

## Features

- Universal input
- Efficiency to 92%
- EN55022-B, FCC Part15 Level B Noise
- Class 2 product
- 12 V at 6.6 A and 15 V at 5.3 A



## Electrical Specifications

AC Input	90–264 V, Universal	
Input Frequency	47–63 Hz	
Input Current	120 VAC: 1.05 A max.	230 VAC: 0.55 A max.
Inrush Current	120 VAC: Limited to safe value	230 VAC: Limited to safe value
Leakage Current	120 VAC: < 60 $\mu$ A	230 VAC: < 100 $\mu$ A
Efficiency	120 VAC: 90% typical	230 VAC: 92% typical
Hold-up Time	120 VAC: 3 ms	230 VAC: 3 ms
Output Power	80 to 90 W	
Line Regulation	+/-0.5%	
Load Regulation	+/-5.0%	
Transient Response	< 3%; 25% load change from mid level, 100 Hz, 50% duty cycle, 0.1 A/ $\mu$ s, recovery time < 5 ms	
Rise Time	< 50 ms	
Set Point Accuracy	+/-5%	
Overshoot	< 10%	
Turn-on Delay	< 2 s	
Over Current Protection	110 to 150%	
Over Voltage Protection	Redundant feedback type	
Short Circuit Protection	Short term, auto recovery	
Switching Frequency	Boost converter: Variable frequency, 35 to 250 kHz; 90 kHz typical Resonant converter: 55 kHz typical	
Isolation Voltage	Min. 4243 VDC between input to output	
Operating Temperature	0 to 40°C, refer derating curve	
Storage Temperature	-40 to +85°C	
Relative Humidity	95% Rh, non-condensing	
MTBF	> 100 kh, Bellcore TR-332	
Cooling	Convection	

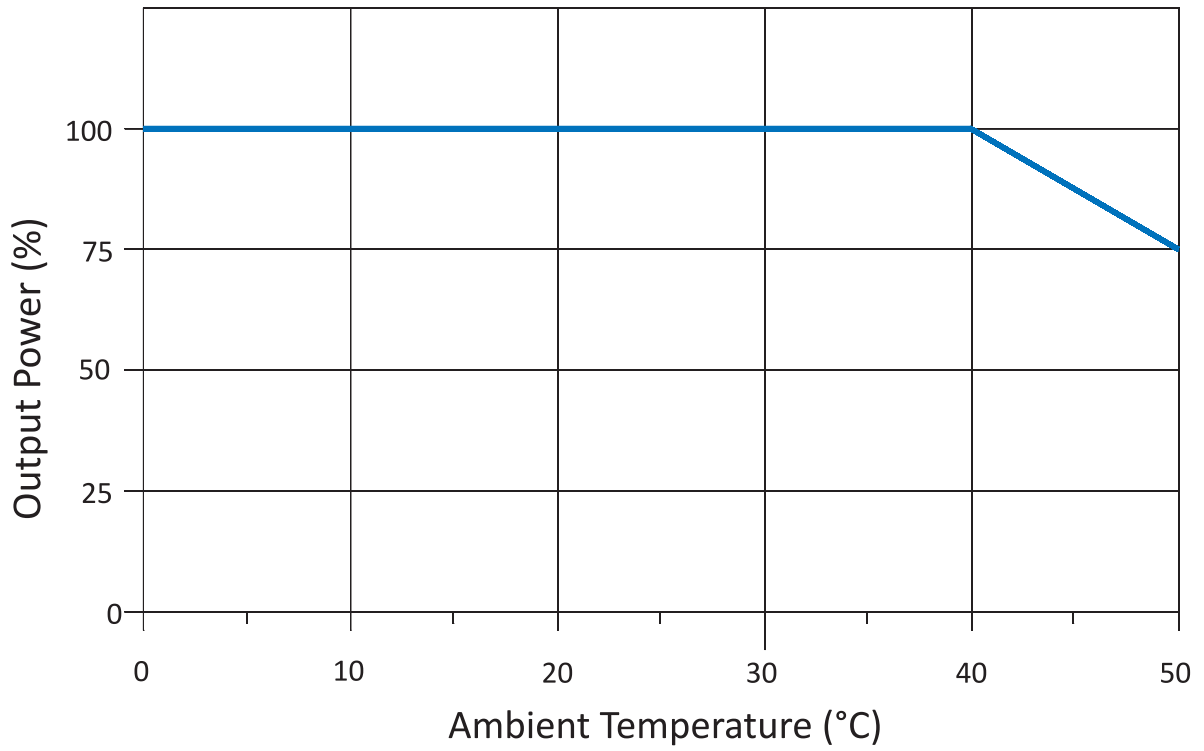
Model Number	Case Type	Voltage	Max. Load	Min. Load	Ripple <sup>1</sup>
LFZVC90NS12E	NS	12 V	6.66 A	0.0 A	< 1.5%
LFZVC90NS15E	NS	15 V	5.33 A	0.0 A	< 1.5%
LFZVC90NS19E	NS	19 V	4.7 A	0.0 A	< 1.5%
LFZVC90NS24E	NS	24 V	3.75 A	0.0 A	< 1.5%
LFZVC90NS48E	NS	48 V	1.87 A	0.0 A	< 1.5%

Mechanical Specifications	
AC Input Connector	IEC320 C8
DC Output Connector	Right angle plug; ID: 2.54 mm, OD: 5.54 mm Barrel length: 9.6 mm. Centre positive polarity Cable length: 40 inches
Dimensions	5.236 x 2.284 x 1.152 inches (133.0 x 58.0 x 29.2 mm)
Weight	350 g
EMC	
CE Mark	Complies with LVD and EMC Directives
Conducted Emissions	EN55022-B, CISPR22-B, FCC PART15 CLASS-B, EN50082-1
Static Discharge	EN61000-4-2, Level-3
RF Field Susceptibility	EN61000-4-3, Level-3
Fast Transients/Bursts	EN61000-4-4, Level-3
Radiated Emissions	EN55022-B, CISPR22-B, FCC PART15-B
Surge Susceptibility	EN61000-4-5, Level-3
Harmonic Current	EN61000-3-2, Class A & D
Safety	
Safety Standard(s)	IEC60950-1 (ed.2), CSA C22.2 No. 60950 (2nd Edition), EN60950-1, UL60950-1 (2nd Edition), Class 2 SELV
Approval Agency	Nemko, UL, C-UL
Safety File Number(s)	Nemko: NO 63201 UL: E150565

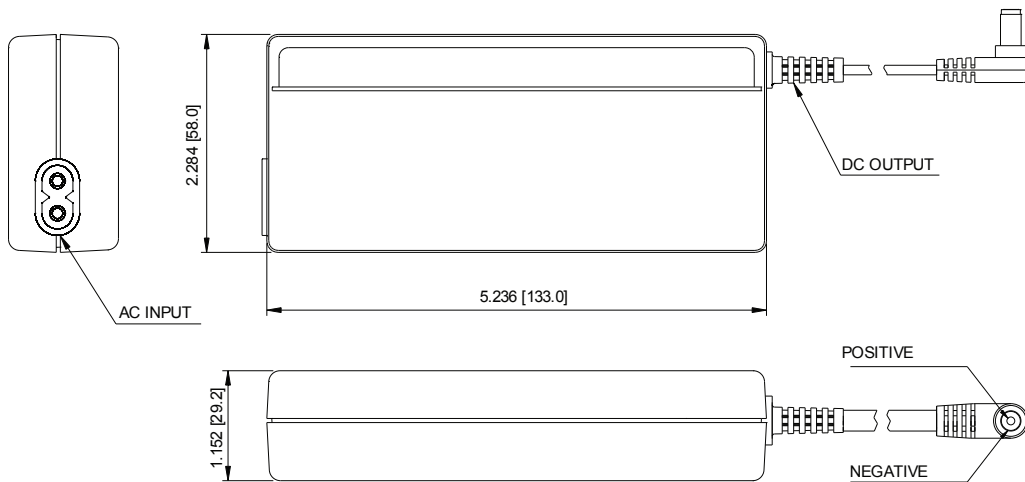
## Notes

1. Ripple is peak to peak with 20 MHz bandwidth and 10  $\mu$ F (Tantalum capacitor) in parallel with a 0.1  $\mu$ F capacitor at rated line voltage and load ranges.
2. Specifications are for nominal input voltage, 25°C and max. load unless otherwise stated.
3. Derate output power linearly to 80% from 90 VAC to 80 VAC input.

### Derating Curve



### Mechanical Drawing



MECHANICAL OUTLINE DIMENSIONS  
ALL DIMENSIONS ARE IN INCHES [MM]  
GEN. TOLERANCE: +/-0.02 [+/-0.5]