Facility Planning Data Sheet

9800AE Series 100 - 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	Cooling Air
kVA	kW	Vac/ Freq.	Nom.	Max.	Nom.	Max.	AWG or kcmil		VDC	kW	A	Vac	A		Inch	Lbs	Lbs/ Ft²	kBTU/ Hr	CFM
100	80	480 / 60Hz	87	93	104	115	1x1/0 or larger	150A	480	86	214	480	120	150A	43.3x29.8x79.7	2,060	230	19	2000
150	120	480 / 60Hz	130	139	156	172	1x4/0 or larger	225A	480	129	321	480	180	225A	47.2x29.8x79.7	2,580	264	29	3000
225	180	480 / 60Hz	196	209	236	256	1x400 or larger	350A	480	194	484	480	271	350A	55.1x29.8x79.7	3,260	285	46	4900
300	270	480 / 60Hz	292	312	351	384	2x250 or larger	500A	480	289	722	480	361	500A	76.8 x37.7x79.7	4,560	227	64	6800
375	337.5	480 / 60Hz	364	390	438	480	2x350 or larger	600A	480	361	901	480	451	600A	76.8 x37.7x79.7	4,920	245	80	8500
500	450	480 / 60Hz	484	520	582	640	2x600 or larger	800A	480	479	1197	480	601	800A	114.2 x37.7x79.7	6,920	231	98	10400
750	675	480 / 60Hz	725	780	873	960	4x350 or larger	1200A	480	718	1795	480	902	1200A	129.9x49.5x79.7	9,190	206	147	15600
Notes:					1	2	3,4,10,13,A,B,C	4,7,9	5		6,10		1	4,7,8,11	11,12				

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. Neutral conductors to be sized per NEC Article 310-15.
   - AC Input: 3 ϕ, 3 wire, ground.
     For single input feed, neutral conductor required for bypass.
     For single input feed, jumper bypass and converter phase conductors.
   - Bypass Input: 3 ϕ, 4 wire + ground.
   - AC Output: 3 ϕ, 4 wire + ground.
   - DC Input: 2 wire (Positive and Negative) + ground.
9. Input neutral conductor not required if main feed is from a delta-wye input isolation transformer AND both the Bypass and AC Inputs are fed from wye side. Neutral derived on wye side.
10. All wiring to be in accordance with all applicable national and/or local electrical codes.
11. Minimum access clearance per UPS drawings or Owner's Manual.
12. Cable entry from bottom (100~225kVA). Cable entry from top (300~750kVA). Punch plates accordingly. (*Side access possible. Top access possible with available side mounted wire way. Consult MEPPI for specifics*.)
13. Control wiring and power wiring to be run in separate conduits.

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 reconmmended. Note: UPS' reflected current distortion is 6% max at full load and 9% 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 2005. 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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