

POWER SPECIFICATIONS

OPTIMA NM/CT 640

(REV. DATE 04.Jun.2012)

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	342-418	28	16	30-A
400	360-440	28	16	30-A
420	378-462	26	15	28-A
440	396-484	25	14	27-A
460	414-506	24	13	26-A
480	432-528	23	12	25-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 SHOULD BE LIMITED TO 1500V PEAK.

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 = 10 KVA

TABLE B
 MAXIMUM
 MOMENTARY
 POWER
 DEMAND.

DEMAND	OPTIMA NM/CT 640
kVa *	19
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 24 KVA, WITH 2.4% RATED REGULATION AT UNITY POWER FACTOR. RESULTANT MAXIMUM ALLOWABLE FEEDER REGULATION IS 3.4%

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 – OPTIMA NM/CT 640

- o CALCULATIONS BASED UPON NOMINAL VOLTAGE, WIRE SIZE IN AWG.
- o RECOMMENDED FEEDER SIZES FROM DISTRIBUTION TRANS. TO POWER DISTRIBUTION UNIT.
- o THE GROUNDING CONDUCTOR () WILL BE A 6 MINIMUM. THIS GROUND WILL RUN FROM THE EQUIPMENT BACK TO THE POWER SOURCE/MAIN GROUNDING POINT AND ALWAYS TRAVEL IN THE SAME CONDUIT WITH THE FEEDERS AND NEUTRAL.
- o NEUTRAL MUST BE TERMINATED PRIOR TO OR INSIDE THE MAIN DISCONNECT PANEL AND NOT BROUGHT INTO THE POWER DISTRIBUTION UNIT.
- o 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	6	6	6	6	6	6	6	6	6	6	6	6
100	6	6	6	6	6	6	6	6	6	6	6	6
150	4	4	4	4	4	4	4	4	4	4	4	4
200	4	4	4	4	4	4	4	4	4	4	4	4
250	4	4	4	4	4	4	4	4	4	4	4	4
300	4	4	4	4	4	4	4	4	4	4	4	4
350	4	4	4	4	4	4	4	4	4	4	4	4
400	4	4	4	4	4	4	4	4	4	4	4	4

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