
COX

Research and Technology, Inc.

DUPLEX PUMP
CONTROL PANEL
MT. VERNON, TX

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	20	
FLA	27.6	
TYPE OF PUMP	Submersible	(Self-Priming, Submersible)
MANUFACTURER	EBARRA	
CATALOG NUMBER		
CONTROL VOLTAGE	120V	(120V, Other)
ENCLOSURE	NEMA 4X	(NEMA 1, NEMA 3R, NEMA 4, NEMA 4X)
ENCLOSURE MATERIAL	Stainless Steel	(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		

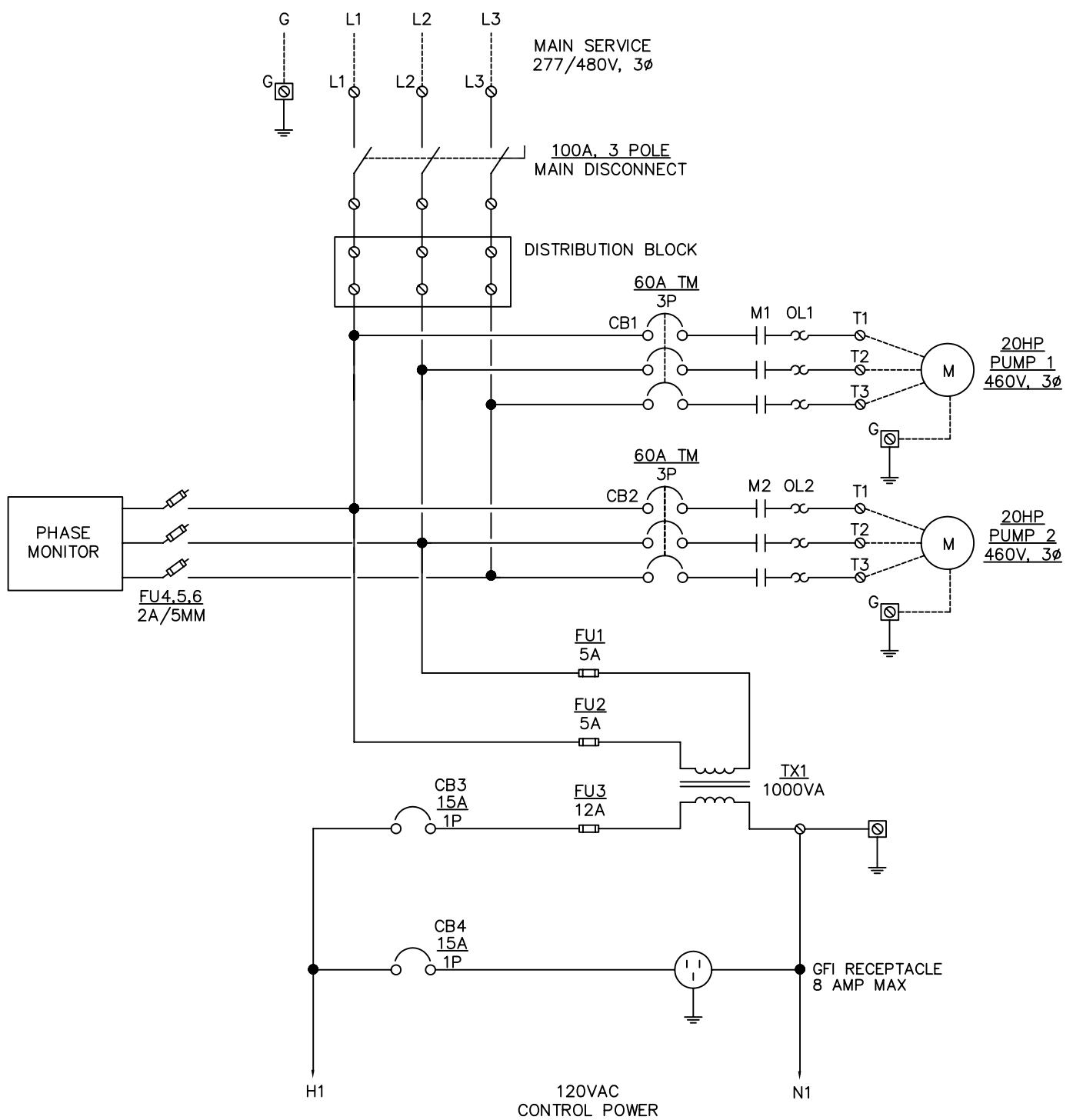
OPTIONS:

SEAL FAIL LIGHTS	X	(Submersible Only)
SEAL FAIL RELAYS	X WARRICK	(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	X	
LIGHTNING ARRESTOR		
ELAPSED TIME METER	X	
PHASE MONITOR	X	
NEMA RATED STARTERS	X ABB	
GROUND FAULT RECPT.	X	
GREEN RUN LIGHTS VS. RED		
POLE, BOX, SEAL		
INTRINSICALLY SAFE RELAYS	X	
HIGH TEMP. LOCKOUT, MANUAL RESET		
ECONOMY VERSION		

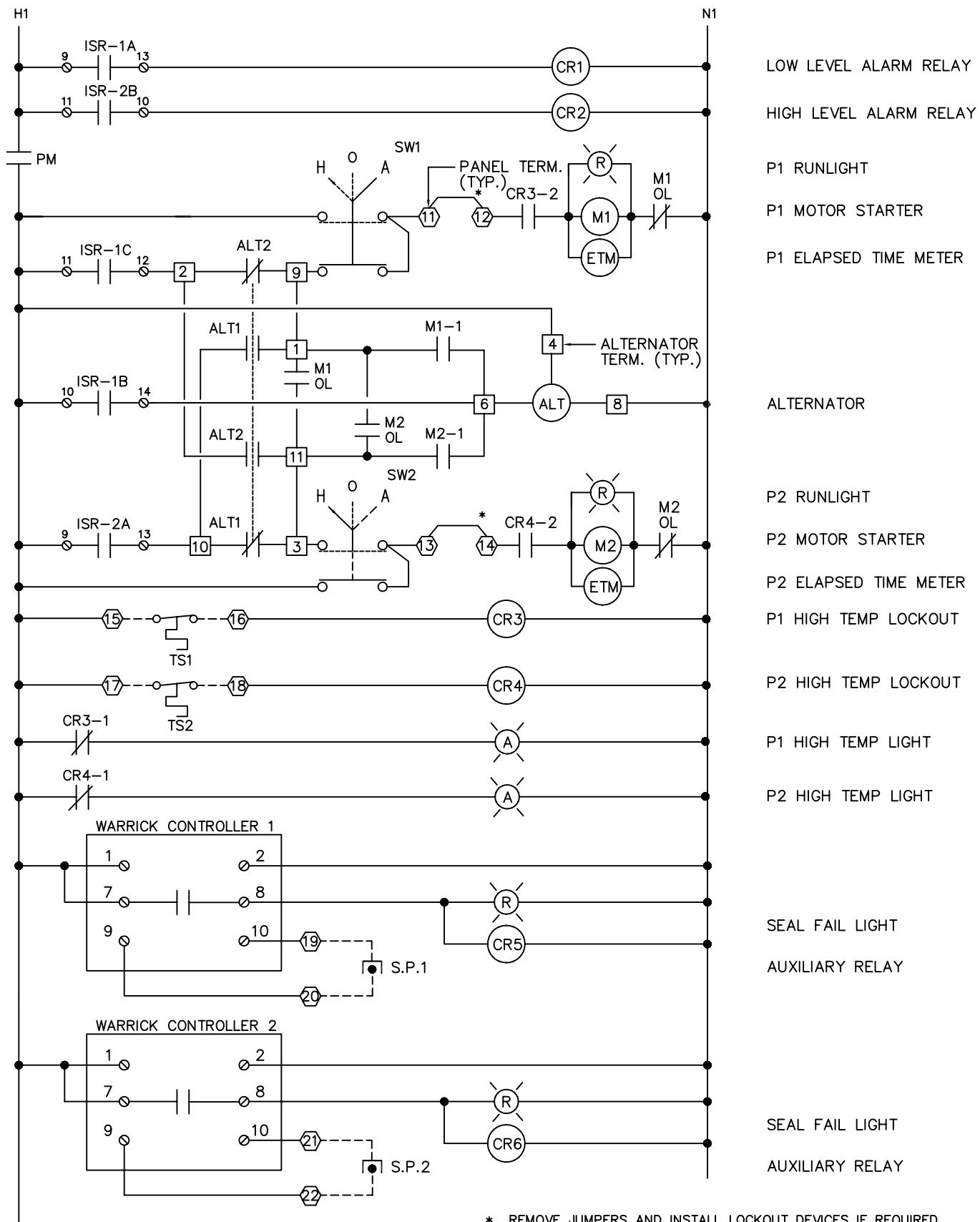
SOLD TO: CF ENGINEERED EQUIPMENT - DALLAS, TX
TAG : MT. VERNON, TX

SHIP TO: CF ENGINEERED EQUIPMENT - DALLAS, TX

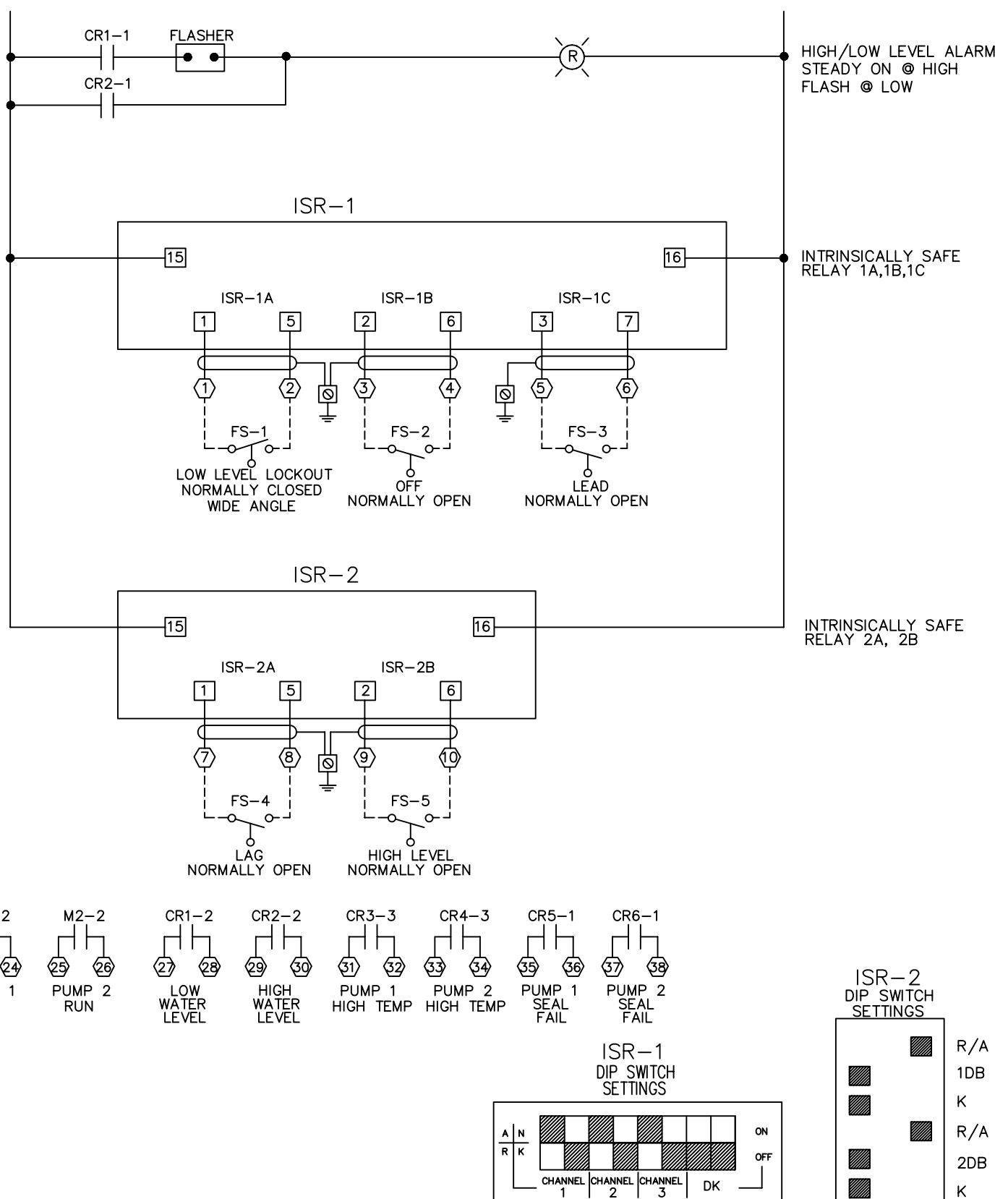
Drawing Title	PANEL DESCRIPTION	REFERENCE DRAWING		NO.	REVISION-LOCATION		ECN	DATE	BY
		S/N	Sales Engineer	Application Engineer	DRAWN	BY	APPROVED	BY	DATE
DATE 9/07/05	Project Title DUPLEX PUMP CONTROL PANEL				C. RACHAL	COX	P.O. Box 77808 Baton Rouge, LA 70809	PURCHASE ORDER NUMBER DRAWING NUMBER CP-2145	
						Research and Technology, Inc.	Ph. (225)756-3271 Fax (225)755-1030	SHEET NUMBER 1	



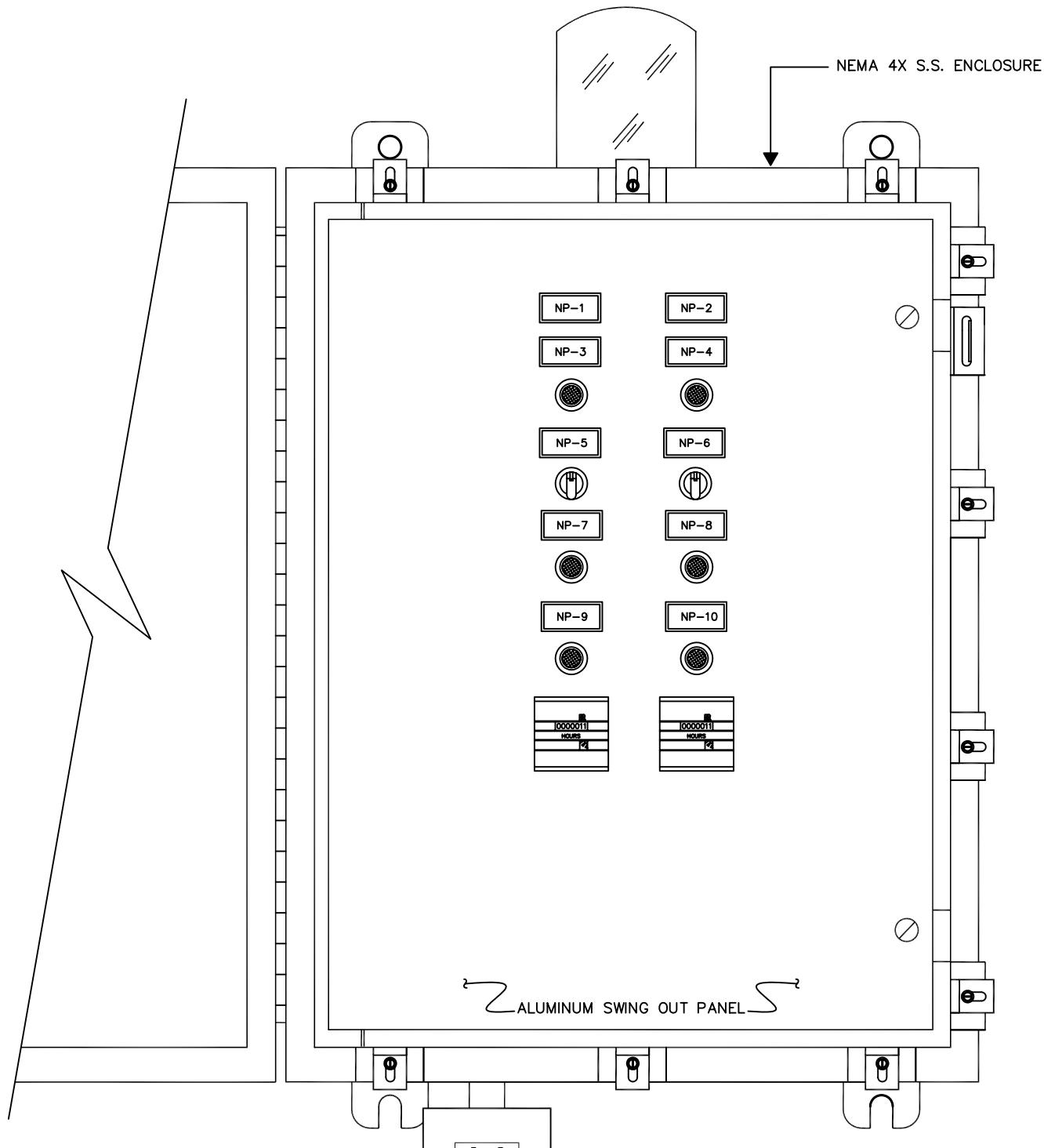
	Drawing Title POWER DIAGRAM				
		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	ECN DRAWN BY C. RACHAL DATE APPROVED BY DATE
DATE 9/07/05					
	Project Title DUPLEX PUMP CONTROL PANEL		COX Research and Technology, Inc.	P.O. Box 77808 Baton Rouge, LA 70809 Ph. (225)756-3271 Fax (225)755-1030	PURCHASE ORDER NUMBER DRAWING NUMBER CP-2145 SHEET NUMBER 2



Drawing Title CONTROL DIAGRAM								
	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 9/07/05								
Project Title DUPLEX PUMP CONTROL PANEL	COX			P.O. Box 77808 Baton Rouge, LA 70809		PURCHASE ORDER NUMBER		
	Research and Technology, Inc.			DRAWING NUMBER CP-2145		SHEET NUMBER		
								3



Drawing Title	CONTROL DIAGRAM								
		REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY		
DATE 9/07/05		S/N	Sales Engineer C.C.	Application Engineer R.C.	DRAWN BY C. RACHAL	APPROVED 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-2145				
					SHEET NUMBER 4				



VIEW OF SWING OUT PANEL

NAMEPLATE SCHEDULE

NP-1	PUMP 1
NP-2	PUMP 2
NP-3	RUN
NP-4	RUN
NP-5	HOA
NP-6	HOA
NP-7	SEAL FAIL
NP-8	SEAL FAIL
NP-9	HIGH TEMP
NP-10	HIGH TEMP

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

Drawing Title ENCLOSURE				
	REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	ECN DRAWN BY C. RACHAL
DATE 9/07/05				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	PURCHASE ORDER NUMBER
			Ph. (225)756-3271 Fax (225)755-1030	DRAWING NUMBER CP-2145
				SHEET NUMBER 5

BILL OF MATERIALS

ITEM	QTY	MANUFACTURER	PART NO.	DESCRIPTION
1	1	EBE	S302410N4X	ENCLOSURE S.S. 4X
1a	1	EBE	A3024P	BACKPLATE
1b	1	EBE	A3024SP	DEAD FRONT
2	1	ABB	OT100E3	MAIN DISC. SWITCH
3	1	MARATHON	1323580	DISTRIBUTION BLOCK
4	2	ABB	SIN060TL	CB1,2
5	2	ABB	A50N2-30-11-84	MS1,2
6	2	ABB	TA75DU32	OL1,2 (24-32A)
7	1	SQUARE D	9070TF1000D1	TRANSFORMER
8	2	ACI	JR22P3M20B	HOA SWITCH
9	2	ACI	JR22FY	AMBER PILOT LIGHT
10	4	ACI	JR22FR	RED PILOT LIGHT
11	1	TIMEMARK	261DT120	ALTERNATOR
12	1	AC/DC	BL5-R-120	ALARM LIGHT
13	2	REDDINGTON	711-0190	ELAPSED TIME METER
14	1	STOCK		GFI RECEPTACLE
15	2	SQUARE D	QOU115	CB3,4
16	1	SSAC	PLMU11	PHASE MONITOR
17	2	WARRICK	2800	SEAL FAIL RELAYS
18	6	IDEC	RU4SA110	CR1-6
19	1	SSAC	FS126RC	FLASHER
20	1	TURCK	MK13-33EX0-R/115VAC	ISR1
21	1	TURCK	MK13-22EX0-R/115VAC	ISR2
22	2	ABB	CAL5-11	AUXILIARY CONTACTS
23				
24				
25				
26				
27				
28				
29				
30				

* SUPPLIED BY CFEE

*

Drawing Title BILL OF MATERIALS							
	REFERENCE DRAWING S/N		NO. Sales Engineer C.C.	REVISION-LOCATION DRAWN BY C. RACHAL		ECN APPROVED BY	DATE BY DATE
DATE 9/07/05							
Project Title DUPLEX PUMP CONTROL PANEL	COX <small>Research and Technology, Inc.</small>			P.O. Box 77808 Baton Rouge, LA 70809 Ph. (225)756-3271 Fax (225)755-1030		PURCHASE ORDER NUMBER	
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						SHEET NUMBER	