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# COX

Research and Technology, Inc.

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DUPLEX BLOWER  
CONTROL PANEL  
GULF STATES ENGINEERING  
(2 REQUIRED)

Cox Research and Technology, Inc.  
14697 S. Harrells Ferry Road  
Baton Rouge, LA. 70816  
(225) 756-3271 Fax (225) 755-1030

CP-1531  
QT= 2

VOLTAGE	<u>277/480V</u>	(480V, 277/480V, 240V, 120/240V, 208V, 120/208V)
PHASE/HZ	<u>3/60</u>	
NO. MOTORS	<u>2, 1</u>	
HP	<u>5, 2</u>	
FLA	<u>7.6, 3.4</u>	
TYPE OF PUMP	<u>Blower, Rotor</u>	(Self-Priming, Submersible)
MANUFACTURER	<u></u>	
CATALOG NUMBER	<u></u>	
CONTROL VOLTAGE	<u>120V</u>	(120V, Other)
ENCLOSURE	<u>NEMA 3R</u>	(NEMA 1, NEMA 3R, NEMA 4, NEMA 4X)
ENCLOSURE MATERIAL	<u>Painted Steel</u>	(Painted Steel, Stainless Steel, Fiberglass)
CONTROL SENSOR	<u></u>	(Floats, Bubbler, Other)
CAPACITORS	<u></u>	(Yes, No)
CAPACITOR WIRING FIGURE	<u></u>	
THERM. & SEAL FAIL WIRING FIGURE	<u></u>	


OPTIONS:

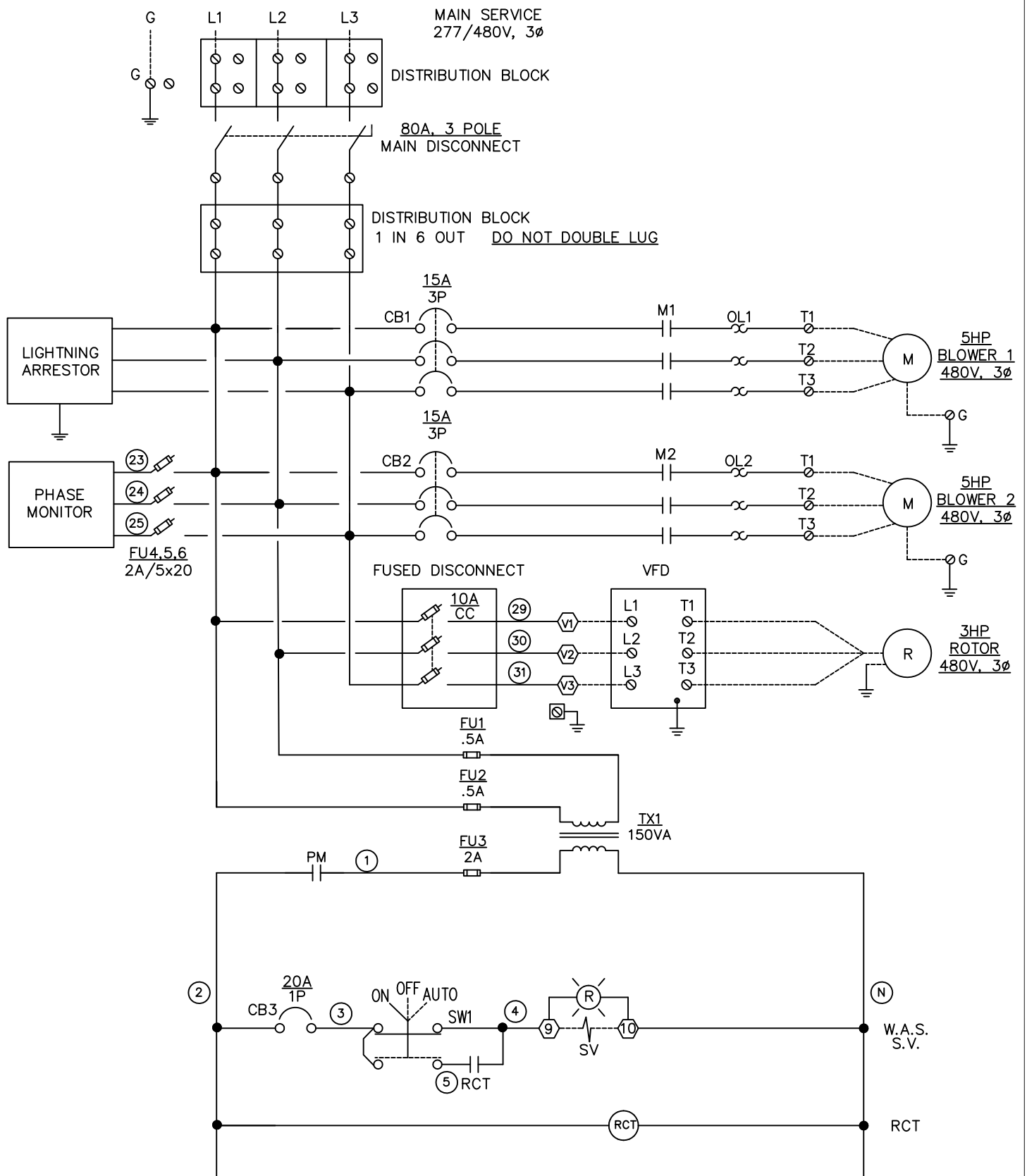
SEAL FAIL LIGHTS	<u></u>	(Submersible Only)
SEAL FAIL RELAYS	<u></u>	(Submersible Only)
SEAL FAIL PUMP SHUTDOWN	<u></u>	(Submersible Only)
HT PUMP SHUTDOWN	<u></u>	(Self-Primer, Submersible)
ALARM HORN	<u></u>	
ALARM LIGHT	<u></u>	
LIGHT PANEL MTD	<u></u>	
LIGHT REMOTE MTD	<u></u>	
LIGHT FLASHER	<u>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

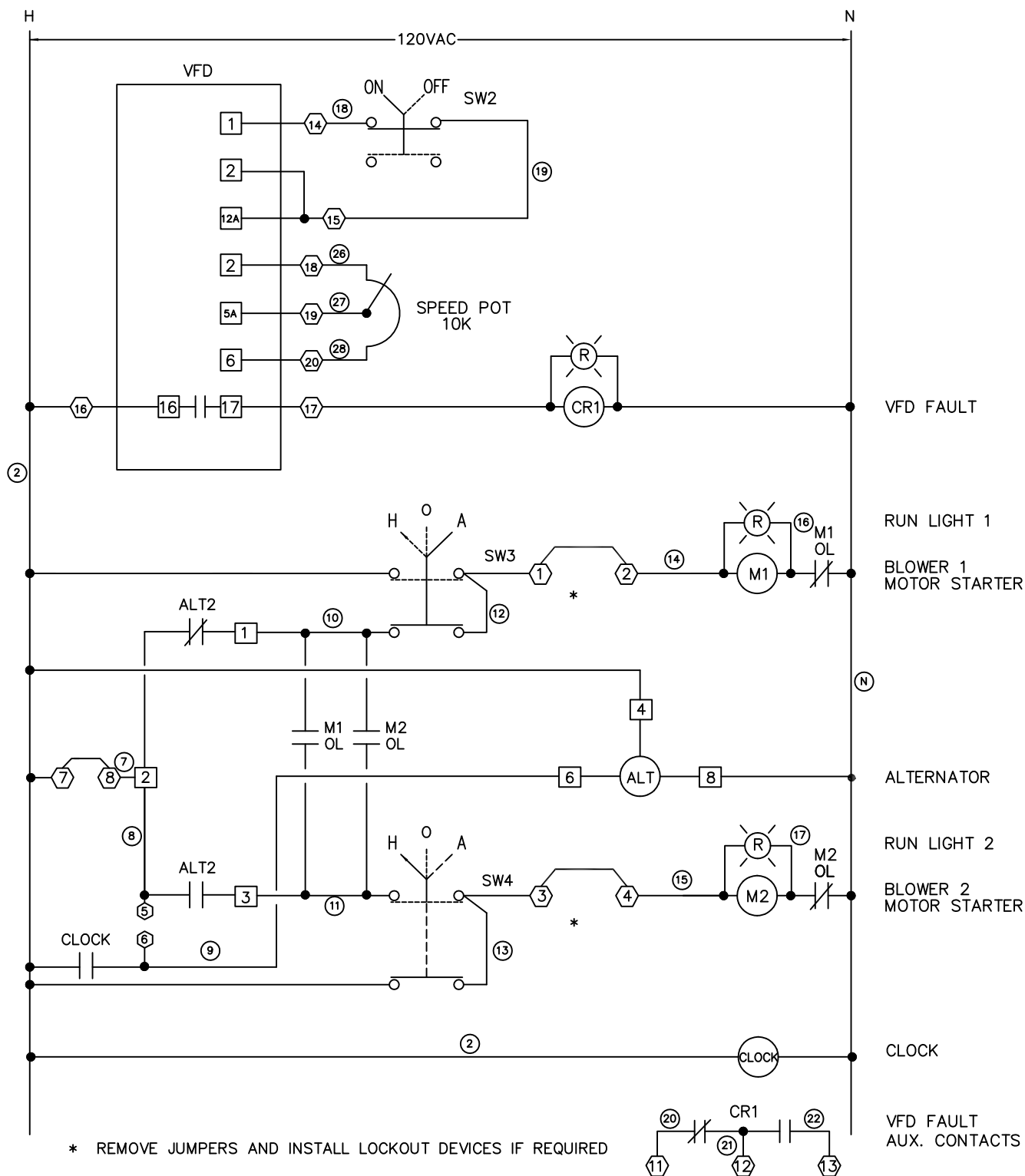
SOLD TO: Gulf States Engineering

TAG : Blower Control Panel

SHIP TO:

	Drawing Title						
	PANEL DESCRIPTION						
DATE 2/19/03		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	DRAWN BY CTR	ECN	DATE
	Project Title	<div style="text-align: center;">   <b>COX</b>  Research and Technology, Inc. </div>			P.O. Box 77808 Baton Rouge, LA 70809		PURCHASE ORDER NUMBER
	DUPLEX BLOWER CONTROL PANEL				Ph. (225)756-3271 Fax (225)756-1030		DRAWING NUMBER CP-1531
							SHEET NUMBER 1





	Drawing Title								
	CONTROL DIAGRAM								
DATE		REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY		
10/11/02		S/N	Sales Engineer C.C.	Application Engineer R.C.	DRAWN	APPROVED			
	Project Title				BY CTR	BY	DATE		
	DUPLEX BLOWER CONTROL PANEL							PURCHASE ORDER NUMBER	
								DRAWING NUMBER	CP-1531
								SHEET NUMBER	3

**COX**

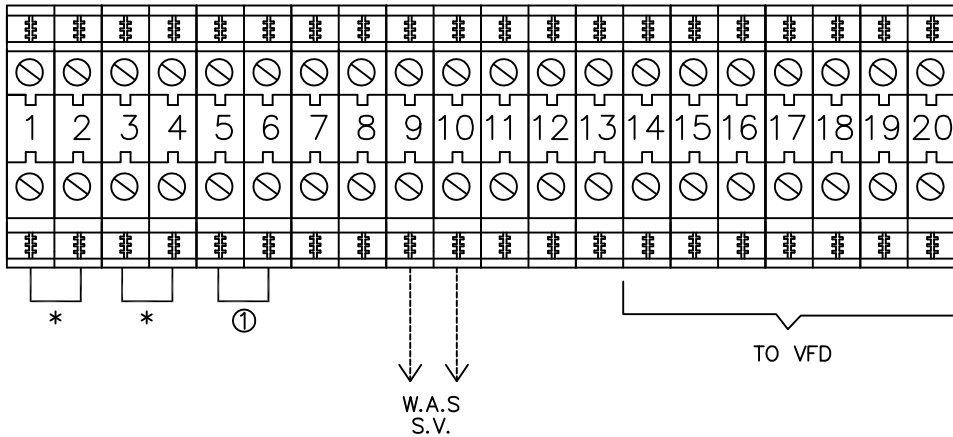
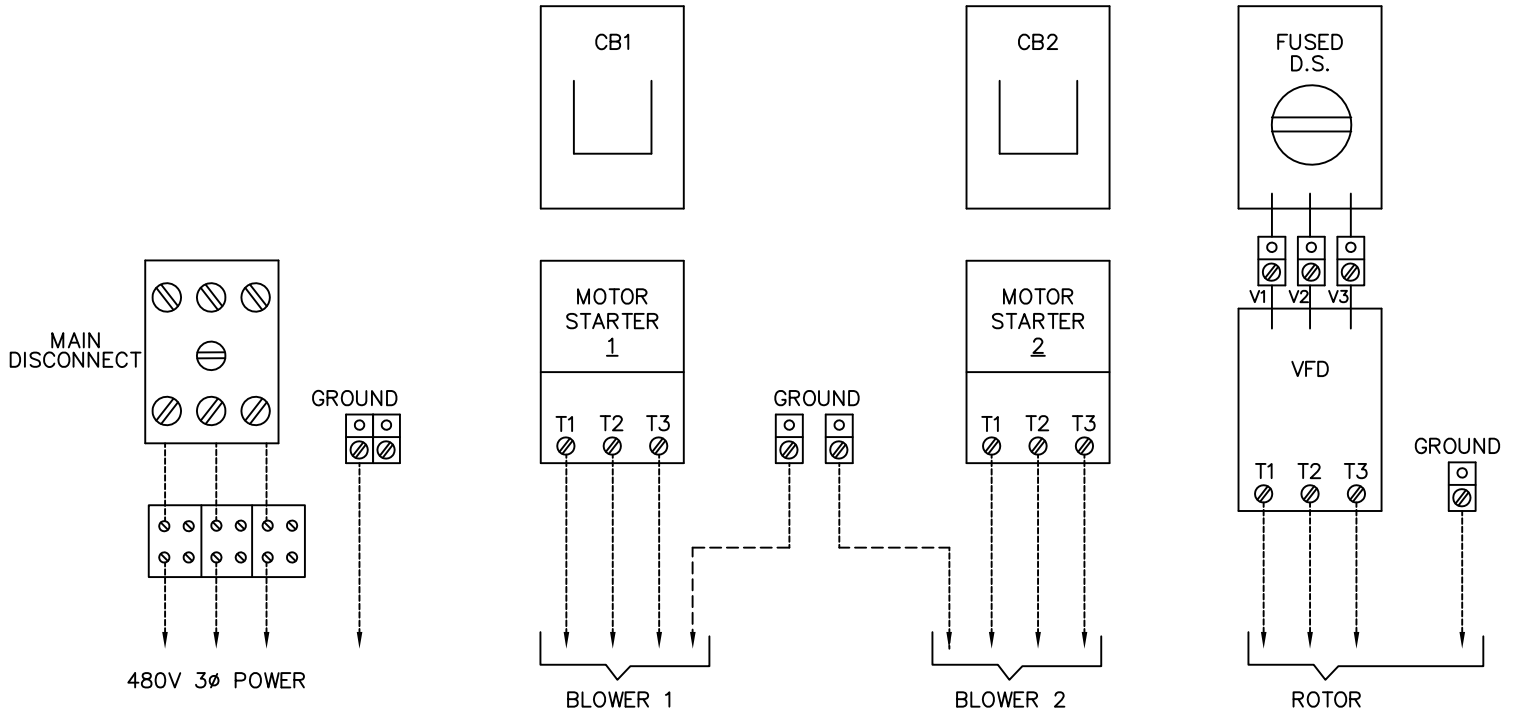
Research and Technology, Inc.

P.O. Box 77808  
Baton Rouge, LA  
70809

Ph. (225)756-3271  
Fax (225)756-1030

ALL VFD SETTINGS ARE DEFAULT EXCEPT THE FOLLOWING:

PARAMETER 9 - DECEL - 2 SEC  
 PARAMETER 17 - MOTOR OL - 60%  
 PARAMETER 29 - MANUAL - 0-10VDC  
 PARAMETER 30 - CONTROL - REMOTE

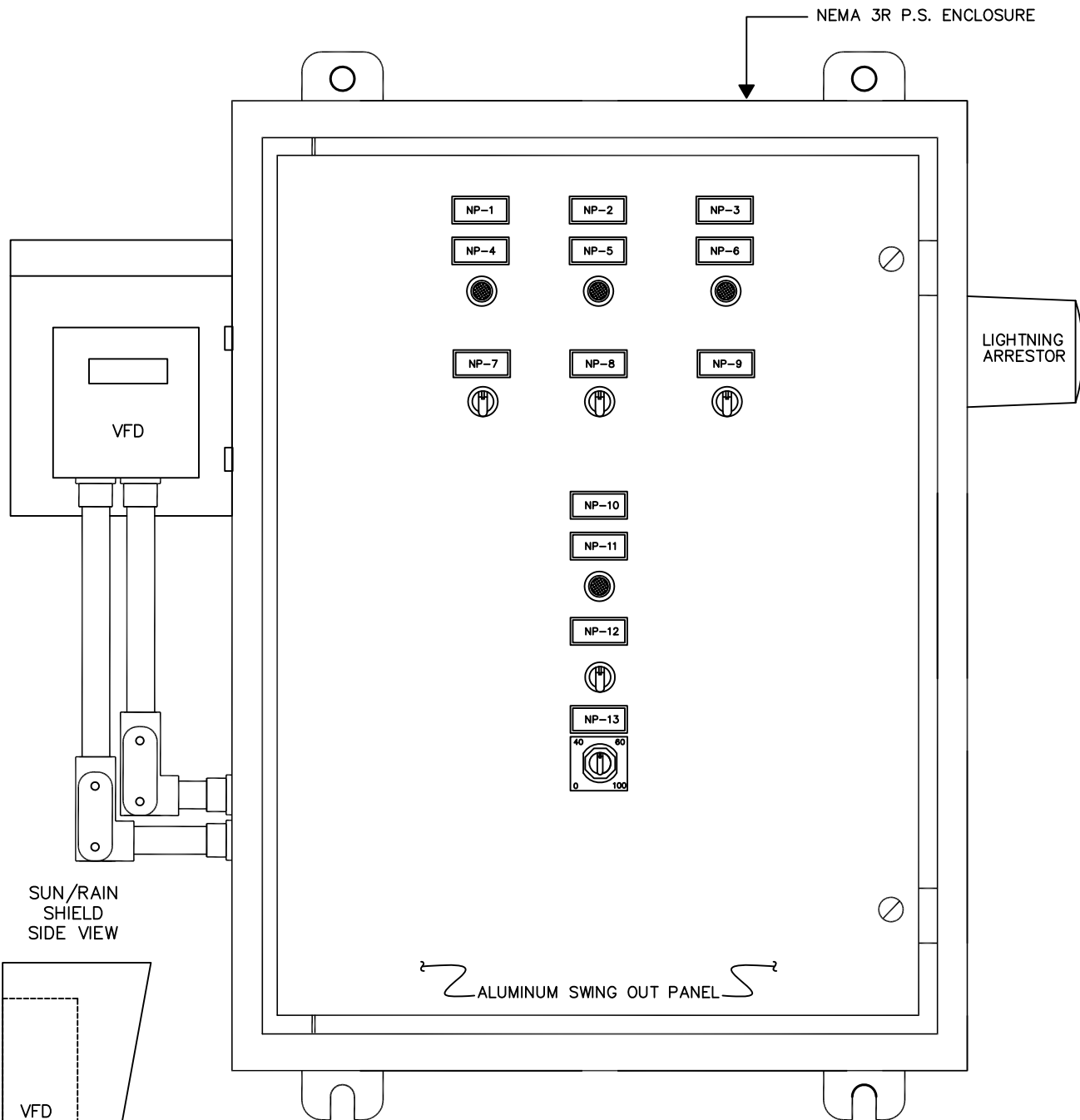


① PANEL IS DESIGNED TO RUN AERATORS WITH A MINIMUM OF 15 MINUTES OF OFF TIME BETWEEN ALTERNATION. PINS PUSHED OUT ON CLOCK INDICATE RUN TIME. PINS PUSHED IN INDICATE OFF TIME. EACH PIN IS EQUAL TO 15 MINUTES.

IF NO OFF TIME IS REQUIRED BETWEEN ALTERNATION, REMOVE JUMPER FROM TERMINALS ⑤ AND ⑥ PLACE JUMPER ACROSS TERMINALS ⑦ AND ⑧ NOW AERATORS WILL RUN CONTINUOUSLY. SET 1 PIN IN AT THE TIME YOU WISH THE AERATORS TO ALTERNATE. ALL REMAINING PINS SHOULD BE PUSHED OUT.

\* REMOVE JUMPERS AND INSTALL LOCKOUT DEVICES IF REQUIRED

Drawing Title									
EXTERNAL CONNECTIONS									
DATE	2/19/03	REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY		
		S/N	Sales Engineer	Application Engineer	DRAWN		APPROVED		
			C.C.	R.C.	BY	CTR	BY	DATE	
Project Title					PURCHASE ORDER NUMBER				
DUPLEX BLOWER CONTROL PANEL		COX			P.O. Box 77808 Baton Rouge, LA 70809		DRAWING NUMBER CP-1531		
		Research and Technology, Inc.			Ph. (225)756-3271 Fax (225)756-1030		SHEET NUMBER 4		



VIEW OF SWING OUT PANEL

FACE PANEL NORTH FOR  
MOST PROTECTION

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

**NAMEPLATE SCHEDULE**

NP-1	W.A.S.
NP-2	BLOWER 1
NP-3	BLOWER 2
NP-4	ON
NP-5	RUN
NP-6	RUN
NP-7	ON-OFF-AUTO
NP-8	H-O-A
NP-9	H-O-A
NP-10	VFD
NP-11	ALARM
NP-12	OFF-ON
NP-13	SPEED/SLOW-FAST

	Drawing Title  
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# BILL OF MATERIAL

ITEM	QTY	MANUFACTURER	PART NO.	DESCRIPTION
1	1	EBE	302410REPL	ENCLOSURE
1a	1	EBE	A3024P	BACKPLATE
1b	1	EBE	A3024SP	DEAD FRONT
2	1	ABB	OT63E3	DISCONNECT SWITCH
3	2	ABB	A16-30-10-84	STARTER
4	2	ABB	TA25DU8.5	O.L. (6.0-8.5A)
5	2	ABB	S1N015TL	CB1,2
6	1	SQUARE D	QOU120	CB3
7	1	SQUARE D	9070TF150D1	TRANSFORMER
8	1	ACI	XF 304BY	FUSED DISCONNECT
9	1	ACI	G995N	DISCONNECT HANDLE
10	1	ACI	JR22P2M11B	SW2
11	4	ACI	JR22FR	PILOT LIGHT RED
12	1	AC TECH	MC1000-M1430E	VFD
13	1	MARATHON	1323580-3	DIST. BLOCK
14	1	CH	CHSA03	LIGHTNING ARRESTER
15	1	SSAC	PLMU11	PHASE MONITOR
16	1	OMRON	G2R2SAC120	CR1
17	1	TIMEMARK	261DT120	ALT.
18	1	GRASSLIN	STUZH-L	24 HOUR TIMER
19	3	ACI	JR22P3M20B	HOA SW 1,3,4
20	1	OMRON	H3CRF8300	RCT
21	1	SQUARE D	9080LBA3652021	DISTRIBUTION BLOCK
22	1	SQUARE D	9080LB53	COVER
23	1	SQUARE D	9001SK2108	10K POT

	Drawing Title						
	<h2 style="margin: 0;">BILL OF MATERIALS</h2>						
DATE		REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY
2/19/03		S/N	Sales Engineer C.C.	Application Engineer R.C.	DRAWN BY CTR	APPROVED BY	DATE
	Project Title	<div style="border: 1px solid black; padding: 5px; margin: 0 auto; width: 150px;"> <h1 style="margin: 0;">COX</h1> </div>			P.O. Box 77808 Baton Rouge, LA 70809		PURCHASE ORDER NUMBER
	<h2 style="margin: 0;">DUPLEX BLOWER CONTROL PANEL</h2>	Research and Technology, Inc.			Ph. (225)756-3271 Fax (225)756-1030		DRAWING NUMBER CP-1531
							SHEET NUMBER