

POWER SPECIFICATIONS

JEDI 80kw SYSTEMS CABINET

REV. DATE: 12/07/10

VOLTAGE PRIMARY SOURCE IS REQUIRED FOR ALL INSTALLATIONS.
 RANGE OF LINE VOLTAGES :
 NOMINAL LINE VOLTAGE OF 380 TO 480, 3 PHASE, WITHOUT NEUTRAL,
 50 OR 60 Hz.

REQUIRED POWER SUPPLY: WYE DISTRIBUTION

MAXIMUM DAILY VOLTAGE VARIATION MUST FALL WITHIN ONE OF THE RANGES IN TABLE A.

**TABLE A
 ALLOWABLE
 INPUT
 VOLTAGES/
 CURRENT
 DEMAND**

NOMINAL VOLTAGE	NORMAL RANGE ±10 PERCENT	CURRENT (AMPS)		MINIMUM OVERCURRENT PROTECTION
		MAX. MOMENTARY	CONTINUOUS	
380	342-418	190	7	95-A
400	360-440	181	6.6	90-A
415	373-456	172	6.3	85-A
440	396-484	164	6	82-A
460	414-506	157	5.8	78-A
480	432-528	151	5.5	75-A

ALL CALCULATIONS BASED UPON NOMINAL VOLTAGE

NOTE LOW LINE CONDITIONS MAY INHIBIT SOME HIGH kV_p TECHNIQUES. THE GENERATOR AUTOMATICALLY ESTABLISHES THESE INHIBITS BASED ON ACTUAL LINE CONDITIONS AND SYSTEM REGULATION.

PHASE-BALANCE. PHASE-TO-PHASE VOLTAGES MUST BE WITHIN +2 PERCENT OF THE LOWEST PHASE-TO-PHASE VOLTAGE. MAXIMUM ALLOWABLE TRANSIENT VOLTAGE EXCURSIONS ARE 2.5 PERCENT OF RATED LINE VOLTAGE AT A MAXIMUM DURATION OF 5 CYCLES AND FREQUENCY OF 10 TIMES PER HOUR.

POWER DEMAND CONTINUOUS POWER DEMAND =4.6 KVA. (MAX DEMAND = 125 KVA)

**TABLE B
 MAXIMUM
 MOMENTARY
 POWER
 DEMAND.**

DEMAND	PRECISION 80 KW
kVa * POWER FACTOR AT	125 0.73
mA	630
kVp	80

* DEMAND INCLUDES POWER FOR ENTIRE SYSTEM. LINE VOLTAGE REGULATION AT MAXIMUM POWER DEMAND MUST BE LESS THAN OR EQUAL TO 6 PERCENT.

DISTRI-BUTION TRANS-FORMER FOR A SINGLE UNIT INSTALLATION, THE MINIMUM TRANSFORMER SIZE IS 150 KVA.



FEEDER TABLE

JEDI 80kw SYSTEMS CABINET

REV. DATE: 04/24/07

- CALCULATIONS BASED UPON NOMINAL VOLTAGE, WIRE SIZE IN AWG.
- RECOMMENDED FEEDER SIZES FROM DISTRIBUTION TRANSFORMER TO THE POWER CABINET
- NEUTRAL MUST BE TERMINATED INSIDE THE MAIN DISCONNECT PANEL AND NOT AT ANY GE CABINET.
- THE GROUNDING CONDUCTOR WILL BE OF SAME SIZE AS THE FEEDER WITH A 1/0 MINIMUM. THIS GROUND WILL RUN FROM THE EQUIPMENT BACK TO THE FACILITY POWER SOURCE/MAIN GROUNDING POINT AND ALWAYS TRAVEL IN THE SAME CONDUIT WITH THE FEEDERS AND NEUTRAL.
- * MINIMUM WIRE SIZE FOR CIRCUIT BREAKER, BASED ON RECOMMENDED OVERCURRENT PROTECTION.
- FOR A FULL SYSTEM UPS, REFER TO ELECTRICAL DETAILS FOR UPS FEEDER WIRES.

RUN LENGTH IN FEET	POWER SUPPLY VOLTAGE											
	342-418 380		360-440 400		373-456 420		396-484 440		414-506 460		432-528 480	
SIZE OF FEEDERS AND GROUND WIRES (AWG)												
	FEEDER	GROUND	FEEDER	GROUND	FEEDER	GROUND	FEEDER	GROUND	FEEDER	GROUND	FEEDER	GROUND
50	* 2	(1/0)	* 2	(1/0)	* 2	(1/0)	* 2	(1/0)	* 2	(1/0)	* 2	(1/0)
100	* 2	(1/0)	* 2	(1/0)	* 2	(1/0)	* 2	(1/0)	* 2	(1/0)	* 2	(1/0)
150	1/0	(1/0)	1	(1/0)	1	(1/0)	* 2	(1/0)	* 2	(1/0)	* 2	(1/0)
200	2/0	(2/0)	2/0	(2/0)	1/0	(1/0)	1/0	(1/0)	1	(1/0)	1	(1/0)
250	3/0	(3/0)	3/0	(3/0)	2/0	(2/0)	2/0	(2/0)	1/0	(1/0)	1/0	(1/0)
300	4/0	(4/0)	4/0	(4/0)	3/0	(3/0)	3/0	(3/0)	2/0	(2/0)	2/0	(2/0)
350	300M	(300M)	250M	(250M)	4/0	(4/0)	4/0	(4/0)	3/0	(3/0)	3/0	(3/0)
400	350M	(350M)	300M	(300M)	250M	(250M)	4/0	(4/0)	4/0	(4/0)	3/0	(3/0)
450	400M	(400M)	350M	(350M)	300M	(300M)	250M	(250M)	250M	(250M)	4/0	(4/0)