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# COX

Research and Technology, Inc.

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TRIPLEX VFD / SOFT START  
WITH EXTERNAL VFD  
CONTROL PANEL

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

CP-1490

VOLTAGE	277/480V	(480V, 277/480V, 240V, 120/240V, 208V, 120/208V)
PHASE/HZ	3/60	
NO. MOTORS	3	
HP	75	
FLA	91	
TYPE OF PUMP	Submersible	(Self-Priming, Submersible)
MANUFACTURER	Gorman Rupp	
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	Transducer	(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		(Submersible Only)
SEAL FAIL PUMP SHUTDOWN		(Submersible Only)
HT PUMP SHUTDOWN	X	(Self-Primer, Submersible)
ALARM HORN		
ALARM LIGHT	X	
LIGHT PANEL MTD		
LIGHT REMOTE MTD	X	
LIGHT FLASHER	X	
LIGHTNING ARRESTER	X	
ELAPSED TIME METER	X	
PHASE MONITOR	X	
NEMA RATED STARTERS	X	
GROUND FAULT RECPT.	X	
GREEN RUN LIGHTS VS. RED	X	
POLE, BOX, SEAL		
INTRINSICALLY SAFE RELAYS		
HIGH TEMP. LOCKOUT, MANUAL RESET	X	
ECONOMY VERSION		

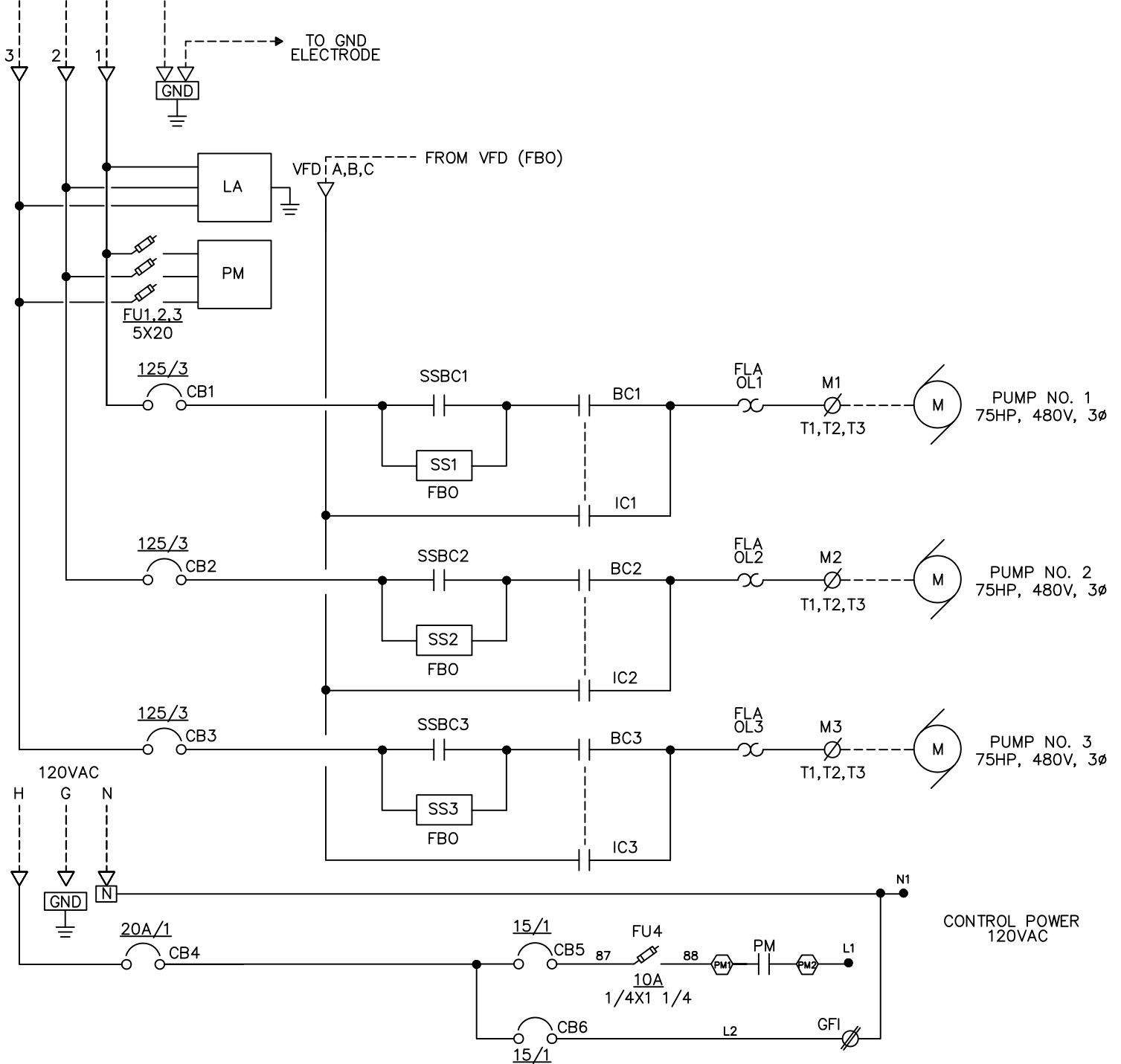
SOLD TO: Delta Process, Ruston, LA  
TAG : City of Ruston

SHIP TO: Delta Process, Ruston, LA

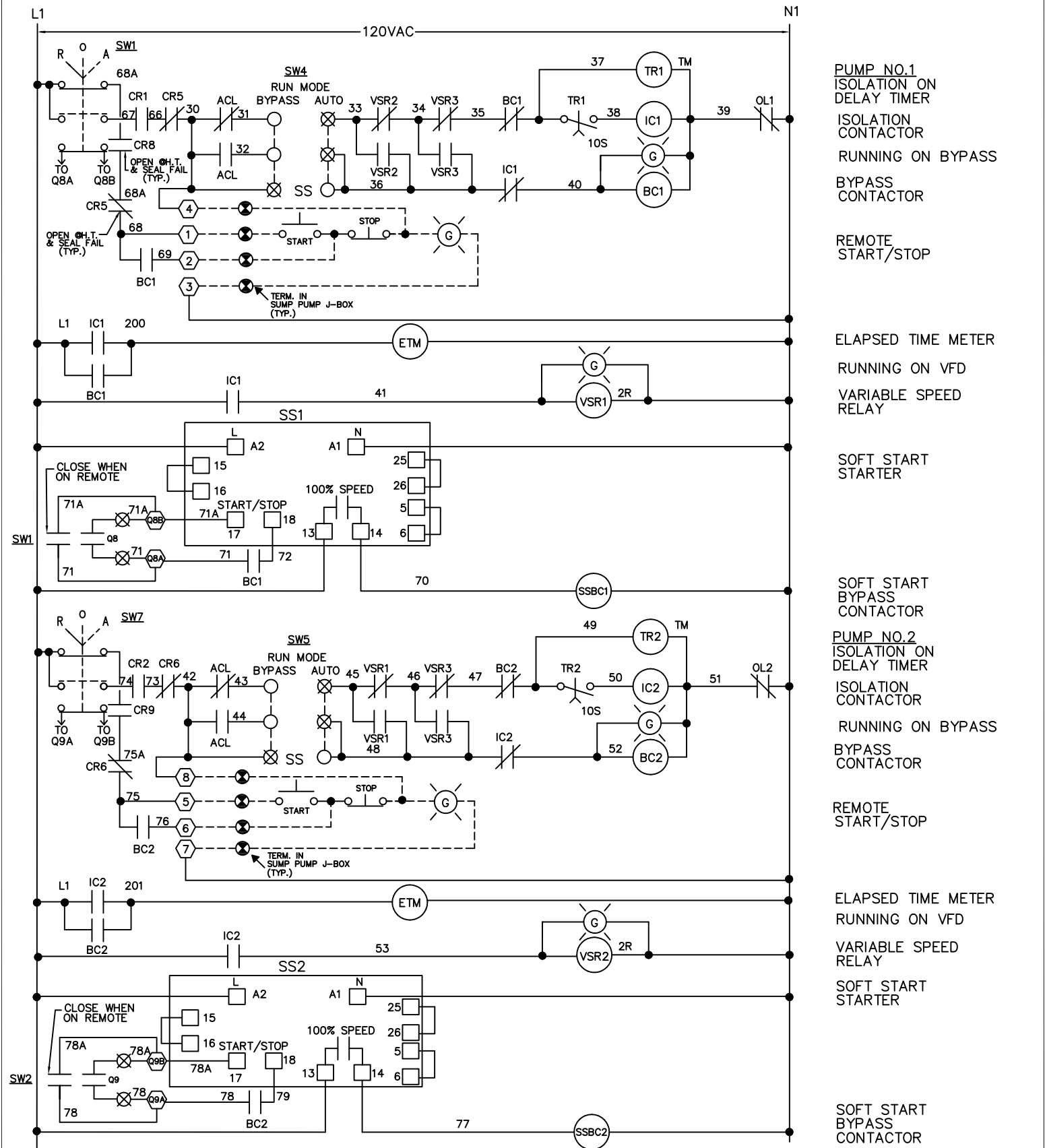
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	PANEL DESCRIPTION						
DATE		REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY
12/03/02		S/N	Sales Engineer C.C.	Application Engineer R.C.	DRAWN BY CTR	APPROVED BY	DATE
	Project Title	<div style="text-align: center;"> <b>COX</b>  Research and Technology, Inc. </div>			P.O. Box 77808 Baton Rouge, LA 70809  Ph. (225)756-3271 Fax (225)756-1030		PURCHASE ORDER NUMBER  DRAWING NUMBER CP-1490 SHEET NUMBER 1
	DUPLEX PUMP CONTROL PANEL						

3 CIRCUITS  
FROM 400A C.B.

480V., 3 $\phi$ , 3W

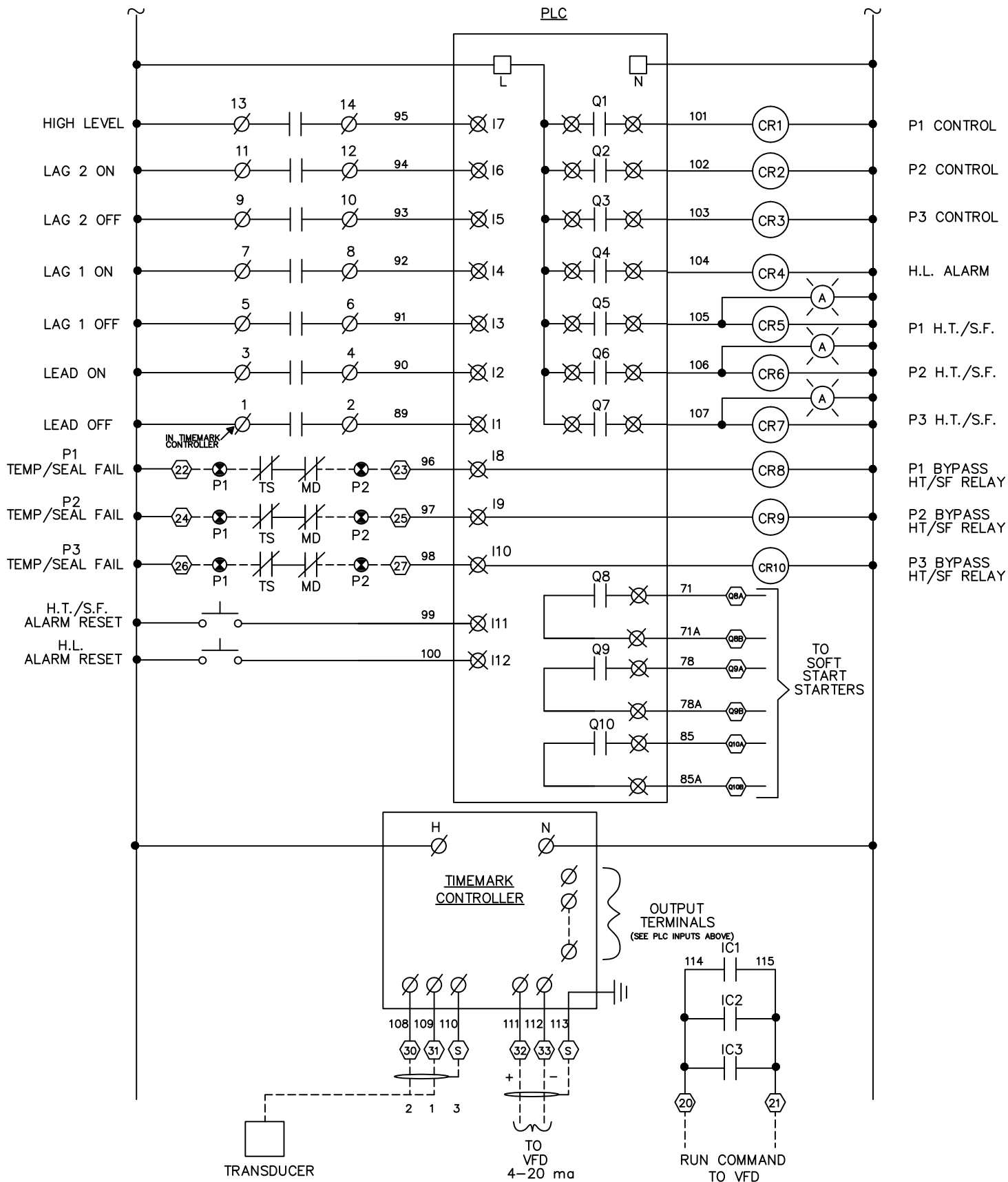


	Drawing Title  <
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Drawing Title							
CONTROL DIAGRAM							
DATE		REFERENCE DRAWING		NO.		REVISION-LOCATION	
11/13/02		S/N		Sales Engineer		Application Engineer	
		C.C.		R.C.		DRAWN	
Project Title				BY		CTR	
TRIPLEX PUMP CONTROL PANEL				BY		DATE	
						PURCHASE ORDER NUMBER	
						DRAWING NUMBER	
						CP-1490	
						SHEET NUMBER	
						3	





Drawing Title									
CONTROL DIAGRAM									
DATE		REFERENCE DRAWING		NO.		REVISION-LOCATION		ECN	
11/13/02		S/N		Sales Engineer		Application Engineer		DRAWN	
				C.C.		R.C.		BY	
Project Title								APPROVED	
TRIPLEX PUMP CONTROL PANEL								DATE	
								PURCHASE ORDER NUMBER	
								DRAWING NUMBER	
								CP-1490	
								SHEET NUMBER	
								5	

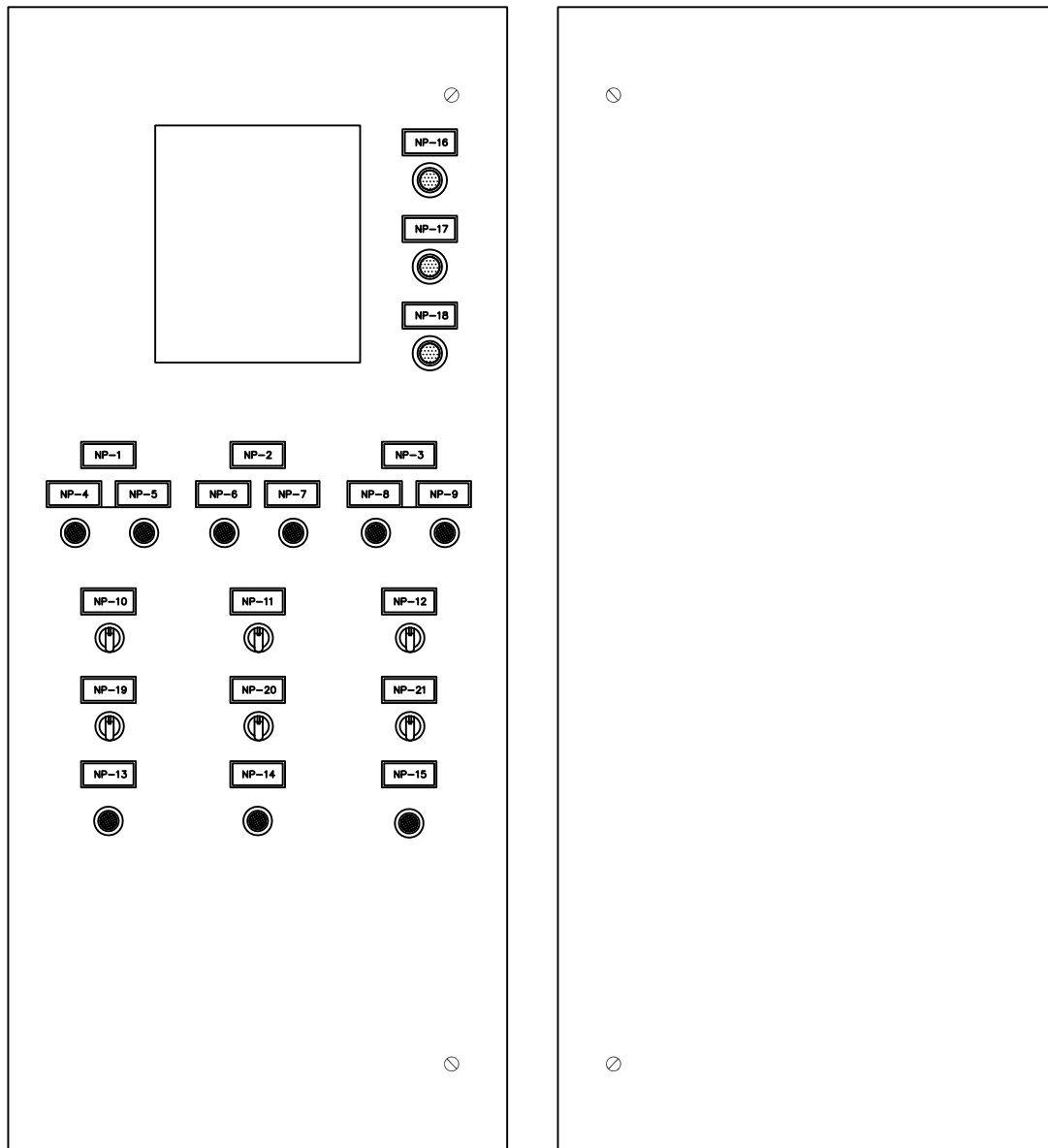
**COX**

Research and Technology, Inc.

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Baton Rouge, LA  
70809

Ph. (225)756-3271  
Fax (225)756-1030





### VIEW OF SWING PANEL

#### NAMEPLATE SCHEDULE

NP-1	PUMP 1	NP-12	REMOTE-OFF-AUTO
NP-2	PUMP 2	NP-13	HT/SF
NP-3	PUMP 3	NP-14	HT/SF
NP-4	DRIVE RUN	NP-15	HT/SF
NP-5	BYPASS RUN	NP-16	VFD FAULT
NP-6	DRIVE RUN	NP-17	HT/SF RESET
NP-7	BYPASS RUN	NP-18	HL RESET
NP-8	DRIVE RUN	NP-19	BYPASS-AUTO
NP-9	BYPASS RUN	NP-20	BYPASS-AUTO
NP-10	REMOTE-OFF-AUTO	NP-21	BYPASS-AUTO
NP-11	REMOTE-OFF-AUTO		

**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									
DATE	11/13/02	REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY		
		S/N	Sales Engineer	Application Engineer	DRAWN		APPROVED		
		C.C.		R.C.	BY	CTR	BY	DATE	
Project Title		COX			P.O. Box 77808 Baton Rouge, LA 70809		PURCHASE ORDER NUMBER		
TRIPLEX PUMP CONTROL PANEL		Research and Technology, Inc.			Ph. (225)756-3271 Fax (225)756-1030		DRAWING NUMBER CP-1490		
							SHEET NUMBER 7		



## BILL OF MATERIALS

ITEM	QTY	MANUFACTURER	PART NO.	DESCRIPTION
1	1	EBE	D747216REPL	ENCLOSURE
1a	1	EBE	AD7472P	BACKPLATE
1b	1	EBE	AD7472SP	DEAD FRONT
2	3	ABB	S3N125TW/LUGS	CB 1,2,3
3	1	SQUARE D	QOU120	CB 4
4	2	SQUARE D	QOU115	CB 5,6
5	1	DANFOSS	VLT80000-AQUA	VFD
6	3	DANFOSS	MCD3045	SS1,2,3
7	3	SQUARE D	8502SF02V02	SSBC1,2,3
8	3	SQUARE D	8736SF03V02	IC/BC1,2,3
9	9	SQUARE D	CC132	THERMAL UNITS FOR 91.1A
10	3	SQUARE D	6A854	TR1,2,3
11	12	SQUARE D	9999SX8	AUX. RELAY
12	12	SQUARE D	9999SBT1	ADAPTOR
13	7	OMRON	MY2INAC120	CR1-7
14	7	OMRON	PYF08A-E	BASES
15	1	SSAC	FS126	FLASHER
16	3	A-B	800H-HR28	BYPASS-AUTO SW1,2,3
17	3	A-B	800H-JR2A	REMOTE-OFF-AUTO SW1,2,3
18	2	A-B	800H-AR2A	P.B.SW
19	6	A-B	800H-QRH10G	GREEN PILOT LIGHT
20	4	A-B	800H-QRH10A	AMBER PILOT LIGHT
21	1	SSAC	PLMU11	PHASE MONITOR
22	1	DELTA L.A.	LA603	LIGHTNING ARRESTOR
23	1	SIEMENS	230RC	PLC 12IO
24	2	SIEMENS	DM8230R	EXPANSION MODULE 8IO
25	1	TIMEMARK	4082	8PT TRANSDUCER CONTROLLER
26	4	OMRON	MK3PN5SAC120	RELAYS
27	3	OMRON	SSAC	RELAYS
28				

	Drawing Title						
	BILL OF MATERIALS						
DATE 11/13/02		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	DRAWN BY CTR	ECN	DATE BY
		<div style="border: 1px solid black; padding: 5px; margin: 0 auto; width: 100px;"> <b>COX</b>  <small>Research and Technology, Inc.</small> </div>		<small>P.O. Box 77808 Baton Rouge, LA 70809</small>  <small>Ph. (225)756-3271 Fax (225)756-1030</small>		<small>PURCHASE ORDER NUMBER</small>  <small>DRAWING NUMBER</small> CP-1490  <small>SHEET NUMBER</small> 8	
	Project Title	TRIPLEX PUMP CONTROL PANEL					