

# POWER SPECIFICATIONS

## JEDI 65kw SYSTEMS CABINET

REV. DATE: 21.JUN.14

**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	148	7	74-A
400	360-440	140	6.6	70-A
415	373-456	133	6.3	67-A
440	396-484	127	6	64-A
460	414-506	122	5.8	61-A
480	432-528	117	5.5	59-A

**ALL CALCULATIONS BASED UPON NOMINAL VOLTAGE**

**NOTE**

LOW LINE CONDITIONS MAY INHIBIT SOME HIGH kV<sub>p</sub> 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 = 97 KVA)

TABLE B  
 MAXIMUM  
 MOMENTARY  
 POWER  
 DEMAND.

DEMAND	PRECISION 65 KW
kVa * POWER FACTOR AT	97 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.

**DISTRIBU-TION TRANS-FORMER**

FOR A SINGLE UNIT INSTALLATION, THE MINIMUM TRANSFORMER SIZE IS 112.5 KVA. SYNTHESIZED POWER FEED IS NOT ACCEPTABLE



## FEEDER TABLE

### JEDI 65kw SYSTEMS CABINET

REV. DATE: 10/13/09

- 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. 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	<b>432-528 480</b>
SIZE OF FEEDERS AND GROUND WIRES (AWG)						
50	* 4	* 4	* 4	* 4	* 4	* 4
100	3	* 4	* 4	* 4	* 4	* 4
150	2	2	2	3	3	* 4
200	1/0	1	1	2	2	2
250	2/0	2/0	1/0	1	1	1
300	3/0	2/0	2/0	1/0	1/0	1/0
350	4/0	3/0	3/0	2/0	2/0	2/0
400	250M	4/0	4/0	3/0	3/0	3/0
450	300M	250M	4/0	4/0	4/0	4/0