

FEATURES:



- Universal Input: 90~264 Vac
- High Efficiency: Up to 87%
- Active Power Factor Correction
- Short Circuit / Open Circuit Protection
- Meet UL, CE Safety Requirement
- Long Life, High reliability
- Ultra-low ripple without flickering
- 3-year limited warranty



Models
Single output

Model	Max Output Power (W)	Output Voltage Range (V)	Output Current (mA)	Input Voltage (VAC/Hz)	Efficiency (%)
AMEPR50N-42100Z	42.0	30-42	1000	90-264/47-63	87.0
AMEPR50N-42105Z	44.1	30-42	1050	90-264/47-63	87.0
AMEPR50N-42115Z	48.3	30-42	1150	90-264/47-63	87.0

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
Input Current	90 VAC, full load		0.76	Arms
Inrush current <2ms	115 VAC, cold start		40	A
	230 VAC, cold start		60	
Leakage current			0.75	mA
Input dissipation	No Load		1.5	W
	Output Short		4.5	W
Power Factor	115 VAC, full load		0.98	
	230 VAC, full load		0.95	
Input Fuse	2A/250V			
Start-up Time	115 VAC, full load		1.5	Sec.
	230 VAC, full load		1.0	Sec.

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Current accuracy		±5		%
Line regulation	LL to HL	±3		%
Load regulation	Full Output Voltage Range	±5		%
Ripple & Noise			200	mV p-p
Output Current Ripple	Full load		50	mA
Current Overshoot	LL to HL, full load at cold start, % of rated output current		15	%
Hold-up time (min)			0.5	ms
Minimum Load Voltage	See Models Table Above			

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	I/P – O/P		3750	VAC
Isolation Resistance	500Vdc	>100		MΩ
Isolation Capacitance		100		pF

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency			150	KHz
Over voltage protection			50	V
Short circuit protection	Continuous, Hiccup Mode			
Short circuit restart	Auto Recovery			
Open circuit protection	Continuous, Hiccup Mode			

Operating temperature	Without Derating	-40 to +50	°C
Maximum case temperature		90	°C
Storage temperature		-40 to +85	°C
Temperature coefficient		0.03	% / °C
Cooling	Free Air Convection		
Humidity		90	% RH
Case material	Plastic		
IP Rating	IP54		
Weight		260	g
Dimensions (L X W+ X H)	6.30 X 1.73 X 1.61 inches	160.00 X 44.00 X 41.00 mm	
MTBF	300,000 hrs (MIL-HDBK-217F at +25°C)		

Safety Specifications

Parameters

Standards	Parameters	Standards
	Electromagnetic Interference	EN55015 / FCC Part 15, Class B
	Harmonic Current Emissions	EN61000-3-2, Class B
	Voltage fluctuations and flicker	EN61000-3-3
	Electrostatic Discharge Immunity	EN61000-4-2, 8kV Air, 4kV Contact, Level 3, Criteria A
	RF, Electromagnetic Field Immunity	EN61000-4-3, Test-RS Level 3, Criteria A
	Electrical Fast Transient / Burst Immunity	EN61000-4-4, Burst EFT Level 3, Criteria A
	Surge Immunity	EN61000-4-5, Line to Neutral 4kV, Neutral to FG 6kV
	RF, Conducted Disturbance Immunity	EN61000-4-6, Test-CS Level 3, Criteria A
	Power frequency Magnetic Field Immunity	EN61000-4-8, Test 3A/m, Criteria A
	Voltage dips, Short Interruptions Immunity	EN61000-4-11, Criteria B
	Electromagnetic Immunity Requirements Applies to Lighting Equipment	EN61547

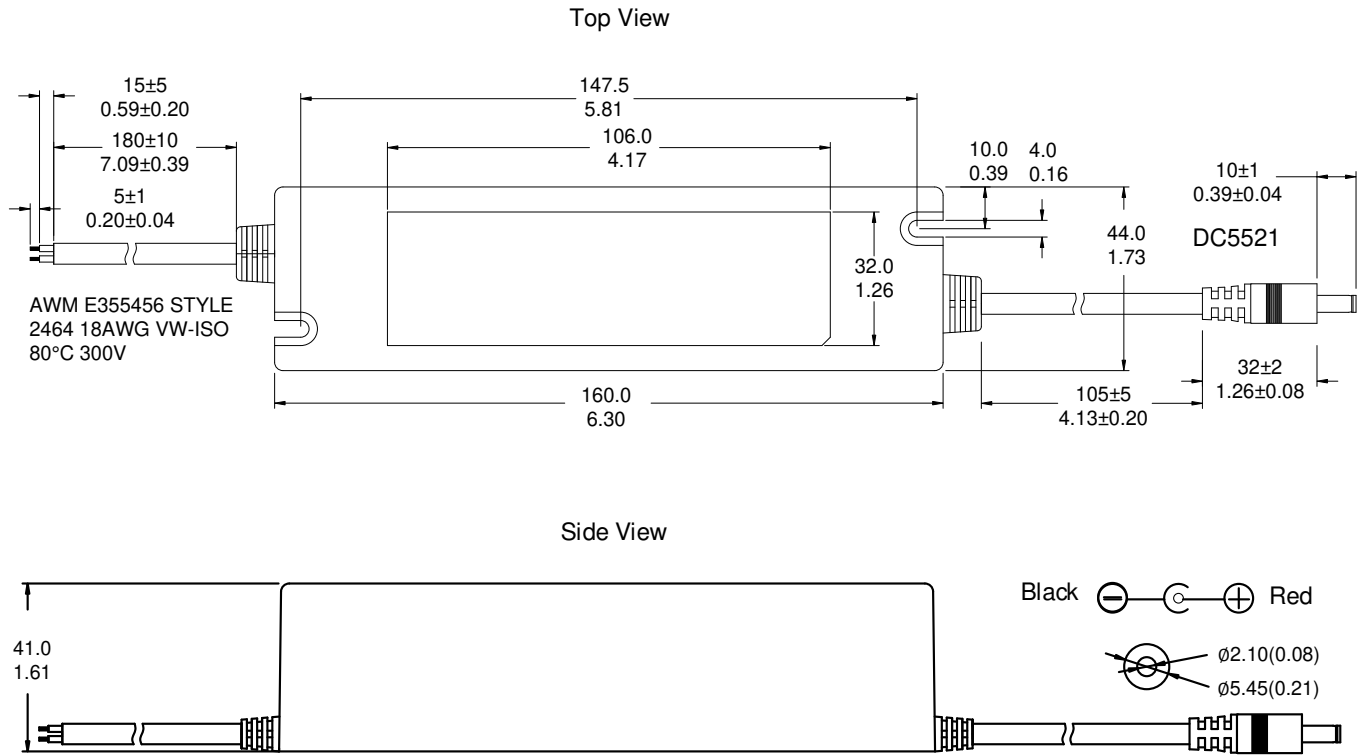
Pin Definition

Pin	Specification / Termination
AC-N	Blue Color, Wire Gauge #18
AC-L	Brown Color, Wire Gauge #18
LED+	The central pin of DC5521 Plug, Connected to the internal red wire
LED-	The external Cylinder pin of DC5521 Plug, Connected to internal black wire

Block diagram

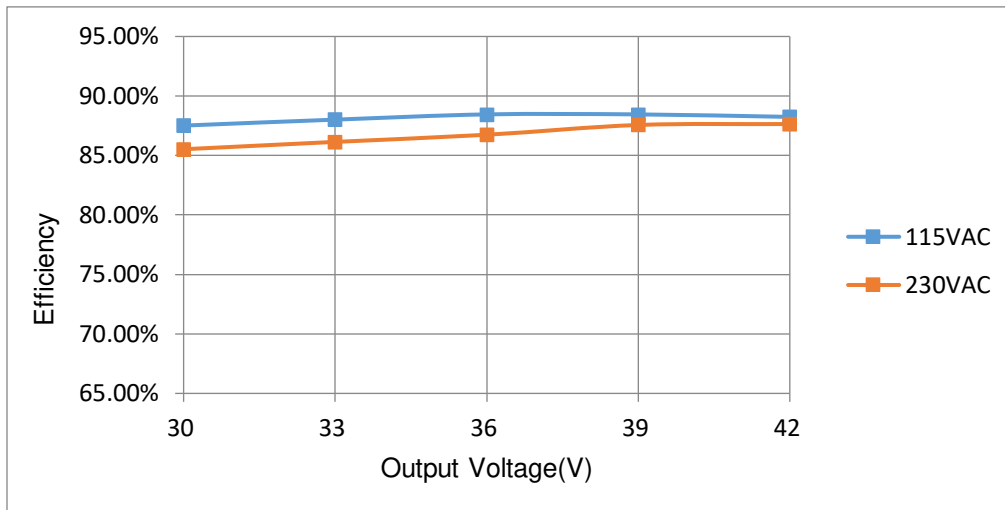


Dimensions

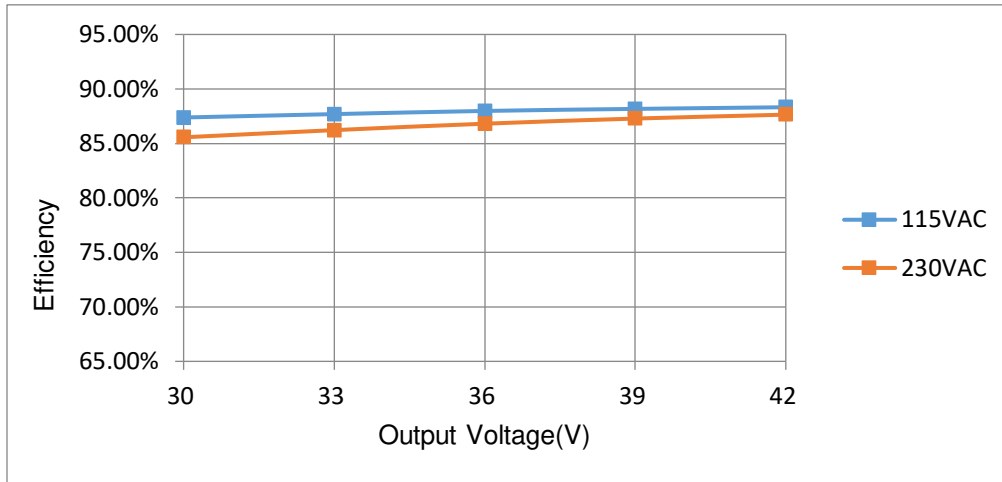


Efficiency Vs. Input Voltage & Output Load Voltage

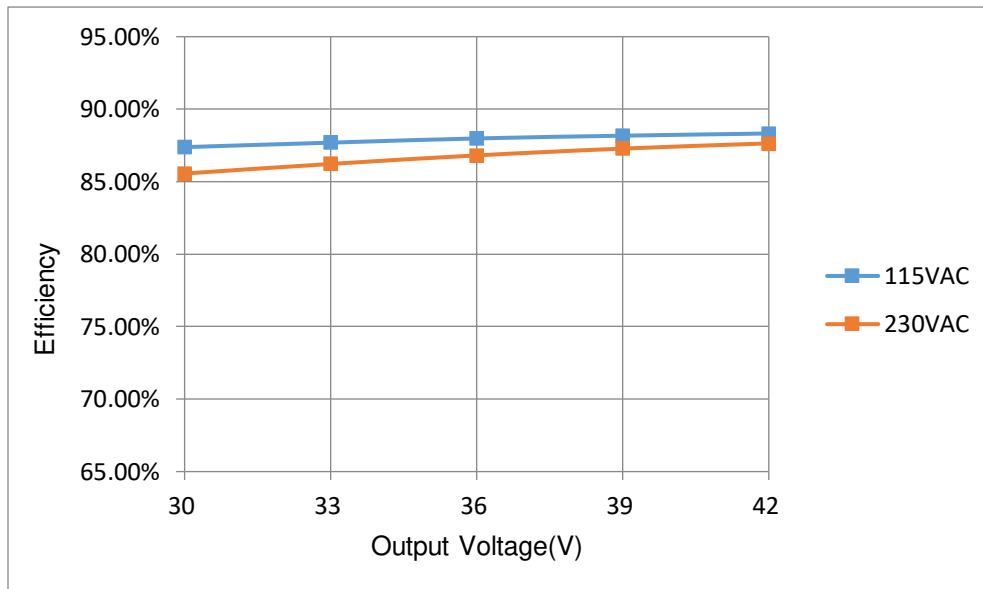
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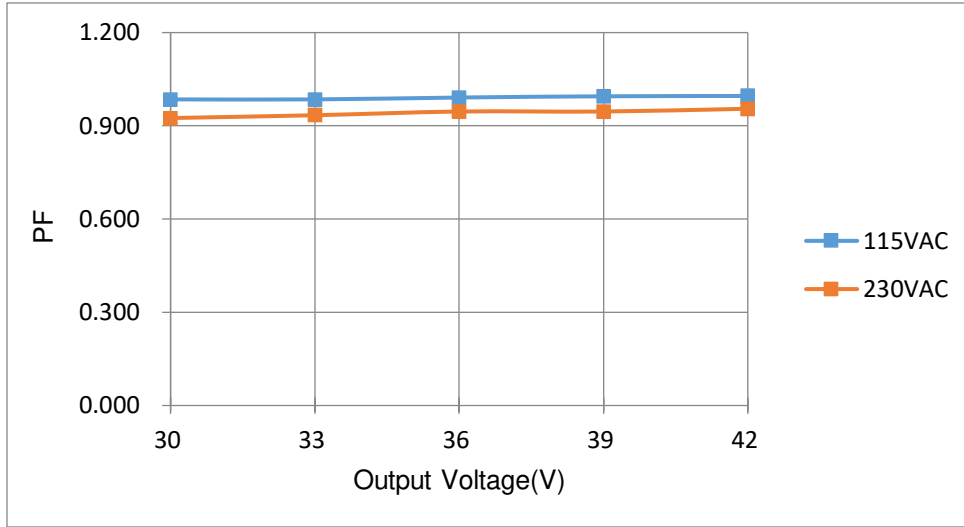


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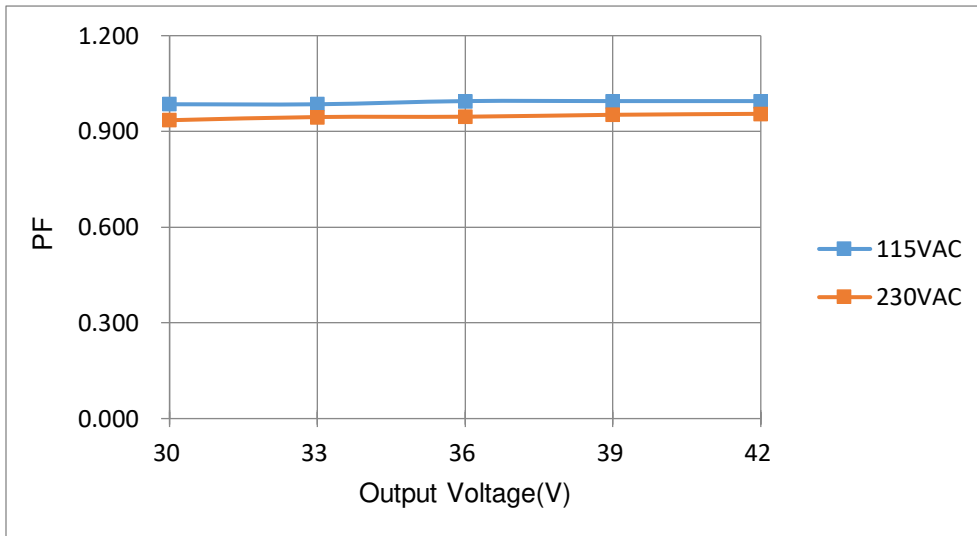


PF vs. Input Voltage & Output Load Voltage

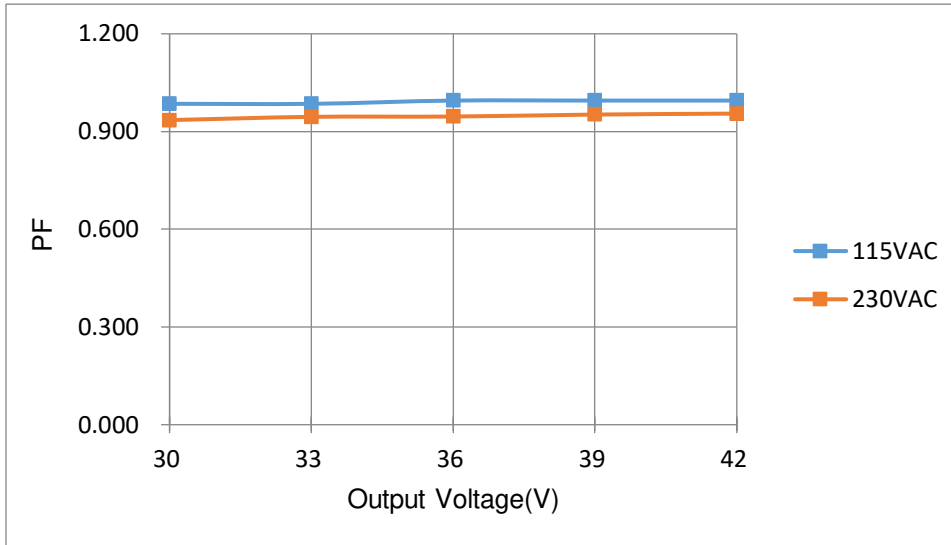
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AMEPR50N-42115Z



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