
COX

Research and Technology, Inc.

DUPLEX PUMP CONTROL PANEL

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

VOLTAGE	120/240V	(480V, 277/480V, 240V, 120/240V, 208V, 120/208V)
PHASE/HZ	3/60	
NO. MOTORS	2	
HP	15	
FLA	42	
TYPE OF PUMP	SP	(Self-Priming, Submersible)
MANUFACTURER	Meyers	
CATALOG NUMBER		
CONTROL VOLTAGE	120V	(120V, Other)
ENCLOSURE	NEMA 4X	(NEMA 1, NEMA 3R, NEMA 4, NEMA 4X)
ENCLOSURE MATERIAL	Fiberglass	(Painted Steel, Stainless Steel, Fiberglass)
CONTROL SENSOR	Remote	(Floats, Bubbler, Other)
CAPACITORS	No	(Yes, No)
CAPACITOR WIRING FIGURE	N/A	
THERM. & SEAL FAIL WIRING FIGURE	N/A	

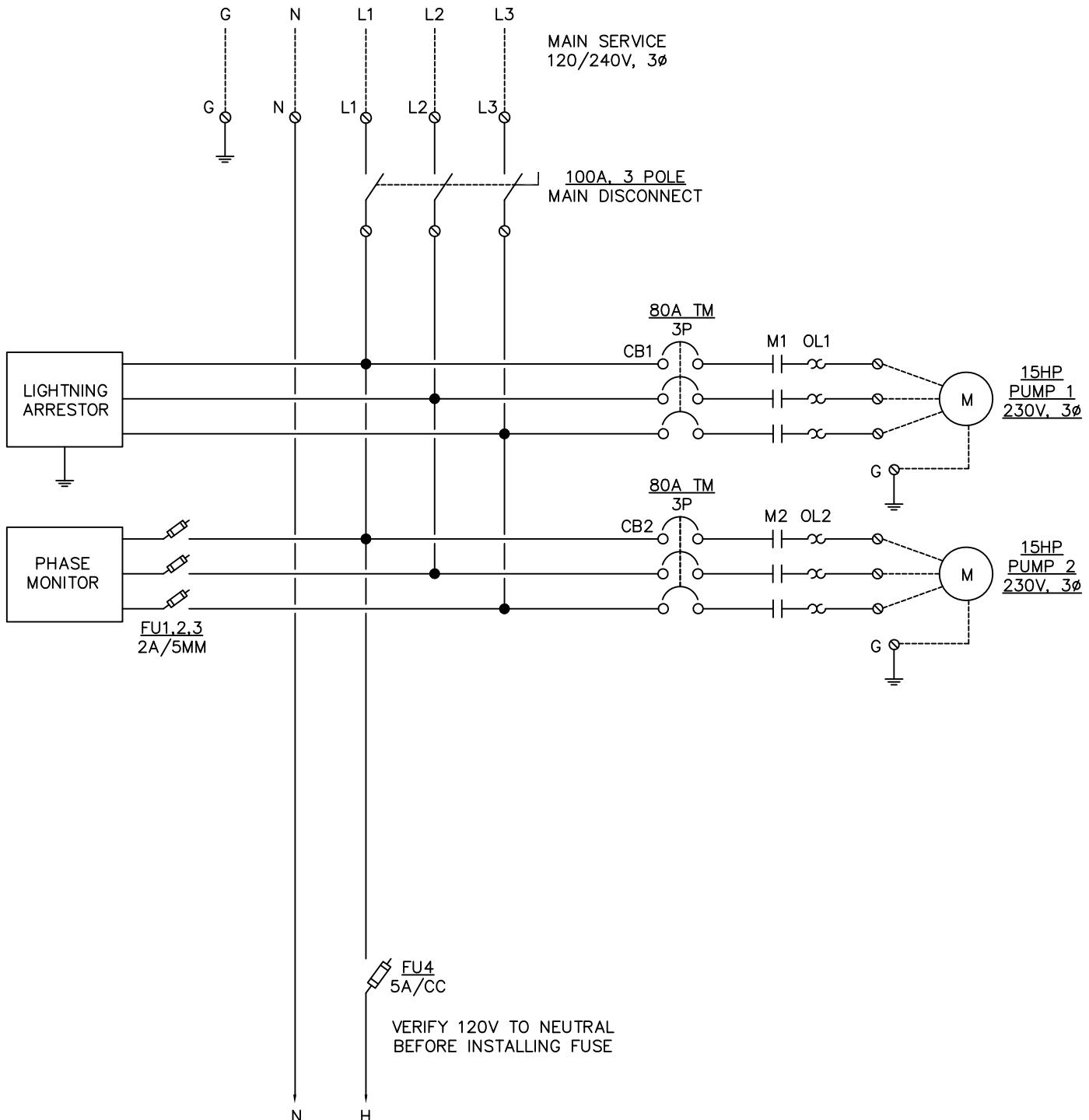
OPTIONS:

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

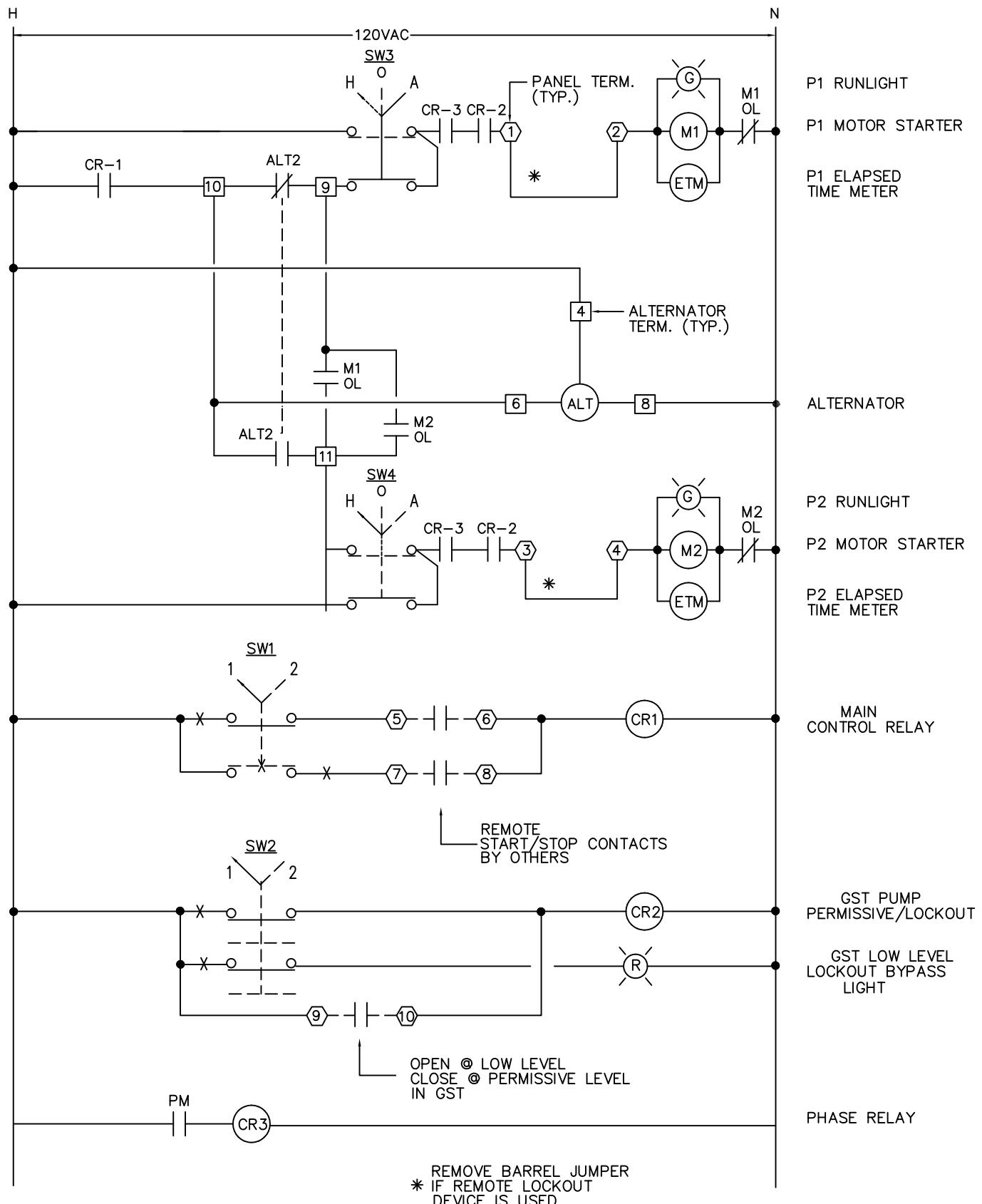
SOLD TO: Delta Process - Bossier City, LA
TAG : Sandy Point 480

SHIP TO: Delta Process - Bossier City, LA

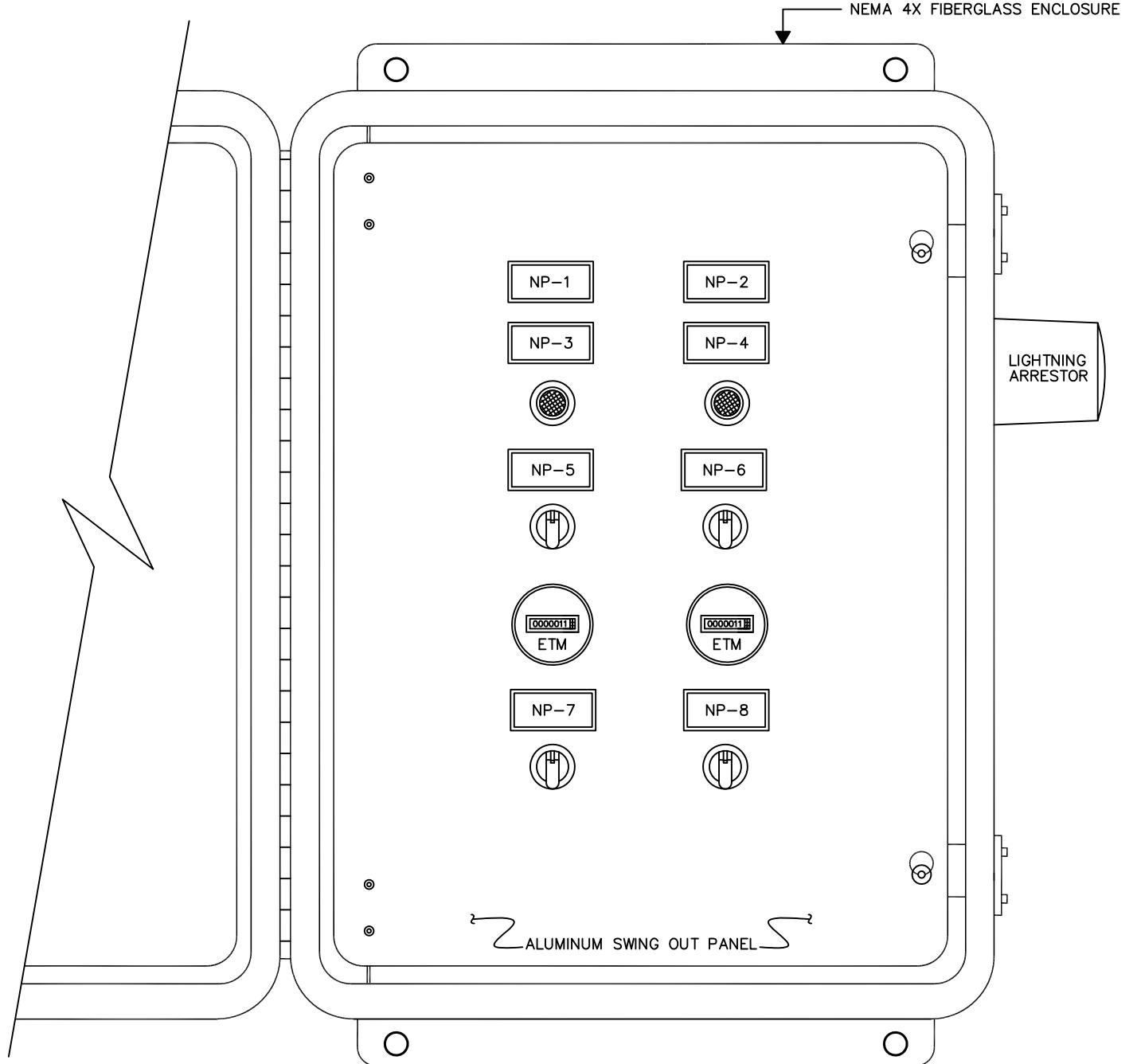
Drawing Title	PANEL DESCRIPTION			REFERENCE DRAWING NO.	REVISION-LOCATION	ECN	DATE BY
DATE 5/21/02	S/N	Sales Engineer	Application Engineer	DRAWN	APPROVED		
				BY M.S. CTR	BY DATE		
Project Title	<hr/> <hr/> <hr/>			P.O. Box 77808 Baton Rouge, LA 70809			PURCHASE ORDER NUMBER
DUPLEX PUMP CONTROL PANEL	<hr/> <hr/> <hr/>			Ph. (225)756-3271 Fax (225)756-1030			DRAWING NUMBER CP-1405
	<hr/> <hr/> <hr/>			SHEET NUMBER 1			



	Drawing Title					
	POWER DIAGRAM					
	REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY
DATE 5/21/02	S/N	Sales Engineer	Application Engineer	DRAWN	APPROVED	
	C.C.		R.C.	BY M.S. CTR	BY DATE	
	Project Title			PURCHASE ORDER NUMBER		
	DUPLEX PUMP CONTROL PANEL	COX Research and Technology, Inc.		DRAWING NUMBER	CP-1405	
				SHEET NUMBER	2	



	Drawing Title CONTROL DIAGRAM				
		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION DRAWN BY M.S. CTR	ECN APPROVED BY DATE
DATE 5/21/02		Application Engineer R.C.			
	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)756-1030	PURCHASE ORDER NUMBER DRAWING NUMBER CP-1405 SHEET NUMBER 3



NAMEPLATE SCHEDULE

VIEW OF SWING OUT PANEL

NP-1	PUMP 1
NP-2	PUMP 2
NP-3	RUN
NP-4	RUN
NP-5	HOA
NP-6	HOA
NP-7	PUMPING TO
	1 = ELEVATED TANK
	2 = GROUND STORAGE TANK
NP-8	1 = GST PUMP LOCKOUT BYPASS
	2 = GST PUMP LOCKOUT
NP-9	GST LOW LEVEL LOCKOUT IS IN BYPASS MODE

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	NO.	REVISION-LOCATION	ECN	DATE	BY
DATE 5/21/02	S/N	Sales Engineer	Application Engineer	DRAWN	APPROVED	
		C.C.	R.C.	BY M.S.	BY	DATE
	Project Title					
	DUPLEX PUMP CONTROL PANEL	COX		P.O. Box 77808 Baton Rouge, LA 70809	PURCHASE ORDER NUMBER	
		Research and Technology, Inc.		Ph. (225)756-3271 Fax (225)756-1030	DRAWING NUMBER	CP-1405
					SHEET NUMBER	4

BILL OF MATERIALS

ITEM	QTY	MANUFACTURER	PART NO.	DESCRIPTION
1	1	ALLIED	AM2420RL	ENCLOSURE
1a	1	ALLIED	PA2420	BACKPLATE
2	1	ALLIED	HFP-2420	DEAD FRONT
3	1	ABB	OT100E3	MAIN DISC. SWITCH
4	2	FURNAS	14FSH32AF	MOTOR STARTER
5	2	SQUARE D	QOU380	CB1, CB2
6	1	TIMEMARK	261DT120	ALTERNATING RELAY
7	2	ACI	JR22FG	GREEN PILOT LIGHT
8	2	ACI	JR22P3M20B	HOA SWITCH
9	1	C-H	CHSA03	LIGHTNING ARRESTER
10	1	SSAC	PLMU-11	PHASE MONITOR
11	2	GRASSLIN	UWZ52E	ELAPSED TIME METER
12	2	ACI	JR22P2M11B	SW1 & SW2
13	1	ACI	JR22FR	RED PILOT LIGHT (LED)
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

	Drawing Title									
	BILL OF MATERIALS									
			REFERENCE DRAWING		NO.	REVISION-LOCATION		ECN	DATE	BY
DATE 5/21/02			S/N	Sales Engineer	Application Engineer	DRAWN			APPROVED	
				C.C.	R.C.	BY M.S.	CTR	BY	DATE	
	Project Title		 COX Research and Technology, Inc.			P.O. Box 77808 Baton Rouge, LA 70809 Ph. (225)756-3271 Fax (225)756-1030			PURCHASE ORDER NUMBER	
	DUPLEX PUMP CONTROL PANEL				DRAWING NUMBER					
					CP-1405					
					SHEET NUMBER		5			

OPERATION

The control panel will receive dry contacts from level controls supplied by others in order to start and stop the pumps. Pumps will alternate upon successive off-on pump cycles. Only one pump will operate at a time. If the called for pump has tripped due to an overload, then the other pump will start.

There are two (2) scenario selector switches on the control panel – selector switch 1 and selector switch 2. Selector switch 1 allows the operator to select which device will control the pumps as follows:

Position 1 – Elevated water tank level via probe controls by others.

Position 2 – Ground storage tank level via probes by others.

Selector switch 2 allows the operator to select whether or not the pumps should lock out when a given pumping scenario is selected.

Operation is as follows:

Position 1 – Bypasses pump low level lockout in GST.

Position 2 – Allows pumps to lockout at low level in GST.

Remote contacts must have a pumping differential inherent in the control circuit.

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DATE 5/21/02	REFERENCE DRAWING S/N	NO. C.C.	REVISION-LOCATION Application Engineer R.C.	ECN DRAWN BY M.S. CTR	DATE APPROVED 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 Ph. (225)756-3271 Fax (225)756-1030	PURCHASE ORDER NUMBER DRAWING NUMBER CP-1405 SHEET NUMBER 5		