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# COX

Research and Technology, Inc.

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## SOUTHERN 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	277/480V	(480V, 277/480V, 240V, 120/240V, 208V, 120/208V)
PHASE/HZ	3/60	
NO. MOTORS	2	
HP	10	
FLA	14 est.	
TYPE OF PUMP	Chopper	(Self-Priming, Submersible)
MANUFACTURER	Vaughan	
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		

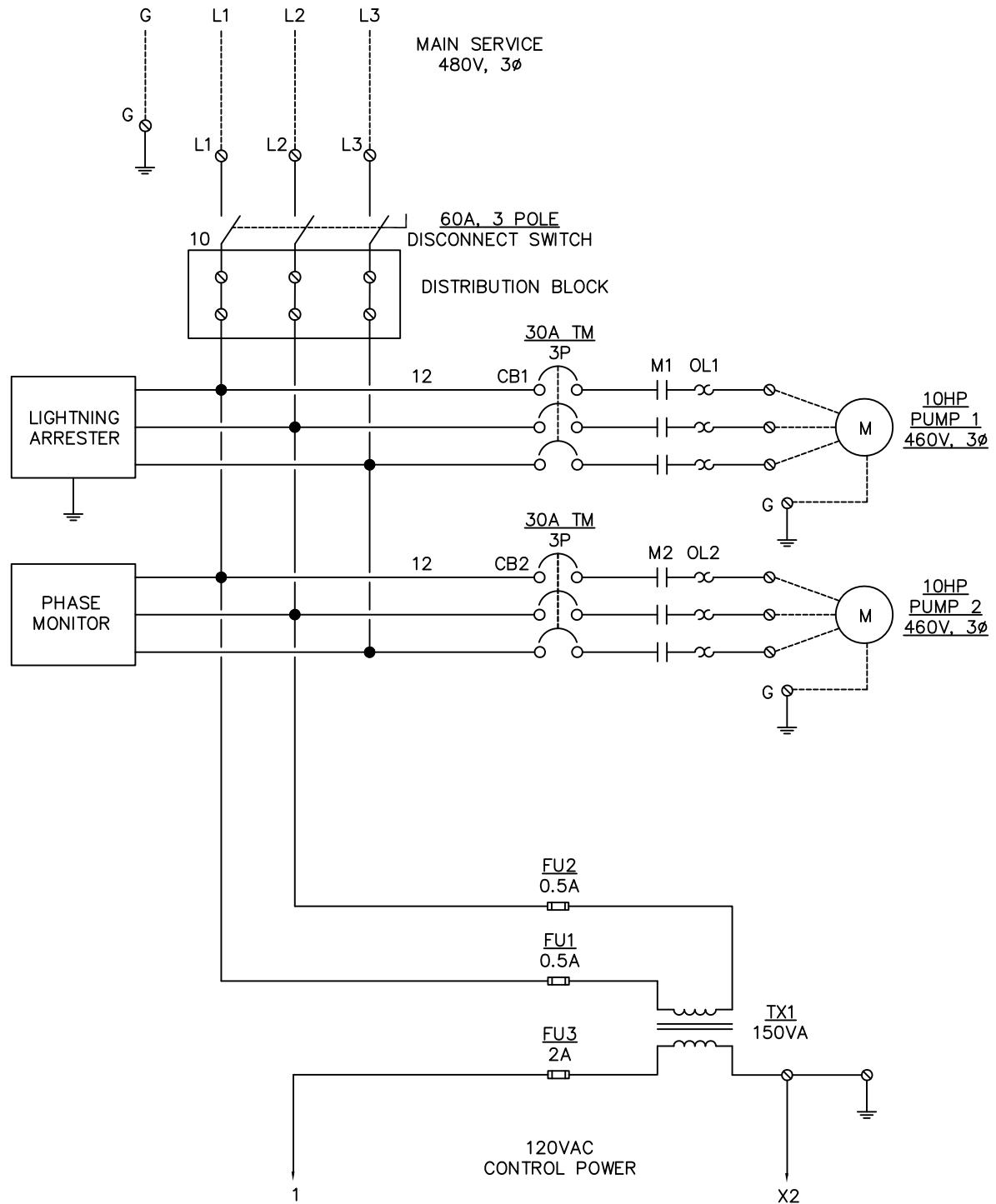
OPTIONS:

SEAL FAIL LIGHTS	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	X ABB	
GROUND FAULT RECPT.		
GREEN RUN LIGHTS VS. RED		
POLE, BOX, SEAL	X	
INTRINSICALLY SAFE RELAYS		
HIGH TEMP. LOCKOUT, MANUAL RESET		
ECONOMY VERSION	X	

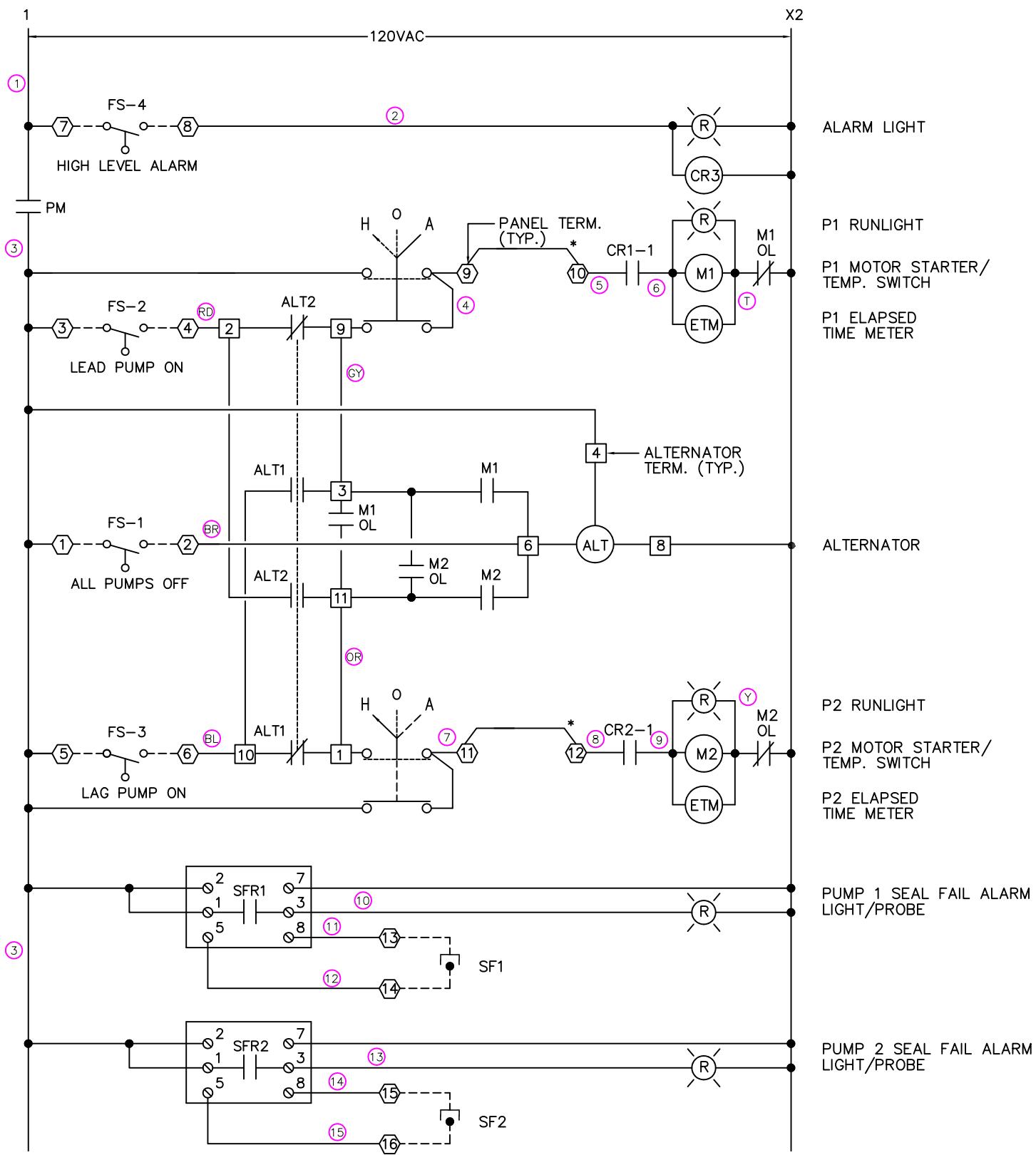
SOLD TO: Delta Process - Denham Springs, LA  
TAG : SOUTHERN

SHIP TO: Delta Process - Denham Springs, LA

	Drawing Title  PANEL DESCRIPTION	R1	10HP REBUILD		11/2/09	HNB
DATE 11/2/09	REFERENCE DRAWING S/N	NO. C.C.	REVISION-LOCATION		ECN DRAWN BY J.HEUGHAN	DATE APPROVED BY DATE
			Application Engineer R.C.	DRAWN BY		
	Project Title  DUPLEX PUMP CONTROL PANEL		<u>COX</u> 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-1779r1  SHEET NUMBER 1

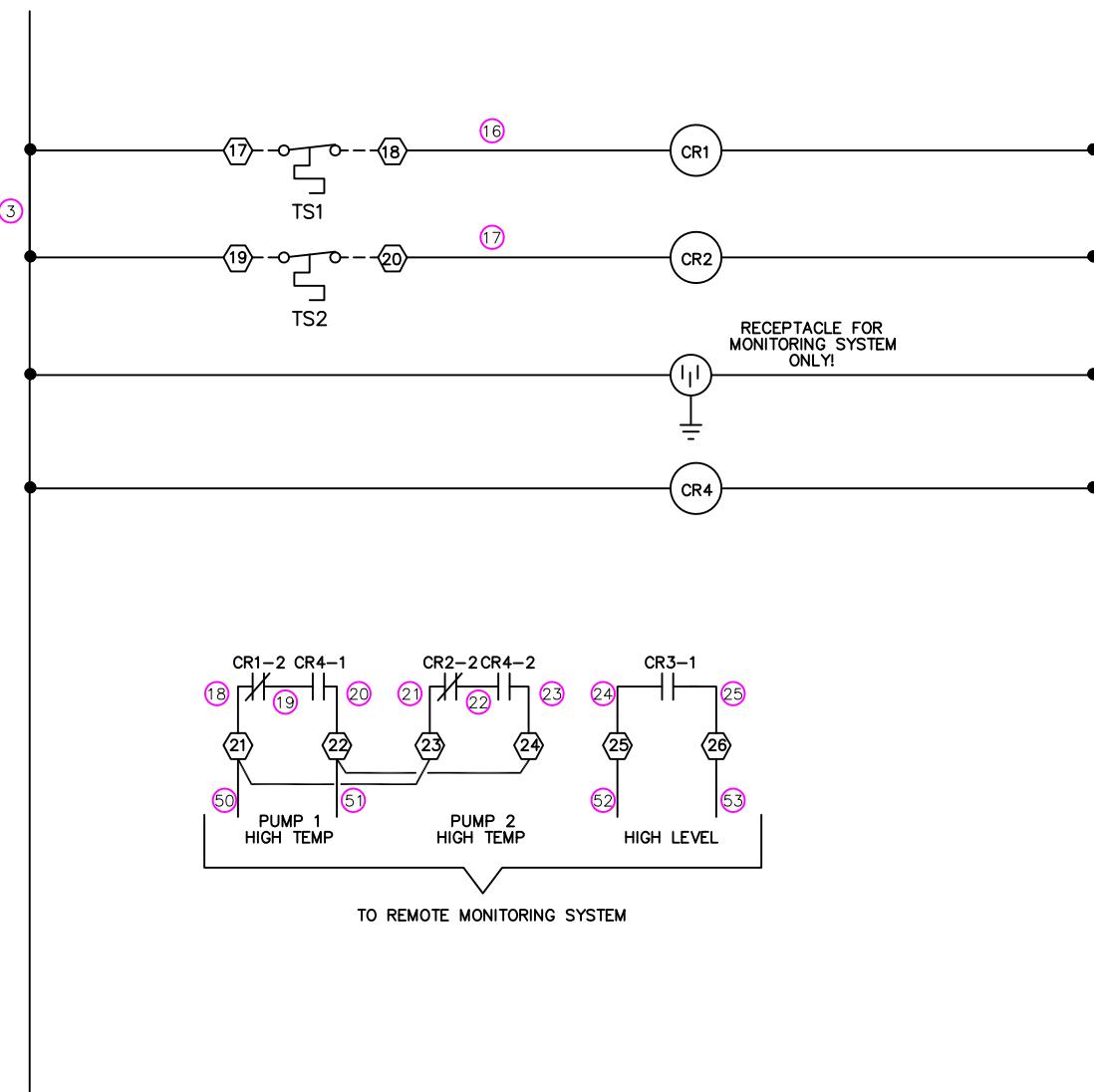


	Drawing Title  <b>POWER DIAGRAM</b>	R1	10HP REBUILD		11/2/09	HNB
	REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY
DATE 11/2/09	S/N C.C.	Sales Engineer Application Engineer R.C.	DRAWN BY J.HEUGHAN		APPROVED BY	DATE
	Project Title  <b>DUPLEX PUMP CONTROL PANEL</b>	<b>COX</b> Research and Technology, Inc.	P.O. Box 77808 Baton Rouge, LA 70809  Ph. (225)756-3271 Fax (225)756-1030	PURCHASE ORDER NUMBER		
				DRAWING NUMBER CP-1779r1		
				SHEET NUMBER 2		

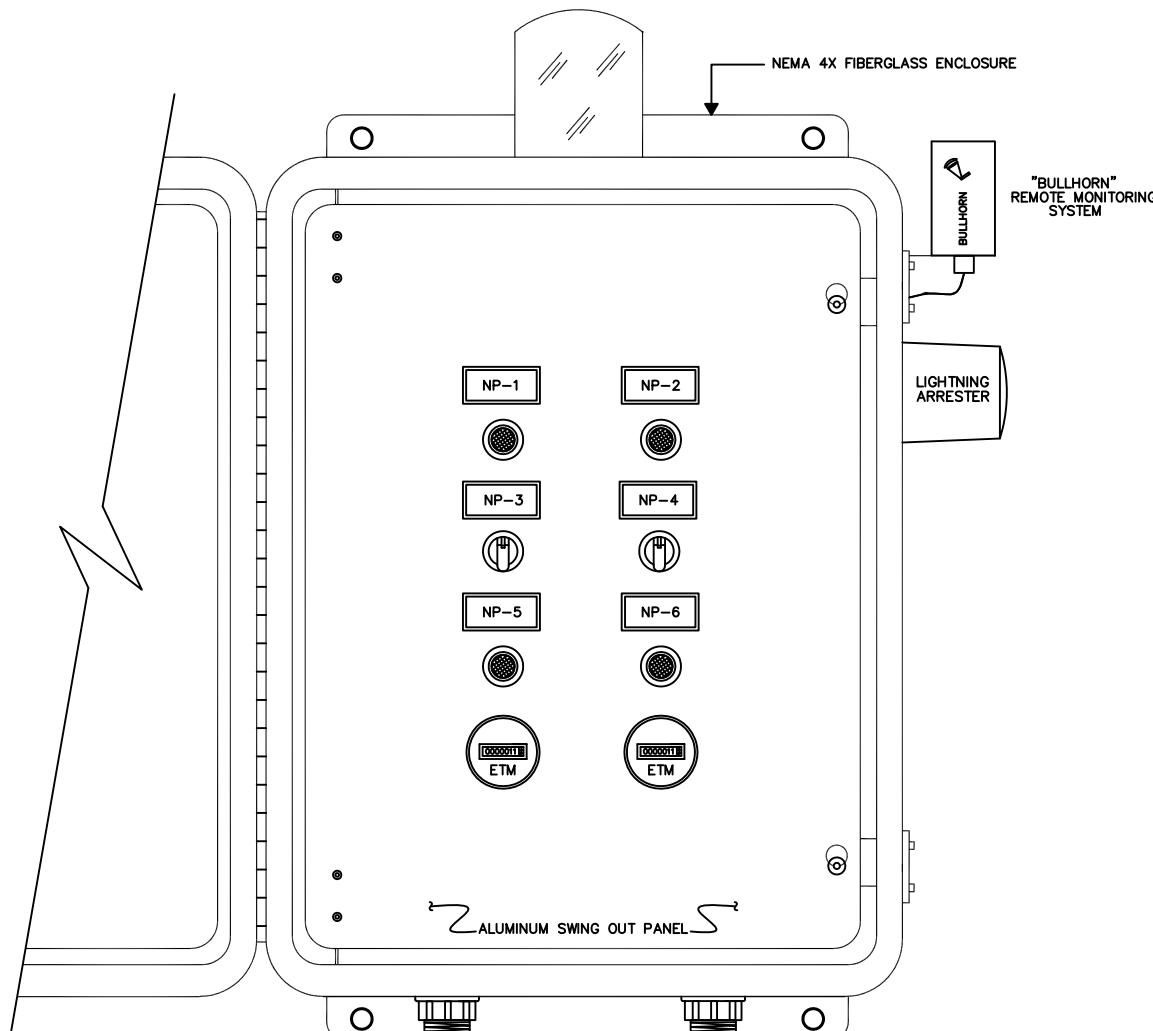


\* REMOVE JUMPERS AND INSTALL LOCKOUT DEVICES IF REQUIRED

	Drawing Title	R1	10HP REBUILD	11/2/09	HNB
	CONTROL DIAGRAM				
DATE 11/2/09	REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION DRAWN BY J.HEUGHAN	ECN	DATE APPROVED 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 Ph. (225)756-3271 Fax (225)756-1030	PURCHASE ORDER NUMBER  DRAWING NUMBER CP-1779r1 SHEET NUMBER 3

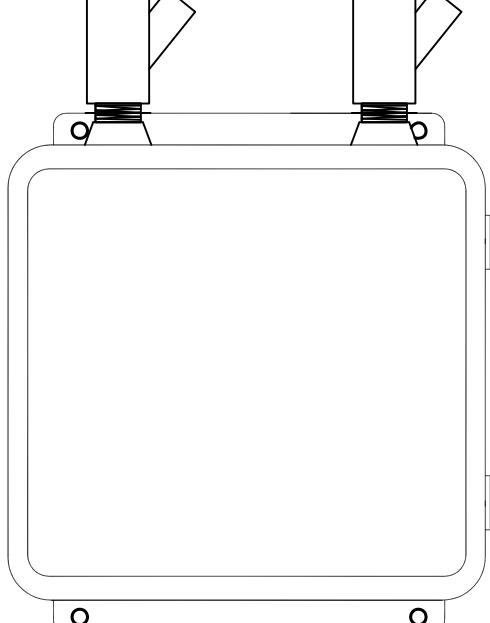


	Drawing Title  CONTROL DIAGRAM	R1	10HP REBUILD		11/2/09	HNB
DATE 11/2/09	REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION DRAWN BY J.HEUGHAN	ECN	DATE APPROVED BY DATE	BY
	Project Title  DUPLEX PUMP CONTROL PANEL	COX Research and Technology, Inc.	P.O. Box 77808 Baton Rouge, LA 70809  Ph. (225)756-3271 Fax (225)756-1030	PURCHASE ORDER NUMBER  DRAWING NUMBER CP-1779r1  SHEET NUMBER 4		



VIEW OF SWING OUT PANEL

NOTE: EXISTING  
ENCLOSURE REMAINS  
IN PLACE



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		R1	10HP REBUILD		11/2/09	HNB
	ENCLOSURE						
DATE 11/2/09	REFERENCE DRAWING S/N	NO. C.C.	REVISION-LOCATION DRAWN BY J.HEUGHAN	ECN	DATE APPROVED BY DATE		
	Project Title						
	DUPLEX PUMP CONTROL PANEL		COX Research and Technology, Inc.		PURCHASE ORDER NUMBER		
					DRAWING NUMBER CP-1779rl		
					SHEET NUMBER 5		

## BILL OF MATERIALS

ITEM	QTY	MANUFACTURER	PART NO.	DESCRIPTION
1	1	ALLIED	HFP2520	SWING PANEL
1a	1	ALLIED	PA2420	BACKPLATE
2	2	ABB	A16NO-30-10-84	MOTOR STARTER
3	2	ABB	TA25DU19	O.L. RELAY (13-19A)
4	2	ABB	T1N030TL	CB1, CB2
5	1	DIVERSIFIED	ARB-120-ADA	ALTERNATING RELAY
6	4	ABB	CL513R	RED PILOT LIGHT
7	2	ABB	C3SS110B-20	HOA SWITCH
8	1	ABB	X4150PSF1	TRANSFORMER
9	1	CONERY	R40-XLS	ALARM LIGHT
10	1	DELTA	LA603	LIGHTNING ARRESTER
11	1	TIMEMARK	A257B-480VAC	PHASE MONITOR
12	2	REDINGTON	711-0190	ELAPSED TIME METER
13	1	MARATHON	1323580	DISTRIBUTION BLOCK
14	2	SSAC	LLC-54AA	SEAL FAIL RELAY
15	4	IDEC	RYS2ULAC120	CR1-4
16	1	LEVITON		RECEPTACLE
17	1	AMERICAN INNOVATIONS	BULLHORN	REMOTE MONITOR
18	1	ABB	OT45E3	DISCONNECT
19				
20				
21				
22				
23				
24				
25				

	Drawing Title  <b>BILL OF MATERIALS</b>  DATE 11/2/09		R1	10HP REBUILD		11/2/09	HNB
		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION DRAWN BY J.HEUGHAN	ECN	DATE	BY
		Application Engineer R.C.					
	Project Title  <b>DUPLEX PUMP CONTROL PANEL</b>	<hr/> <hr/> <b>COX</b> <hr/> <hr/> 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-1779r1			
				SHEET NUMBER 6			