

AMES350-NZ



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Enclosed

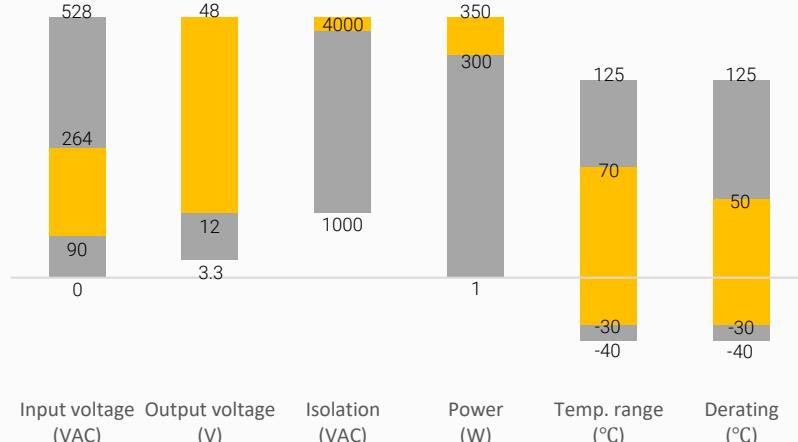
Features



- Universal Input: 90 – 132VAC/180 – 264VAC or 240-370VDC
- Operating Temp: -30 °C to +70 °C
- High isolation voltage: Up to 4000VAC
- Low ripple & noise, 200mV(p-p) typ.
- Output short circuit, over-current, over-voltage and over-temperature protection
- Regulated Output
- Surge immunity: 300VAC for 5s

Summary

AMES350-NZ



Training



Product Training Video
(click to open)



Press Release

Coming Soon!

Applications



Power Grid



Industrial



Telecom



Instrumentation

Application Notes

Models & Specifications



Single Output

Model	Input Voltage (VAC/VAC/Hz)*	Input Voltage (VDC)**	Max Output Wattage (W)	Output Voltage (V)	Output Voltage Adjustable Range (V)	Output Current (A)	Efficiency @230VAC (%)
AMES350-12SNZ-P	90-132/180-264/47-63	240-370	348	12	10.2-13.8	29	85
AMES350-15SNZ-P	90-132/180-264/47-63	240-370	348	15	13.5 -18	23.2	86
AMES350-24SNZ-P	90-132/180-264/47-63	240-370	350.4	24	21.6 - 28.8	14.6	88
AMES350-36SNZ-P	90-132/180-264/47-63	240-370	349.2	36	32.4 - 39.6	9.7	88.5
AMES350-48SNZ-P	90-132/180-264/47-63	240-370	350.4	48	43.2 -52.8	7.3	89

Note: The “-P” suffix indicates a terminal protective cover (ex. AMES350-12SNZ-P). For optional conformal coating, add “Q” after the “-P” (ex. AMES350-12SNZ-PQ is conformal coated version with terminal protective cover).

* The input voltage needs to be selected by a switch.

** Switch needs to be set to 230V.

Input Specifications

Parameters	Conditions	Typical	Maximum	Units
Input current	115VAC	6.8		A
	230VAC	3.4		A
Inrush current	115VAC, Cold start	60		A
	230VAC, Cold start	60		A
Leakage	240VAC		2	mA

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy	Full load, 12V output	±1.5		%
	Full load, 15V,24V,36V,48V output	±1		%
Line regulation	Full load	±0.5		%
	0-100% load, 12V output	±1		%
Load regulation	0-100% load, 15V,24V,36V,48V output	±0.5		%
	12V,15V,24V, output	150		mV p-p
Ripple & Noise*	36V,48V output	200		mV p-p
	115VAC	12		ms
Hold up time	230VAC	16		ms

* Ripple and Noise are measured at 20MHz bandwidth with a 47µF electrolytic capacitor and a 0.1µF ceramic capacitor. Please refer to the application note for specific details.

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	60 sec, leakage current < 5mA		4000	VAC
Tested Input to GND voltage	60 sec, leakage current < 3mA		2000	VAC
Tested Output to GND voltage	60 sec, leakage current < 3mA		500	VAC
Resistance (I/O, I/O to GND)	500VDC		100	MΩ

General Specifications

Parameters	Conditions	Typical	Maximum	Units

Over voltage category	OVC III			
Over Current protection	Hiccup, Auto recovery	≥ 110	140	% of I_{out}
Over voltage protection	Hiccup, Auto recovery, 12V output	≥ 13.8	16.2	VDC
	Hiccup, Auto recovery, 15V output	≥ 18	21	VDC
	Hiccup, Auto recovery, 24V output	≥ 28.8	33.6	VDC
	Hiccup, Auto recovery, 36V output	≥ 41.4	46.8	VDC
	Hiccup, Auto recovery, 48V output	≥ 55.2	64.8	VDC
Over temperature protection	Hiccup, Auto recovery			
Short circuit protection	Hiccup, Continuous, Auto recovery			
Operating temperature	See derating graph	-30 to +70		°C
Storage temperature		-40 to +85		°C
Power derating	50 °C to 70 °C	2.5		% / °C
	90VAC ~ 100VAC	2		% / VAC
Temperature coefficient		± 0.03		% / °C
Cooling	Forced air cooling			
Humidity	Non-condensing, Storage	≥ 10	95	% RH
	Non-condensing, Operating	≥ 20	90	% RH
Case material	Metal			
Weight		660		g
Dimensions (L x W x H)	8.46 x 4.53 x 1.18inch (215.0 x 115.0 x 30.0mm)			
MTBF	> 2 346 khrs min. Telcordia SR-332 (Bellcore)			

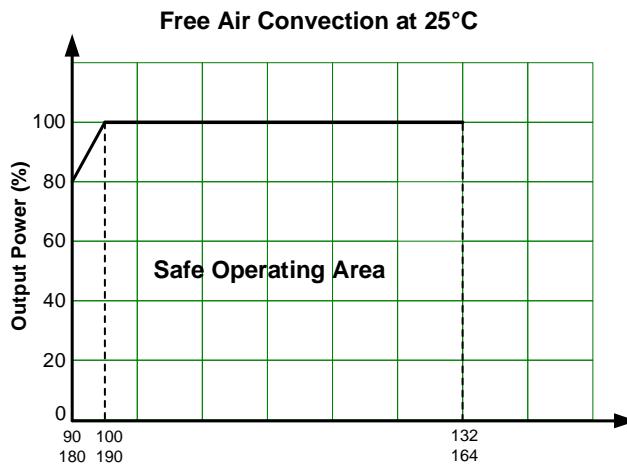
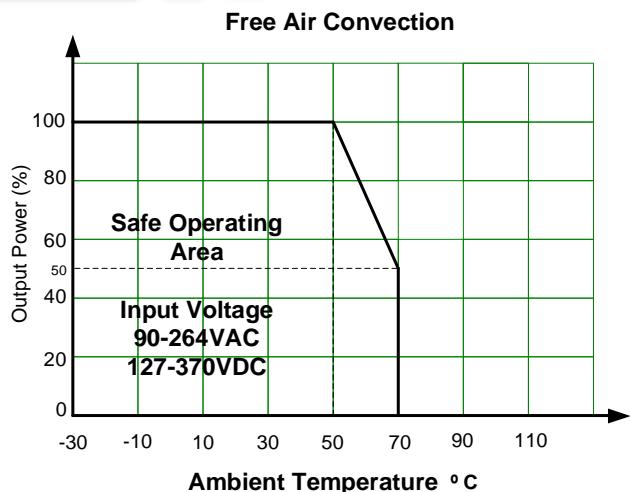
NOTE: All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.

Safety Specifications

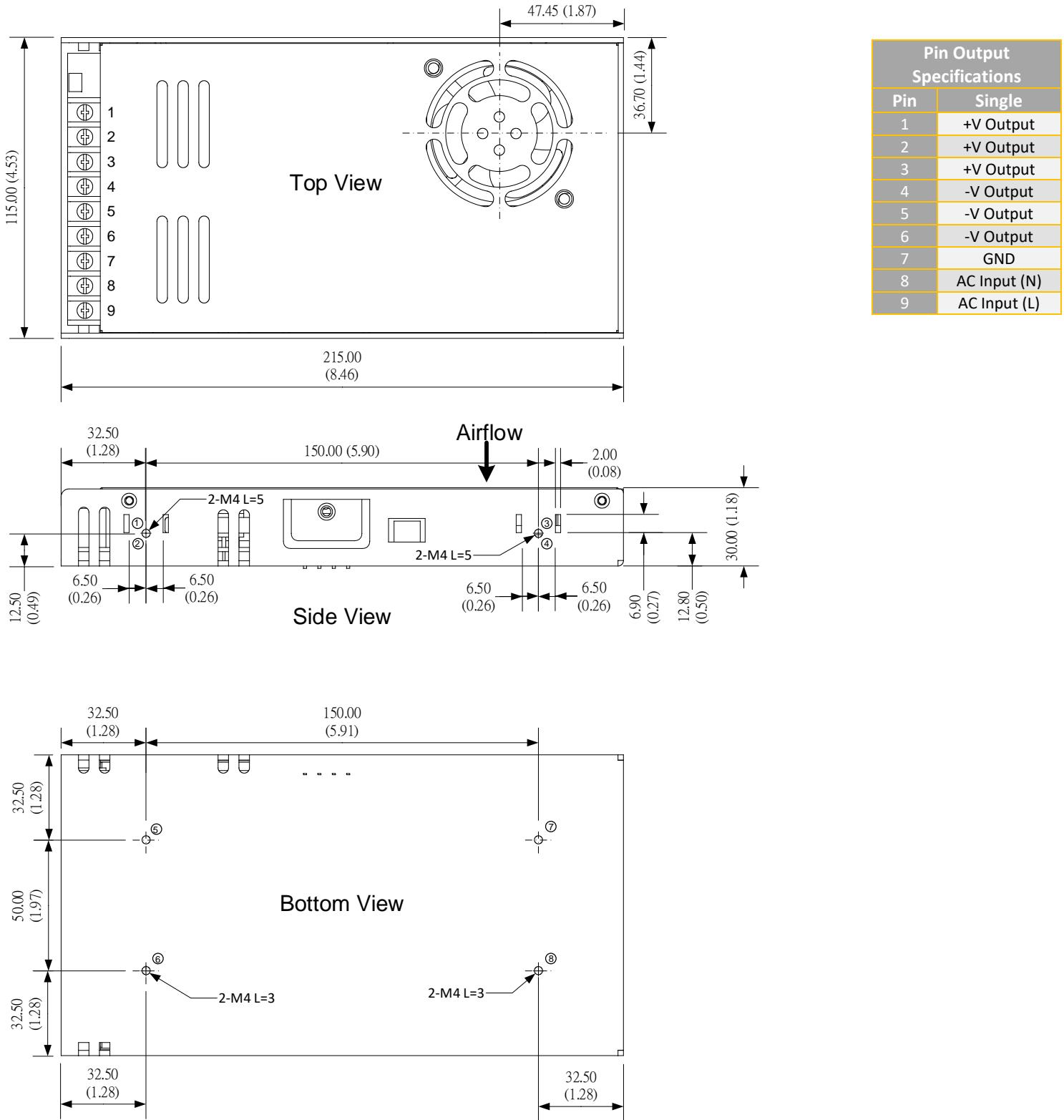
Parameters

Standards	Information technology Equipment	Design to meet BS EN/EN62368-1, BS EN/EN61558-1
	EMC - Conducted and radiated emission	CISPR32 / EN55032, class B
	Electrostatic Discharge Immunity	IEC 61000-4-2
	RF, Electromagnetic Field Immunity	IEC 61000-4-3
	Electrical Fast Transient/Burst Immunity	IEC 61000-4-4
	Surge Immunity	IEC 61000-4-5
	RF, Conducted Disturbance Immunity	IEC 61000-4-6
	Voltage dips, Short Interruptions Immunity	IEC 61000-4-11

Derating



Dimensions



Note:

Unit: mm(inch)

Wire gauge: 22-12AWG

Screw terminal tightening torque: M3.5, 0.8N·m

Mounting screw tightening torque: M4, 0.9N·m

General tolerance: $\pm 1.0 (\pm 0.04)$

At least one of the ① - ⑧ location must be connected to PE

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