
COX

Research and Technology, Inc.

SANTA MONICA
20HP VFD
CONTROL PANEL

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

CP-1951

VOLTAGE	<u>277/480V</u>	(480V, 277/480V, 240V, 120/240V, 208V, 120/208V)
PHASE/HZ	<u>3/60</u>	
NO. MOTORS	<u>1</u>	
HP	<u>20</u>	
FLA	<u>27</u>	
TYPE OF PUMP	<u>Self-Priming</u>	(Self-Priming, Submersible)
MANUFACTURER	<u></u>	
CATALOG NUMBER	<u></u>	
CONTROL VOLTAGE	<u>120V</u>	(120V, Other)
ENCLOSURE	<u>NEMA 3R</u>	(NEMA 1, NEMA 3R, NEMA 4, NEMA 4X)
ENCLOSURE MATERIAL	<u>Painted Steel</u>	(Painted Steel, Stainless Steel, Fiberglass)
CONTROL SENSOR	<u></u>	(Floats, Bubbler, Other)
CAPACITORS	<u>No</u>	(Yes, No)
CAPACITOR WIRING FIGURE	<u>N/A</u>	
THERM. & SEAL FAIL WIRING FIGURE	<u></u>	

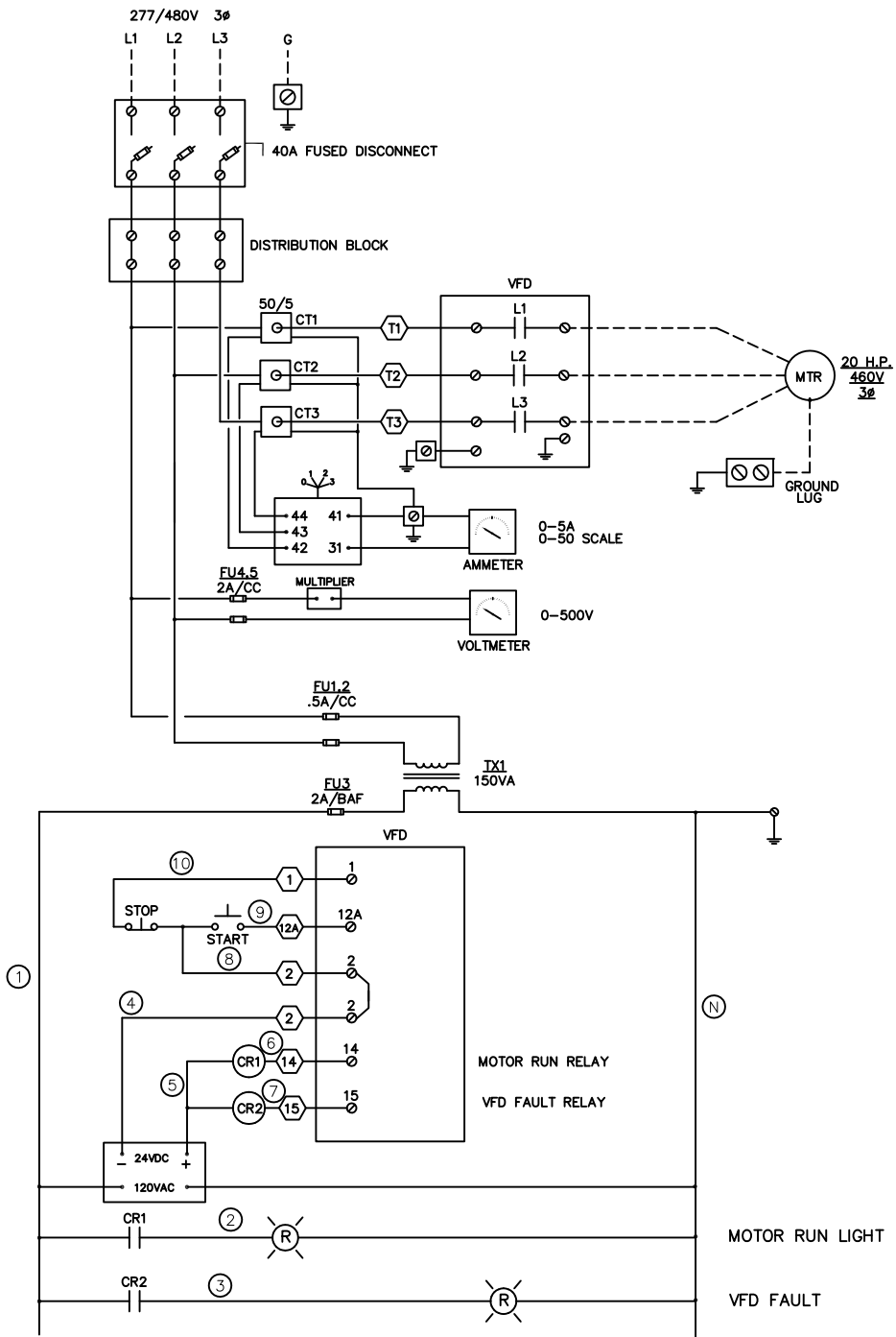
OPTIONS:

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

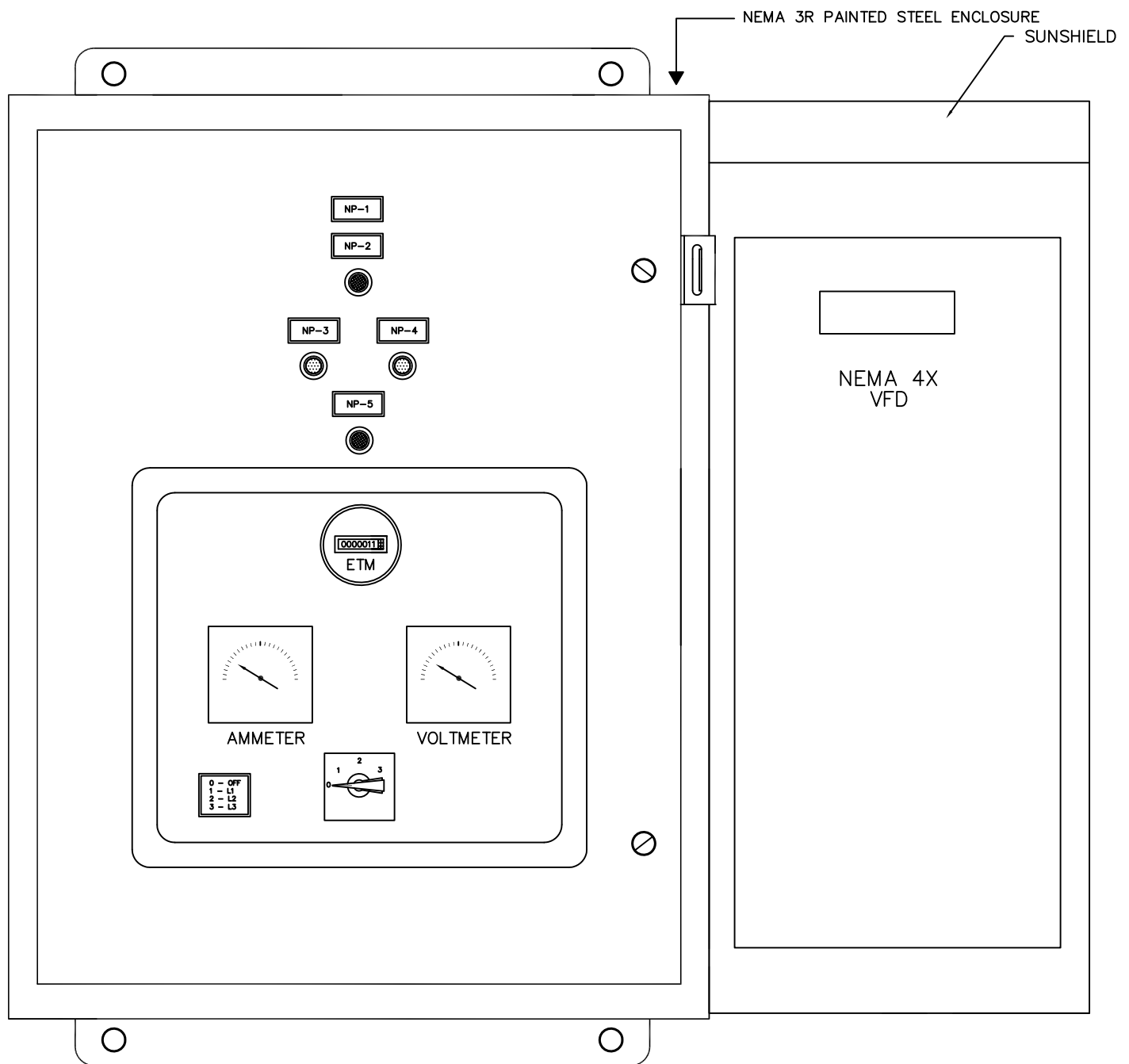
SOLD TO:	<u>Irrigation Mart</u>
TAG :	<u>Santa Monica</u>
	<u>VFD</u>

SHIP TO:	<u></u>
	<u></u>
	<u></u>

	Drawing Title						
	PANEL DESCRIPTION						
9/02/04 11/15/04		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	DRAWN BY C. RACHAL	ECN	DATE
	Project Title	<div style="text-align: center;"> COX Research and Technology, Inc. </div>			P.O. Box 77808 Baton Rouge, LA 70809		PURCHASE ORDER NUMBER
	20 HP VFD CONTROL PANEL				Ph. (225)756-3271 Fax (225)756-1030		DRAWING NUMBER CP-1951
					SHEET NUMBER 1		



	Drawing Title								
	POWER DIAGRAM								
DATE	11/15/04	REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY	APPROVED	
		S/N	Sales Engineer C.C.	Application Engineer R.C.	BY C. RACHAL	BY	DATE		
	Project Title	COX			P.O. Box 77808 Baton Rouge, LA 70809	PURCHASE ORDER NUMBER			
	20 HP VFD CONTROL PANEL	Research and Technology, Inc.			Ph. (225)756-3271 Fax (225)756-1030	DRAWING NUMBER CP-1951			
						SHEET NUMBER 2			



VIEW OF FRONT OF PANEL

NAMEPLATE SCHEDULE

NP-1 MOTOR
 NP-2 RUN
 NP-3 STOP
 NP-4 START
 NP-5 VFD FAULT

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

	Drawing Title 	
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BILL OF MATERIALS

ITEM	QTY	MANUFACTURER	PART NO.	DESCRIPTION
1	1	B-LINE	24208RHL	ENCLOSURE
1a	1	B-LINE	N2420P	BACKPLATE
2	1	ABB	OS60J12	FUSABLE DISCONNECT
3	1	ABB	OHB4	DIRECT MOUNT HANDLE
4	1	SIMPSON	1X099	VOLTMETER
5	1	SIMPSON	4TL72	AMMETER
6	1	ELECTROSWITCH	3115A	AMMETER SWITCH
7	1	MARATHON	1323580	DISTRIBUTION BLOCK
8	1	ABB	T4150PSF1	TRANSFORMER
9	1	AC TECH	M14200E	4X VFD
10	2	ACI	JR22AN11B	PUSH BUTTONS
11	2	ACI	JR22FR	PILOT LIGHTS
12	1	SIEMENS	6EP1331-1SH02	POWER SUPPLY 120AC-24DC
13	2	IDEC	RU2SD24	CR1,2
14	3	ITT	2SFT500/50:5	CURRENT TRANSFORMER
15	1	B LINE	HWK1212	WINDOW KIT
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	Drawing Title							
	BILL OF MATERIALS							
DATE 11/15/04		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	ECN	DATE	BY	
				DRAWN BY C. RACHAL		APPROVED BY	DATE	
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VFD PARAMETER SETTINGS

<u>PARAMETER NO.</u>	<u>PARAMETER NAME</u>	<u>PARAMETER SETTING</u>
1	SPEED #1	<u>60 HZ</u>
8	ACCEL	15 SEC
9	DECEL	3 SEC
10	MIN. FREQ.	0.5 HZ
11	MAX. FREQ.	<u>60 HZ</u>
17	MOTOR OL	100%
18	BASE	<u>60 HZ</u>
26	STOP	RAMP
27	ROTATION	FWD
28	AUTO/MAN	AUTO
30	CONTROL	REMOTE
52	TB14OUT	RUN
53	TB15OUT	1 FAULT