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# COX

Research and Technology, Inc.

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DUPLEX PUMP  
CONTROL PANEL  
LIFT STATION 12

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

CP-2231

VOLTAGE	277/480V	(480V, 277/480V, 240V, 120/240V, 208V, 120/208V)
PHASE/HZ	3/60	
NO. MOTORS	2	
HP	10	
FLA	14	
TYPE OF PUMP	Self-Priming	(Self-Priming, Submersible)
MANUFACTURER	G-R	
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	(Floats, Bubbler, Other)
CAPACITORS	No	(Yes, No)
CAPACITOR WIRING FIGURE	N/A	
THERM. & SEAL FAIL WIRING FIGURE		

## OPTIONS:

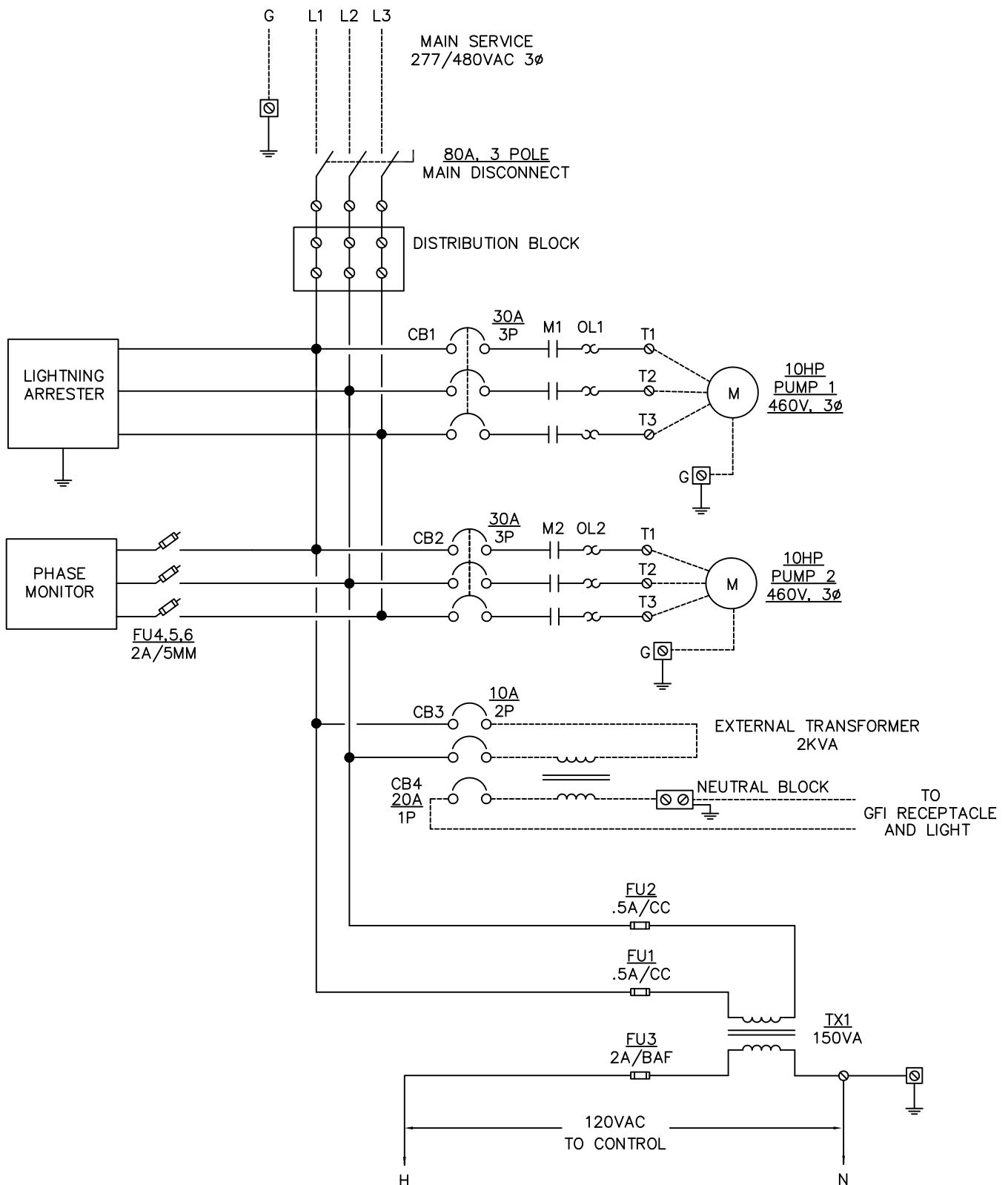
SEAL FAIL LIGHTS	<input type="checkbox"/>	(Submersible Only)
SEAL FAIL RELAYS	<input type="checkbox"/>	(Submersible Only)
SEAL FAIL PUMP SHUTDOWN	<input type="checkbox"/>	(Submersible Only)
HT PUMP SHUTDOWN	<input checked="" type="checkbox"/>	(Self-Primer, Submersible)
ALARM HORN	<input type="checkbox"/>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

SOLD TO: Delta Process - Bossier City  
TAG : Lift Station 12

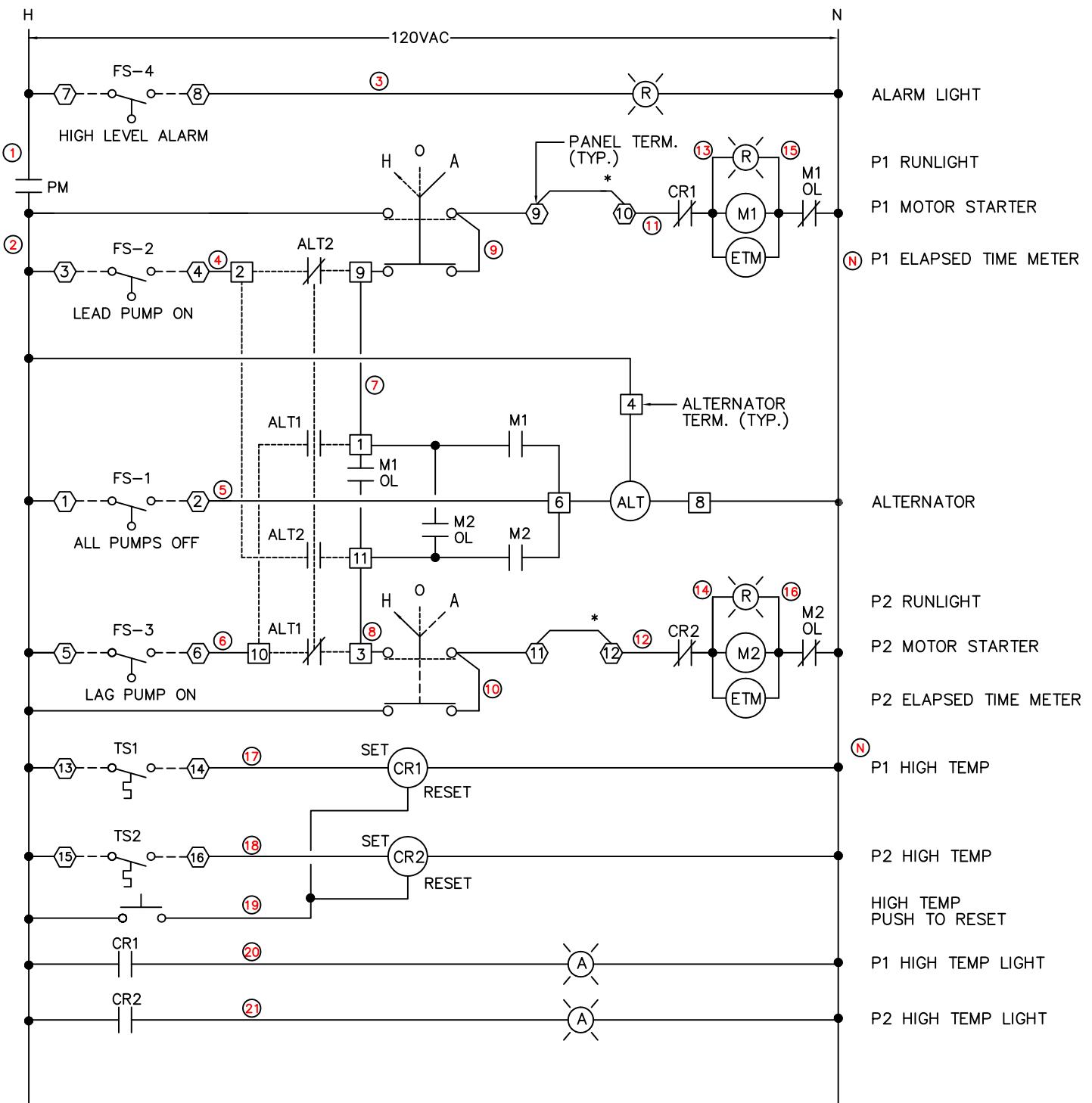
SHIP TO: Delta Process - Ruston, LA

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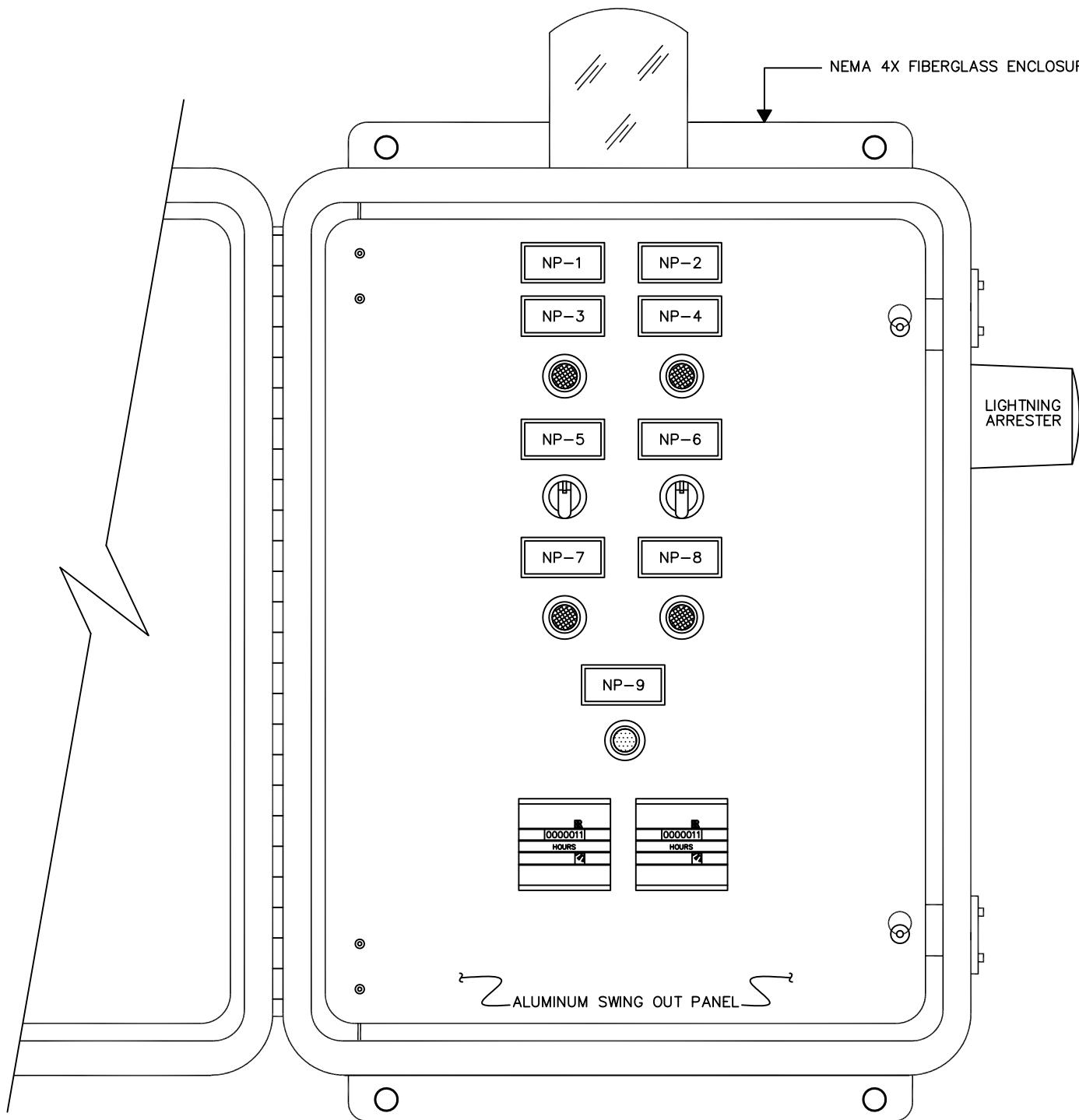
	Drawing Title  <b>PANEL DESCRIPTION</b>  DATE 12/09/05							
		REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY	
S/N	Sales Engineer C.C.	Application Engineer R.C.	DRAWN		APPROVED			
			BY C. RACHAL		BY	DATE		
	Project Title	<hr/> <hr/> <b>COX</b> <hr/> <hr/> Research and Technology, Inc.	P.O. Box 77808 Baton Rouge, LA 70809	PURCHASE ORDER NUMBER				
	DUPLEX PUMP CONTROL PANEL		Ph. (225)756-3271 Fax (225)755-1030	DRAWING NUMBER CP-2231	SHEET NUMBER 1			



	Drawing Title					
	POWER DIAGRAM					
DATE 12/09/05	REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	ECN DRAWN BY C. RACHAL	DATE APPROVED BY	BY
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)755-1030	PURCHASE ORDER NUMBER  DRAWING NUMBER CP-2231 SHEET NUMBER 2			



	Drawing Title  CONTROL DIAGRAM								
		REFERENCE DRAWING		NO.	REVISION-LOCATION		ECN	DATE	BY
DATE 12/09/05	S/N	Sales Engineer C.C.	Application Engineer R.C.	DRAWN BY C. RACHAL	APPROVED BY				
Project Title  DUPLEX PUMP CONTROL PANEL	<b>COX</b> Research and Technology, Inc.				P.O. Box 77808 Baton Rouge, LA 70809	PURCHASE ORDER NUMBER			
					DRAWING NUMBER CP-2231	DRAWING NUMBER			
					SHEET NUMBER 3	SHEET NUMBER			



VIEW OF SWING 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	HIGH TEMP
NP-8	HIGH TEMP
NP-9	HIGH TEMP 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						
		REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY
S/N	Sales Engineer	Application Engineer	DRAWN		APPROVED		
	C.C.	R.C.	BY C. RACHAL	BY	DATE		
Project Title	COX	P.O. Box 77808 Baton Rouge, LA 70809	PURCHASE ORDER NUMBER				
DUPLEX PUMP CONTROL PANEL	Research and Technology, Inc.	Ph. (225)756-3271 Fax (225)755-1030	DRAWING NUMBER	CP-2231			
			SHEET NUMBER	4			

## BILL OF MATERIAL

ITEM	QTY	MANUFACTURER	PART NO.	DESCRIPTION
1	1	STAHLIN	RJ1816HPLDF	ENCLOSURE
1a	1	STAHLIN	BP1816AL	BACKPLATE
2	2	ABB	A16-30-10-84	MOTOR STARTER
3	2	ABB	TA25DU19	O.L. RELAY (13-19A)
4	2	ABB	T1NO30TL	CB1, CB2
5	2	ACI	JR22FR	RED PILOT LIGHT
6	2	ACI	JR22P3M20B	HOA SWITCH
7	1	ABB	OT63E3	DISCONNECT SWITCH
8	1	ABB	T4150PSF1	TRANSFORMER
9	1	SSAC	PLMU-11	PHASE MONITOR
10	1	MARATHON	1323580	DISTRIBUTION BLOCK
11	2	ACI	JR22FY	AMBER PILOT LIGHT
12	1	ACI	JR22AN11B	PUSH BUTTON
13	2	MAGNECRAFT	W388AMLCPX-9	LATCHING RELAYS
14	1	TIMEMARK	261DT120	ALTERNATING RELAY
15	1	AC/DC	BL5-R-120	ALARM LIGHT
16	1	SQUARE D	QOU120	CB4
17	1	DELTA	LA603	LIGHTNING ARRESTER
18	2	REDINGTON	711-0190	ELAPSED TIME METER
19	1	ABB	S202UP-K10	CB3
20	1	MARATHON	1321570	NEUTRAL BLOCK
21	1	SQUARE D	2S1F	EXTERNAL TRANSFORMER
22				
23				
24				
25				

	Drawing Title								
	BILL OF MATERIALS								
DATE 12/09/05			REFERENCE DRAWING		NO.	REVISION-LOCATION	ECN	DATE	BY
			S/N	Sales Engineer	Application Engineer	DRAWN	APPROVED		
				C.C.	R.C.	BY C.RACHAL	BY	DATE	
	Project Title		 COX <small>Research and Technology, Inc.</small>		P.O. Box 77808 Baton Rouge, LA 70809  Ph. (225)756-3271 Fax (225)755-1030	PURCHASE ORDER NUMBER			
	DUPLEX PUMP CONTROL PANEL					DRAWING NUMBER			
						CP-2231			
						SHEET NUMBER			
						5			