## Facility Planning Data Sheet 9800AE Series 100 - 750 kVA UPS (480in/600out)

		UPS AC Input							Battery System			AC Output			Mechanical Information				
Power		Voltage	kVA		Current		Minimum	External	Nominal	Full Load	Maximum	Voltage	Current	External	Dimensions		Floor	Heat	Cooling
Rating						Input	Overcurrent	Voltage	[	Discharge		Nominal	Overcurrent	WxDxH	Weight	Loading	Rejection	Air	
kVA	kW	Vac/ Freq.	Nom.	Max.	Nom.	Max.	AWG or kcmil	Protection	VDC	kW	А	Vac	А	Protection	Inch	Lbs	Lbs/ Ft <sup>2</sup>	kBTU/ Hr	CFM
100	80	480 / 60Hz	87	93	104	115	1x1/0 or larger	150A	480	86	214	600	96	125A	43.3x29.5x79.7	2,060	230	31	3200
150	120	480 / 60Hz	130	139	156	172	1x4/0 or larger	225A	480	129	321	600	144	200A	47.2x29.5x79.7	2,580	264	46	4800
225	180	480 / 60Hz	196	209	236	256	1x400 or larger	350A	480	194	484	600	217	300A	55.1x29.5x79.7	3,260	285	72	7700
300	270	480 / 60Hz	292	312	351	384	2x250 or larger	500A	480	289	722	600	289	400A	76.8 x37.4x79.7	4,560	227	103	10900
375	337.5	480 / 60Hz	364	390	438	480	2x350 or larger	600A	480	361	901	600	361	500A	76.8 x37.4x79.7	4,920	245	129	13600
500	450	480 / 60Hz	484	520	582	640	2x600 or larger	800A	480	479	1197	600	481	700A	114.2 x37.4x79.7	6,920	231	163	17200
750	675	480 / 60Hz	725	780	873	960	4x350 or larger	1200A	480	718	1795	600	722	1000A	129.9x49.2x79.7	9,190	206	244	25800
Notes:					1	2	3,4,10,13,A,B,C	4,7,9	5		6,10		1	4,7,8,11	11,12,14	14	14		

## Notes:

- 1. Nominal (Nom.) current based on rated load.
- 2. Maximum (Max.) current and Maximum (Max.) kVA based on inverter rated load and nominal battery charge current.
- 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 CEC Rules 30-714 and 34-018. 80% rated breakers assumed.
- 8. Grounding conductors to be sized per CEC Table 16 and applicable rules. Neutral conductors to be sized per CEC Rule 4-022.
  - AC Input:  $3\phi$ , 3 wire + ground.
  - Bypass Input:  $3\phi$ , 4 wire + ground.
  - AC Output:  $3\phi$ , 4 wire + ground.
  - DC Input: 2 wire (Positive and Negative) + ground.
- 9. Static bypass input neutral conductor not required if load is 3 phase only.
- 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.
- 14. Not includes dimension and weight of input transformer cabinet.

## 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 6% typical at full load and 9% typical 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 CEC, 75 °C column, using copper conductors. 75 °C (167 °F) cable terminal connectors assumed.
- C. Reference: CEC handbook 1994. 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.



Mitsubishi Electric Power Products, Inc. UPS Division Phone: (724) 772-2555 Fax: (724) 778-3146