

## Facility Planning Data Sheet

### 2033C Series 10 - 20 kVA UPS (480in/208out)

Power Rating		UPS AC Input (480V)							Battery System			AC Output (208V)		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
		kVA	kW	Vac/ Freq.	Nom.	Max.	Nom.												
10	8	480 / 60Hz	9.4	11.4	11.3	13.8	14 AWG or larger	20A	360 VDC	8.6	28.7	27.8	35A	35.6x31.5x43.3	930	119	4.2	440	
15	12	480 / 60Hz	14.1	17.2	17.0	20.6	10 AWG or larger	30A	360 VDC	12.9	43.1	41.6	60A	35.6x31.5x43.3	1,210	155	6.3	660	
20	16	480 / 60Hz	18.9	22.5	22.8	27.1	10 AWG or larger	35A	360 VDC	17.3	57.5	55.5	70A	35.6x31.5x43.3	1,280	164	8.7	920	
Notes:				1	2	3,4,10,13,A,B,C		4,7,9	5	6,10		1	4,7,8,11	11,12	14				

#### 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. Punch plates accordingly. (*Consult MEPPi for alternate entry/exit points.*)
13. Control wiring and power wiring to be run in separate conduits.
14. Includes weight of internal batteries. (10kVA to 20kVA)

#### 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 6% 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 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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