

## Features

- ▶ **High availability** with modular, scaleable double conversion online design for continuous uptime
- ▶ **High reliability** with advanced transformerless design
- ▶ **High performance** with highly efficient operation, low weight and small footprint
- ▶ **Global services** provides round-the-clock on-site maintenance programs with Powerware service professionals
- ▶ **Communication options**
  - ▶ Optional communication cards (X-Slot form)
    - Single port serial card
    - Multi-server card (3-RS232 serial port output)
    - ConnectUPS-X SNMP/Web card
    - ConnectUPS-X SNMP/Modem card
    - Modbus card
    - Relay interface card (AS400 interface)
    - Modem card

# Powerware® 9335



Model 80, 80 kVA; Model 120, 120 kVA

### Everything is mission-critical

That's because mission-critical is defined by your perception of what you need to be successful. This makes maximum uptime of information technology infrastructure, automation systems, enterprise-wide networks and workstation applications essential.

The Powerware 9335 is a double conversion online UPS for your critical 80 kVA and 120 kVA applications. Its unique transformerless design gives the Powerware 9335 highly efficient, cost-saving operation, as well as lower weight for reduced shipping costs, and small footprint to easily fit into most spaces.

## GENERAL SPECIFICATIONS

<b>Input/Output Voltage</b>	480 V/480 V
<b>Output Power</b>	80 kVA & 120 kVA
<b>Topology</b>	Online, double conversion 60 Hz
<b>Technology</b>	Second generation transformerless
<b>Cooling</b>	Fan assisted
<b>Accessibility</b>	Front and rear access
<b>Input &amp; Output Power Cabling</b>	Rear & bottom, 4 wire input plus ground
<b>Communication Ports</b>	Dry-contacts RS232

## ENVIRONMENTAL SPECIFICATIONS

<b>Ambient Temperature</b>	0°C to +40°C (for UPS); 20°C to 25°C (for batteries)
<b>Storage</b>	-20°C to +50°C
<b>Relative Humidity</b>	Maximum 95% non-condensing
<b>Audible Noise</b>	65 dBA (80 kVA) to 75 dBA (120 kVA)
<b>Electrostatic Discharge</b>	IEC 801-2
<b>EMC</b>	Meets FCC Class A
<b>Dimensions (WxHxD) mm(in.)</b>	700 (27.6)x 1800 (70.9)x 750 (29.6)
<b>Weight Kg (lbs)</b>	80 kVA 333 (733); 120 kVA 340 (748)

## BATTERY SPECIFICATIONS

<b>Maximum Battery Current (std)</b>	200 amps
<b>Maximum Battery Charge Current</b>	32 amps
<b>Battery Charger Ripple (&lt;1% @ 20 kHz)</b>	Ripple-free battery charging
<b>Battery Test</b>	Automatic and periodic
<b>Battery Type</b>	Lead-acid, maintenance-free or flooded batteries
<b>Variable Number of 12 V Batteries</b>	40 (480 V): (±240) 80 kVA 48 (576 V): (±288) 120 kVA

## SAFETY

UL1778 Listed	IEC 62040-3
IEEE 62.41	NEMA1

## EFFICIENCIES

Double conversion AC-AC efficiency with battery fully charged		80 kVA	120 kVA
100/75/50/25% linear load 0.8 pf	%	94.5/94.4/94/90	94/94/93/90
100/75/50/25% linear load 1.0 pf	%	94/93.5/92/87	93/93/92/87
100/75/50/25% non-linear load (EN50091-1)	%	92.5/92.5/91/88	92.5/92.5/91/88
Heat dissipation with 100% load (cosφ = 0.8 ind)			
With 100% linear load (cosφ = 0.8 ind)	W	2000	3000
With 100% linear load (resistive cosφ = 1)	W	3500	5200
With 100% linear load (EN50091-1)	W	4700	7000

## INPUT SPECIFICATIONS

		80 kVA	120 kVA
Input power w/charged battery & rated output power	KW	67.4	101
Maximum input power w/ rated output power	KW	80	120
Input voltage window			
With 100% Load	V(%)	(-20%, +15%)	
With 75% Load	V(%)	(-30%, +15%)	
Input frequency		40-100 Hz, ƒcontinuous duty	
Input power factor		0.98	
Input current waveform (100% load)		Sinewave (THD<10%)	
Inrush current		Soft-start (inrush current=load current)	
Output DC-voltage tolerance	%	±1	

## OUTPUT SPECIFICATIONS

	kVA	80 kVA	120 kVA
Output rated power			
Output rated voltage		3x480 V/277+ neutral	
Output rated power factor		0.8	
Inverter bridge		IGBT bridge	
Output voltage			
Static	%	<±1.5	
Load step (0-100%, 100-0%)	%	<±4	
Distortion with linear load	%	±1.5(2)	
Distortion with non-linear load	%	<±4	
Recovery time after load step (0-100%, 100-0%)	ms	20	
Permissible unbalanced load		100% (all 3-phases regulated independently)	
Output waveform		Sinewave	
Output frequency	Hz	50 or 60 Hz, continuous duty, user selectable	
Output frequency tolerance			
Free-running, quartz oscillator	%	±0.1	
Synchronized with input (adjustable)	%	±4	
Frequency slew rate	Hz/s	1	
Overload capability		110% 10 min., 125% 6 min., 150% 30 sec.	
Short circuit capability		Yes	
Crest factor		1:3	

## BYPASS SPECIFICATIONS

Overload capacity	150% continuous, 200% for 1 min., 1000% for 10 ms
Load transfer time from inverter to bypass	0 ms
Load transfer time from bypass to inverter	<1 ms
Minimum input voltage before inhibiting the bypass	229 V
Integrated maintenance bypass	Yes
Input terminals	4-wire, input plus ground

## BATTERY TIMES

Model Number	Weight (lbs.)	Dimensions WxDxH (inches)	80 kVA	120 kVA
1CR440TC065480	2698	40x32.5x77	5 min.	
1CR440TC100480	3543		15 min.	
1CR548TC090576	3643	48x32.5x77		5 min.
1CR548TC120576	4642			15 min.

† These specifications subject to change without notice, please reference [www.powerware.com](http://www.powerware.com) for latest information.



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