

---

---

# COX

Research and Technology, Inc.

---

---

DUPLEX PUMP  
CONTROL PANEL  
ARROWWOOD

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

CP-2341-A

VOLTAGE	120/240	(480V, 277/480V, 240V, 120/240V, 208V, 120/208V)
PHASE/HZ	3/60	
NO. MOTORS	2	
HP	25	
FLA	68	
TYPE OF PUMP	Self Priming	(Self-Priming, Submersible)
MANUFACTURER	Gorman Rupp	
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	Flowmeter	(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	X	
ELAPSED TIME METER	X	
PHASE MONITOR	X	
NEMA RATED STARTERS	X	
GROUND FAULT RECPT.	X	
GREEN RUN LIGHTS VS. RED		
POLE, BOX, SEAL		
INTRINSICALLY SAFE RELAYS		
HIGH TEMP. LOCKOUT, MANUAL RESET	X	
ECONOMY VERSION		

SOLD TO: Delta Process - New Orleans, LA


TAG : ARROWWOOD

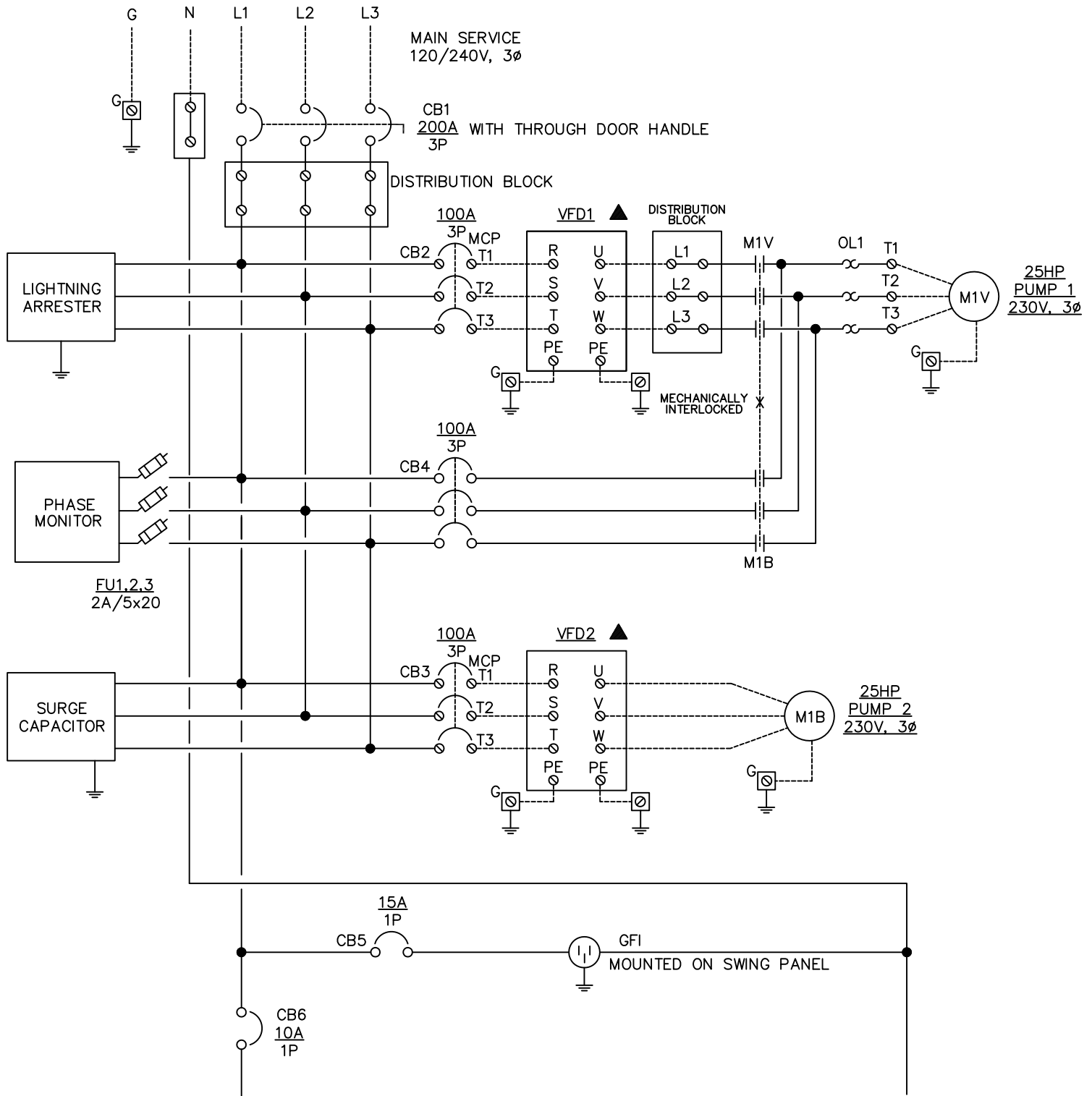
\_\_\_\_\_

SHIP TO: Delta Process - Ruston, LA

\_\_\_\_\_

\_\_\_\_\_

	Drawing Title		R1	ADD SIMPLEX/DUPLEX SWITCH		05/08/07	HNB
	PANEL DESCRIPTION						
DATE		REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY
05/19/06		S/N	Sales Engineer C.C.	Application Engineer R.C.	DRAWN BY COREYC	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)755-1030		PURCHASE ORDER NUMBER
	DUPLEX PUMP CONTROL PANEL				DRAWING NUMBER		
					CP-2341		
					SHEET NUMBER		1



▲ LOCATED EXTERNALLY

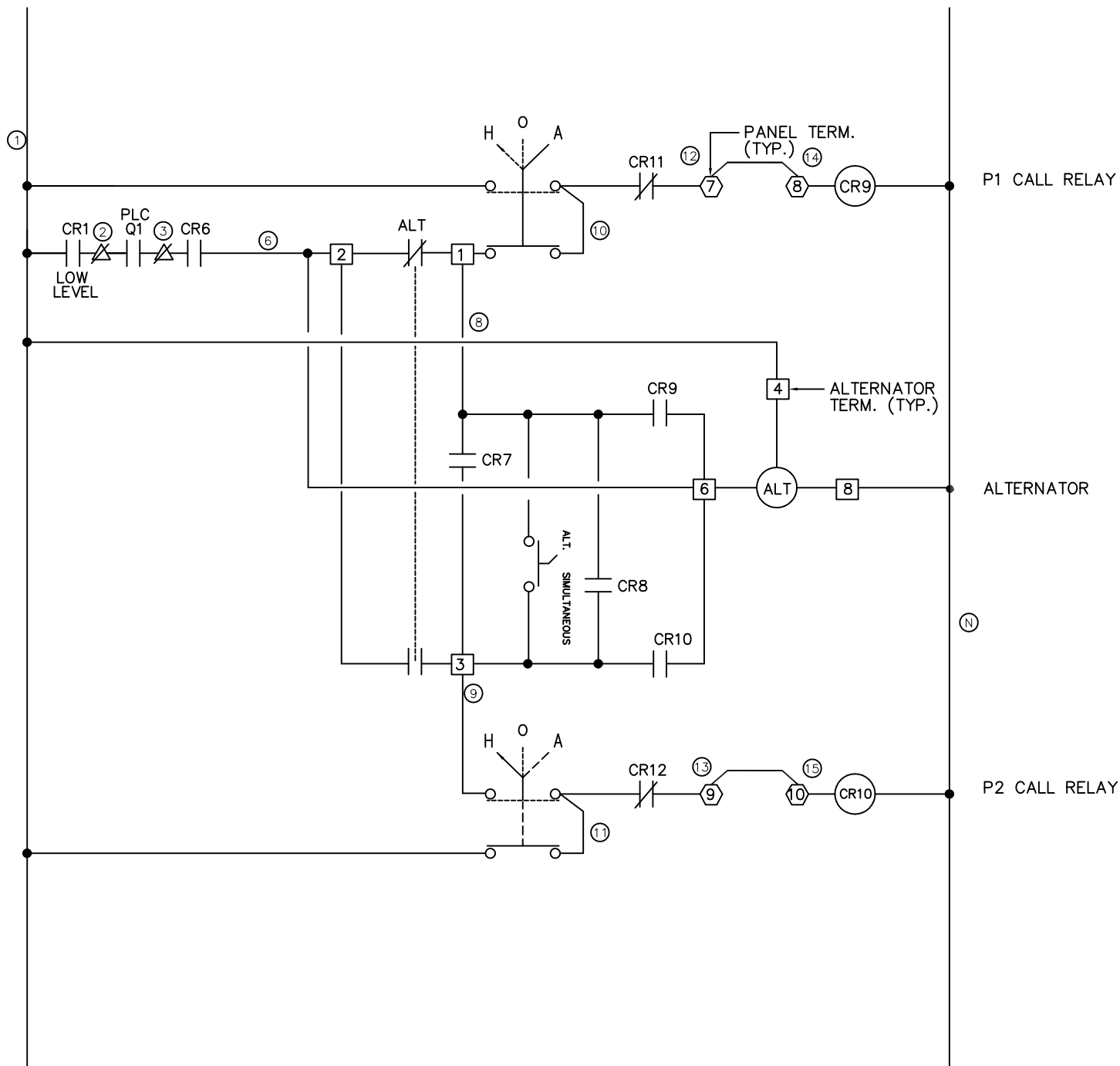
	Drawing Title		R1	ADD SIMPLEX/DUPLEX SWITCH		05/08/07	HNB
	POWER DIAGRAM						
DATE	05/19/06	REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY
		S/N	Sales Engineer C.C.	Application Engineer R.C.	BY COREYC	APPROVED	
	Project Title					PURCHASE ORDER NUMBER	
	DUPLEX PUMP CONTROL PANEL					DRAWING NUMBER CP-2341	
						SHEET NUMBER	2

**COX**

Research and Technology, Inc.

P.O. Box 77808  
Baton Rouge, LA  
70809

Ph. (225)756-3271  
Fax (225)755-1030



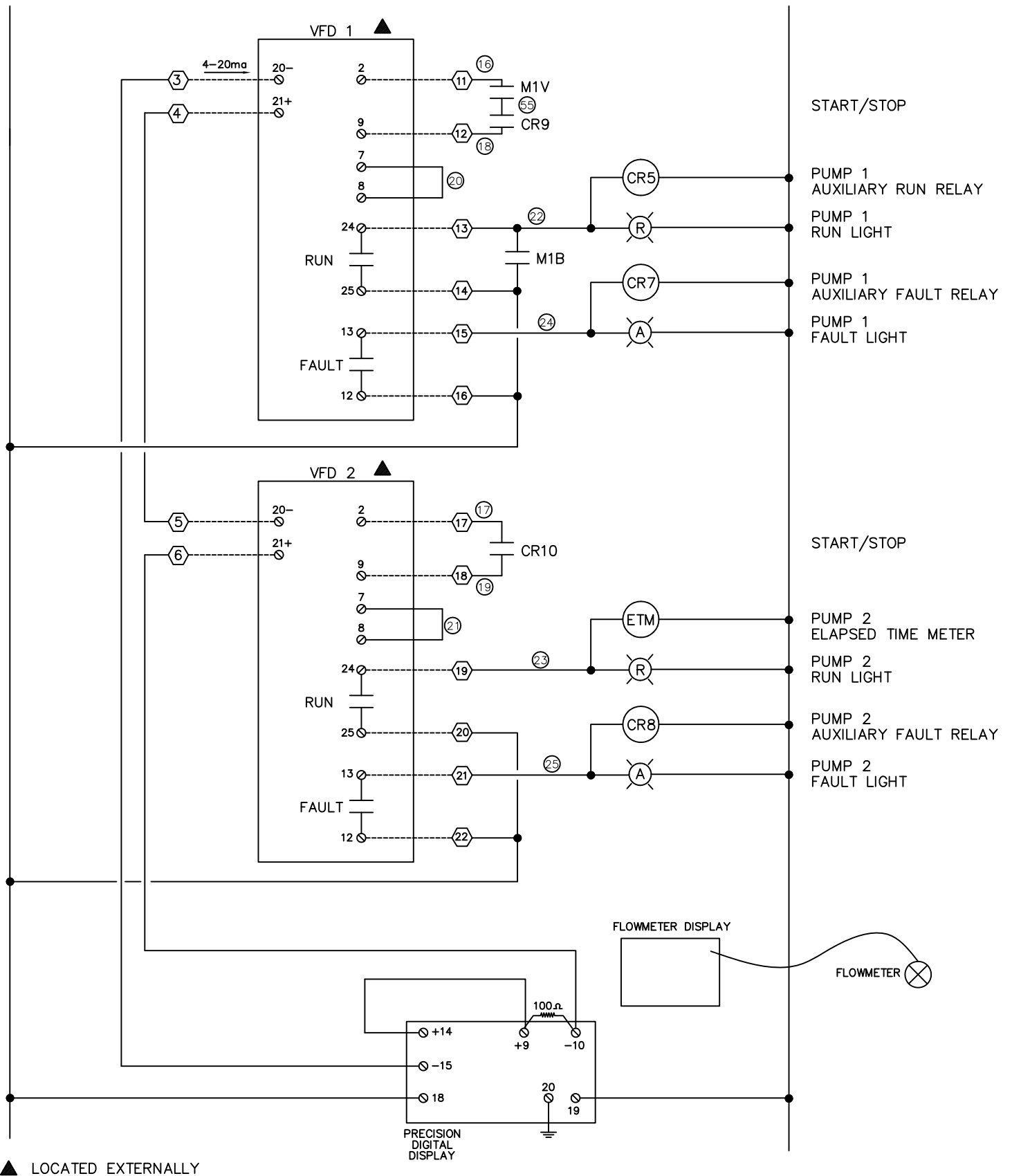
	Drawing Title		R1	ADD SIMPLEX/DUPLEX SWITCH		05/08/07	HNB
	CONTROL DIAGRAM						
DATE		REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY
05/19/06		S/N	Sales Engineer C.C.	Application Engineer R.C.	BY COREYC	APPROVED	
	Project Title					BY	DATE
	DUPLEX PUMP CONTROL PANEL					PURCHASE ORDER NUMBER	
						DRAWING NUMBER	CP-2341
						SHEET NUMBER	3

**COX**

Research and Technology, Inc.

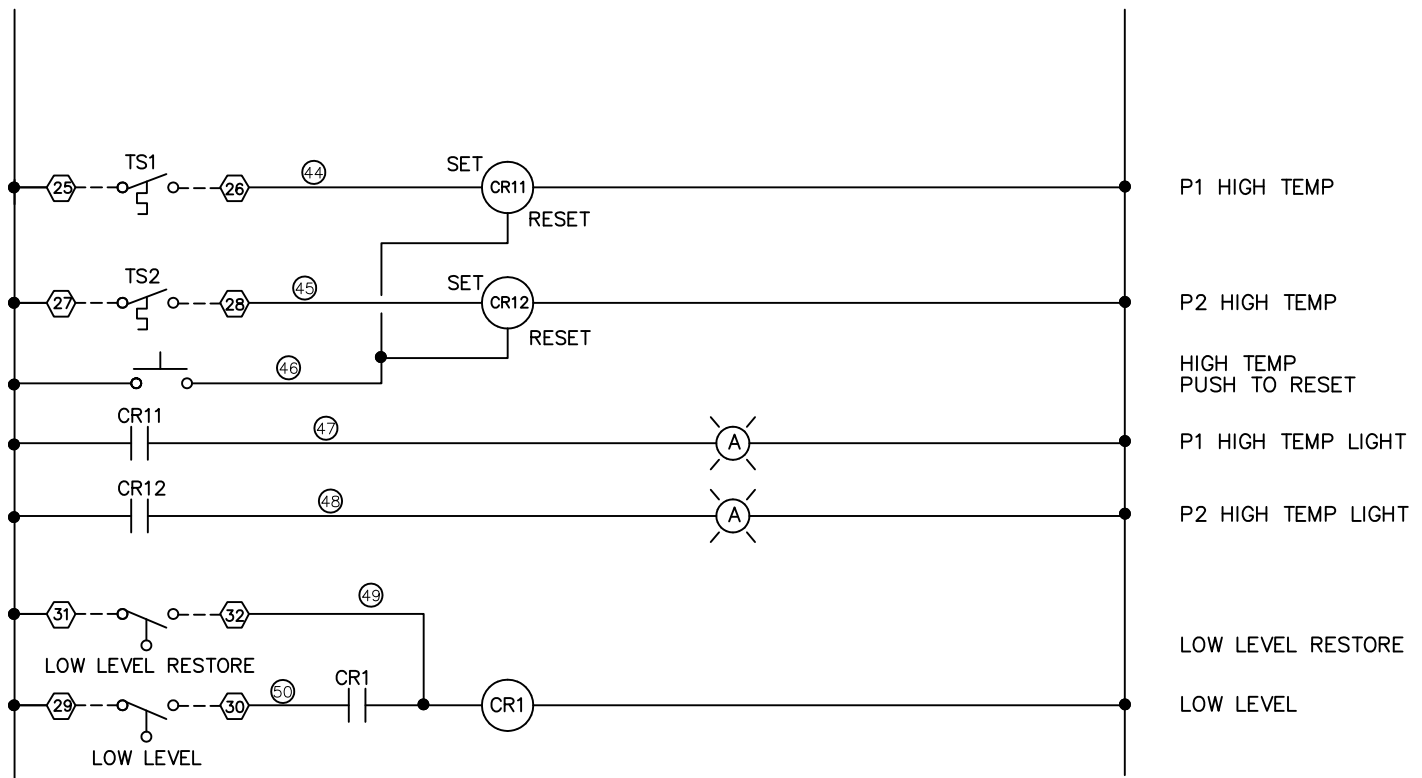
P.O. Box 77808  
Baton Rouge, LA  
70809

Ph. (225)756-3271  
Fax (225)755-1030

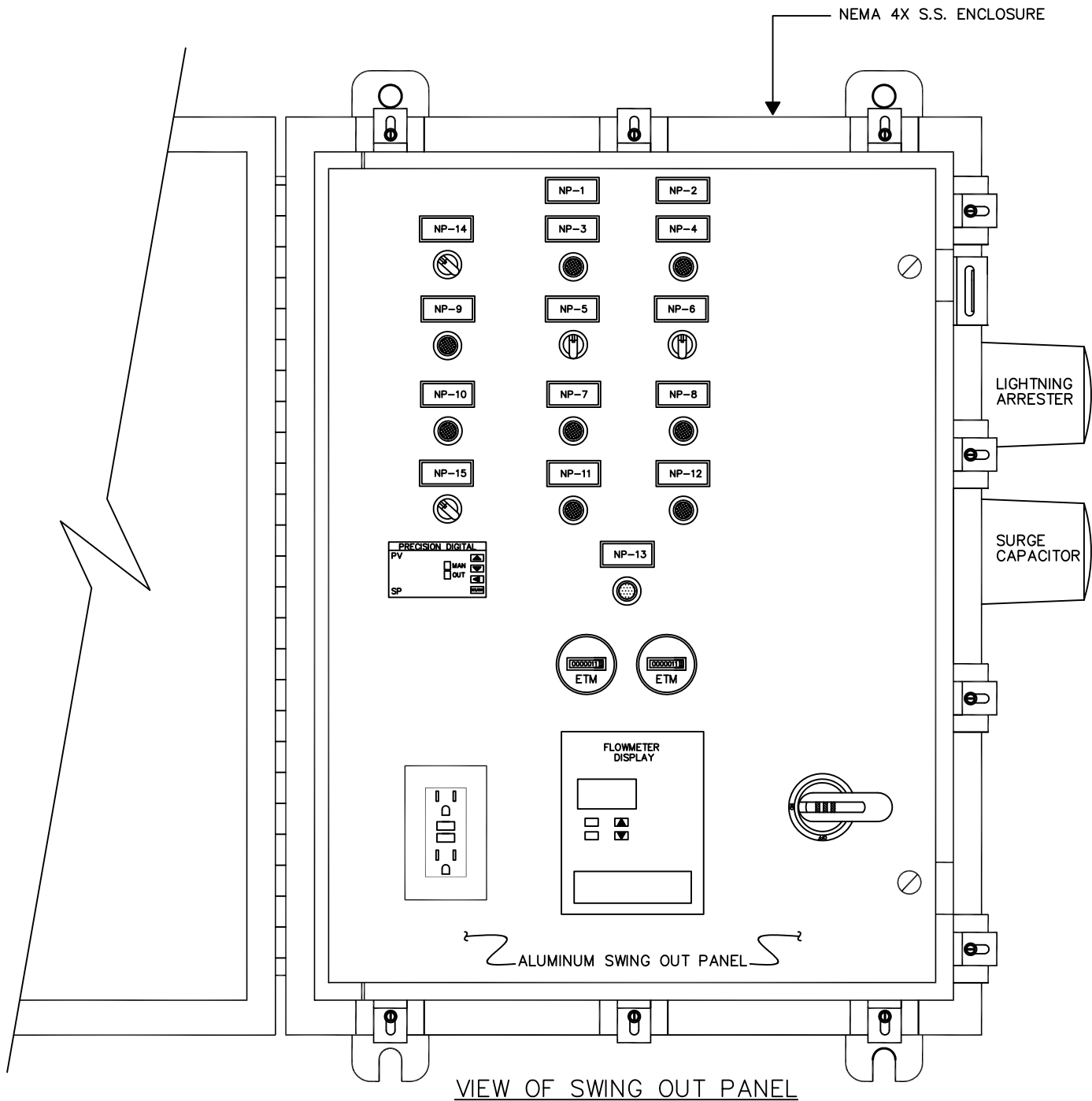


	Drawing Title	R1	ADD SIMPLEX/DUPLEX SWITCH	05/08/07	HNB
	CONTROL DIAGRAM				
DATE	05/19/06	REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN
		S/N	Sales Engineer C.C.	Application Engineer R.C.	DATE
	Project Title	BY	COREYC	APPROVED	BY
	DUPLEX PUMP CONTROL PANEL			DATE	
		P.O. Box 77808 Baton Rouge, LA 70809	PURCHASE ORDER NUMBER		
		Ph. (225)756-3271 Fax (225)755-1030	DRAWING NUMBER CP-2341		
			SHEET NUMBER		4





	Drawing Title		R1	ADD SIMPLEX/DUPLEX SWITCH		05/08/07	HNB
	CONTROL DIAGRAM						
DATE		REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY
05/19/06		S/N	Sales Engineer C.C.	Application Engineer R.C.	DRAWN BY COREYC	APPROVED BY	DATE
	Project Title				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-2341	
						SHEET NUMBER 6	



VIEW OF SWING OUT PANEL

# NAMEPLATE SCHEDULE

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

▲ DISPLAY SUPPLIED BY DELTA PROCESS

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

	Drawing Title	R1	ADD SIMPLEX/DUPLEX SWITCH	05/08/07	HNB
	ENCLOSURE				
DATE	05/19/06	REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN
		S/N	Sales Engineer	Application Engineer	DATE
			C.C.	R.C.	BY
	Project Title			BY COREYC	APPROVED
	DUPLEX PUMP CONTROL PANEL				DATE
					PURCHASE ORDER NUMBER
					DRAWING NUMBER
					CP-2341
					SHEET NUMBER
					7

**COX**

Research and Technology, Inc.

P.O. Box 77808  
Baton Rouge, LA  
70809

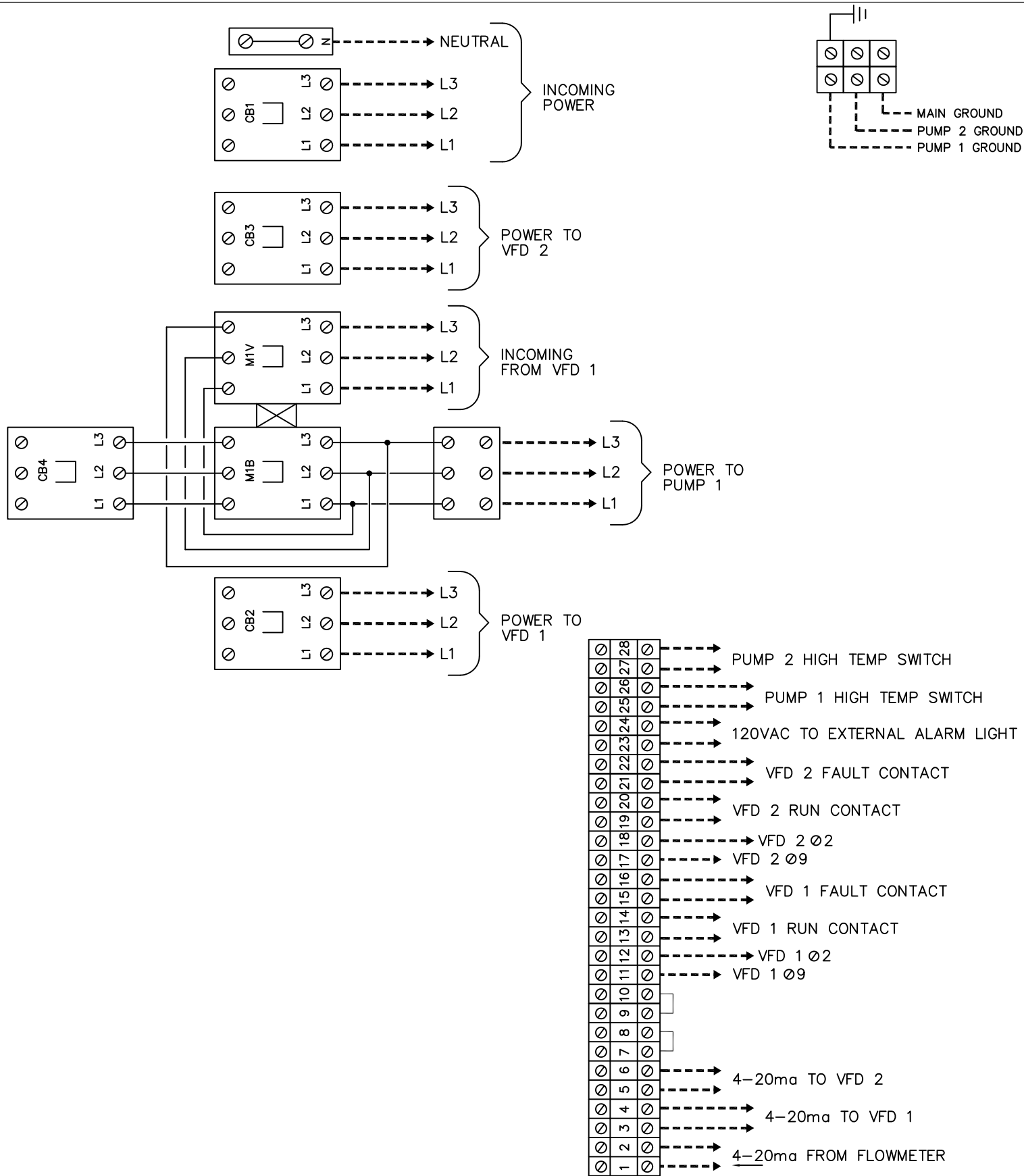
Ph. (225)756-3271  
Fax (225)755-1030



# BILL OF MATERIALS

ITEM	QTY	MANUFACTURER	PART NO.	DESCRIPTION
1	1	C & I	CI-363010N4X	ENCLOSURE
1a	1	C & I	C-3630P	BACKPLATE
1b	1	C & I	C-3630SPA	DEAD FRONT
2	1	ABB	S3N200TW	CB1
3	1	ABB	K5VDM	MECHANISM
4	1	ABB	OXP10X225	SHAFT
5	1	ABB	OHB65L10	HANDLE
6	1	BUSSMAN	16371-3	DISTRIBUTION BLOCK
7	1	BUSSMAN	16371-1	NEUTRAL BLOCK
8	2	ABB	S3N100MW	CB2,3
9	1	ABB	S3N100TW	CB4
10	1	ABB	A75N3M-11-84	MECH. INTERLOCKED CONTACTOR
11	1	ABB	TA75DU80	OL (60-80A)
12	1	ABB	DB80	OL SP. MT. KIT
13	1	DELTA	LA603	LIGHTNING ARRESTOR
14	1	SSAC	PLMU-11	PHASE MONITOR
15	1	DELTA	CA603	SURGE ARRESTOR
16	2	A-B	20AB070C3AYNANCO	4XVFD
17	1	SQUARE D	QOU115	CB5
18	1	SQUARE D	QOU110	CB6
19	1	TIMEMARK	261DT120	ALTERNATOR
20	7	IDEC	RU4SA110	RELAYS 110AC
21	2	A-B	800H-JR2A	HOA
22	4	A-B	800H-QR10R	RED PILOT LIGHT
23	4	A-B	800H-QR10A	AMBER PILOT LIGHT
24	1	PRECISION DIGITAL	PD-542-6RB-00	DISPLAY
25	2	ENM	1672T84	ELAPSED TIME METER
26	2	A-B	800H-HR2A	2 POSITION SWITCH
27	1	SSAC	FS126RC	FLASHER
28	1	SIEMENS	LOGO	PLC
29	1	STOCK		GFI
30	1	IRL		EXTERNAL ALARM LIGHT
31	2	MAGNECRAFT	W388AMLCPX-9	LATCHING RELAYS
32	1	ABB	CAL-5	AUXILIARY CONTACT
33				
34				

	Drawing Title		R1	ADD SIMPLEX/DUPLEX SWITCH		05/08/07	HNB
	BILL OF MATERIALS						
DATE 05/19/06		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	DRAWN BY COREYC	ECN	DATE
	Project Title	<div style="border: 1px solid black; padding: 5px; margin: 0 auto; width: 150px;"> <b>COX</b>  Research and Technology, Inc. </div>			P.O. Box 77808 Baton Rouge, LA 70809  Ph. (225)756-3271 Fax (225)755-1030		APPROVED BY DATE PURCHASE ORDER NUMBER  DRAWING NUMBER CP-2341 SHEET NUMBER 8
	DUPLEX PUMP CONTROL PANEL						



	Drawing Title	R1	ADD SIMPLEX/DUPLEX SWITCH	05/08/07	HNB
	EXTERNAL CONNECTIONS				
DATE	05/19/06	REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN
		S/N	Sales Engineer	Application Engineer	DATE
			C.C.	R.C.	BY
	Project Title			BY COREYC	DATE
	DUPLEX PUMP CONTROL PANEL				PURCHASE ORDER NUMBER
					DRAWING NUMBER
					CP-2341
					SHEET NUMBER
					9