
COX

Research and Technology, Inc.

ELMWOOD MARINE SERVICE
WAGGEMAN
DUPLEX BLOWER
CONTROL PANEL

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

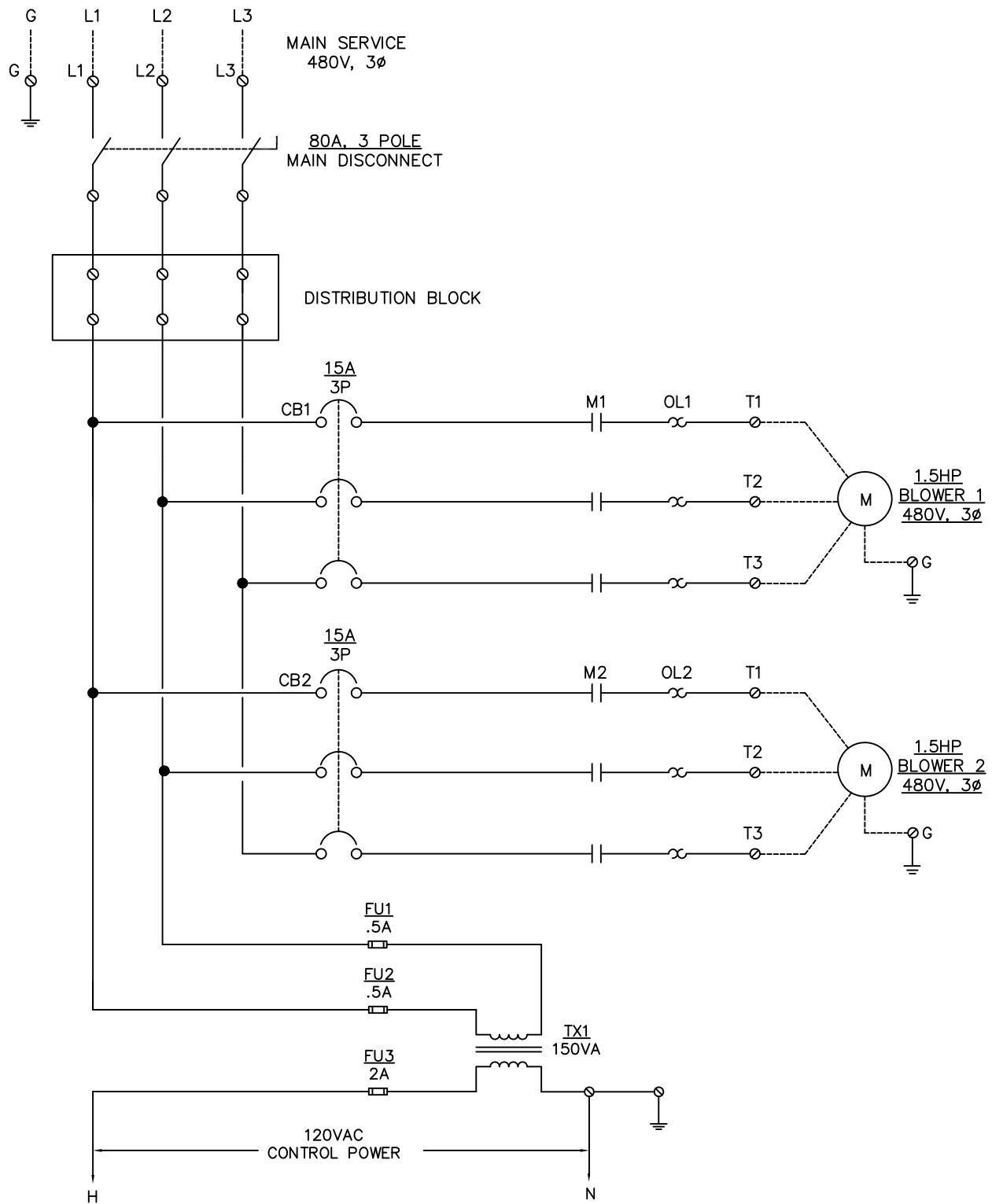
VOLTAGE	277/480V	(480V, 277/480V, 240V, 120/240V, 208V, 120/208V)
PHASE/HZ	3/60	
NO. MOTORS	2	
HP	1.5	
FLA	3.0	
TYPE OF PUMP	Blower	(Self-Priming, Submersible)
MANUFACTURER		
CATALOG NUMBER		
CONTROL VOLTAGE	120V	(120V, Other)
ENCLOSURE	NEMA 4X	(NEMA 1, NEMA 3R, NEMA 4, NEMA 4X)
ENCLOSURE MATERIAL	Fiberglass	(Painted Steel, Stainless Steel, Fiberglass)
CONTROL SENSOR		(Floats, Bubbler, Other)
CAPACITORS		(Yes, No)
CAPACITOR WIRING FIGURE		
THERM. & SEAL FAIL WIRING FIGURE		

OPTIONS:

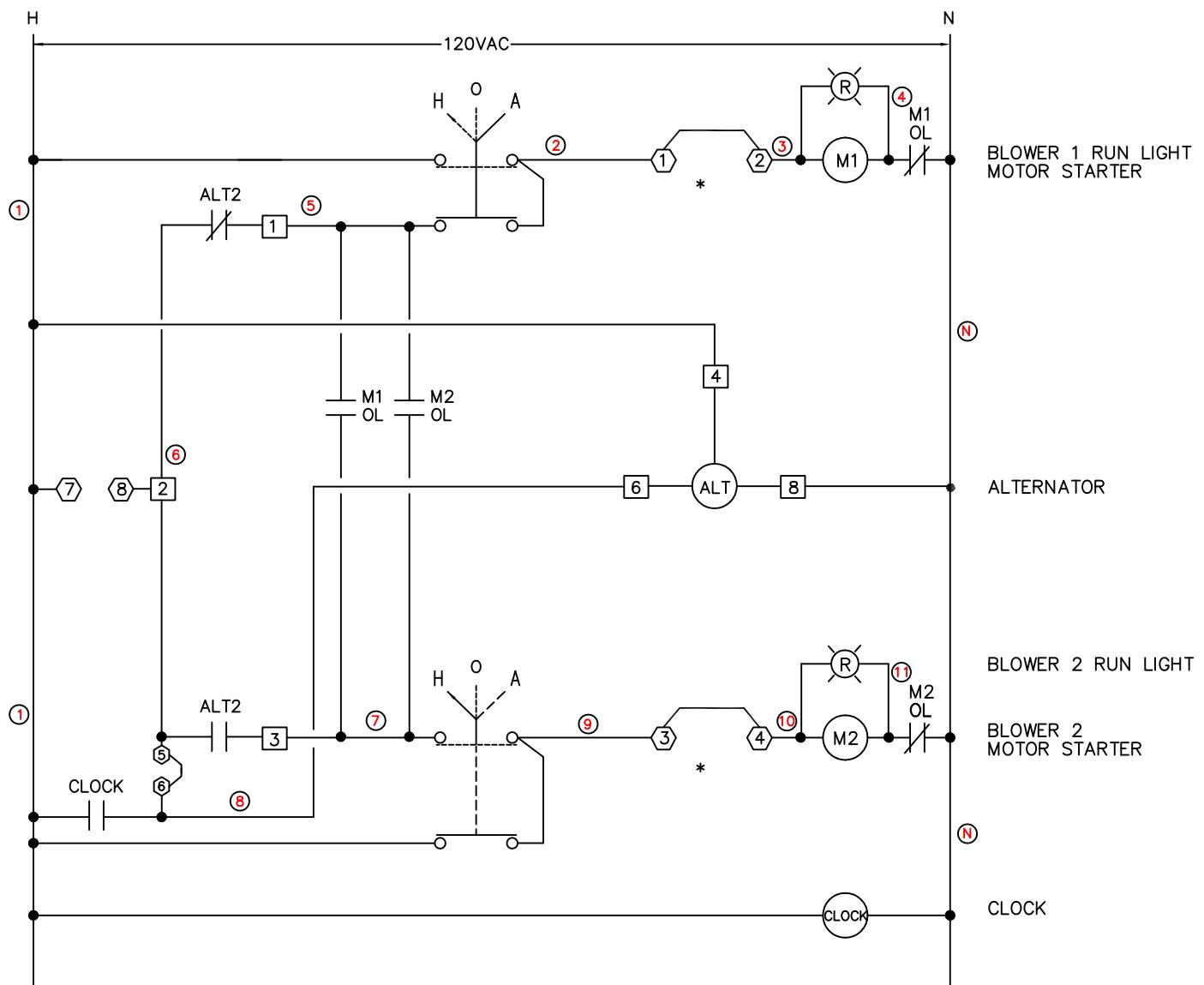
SEAL FAIL LIGHTS		(Submersible Only)
SEAL FAIL RELAYS		(Submersible Only)
SEAL FAIL PUMP SHUTDOWN		(Submersible Only)
HT PUMP SHUTDOWN		(Self-Primer, Submersible)
ALARM HORN		
ALARM LIGHT		
LIGHT PANEL MTD		
LIGHT REMOTE MTD		
LIGHT FLASHER		
LIGHTNING ARRESTER		
ELAPSED TIME METER		
PHASE MONITOR		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

SOLD TO: Delta Process, Ruston, LA
TAG : Elmwood Marine Service
Waggeman

	Drawing Title PANEL DESCRIPTION DATE 4/20/05					
		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		
	Project Title DUPLEX BLOWER CONTROL PANEL	COX Research and Technology, Inc.	P.O. Box 77808 Baton Rouge, LA 70809	PURCHASE ORDER NUMBER		
			Ph. (225)756-3271 Fax (225)755-1030	DRAWING NUMBER CP-2039		
				SHEET NUMBER 1		



	Drawing Title POWER DIAGRAM				
DATE 4/20/05	REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	ECN DRAWN BY C. RACHAL	DATE APPROVED BY DATE
Project Title DUPLEX BLOWER 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-2039 SHEET NUMBER 2

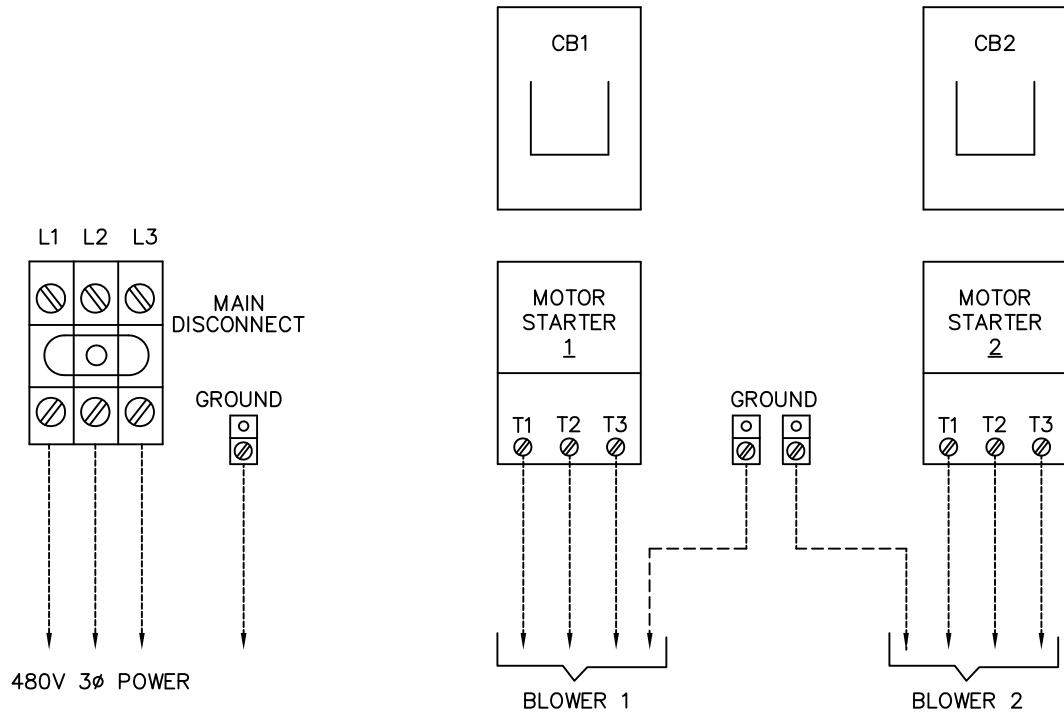


PANEL IS DESIGNED TO RUN AERATORS WITH A MINIMUM OF 15 MINUTES OF OFF TIME BETWEEN ALTERNATION. PINS PUSHED OUT ON CLOCK INDICATE RUN TIME. PINS PUSHED IN INDICATE OFF TIME. EACH PIN IS EQUAL TO 15 MINUTES.

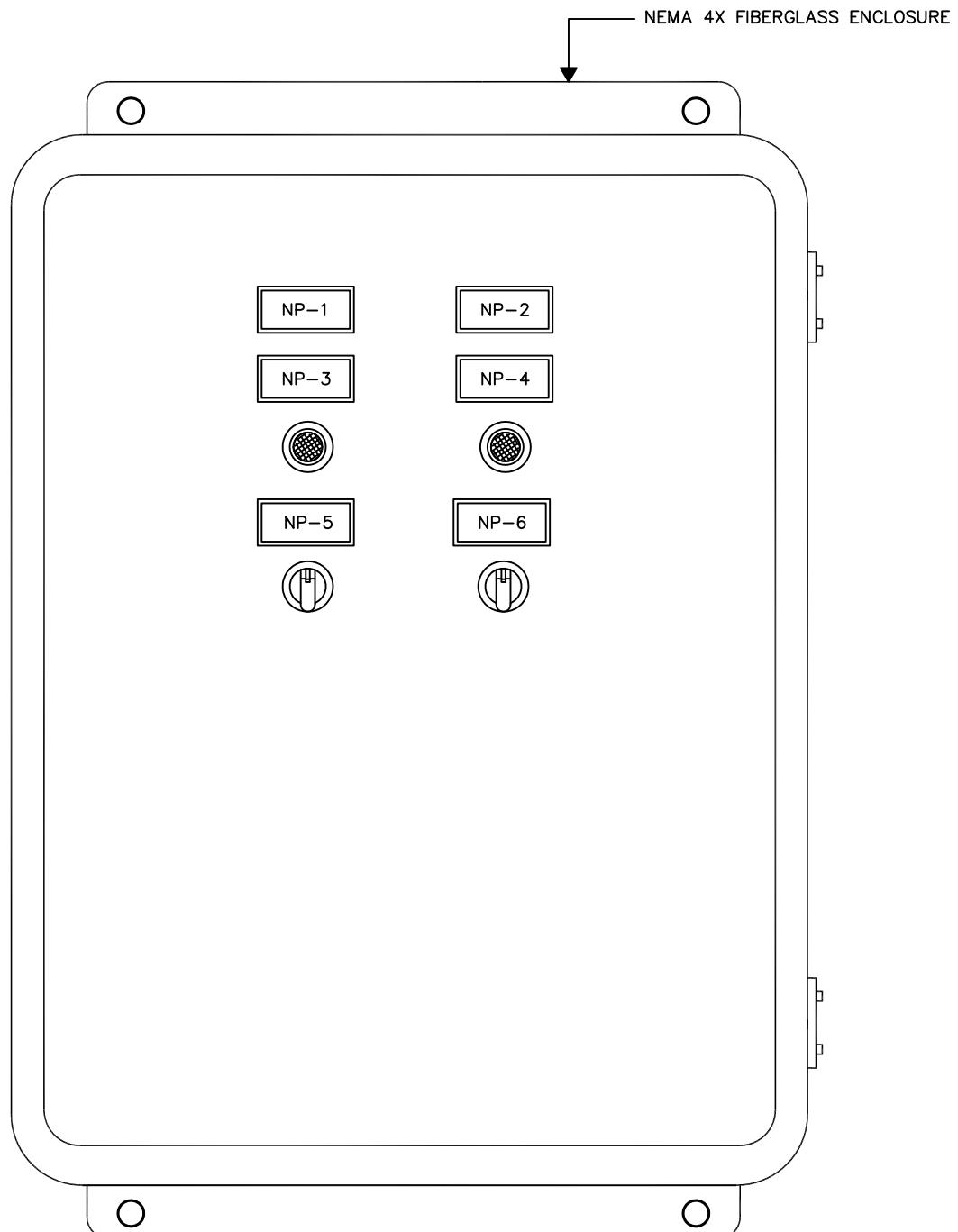
IF NO OFF TIME IS REQUIRED BETWEEN ALTERNATION, REMOVE JUMPER FROM TERMINALS ⑤ AND ⑥. PLACE JUMPER ACROSS TERMINALS ⑦ AND ⑧. NOW AERATORS WILL RUN CONTINUOUSLY. SET 1 PIN IN AT THE TIME YOU WISH THE AERATORS TO ALTERNATE. ALL REMAINING PINS SHOULD BE PUSHED OUT.

REMOVE JUMPERS AND INSTALL LOCKOUT DEVICES IF REQUIRED

	Drawing Title					
	CONTROL DIAGRAM					
DATE 4/20/05	REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	ECN DRAWN BY C. RACHAL	DATE APPROVED BY	BY
Project Title						
DUPLEX BLOWER 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-2039 SHEET NUMBER 3			



	Drawing Title					
	EXTERNAL CONNECTIONS					
DATE 4/20/05		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	ECN DRAWN BY C. RACHAL	DATE APPROVED BY DATE
	Project Title DUPLEX BLOWER 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-2039 SHEET NUMBER 4		



VIEW OF FRONT COVER

NAMEPLATE SCHEDULE

NP-1	BLOWER 1
NP-2	BLOWER 2
NP-3	RUN
NP-4	RUN
NP-5	HOA
NP-6	HOA

NOTE:

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

DATE 4/20/05	Drawing Title ENCLOSURE							
		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	DRAWN BY C. RACHAL	ECN BY	DATE APPROVED BY DATE	
Project Title DUPLEX BLOWER 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)755-1030	PURCHASE ORDER NUMBER DRAWING NUMBER CP-2039 SHEET NUMBER 5			

BILL OF MATERIAL

ITEM	QTY	MANUFACTURER	PART NO.	DESCRIPTION
1	1	STAHLIN	RJ1816HPL	ENCLOSURE
2	1	STAHLIN	BP1816AL	BACKPLATE
3	2	ABB	A16-30-10-84	STARTER
4	2	ABB	TA25DU4.0	O.L. (2.8-4.0A)
5	2	ABB	S1N015TL	CIRCUIT BREAKER 1,2
6	2	ACI	JR22P3M20B	H.O.A. SWITCH
7	1	TIMEMARK	261DT120	ALTERNATING RELAY
8	1	GRASSLIN	FM/1 STUZH-L	TIMER
9	2	ACI	JR22FR	RED PILOT LIGHT
10	1	ABB	T4150PSF1	TRANSFORMER
11	1	ABB	OT63E3	DISCONNECT SWITCH
12	1	MARATHON	1323580	DISTRIBUTION BLOCK

DATE 4/20/05	Drawing Title BILL OF MATERIALS					
		REFERENCE DRAWING S/N	NO. Sales Engineer C.C.	REVISION-LOCATION Application Engineer R.C.	ECN DRAWN BY C. RACHAL	DATE APPROVED BY DATE
	Project Title DUPLEX BLOWER CONTROL PANEL	<hr/> COX <hr/> Research and Technology, Inc. <hr/>			P.O. Box 77808 Baton Rouge, LA 70809 Ph. (225)756-3271 Fax (225)755-1030	PURCHASE ORDER NUMBER DRAWING NUMBER CP-2039 SHEET NUMBER 6