



## FEEDER TABLE

### FEEDER TABLE – 1.5T SIGNA SYSTEMS

- CALCULATIONS BASED UPON NOMINAL VOLTAGE, WIRE SIZE IN AWG.
- RECOMMENDED FEEDER SIZES FROM DIST. TRANS. TO MDP, ALL CALCULATIONS BASED UPON A 20 FT. [6.1m] RUN FROM MDP TO PD USING NO.2 AWG [35 SQ mm].
- THE GROUNDING CONDUCTOR ( ) SHALL BE COPPER AND WILL RUN IN THE SAME CONDUIT AS THE FEEDERS FROM EQUIPMENT BACK TO THE ROOM POWER SOURCE GROUNDING POINT.
- THE GROUND CONDUCTOR BETWEEN THE MDP AND PDU MUST BE AT LEAST 1/0 AWG OR THE SAME SIZE AS THE FEEDER, WHICH EVER IS LARGER.
- IF THE GENERAL ELECTRIC EQUIPMENT IS BEING FED BY A DELTA SECONDARY, IT IS RECOMMENDED THAT THE B PHASE ON THE SECONDARY BE CONNECTED TO GROUND TO PREVENT DAMAGE TO THE SYSTEM.
- NEUTRAL MUST BE TERMINATED PRIOR TO OR INSIDE THE MAIN DISCONNECT PANEL AND NOT BROUGHT INTO THE PDU CABINET.
- **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		374-456 415		432-528 480	
	FEEDER	GROUND	FEEDER	GROUND	FEEDER	GROUND	FEEDER	GROUND
100	2	8	2	8	2	8	<b>2</b>	<b>8</b>
150	2	8	2	8	2	8	<b>2</b>	<b>8</b>
200	1	6	2	8	2	8	<b>2</b>	<b>8</b>
250	1/0	6	1/0	6	1	6	<b>2</b>	<b>8</b>
300	2/0	4	2/0	4	1/0	6	<b>1</b>	<b>6</b>
350	3/0	4	2/0	4	2/0	4	<b>1</b>	<b>6</b>
400	4/0	2	3/0	4	3/0	4	<b>1/0</b>	<b>6</b>
450	4/0	2	4/0	2	3/0	4	<b>2/0</b>	<b>4</b>

REV. DATE: 06/16/09

# POWER SPECIFICATIONS

## SIGNA MR 1.5/3.0T SYSTEMS

(REV. DATE 06/16/09)

**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.  
 RECOMMENDED POWER SUPPLY: WYE-CONNECTED OR DELTA-CONNECTED (GROUNDED DELTA).

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 **
		MAX	MOMENTARY CONTINUOUS	
380	342-418	113	82	125-A
400	360-440	107	78	100-A
415	374-456	103	75	100-A
<b>480</b>	<b>432-528</b>	<b>89</b>	<b>65</b>	<b>90-A</b>

\*\* OVERCURRENT PROTECTION SIZED FOR 125% CONTINUOUS CURRENT. (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 1.8 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**

MAXIMUM POWER DEMAND = 74 KVA.  
 74 KVA CONSISTING OF 65 KVA FOR PDU + 9 KVA (CONTINUOUS OPERATION) FOR SHIELD/CRYO COOLER CABINET.

**TABLE B  
 MAXIMUM  
 POWER  
 DEMAND.**

DEMAND	SIGNA SYSTEM
kVa *	74
POWER FACTOR AT	0.9

\* DEMAND INCLUDES POWER FOR ENTIRE MR SYSTEM. LINE VOLTAGE REGULATION AT MAXIMUM POWER DEMAND MUST BE LESS THAN OR EQUAL TO 2 PERCENT OR 4 PERCENT FROM POWER SOURCE.

**DISTRIBUTION TRANSFORMER**

FOR A SINGLE UNIT INSTALLATION, THE MINIMUM TRANSFORMER SIZE IS 150 KVA. REGULATED TRANSFORMER IS NOT REQUIRED UNLESS VOLTAGE CHANGES EXCEED ±10% OVER A PERIOD OF 1 HOUR OR LONGER.

**REFER TO DIRECTION LISTED ON C1 FOR ADDITIONAL INFORMATION.**