PANEL E1T

208/120 Volts 3 Phase 4 Wire 200 MAIN CIRCUIT BREAKER — 225A Bus Rating

BRANCH BREAKERS — 22 kAIC Minimum Rating

LOAD DESCRIPTION	AMPERE RATING	POLE	CIRC NO.	LEFT PHASE VA LOADING A	B	C	RIGHT PHASE VA LOADING A	B	C	CIRC NO.	POLE	AMPERE RATING	LOAD DESCRIPTION
OUTLET	30	2	1	1000	-	-	1000	-	-	2	2	30	OUTLET
			3	-	1000	-	-	1000	-	4			
OUTLET	30	2	5	-	-	1000	-	-	1000	6	2	30	OUTLET
			7	1000	-	-	1000	-	-	8			
OUTLET	30	2	9	-	1000	-	-	1000	-	10	2	30	OUTLET
			11	-	-	1000	-	-	1000	12			
OUTLET	30	2	13	1000	-	-	1200	-	-	14	1	20	OUTLET
			15	-	1000	-	-	1200	-	16	1	20	OUTLET
OUTLET	30	2	17	-	-	1000	-	-	1200	18	1	20	OUTLET
			19	1000	-	-	1200	-	-	20	1	20	OUTLET
OUTLET	30	2	21	-	1000	-	-	1200	-	22	2	30	OUTLET
			23	-	-	1000	-	-	1200	24	1	20	OUTLET
OUTLET	30	2	25	1000	-	-	1200	-	-	26	1	20	OUTLET
			27	-	1000	-	-	1000	-	28	2	30	OUTLET
OUTLET	30	2	29	-	-	1000	-	-	1000	30			
			31	1000	-	-	1000	-	-	32	2	30	OUTLET
OUTLET	30	2	33	-	1000	-	-	1000	-	34			
			35	-	-	1000	-	-	1000	36	2	30	OUTLET
OUTLET	30	2	37	1000	-	-	1000	-	-	38			
			39	-	1000	-	-	1000	-	40	1	20	OUTLET
OUTLET	20	1	41	-	-	1000	-	-	0	42	1	20	FM200 PANELS
PHASE LOADING SUB-TOTALS				7000	7000	10000	7600	7400	6400				
PHASE LOADING VA TOTALS				14600	14400	13400							

Equipment	Connected Load VA	% D.F.	Est. Max. Demand VA
RECEPTACLES	42400	100	42400
Total Conn. Load	42400		
Spare Capacity	15000	-	15000
Total E.M.D.			57400 VA (160A)

COMMENTS:

PROVIDE LUGS TO ACCOMMODATE CONDUCTOR SIZING
PROVIDE 200% RATED NEUTRAL BAR
PROVIDE FULL SIZE EQUIPMENT GROUND BAR
PROVIDE FULL SIZE ISOLATED GROUND BAR
PROVIDE SUB-FEED LUGS

NEW PANEL
SURFACE MOUNTED
NEMA 1
LOCKABLE COVER
BOLT-ON BREAKERS

PANEL E1T2

208/120 Volts 3 Phase 4 Wire 225 MAIN LUGS ONLY — 225A Bus Rating

BRANCH BREAKERS — 22 kAIC Minimum Rating

LOAD DESCRIPTION	AMPERE RATING	POLE	CIRC NO.	LEFT PHASE VA LOADING A	B	C	RIGHT PHASE VA LOADING A	B	C	CIRC NO.	POLE	AMPERE RATING	LOAD DESCRIPTION
PROVISIONS	20	1	1							2	1	20	PROVISIONS
PROVISIONS	20	1	3							4	1	20	PROVISIONS
PROVISIONS	20	1	5							6	1	20	PROVISIONS
PROVISIONS	20	1	7							8	1	20	PROVISIONS
PROVISIONS	20	1	9							10	1	20	PROVISIONS
PROVISIONS	20	1	11							12	1	20	PROVISIONS
PROVISIONS	20	1	13							14	1	20	PROVISIONS
PROVISIONS	20	1	15							16	1	20	PROVISIONS
PROVISIONS	20	1	17							18	1	20	PROVISIONS
PROVISIONS	20	1	19							20	1	20	PROVISIONS
PROVISIONS	20	1	21							22	1	20	PROVISIONS
PROVISIONS	20	1	23							24	1	20	PROVISIONS
PROVISIONS	20	1	25							26	1	20	PROVISIONS
PROVISIONS	20	1	27							28	1	20	PROVISIONS
PROVISIONS	20	1	29							30	1	20	PROVISIONS
PROVISIONS	20	1	31							32	1	20	PROVISIONS
PROVISIONS	20	1	33							34	1	20	PROVISIONS
PROVISIONS	20	1	35							36	1	20	PROVISIONS
PROVISIONS	20	1	37							38	1	20	PROVISIONS
PROVISIONS	20	1	39							40	1	20	PROVISIONS
PROVISIONS	20	1	41							42	1	20	PROVISIONS
PHASE LOADING SUB-TOTALS													
PHASE LOADING VA TOTALS													

Equipment	Connected Load VA	% D.F.	Est. Max. Demand VA
Total Conn. Load			
Spare Capacity			
Total E.M.D.			

COMMENTS:

PROVIDE LUGS TO ACCOMMODATE CONDUCTOR SIZING
PROVIDE FULL SIZE NEUTRAL BAR
PROVIDE 200% RATED NEUTRAL BAR
PROVIDE FULL SIZE EQUIPMENT GROUND BAR
PROVIDE FULL SIZE ISOLATED GROUND BAR
SERVED BY E1T SUBFEED LUGS

NEW PANEL
SURFACE MOUNTED
NEMA 1
LOCKABLE COVER
BOLT-ON BREAKERS

LOAD TABULATION

LOAD	CONNECTED VA	CALCULATED DIVERSITY	DEMAND VA
MSB-A			
PANEL L1/L2	54240	60%	32480
PANEL M	135000	85%	47775
PANEL H1	58311	100%	58311
MSB-B			
PANEL EH1	70120	100%	70120
PANEL EL1/EL2/EL3	81660	60%	52816
PANEL EM	209023	85%	173853
UPS	75000	76%	57400
CHILLER	230010	70%	161014
WATER HEATER	162000	70%	113400
NEUTRAL LOADS			
MSB-A	112551	-	82791
MSB-B	214580	-	179796
MSB-A TOTAL	186051	75%	138566
MSB-B TOTAL	829803	75%	628663
TOTAL BUILDING LOAD	1010230	75%	767229

480/277V, 3Φ, 4W UTILITY SERVICE, WYE
767229 DEMAND VA - 3Φ
- DEMAND VA-1Φ
0 SPARE DEMAND VA
767229 TOTAL DEMAND VA

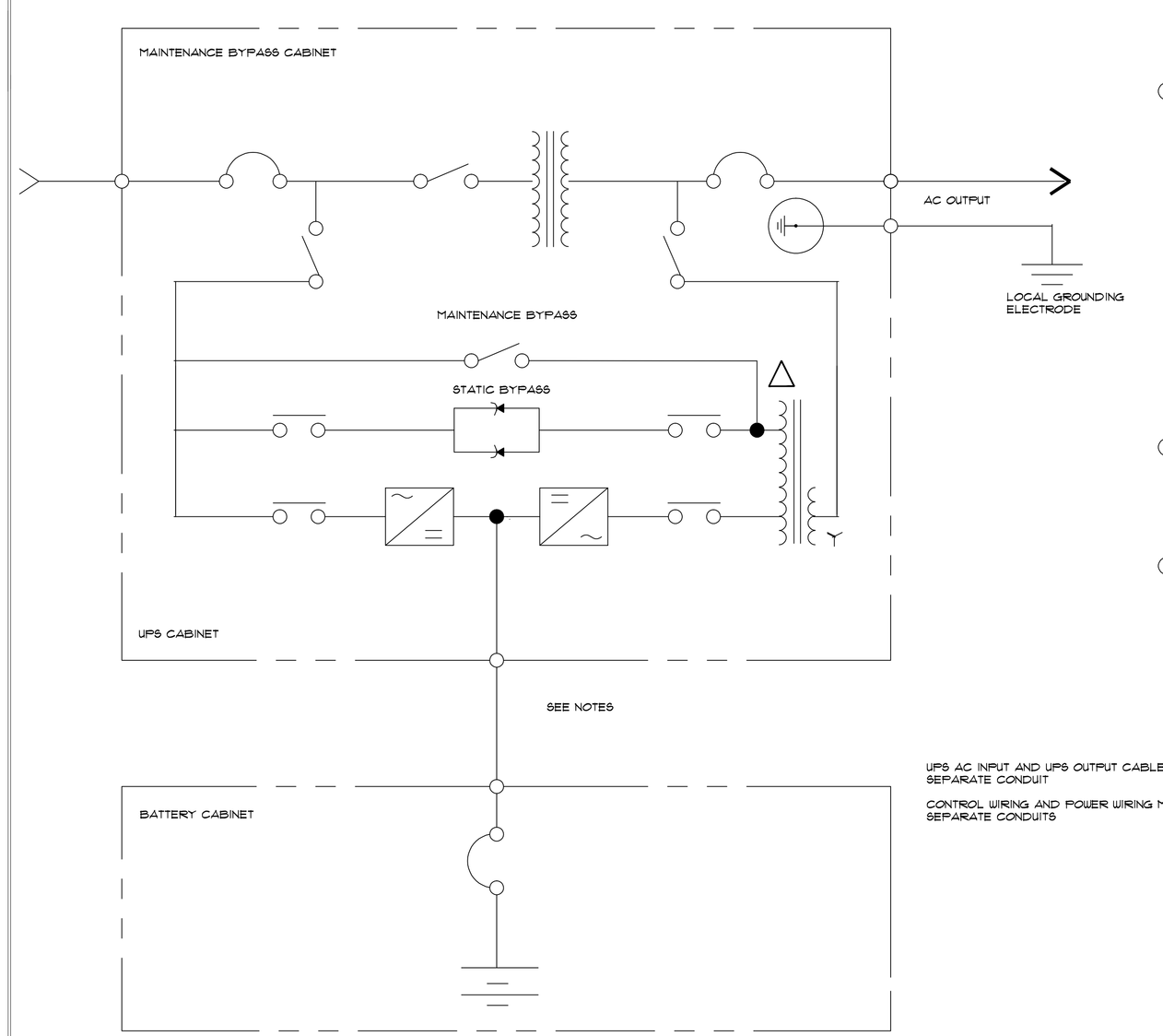
767229 kVA AT 480/277V, 3Φ = 923 AMPERES
TOTAL LOAD = 923 AMPERES

TRANSFORMER SCHEDULE

LABEL	kVA RATING	PHASE	PRIMARY RATINGS	SECONDARY RATINGS	DEGREES RISE	NOTES
E1	75	3	480 VOLT, 3 WIRE	208/120 VOLT, 4 W, WYE	150	
T1	45	3	480 VOLT, 3 WIRE	208/120 VOLT, 4 W, WYE	150	

1 UPS SYSTEM SCHEMATIC DETAIL

NO SCALE



UPS AC INPUT AND UPS OUTPUT CABLES MUST BE RUN IN SEPARATE CONDUIT

CONTROL WIRING AND POWER WIRING MUST BE RUN IN SEPARATE CONDUITS

NOTES:

1. ONE (1) 80KVA / 64KW LIEBERT NPOWER THREE PHASE UNINTERRUPTIBLE POWER SUPPLY, MODEL 3T5A080A0C6EA06, WITH THE FOLLOWING CHARACTERISTICS.

   AC INPUT VOLTAGE 480V (THREE-PHASE, THREE-WIRE PLUS GROUND)
   AC OUTPUT VOLTAGE 208/120V (THREE-PHASE, FOUR-WIRE PLUS GROUND)
   SINGLE INPUT, TRUE ON-LINE, DOUBLE CONVERSION
   REVERSE TRANSFER CONFIGURATION
   PHASE CONTROLLED RECTIFIER/CHARGER
   IGBT PULSE-WIDTH MODULATED (PWM) INVERTER
   AUTOMATIC CONTINUOUS DUTY STATIC TRANSFER SWITCH
   INTERNAL MAINTENANCE BYPASS SWITCH
   DSP (DIGITAL SIGNAL PROCESSING) CONTROLS
   MICROPROCESSOR BASED MONITORING AND CONTROL PANEL WITH MIMIC BUS
   LCD GRAPHIC DISPLAY WITH ALARM HISTORY DATABASE
   PROGRAMMABLE BATTERY LOAD TESTINGLOAD NEUTRAL ISOLATION
   INPUT FILTER WITH 10% THD AT FULL OUTPUT LOAD
   OPEN COMMS-DISCRETE OUTPUT PROGRAMMABLE RELAY BOARD
   LOCAL E.P.O. WITH PROVISION FOR REMOTE E.P.O.
   RS 232 INTERFACE PORT
   CASTERS AND LEVELING FEET
   UL 1778, CSA

2. LIEBERT BATTERY POWER PACK RATED FOR 9 MINUTES AT A 64KW LOAD, MODEL 3TBP0805MS1BNL, WITH THE FOLLOWING CHARACTERISTICS
   BATTERY CIRCUIT BREAKER TO ISOLATE THE BATTERY DURING MAINTENANCE
   VALVE REGULATED LEAD ACID BATTERY CELLS IN FLAME RETARDANT CASES
   3 YEAR FULL AND- YEAR PRORATED WARRANTY ON BATTERIES MINIMUM.

   LIEBERT MAINTENANCE BYPASS CABINET, MODEL 3TMB0800AC61Q, WITH THE FOLLOWING CHARACTERISTICS

3. SINGLE ROTARY HANDLE SWITCH INTERLOCKED FOR "MAKE-BEFORE-BREAK" TRANSFER OF THE LOAD, BYPASS TRANSFORMER WITH INPUT AND OUTPUT CIRCUIT BREAKERS
   CASTERS AND LEVELING FEET

SYMBOL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	FLUORESCENT LIGHT FIXTURE.		CONDUIT STUB-UP OR STUB-DOWN
	DOWN LIGHT FIXTURE.		LIGHTING POLE AND LUMINAIRE
	EXIT LIGHT FIXTURE. LINE INDICATES FACE AND ARROW CONFIGURATION.		
S	SINGLE-POLE TOGGLE SWITCH.		WALL MOUNTED LIGHT FIXTURE
S_2	TWO POLE TOGGLE SWITCH. SUBSCRIPT DENOTES FIXTURE CONTROLLED.		
S_3	THREE-WAY TOGGLE SWITCH.		CANOPY MOUNTED LIGHT FIXTURE
J	JUNCTION BOX		
J C	JUNCTION BOX FOR COMMUNICATION CONNECTIONS TO PARTITIONS		FLUORESCENT FIXTURE
J P	JUNCTION BOX FOR POWER CONNECTIONS TO PARTITIONS		
	DUPLEX OUTLET, 20A, 120V, NEMA 5-20R		PENDANT MOUNTED FIXTURE
	QUADRAPLEX RECEPTACLE. TWO DUPLEX WITH DOUBLE GANG PLATE.		WALL MOUNTED FIXTURE
	GROUND FAULT CIRCUIT INTERRUPTER DUPLEX OUTLET, OR DEVICE LABELED GFI		FLOOR BOX
	SIMPLEX RECEPTACLE. WITH SINGLE GANG PLATE		WALL SWITCH TYPE OCCUPANCY SENSOR WITH MANUAL OVERRIDE
▷ 23A	DEVICE ID LABEL		
▽	COMBINATION VOICE/DATA COMMUNICATION OUTLET, WALL MOUNTED.		CEILING MOUNTED OCCUPANCY SENSOR
▼	VOICE COMMUNICATION OUTLET, WALL MOUNTED.		ANTENNAE/SATELLITE DATA CONNECTION
	CATV OUTLET		
	FLOOR OUTLET, COMBINATION POWER, VOICE/DATA COMMUNICATION.	S	WALL MOUNTED FIRE ALARM VISUAL NOTIFICATION UNIT (INTENSITY IS 15CD UNLESS NOTED AT SYMBOL)
B	DOOR BELL CHIME		
	TELEPHONE BACKBOARD		COMBINATION AUDIBLE/VISUAL NOTIFICATION APPLIANCE. WALL MOUNTED. INTESITY OF VISUAL IS 15CD UNLESS NOTED AT SYMBOL
	ELECTRICAL PANELBOARD.		
	DISCONNECT SWITCH FUSED UNLESS OTHERWISE NOTED.		DUCT DETECTOR
	SMOKE DETECTOR, MOUNTED ON CEILING.	DC	DOOR CONTROLLER
M	FIRE ALARM MONITOR MODULE	DU	DURESS BUTTON
R	FIRE ALARM RELAY		
S	CEILING MOUNTED FIRE ALARM VISUAL NOTIFICATION UNIT, INTENSITY IS 9 CD UNLESS NOTED AT SYMBOL	K	KEYPAD
C	FIRE ALARM CONTROL MODULE	V	VEHICLE DETECTION CONTROLLER
S	FIRE ALARM AUDIO NOTIFICATION UNIT. CEILING MOUNTED SPEAKER.	EL	ELECTRIC MORTISE/HINGE CONNECTION
	GROUND CONNECTION POINT		
C	CAMERA	D	DOOR CONTACT
X	NOTE REFERENCE		
X	FEEDER SCHEDULE TAG	II	CONTACTS
	WIRING (IN CONDUIT) CONCEALED IN OR UNDER FLOOR	MS	MICROSWITCH CONTROLS
	WIRING (IN CONDUIT) CONCEALED IN CEILING OR WALL OR RUN EXPOSED		TRANSFORMER
	CIRCUIT TURNED UP OR DOWN.		PUSH BUTTON
L1,2	HOMERUN TO PANELBOARD WITH NOMENCLATURE (LETTERS), CIRCUIT NUMBERS (NUMBERS), NUMBER OF PHASE AND NEUTRAL CONDUCTERS WHEN MORE THAN TWO (HASH MARKS), NUMBER OF CIRCUITS (NUMBER OF ARROWS). GROUND CONDUCTOR NOT SHOWN - REFER TO SPECIFICATIONS FOR REQUIREMENTS.	A	CAMERA WITH AUDIO
			DOOR SWITCH
1	PLAN OR DETAIL NUMBER.	TS	TAMPER SWITCH ON VALVE
1 / E-1	DETAIL: NUMBER DENOTES DETAIL NUMBER. DRAWING NUMBER DENOTES SHEET ON WHICH DETAIL IS DRAWN.	FS	FLOW SWITCH

ABBREVIATIONS

P	PHASE/POLE	GFI	GROUND FAULT PROTECTION
A	AMPERE	C	CONDUIT
V	VOLT	EMR	EQUIPMENT MANUFACTURES RECOMMENDATIONS
AFF	ABOVE FINISHED FLOOR		
GND	GROUND	OCP	OVER CURRENT PROTECTION
EPO	EMERGENCY POWER OFF	3/20/60/20/1	NUMBER OF POLE/AMPERE RATING/RATING/OCP OR EMR/NEMA
SFU	SWITCH FUSE UNIT		
UNO	UNLESS NOTED OTHERWISE		NEMA ENCLOSURE RATING
FA	FIRE ALARM		
WP	WEATHER PROOF		
E	EMERGENCY		

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Checked By: EDA

Revisions:

ST. TAMMANY PARISH SHERIFF'S OFFICE

BROWNSWITCH ROAD
SLIDELL, LOUISIANA

CONSTRUCTION DOCUMENTS

PANELS

Sheet Number:
E5.1

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