POWER SPECIFICATIONS

Discovery ST

(REV. DATE 03/18/08)

VOLTAGE

PRIMARY SOURCE IS REQUIRED FOR ALL INSTALLATIONS. RANGE OF LINE VOLTAGES: NOMINAL LINE VOLTAGE OF 380 TO 480, 3 PHASE, 50 OR 60 Hz.

REQUIRED POWER SUPPLY: WYE CONNECTED.

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

TABLE A ALLOWABLE INPUT VOLTAGES/ CURRENT DEMAND

NOMINAL VOLTAGE	ABSOLUTE RANGE	CURRENT (AMPS)		MINIMUM STANDARD OVERCURRENT PROTECTION
		MOMENTARY	CONTINUOUS	
380	350–410	137	30	110–A
400	368–432	130	29	110–A
420	386–454	124	27	110–A
440	405–475	118	26	110–A
460	423–497	113	25	110–A
480	**442–518**	**108**	**24**	**110–A**

(ALL CALCULATIONS BASED UPON NOMINAL VOLTAGE)

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 1 CYCLE AND FREQUENCY OF 10 TIMES PER HOUR.

VOLTAGE TRANSIENT OR IMPULSE ON THE INCOMING POWER MUST BE HELD TO A MINIMUM. TRANSIENTS CAUSED BY LIGHTNING, SURGES, LOAD SWITCHING, STATIC ELECTRICITY ETC. CAN CAUSE SCAN ABORTS OR, IN EXTREME INSTANCES, COMPONENT FAILURE IN THE COMPUTER SUBSYSTEM.

POWER DEMAND

CONTINUOUS POWER DEMAND = 34 KVA (MAX DEMAND = 90 KVA)

TABLE B MAXIMUM MOMENTARY POWER DEMAND.

DEMAND	Discovery ST
kVa *	90
POWER FACTOR AT	0.85

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

DISTRIBUTION TRANSFORMER

FOR A SINGLE UNIT INSTALLATION, THE MINIMUM TRANSFORMER SIZE IS 112.5 KVA. GE DOES NOT RECOMMEND USING A REGULATION DEVICE.

NOTE: THE CT SYSTEM MUST NOT BE POWERED IN A MULTIPLE INSTALLATION WHERE FILM CHANGERS ARE USED. FILM CHANGERS UTILIZE A LARGE NUMBER OF HIGH POWERED CLOSELY SPACED EXPOSURES WHICH MAY COINCIDE WITH THE CT SCAN.

FEEDER TABLE

FEEDER TABLE – DISCOVERY ST

REV. DATE: 12.Apr.11

- 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 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 SIZE FOR CIRCUIT BREAKER, NEC ARTICLE 517–73.
- 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		378–462 420		396–484 440		414–506 460		**432–528 480**	
	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	2	(1/0)	2	(1/0)	2	(1/0)	3	(1/0)	3	(1/0)	**3**	**(1/0)**
200	1	(1/0)	1	(1/0)	2	(1/0)	2	(1/0)	3	(1/0)	**3**	**(1/0)**
250	1/0	(1/0)	1	(1/0)	1	(1/0)	1	(1/0)	2	(1/0)	**2**	**(1/0)**
300	2/0	(1/0)	2/0	(1/0)	1/0	(1/0)	1	(1/0)	1	(1/0)	**1**	**(1/0)**
350	3/0	(1/0)	2/0	(1/0)	2/0	(1/0)	1/0	(1/0)	1/0	(1/0)	**1**	**(1/0)**
400	4/0	(1/0)	3/0	(1/0)	3/0	(1/0)	2/0	(1/0)	2/0	(1/0)	**1/0**	**(1/0)**