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# COX

Research and Technology, Inc.

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## DUPLEX PUMP CONTROL PANEL LIFT STATIONS

13,14,15,16,17,20,21,23,24,27,28,29,31

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

VOLTAGE	120/240V	(480V, 277/480V, 240V, 120/240V, 208V, 120/208V)
PHASE/HZ	1/60	
NO. MOTORS	2	
HP	2	
FLA	15	
TYPE OF PUMP	Submersible	(Self-Priming, Submersible)
MANUFACTURER	Barnes	
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	Yes	(Yes, No)
CAPACITOR WIRING FIGURE		
THERM. & SEAL FAIL WIRING FIGURE		

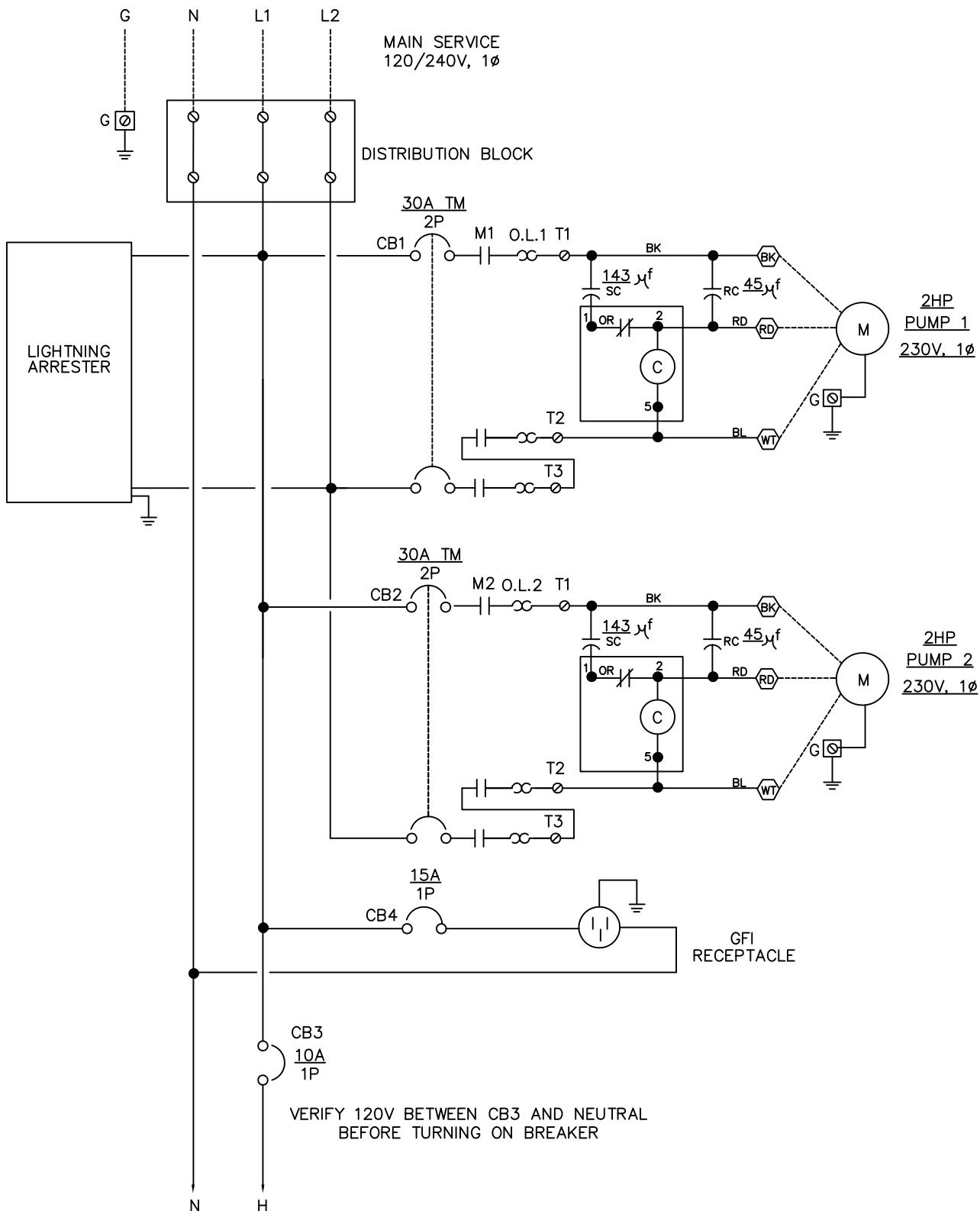
OPTIONS:

SEAL FAIL LIGHTS	X	(Submersible Only)
SEAL FAIL RELAYS		(Submersible Only)
SEAL FAIL PUMP SHUTDOWN		(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		
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	X	

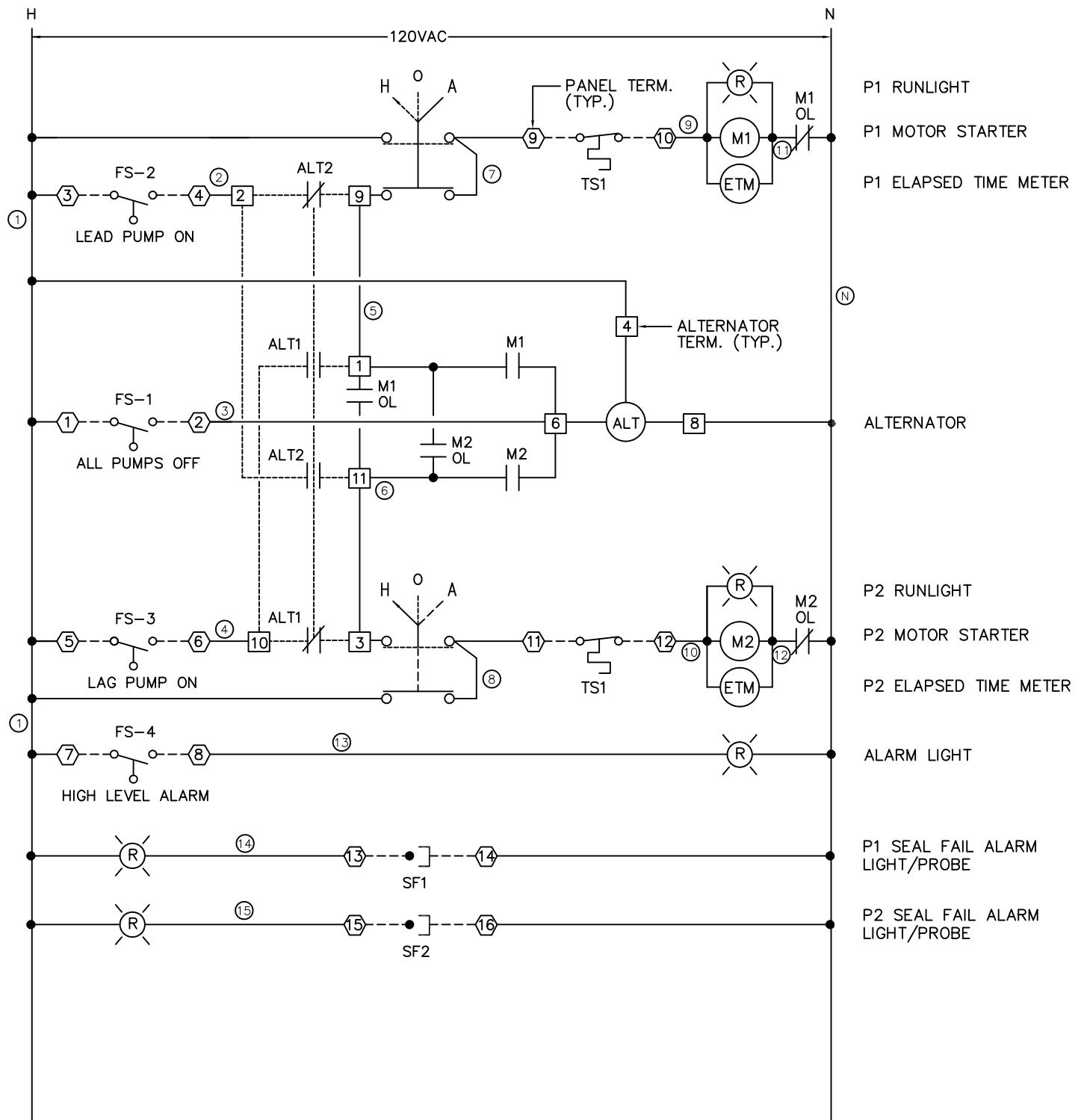
SOLD TO: Delta Process - Denham Springs, LA  
TAG : Lift Stations 13,14,15,16,17,20,21,23,24,27,28,29,31

SHIP TO: Delta Process - Denham Springs, LA

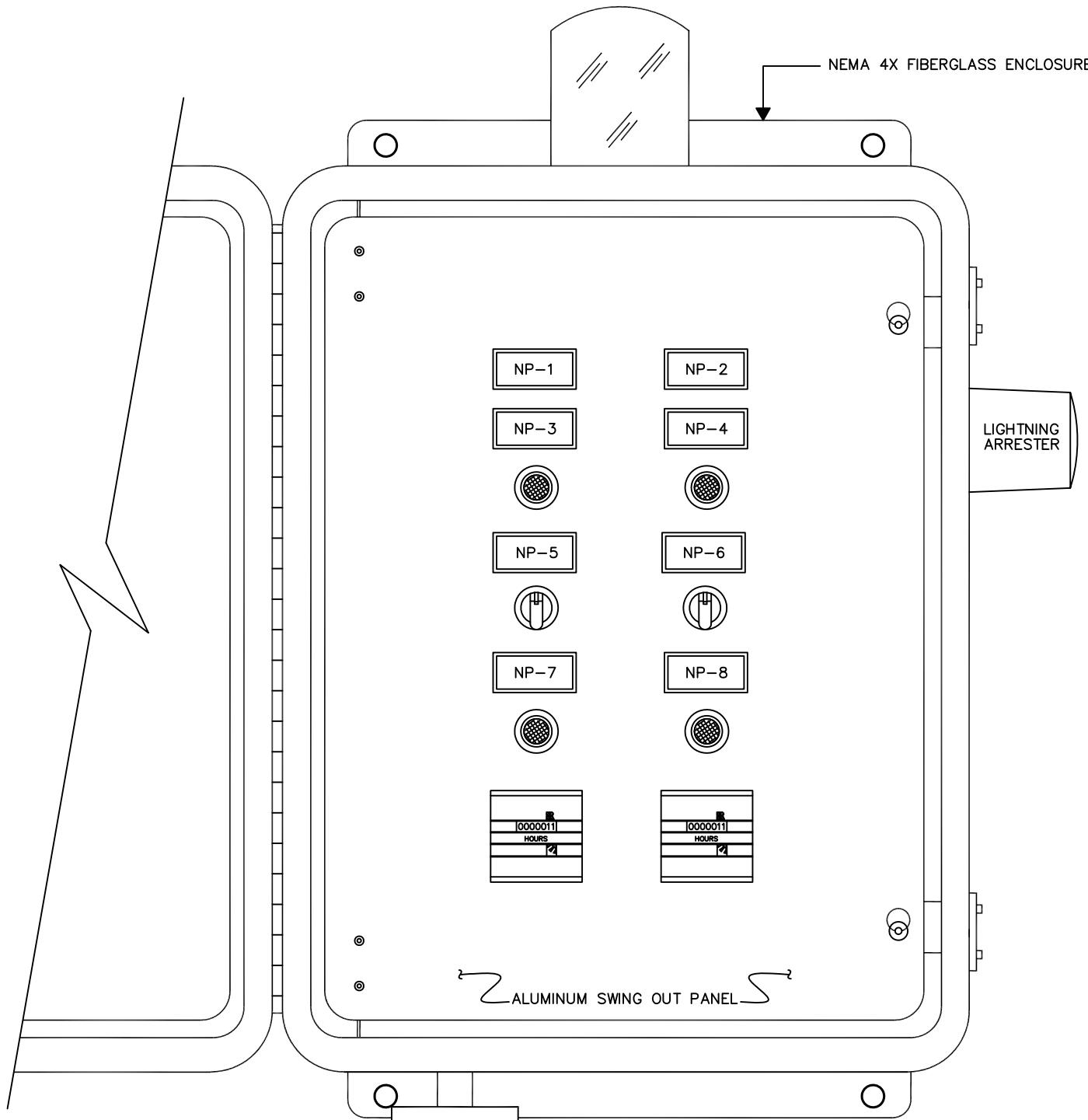
Drawing Title	PANEL DESCRIPTION	REFERENCE DRAWING		NO. R.C.	REVISION-LOCATION		ECN	DATE BY
		S/N	Sales Engineer C.C.		DRAWN BY C. RACHAL	APPROVED BY DATE		
DATE 12/09/05	Project Title  DUPLEX PUMP CONTROL PANEL				P.O. Box 77808 Baton Rouge, LA 70809		PURCHASE ORDER NUMBER	
					Ph. (225)756-3271 Fax (225)755-1030		DRAWING NUMBER CP-2224	
							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 12/09/05		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)755-1030	PURCHASE ORDER NUMBER  DRAWING NUMBER CP-2224 SHEET NUMBER 2	



	Drawing Title					
	CONTROL DIAGRAM					
DATE 12/09/05	REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION DRAWN BY C. RACHAL	ECN	DATE	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-2224	
				SHEET NUMBER		3



VIEW OF SWING PANEL

NAMEPLATE SCHEDULE

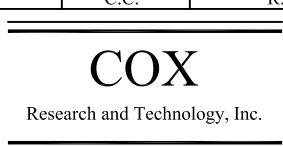
NP-1	PUMP 1
NP-2	PUMP 2
NP-3	RUN
NP-4	RUN
NP-5	HOA
NP-6	HOA
NP-7	SEAL FAIL
NP-8	SEAL FAIL

**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
DATE 12/09/05	S/N	Sales Engineer	Application Engineer	DRAWN BY C. RACHAL	APPROVED BY	DATE
	C.C.		R.C.			
	Project Title	<hr/> <hr/> <hr/> <b>COX</b> <hr/> <hr/>			PURCHASE ORDER NUMBER	
	DUPLEX PUMP CONTROL PANEL	Research and Technology, Inc.			DRAWING NUMBER	CP-2224
					SHEET NUMBER	4

# BILL OF MATERIALS

ITEM	QTY	MANUFACTURER	PART NO.	DESCRIPTION
1	1	STAHLIN	RJ1816HPLDF	ENCLOSURE
1a	1	STAHLIN	BP1816AL	BACKPLATE
2	1	MARATHON	1323580	DISTRIBUTION BLOCK
3	2	ABB	A16-30-10-84	MOTOR STARTER
4	2	ABB	TA25DU19	O.L. RELAY (13-19A)
5	2	SQUARE D	QOU230	CB1, CB2
6	1	TIMEMARK	261DT120	ALTERNATING RELAY
7	4	ACI	JR22FR	RED PILOT LIGHT
8	2	ACI	JR22P3M20B	HOA SWITCH
9	1	AC/DC	BL5-R120	ALARM LIGHT
10	2	CGE	4CU54	START CAPACITOR $143\mu f$
11	2	CGE	5X434	RUN CAPACITOR $45\mu f$
12	2	GE	6X559	START RELAY
13	2	REDINGTON	711-0190	ELAPSED TIME METER
14	1	DELTA	LA302R	LIGHTNING ARRESTER
15	1	STOCK		GFI RECEPTACLE
16	1	SQUARE D	QOU110	CB3
17	1	SQUARE D	QOU115	CB4
18				
19				
20				
21				
22				
23				
24				
25				

	Drawing Title								
	BILL OF MATERIALS								
			REFERENCE DRAWING		NO.	REVISION-LOCATION	ECN	DATE	BY
DATE 12/09/05			S/N	Sales Engineer	Application Engineer	DRAWN	APPROVED		
				C.C.	R.C.	BY C. RACHAL	BY	DATE	
	Project Title		 <b>COX</b> Research and Technology, Inc.			PURCHASE ORDER NUMBER  P.O. Box 77808 Baton Rouge, LA 70809  DRAWING NUMBER CP-2224  SHEET NUMBER 5			
	DUPLEX PUMP CONTROL PANEL								