

## Facility Planning Data Sheet

### 2033G Series 30 - 50 kVA UPS (208in/208out, 480in/480out)

Power Rating		UPS AC Input (208V or 480V)						Battery System			AC Output (208V or 480V)		Mechanical Information						
		Voltage		kVA		Current		Minimum Input AWG	External Overcurrent Protection	Nominal Voltage	Full Load kW	Maximum Discharge	Current Nominal	External Overcurrent Protection	Dimensions W x D x H	Weight Lbs	Floor Loading Lbs/ Ft <sup>2</sup>	Heat Rejection kBTU/ Hr	Cooling Air CFM
		Vac/ Freq.	Nom.	Max.	Nom.	Max.													
30	24	208 / 60Hz	28	32	79	85	1 AWG or larger	125A	432 VDC	26	72	83.3	125A	27.6x31.5x59.1	530	87.78	13.9	1500	
30	24	480 / 60Hz	29	33	35	38	6 AWG or larger	50A	432 VDC	26	72	38	50A	56.6x31.5x59.1	1,525	123.17	14.4	1500	
50	40	208 / 60Hz	47	53	131	142	3/0 AWG or larger	175A	432 VDC	43	121	138.8	175A	27.6x31.5x59.1	665	110.14	23.9	2500	
50	40	480 / 60Hz	49	55	59	64	2 AWG or larger	80A	432 VDC	43	121	63	80A	56.6x31.5x59.1	1950	157.49	24.8	2500	
Notes:						1	2	3,4,10,13,A,B,C	4,7,9	5		6,10	1,14	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. If user provided, 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  $\phi$ , 4 wire + ground. Single feed only. Bypass and converter inputs jumpered internally.
  - AC Output: 3  $\phi$ , 4 wire + ground.
  - DC Input: If user supplied, 2 wire (Positive and Negative) + ground.
9. 480V System : Input neutral conductor not required if main feed is from a delta-wye input isolation transformer. 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 Owner's Manual.
12. Cable entry from bottom/side. Punch plates accordingly. (*Consult MEPMI for alternate entry/exit points.*)
13. Control wiring and power wiring to be run in separate conduits.
14. Nominal output current based on matching AC input / output voltages.

#### 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 4% max at full load and 7% 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.
    - 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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