

## Facility Planning Data Sheet

### 9900B Series 300 - 750 kVA UPS (480in/480out)

Power Rating		UPS AC Input							Battery System			AC Output			Mechanical Information				
		Voltage		kVA		Current		Minimum Input	External Overcurrent Protection	Nominal Voltage	Full Load	Maximum Discharge	Voltage	Current Nominal	External Overcurrent Protection	Dimensions W x D x H	Weight	Floor Loading	Heat Rejection
kVA	kW	Vac/ Freq.	Nom.	Max.	Nom.	Max.	AWG or kcmil	VDC		kW	A	Vac	A		Inch	Lbs	Lbs/ Ft <sup>2</sup>	kBTU/ Hr	CFM
300	300	480 / 60Hz	313	348	377	419	3x1/0 or larger	480	312	780	480	361	500A	55.1x32.7x80.7	2360	189	42.7	4100	
500	500	480 / 60Hz	522	580	628	698	3x250MCM or larger	480	520	1299	480	601	800A	88.3x32.7x80.7	3625	208	69.2	6800	
750	750	480 / 60Hz	783	835	942	1005	3x600MCM or larger	480	776	1939	480	902	1200A	106.9x32.7x80.7	4425	205	98.3	8800	
Notes:							1	2	3,4,9,12,A,B,C	4,7,13,14	5	6,9	1	4,7,8,10	10,11				

#### Notes:

1. Nominal (Nom.) current based on rated load.
2. Maximum (Max.) current based on converter overload rating.
3. Input and output cables typically run in separate conduits.
4. If initial load is less than UPS' rated output, it is recommended that AC input, battery, and AC output wiring and overcurrent protection be sized to UPS' full load rating to accommodate possible future expansion.
5. Nominal battery voltage assumed to be 2.0 volts/cell (lead technology).
6. DC cables should be sized for not more than a 2.0% line drop at maximum discharge current.
7. Suggested AC output overcurrent protection based on continuous full load current per NEC 210-20. 80% rated breakers assumed.
8. Grounding conductors to be sized per NEC Article 250-122 and NEC Table 250-122. Phase conductors to be sized per NEC Article 310-15.
  - AC Input: 3  $\phi$ , 3 wire + ground.
  - Bypass Input: 3  $\phi$ , 3 wire + ground.
  - AC Output: 3  $\phi$ , 3 wire + ground.
  - DC Input: 2 wire (Positive and Negative) + ground.
9. All wiring to be in accordance with all applicable national and/or local electrical codes.
10. Minimum access clearance per UPS drawings or Owner's Manual.
11. 750kVA and 500kVA widths include additional 16.3" cable entry sidecar. Cable entry from top or bottom. Punch plates accordingly. (*Side access possible. Consult MEPPI for specifics.*)
12. Control wiring and power wiring to be run in separate conduits.
13. External overcurrent protection based on nominal current + battery charge current (non-continuous).
14. For 500kVA and 750kVA, 100% rated breakers assumed.

#### Additional Notes:

- i. For site configurations including emergency generators, engine generator to be sized and equipped for UPS applications. Generator equipped with governor for frequency regulation and regulator for voltage stability recommended. Note: UPS' reflected current distortion is 3% max at full load and 5% max at 50% load.
  - ii. For site configurations equipped with an external Maintenance Bypass Switch circuit, UPS must be on internal Static Bypass before transferring to external Maintenance Bypass. Consult Factory for further information.
  - iii. For site configurations including automatic transfer switches, transfer switch to be equipped with "neutral delay position" option to minimize phase shift during operation. Transfer switch equipped with auxiliary contact for control of UPS input current when on generator recommended. Consult transfer switch manufacturer for required transfer switch options and sizing.
    - A. Not more than 3 conductors in raceway assumed; ambient temperature of 30 °C (86 °F) assumed.
    - B. Temperature rating of conductors: 75 °C (167 °F). Reference Table 310-16 of NEC, 75 °C column, using copper conductors. 75 °C (167 °F) cable terminal connectors assumed.
    - C. Reference: NEC handbook 2008. Consult local codes for possible variations.
- D. RATINGS OF CABLES AND OVERCURRENT DEVICES SUPPLIED FOR INFORMATION ONLY. USER TO CONSULT WITH ITS ENGINEERING SERVICES BEFORE ADOPTING.**



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