

---

---

# **COX**

Research and Technology, Inc.

---

---

## **BOSSIER PENAL FARM**

**DUPLEX PUMP**  
**CONTROL PANEL**  
**FOR**  
**EXISTING PUMPS**  
**LS#1**

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

VOLTAGE	120/208V	(480V, 277/480V, 240V, 120/240V, 208V, 120/208V)
PHASE/HZ	3/60	
NO. MOTORS	2	
HP	20	
FLA	62	
TYPE OF PUMP	Submersible	(Self-Priming, Submersible)
MANUFACTURER	Vaughn/Reliance	
CATALOG NUMBER		
CONTROL VOLTAGE	120V	(120V, Other)
ENCLOSURE	NEMA 3R	(NEMA 1, NEMA 3R, NEMA 4, NEMA 4X)
ENCLOSURE MATERIAL	Painted Steel	(Painted Steel, Stainless Steel, Fiberglass)
CONTROL SENSOR	Floats	(Floats, Bubbler, Other)
CAPACITORS	No	(Yes, No)
CAPACITOR WIRING FIGURE	N/A	
THERM. & SEAL FAIL WIRING FIGURE		

## OPTIONS:

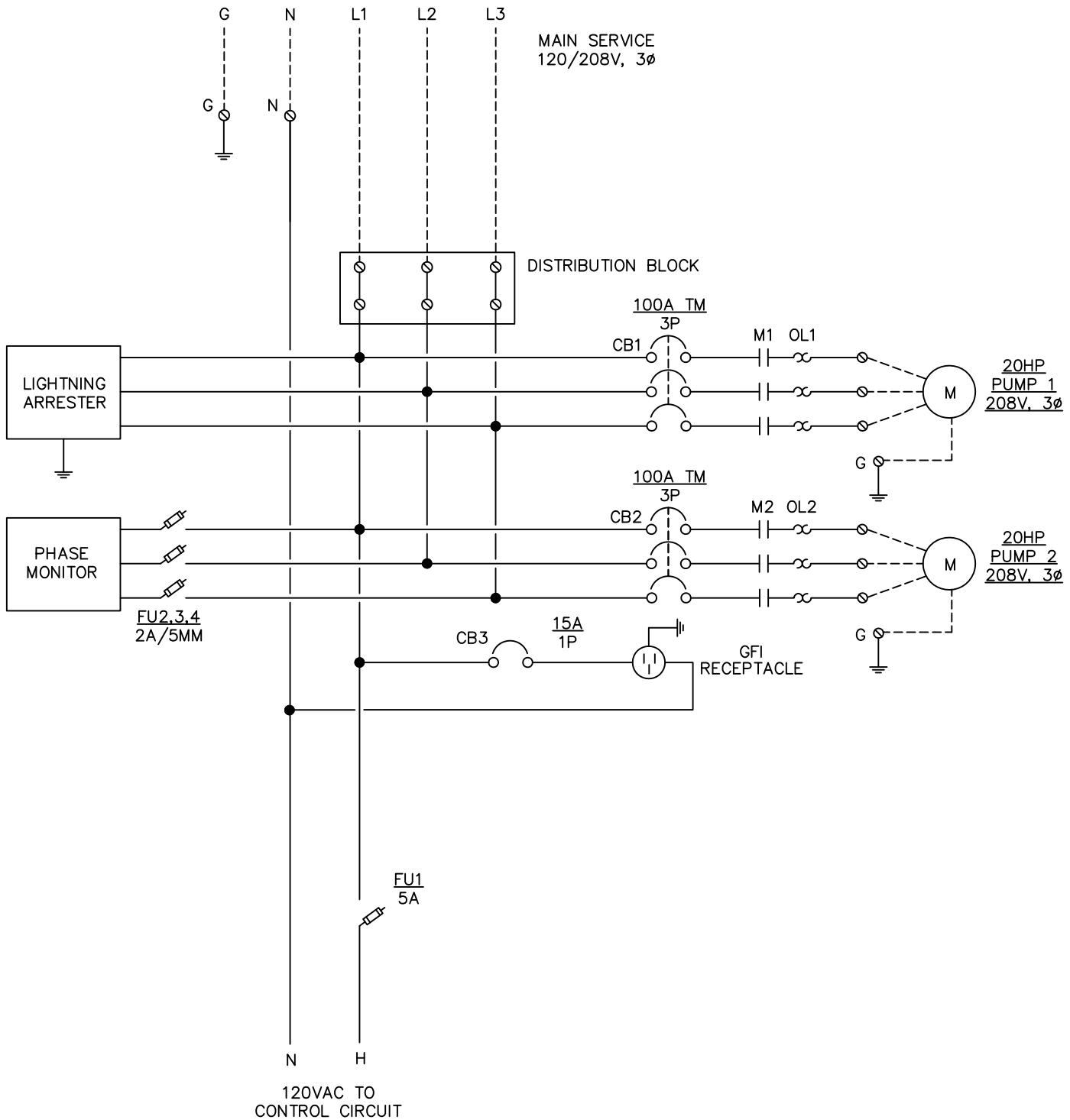
SEAL FAIL LIGHTS	X	(Submersible Only)
SEAL FAIL RELAYS	X	(Submersible Only)
SEAL FAIL PUMP SHUTDOWN	X	(Submersible Only)
HT PUMP SHUTDOWN	X	(Self-Primer, Submersible)
ALARM HORN		
ALARM LIGHT	X	
LIGHT PANEL MTD	X	
LIGHT REMOTE MTD		
LIGHT FLASHER		
LIGHTNING ARRESTER	X	
ELAPSED TIME METER	X	
PHASE MONITOR	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:** Delta Process - Bossier City, LA  
**TAG :** Bossier Penal Farm  
Existing Penal Farm, LS#1

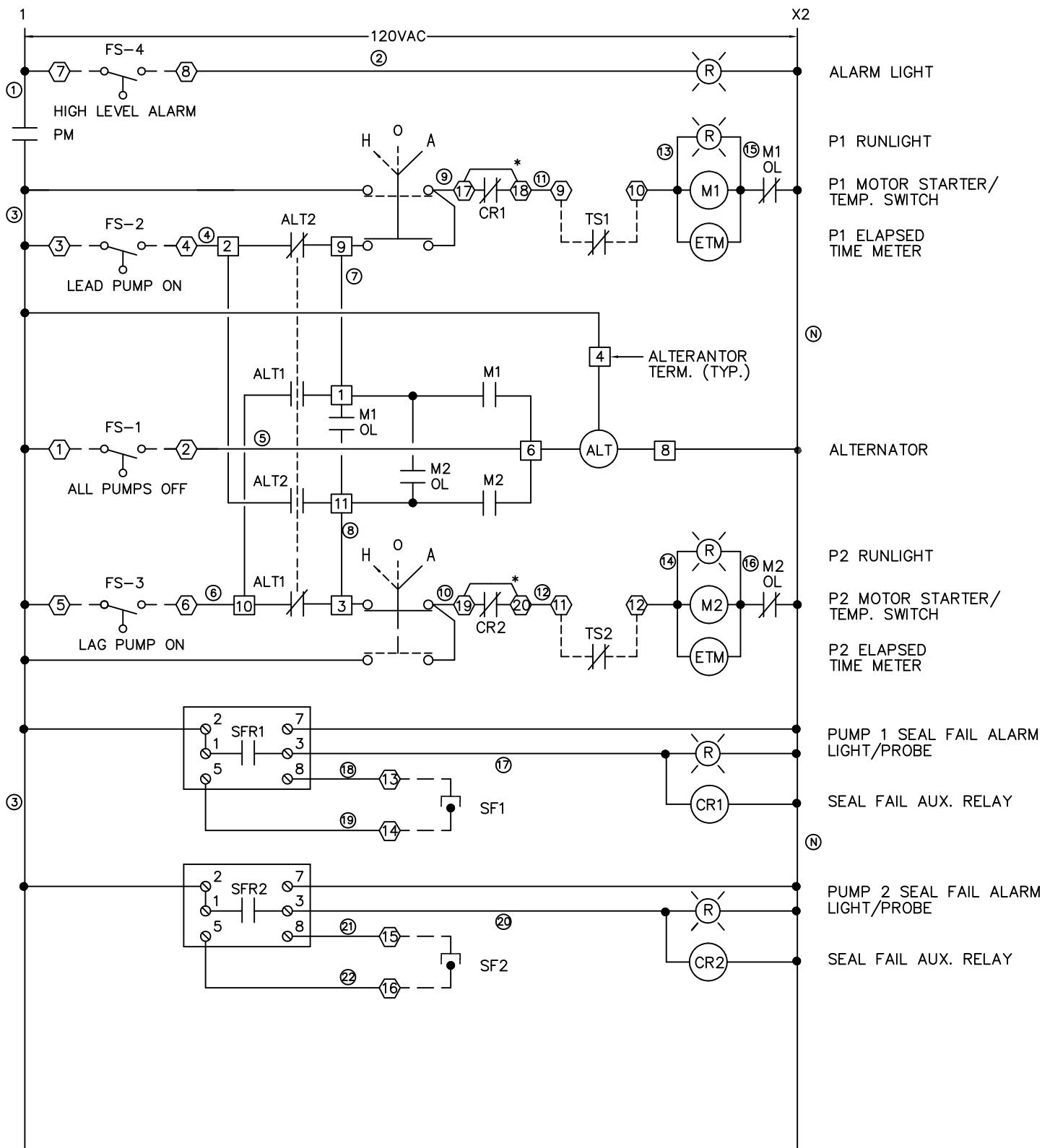
SHIP TO: Delta Process - Shreveport, LA

---

	Drawing Title  <b>PANEL DESCRIPTION</b>  DATE 8/15/03					
		REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE BY
S/N	Sales Engineer C.C.	Application Engineer R.C.	DRAWN	APPROVED		
			BY C. RACHAL	BY	DATE	
	Project Title  <b>DUPLEX PUMP CONTROL PANEL</b>	<b>COX</b> Research and Technology, Inc.	P.O. Box 77808 Baton Rouge, LA 70809	PURCHASE ORDER NUMBER		
			Ph. (225)756-3271 Fax (225)756-1030	DRAWING NUMBER	CP-1630	
				SHEET NUMBER		1

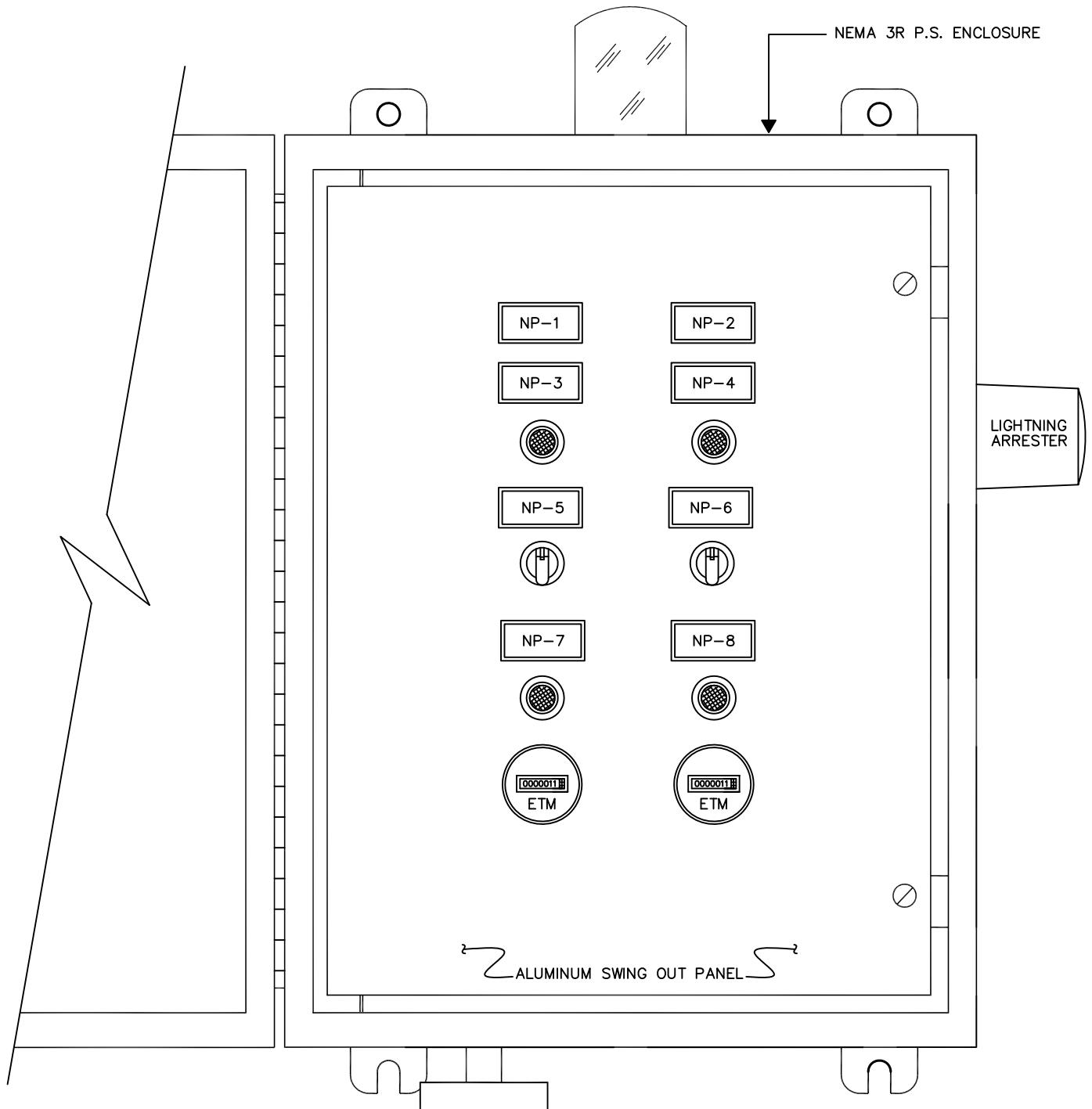


	Drawing Title  <b>POWER DIAGRAM</b>				
		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION DRAWN BY C. RACHAL	ECN APPROVED BY DATE
DATE 8/15/03		Application Engineer R.C.			
	Project Title  <b>DUPLEX PUMP CONTROL PANEL</b>	<b>COX</b> Research and Technology, Inc.	P.O. Box 77808 Baton Rouge, LA 70809  Ph. (225)756-3271 Fax (225)756-1030	PURCHASE ORDER NUMBER  DRAWING NUMBER CP-1630  SHEET NUMBER 2	



\* REMOVE JUMPER IF SEAL FAIL LOCKOUT IS PREFERRED.

	Drawing Title  CONTROL DIAGRAM  DATE 8/15/03						
		REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY
S/N		Sales Engineer C.C.	Application Engineer R.C.	DRAWN BY C. RACHAL	APPROVED BY	DATE	
	Project Title  DUPLEX PUMP CONTROL PANEL	<hr/> <hr/> <b>COX</b> Research and Technology, Inc. <hr/> <hr/>	P.O. Box 77808 Baton Rouge, LA 70809	PURCHASE ORDER NUMBER			
			Ph. (225)756-3271 Fax (225)756-1030	DRAWING NUMBER CP-1630			
				SHEET NUMBER 3			

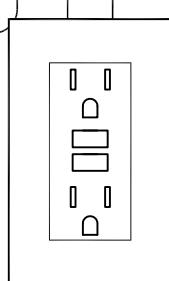


VIEW OF SWING OUT PANEL

NAMEPLATE SCHEDULE

NP-1	PUMP 1
NP-2	PUMP 2
NP-3	RUN
NP-4	RUN
NP-5	HOA
NP-6	HOA
NP-7	SEAL FAIL
NP-8	SEAL FAIL

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



	Drawing Title					
	ENCLOSURE					
	REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY
DATE 8/15/03	S/N	Sales Engineer C.C.	Application Engineer R.C.	DRAWN BY C. RACHAL	APPROVED BY DATE	
	Project Title					
	DUPLEX PUMP CONTROL PANEL		COX Research and Technology, Inc.	P.O. Box 77808 Baton Rouge, LA 70809  Ph. (225)756-3271 Fax (225)756-1030	PURCHASE ORDER NUMBER  DRAWING NUMBER CP-1630  SHEET NUMBER 4	

## BILL OF MATERIAL

ITEM	QTY	MANUFACTURER	PART NO.	DESCRIPTION
1	1	EBE	242010REPL	ENCLOSURE
1a	1	EBE	A2420P	BACKPLATE
1b	1	EBE	A2420SP	DEAD FRONT
2	2	ABB	A75-30-11-84	MOTOR STARTER
3	2	ABB	TA75DU80	O.L. RELAY (60-80A)
4	2	ABB	S1N100TL	CB1, CB2
5	1	TIMEMARK	261DT120	ALTERNATING RELAY
6	4	ACI	JR22FR	RED PILOT LIGHT
7	2	ACI	JR22P3M20B	HOA SWITCH
8	1	AC/DC	BL5-R-120	ALARM LIGHT
9	2	SSAC	LLC54AA	SEAL FAIL RELAY
10	2	OMRON	G2R2SAC120	RELAY
11	1	SSAC	PLMU11	PHASE MONITOR
12	1	CUTLER HAMMER	CHSA03	LIGHTNING ARRESTER
13	2	GRASSLIN	UWZ52E	ETM
14	1	SQUARE D	QUU115	CB3
15	1	STOCK		GFI
16	1	BUSS	16371-3	DISTRIBUTION BLOCK
17	1	BUSS	CPDB-3	DIST. BLOCK COVER
18				
19				
20				
21				
22				

	Drawing Title  <b>BILL OF MATERIALS</b>  DATE 8/15/03						
		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	DRAWN BY C. RACHAL	ECN	DATE BY DATE
							APPROVED
	Project Title  <b>DUPLEX PUMP CONTROL PANEL</b>	<hr/> <b>COX</b> Research and Technology, Inc. <hr/>	P.O. Box 77808 Baton Rouge, LA 70809	PURCHASE ORDER NUMBER  DRAWING NUMBER CP-1630			
			Ph. (225)756-3271 Fax (225)756-1030	SHEET NUMBER 5			