

---

---

# COX

Research and Technology, Inc.

---

---

## DUPLEX PUMP CONTROL PANEL

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	5	
FLA	39	
TYPE OF PUMP	Submersible	(Self-Priming, Submersible)
MANUFACTURER	BARNES	
CATALOG NUMBER	SGVF5022L-MS	
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	Opti-Floats	(Floats, Bubbler, Other)
CAPACITORS	No	(Yes, No)
CAPACITOR WIRING FIGURE	N/A	
THERM. & SEAL FAIL WIRING FIGURE		

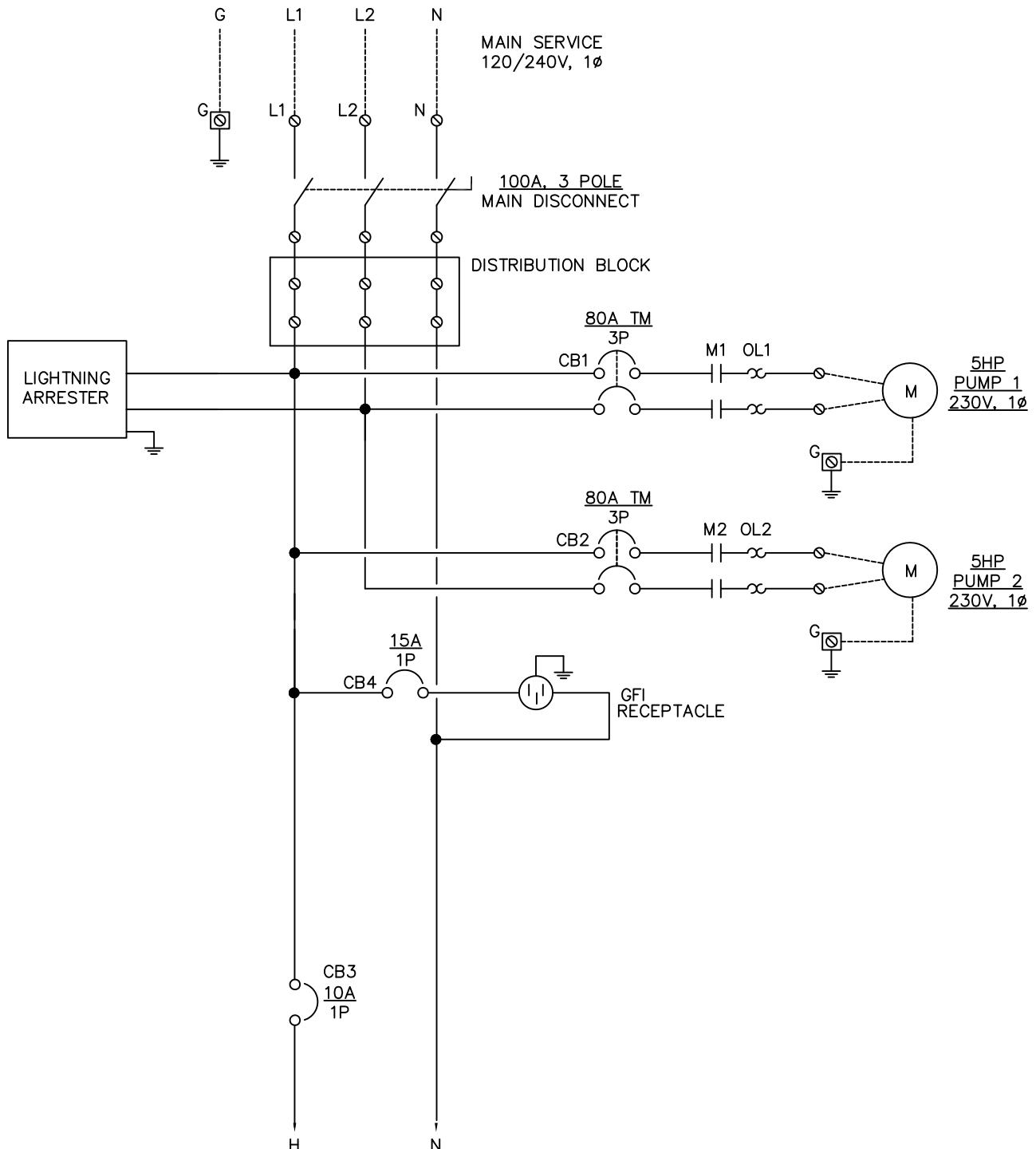
OPTIONS:

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

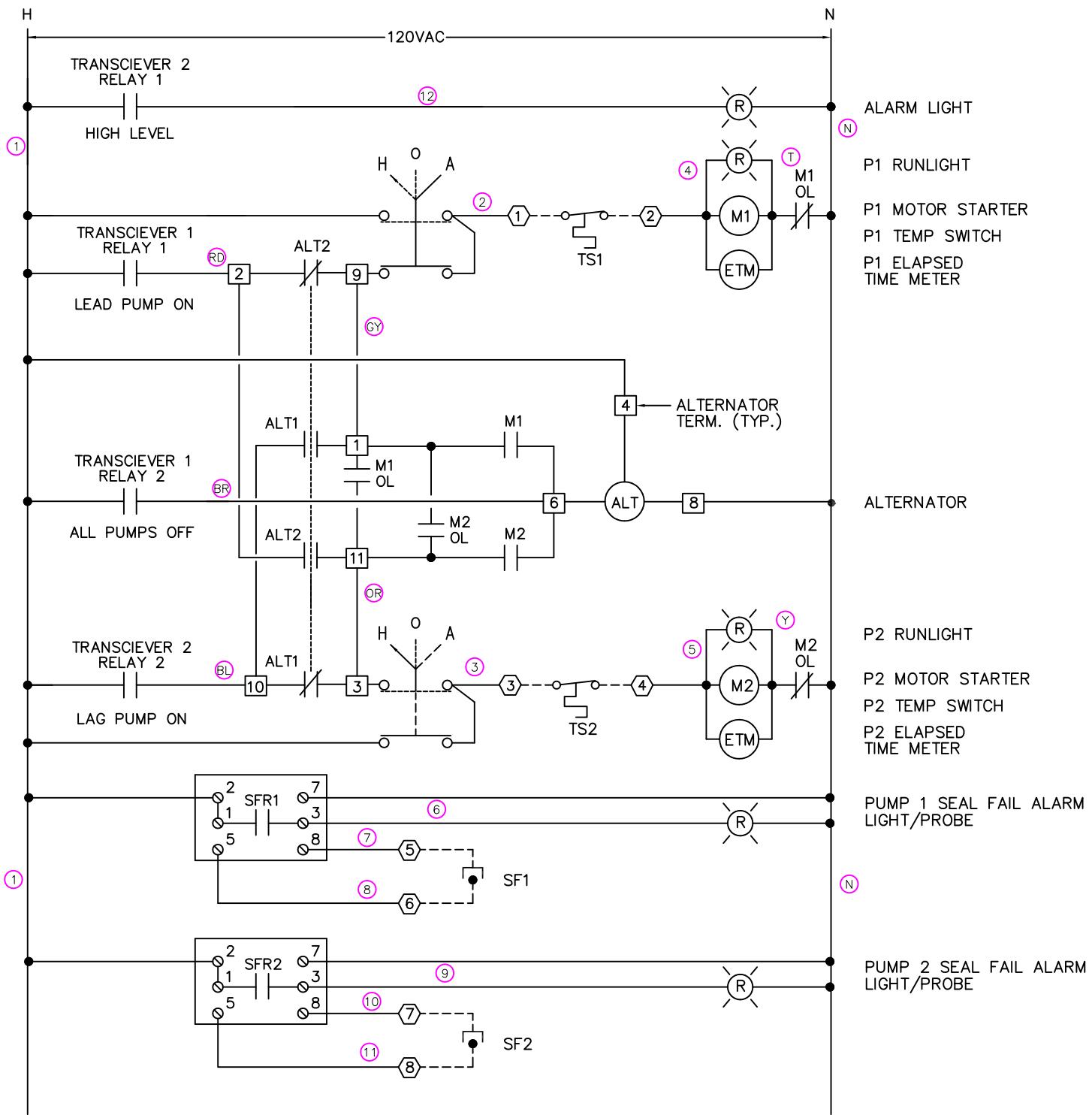
SOLD TO: Delta Process - Bossier City, LA  
TAG : \_\_\_\_\_

SHIP TO: Delta Process - Ruston, LA  
\_\_\_\_\_

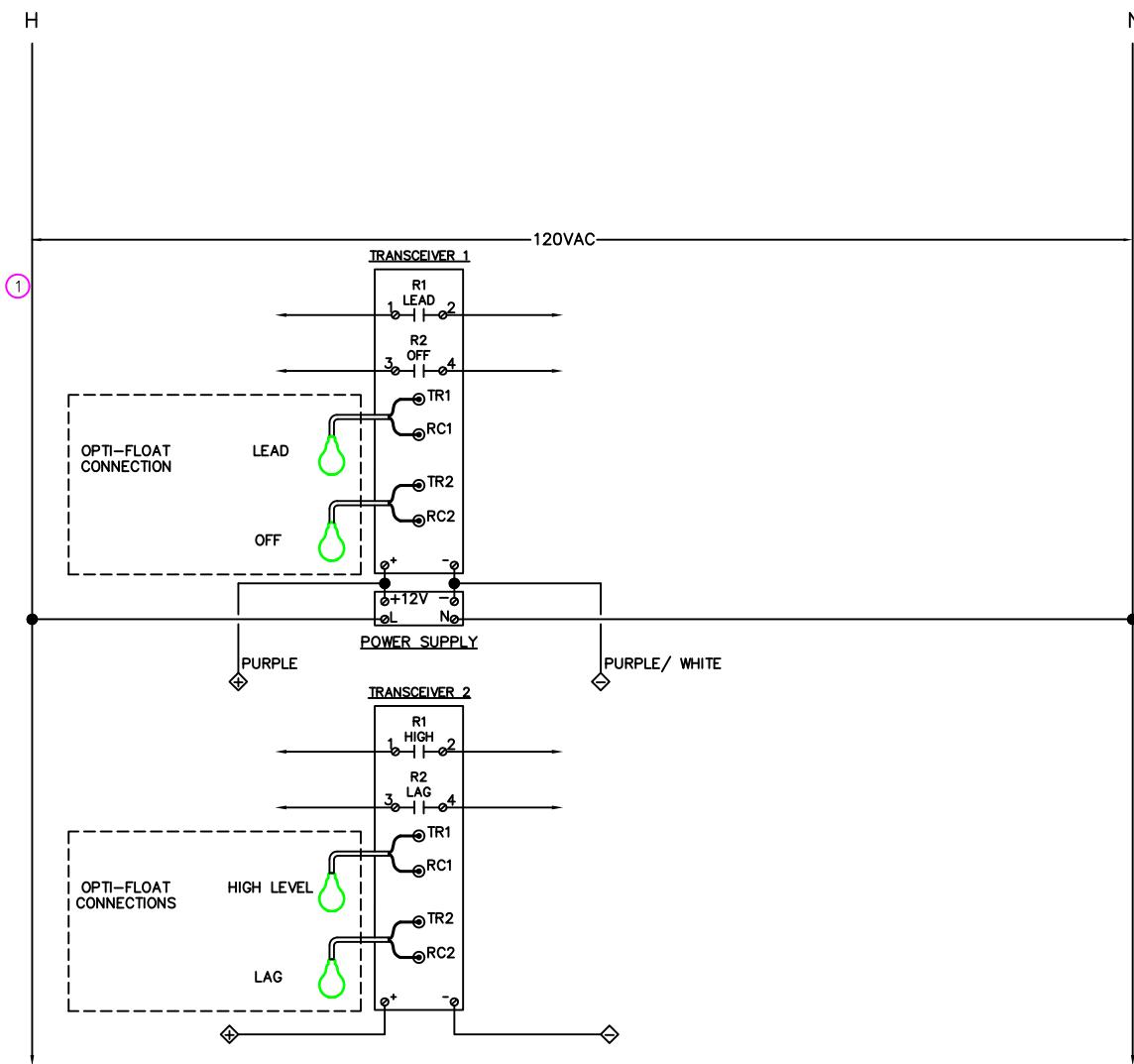
Drawing Title	PANEL DESCRIPTION	R2	Opti-Float	7/29/09	NHB
		REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN DATE BY
DATE	S/N	Sales Engineer	Application Engineer	DRAWN	APPROVED
7/29/09	C.C.	R.C.	J.HEUGHAN	BY	DATE
Project Title	COX	P.O. Box 77808 Baton Rouge, LA 70809	PURCHASE ORDER NUMBER		
DUPLEX PUMP CONTROL PANEL	Research and Technology, Inc.	Ph. (225)756-3271 Fax (225)756-1030	DRAWING NUMBER	CP-1830r2	
			SHEET NUMBER	1	



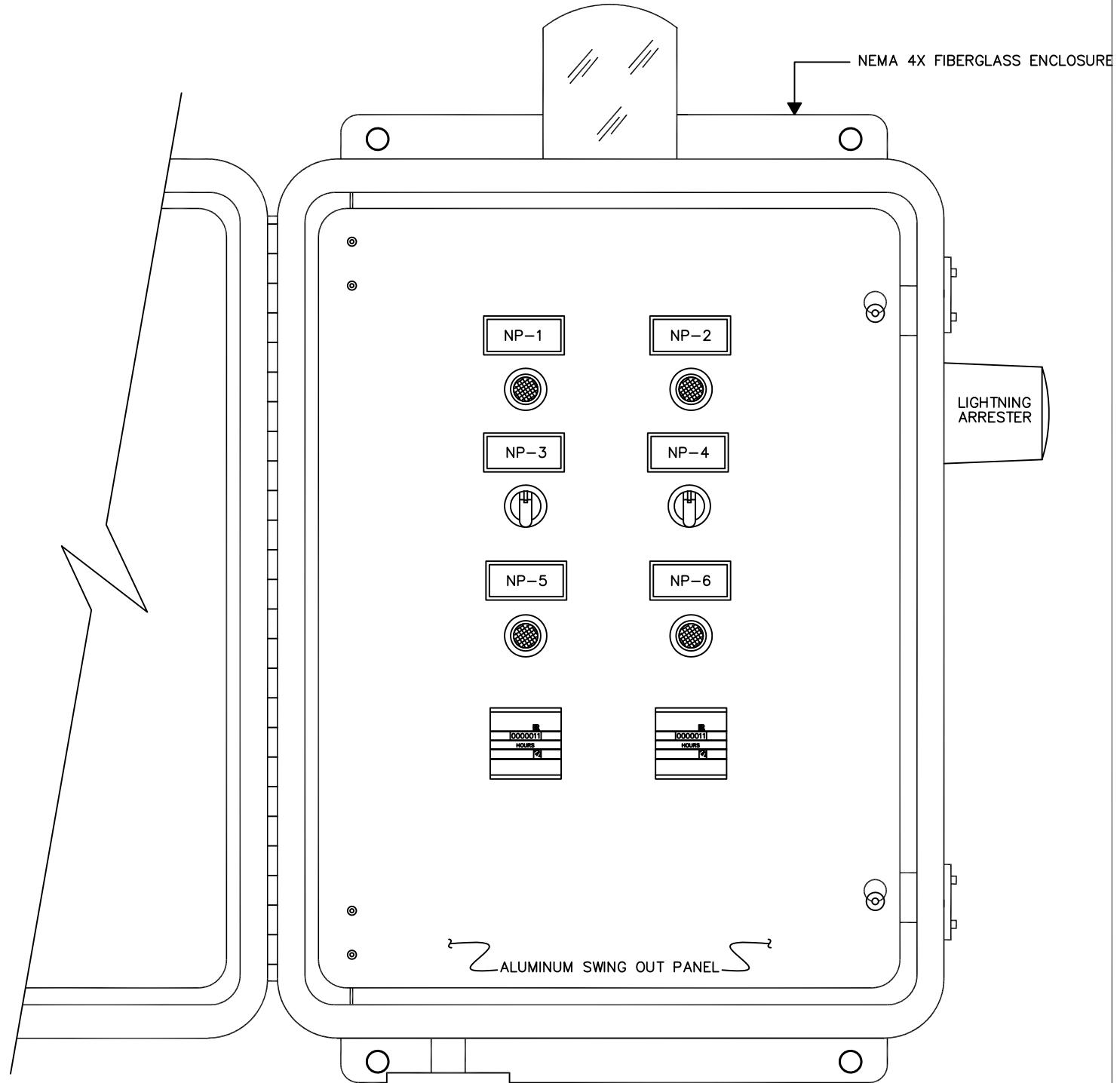
	Drawing Title	R2	Opti-Float	7/29/09	NHB
	POWER DIAGRAM				
	REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE BY
DATE 7/29/09	S/N	Sales Engineer	DRAWN	APPROVED	
	C.C.	Application Engineer	BY J.HEUGHAN	BY DATE	
	Project Title	<hr/> <hr/> <b>COX</b> <hr/> <hr/> Research and Technology, Inc. <hr/> <hr/>		PURCHASE ORDER NUMBER	
	DUPLEX PUMP CONTROL PANEL			DRAWING NUMBER	CP-1830r2
				SHEET NUMBER	2



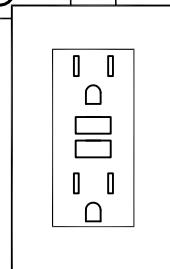
	Drawing Title  CONTROL DIAGRAM		R2	Opti-Float		7/29/09	NHB
DATE 7/29/09		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	DRAWN BY J.HEUGHAN	ECN BY	DATE APPROVED BY DATE
	Project Title  DUPLEX PUMP CONTROL PANEL		<hr/> <hr/> <b>COX</b> Research and Technology, 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-1830r2		
					SHEET NUMBER 3		



	Drawing Title		R2	Opti-Float		7/29/09	NHB
	CONTROL DIAGRAM						
		REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY
DATE 7/29/09		S/N	Sales Engineer	Application Engineer	DRAWN	APPROVED	
			C.C.	R.C.	BY J.HEUGHAN	BY	DATE
	Project Title				P.O. Box 77808 Baton Rouge, LA 70809	PURCHASE ORDER NUMBER	
	DUPLEX PUMP CONTROL PANEL		COX		Ph. (225)756-3271 Fax (225)756-1030	DRAWING NUMBER CP-1830r2	
			Research and Technology, Inc.			SHEET NUMBER 4	



VIEW OF SWING OUT PANEL



NAMEPLATE SCHEDULE

NP-1	PUMP 1 RUN
NP-2	PUMP 2 RUN
NP-3	HOA
NP-4	HOA
NP-5	SEAL FAIL
NP-6	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	R2	Opti-Float		7/29/09	NHB
	ENCLOSURE					
DATE 7/29/09	REFERENCE DRAWING S/N	NO. C.C.	REVISION-LOCATION DRAWN BY J.HEUGHAN	ECN	DATE APPROVED BY 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)756-1030		PURCHASE ORDER NUMBER DRAWING NUMBER CP-1830r2 SHEET NUMBER 5	

# BILL OF MATERIALS

ITEM	QTY	MANUFACTURER	PART NO.	DESCRIPTION
1	1	STAHLIN	RJ1816HPLDF	ENCLOSURE
1a	1	STAHLIN	BP1816AL	BACKPLATE
2	1	ABB	OT100E3	MAIN DISC. SWITCH
3	2	ABB	A40-30-10-84	MOTOR STARTER
4	2	ABB	TA42DU42	O.L. RELAY (29-42A)
5	2	SQUARE D	QOU280	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	R40-XLS	ALARM LIGHT
10	1	MARATHON	1323580	DISTRIBUTION BLOCK
11	2	REDINGTON	711-0190	ELAPSED TIME METER
12	1	SQUARE D	QOU115	CB4
13	1	STOCK		GFI
14	2	SSAC	LLC54AA	SEAL FAIL RELAY
15	1	DELTA	LA302R	LIGHTNING ARRESTER
16	2	COX RESEARCH	OPTI-TR2	TRANSCEIVER
17	4	COX RESEARCH	OPTI-F130-WT1	(30' CORD) OPTI-FLOATS
18	1	ABB	1SVR427041R1000	POWER SUPPLY
19	1	SQUARE D	QOU110	CB3
20				
21				
22				
23				
24				
25				

	Drawing Title  <b>BILL OF MATERIALS</b>			R2	Opti-Float		7/29/09	NHB
		REFERENCE DRAWING S/N		NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	ECN DRAWN BY J.HEUGHAN	DATE APPROVED BY DATE	
DATE 7/29/09	Project Title  DUPLEX PUMP CONTROL PANEL	<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-1830r2  SHEET NUMBER 6		