

ENVIRONMENTAL CONSTRUCTION CORP.

CWS, DIV.

DUPLEX BLOWER  
CONTROL PANEL  
WITH CLARIFIER  
MOTOR CONTROLS  
PORT BIENVILLE

Environmental Construction Corp.  
P.O. Box 396  
Pass Christian, MS 39571  
(228) 255-5353 Fax (228) 255-6095

VOLTAGE	480V	(480V, 277/480V, 240V, 120/240V, 208V, 120/208V)
PHASE/HZ	3/60	
NO. MOTORS	2,1	
HP	10, 1/2	
FLA	13, 1.0	
TYPE OF PUMP	Blower,Clarifier Motor	(Self-Priming, Submersible)
MANUFACTURER		
CATALOG NUMBER		
CONTROL VOLTAGE	120V	(120V, Other)
ENCLOSURE	NEMA 4X	(NEMA 1, NEMA 3R, NEMA 4, NEMA 4X)
ENCLOSURE MATERIAL	Fiberglass	(Painted Steel, Stainless Steel, Fiberglass)
CONTROL SENSOR		(Floats, Bubbler, Other)
CAPACITORS		(Yes, No)
CAPACITOR WIRING FIGURE		
THERM. & SEAL FAIL WIRING FIGURE		

OPTIONS:

SEAL FAIL LIGHTS		(Submersible Only)
SEAL FAIL RELAYS		(Submersible Only)
SEAL FAIL PUMP SHUTDOWN		(Submersible Only)
HT PUMP SHUTDOWN		(Self-Primer, Submersible)
ALARM HORN		
ALARM LIGHT		
LIGHT PANEL MTD		
LIGHT REMOTE MTD		
LIGHT FLASHER		
LIGHTNING ARRESTER	X	
ELAPSED TIME METER		
PHASE MONITOR	X	
NEMA RATED STARTERS		
GROUND FAULT RECPT.	X	
GREEN RUN LIGHTS VS. RED		
POLE, BOX, SEAL		
INTRINSICALLY SAFE RELAYS		
HIGH TEMP. LOCKOUT, MANUAL RESET		
ECONOMY VERSION		

SOLD TO: Environmental Construction Corp.  
TAG : PORT BIENVILLE

SHIP TO: ECC  
Pass Christian, MS

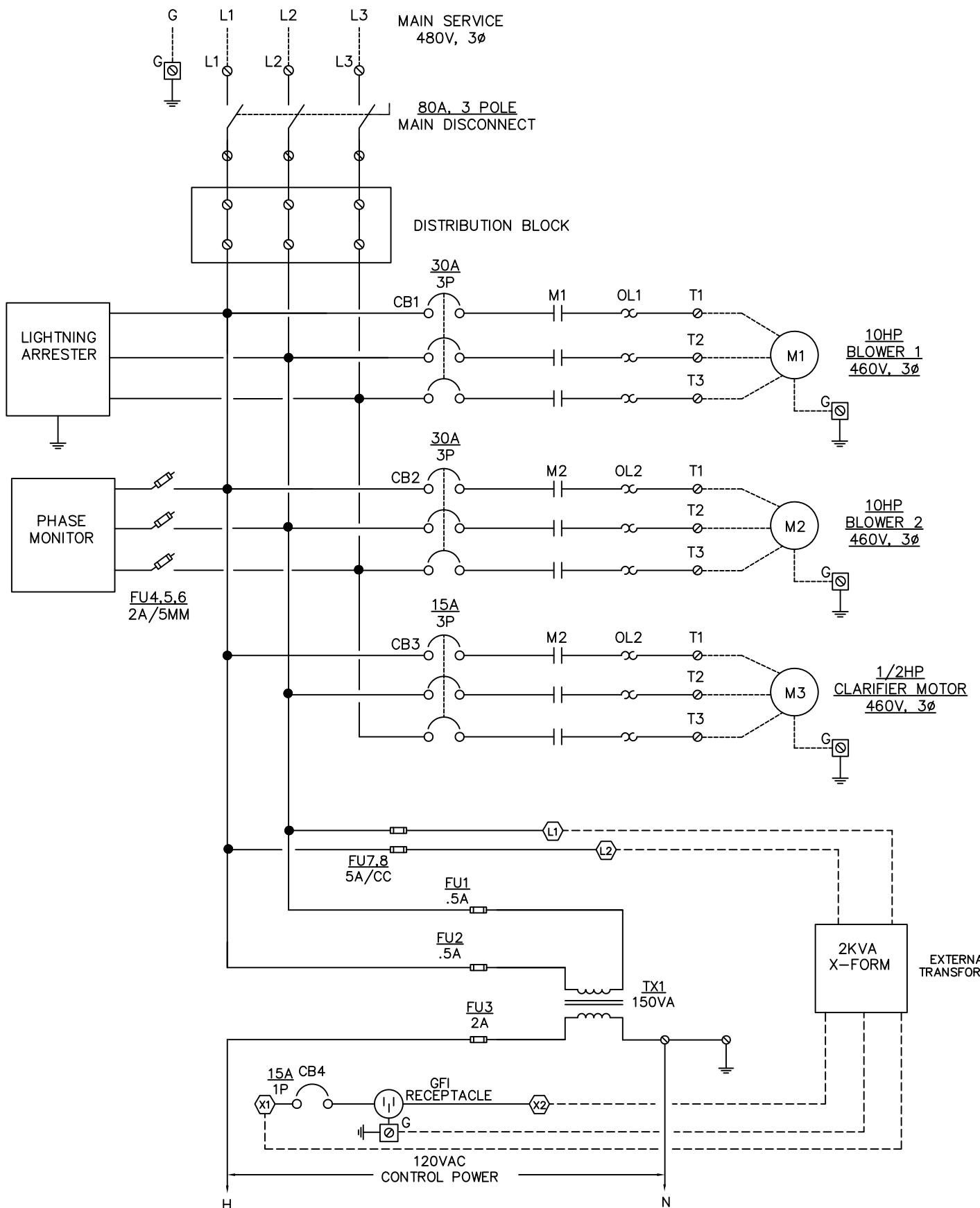
	Drawing Title  PANEL DESCRIPTION	REFERENCE DRAWING						ECN	DATE	BY
		S/N	Sales Engineer	Application Engineer	NO.	REVISION-LOCATION	DRAWN			
DATE 8/13/04	Project Title  DUPLEX BLOWER CONTROL PANEL									

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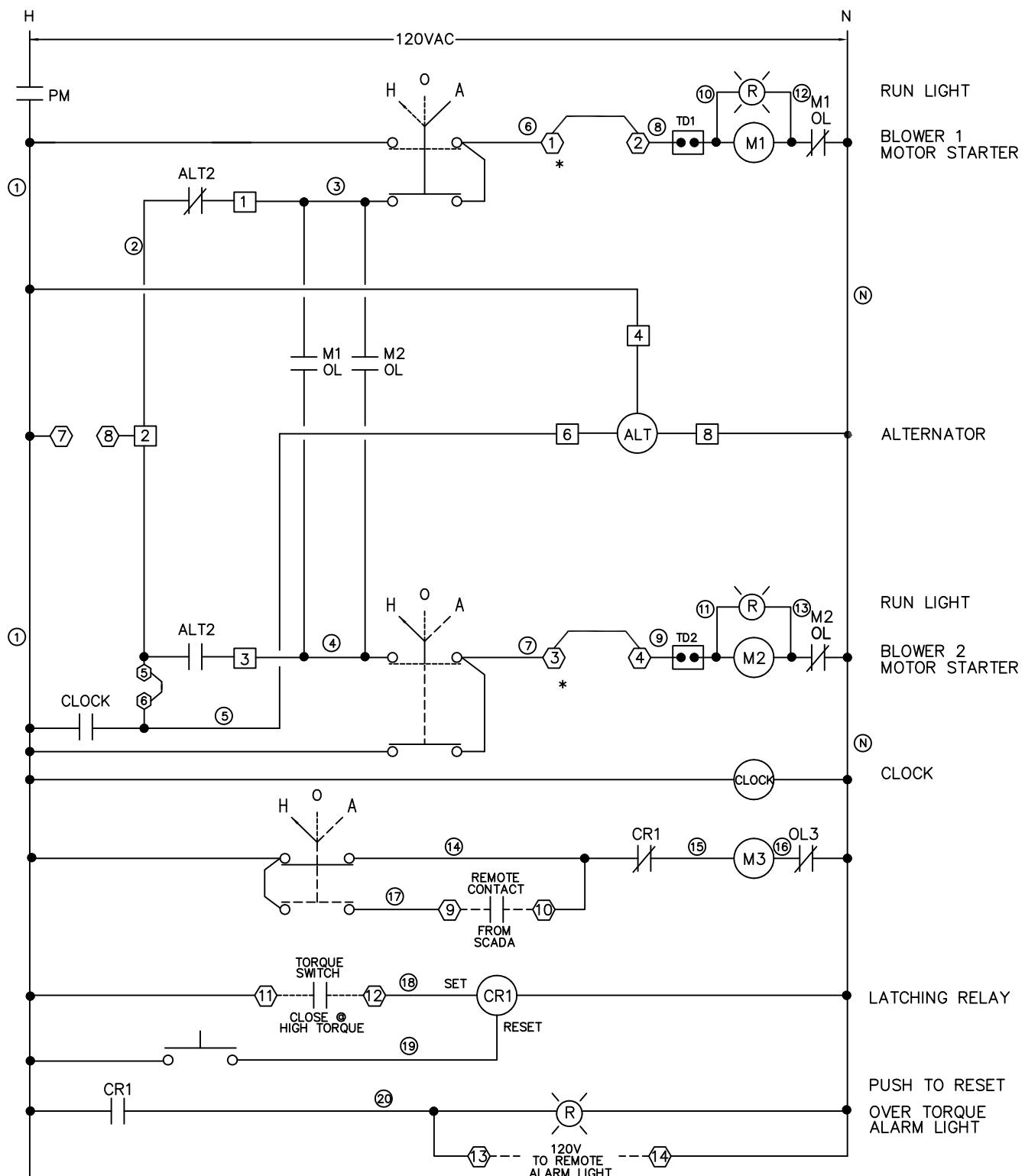
PURCHASE ORDER NUMBER

DRAWING NUMBER  
CP-1871

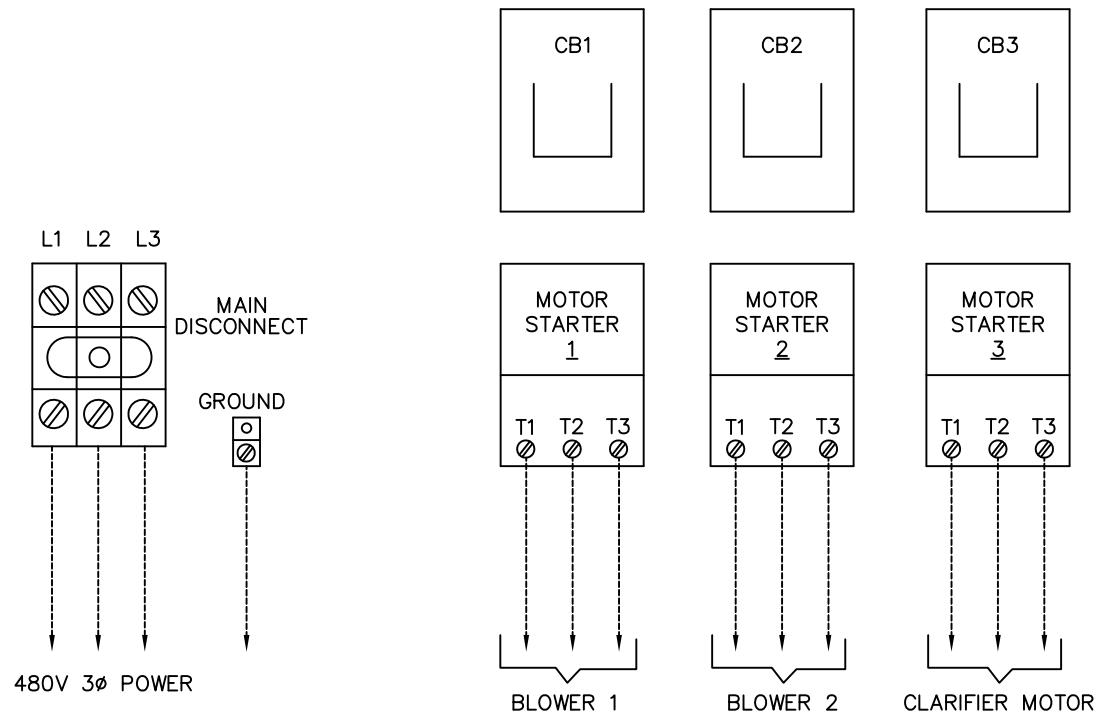
SHEET NUMBER  
1



	Drawing Title									
	POWER DIAGRAM									
DATE 8/13/04	REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	DRAWN BY C. RACHAL	ECN	DATE	BY	APPROVED		
Project Title DUPLEX BLOWER CONTROL PANEL	Environmental Construction Corp. P.O. Box 396 Pass Christian, MS 39571 (228) 255-5353 Fax (228) 255-6095							PURCHASE ORDER NUMBER		
								DRAWING NUMBER	CP-1871	
								SHEET NUMBER	2	



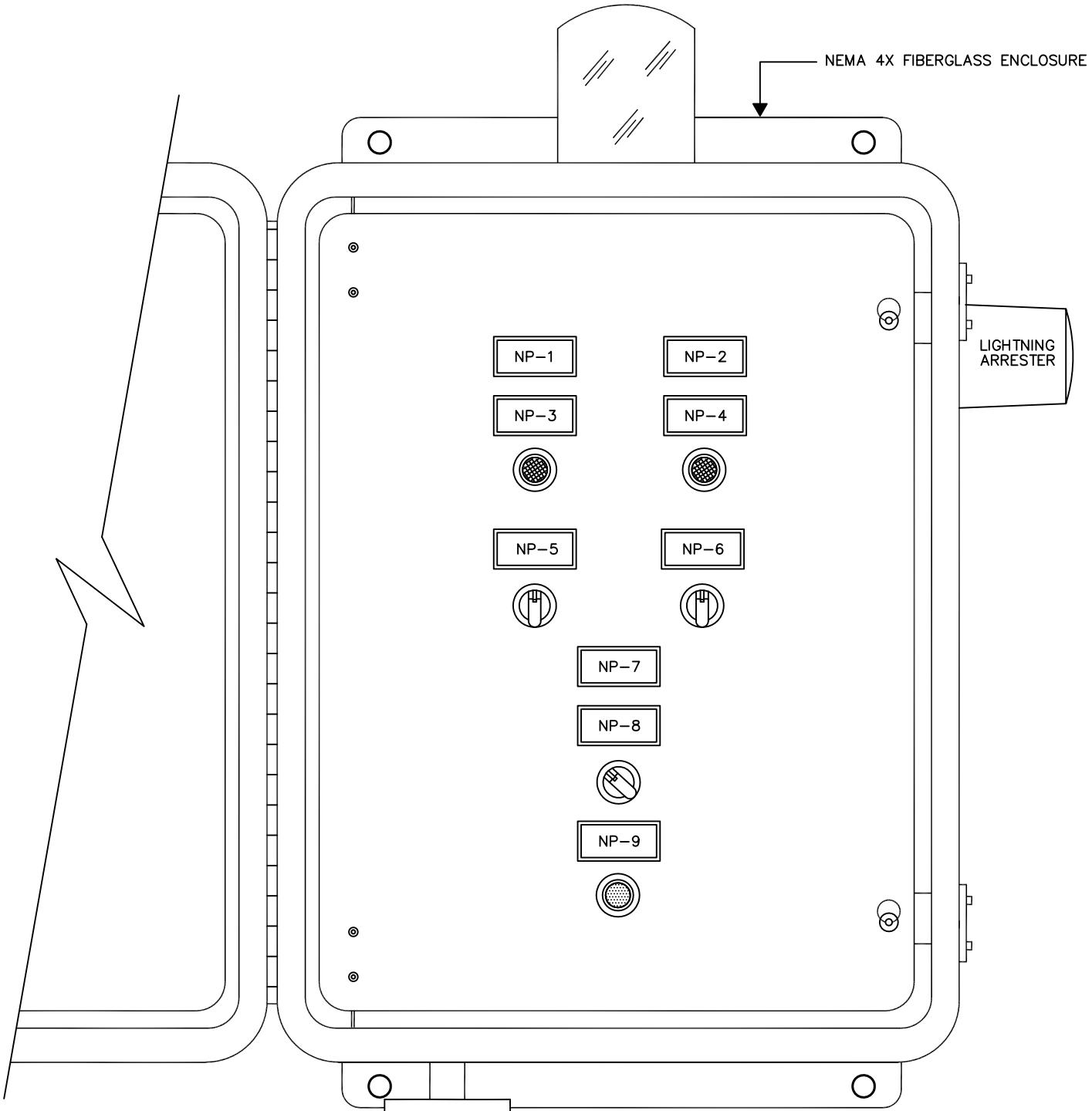
Drawing Title						
	REFERENCE DRAWING		NO.	REVISION-LOCATION	ECN	DATE
DATE 8/13/04	S/N	Sales Engineer C.C.	Application Engineer R.C.	DRAWN BY C. RACHAL	APPROVED BY	DATE
Project Title	Environmental Construction Corp. P.O. Box 396 Pass Christian, MS 39571 (228) 255-5353 Fax (228) 255-6095					
DUPLEX BLOWER CONTROL PANEL	PURCHASE ORDER NUMBER DRAWING NUMBER CP-1871 SHEET NUMBER 3					



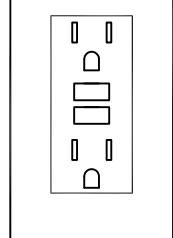
GROUNDS

INCOMING	-----	<input checked="" type="checkbox"/>	<input type="radio"/>
BLOWER 1	-----	<input checked="" type="checkbox"/>	<input type="radio"/>
BLOWER 2	-----	<input checked="" type="checkbox"/>	<input type="radio"/>
CLARIFIER	-----	<input checked="" type="checkbox"/>	<input type="radio"/>

	Drawing Title  EXTERNAL CONNECTIONS					
DATE 8/13/04	REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	ECN DRAWN BY C. RACHAL	DATE APPROVED BY DATE	BY
	Project Title  DUPLEX BLOWER CONTROL PANEL	Environmental Construction Corp. P.O. Box 396 Pass Christian, MS 39571 (228) 255-5353 Fax (228) 255-6095			PURCHASE ORDER NUMBER	
					DRAWING NUMBER	CP-1871
					SHEET NUMBER	4



VIEW OF SWING OUT PANEL



NAMEPLATE SCHEDULE

NP-1	BLOWER 1
NP-2	BLOWER 2
NP-3	RUN
NP-4	RUN
NP-5	HOA
NP-6	HOA
NP-7	CLARIFIER MOTOR
NP-8	HOA
NP-9	OVER TORQUE/RESET

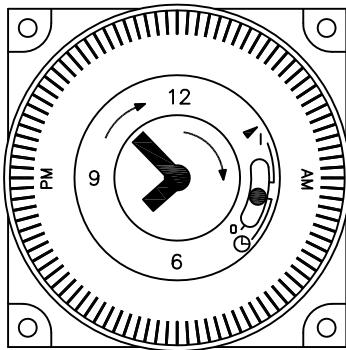
**NOTE:**  
SEWER GASES WILL DESTROY COMPONENTS IN PANEL.  
PROPER SEALS MUST BE INSTALLED EXTERNAL TO THE  
PANEL TO PREVENT ENTRY OF GASES.

	Drawing Title					
	ENCLOSURE					
DATE 8/13/04	REFERENCE DRAWING S/N	NO. C.C.	REVISION-LOCATION DRAWN R.C.	ECN BY	DATE APPROVED BY	BY DATE
	Sales Engineer	Application Engineer	C. RACHAL			
	Project Title	Environmental Construction Corp. P.O. Box 396 Pass Christian, MS 39571 (228) 255-5353 Fax (228) 255-6095			PURCHASE ORDER NUMBER	
	DUPLEX BLOWER CONTROL PANEL				DRAWING NUMBER	CP-1871
					SHEET NUMBER	5

## BILL OF MATERIAL

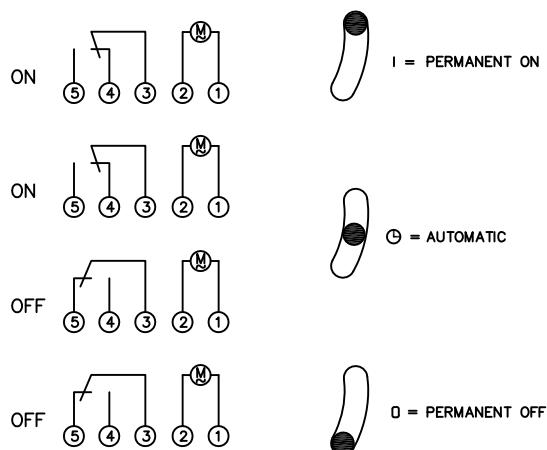
ITEM	QTY	MANUFACTURER	PART NO.	DESCRIPTION
1	1	ALLIED	AM24200RL	ENCLOSURE
2	1	ALLIED	HFP2420	BACKPLATE
3	3	ABB	A16-30-10-84	STARTER
4	2	ABB	TA25DU14	O.L.1,2 (10-14A)
5	2	ABB	S1N030TL	CIRCUIT BREAKER 1,2
6	2	ACI	JR22P3M20B	H.O.A. SWITCH
7	1	TIMEMARK	261DT120	ALTERNATING RELAY
8	1	GRASSLIN	FM/1 STUZH-L	TIMER
9	2	ACI	JR22FR	RED PILOT LIGHT
10	1	SQUARE D	9070TF150D1	TRANSFORMER
11	1	ABB	OT63E3	DISCONNECT SWITCH
12	1	STOCK		GFI RECEPTACLE
13	1	SQUARE D	QOU115	CB4
14	1	SSAC	PLMU-11	PHASE MONITOR
15	1	DELTA	LA603	LIGHTNING ARRESTER
16	1	MARATHON	1323580	DISTRIBUTION BLOCK
17	2	DAYTON	2A561	TIME DELAY
18	1	ABB	TA25DU1.4	O.L.3 (1.0-1.4A)
19	1	ABB	S1N015TL	CIRCUIT BREAKER 3
20	1	ACI	JR22AN11B	PUSH BUTTON
21	1	MAGNECRAFT	W388AMLCPX-9	LATCHING RELAY
22	1	LUMA PRO	3RB24	REMOTE ALARM LIGHT
23				

	Drawing Title							
	BILL OF MATERIALS							
			REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY
DATE 8/13/04			S/N	Sales Engineer	Application Engineer	DRAWN	APPROVED	
				C.C.	R.C.	BY C. RACHAL	BY	DATE
	Project Title		Environmental Construction Corp. P.O. Box 396 Pass Christian, MS 39571 (228) 255-5353 Fax (228) 255-6095			PURCHASE ORDER NUMBER		
	DUPLEX BLOWER CONTROL PANEL					DRAWING NUMBER CP-1871		
						SHEET NUMBER 6		



"OFF" POSITION – TRIPPERS PUSHED INWARD  
 "ON" POSITION – TRIPPERS PUSHED OUTWARD

3-WAY MANUAL OVERRIDE SWITCH      I = PERMANENT ON  
 ⊖ = AUTOMATIC  
 O = PERMANENT OFF



### TIME SETTING

TURN THE PROGRAM DIAL GRADUALLY CLOCKWISE UNTIL THE DAY OF THE WEEK (7-DAY TIMER) AND TIME OF DAY ON THE OUTER DIAL IS ALIGNED WITH THE TRIANGLE MARKER ON THE INNER DIAL (TWO O'CLOCK POSITION). FOR TO-THE-MINUTE SETTING TURN THE MINUTE HAND CLOCKWISE TO THE EXACT TIME OF DAY.

EXAMPLE FOR 7-DAY PROGRAM DIAL. MONDAY 10:30 AM. TURN PROGRAM DIAL OR MINUTE HAND CLOCKWISE UNTIL MONDAY 10:30 AM IS ALIGNED WITH THE TRIANGLE ON THE INNER DIAL. THE HOUR AND MINUTE HAND WILL SHOW EXACTLY 10:30.

EXAMPLE FOR 24-HOUR PROGRAM DIAL. MONDAY 10:30 AM. TURN MINUTE HAND CLOCKWISE UNTIL 10:30 AM IS ALIGNED WITH TRIANGLE ON THE INNER DIAL. THE HOUR AND MINUTE HAND WILL SHOW EXACTLY 10:30.

### PROGRAMMING

THE WEEKLY PROGRAM DIAL REFLECTS THE SEVEN DAYS OF THE WEEK AND AM/PM IMPRINTS FOR EACH DAY. THE 24-HOUR DIAL HAS QUARTER-HOUR DIVISIONS AND AM/PM INDICATIONS.

THE TIME SWITCH IS PROGRAMMED BY PUSHING THE CAPTIVE TRIPPERS TO THE OUTER RING POSITION FOR THE ENTIRE PERIOD THAT THE LOAD IS TO BE TURNED "ON" I.E. FIFTEEN MINUTES FOR EACH TRIPPER ON THE TWENTY-FOUR DIAL AND TWO HOURS FOR EACH TRIPPER ON THE SEVEN DAY DIAL. WHEN THE TRIPPER IS PUSHED TO THE INSIDE THE SWITCH IS IN THE "OFF" POSITION.

HAND WILL SHOW EXACTLY 10:30.

### AUTOMATIC MODE

IN ORDER TO OPERATE THE TIME SWITCH MODULE IN THE AUTOMATIC MODE THE MANUAL SWITCH MUST BE IN THE CENTER POSITION (AUTOMATIC)—SEE DIAGRAM ABOVE.

### MANUAL MODE

WITH THE MANUAL SWITCH SELECTOR LEVER THE SELECTED PROGRAMS CAN BE OVERRIDDEN. IN THE LOWER POSITION MARKED O. TERMINALS 3 AND 5 ARE CLOSED—PERMANENT OFF. IN THE UPPER POSITION MARKED I TERMINALS 3 AND 4 ARE CLOSED—PERMANENT ON (SEE DIAGRAM ABOVE).

	Drawing Title					
	CLOCK INSTRUCTIONS					
DATE 8/13/04	REFERENCE DRAWING S/N	NO. C.C.	REVISION-LOCATION DRAWN R.C. BY C. RACHAL	ECN	DATE	BY
Project Title DUPLEX BLOWER CONTROL PANEL	Environmental Construction Corp. P.O. Box 396 Pass Christian, MS 39571 (228) 255-5353 Fax (228) 255-6095	PURCHASE ORDER NUMBER DRAWING NUMBER SHEET NUMBER	APPROVED BY DATE CP-1871 7			