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# COX

Research and Technology, Inc.

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## BORDEN MILK CONTROL PANEL

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

CP-1944

VOLTAGE	<u>208V</u>	(480V, 277/480V, 240V, 120/240V, 208V, 120/208V)
PHASE/HZ	<u>3/60</u>	
NO. MOTORS	<u>8</u>	
HP	<u></u>	
FLA	<u></u>	
TYPE OF PUMP	<u></u>	(Self-Priming, Submersible)
MANUFACTURER	<u></u>	
CATALOG NUMBER	<u></u>	
CONTROL VOLTAGE	<u>120V</u>	(120V, Other)
ENCLOSURE	<u>NEMA 1</u>	(NEMA 1, NEMA 3R, NEMA 4, NEMA 4X)
ENCLOSURE MATERIAL	<u>Painted Steel</u>	(Painted Steel, Stainless Steel, Fiberglass)
CONTROL SENSOR	<u>Start/Stop</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:

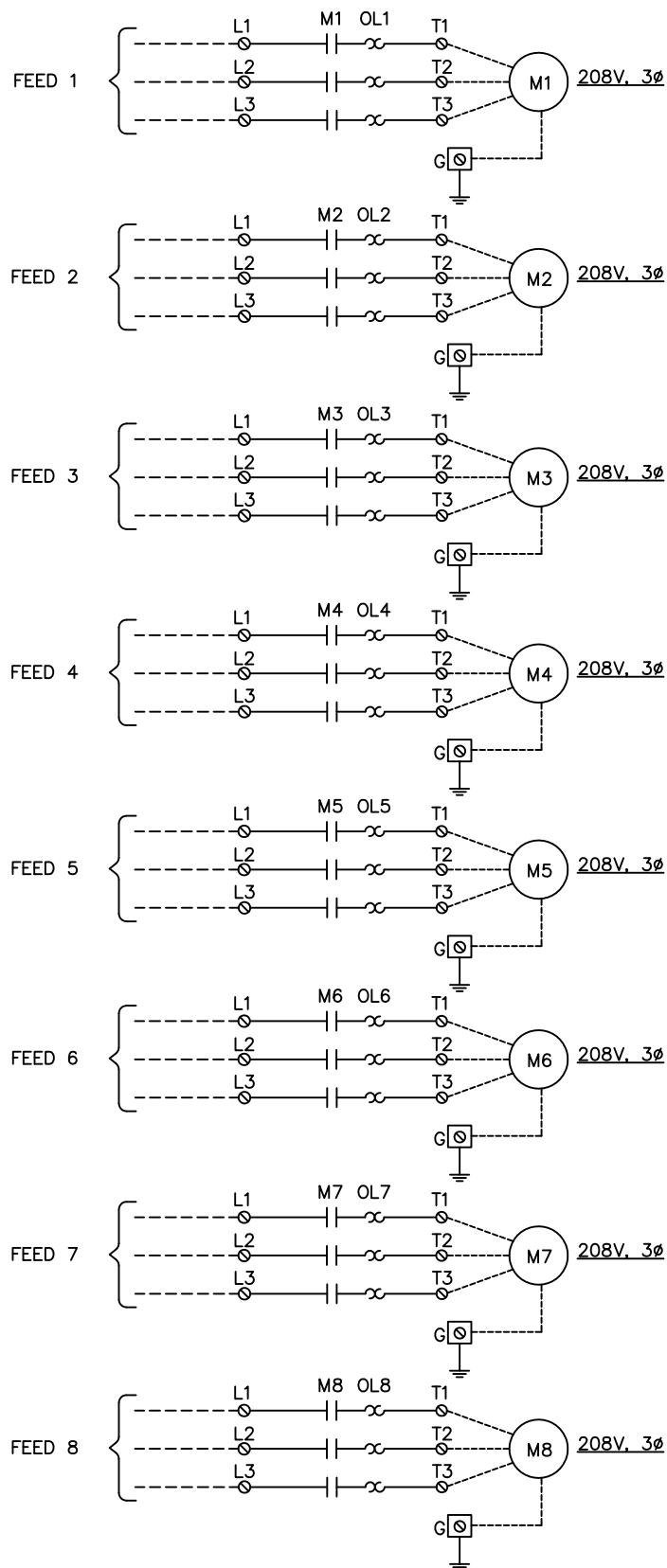
SEAL FAIL LIGHTS	<u></u>	(Submersible Only)
SEAL FAIL RELAYS	<u></u>	(Submersible Only)
SEAL FAIL PUMP SHUTDOWN	<u></u>	(Submersible Only)
HT PUMP SHUTDOWN	<u></u>	(Self-Primer, Submersible)
ALARM HORN	<u></u>	
ALARM LIGHT	<u></u>	
LIGHT PANEL MTD	<u></u>	
LIGHT REMOTE MTD	<u></u>	
LIGHT FLASHER	<u></u>	
LIGHTNING ARRESTER	<u></u>	
ELAPSED TIME METER	<u></u>	
PHASE MONITOR	<u></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: ARMCO ELECTRIC

TAG : BORDEN MILK

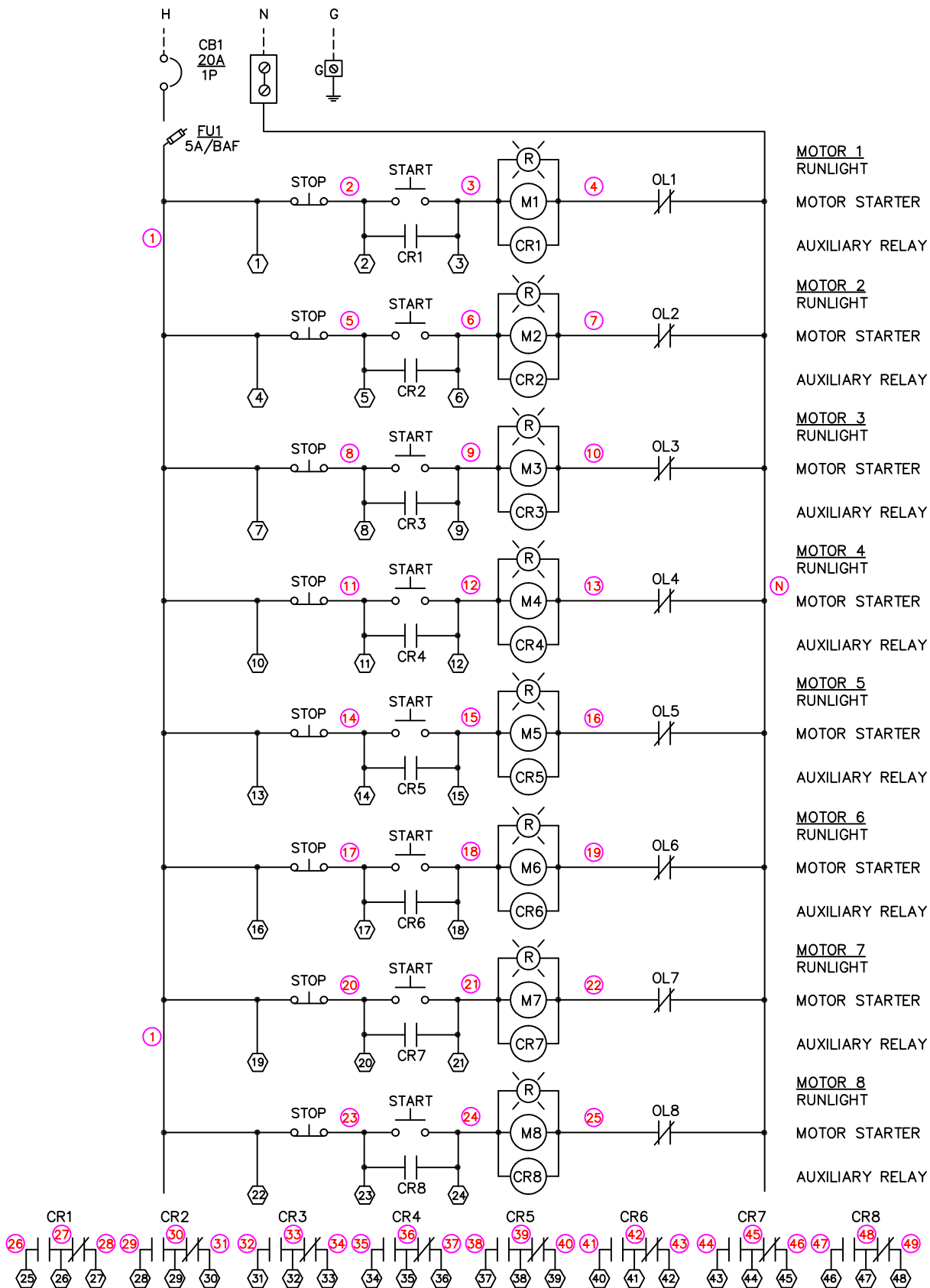
SHIP TO: ARMCO ELECTRIC

	Drawing Title						
	PANEL DESCRIPTION						
DATE		REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY
11/02/04		S/N	Sales Engineer C.C.	Application Engineer R.C.	DRAWN BY C. RACHAL		APPROVED BY
	Project Title	<div style="text-align: center;">   <b>COX</b>  Research and Technology, Inc. </div>			P.O. Box 77808 Baton Rouge, LA 70809		PURCHASE ORDER NUMBER
	BORDEN MILK CONTROL PANEL				Ph. (225)756-3271 Fax (225)755-1030		DRAWING NUMBER CP-1944
							SHEET NUMBER 1



	Drawing Title							
	POWER DIAGRAM							
DATE		REFERENCE DRAWING	NO.	REVISION-LOCATION	ECN	DATE	BY	
11/02/04		S/N	Sales Engineer C.C.	Application Engineer R.C.	BY C. RACHAL	APPROVED		
	Project Title				PURCHASE ORDER NUMBER			
	BORDEN MILK CONTROL PANEL	<div>COX</div> <div>Research and Technology, Inc.</div>			P.O. Box 77808 Baton Rouge, LA 70809  Ph. (225)756-3271 Fax (225)755-1030		DRAWING NUMBER CP-1944	
					SHEET NUMBER			2

120VAC CONTROL CIRCUIT



**MOTOR 1**  
RUNLIGHT  
MOTOR STARTER  
AUXILIARY RELAY

**MOTOR 2**  
RUNLIGHT  
MOTOR STARTER  
AUXILIARY RELAY

**MOTOR 3**  
RUNLIGHT  
MOTOR STARTER  
AUXILIARY RELAY

**MOTOR 4**  
RUNLIGHT  
MOTOR STARTER  
AUXILIARY RELAY

**MOTOR 5**  
RUNLIGHT  
MOTOR STARTER  
AUXILIARY RELAY

**MOTOR 6**  
RUNLIGHT  
MOTOR STARTER  
AUXILIARY RELAY

**MOTOR 7**  
RUNLIGHT  
MOTOR STARTER  
AUXILIARY RELAY

**MOTOR 8**  
RUNLIGHT  
MOTOR STARTER  
AUXILIARY RELAY

Drawing Title							
CONTROL DIAGRAM							
DATE		REFERENCE DRAWING		NO.		REVISION-LOCATION	
11/02/04		S/N		Sales Engineer		Application Engineer	
Project Title		C.C.		R.C.		DRAWN	
BORDEN MILK CONTROL PANEL						BY C. RACHAL	
						APPROVED	
						BY	
						DATE	
						PURCHASE ORDER NUMBER	
						DRAWING NUMBER	
						CP-1944	
						SHEET NUMBER	
						3	

COX

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P.O. Box 77808  
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70809

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NEMA 1 PAINTED

NP-1 NP-2 NP-3 NP-4

NP-5 NP-6 NP-7 NP-8

NP-9 NP-10 NP-11 NP-12


NP-13 NP-14 NP-15 NP-16

NP-17 NP-18 NP-19 NP-20

NP-21 NP-22 NP-23 NP-24

NAMEPLATE SCHEDULE

NP-1	MOTOR 1	NP-9	STOP	NP-17	START
NP-2	MOTOR 2	NP-10	STOP	NP-18	START
NP-3	MOTOR 3	NP-11	STOP	NP-19	START
NP-4	MOTOR 4	NP-12	STOP	NP-20	START
NP-5	START	NP-13	MOTOR 5	NP-21	STOP
NP-6	START	NP-14	MOTOR 6	NP-22	STOP
NP-7	START	NP-15	MOTOR 7	NP-23	STOP
NP-8	START	NP-16	MOTOR 8	NP-24	STOP

	Drawing Title								
	ENCLOSURE								
DATE 11/02/04		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	ECN  BY C. RACHAL	DATE  BY	BY  DATE		
	Project Title				P.O. Box 77808 Baton Rouge, LA 70809	PURCHASE ORDER NUMBER			
	BORDEN MILK CONTROL PANEL	<div style="text-align: center;">  <p>Research and Technology, Inc.</p> </div>			Ph. (225)756-3271 Fax (225)756-1030	DRAWING NUMBER CP-1944			
						SHEET NUMBER 4			

# BILL OF MATERIALS

ITEM	QTY	MANUFACTURER	PART NO.	DESCRIPTION
1	1	SAGINAW	SCE-36EL3008	ENCLOSURE
1a	1	SAGINAW	SCE-36P30	BACKPLATE
2	8	SQUARE D	8536SC03V02	STARTER
3	24	SQUARE D	VARIOUS	O.L. HEATERS
4	1	SQUARE D	QOU120	CB1
5	1	MARATHON	1321580	NEUTRAL BLOCK
6	16	A-B	800H-AR2A	PUSH BUTTON
7	8	IDEC	RU2SA110	CR1-8
8	8	A-B	800H-QR10R	RED PILOT LIGHT
9				
10				
11				
12				
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17				
18				
19				
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21				
22				
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24				
25				

	Drawing Title						
	<h2 style="margin: 0;">BILL OF MATERIALS</h2>						
DATE 11/02/04		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	<div style="border-top: 3px double black; border-bottom: 3px double black; padding: 5px 0;"> <h1 style="margin: 0;">COX</h1> </div> <div style="font-size: small; margin-top: 5px;">Research and Technology, Inc.</div>			P.O. Box 77808 Baton Rouge, LA 70809  Ph. (225)756-3271 Fax (225)756-1030		PURCHASE ORDER NUMBER  DRAWING NUMBER CP-1944 SHEET NUMBER 5
	<h2 style="margin: 0;">BORDEN MILK CONTROL PANEL</h2>						