



AME15 Series

15 Watt Encapsulated AC-DC Converter



- Low Ripple and Noise
- High Efficiency
- CE, cUL Approvals
- 2-Year Product Warranty
- Switching Power Modules for PCB Mounting
- Fully Encapsulated Plastic Case
- Universal Input Range 90...260VAC, 47...440 Hz
- Regulated Output



ELECTRICAL SPECIFICATIONS

Model No. (SingleOutput)	AME15-5S	AME15-12S	AME15-15S	AME15-24S	
Max output wattage (W)	15W	15W	15W	15W	
Input	Voltage	90...260 VAC or 120...370 VDC			
	Frequency (Hz)	47...440 Hz			
	Current (Full load)	280 mA max. (115 VAC) / 170 mA max. (230 VAC)			
	Inrush current (<2ms)	10 A max. (115 VAC) / 20 A max. (230 VAC)			
	Leakage Current	0.75 mA max.			
	External fuse (recommend)	1.5 A slow blow type			
Output	Voltage (VDC)	5V	12V	15V	24V
	Voltage accuracy	±2%			
	Current (mA) max	3000	1250	1000	625
	Line regulation (typ.)	±0.5%			
	Load regulation (5-100%) (typ.)	±0.5%			
	Minimum load	0%			
	Maximum capacitive load	470-23,000µF depending on model			
	Noise	<0.5% Vout +50mV max (Vp-p)			
	Ripple	<0.2% Vout+40mV max (Vp-p)			
	Efficiency	75%	80%	80%	84%
	Hold-up time	15 ms min.			
	Switching frequency	100 kHz			
Protection	Over current protection	Hiccup technique, auto-recovery			
	Over voltage protection	Zener diode clamp			
	Short circuit protection	Hiccup mode, indefinite (automatic recovery)			
Isolation	Input-Output (VAC)	3000V			
	Input-FG (VAC)	1500V			
	Output-FG (VAC)	500V			
Environment	Operating temperature	-25°C...+71°C			
	Storage temperature	-40°C...+85°C			
	Temperature coefficient	0.02%/°C			
	Humidity	95% RH			
	MTBF	>210,000 h @ 25°C (MIL-HDBK-217F)			
Physical	Dimension (L x W x H)	2.91 x 2.13 x 0.87 Inches (74.0 x 54.0 x 22.0 mm)			
	Case Material	Plastic resin + Fiberglass (flammability to UL 94V-0)			
	Weight	140 g			
	Cooling method	Free air convection			
Safety	Agency approvals	cUL, CE			
EMC	EMI (Conducted & Radiated Emission)	EN 55022 class B			
	EMS (Noise Immunity)	EN 55024			

All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.



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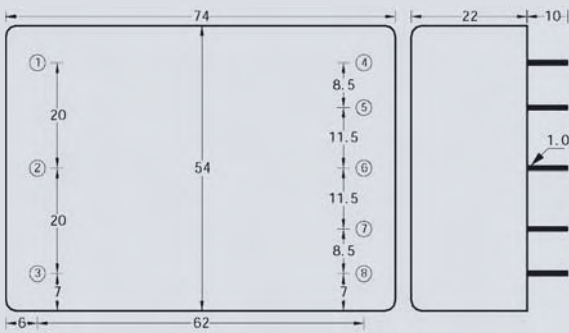
ELECTRICAL SPECIFICATIONS

Model No. (Dual, Triple Output)	AME15-5D	AME15-12D	AME15-15D	AME15-512T	AME15-515T	
Max output wattage (W)	15W	15W	15W	15W	15W	
Input	Voltage					
	90...260 VAC or 120...370 VDC					
	Frequency (Hz)					
	47...440 Hz					
	Current (Full load)					
	280 mA max. (115 VAC) / 170 mA max. (230 VAC)					
	Inrush current (<2ms)					
10 A max. (115 VAC) / 20 A max. (230 VAC)						
Leakage Current						
0.75 mA max.						
External fuse (recommend)						
1.5 A slow blow type						
Output	Voltage (VDC)	±5V	±12V	±15V	5/±12	5/±15
	Voltage accuracy	±2%				
	Current (mA) max	±1500	±650	±500	2000/±200	2000/±150
	Line regulation (typ.)	±0.5%	±0.5%	±0.5%	±1%/±5%	±1%/±5%
	Load regulation (5-100%) (typ.)	±3%	±3%	±3%	±2%/±5%	±2%/±5%
	Minimum load	0%	0%	0%	5V 10% (200 mA)	5V 10% (200 mA)
	Maximum capacitive load	470...23,000µF depending on model				
	Noise	<0.5% Vout +50mV max (Vp-p)				
	Ripple	<0.2% Vout+40mV max (Vp-p)				
	Efficiency	75%	79%	79%	75%	75%
	Hold-up time	15 ms min.				
	Switching frequency	100 kHz				
	Protection	Overcurrent protection	Hiccup technique, auto-recovery			
Overvoltage protection		Zener diode clamp				
Short circuit protection		Hiccup mode, indefinite (automatic recovery)				
Isolation	Input-Output (VAC)	3000V				
	Input-FG (VAC)	1500V				
	Output-FG (VAC)	500V				
Environment	Operating temperature	-25°C...+71°C				
	Storage temperature	-40°C...+85°C				
	Temperature coefficient	0.02%/°C				
	Humidity	95% RH				
	MTBF	>210,000 h @ 25°C (MIL-HDBK-217F)				
Physical	Dimension (L x W x H)	2.91 x 2.13 x 0.87 Inches (74.0 x 54.0 x 22.0 mm)				
	Case Material	Plastic resin + Fiberglass (flammability to UL 94V-0)				
	Weight	140 g				
	Cooling method	Free air convection				
Safety	Agency approvals	cUL, CE				
EMC	EMI (Conducted Emission)	EN 55022 class B				
	EMS (Radiated Emission)	EN 55024				

All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.



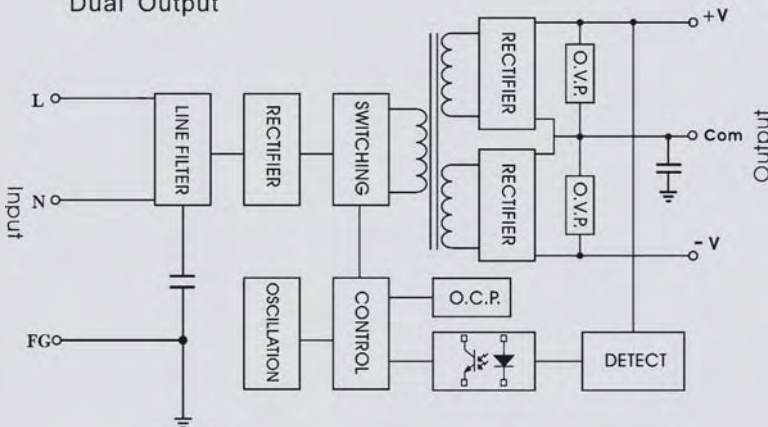
MECHANICAL DIMENSION (Top View)



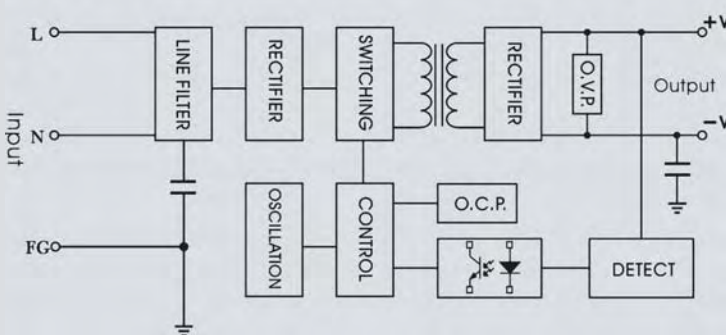
PIN#	SINGLE	Dual	Triple
1	FG	FG	FG
2	AC IN (N)	AC IN (N)	AC IN (N)
3	AC IN (L)	AC IN (L)	AC IN (L)
4	NO PIN	NO PIN	-DC OUT
5	-DC OUT	-DC OUT	COMMON
6	NO PIN	COMMON	+DC OUT
7	+DC OUT	+DC OUT	COMMON
8	NO PIN	NO PIN	+5V OUT

BLOCK DIAGRAM

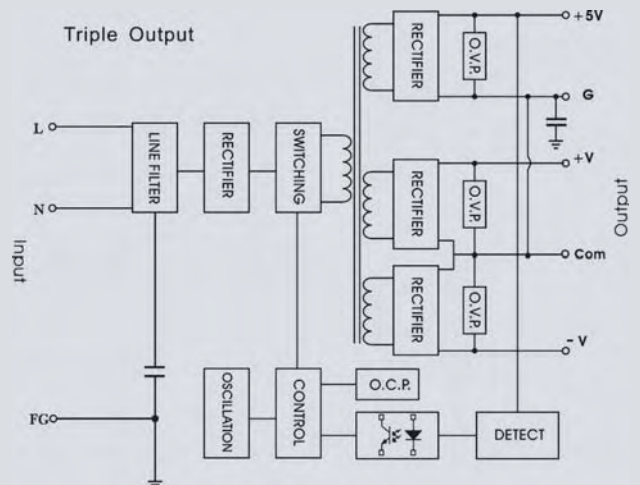
Dual Output



Single Output



Triple Output



DERATING

