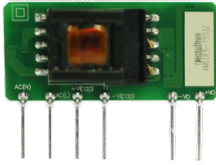


FEATURES:



- Input voltage up to 85-305VAC or 100-430VDC
- Operating temperature up to -40°C to +85°C
- Low power consumption $\leq 0.5W$
- Continuous short circuit protection
- Class II power supply
- I/O Isolation 4000VAC
- Ultra slim open frame SIP
- Over current protection
- Over voltage protection



Models
Single output

Model	Input Voltage (VAC/Hz)	Input Voltage (VDC)	Full power temperature range (°C)	Output Voltage (V)	Output Current max (mA)	Maximum capacitive load (μF)	Efficiency (%)
AMEOF5-3.3SJZ	85-305/47-63	100-430	0 to +55	3.3	1000	2200	67
AMEOF5-5SJZ	85-305/47-63	100-430	0 to +55	5	1000	1500	74
AMEOF5-9SJZ	85-305/47-63	100-430	0 to +55	9	560	680	75
AMEOF5-12SJZ	85-305/47-63	100-430	0 to +55	12	420	470	76
AMEOF5-15SJZ	85-305/47-63	100-430	0 to +55	15	340	330	77
AMEOF5-24SJZ	85-305/47-63	100-430	0 to +55	24	210	100	79
AMEOF5-3.3SLJZ	85-305/47-63	100-430	0 to +55	3.3	1000	2200	67
AMEOF5-5SLJZ	85-305/47-63	100-430	0 to +55	5	1000	1500	74
AMEOF5-9SLJZ	85-305/47-63	100-430	0 to +55	9	560	680	75
AMEOF5-12SLJZ	85-305/47-63	100-430	0 to +55	12	420	470	76
AMEOF5-15SLJZ	85-305/47-63	100-430	0 to +55	15	340	330	77
AMEOF5-24SLJZ	85-305/47-63	100-430	0 to +55	24	210	100	79

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.

Input Specifications

Parameters	Conditions	Typical	Maximum	Units
Current	115VAC		200	mA
	230VAC		100	mA
Inrush current <2ms	115VAC	5		A
	230VAC	10		A
External fuse	Recommended slow blow type	1		A
Input dissipation	No Load		0.5	W
Leakage current	CY(Input to Output) 1nF/400VAC		250	μA

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy	3.3V output	± 2	± 3	%
	others	± 1	± 2	%
Line regulation	Full load	± 0.5		%
Load regulation	10% - 100% load	± 1	± 1.5	%
Ripple & Noise	20MHz Bandwidth	50	150	mV p-p
Over current protection	Auto-recovery	≥ 150		% of I out
Short circuit protection		Continuous		
Short circuit restart		Auto-recovery		
Over Voltage protection	3.3/5Vout, Voltage clamp		7.5	V
	9Vout, Voltage clamp		15	V
	12/15Vout, Voltage clamp		20	V
	24Vout, Voltage clamp		30	V
Hold up time	115VAC	15		ms
	230VAC	75		ms

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	60 sec, 5mA leakage current		4000	VAC

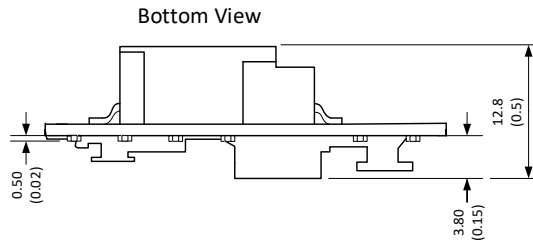
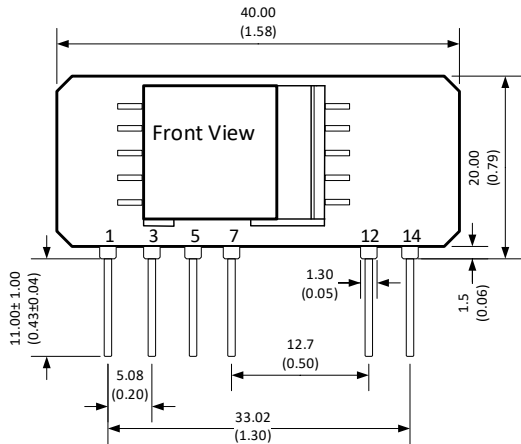
General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency		65		KHz
Operating temperature	See derating curve	-40 to +85		°C
Power derating	-40°C to -25°C	≥2		% / °C
	-25°C to 0°C	≥0.8		% / °C
	55°C to 85°C	≥1.33		% / °C
	85VAC to 110VAC	≥0.8		% / VAC
	240VAC to 264VAC	≥1.67		% / VAC
	264VAC to 305VAC	≥1.0		% / VAC
Storage temperature		-40 to +105		°C
Temperature coefficient		±0.02		% / °C
Wave soldering temperature	Duration 5-10s	260±5°C		°C
Manual soldering temperature	Duration 3-5s	360±10°C		°C
Cooling	Free air convection			
Humidity			85	% RH
Weight		7		g
Dimensions (L x W x H)	1.58 x 0.50 x 0.79 inches		40.00 x 12.80 x 20.00 mm	
MTBF	>300,000 hours (MIL-HDBK -217F, Ground Benign, t=+25°C)			

Safety Specifications

Parameters	
Agency approvals	IEC/EN/UL60950-1 IEC/EN/UL62368-1, Design to meet EN60335 (With the EN60335 recommended circuit)
Standards	EMC - Conducted and radiated emission
	Electrostatic Discharge Immunity
	RF, Electromagnetic Field Immunity
	Electrical Fast Transient/Burst Immunity
	RF, Conducted Disturbance Immunity
	Voltage dips, Short Interruptions Immunity

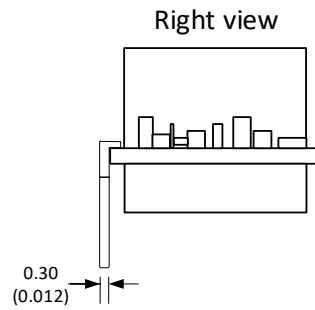
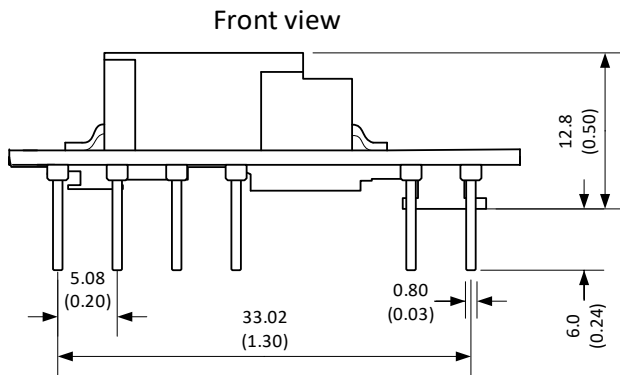
Dimensions



Note:
Unit: mm (inch)
Pin diameter tolerance: ± 0.10 (± 0.004)
Case tolerance: ± 0.50 (± 0.02)

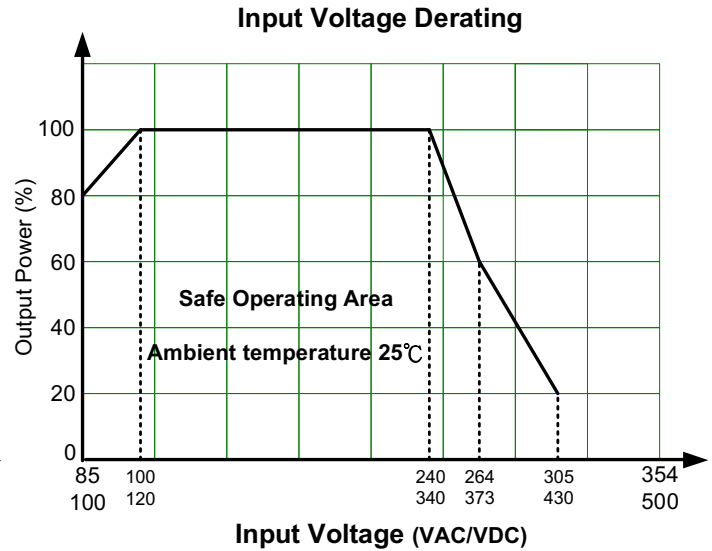
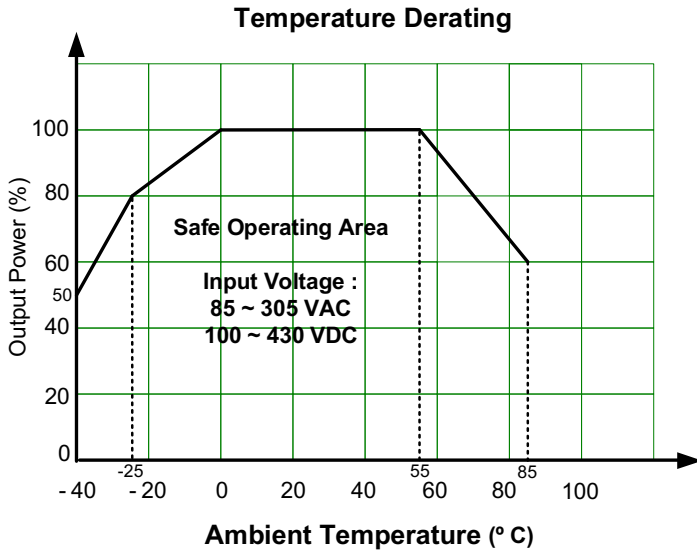
Pin	Single
1	AC N
3	AC L
5	+V sc
7	-V sc
12	-V Output
14	+V Output

L models

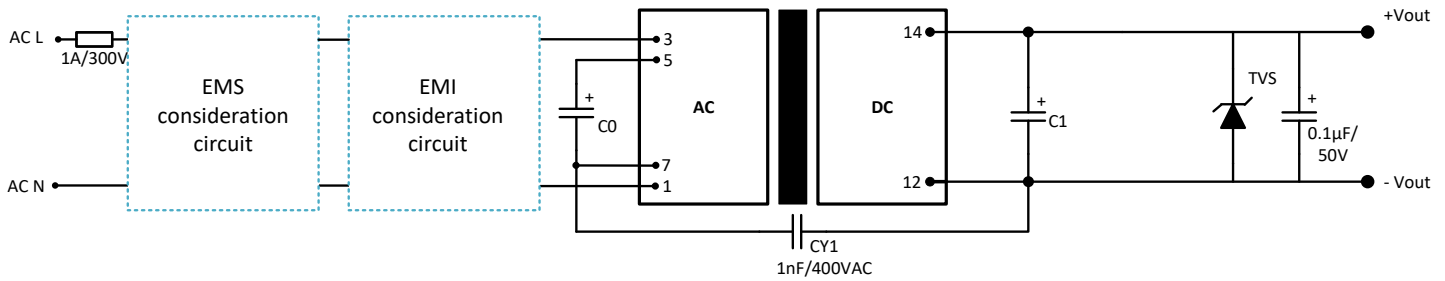


- Note:
1. Capacitor between pin5 and pin7 is necessary.
 2. External circuit on the output side is necessary. Please refer to the recommended circuit.
 3. It is needed to have distance ≥ 6.4 mm for safety between external components in primary circuit and secondary circuit.
 4. The layout of the device is for reference only, please refer to the actual product.

Derating



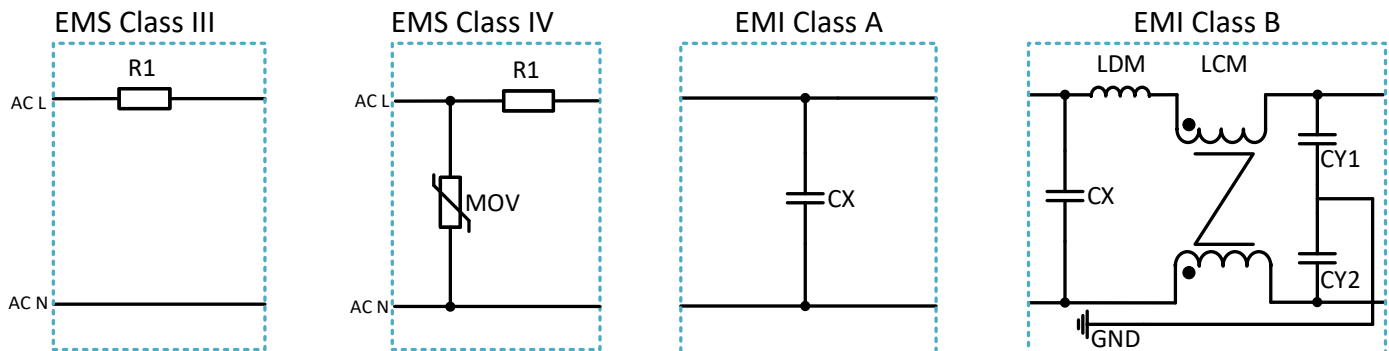
Recommended EMC external circuit



A suppressor diode (TVS) with 1.2 times of the output voltage rating is recommended.

Model	C0	C1
3.3 VDC output	10µF/400V	220µF/35V (-25°C to +85°C), 470µF/35V (-40°C to +85°C)
5 VDC output	(-20°C to +85°C, 85 to 264VAC)	220µF/35V (-25°C to +85°C), 470µF/35V (-40°C to +85°C)
9 VDC output	10µF/450V	220µF/35V (-25°C to +85°C), 470µF/35V (-40°C to +85°C)
12 VDC output	(-20°C to +85°C, 85 to 305VAC)	150µF/35V (-25°C to +85°C), 470µF/35V (-40°C to +85°C)
15 VDC output	22µF/450V	150µF/35V (-25°C to +85°C), 470µF/35V (-40°C to +85°C)
24 VDC output	(-40°C to +85°C)	150µF/35V (-25°C to +85°C), 470µF/35V (-40°C to +85°C)

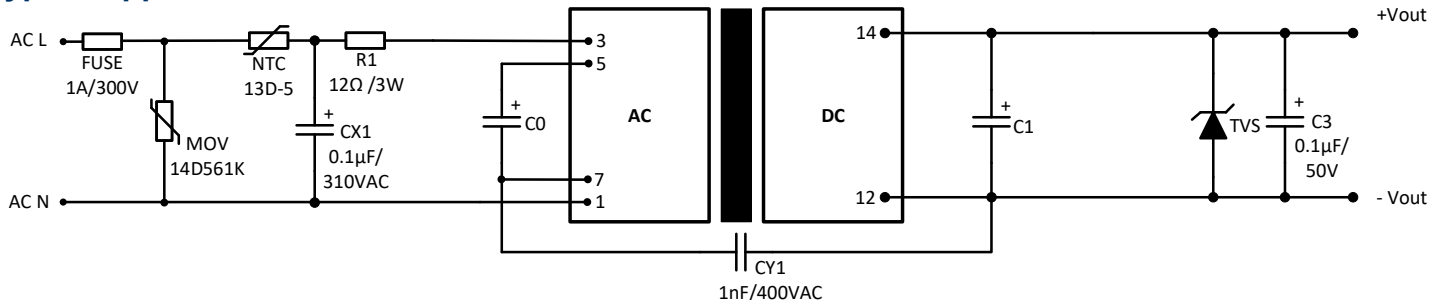
EMI & EMS Recommended Circuit



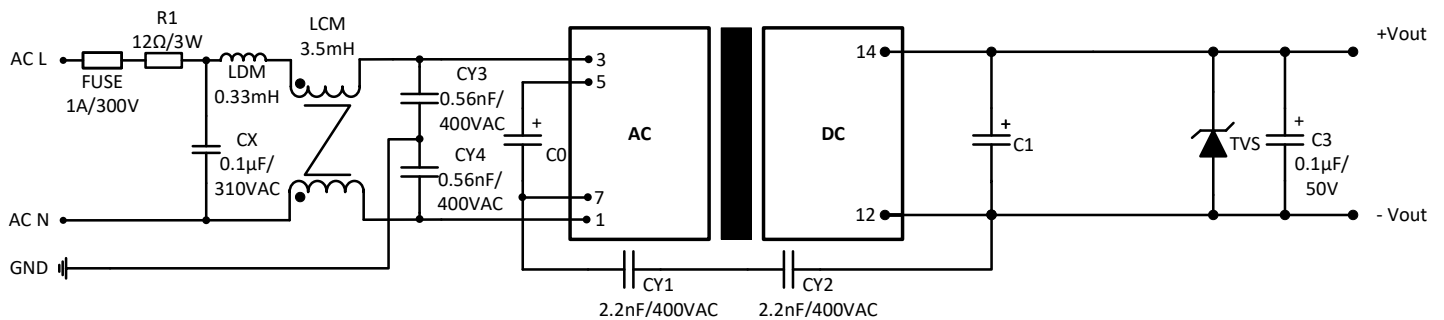
Component	EMS		EMI	
	Class III	Class IV	CLASS A	CLASS B

MOV	-	14D561K	-	-
R1	12Ω/3W	12Ω/3W	-	-
CX	-	-	0.1μF/310VAC	0.1μF/310VAC
CY1	-	-	-	1nF/400VAC
CY2	-	-	-	1nF/400VAC
LCM	-	-	-	3.5mH
LDM	-	-	-	0.33mH
FUSE	1A/300V	1A/300V	1A/300V	1A/300V

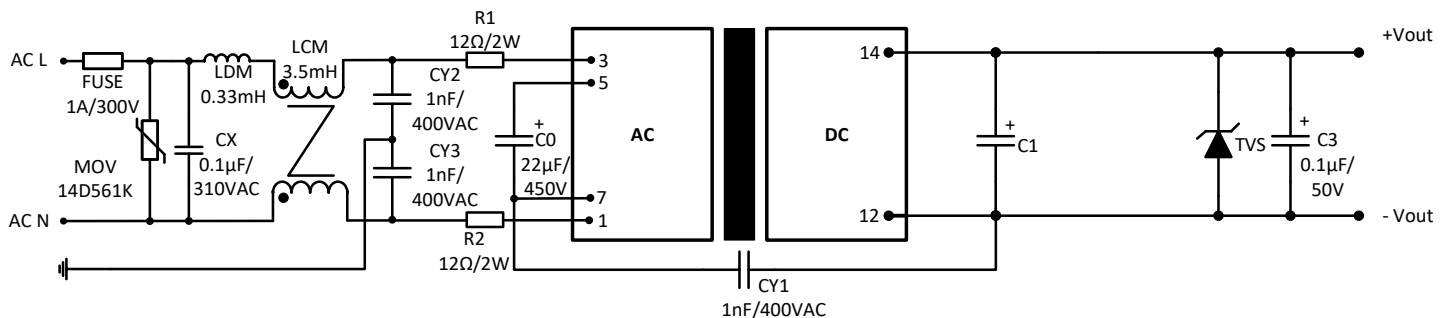
Typical application circuit

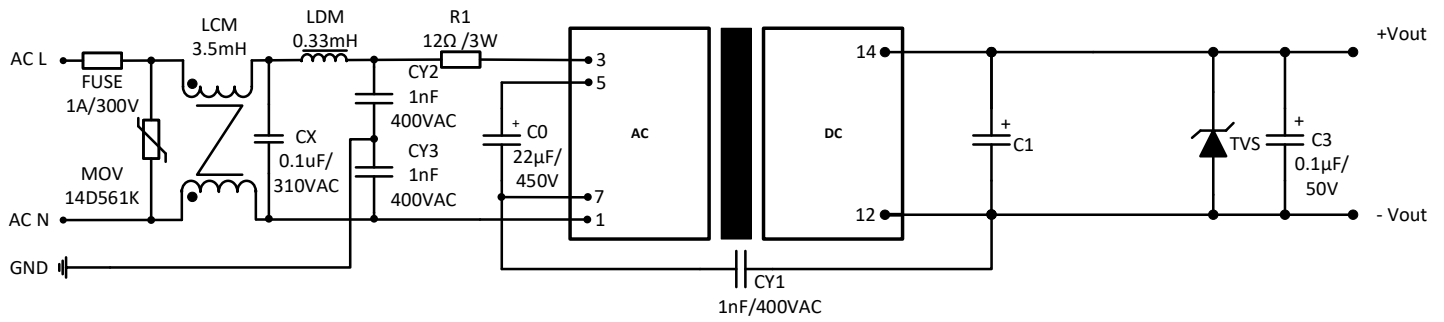


Recommended EMC circuit for EN60335



Recommended EMC circuit for EMS Class IV, EMI Class B





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.