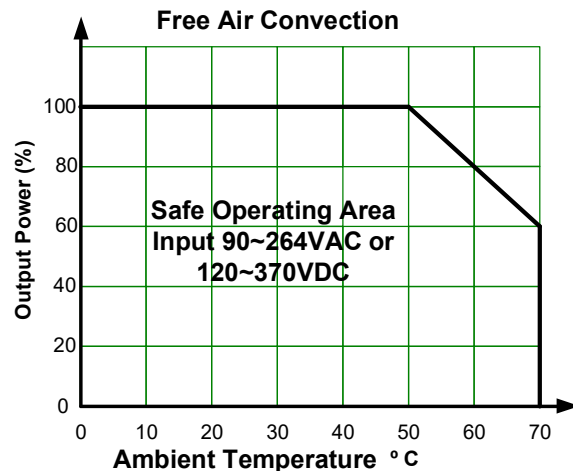
Parameters	Conditions	Typical	Maximum	Units
Tested I/O voltage	--	3000	--	VAC
Tested I/PE voltage	--	1768	--	VAC
Resistance I/O	500VDC	>100	--	MΩ

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	2	--	W/°C
Cooling	Free air convection			
Humidity	Non-condensing	>5	95	% RH
Operating altitude	--	--	2000	M
Weight	--	75	--	g
Dimensions (L x W x H)	--	2.95 x 1.89 x 1.05 inches (75.00 x 48.00 x 26.6 mm)		
MTBF	> 500 000 hrs Telcordia SR-332			

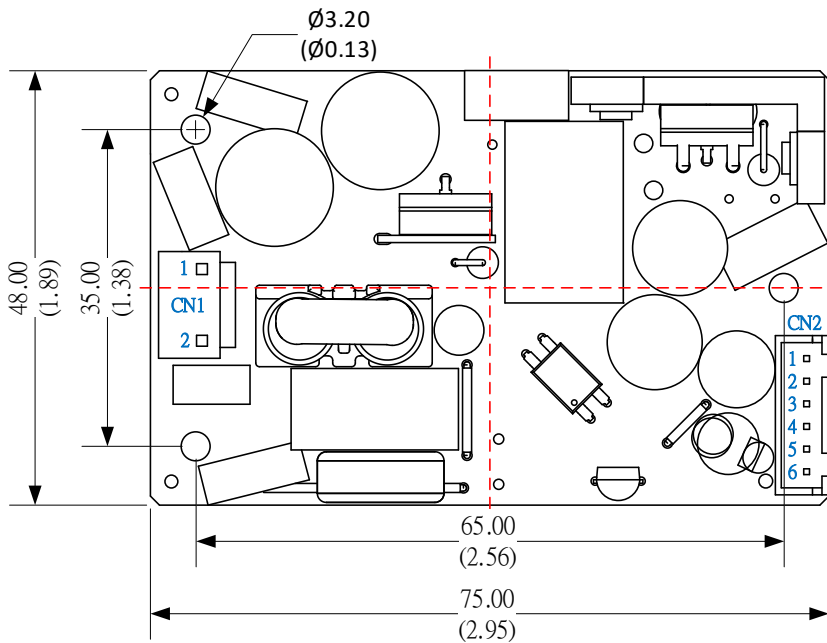
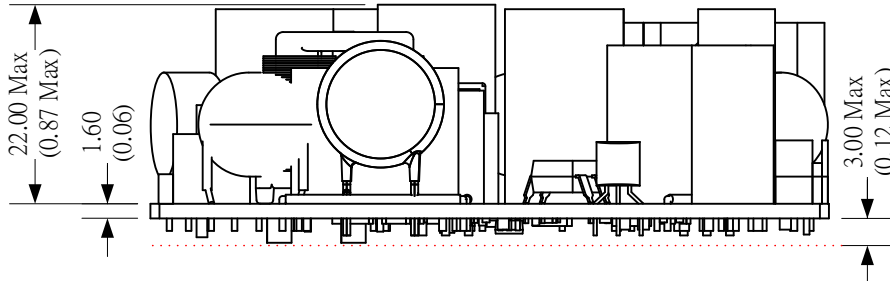
NOTE: All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.

Safety Specifications		
Parameters		
Standards	Design to meet IEC/UL 62368-1	
	EMC - Conducted and radiated emission	CISPR32/EN55032, CNS13438 Class B
	EMC - Harmonic current emissions	EN 61000-3-2
	EMC – Voltage flicker	EN 61000-3-3
	Electrostatic Discharge Immunity	EN 61000-4-2 Level , Contact ±4KV, 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
	Voltage dips, Short Interruptions Immunity	EN 61000-4-11 >95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250 periods

Derating



Dimensions



Note:
Unit: mm(inch)
General tolerance: ± 1.00 (± 0.04)

CN1 Molex 09-65-2038 with second pin removed or equivalent	
Pin	Function
1	AC N
2	AC L

CN2 JST B 6B-XH-A 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: **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.