

Facility Planning Data Sheet

9900A Series 80 - 225 kVA UPS (480in/480out)

Power Rating	UPS AC Input						Battery System			AC Output			Mechanical Information							
	kVA	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	Cooling Air
		Vac/ Freq.	Nom.	Max.	Nom.	Max.	Nom.													
80	72	480 / 60Hz	76	80	91	103	1x1/0 or larger	125A	480	76	189	480	96	125A	27.6x32.8x80.6	882	139	11.3	1200	
100	90	480 / 60Hz	95	112	114	129	1x3/0 or larger	150A	480	95	236	480	120	150A	27.6x32.8x80.6	882	139	14.1	1500	
150	135	480 / 60Hz	142	168	170	191	1x250 or larger	225A	480	140	350	480	180	225A	35.4x32.8x80.6	1,146	142	18.2	1900	
225	202.5	480 / 60Hz	212	252	255	287	2x3/0 or larger	350A	480	210	524	480	271	350A	35.4x32.8x80.6	1,235	152	27.3	2800	
Notes:					1	2	3,4,9,12,A,B,C	4,7,13	5		6,9		1	4,7,8,10	10,11					

Notes:

- Nominal (Nom.) current based on rated load.
- Maximum (Max.) current based on converter overload rating.
- Input and output cables typically run in separate conduits.
- 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.
- Nominal battery voltage assumed to be 2.0 volts/cell (lead technology).
- DC cables should be sized for not more than a 2.0% line drop at maximum discharge current.
- Suggested AC output overcurrent protection based on continuous full load current per NEC 210-20. 80% rated breakers assumed.
- 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 ϕ , 3 wire + ground.
 - Bypass Input: 3 ϕ , 3 wire + ground.
 - AC Output: 3 ϕ , 3 wire + ground.
 - DC Input: 2 wire (Positive and Negative) + ground.
- All wiring to be in accordance with all applicable national and/or local electrical codes.
- Minimum access clearance per UPS drawings or Owner's Manual.
- Cable entry from bottom. Punch plates accordingly. (Side access possible. Top access possible with available side mounted wire way. Consult MEP/PI for specifics.)
- Control wiring and power wiring to be run in separate conduits.
- External overcurrent protection based on nominal current + battery recharge current (non-continuous).

Additional Notes:

- 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.
 - 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.
 - 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.
- Not more than 3 conductors in raceway assumed; ambient temperature of 30 °C (86 °F) assumed.
 - 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.
 - 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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