# POWER SPECIFICATIONS

## DISCOVERY NM 630/BRIVO NM 615

**(REV. DATE 28.FEB.14)**

**VOLTAGE**

PRIMARY DEDICATED SINGLE PHASE SOURCE IS REQUIRED FOR ALL INSTALLATIONS. RANGE OF LINE VOLTAGES: 173 to 250 VAC, NOMINAL LINE VOLTAGE OF 208–V 50 Hz or 60Hz, +/– 3Hz, 6 KVA.

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% | MAXIMUM CURRENT (AMPS) | * MINIMUM STANDARD OVERCURRENT PROTECTION |
|---|---|---|---|
| **208** | **187–230** | **25** | **30–A** |
| * CIRCUIT BREAKERS SHOULD HAVE A TIME DELAY OF GREATER THAN ONE SECOND TO WITHSTAND SWITCH–ON SURGE. | | | |

**GEHC RECOMMENDED UPS REQUIREMENTS**

UPS CIRCUIT BREAKER AND CONDUCTORS MUST BE SIZED FOR THE MAXIMUM INPUT CURRENT OF THE UPS. MAXIMUM INPUT CURRENT OF THE UPS. MAXIMUM INPUT CURRENT IS FULL LOAD CURRENT PLUS THE MAXIMUM BATTERY CHARGING CURRENT. CONSULT UPS NAMEPLATE AND INSTRUCTIONS TO DETERMINE REQUIREMENTS.

**TRANSIENT**

MAXIMUM ALLOWABLE TRANSIENT VOLTAGE EXCURSIONS ARE 5 PERCENT OF RATED LINE VOLTAGE AT A MAXIMUM DURATION OF 5 CYCLES 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.

THE MAXIMUM ALLOWABLE TRANSIENT AMPLITUDE IS 2.5 TIMES THE RMS LINE VOLTAGE. (FILTERS MAY BE REQUIRED IF TRANSIENT LEVEL EXCEEDS THIS VALUE.)

**REGULATION**

POWER SUPPLY REGULATION MUST BE 4 PERCENT OR BETTER.

**POWER SUPPLY TEST**

IT IS RECOMMENDED THAT THE POWER SUPPLY BE MONITORED TO ASCERTAIN THE AVERAGE LINE VOLTAGE, SURGES, SAGS, IMPULSES AND FREQUENCY OF THE SUPPLY VOLTAGE. THE ANALYSIS OF A SIMULATED LOAD, USING A POWER SYSTEMS ANALYZER CAPABLE OF THE ABOVE SPECIFICATIONS, SHOULD BE CARRIED OUT OVER A CONTINUOUS SEVEN DAY PERIOD PRIOR TO INSTALLATION. THE RESULTS OF THIS ANALYSIS SHOULD BE REVIEWED WITH THE LOCAL SERVICE REPRESENTATIVE TO DETERMINE WHETHER A VOLTAGE/FREQUENCY STABILIZER, POWER LINE PROTECTOR OR FILTERS ARE REQUIRED TO BE INSTALLED BY THE PURCHASER, AS PART OF THE PREINSTALLATION WORK, TO COMPLY WITH THE ABOVE ELECTRICAL REQUIREMENTS.

**EMERGENCY POWER**

EMERGENCY POWER IS NOT RECOMMENDED FOR THE SYSTEM. SERIOUS DISRUPTION OF EQUIPMENT OPERATION CAN RESULT FROM POWERLINE DISTURBANCES BY SWITCHING TO EMERGENCY POWER. IF CONTINUOUS OPERATION IS REQUIRED AN ON–LINE TYPE UPS IS RECOMMENDED. EMERGENCY POWER RECOMMENDED IS THE LIGHTING IN THE ROOM TO ALLOW SAFE EVACUATION OF THE PATIENT AND PERSONNEL.

**NOTE:**

THESE SPECIFICATIONS APPLY TO THE BASE SYSTEM. IF AN OPTIONAL FULL SYSTEM UPS IS APPLIED WITH THIS SYSTEM THE POWER REQUIREMENTS MAY VARY.

# FEEDER TABLE

## FEEDER TABLE – Discovery NM 630

- CALCULATIONS BASED UPON NOMINAL VOLTAGE, WIRE SIZE IN AWG.
- RECOMMENDED FEEDER SIZES FROM POWER SOURCE TO MAIN DISCONNECT.
- THE GROUNDING CONDUCTOR WILL BE THE SAME SIZE AS THE POWER 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.
- FOR A FULL SYSTEM UPS REFER TO ELECTRICAL DETAILS FOR UPS FEEDER WIRES.

| RUN LENGTH IN FEET | POWER SUPPLY VOLTAGE | |
|---|---|---|
| | 173 to 250 VAC 50 to 60hz | |
| | **208 VAC** | 240 VAC |
| | SIZE OF FEEDERS AND GROUND WIRES (AWG) | |
| 50 | **10** | 10 |
| 100 | **8** | 8 |
| 150 | **6** | 8 |
| 200 | **4** | 6 |
| 250 | **3** | 4 |

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