
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

CP-2215

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:

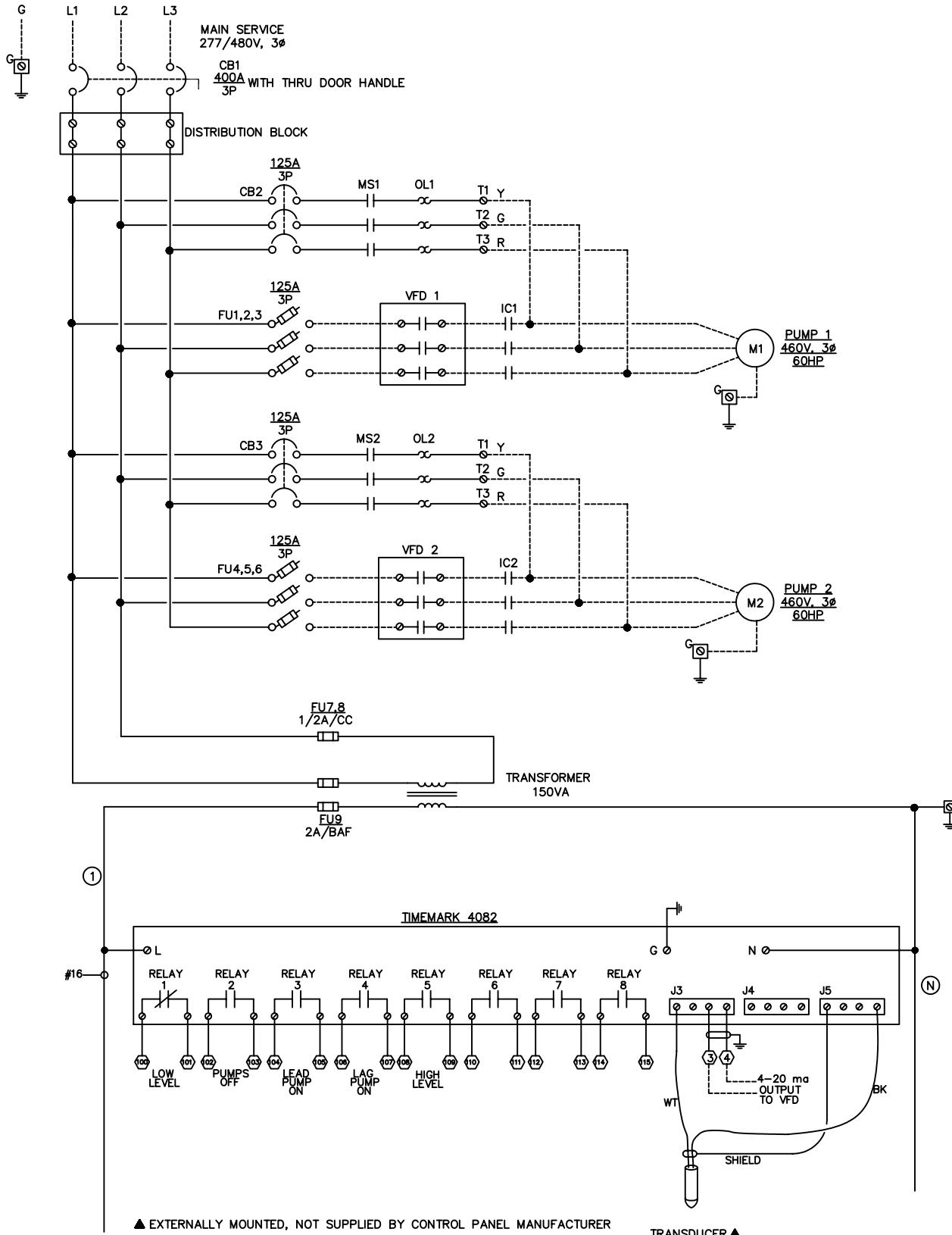
SEAL FAIL LIGHTS	_____	(Submersible Only)
SEAL FAIL RELAYS	_____	(Submersible Only)
SEAL FAIL PUMP SHUTDOWN	_____	(Submersible Only)
HT PUMP SHUTDOWN	X	(Self-Primer, Submersible)
ALARM HORN	_____	
ALARM LIGHT	X	
LIGHT PANEL MTD	_____	
LIGHT REMOTE MTD	X	
LIGHT FLASHER	X	
LIGHTNING ARRESTER	_____	
ELAPSED 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

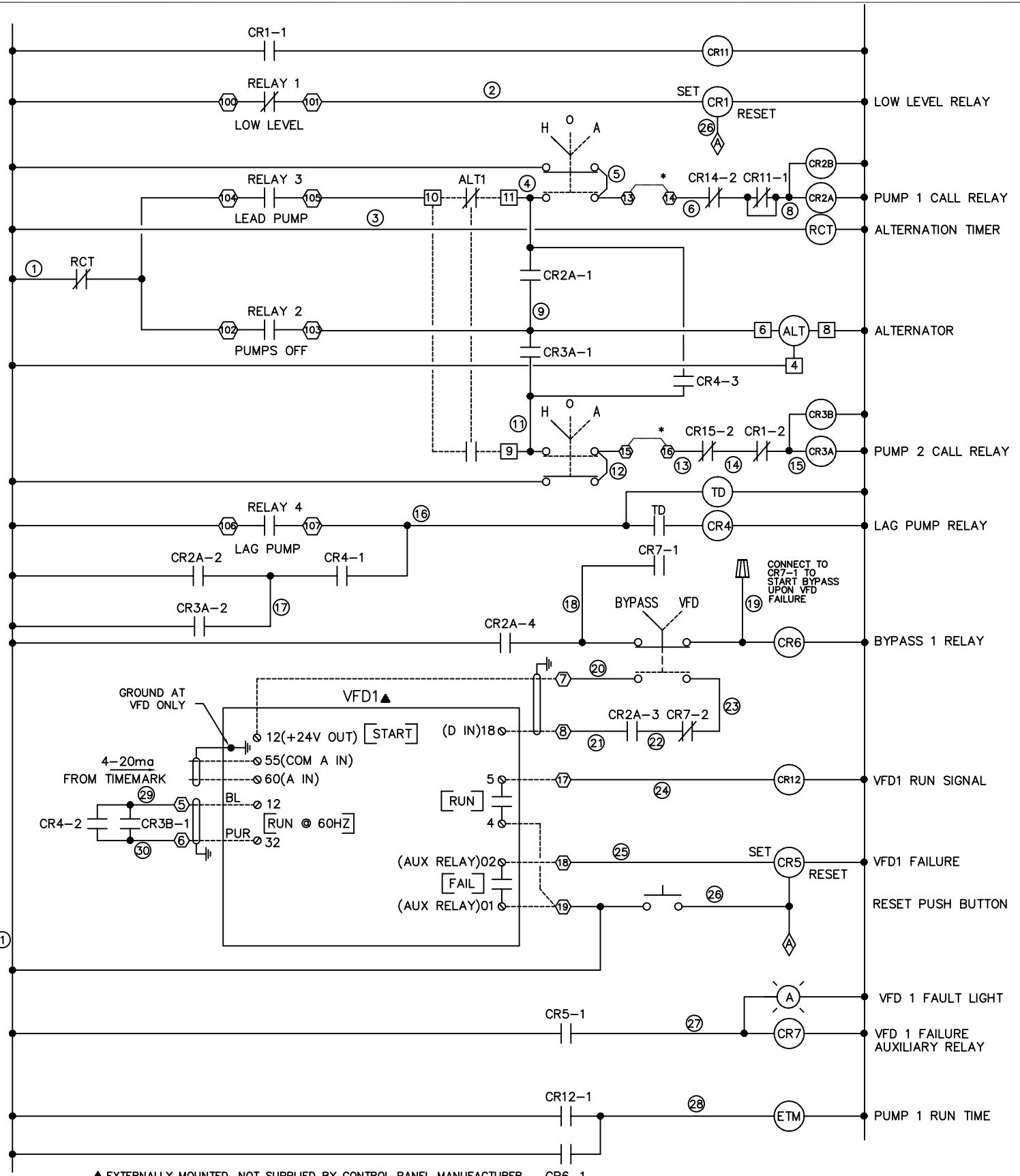
TAG : Marksville

SHIP TO: Delta Process - Ruston, LA

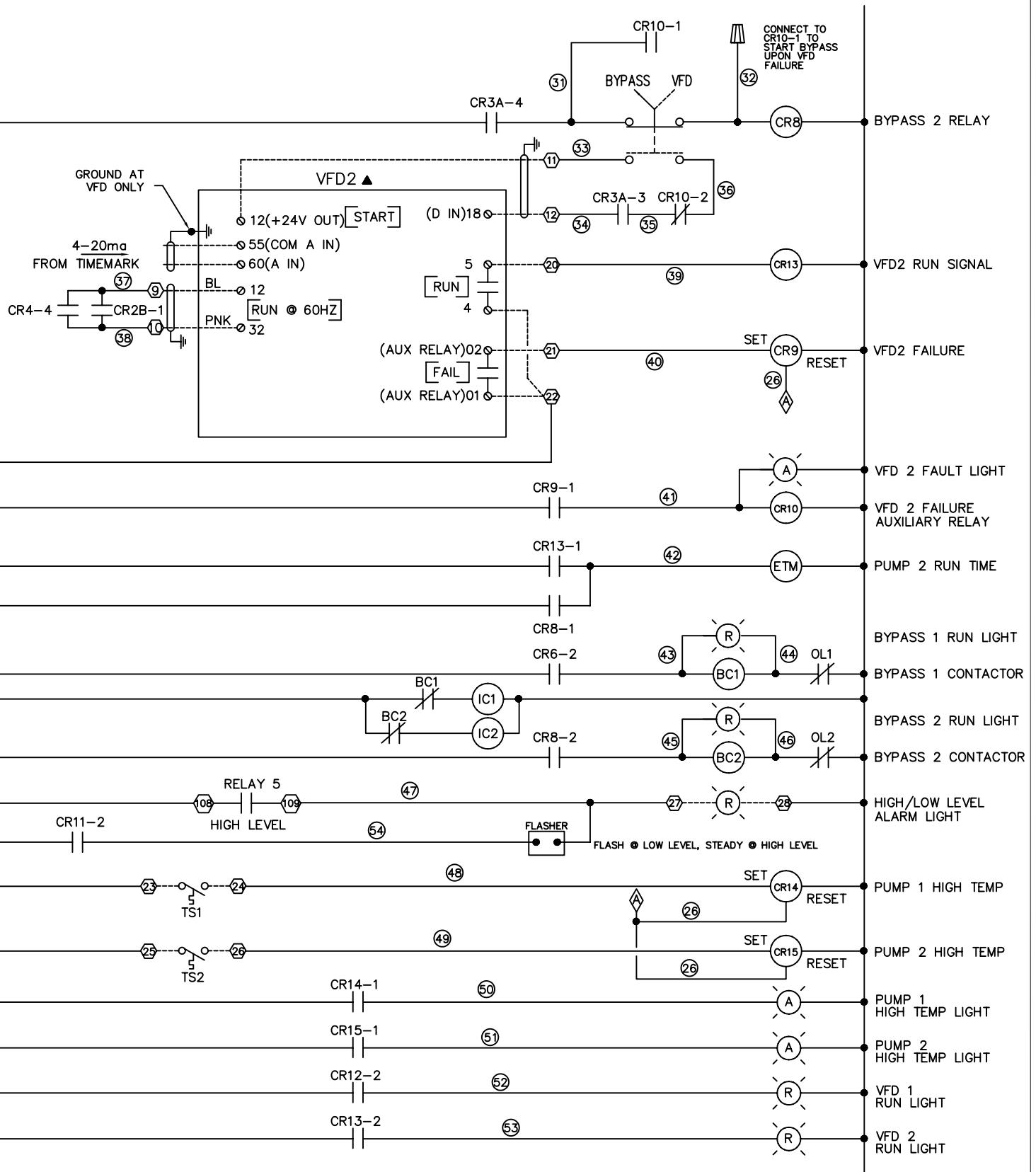
Drawing Title	PANEL DESCRIPTION	1		MISC	5/31/06	BY
		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION DRAWN R.C.	ECN APPROVED	
DATE 12/16/05	Project Title DUPLEX PUMP CONTROL PANEL	COX Research and Technology, Inc.	P.O. Box 77808 Baton Rouge, LA 70809 Ph. (225)756-3271 Fax (225)755-1030	PURCHASE ORDER NUMBER DRAWING NUMBER CP-2215 SHEET NUMBER 1		



	Drawing Title				
	POWER DIAGRAM				
DATE 5/31/06		1	MISC		5/31/06
	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 2	

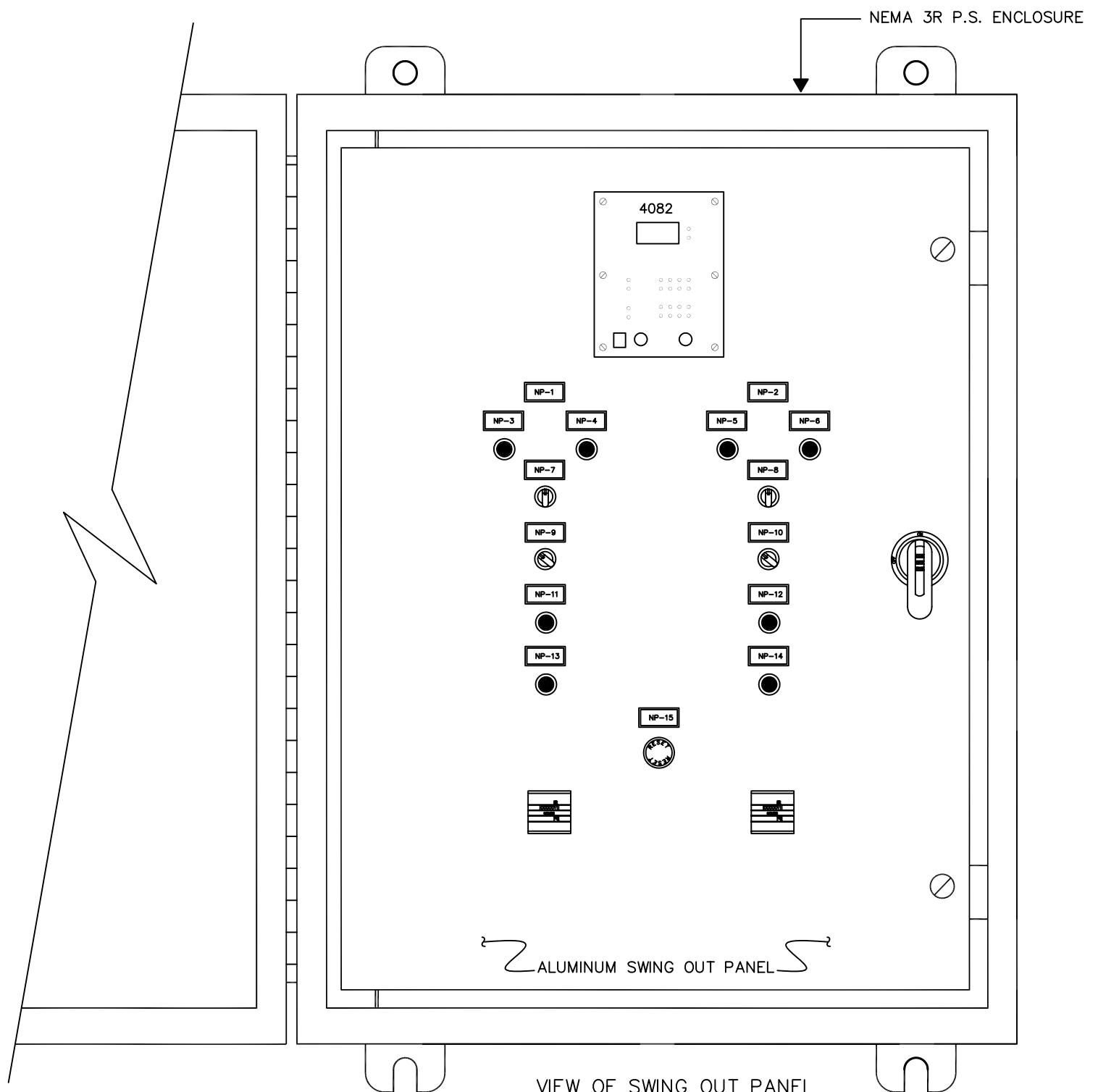


	Drawing Title						
	CONTROL DIAGRAM				1	MISC	5/31/06
DATE 12/16/05	REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	DRAWN BY C. RACHAL	ECN	DATE APPROVED BY	BY DATE
Project Title DUPLEX PUMP CONTROL PANEL	COX Research and Technology, Inc.				P.O. Box 77808 Baton 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

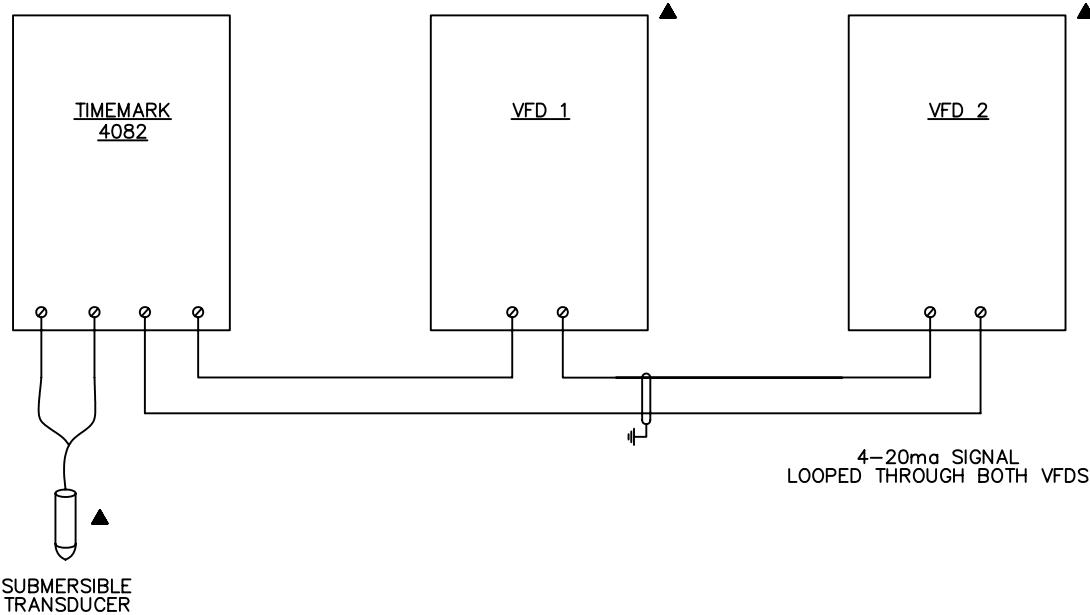
	Drawing Title CONTROL DIAGRAM								
				1	MISC	5/31/06			
DATE 12/16/05	Project Title DUPLEX PUMP CONTROL PANEL	REFERENCE DRAWING		NO.	REVISION-LOCATION	ECN	DATE	BY	
		S/N	Sales Engineer C.C.	Application Engineer R.C.	DRAWN BY C. RACHAL	APPROVED BY	DATE	BY	
			COX Research and Technology, Inc.			P.O. Box 77808 Baton Rouge, LA 70809			
			Ph. (225)756-3271 Fax (225)755-1030			PURCHASE ORDER NUMBER DRAWING NUMBER CP-2215 SHEET NUMBER 4			



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		1	MISC		5/31/06	
DATE 12/16/05	REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	ECN DRAWN BY C. RACHAL	DATE APPROVED BY	BY	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 5	



▲ EXTERNALLY MOUNTED, NOT SUPPLIED BY CONTROL PANEL MANUFACTURER

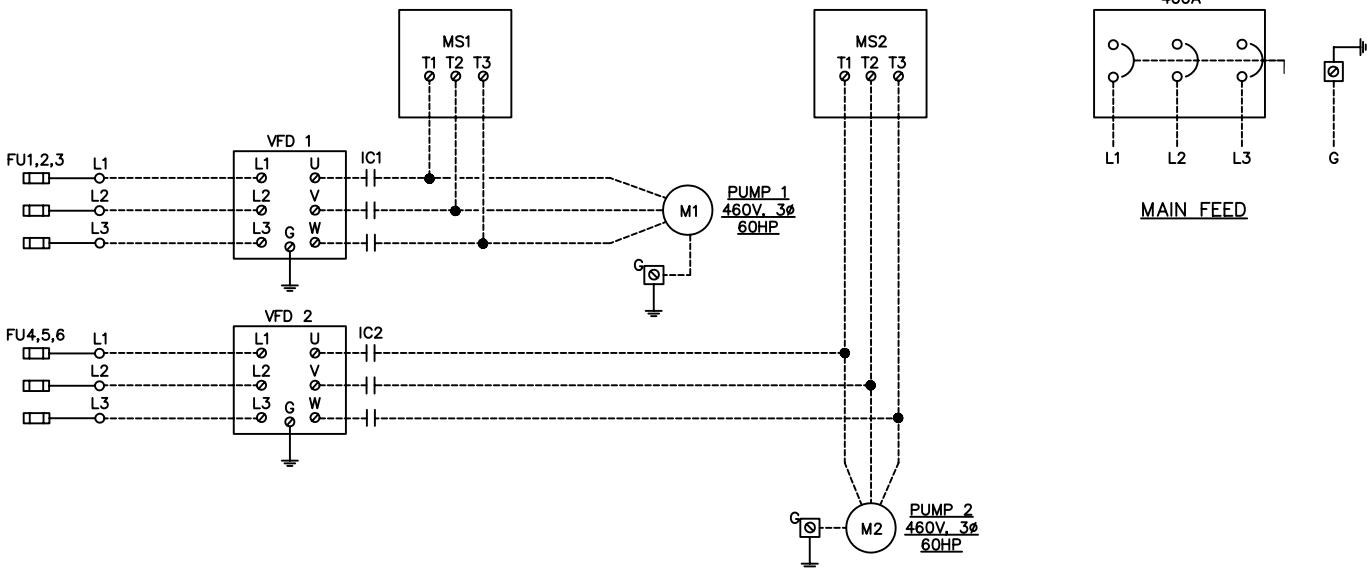
	Drawing Title					
	DIAGRAM					
DATE 12/16/05		1	MISC		5/31/06	
	REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY
	S/N	Sales Engineer	Application Engineer	DRAWN	APPROVED	
		C.C.	R.C.	BY C. RACHAL	BY	DATE
	Project Title	<hr/> <hr/> COX <hr/> <hr/> Research and Technology, Inc. <hr/> <hr/>		P.O. Box 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 6	

BILL OF MATERIALS

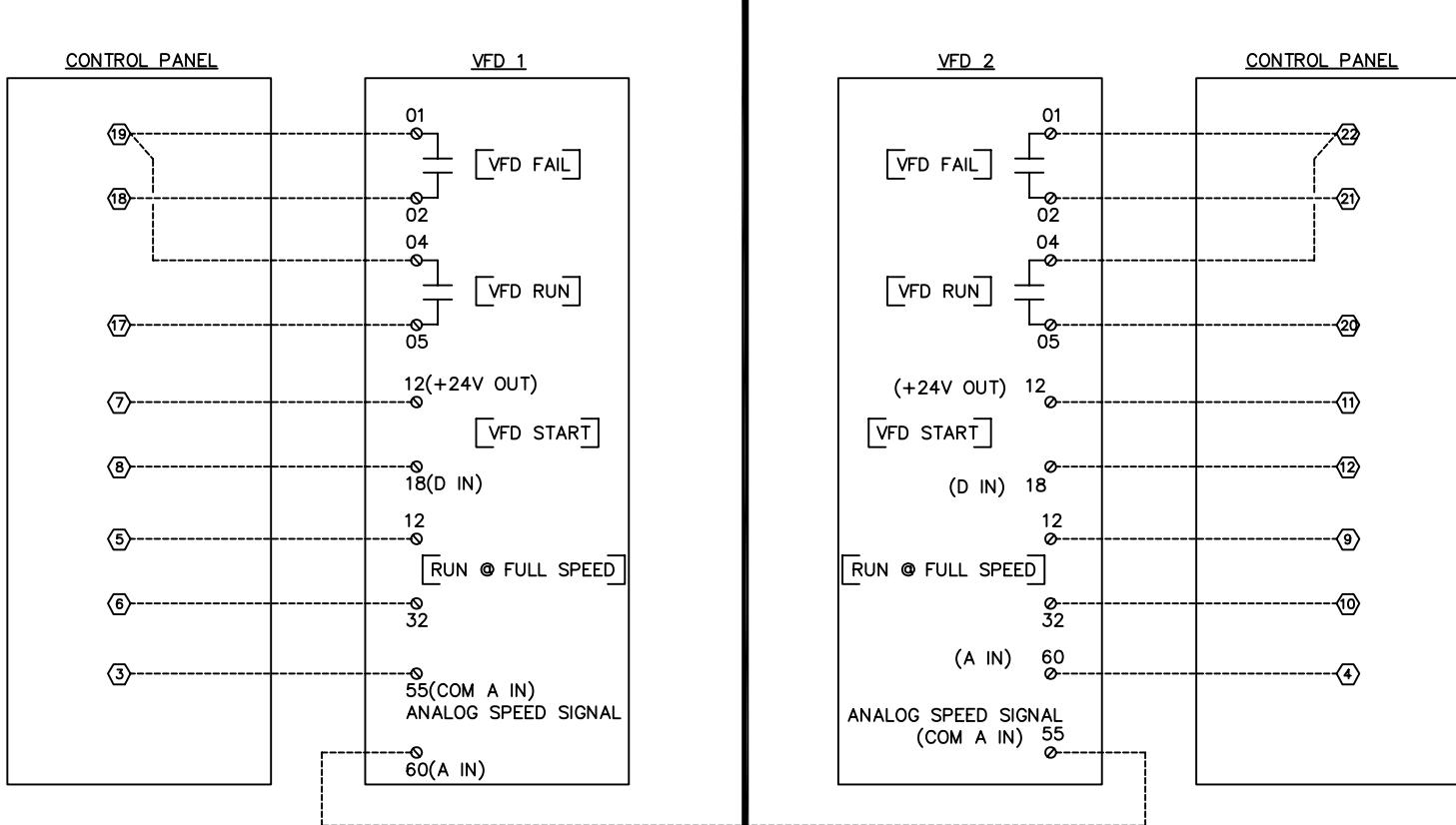
ITEM	QTY	MANUFACTURER	PART NO.	DESCRIPTION
1	1	C&I	C-483610RHPL	ENCLOSURE
1a	1	C&I	CI-4836P	BACKPLATE
1b	1	C&I	CI-4836SPA	DEAD FRONT
2	1	ABB	S5H400DW	MOLDED CASE SWITCH
3	4	ABB	A75-30-11-84	MOTOR STARTERS
4	2	ABB	TA75DU80	OVERLOAD 1,2
5	2	ABB	S3N125TW	CB2, CB3
6	1	ABB	T4150PSF-1	TRANSFORMER
7	1	TIMEMARK	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	IDECA	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									
			1 MISC				5/31/06		
DATE 12/16/05	REFERENCE DRAWING		NO.	REVISION-LOCATION		ECN	DATE BY		
	S/N	Sales Engineer C.C.	Application Engineer R.C.	DRAWN BY C. RACHAL			APPROVED 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.



POWER WIRING



VFD 1
CONTROL WIRING

VFD 2
CONTROL WIRING

Drawing Title								
	1		MISC			5/31/06		
WIRING DIAGRAMS	REFERENCE DRAWING		NO.	REVISION-LOCATION		ECN	DATE	BY
	S/N	Sales Engineer C.C.	Application Engineer R.C.	DRAWN BY C. RACHAL	APPROVED BY			
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			
			Ph. (225)756-3271 Fax (225)755-1030		8			