
COX

Research and Technology, Inc.

DUPLEX PUMP CONTROL PANEL MARKSVILLE

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	60	
FLA	77	
TYPE OF PUMP	Submersible	(Self-Priming, Submersible)
MANUFACTURER	GR	
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	Submersible Transducer	(Floats, Bubbler, Other)
CAPACITORS	No	(Yes, No)
CAPACITOR WIRING FIGURE	N/A	
THERM. & SEAL FAIL WIRING FIGURE		

OPTIONS:

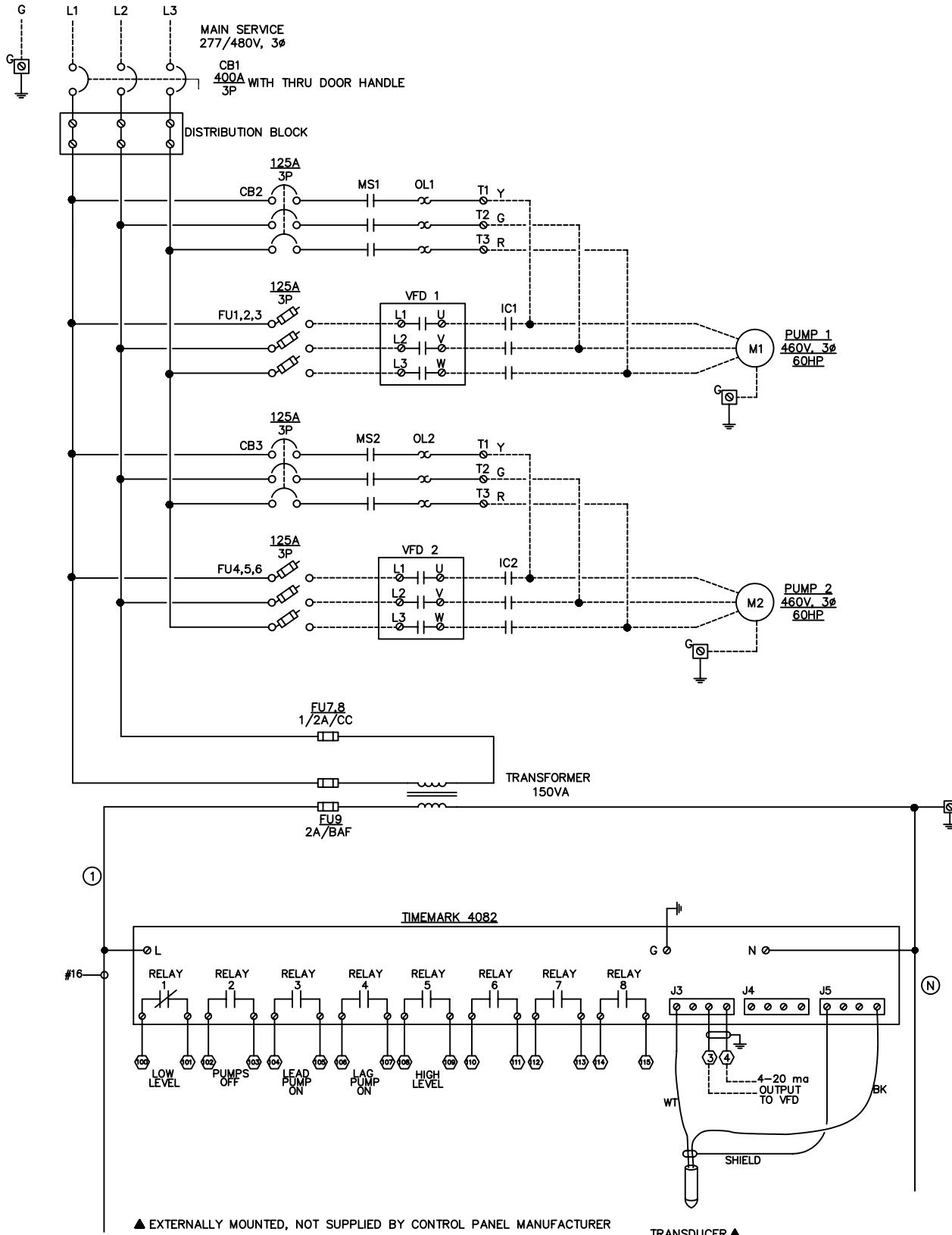
SEAL FAIL LIGHTS		(Submersible Only)
SEAL FAIL RELAYS		(Submersible Only)
SEAL FAIL PUMP SHUTDOWN		(Submersible Only)
HT PUMP SHUTDOWN	X	(Self-Primer, Submersible)
ALARM HORN		
ALARM LIGHT	X	
LIGHT PANEL MTD		
LIGHT REMOTE MTD	X	
LIGHT FLASHER	X	
LIGHTNING ARRESTOR		
ELAPSED TIME METER	X	
PHASE MONITOR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

SOLD TO: Delta Process - Ruston, LA

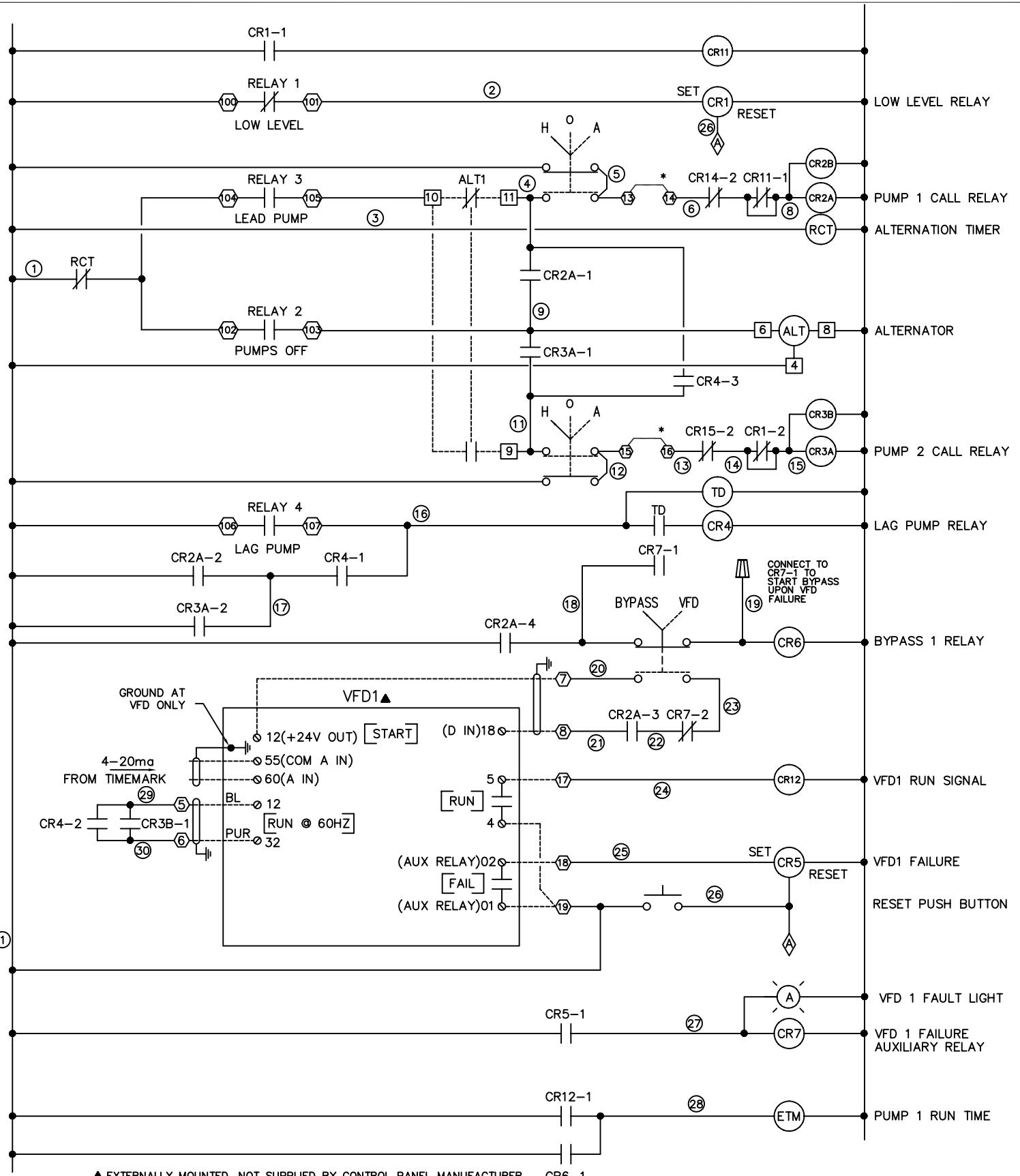
TAG : Marksville

SHIP TO: Delta Process - Ruston, LA

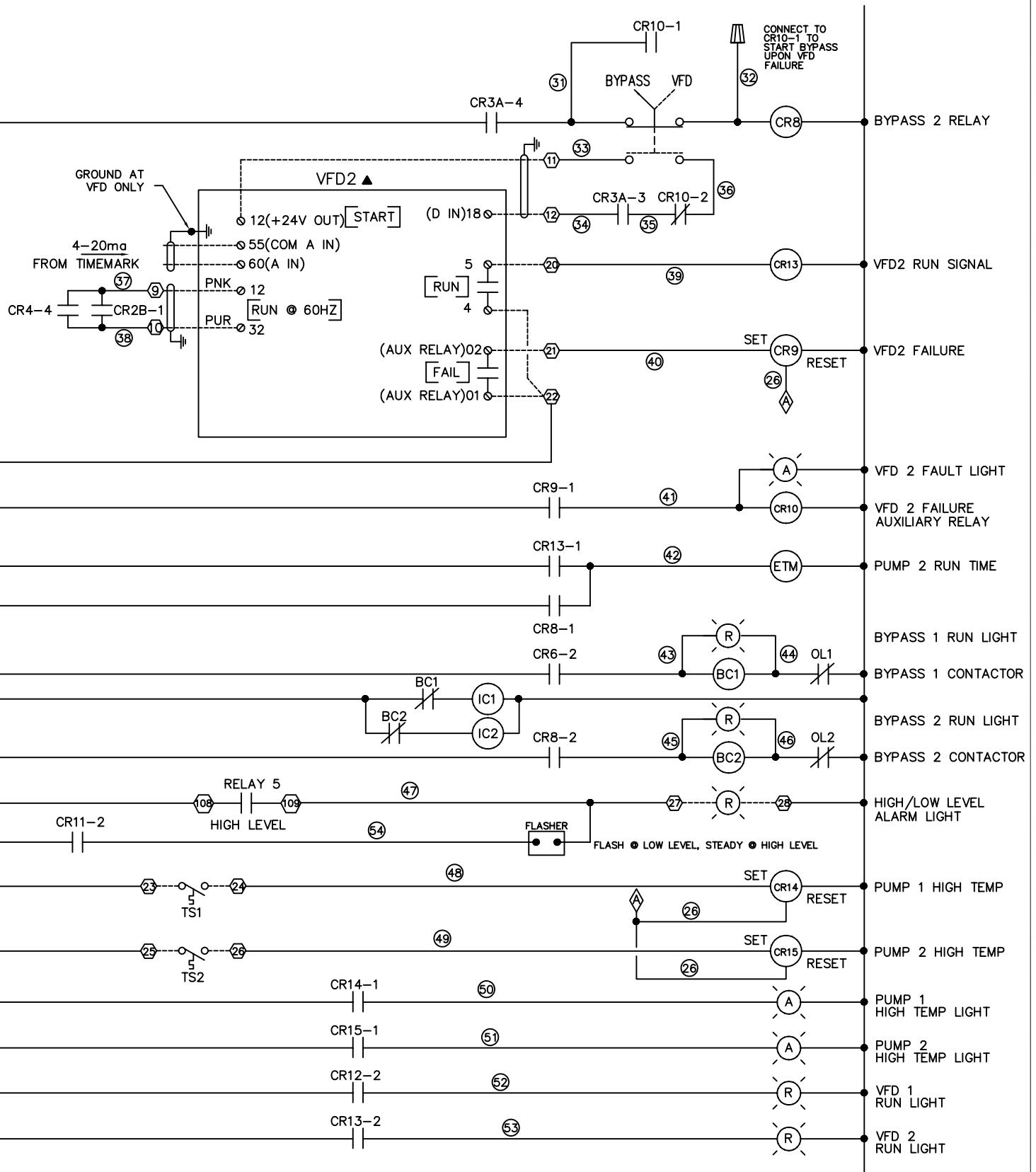
Drawing Title	PANEL DESCRIPTION	FIELD REVISIONS		7/12/06		
		2	MISC			
DATE 7/13/06	REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY
	S/N	Sales Engineer	Application Engineer	DRAWN	APPROVED	
		C.C.	R.C.	BY C. RACHAL	BY	DATE
	Project Title	COX	Research and Technology, Inc.	P.O. Box 77808 Baton Rouge, LA 70809	PURCHASE ORDER NUMBER	
	DUPLEX PUMP CONTROL PANEL			Ph. (225)756-3271 Fax (225)755-1030	DRAWING NUMBER	CP-2215
					SHEET NUMBER	1



	Drawing Title				
	POWER DIAGRAM	2	FIELD REVISIONS		7/12/06
		1	MISC		5/31/06
DATE 7/13/06	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			P.O. Box 77808	PURCHASE ORDER NUMBER
	DUPLEX PUMP	COX		Baton Rouge, LA	
	CONTROL PANEL	Research and Technology, Inc.		70809	
				Ph. (225)756-3271	DRAWING NUMBER CP-2215
				Fax (225)755-1030	SHEET NUMBER 2

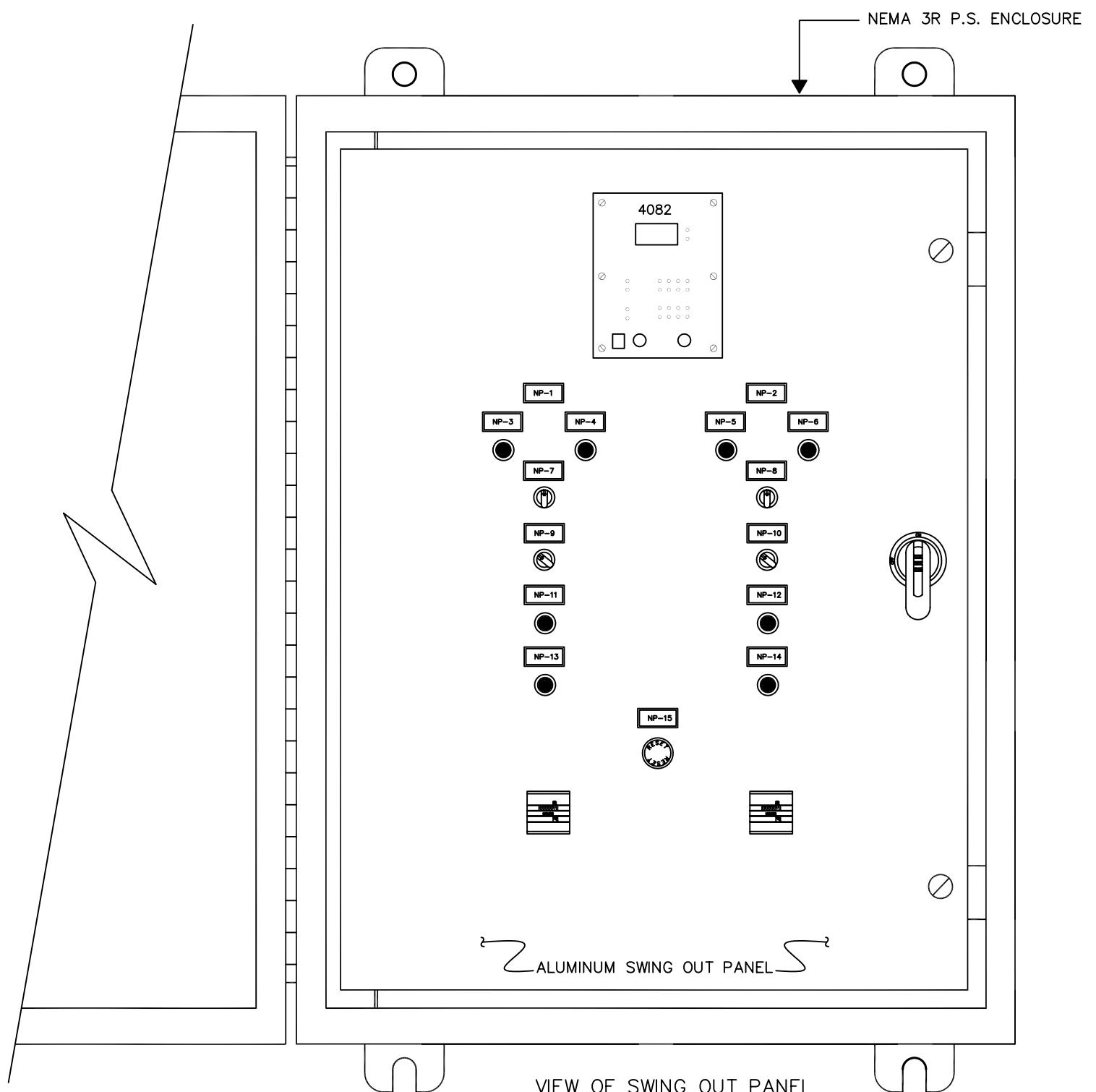


Drawing Title CONTROL DIAGRAM	2		FIELD REVISIONS		7/12/06
	1		MISC		5/31/06
DATE 7/13/06	REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	ECN DRAWN BY C. RACHAL	DATE APPROVED BY DATE
Project Title DUPLEX PUMP CONTROL PANEL	COX Research and Technology, Inc.		P.O. Box 77808 Baton Rouge, LA 70809 Ph. (225)756-3271 Fax (225)755-1030	PURCHASE ORDER NUMBER DRAWING NUMBER CP-2215 SHEET NUMBER 3	



▲ EXTERNALLY MOUNTED, NOT SUPPLIED BY CONTROL PANEL MANUFACTURER

Drawing Title CONTROL DIAGRAM			FIELD REVISIONS		7/12/06
			MISC		5/31/06
DATE 7/13/06	REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	ECN DRAWN BY C. RACHAL	DATE APPROVED BY DATE
Project Title DUPLEX PUMP CONTROL PANEL	COX Research and Technology, Inc.	P.O. Box 77808 Baton Rouge, LA 70809	PURCHASE ORDER NUMBER		
		Ph. (225)756-3271 Fax (225)755-1030	DRAWING NUMBER CP-2215		
			SHEET NUMBER 4		

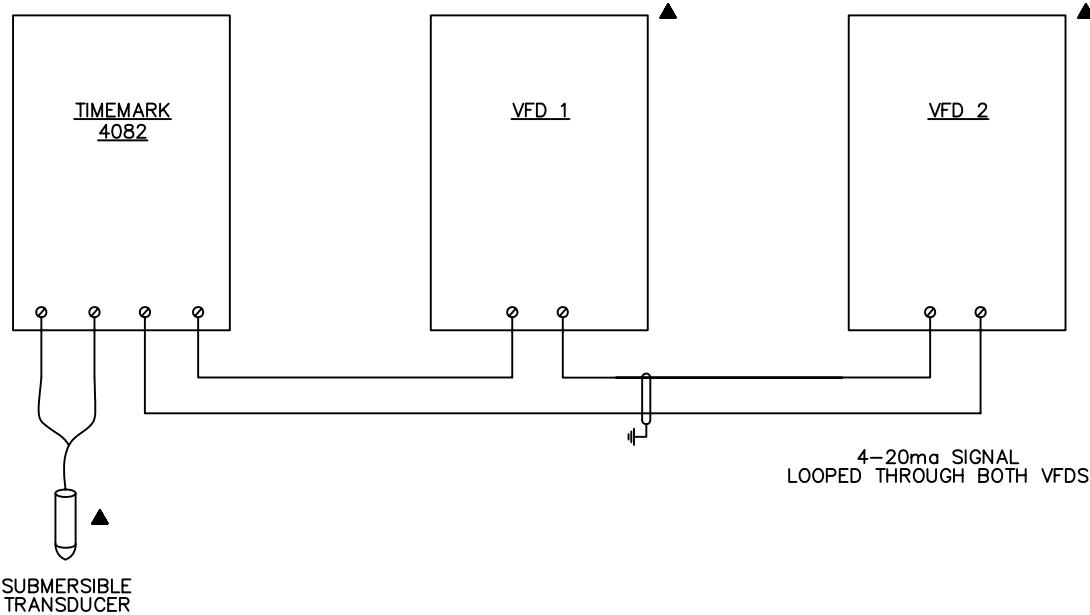


VIEW OF SWING OUT PANEL

NAMEPLATE SCHEDULE			
NP-1	PUMP 1	NP-11	VFD FAULT
NP-2	PUMP 2	NP-12	VFD FAULT
NP-3	VFD RUN	NP-13	HIGH TEMP
NP-4	BYPASS RUN	NP-14	HIGH TEMP
NP-5	VFD RUN	NP-15	ALARM RESET
NP-6	BYPASS RUN		
NP-7	HOA		
NP-8	HOA		
NP-9	VFD BYPASS		
NP-10	VFD BYPASS		

SEWER GASES WILL DESTROY COMPONENTS IN PANEL.
PROPER SEALS MUST BE INSTALLED EXTERNAL TO THE
PANEL TO PREVENT ENTRY OF GASES.

Drawing Title ENCLOSURE					
			2	FIELD REVISIONS	7/12/06
			1	MISC	5/31/06
DATE 7/13/06	REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	ECN DRAWN BY C. RACHAL	DATE APPROVED BY DATE
Project Title DUPLEX PUMP CONTROL PANEL	<hr/> COX <hr/> Research and Technology, Inc. <hr/>			P.O. Box 77808 Baton Rouge, LA 70809 Ph. (225)756-3271 Fax (225)755-1030	PURCHASE ORDER NUMBER DRAWING NUMBER CP-2215 SHEET NUMBER 5



▲ EXTERNALLY MOUNTED, NOT SUPPLIED BY CONTROL PANEL MANUFACTURER

DATE 7/13/06	Drawing Title DIAGRAM								
				2 FIELD REVISIONS				7/12/06	
				1 MISC				5/31/06	
		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 DUPLEX PUMP CONTROL PANEL	<hr/> <hr/> COX <hr/> <hr/> Research and Technology, Inc. <hr/> <hr/>				P.O. Box 77808 Baton Rouge, LA 70809	PURCHASE ORDER NUMBER		
							DRAWING NUMBER		
							CP-2215		
							SHEET NUMBER		
							6		

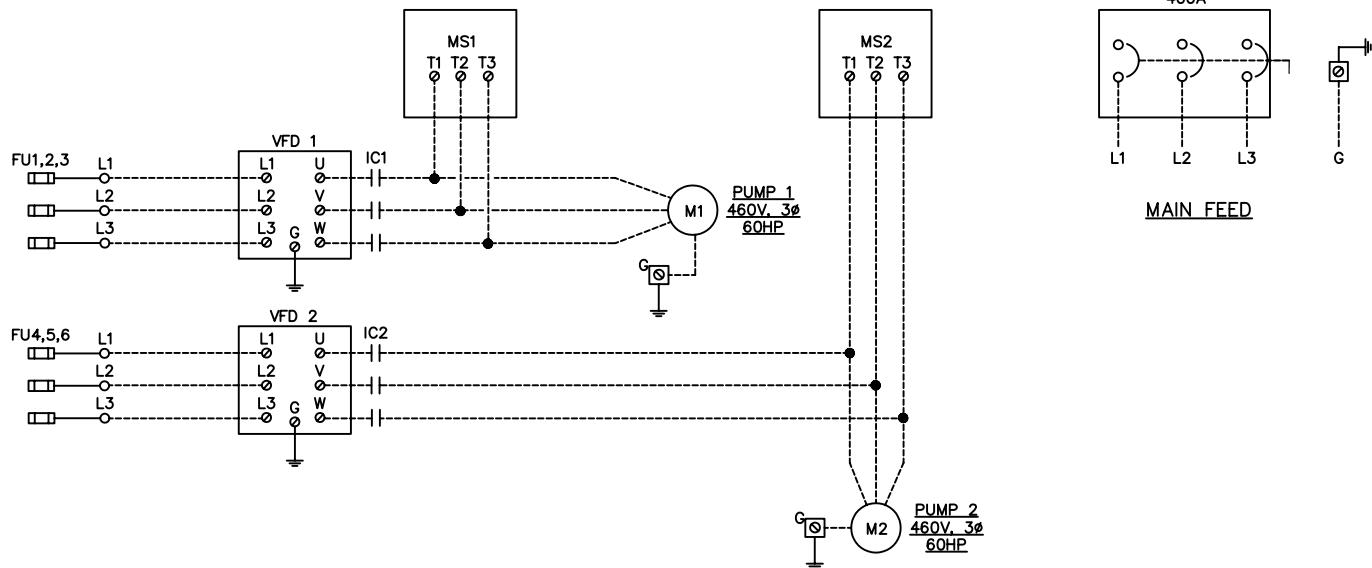
BILL OF MATERIALS

ITEM	QTY	MANUFACTURER	PART NO.	DESCRIPTION
1	1	C&I	C-483610RHPL	ENCLOSURE
1a	1	C&I	CI-4836P	BACKPLATE
1b	1	C&I	CI-4836SPA	DEAD FRONT
2	1	ABB	S5H400DW	MOLDED CASE SWITCH
3	4	ABB	A75-30-11-84	MOTOR STARTERS
4	2	ABB	TA75DU80	OVERLOAD 1,2
5	2	ABB	S3N125TW	CB2, CB3
6	1	ABB	T4150PSF-1	TRANSFORMER
7	1	TIMEMARK	261DT120	ALTERNATING RELAY
8	4	A-B	800H-QR10R	RED PILOT LIGHT
9	2	A-B	800H-JR2A	HOA SWITCH
10	1	ABB	K5VDM	MECHANICAL OPERATOR
11	1	ABB	OXP10X225	SHAFT
12	1	ABB	OHB95J10	HANDLE
13	2	A-B	800H-HR2A	2 POSITION SWITCH
14	4	ABB	K4TD	BREAKER LUGS
15	2	ABB	K5TG	BREAKER LUGS
16	4	A-B	800H-QR10A	AMBER PILOT LIGHT
17	2	REDINGTON	711-0190	ELAPSED TIME METER
18	5	MAGNECRAFT	W388AMLCPX-9	LATCHING RELAY
19	1	A-B	800H-AR2A	PUSH BUTTON
20	1	TIMEMARK	4082	LIQUID LEVEL CONTROLLER
21	1	OMRON	H3CRF8300	RCT
22	11	IDEK	RU4S-A110	CONTROL RELAYS
23	2	REDINGTON	711-0190	ELAPSED TIME METER
24	1	OMRON	H3YN2AC120	TIME DELAY RELAY
25				
26				
18				
19				
20				
21				
22				
23				
24				
25				

Drawing Title BILL OF MATERIALS DATE 7/13/06			FIELD REVISIONS				
			2	FIELD REVISIONS		7/12/06	
			1	MISC		5/31/06	
	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 QUADPLEX EFFLUENT PUMP STATION 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-2215	
						SHEET NUMBER	
						7	

COX RESEARCH DID NOT SUPPLY THE VFD'S FOR THIS PROJECT.
VERIFY CONNECTIONS WITH DANFOSS SUPPORT.

MAIN CIRCUIT
BREAKER
400A



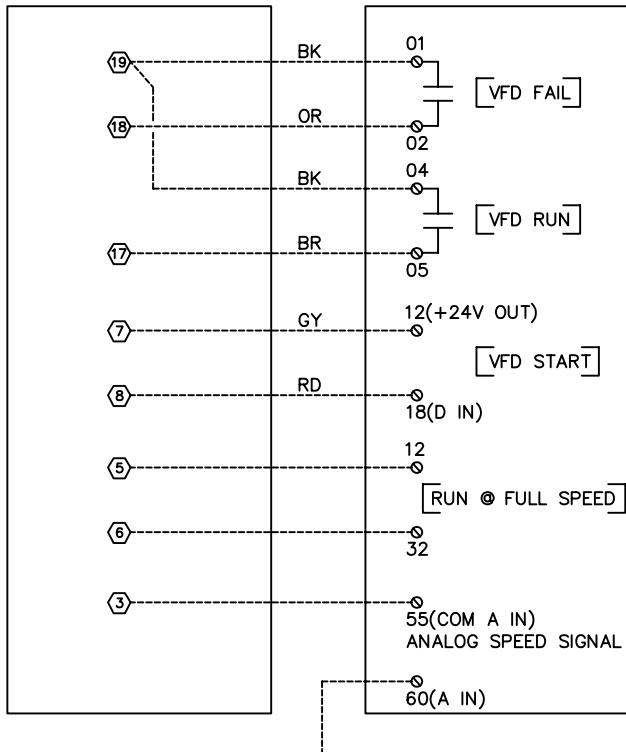
POWER WIRING

CONTROL PANEL

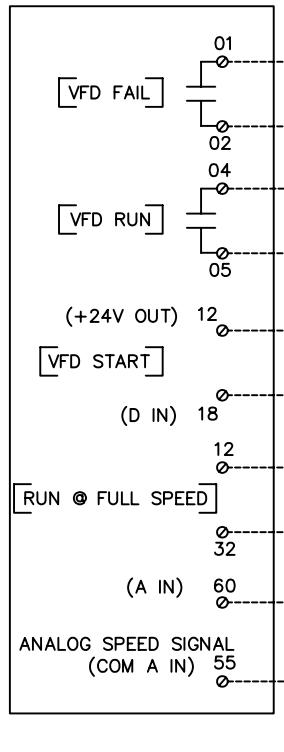
VFD 1

VFD 2

CONTROL PANEL



VFD 1
CONTROL WIRING



VFD 2
CONTROL WIRING

Drawing Title

WIRING DIAGRAMS

DATE
7/13/06

Project Title

DUPLEX PUMP CONTROL PANEL

2 FIELD REVISIONS 7/12/06

1 MISCE 5/31/06

REFERENCE DRAWING		NO.	REVISION-LOCATION		ECN	DATE	BY
S/N	Sales Engineer	Application Engineer	DRAWN	APPROVED			
	C.C.	R.C.	BY C. RACHAL	BY			

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SHEET NUMBER