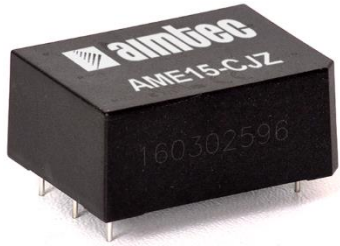


Series AME15-CJZ

15 Watt | AC-DC / DC-DC Converter



FEATURES:

- I/O Isolation 3000VAC
- Operating Temp: -25 °C to +70 °C
- Input: 85-264VAC, 47-63Hz, or 120-370VDC
- Over current, Over Voltage Protection
- Continuous Short circuit protection
- Energy Star compliant
- Compact package
- Efficiency up to 84%

Models Single output



Model	Input Voltage (VAC/Hz)	Input Voltage (VDC)	Output Voltage (V)	Output Current max (A)	Maximum capacitive Load (μF)	Efficiency 230VAC (%)
AME15-3.3SCJZ	85-264/47-63	120-370	3.3	3	72000	73
AME15-5SCJZ	85-264/47-63	120-370	5	2.8	44800	76
AME15-9SCJZ	85-264/47-63	120-370	9	1.6	13760	78
AME15-12SCJZ	85-264/47-63	120-370	12	1.25	5200	80
AME15-15SCJZ	85-264/47-63	120-370	15	1	5120	80
AME15-24SCJZ	85-264/47-63	120-370	24	0.625	880	84
AME15-48SCJZ	85-264/47-63	120-370	48	0.312	330	80

Models Dual output

Model	Input Voltage (VAC/Hz)	Input Voltage (VDC)	Output Voltage (V)	Output Current max (A)	Maximum capacitive Load (μF)	Efficiency 230VAC (%)
AME15-5DCJZ	85-264/47-63	120-370	±5	±1.5	±12800	76
AME15-12DCJZ	85-264/47-63	120-370	±12	±0.65	±2350	81
AME15-15DCJZ	85-264/47-63	120-370	±15	±0.5	±3120	83
AME15-24DCJZ	85-264/47-63	120-370	±24	±0.31	±400	83

Models Triple output

Model	Input Voltage (VAC/Hz)	Input Voltage (VDC)	Output Voltage (V)	Auxiliary Output Voltage (V)	Output Current max (A)	Maximum capacitive Load (μF)	Efficiency 230VAC (%)
AME15-505TCJZ	85-264/47-63	120-370	5	±5	2/±0.5	10800/±2160	75
AME15-512TCJZ	85-264/47-63	120-370	5	±12	2/±0.2	17280/±2160	77
AME15-515TCJZ	85-264/47-63	120-370	5	±15	1.8/±0.2	5920/±370	78
AME15-524TCJZ	85-264/47-63	120-370	5	±24	2/±0.1	1600/±130	78

Models Asymmetric Separated Dual output

Model	Input Voltage (VAC/Hz)	Input Voltage (VDC)	Output Voltage (V)	Output Current max (A)	Maximum capacitive Load (μF)	Efficiency 230VAC (%)
AME15-505DCJZ	85-264/47-63	120-370	5/5	2.2/0.8	10800/2960	76
AME15-512DCJZ	85-264/47-63	120-370	5/12	2/0.4	8640/1200	80
AME15-515DCJZ	85-264/47-63	120-370	5/15	2/0.3	6480/800	80
AME15-524DCJZ	85-264/47-63	120-370	5/24	2/0.2	12900/800	81
AME15-1205DCJZ	85-264/47-63	120-370	12/5	1/0.4	2200/1200	78

Note: Add suffix “-ST” for optional screw terminal bottom plate or “-STD” for optional DIN rail mountable screw terminal bottom plate.

Input Specifications

Parameters	Conditions	Typical	Maximum	Units
Current (full load)	115 VAC		370	mA
	230 VAC		220	mA
Inrush current <2ms (cold start)	115 VAC	10		A
	230 VAC	20		A
Leakage current	230VAC/50Hz		0.3	mA
External fuse	Recommended slow blow type	2		A

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±2		%
Line regulation	Full load, main output	±0.5		%
	Full load, auxiliary output	±1.5		%
Load regulation (single output)	10-100% load	±1		%
Load Regulation (dual output)	10-100% Balanced load	±2		%
Load Regulation (triple & asymmetric separated output)	10-100% Balanced load, main output	±3		
	10-100% Balanced load, auxiliary output	±5		
Minimum load	Single output	0		%
	Others	10		%
Ripple & Noise *		50	150	mV p-p
Hold-up time	115VAC, 20MHz bandwidth	15		ms
	230VAC, 20MHz bandwidth	80		ms

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	60 sec		3000	VAC
Isolation voltage between Main and Auxiliary output	60 sec		500	VDC
Isolation Resistance		>1000		MΩ

General Specifications

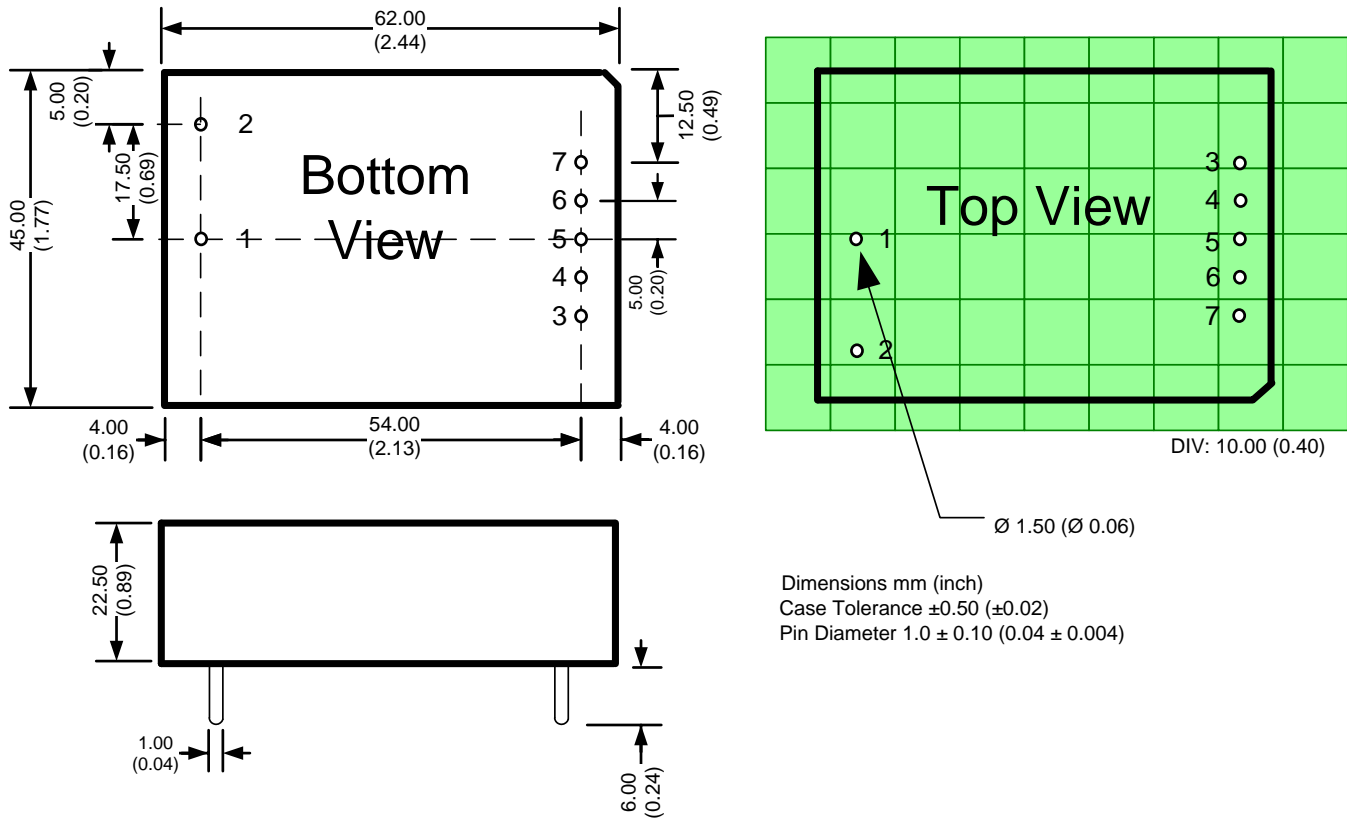
Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	65		KHz
Protection class		Class II		
Over current protection		≥110		% of Iout
Over voltage protection		Zener diode clamp		
Short circuit protection		Continuous, Auto recovery		
Operating temperature	See derating curve	-25 to +70		°C
Storage temperature		-25 to +105		°C
Maximum Case temperature			100	°C
Temperature coefficient		±0.02		% / °C
Cooling	Free air convection			
Humidity	Non condensing		95	% RH
Case material		Plastic (flammability to UL 94V-0)		
Weight	Pin mountable	85		g
	With optional -ST mounting plate	135		
	With optional -STD mounting plate	175		
Dimensions (L x W x H)	Pin mountable: 2.44 x 1.77 x 0.89 inches	62.0 x 45.0 x 22.5 mm		
	With optional -ST mounting plate: 3.78 x 2.13 x 1.22 inches	96.1 x 54.0 x 31.0 mm		
	With optional -STD mounting plate: 3.78 x 2.13 x 1.40 inches	96.1 x 54.0 x 35.6 mm		
MTBF		> 300,000 hrs (MIL-HDBK -217F, t _a =+25°C)/Full Load		

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		
Agency approvals	cULus (single output models and AME15-505TCJZ, AME15-512TCJZ only), CE	
Standards	Information technology Equipment	IEC/EN/UL 60950-1
	EMI - Conducted and radiated emission	EN55022, class B
	Electrostatic Discharge Immunity	IEC 61000-4-2 Level 3
	RF, Electromagnetic Field Immunity	IEC 61000-4-3 Level 3
	Electrical Fast Transient/Burst Immunity	IEC 61000-4-4 Level 3
	Surge Immunity	IEC 61000-4-5 Level 3
	RF, Conducted Disturbance Immunity	IEC 61000-4-6 Level 3
	Power frequency Magnetic Field Immunity	IEC 61000-4-8 Level 3
	Voltage dips, Short Interruptions Immunity	IEC 61000-4-11 Class 2

Dimensions

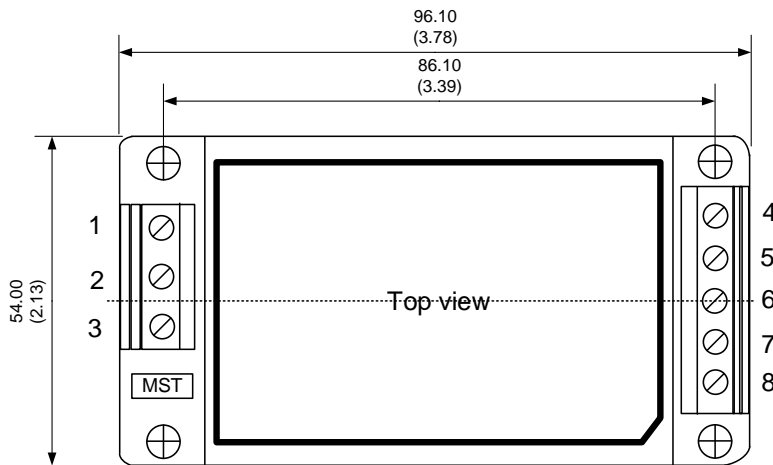


Pin Out Specifications

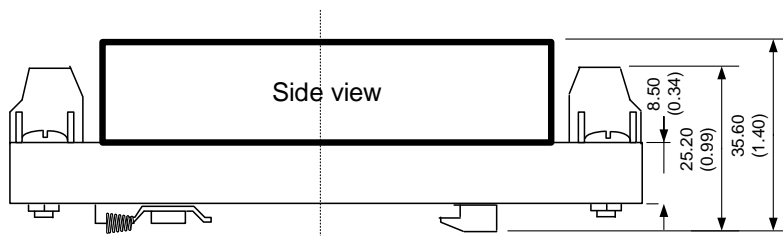
Pin	Single	Dual	Triple	Asymmetric Dual
1	AC Input (N)	AC Input (N)	AC Input (N)	AC Input (N)
2	AC Input (L)	AC Input (L)	AC Input (L)	AC Input (L)
3	-V Output	-V Output	-V Output 1	-V Output 1
4	No pin	No pin	+V Output 1	+V Output 1
5	No pin	Common	-V Output 2	No pin
6	No pin	No pin	Common	-V Output 2
7	+V Output	+V Output	+V Output 2	+V Output 2

Optional -ST bottom plate

Optional -STD bottom plate



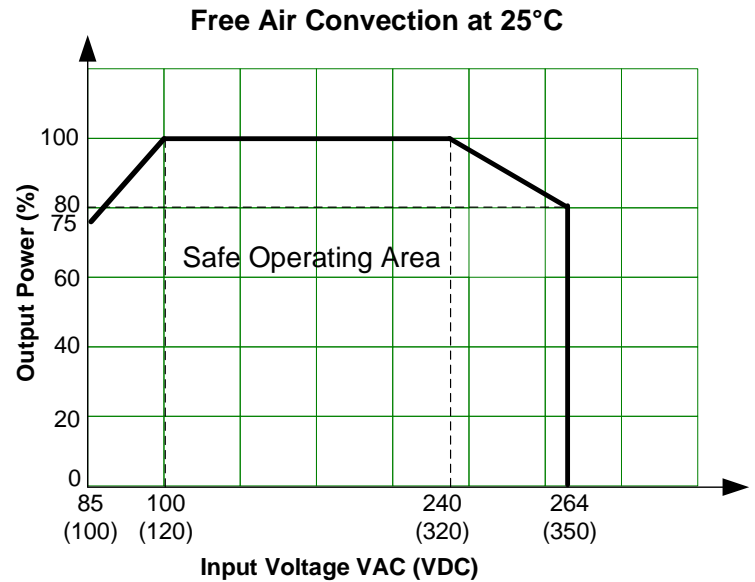
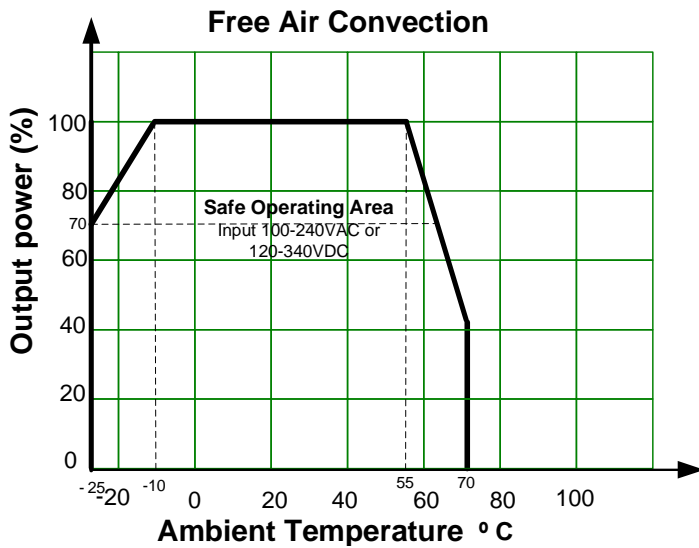
Dimensions: mm (inch)
Case Tolerance: ± 0.50 (0.02)
Wire gauge: 24-12AWG
DIN Rail TS35



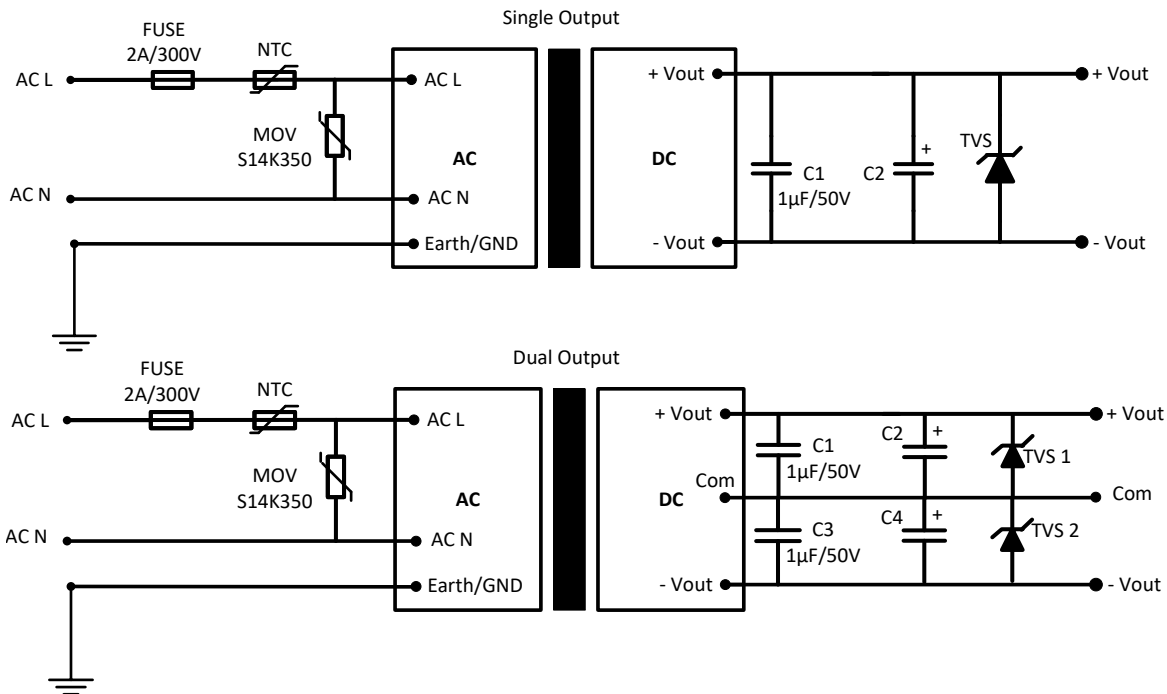
Pin Out Specifications for -ST and -STD models

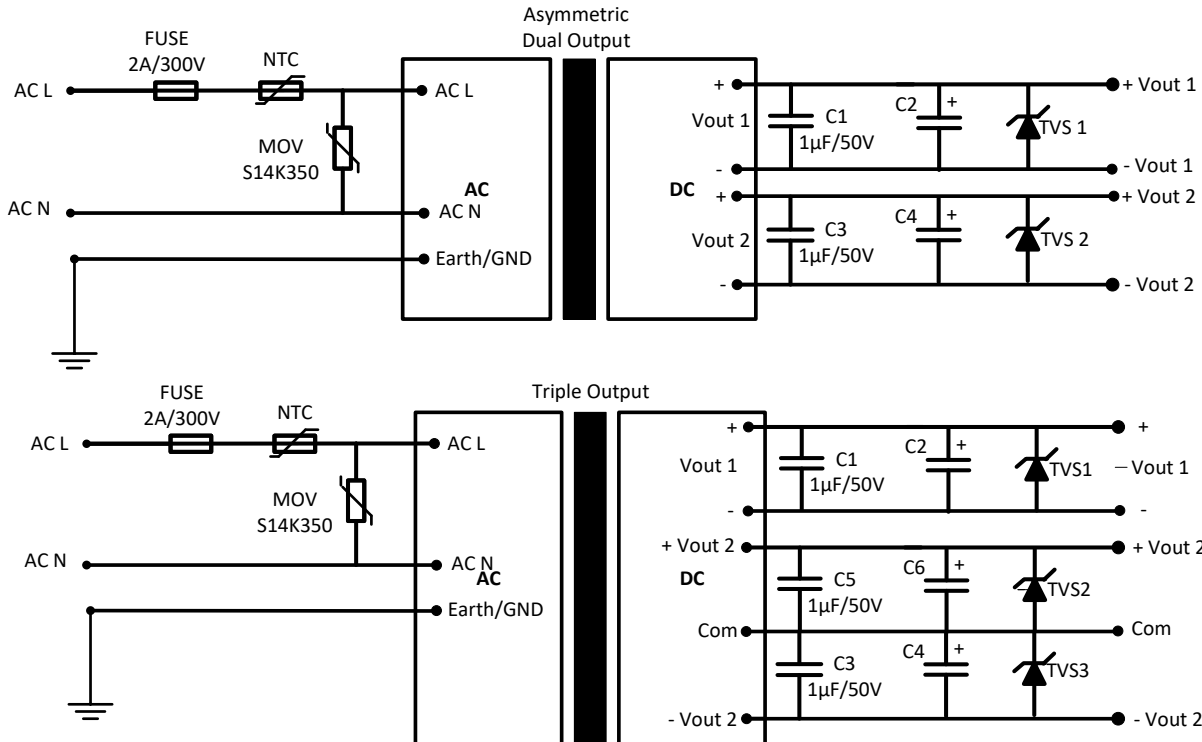
Pin	Single	Dual	Triple	Asymmetric Dual
1	N.C.	N.C.	N.C.	N.C.
2	AC Input (N)	AC Input (N)	AC Input (N)	AC Input (N)
3	AC Input (L)	AC Input (L)	AC Input (L)	AC Input (L)
4	-V Output	-V Output	-V Output 1	-V Output 1
5	N.C.	N.C.	+V Output 1	+V Output 1
6	N.C.	Common	-V Output 2	N.C.
7	N.C.	N.C.	Common	-V Output 2
8	+V Output	+V Output	+V Output 2	+V Output 2

Derating



Typical application circuits





Model	C2	C4	C6	TVS1	TVS2	TVS3
Single 3.3 & 5 Vout	680 µF	-	-	7V	-	-
Single 9 Vout	470 µF	-	-	12V	-	-
Single 12 & 15 Vout	220 µF	-	-	20V	-	-
Single 24 Vout	68 µF	-	-	30V	-	-
Dual ±5 Vout	470 µF	470 µF	-	7V	7V	-
Dual ±12 Vout	220 µF	220 µF	-	20V	20V	-
Dual ±15 Vout	120 µF	120 µF	-	20V	20V	-
Dual ±24 Vout	68 µF	68 µF	-	30V	30V	-
Triple 5/±5 Vout	470 µF	220 µF	220 µF	7V	7V	7V
Triple 5/±12 Vout	470 µF	120 µF	120 µF	7V	20V	20V
Triple 5/±15 Vout	470 µF	120 µF	120 µF	7V	20V	20V
Triple 5/±24 Vout	470 µF	120 µF	120 µF	7V	30V	30V
Dual 5/5 Vout	470 µF	470 µF	-	7V	7V	-
Dual 5/12 Vout	470 µF	220 µF	-	7V	20V	-
Dual 5/15 Vout	470 µF	120 µF	-	7V	20V	-
Dual 5/24 Vout	470 µF	47 µF	-	7V	30V	-

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