

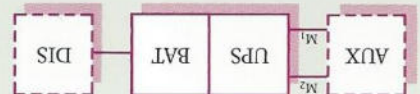
## HA3000 Reference and Ordering Guide

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A Guide to Part Numbers, Weights and Sizes for Environmental Products' 3-Phase Uninterruptible Power System

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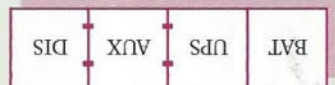
The base HA3000 system consists of a UPS Cabinet and a Battery Cabinet(s). HA3000 system options include:

- The Auxiliary Cabinet houses the Input THD Reduction Filter and/or the Input Isolation Transformer. Purchase of one or both of these options includes the Auxiliary Cabinet. Both options fit into one Auxiliary Cabinet.
- The Auxiliary Cabinet with a transformer (480/208 VAC) is required for the 480/208 VAC UPS in order to step down the voltage on the UPS bypass input (M2). The Auxiliary Cabinet with a transformer is recommended to isolate the UPS bypass input (M2).
- An Auxiliary Cabinet with a filter is recommended for use on the UPS system input (M1), to reduce harmonic noise reflected back to the utility power line to <10% and to provide power factor correction to a minimum of .9.
- An empty Auxiliary Cabinet is required for systems with top cable feed.

**Distribution Cabinet**

- The Distribution Cabinet is recommended for efficient cable distribution, and can be ordered with or without an output transformer. The output transformer provides another layer of isolation for all applications, and is required for Distribution Cabinets attached to 480/480 VAC UPS systems.

**Layout:** The configuration below is recommended for the UPS and option cabinets. The Battery Cabinet(s) should always be to the left of the UPS cabinet. The Auxiliary Cabinet is always bolted to the right side of the UPS and the Distribution Cabinet is bolted to the right of the UPS or Auxiliary Cabinet.



► **Part Number Charts**

Voltage (60 Hz)	kVA	Base System		Options			
		UPS Cabinet	Battery Cabinet	w/F&T <sup>1</sup>	w/T	w/F	Empty
208/208	20	HA32A-AH	HA32B-CH	HA32C-AH	HA32D-AH	HA32E-PH	HA32F-PT
480/208	20	HA32A-BH	HA32B-BH	HA32C-BH	HA32D-BH	HA32E-PH	HA32F-AH
480/480	20	HA32A-CH	HA32B-CH	HA32C-CH	HA32D-CH	HA32E-PH	HA32F-BH
208/208	40	HA32A-AK	HA32B-CK	HA32C-AK	HA32D-AK	HA32E-PK	HA32F-AK
480/208	40	HA32A-BK	HA32B-BK	HA32C-BK	HA32D-BK	HA32E-PK	HA32F-AK
480/480	40	HA32A-CK	HA32B-CK	HA32C-CK	HA32D-CK	HA32E-PK	HA32F-BK
208/208	60	HA32A-AM	HA32B-CM	HA32C-AM	HA32D-AM	HA32E-PM	HA32F-AM
480/208	60	HA32A-BM	HA32B-BM	HA32C-BM	HA32D-BM	HA32E-PM	HA32F-AM
480/480	60	HA32A-CM	HA32B-CM	HA32C-CM	HA32D-CM	HA32E-PM	HA32F-BM
208/208	80	HA32A-AN	HA32B-CN <sup>2</sup>	HA32C-AN	HA32D-AN	HA32E-PN	HA32K-AN
480/208	80	HA32A-BN	HA32B-BN	HA32C-BN	HA32D-BN	HA32E-PN	HA32K-AN
480/480	80	HA32A-CN	HA32B-CN	HA32C-CN	HA32D-CN	HA32E-PN	HA32K-BN

<sup>1</sup> F = Filter; T = Transformer  
<sup>2</sup> For site planning purposes, plan for 2 cabinet footprint.

**Other Options**

Remote Status Panel with 150' cable	HA320-AA
Remote Status Panel with 300' cable	HA320-AB

## Part Number Selection

### ► Establishing kVA and Cable Requirements

1) List your computer equipment and its peripherals.

2) List kVA rating for each item.  
 $kVA = (\text{Volts} \times \text{Amps}) \div 1000$

3) List number of poles for each listed item. (Note whether circuit is one pole, two pole or three pole.)

4) List the NEMA receptacle number for each listed item.

5) List cable part numbers. (For specific cable information and cable part numbers, refer to the Cable section of the Environmental Products Catalog.)

Equipment	kVA	Poles	Receptacles	Cable Part Number
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
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_____	_____	_____	_____	_____
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_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
	Total kVA	Total Poles		

### ► HA3000 System Part Numbers

6) Record available input voltage for your UPS system. (Your building electrician can provide this information.) . . . . . \_\_\_\_\_

7) Record the desired output voltage of your UPS system. . . . . \_\_\_\_\_

8) From the part number chart to the left, select the HA3000 UPS cabinet model number by using the total kVA requirement as determined in Step 2, and the available input voltage along with the desired output voltage from Steps 6 and 7. (Although the HA3000 unit can be run at 100 percent of its rated capacity, we recommend 75 percent loading, to allow for future growth.) . . . . . \_\_\_\_\_

9) Select your battery cabinet by reading across from the UPS model number. . . . . \_\_\_\_\_

10) Select the desired Auxiliary Cabinet by reading across from the UPS model number. . . . . \_\_\_\_\_

11) Select the desired Distribution Cabinet by reading across from the UPS model number. . . . . \_\_\_\_\_

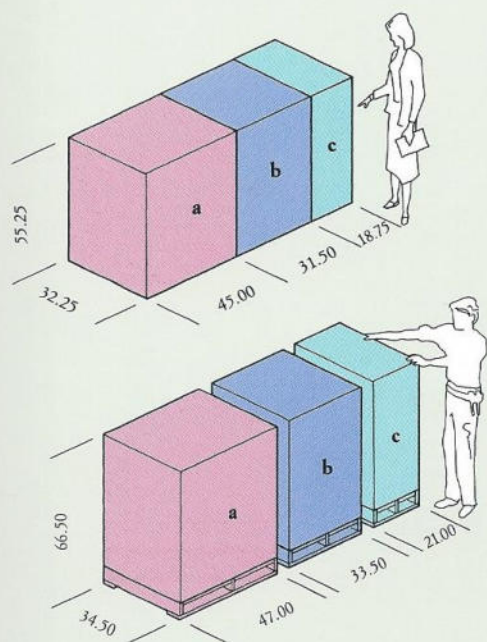
12) From the other options chart to the left, list any additional part numbers. . . . . \_\_\_\_\_

System Part Number

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

*Note: For pricing information, contact a Field Service Environmental Product Support Specialist or your local Sales Representative.*

► Weight and Dimension Charts



Above illustrations do not represent actual configuration of the HA3000 system.

kVA	Base System		Options					
	UPS Cabinet	Battery Cabinet	Auxiliary Cabinet				Distribution Cab.	
			w/F & T <sup>1</sup>	w/T	w/F	Empty	w/T	w/o T
20	1075	1820	591	450	341	200	775 (42 Pole)	495 (42 Pole)
40	1385	1995	724	550	374	''	885 (42 Pole)	495 (42 Pole)
60	1725	1995	993	720	473	''	1015 (84 Pole)	525 (84 Pole)
80	2250	2 × 1820	1225	850	573	''	1135 (84 Pole)	525 (84 Pole)
Dim.	size b		size c				size b	
	size a							

<sup>1</sup> F = Filter; T = Transformer

Note: Weight of Remote Status Panel does not exceed 10 lbs.

	Actual Dimensions			Shipping Dimensions		
	height	depth	width	height	depth	width
size a	55.25	32.25	45.00	66.50	34.50	47.00
size b	''	''	31.50	''	''	33.50
size c	''	''	18.75	''	''	21.00

*Special Shipping/Delivery Considerations*

- The shipment method of choice for the HA3000 system is a padded van with inside delivery to the final location. We strongly recommend that this shipment method be utilized.
- Upon removal from the van, only the shipping pallet(s) should be removed from the HA3000 unit. The packaging should be removed only at the final location. Therefore, you must consider shipping size when transporting the HA3000 unit through the building.
- When assessing access routes to the final location of the HA3000 system from the unloading point, it's extremely important to consider:
  - stairs/elevator capacities, doorway sizes, floor loading during movement
  - possible need for rigging
  - static floor loading capabilities at the final location.

◀ . . . . . Choosing the correct HA3000 3-Phase UPS unit requires you to know the amount of power consumed by your computer equipment. This Reference Guide is designed to help you determine the exact power requirements of your computer system in order to select and configure your HA3000 unit and its related options.

On the following pages you will find a worksheet which, when completed following steps 1 through 12, will allow you to determine the right HA3000 configuration for your needs. The information necessary to complete the worksheet can be found in the accompanying charts, or in the Digital Environmental Products Catalog.

For additional information, or assistance in completing the worksheet, contact your local Digital sales office.

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