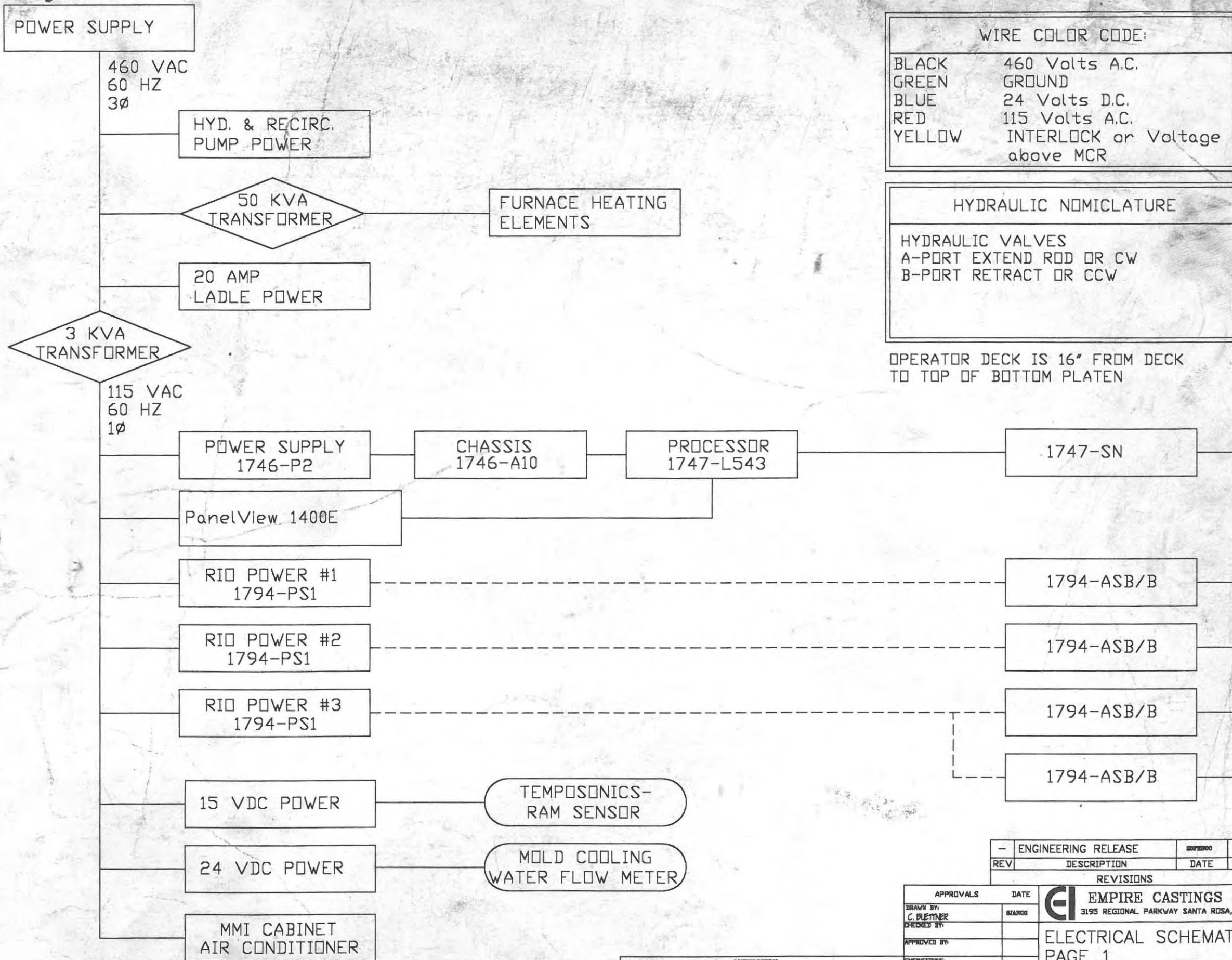


C35

Empire X-Mem #2 Electrical Sch.

AAP ST. MARYS CORPORATION
REF: MD-OP-06 (Sheet 1 of 28)
SIGNATURE
CODE NO. MD0257
EFF. DATE 08/10/00



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- ENGINEERING RELEASE		08/10/00	
REV	DESCRIPTION	DATE	APP'D
REVISIONS			
APPROVALS	DATE	 EMPIRE CASTINGS INC. 3195 REGIONAL PARKWAY SANTA ROSA, CA 95403	
DRAWN BY: C. BLETNER	08/10/00		
CHECKED BY:			
APPROVED BY:			
ENGINEERING:			
MANUFACTURING:		ELECTRICAL SCHEMATIC PAGE 1	
CUSTOMER: AAP ST. MARYS		EMPIRE WORK ORDER NO. AAPM008	EMPIRE DRAWING NO. 1801101
DO NOT SCALE DRAWING		NEXT ASSEMBLY NO. 1801102	CUSTOMER PART NO. REV
QTY: 1	SCALE: TO FIT	SHEET 1 OF 27	

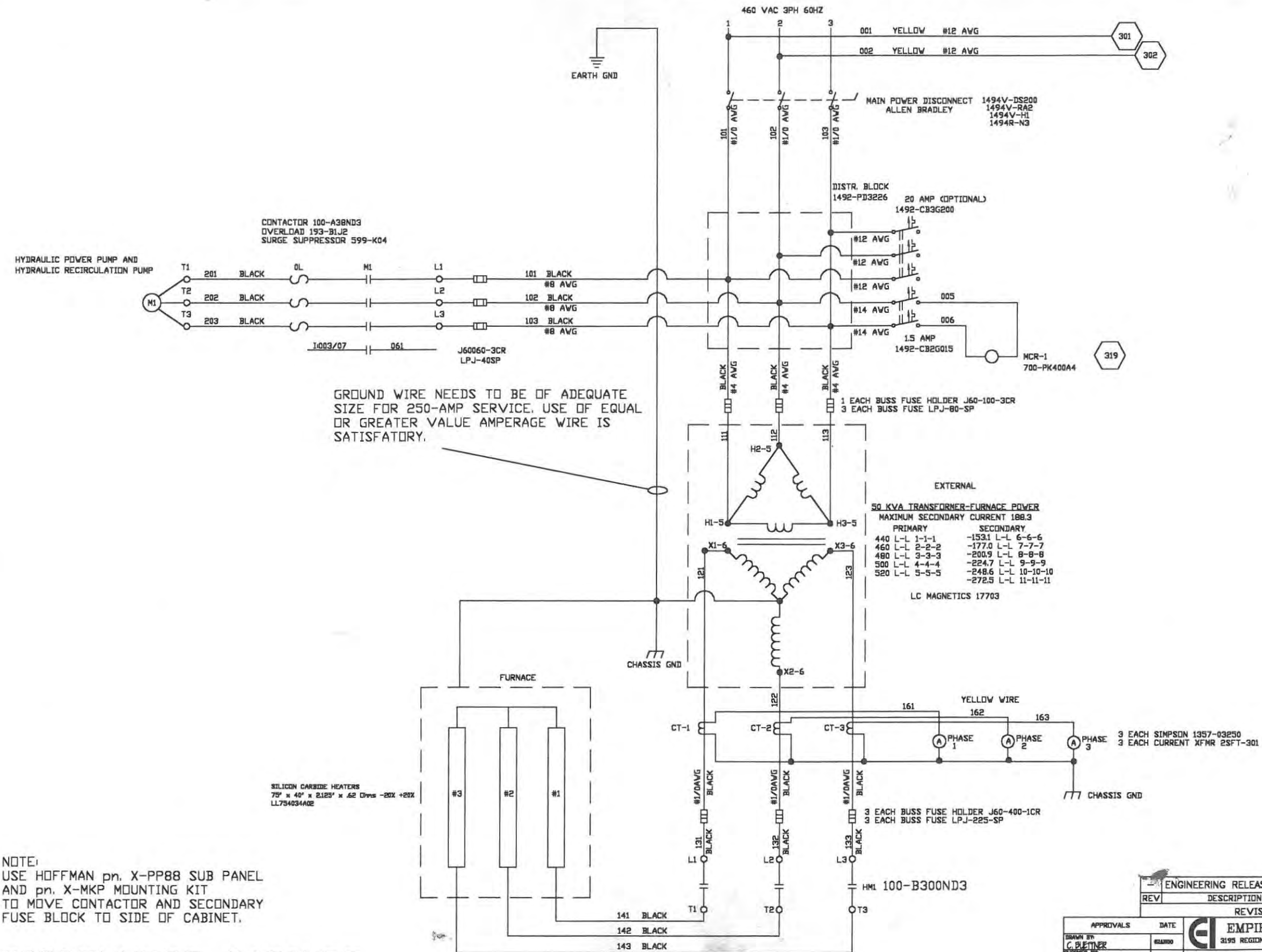
AAP ST. MARYS CORPORATION

CODE NO. **M0257**

REF: **M0-0P-06**
 (Sheet 2 of 28)

SIGNATURE

EFF. DATE 08/10/09



NOTE:
USE HOFFMAN pn. X-PP88 SUB PANEL
AND pn. X-MKP MOUNTING KIT
TO MOVE CONTACTOR AND SECONDARY
FUSE BLOCK TO SIDE OF CABINET.

DISCONNECT CABINET
CIRCLE AW FD483712-12 ENCLOSURE
CIRCLE AW AW2836P PANEL

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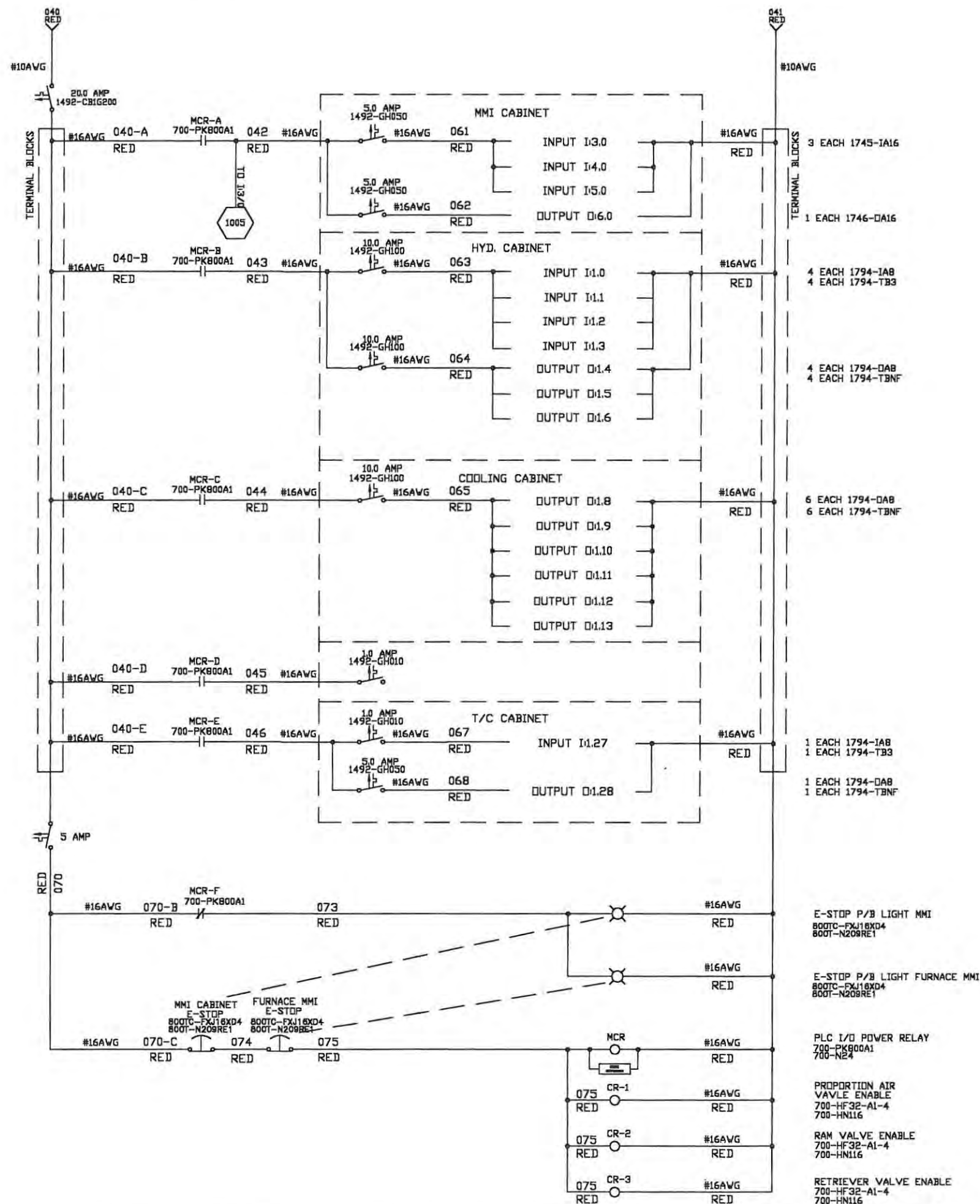
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REV	DESCRIPTION	DATE	APP'D
REVISIONS			
APPROVALS		DATE	
DRAWN BY C. PLETNER		RELEASED	
CHECKED BY			
APPROVED BY			
ENGINEERING			
MANUFACTURING			
CUSTOMER			
AAP ST. MARYS			
DO NOT SCALE DRAWING			

EMPIRE CASTINGS INC. 3195 REGIONAL PARKWAY SANTA ROSA, CA 95403			
ELECTRICAL SCHEMATIC PAGE 2 DISC. CAB.			
EMPIRE WORK ORDER NO. AAPM008		EMPIRE DRAWING NO. 1801102	
NEXT ASSEMBLY NO. 1801103		CUSTOMER PART NO. REV	
QTY. 1		SCALE 1/8" = 1"	
		SHEET 8 OF 8	

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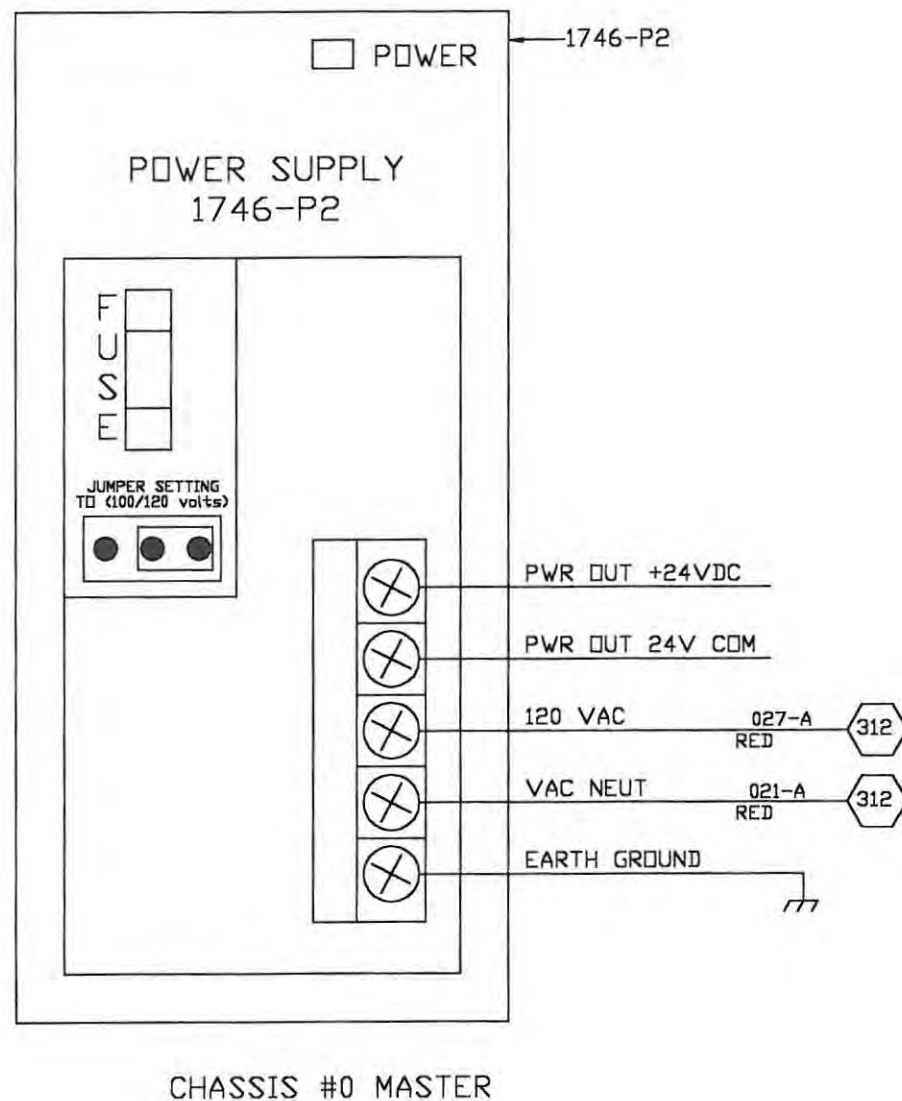
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SHEET 4 OF 28
SIGNATURE
EFFECT. DATE 08/10/00



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REVISIONS			
APPROVALS		DATE	
DRAWN BY	C. PLETNER	02/09/00	
CHECKED BY			
APPROVED BY			
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CUSTOMER	AAP St. Marys		
DO NOT SCALE DRAWING		QTY: 1	SCALED TO FIT

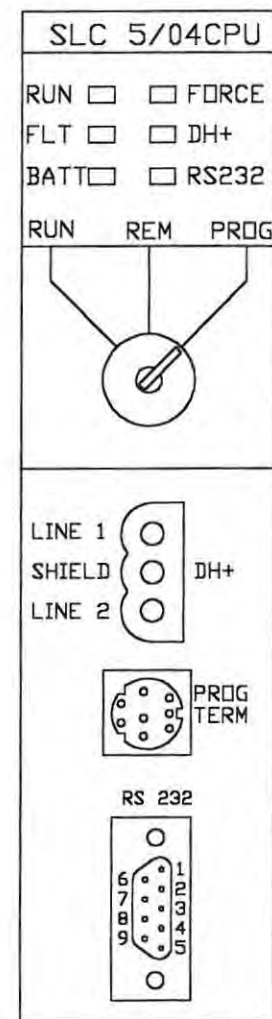
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3195 REGIONAL PARKWAY SANTA ROSA, CA 95403	
ELECTRICAL SCHEMATIC	
PAGE 4	
EMPIRE WORK ORDER NO.	1801104
EMPIRE DRAWING NO.	1801104
NEXT ASSEMBLY NO.	1801105
CUSTOMER PART NO.	
REV	

CODE NO.	MD-OP-06	REF:	MD-OP-06	SIGNATURE	
MD0257			(Sheet 5 of 28)		
EFF. DATE	08/10/00				

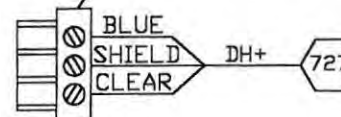


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1747-L543
PLC 5/04
CPU



TERMINATING RESISTOR
SCANNER END
CONNECT BETWEEN 1 AND 2
82 Ohm 1/2 WATT
GRAY-RED-BLACK-GOLD



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—	ENGINEERING RELEASE	REVISION	
REV	DESCRIPTION	DATE	APP'D
REVISIONS			
APPROVALS DATE			
DRAWN BY C. PLETNER			
CHECKED BY			
APPROVED BY			
ENGINEERING			
MANUFACTURING			
CUSTOMER			
DO NOT SCALE DRAWING			
QTY: 1			
SCALE TO FIT			
SHEET 8 OF 27			

EMPIRE CASTINGS INC.
3195 REGIONAL PARKWAY SANTA ROSA, CA 95403

ELECTRICAL SCHEMATIC
PAGE 5 MMI CAB.

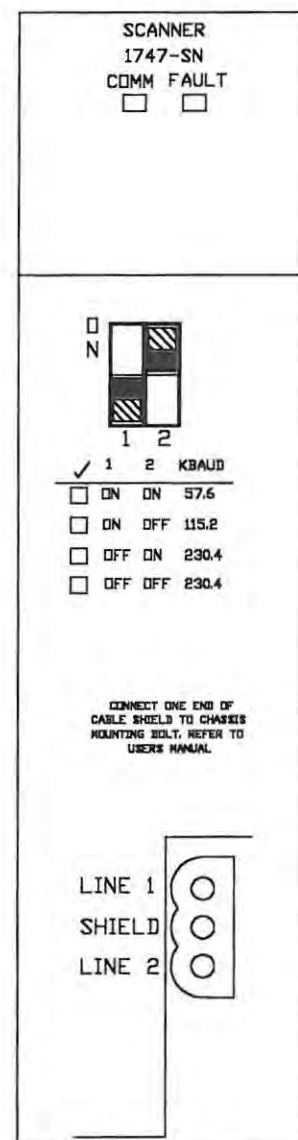
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EMPIRE DRAWING NO. AAPM008

NEXT ASSEMBLY NO. 1801106

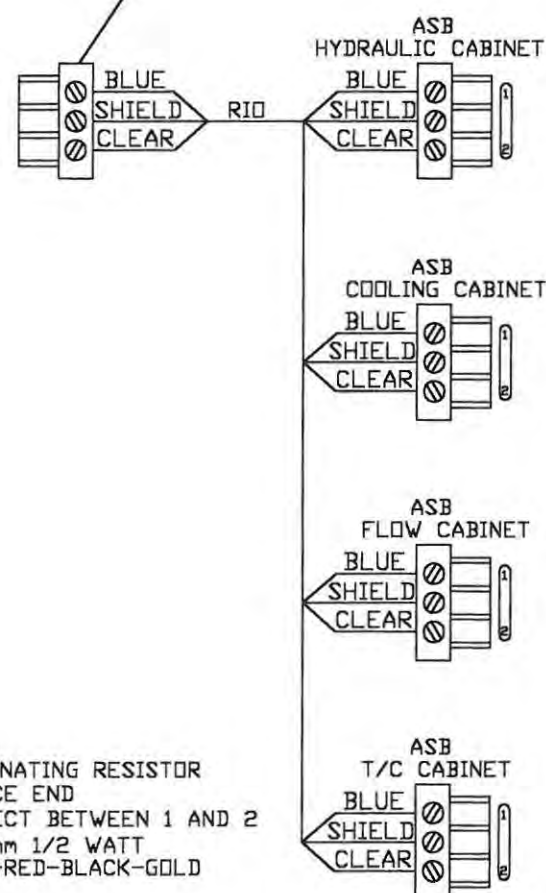
CUSTOMER PART NO.

CODE NO. MD0257	SIGNATURE	REF: MD-OP-06 (Sheet 6 of 28)	AAP ^{ST.} MARKS CORPORATION TEST
EFF. DATE 08/10/00			



CHASSIS #0 SLOT 01

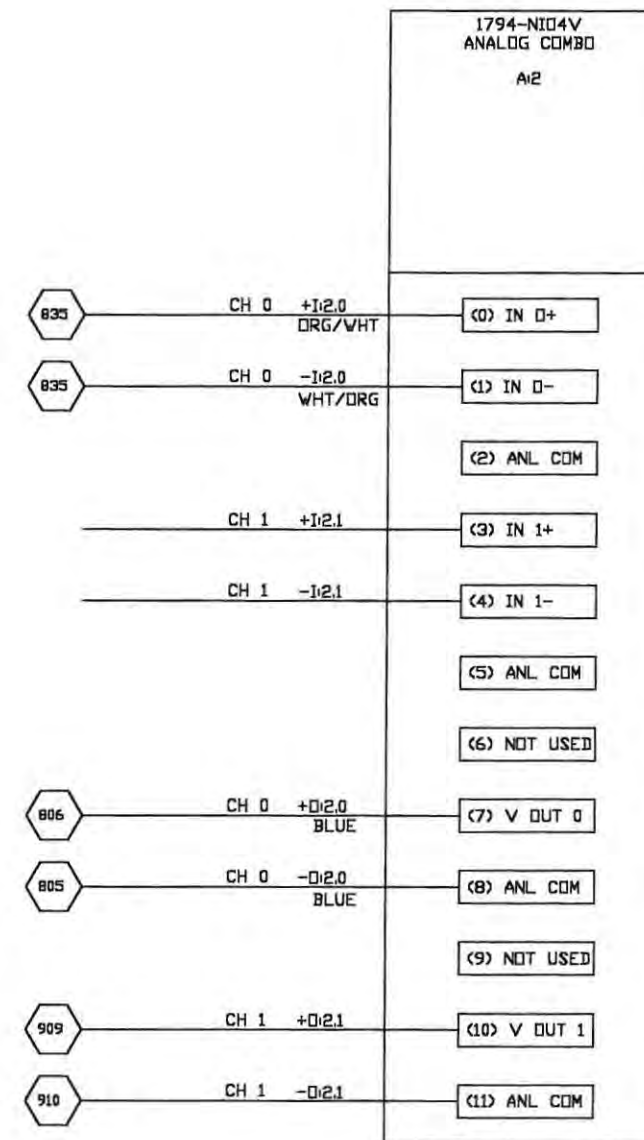
TERMINATING RESISTOR
SCANNER END
CONNECT BETWEEN 1 AND 2
82 Ohm 1/2 WATT
GRAY-RED-BLACK-GOLD



TERMINATING RESISTOR
DEVICE END
CONNECT BETWEEN 1 AND 2
82 Ohm 1/2 WATT
GRAY-RED-BLACK-GOLD

NOTES:

THE RIO CABLE SHIELD MUST BE GROUNDED AT THE SCANNER END ONLY
ENSURE THAT THE UNSHIELDED PORTION OF THE LINK COMMUNICATION
WIRE IS AS SHORT AS POSSIBLE.



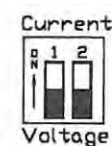
MAIN RAM POSITION
0-10 VDC

SPARE INPUT

RAM PROPORTIONAL VALVE
0-10 VDC

RETRIEVER PROPORTIONAL VALVE
0-10 VDC

CHASSIS #0 SLOT 02



Switch 1 = INPUT Channel 0
Switch 2 = INPUT Channel 1
ON - CONFIGURES CHANNEL FOR CURRENT INPUT
OFF - CONFIGURES CHANNEL FOR VOLTAGE INPUT

NOTE: SET SWITCH #1 TO VOLTAGE

-	ENGINEERING RELEASE	EXP2000	
REV	DESCRIPTION	DATE	APP'D
REVISIONS			
S	DATE	 EMPIRE CASTINGS INC. 3195 REGIONAL PARKWAY SANTA ROSA, CA 95405	
-	EXP2000		
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		EMPIRE WORK ORDER NO. AAPM008	EMPIRE DRAWING NO. 1801106
x		NEXT ASSEMBLY NO. 1801107	CUSTOMER PART NO. RE-
Marys			
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		SHEET 8 OF 8	

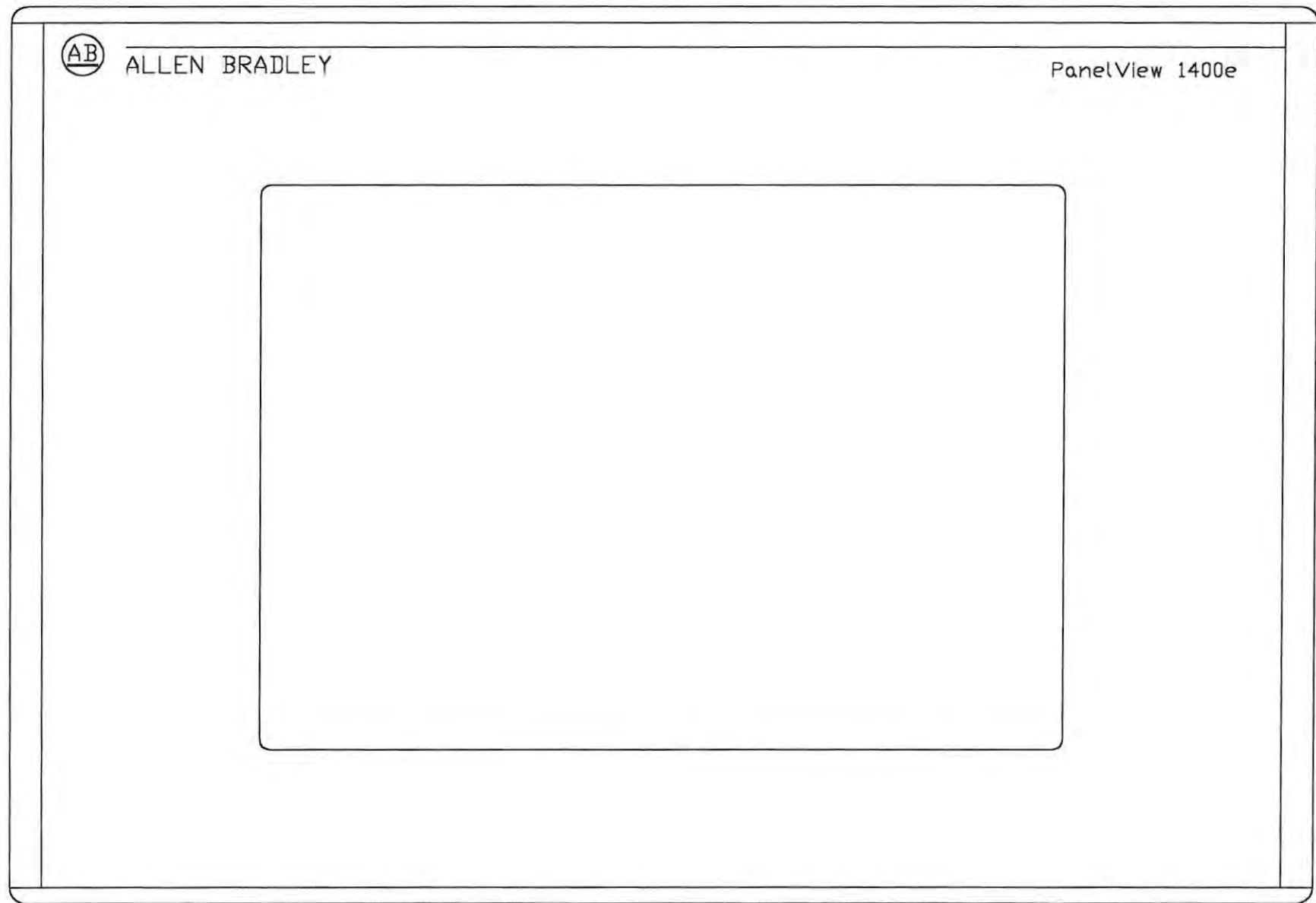
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UNPUBLISHED WORKS OF EMPIRE CASTINGS, INC.

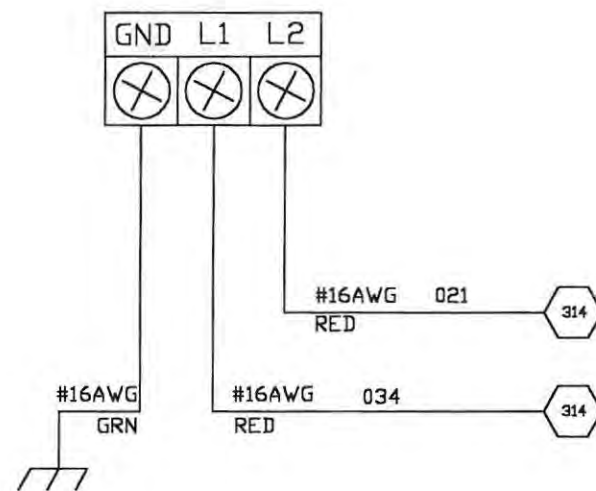
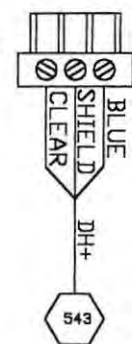
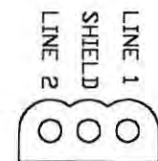
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EFF. DATE	08/10/00		(Sheet 7 of 28)	

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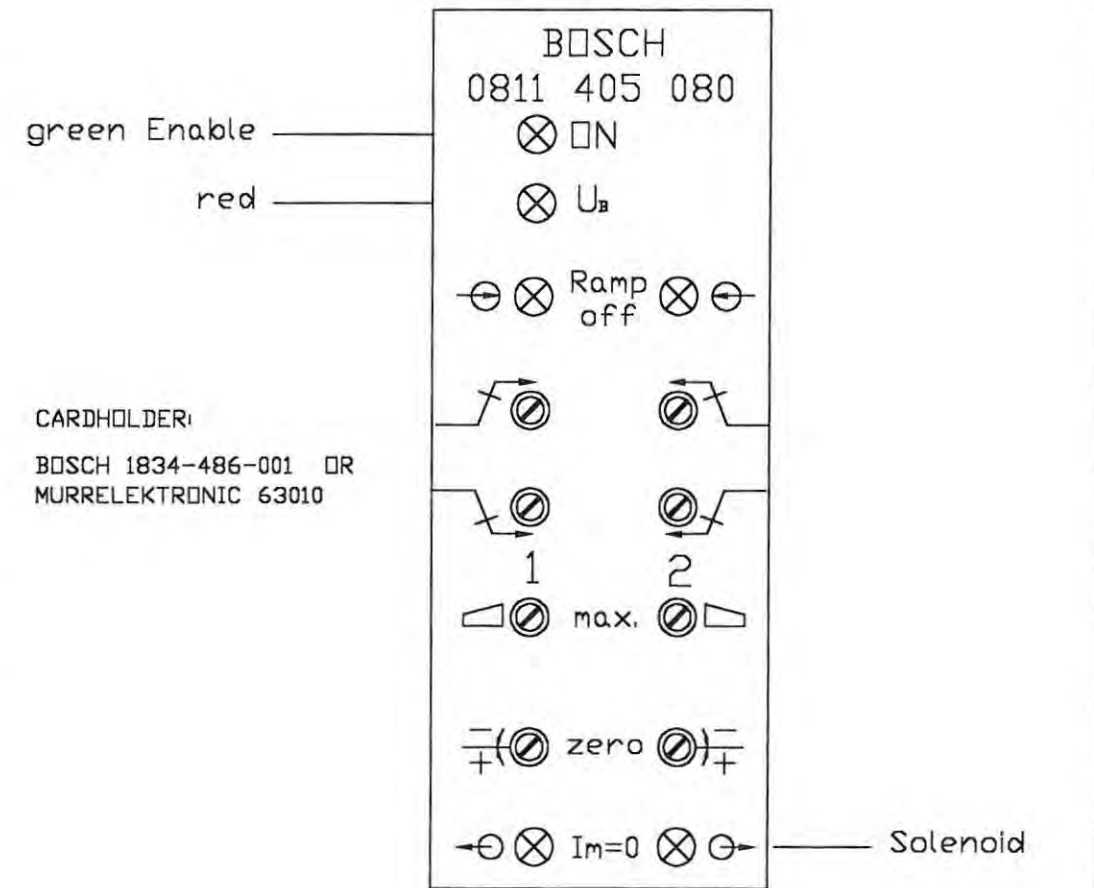
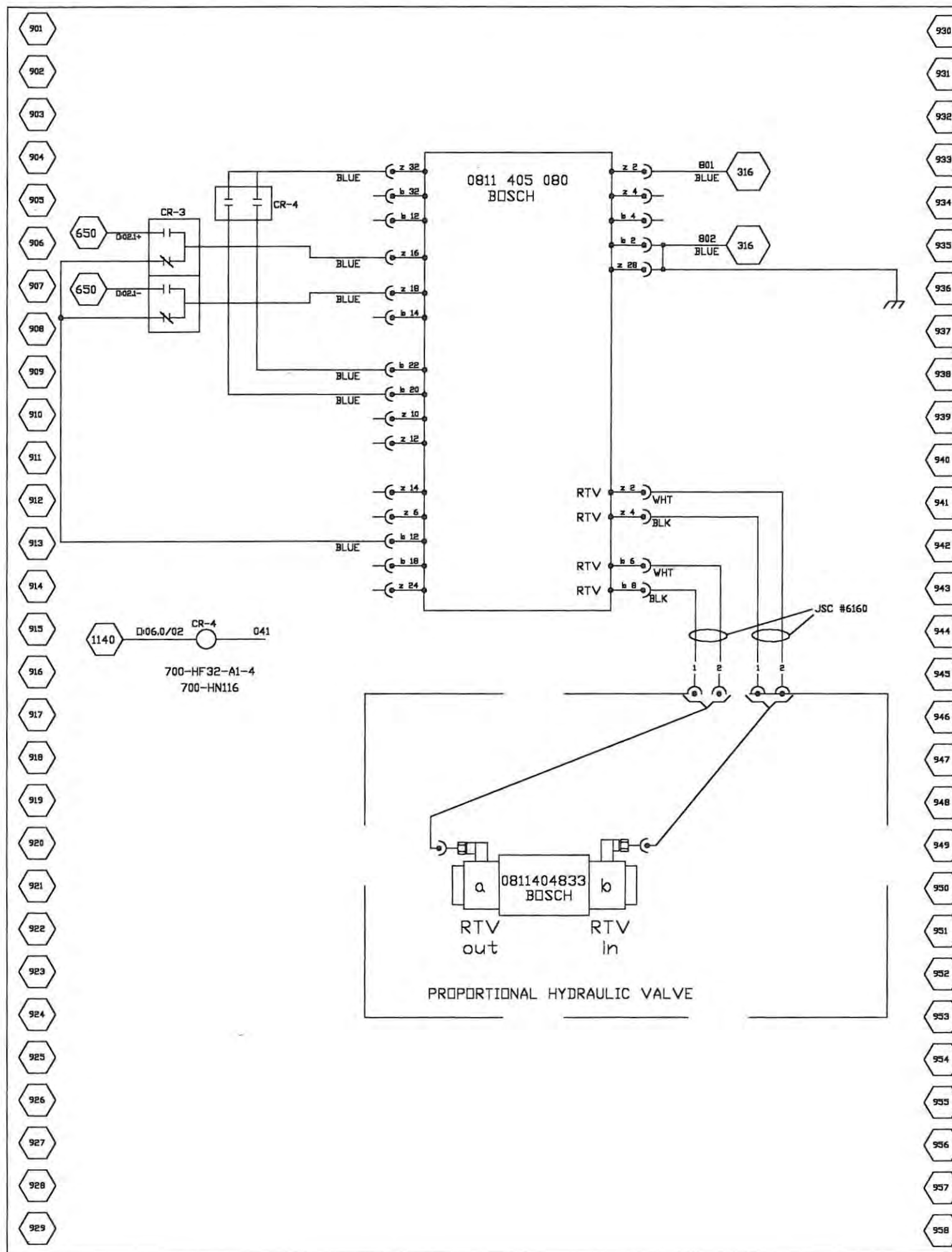
TERMINATING RESISTOR
SCANNER END
CONNECT BETWEEN 1 AND 2
82 Ohm 1/2 WATT
GRAY-RED-BLACK-GOLD



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APPROVALS		DATE	REVISIONS	
DRAWN BY	C. FLETCHER	EMM/000	EMPIRE CASTINGS INC. 3195 REGIONAL PARKWAY SANTA ROSA, CA 95403	
CHECKED BY			ELECTRICAL SCHEMATIC PAGE 7 MMI CAB.	
APPROVED BY			EMPIRE WORK ORDER NO. 1801107	
ENGINEERING			AAPM008	
MANUFACTURING	X		NEXT ASSEMBLY NO. 1801108	
CUSTOMER	AAP BL. Maryn		CUSTOMER PART NO.	
DO NOT SCALE DRAWING		QTY: 1	SCALE: TO FIT	SHEET 7 OF 27

CODE NO. MD-OP-06	SIGNATURE	REF: MD-OP-06 (Sheet 9 of 28)	AAP



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REV	DESCRIPTION	DATE	APP'D
REVISIONS			
APPROVALS		DATE	
DRAWN BY:	C. BLATTNER	DATE:	08/10/00
DESIGNED BY:			
APPROVED BY:			
ENGINEERING			
MANUFACTURING	X		
CUSTOMER	AAP St. Marys		
DO NOT SCALE DRAWING		QTY: 1	SCALE: TO FIT
SHEET 9 OF 27			

EMPIRE CASTINGS INC.	
3195 REGIONAL PARKWAY SANTA ROSA, CA 95403	
ELECTRICAL SCHEMATIC	
PAGE 9 MMI CAB.	
EMPIRE WORK ORDER NO.	EMPIRE DRAWING NO.
AAPM008	1801109
NEXT ASSEMBLY NO.	CUSTOMER PART NO.
1801110	

CODE NO.
MD-OP-06

REF: MD-OP-06
(Sheet 10 of 28)

SIGNATURE

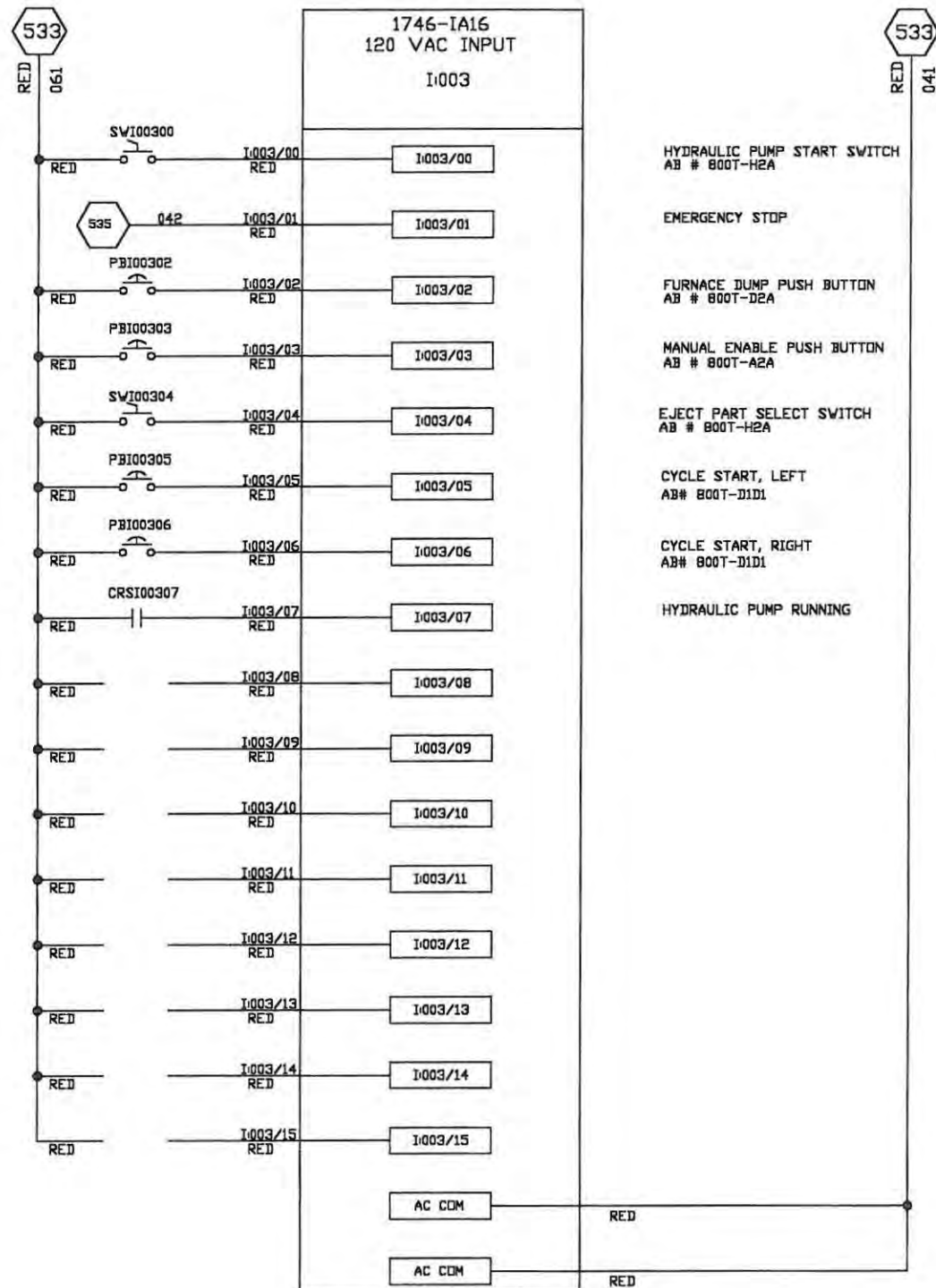
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EFF. DATE 08/10/00

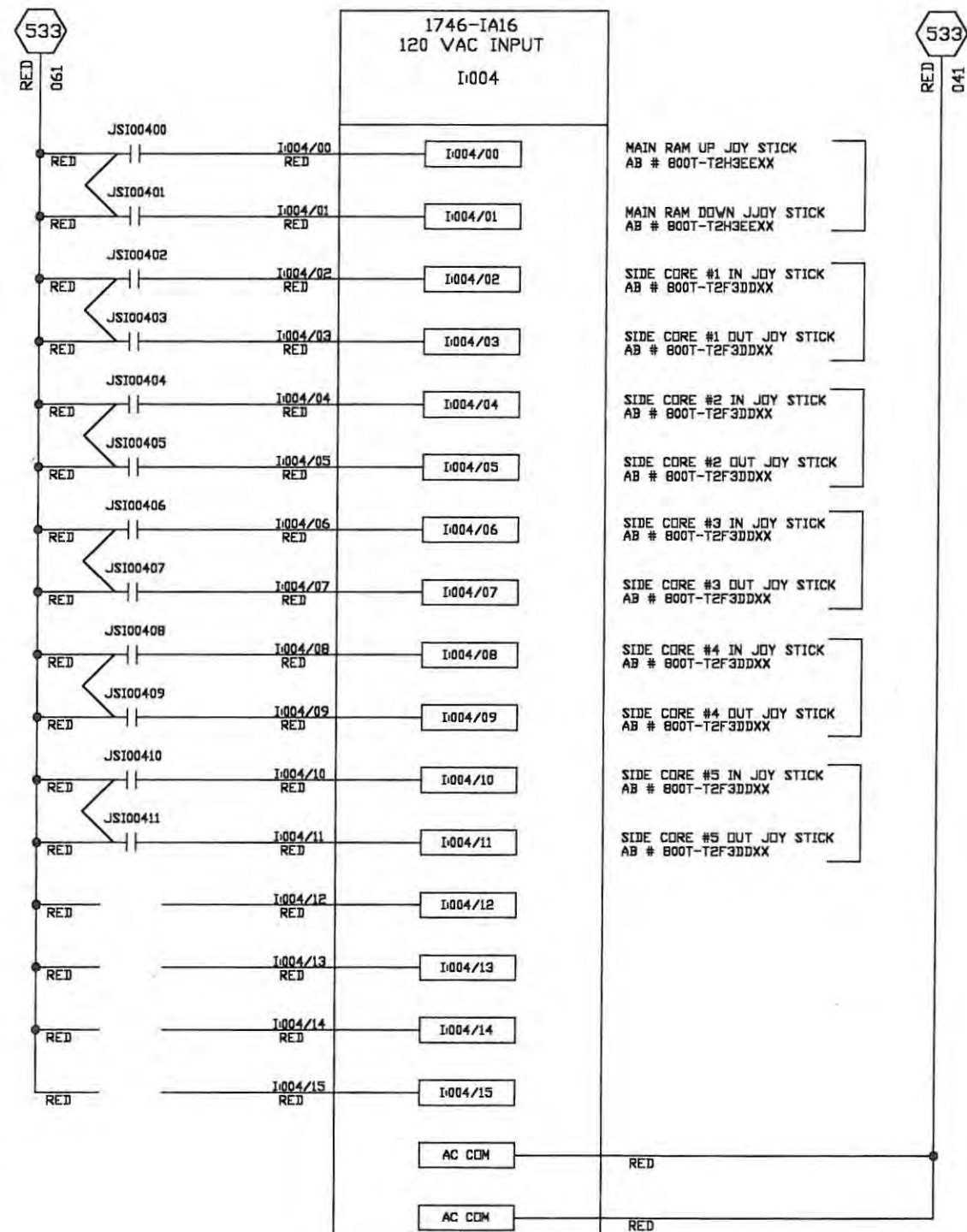
AAP

Part. Machine

Customer Name



CHASSIS #0 SLOT 03



CHASSIS #0 SLOT 04

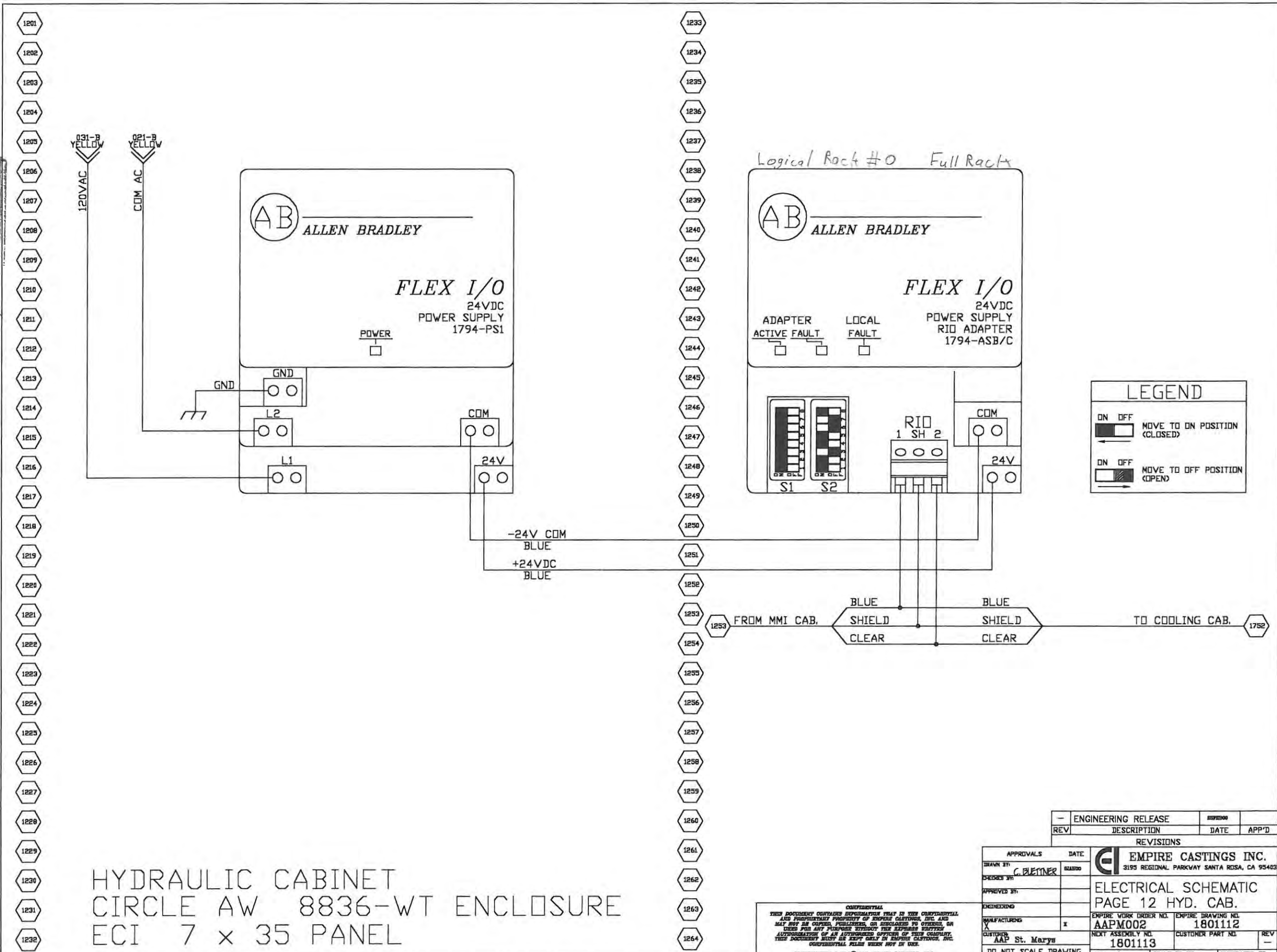
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REVISIONS			
APPROVALS		DATE	
DRAWN BY	C. BUEHNER	RELEASING	
CHECKED BY			
APPROVED BY			
ENGINEERING			
MANUFACTURING	X		
CUSTOMER	AAP St. Marys		
DO NOT SCALE DRAWING	QTY: 1	SCALE TO FIT	SHEET 10 OF 17

EMPIRE CASTINGS INC.	
3195 REGIONAL PARKWAY SANTA ROSA, CA 95403	
ELECTRICAL SCHEMATIC	
PAGE 10 MMI CAB.	
EMPIRE WORK ORDER NO.	EMPIRE DRAWING NO.
AAPM008	1801110
NEXT ASSEMBLY NO.	CHASSIS PART NO.
1801111	

CODE NO. **MD0257**
 REF: **MD-OP-06**
 (Sheet 12 of 28)
 SIGNATURE
 EFF. DATE **08/10/00**



HYDRAULIC CABINET
 CIRCLE AW 8836-WT ENCLOSURE
 ECI 7 x 35 PANEL

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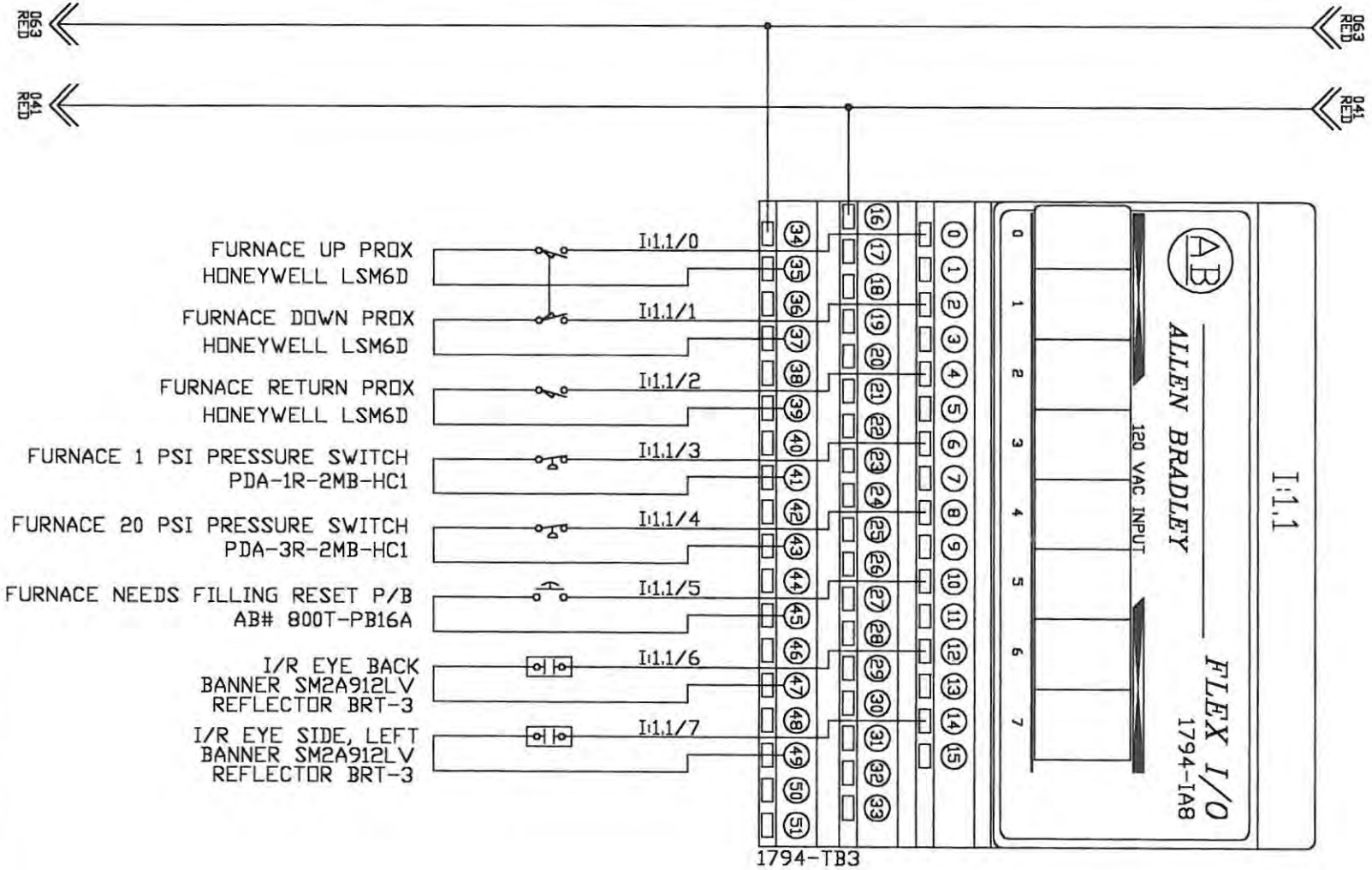
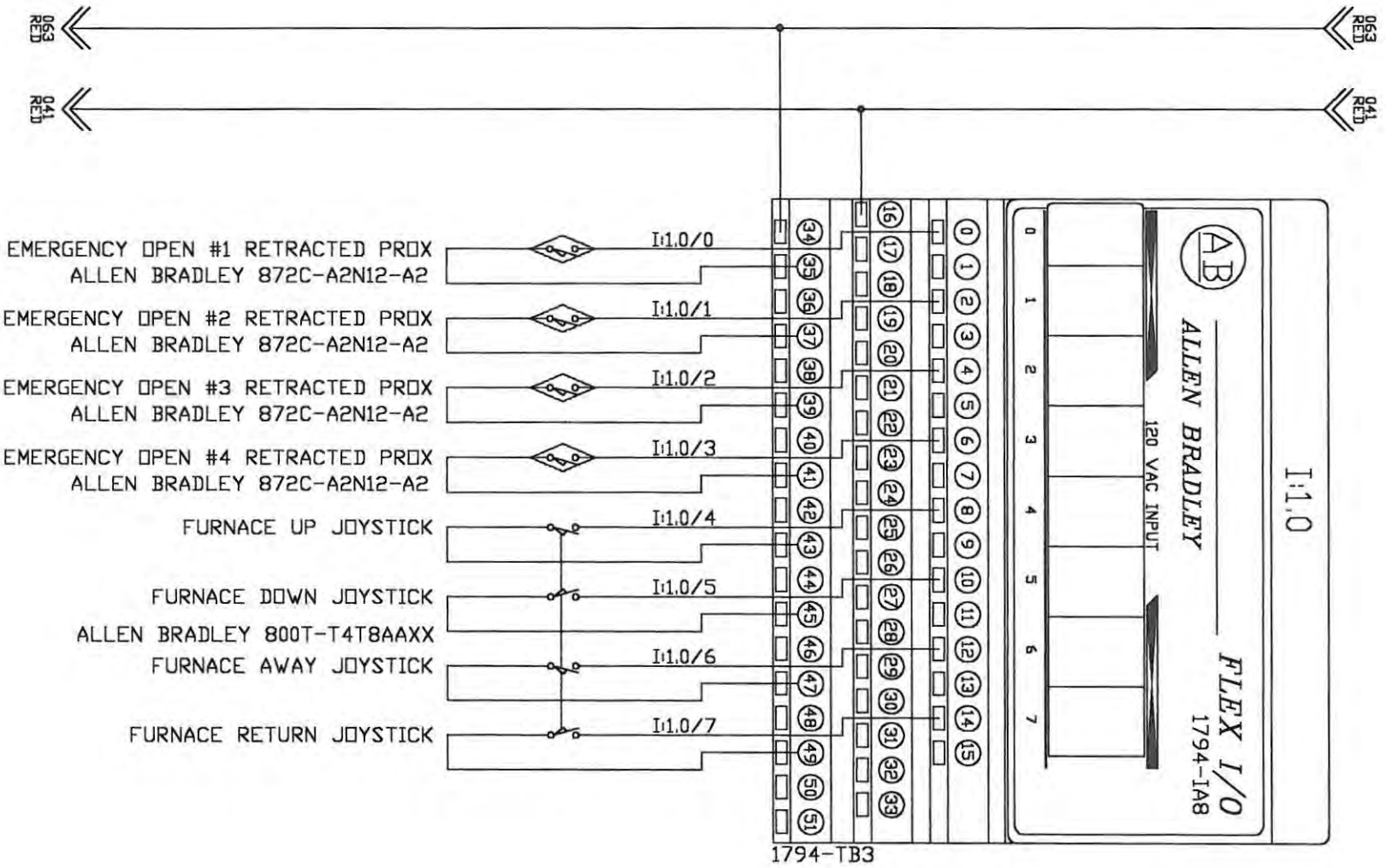
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CHECKED BY:			DATE	APP'D
APPROVED BY:			EMPIRE CASTINGS INC.	
ENGINEERING			3195 REGIONAL PARKWAY SANTA ROSA, CA 95403	
MANUFACTURING	X		ELECTRICAL SCHEMATIC	
CUSTOMER	AAP St. Marys		PAGE 12 HYD. CAB.	
DO NOT SCALE DRAWING			EMPIRE WORK ORDER NO.	EMPIRE DRAWING NO.
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			NEXT ASSEMBLY NO.	CUSTOMER PART NO.
			1801113	
			QTY: 1	SCALE TO FIT
				SHEET 1 OF 37

CODE NO.
MD0257
EFF. DATE 08/10/00

SIGNATURE

REF: MD-OP-06
(Sheet 13 of 28)

AAP
W.T. HARRIS
CORPORATION

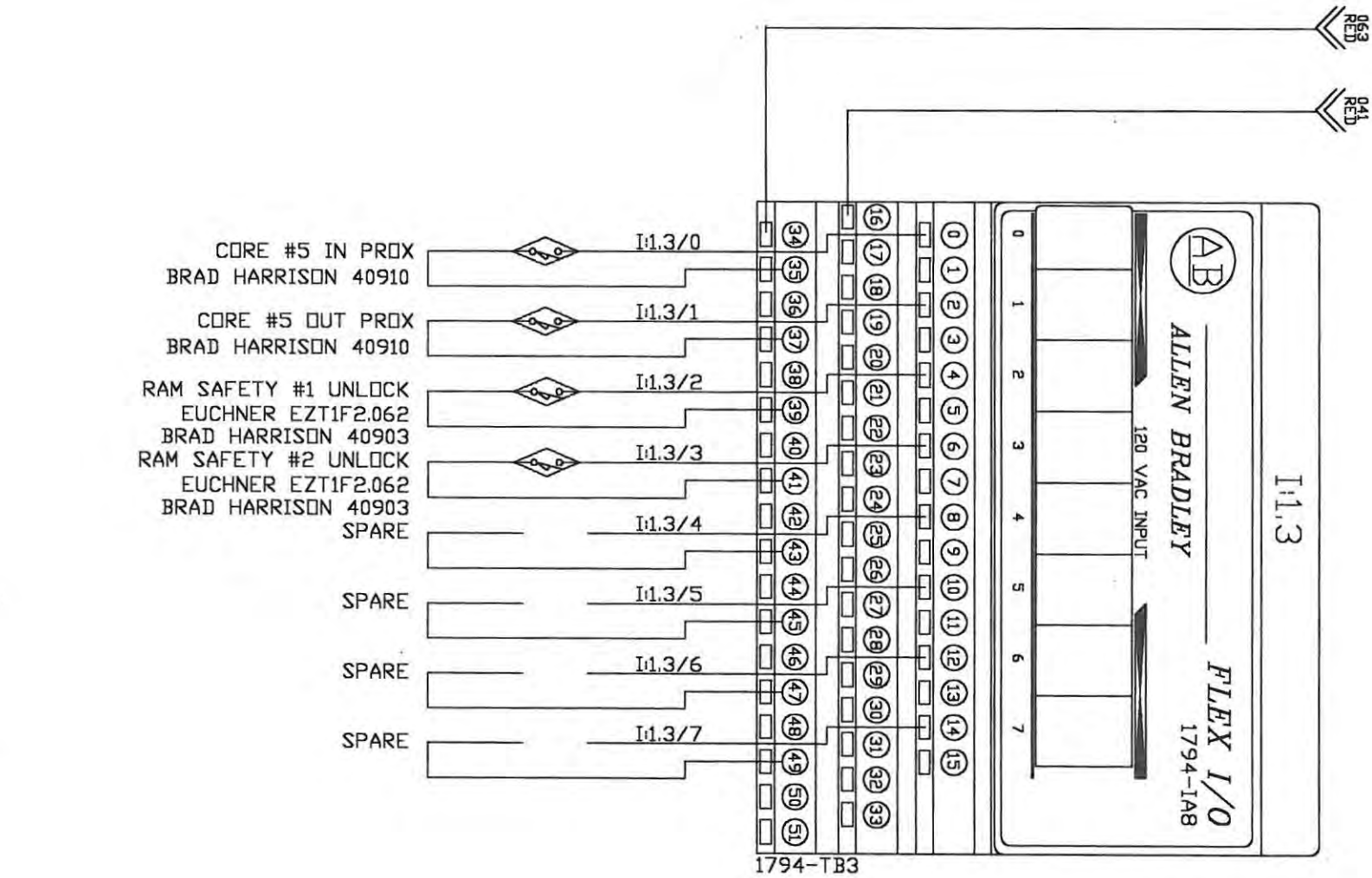
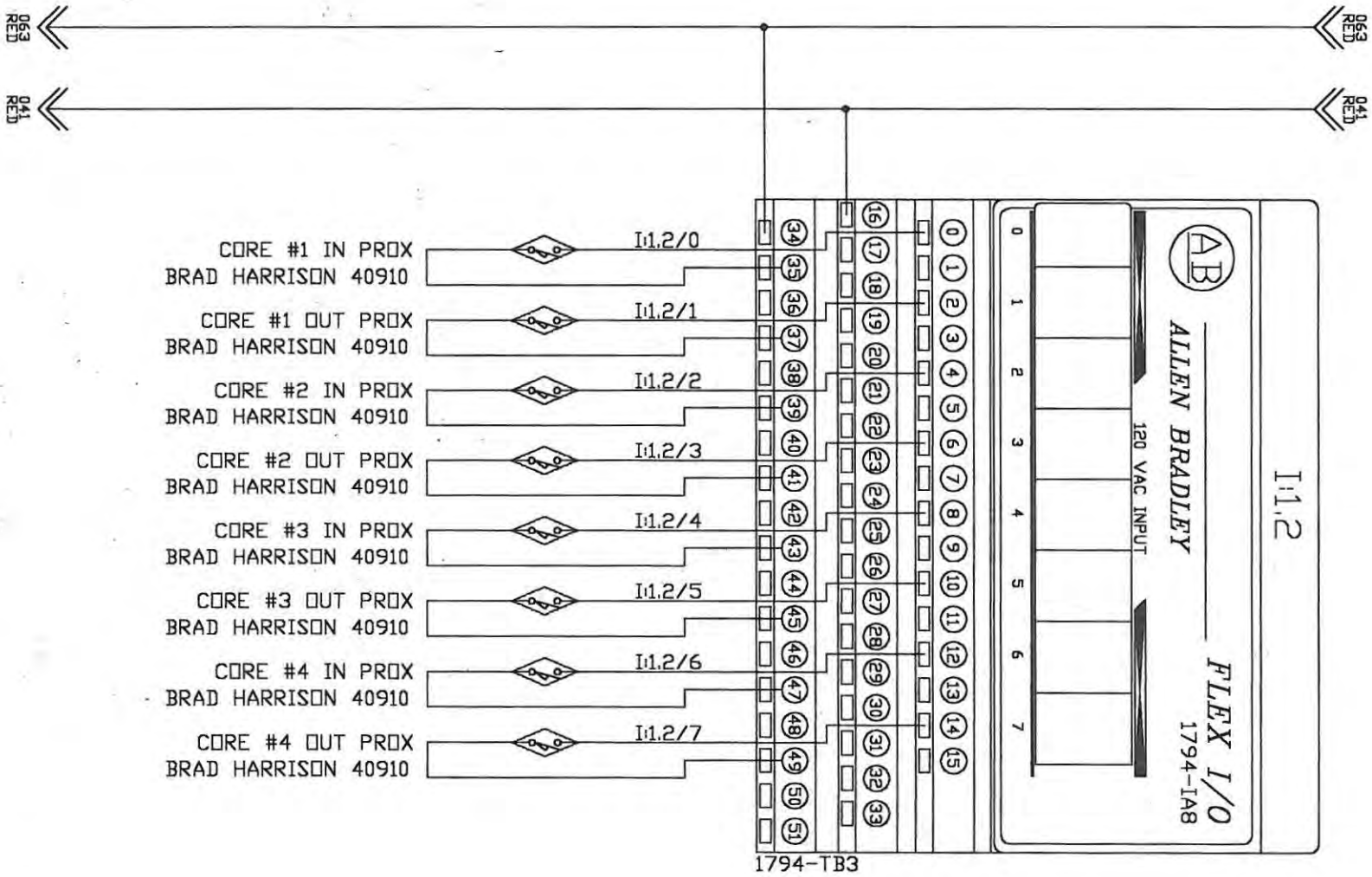


NOTE:
CENTERLINE OF I/R EYE IS 14"
ABOVE TOP OF BOTTOM PLATEN

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APPROVALS	DATE	REVISIONS
DESIGNED BY: C. FLENNER	DATE: 08/10/00	1. INITIAL DESIGN
CHECKED BY: C. FLENNER	DATE: 08/10/00	2. REVISED FOR I/R EYE
APPROVED BY: C. FLENNER	DATE: 08/10/00	3. FINAL APPROVAL
ENGINEER: C. FLENNER	DATE: 08/10/00	4. ELECTRICAL SCHEMATIC
DRAWN BY: AAP	DATE: 08/10/00	5. ELECTRICAL SCHEMATIC
CHECKED BY: AAP	DATE: 08/10/00	6. ELECTRICAL SCHEMATIC
APPROVED BY: AAP	DATE: 08/10/00	7. ELECTRICAL SCHEMATIC
ENGINEER: AAP	DATE: 08/10/00	8. ELECTRICAL SCHEMATIC
DRAWN BY: AAP	DATE: 08/10/00	9. ELECTRICAL SCHEMATIC
CHECKED BY: AAP	DATE: 08/10/00	10. ELECTRICAL SCHEMATIC
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APPROVED BY: AAP	DATE: 08/10/00	63. ELECTRICAL SCHEMATIC
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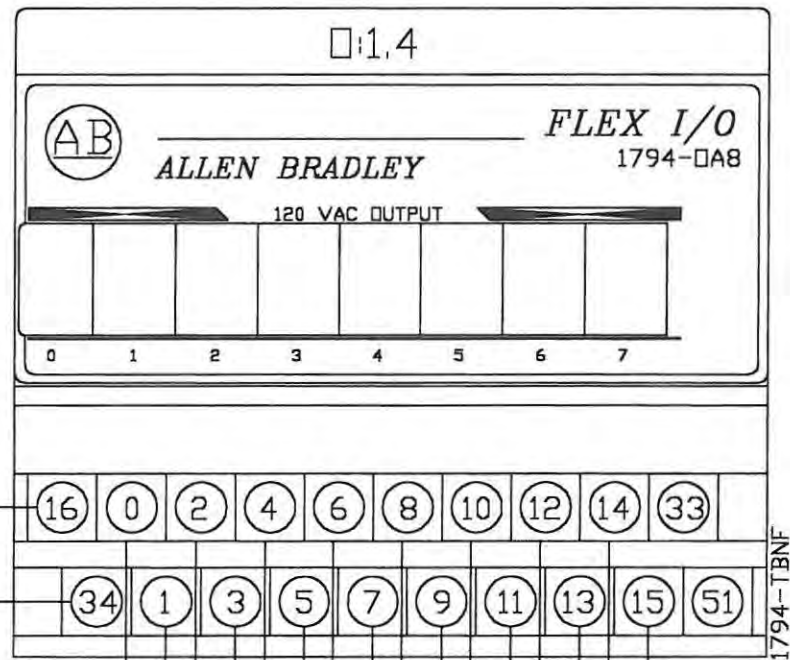
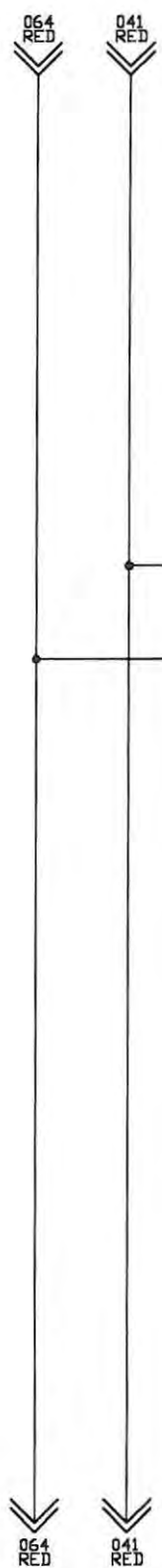
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EFF. DATE 08/10/00			



REVISIONS		APPROVALS	
REV	DESCRIPTION	DATE	REVISION
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2	DATE		APP'D
ELECTRICAL SCHEMATIC			
PAGE 14 HYD. CAB.			
EMPIRE CASTINGS INC.			
3155 REGIONAL PARKWAY SANTA ROSA, CA 95403			
DRAWN BY: C. BLUMER			
CHECKED BY: [Signature]			
APPROVED BY: [Signature]			
DATE: 08/10/00			
NEXT ASSEMBLY NO. 1801114			
CHASSIS PART NO. 1801115			
REV			
BY: 1			
SHEET 14 OF 28			

CODE NO.	SIGNATURE	REF:	AAP
MD0757		MD-0P-06	
EFF. DATE 08/10/00		(Sheet 15 of 28)	

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RAM SAFETY OUT S/V
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EMERGENCY EXTEND S/V
BOSCH 9810-231-011

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BOSCH 9810-231-011

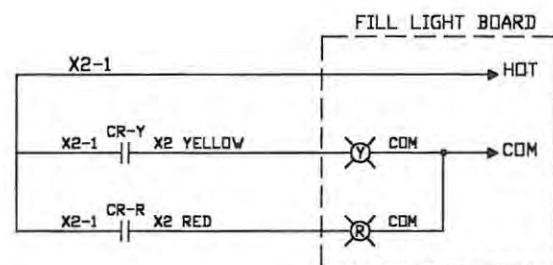
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RED FILL LIGHT RELAY
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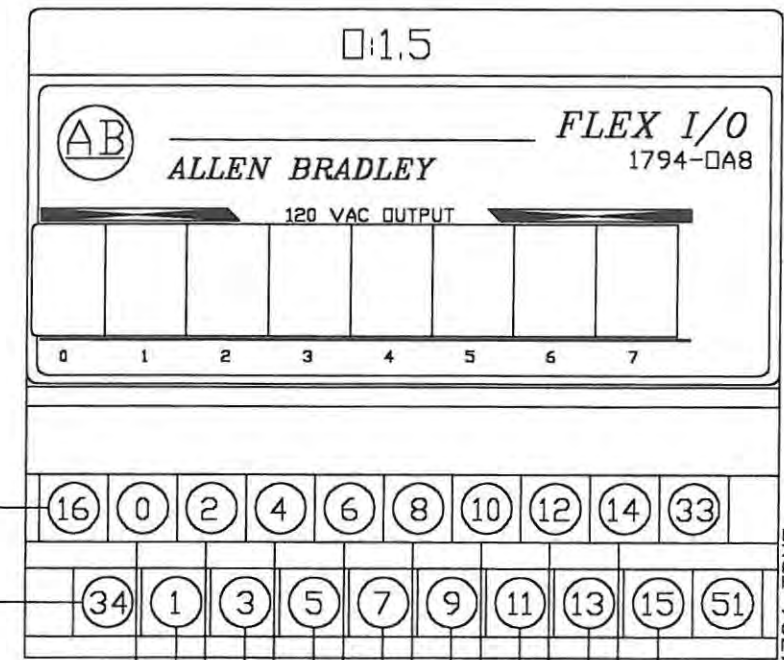
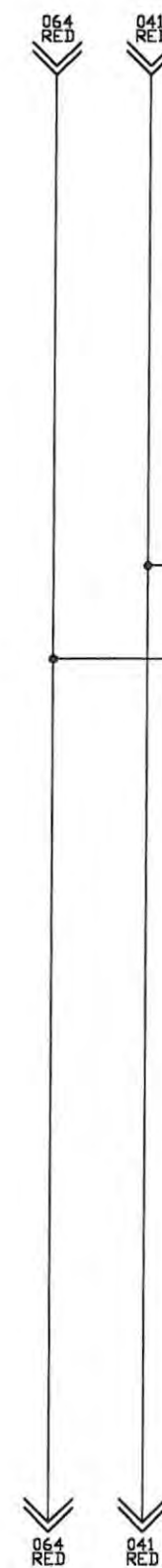
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CORE #1 IN S/V
BOSCH 9810-231-004

CORE #1 OUT S/V



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CORE #2 IN S/V
BOSCH 9810-231-004

CORE #2 OUT S/V

CORE #3 IN S/V
BOSCH 9810-231-004

CORE #3 OUT S/V

CORE #4 IN S/V
BOSCH 9810-231-004

CORE #4 OUT S/V

CORE #5 IN S/V
BOSCH 9810-231-004

CORE #5 OUT S/V

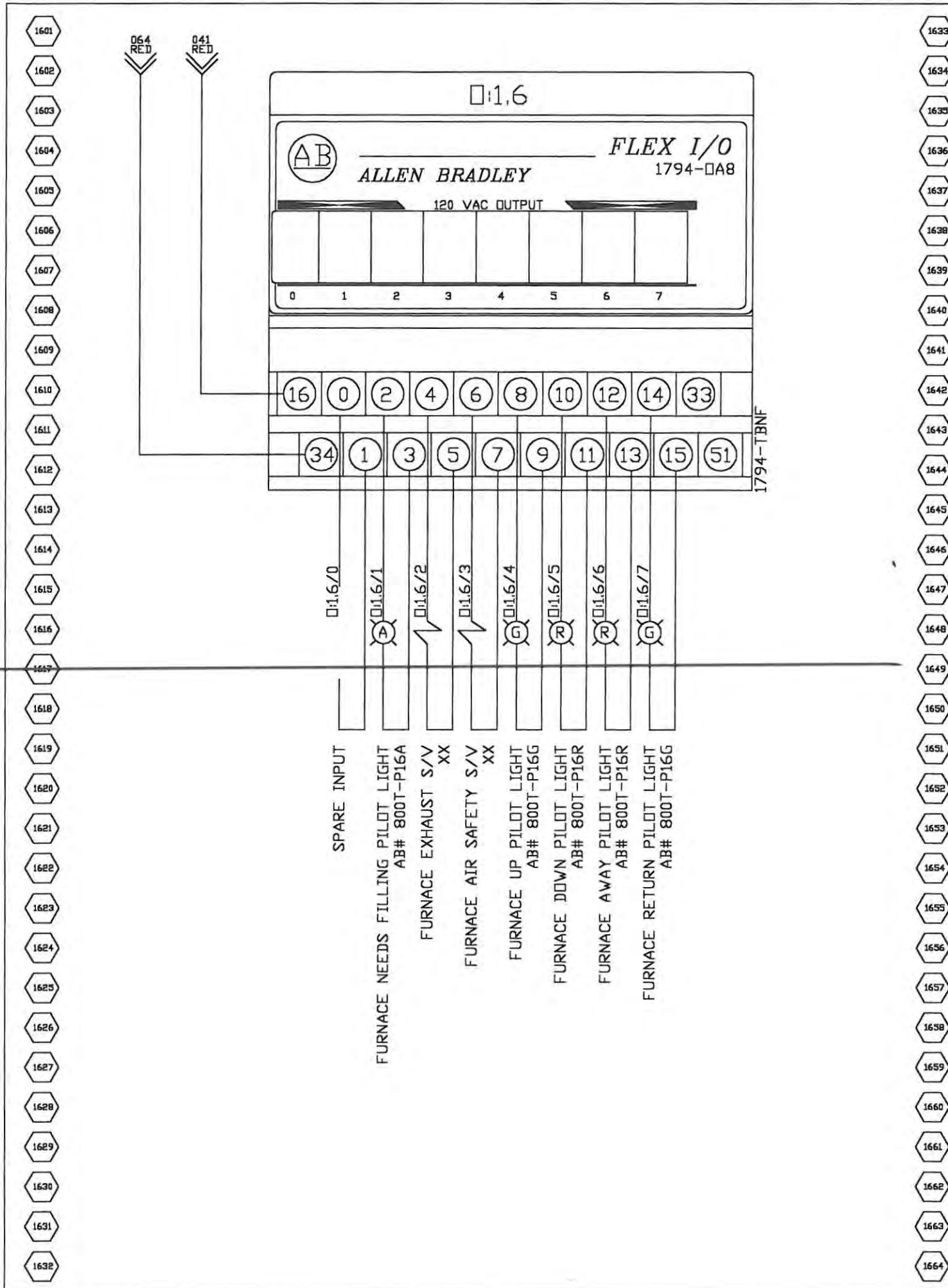
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APPROVALS		DATE	REVISIONS	
DRAWN BY	C. BLETNER	REVISION	DESCRIPTION	DATE
CHECKED BY				
APPROVED BY				
ENGINEERING				
MANUFACTURING				
CUSTOMER	AAP St. Marys			
DO NOT SCALE DRAWING				

EMPIRE CASTINGS INC.	
3195 REGIONAL PARKWAY SANTA ROSA, CA 95403	
ELECTRICAL SCHEMATIC	
PAGE 15 HYD. CAB.	
EMPIRE WORK ORDER NO.	EMPIRE DRAWING NO.
AAPM008	1801115
NEXT ASSEMBLY NO.	CUSTOMER PART NO.
1801116	
QTY: 1	SCALE TO FIT
SHEET 15 OF 27	

CODE NO.	SIGNATURE	REF:	AAP
M00257		MD-OP-06	
EFF. DATE 08/10/00		(Sheet 16 of 28)	



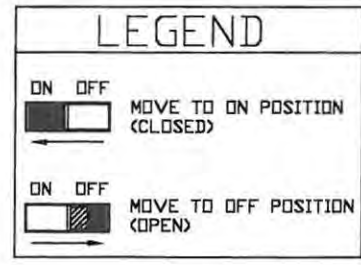
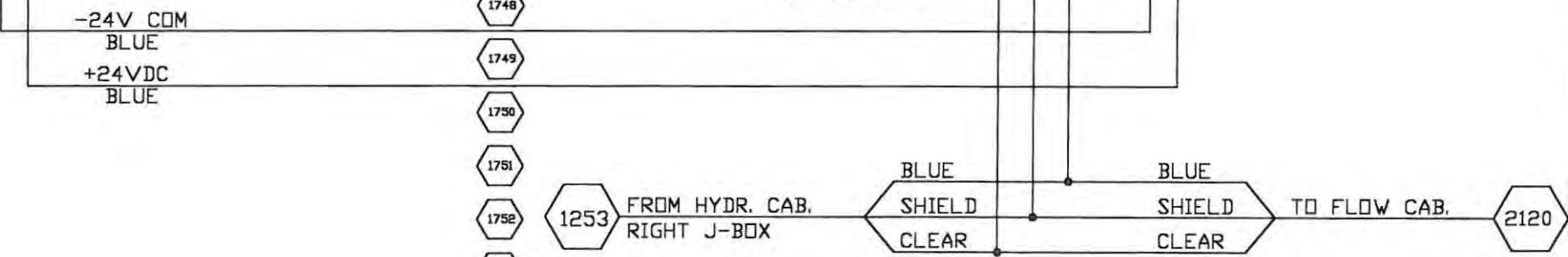
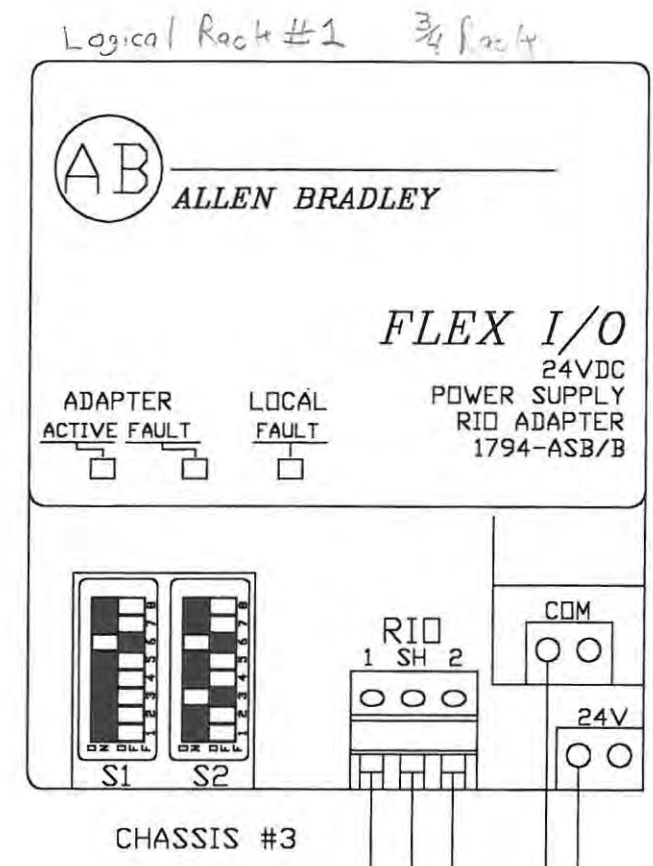
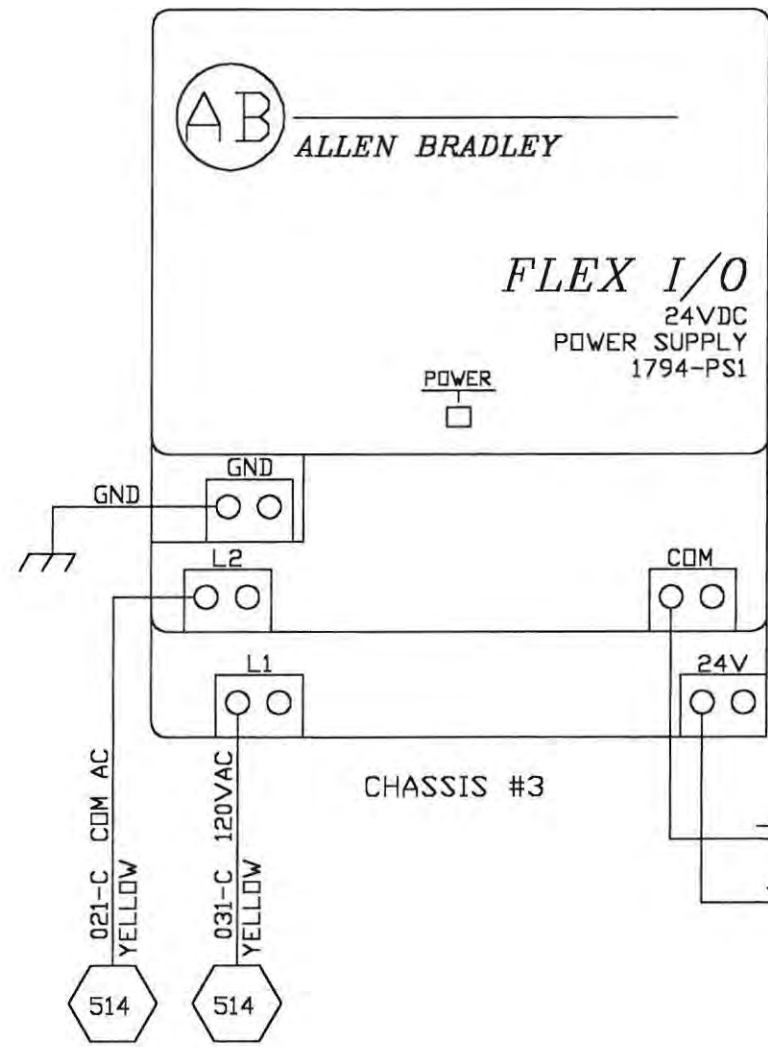
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- ENGINEERING RELEASE		REVISIONS	
REV	DESCRIPTION	DATE	APP'D
REVISIONS			
APPROVALS		DATE	
DRAWN BY: C. BLETNER	DESIGNED BY: BSM/000		
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CUSTOMER: AAP St. Marys			
DO NOT SCALE DRAWING		QTY: 1	SCALE TO FIT

EMPIRE CASTINGS INC.	
3195 REGIONAL PARKWAY SANTA ROSA, CA 95403	
ELECTRICAL SCHEMATIC	
PAGE 16 HYDR. CAB.	
EMPIRE WORK ORDER NO.	EMPIRE DRAWING NO.
AAPM008	1801116
NEXT ASSEMBLY NO.	CUSTOMER PART NO.
1801117	
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CODE NO. MDO287
REF: MD-OP-06
SIGNATURE
EFFECT. DATE 08/10/00
AAP ST. MARYS CORPORATION
(Sheet 17 of 28)



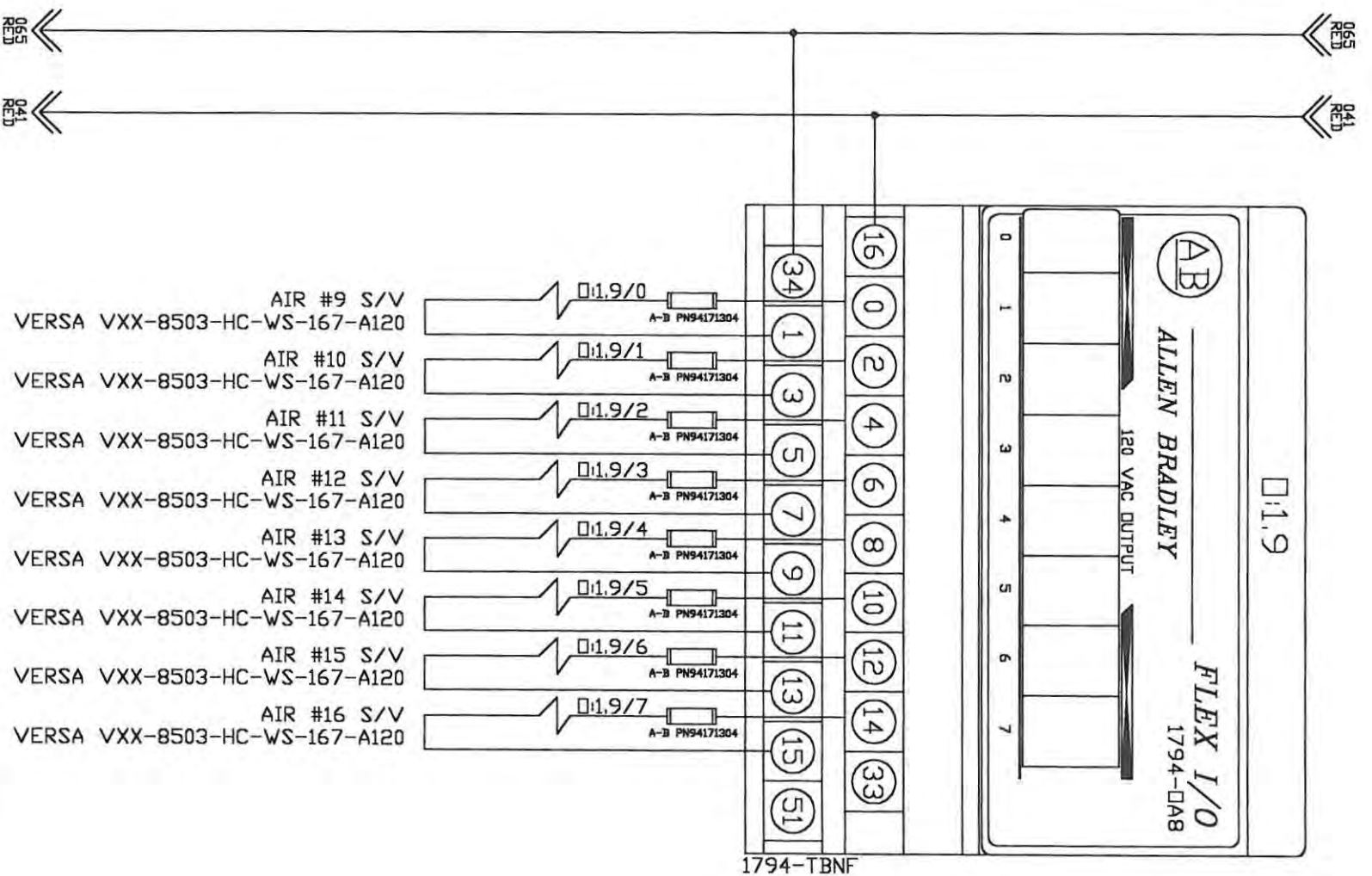
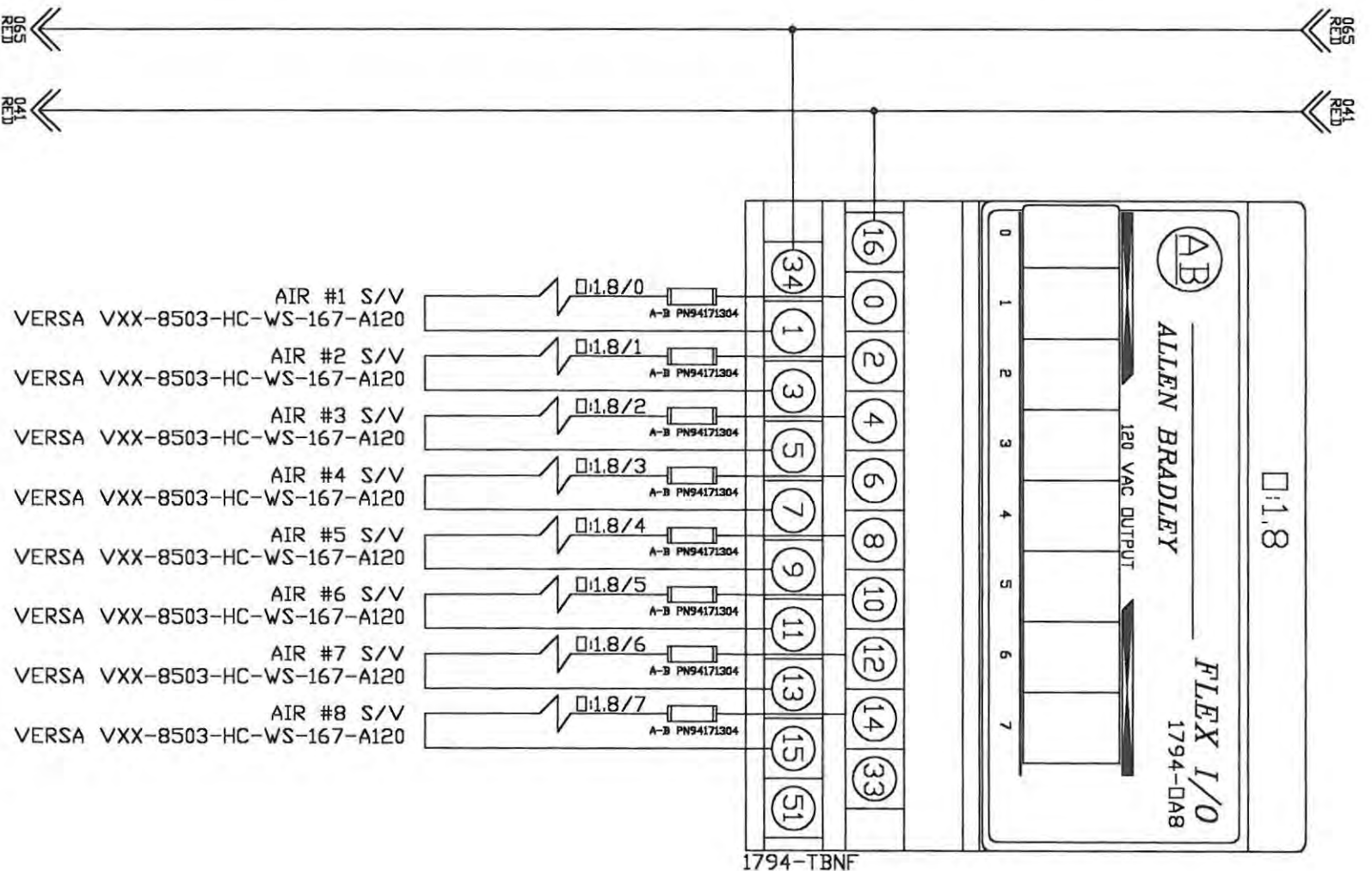
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CIRCLE AW 8836-WT ENCLOSURE
ECI 7 x 35 PANEL

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APPROVALS		DATE	REVISIONS	
DRAWN BY	C. BLETNER	08/10/00	REV	DESCRIPTION
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DO NOT SCALE DRAWING		QTY: 1	SCALE TO FIT	SHEET 18 OF 27

EMPIRE CASTINGS INC.	3195 REGIONAL PARKWAY SANTA ROSA, CA 95403
ELECTRICAL SCHEMATIC	
PAGE 17 COOLING CAB.	
EMPIRE WORK ORDER NO.	EMPIRE DRAWING NO.
AAPM008	1801117
NEXT ASSEMBLY NO.	CUSTOMER PART NO.
1801118	

CODE NO. MD0257	SIGNATURE	REF: MD-OP-06 (Sheet 18 of 28)	AAP PT. HARRIS CORPORATION
EFF. DATE 08/10/00			



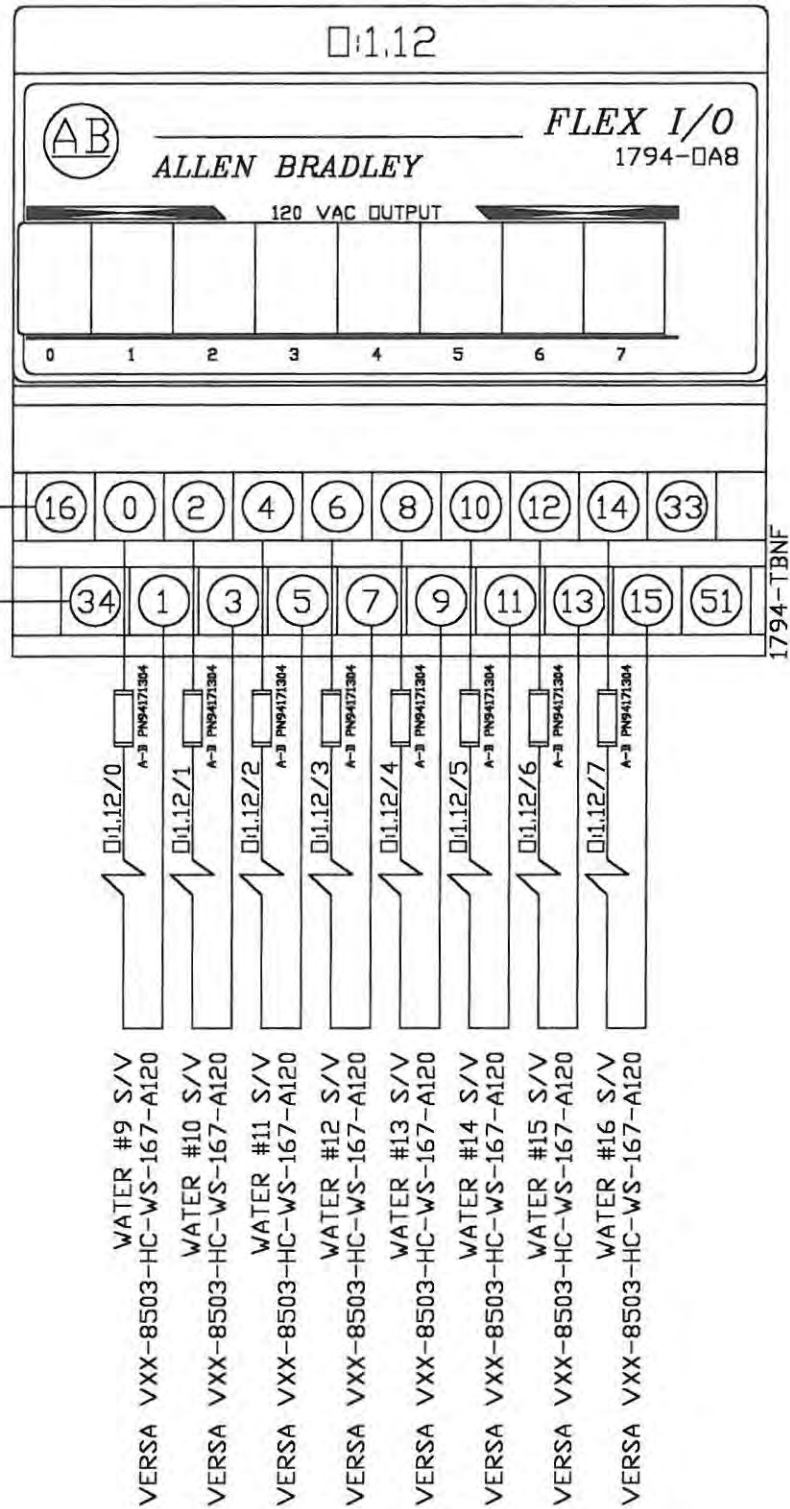
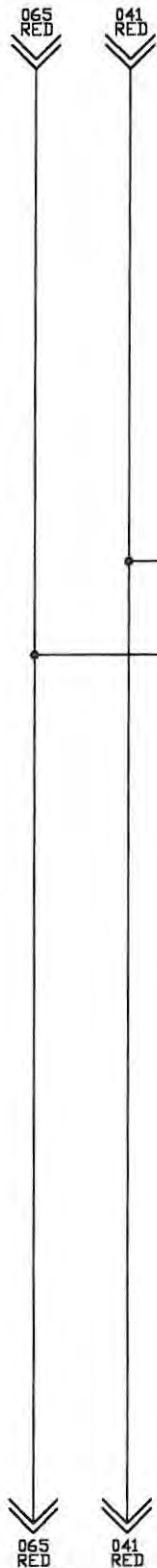
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REV	DESCRIPTION			

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CUSTOMER APP. St. Mary's		

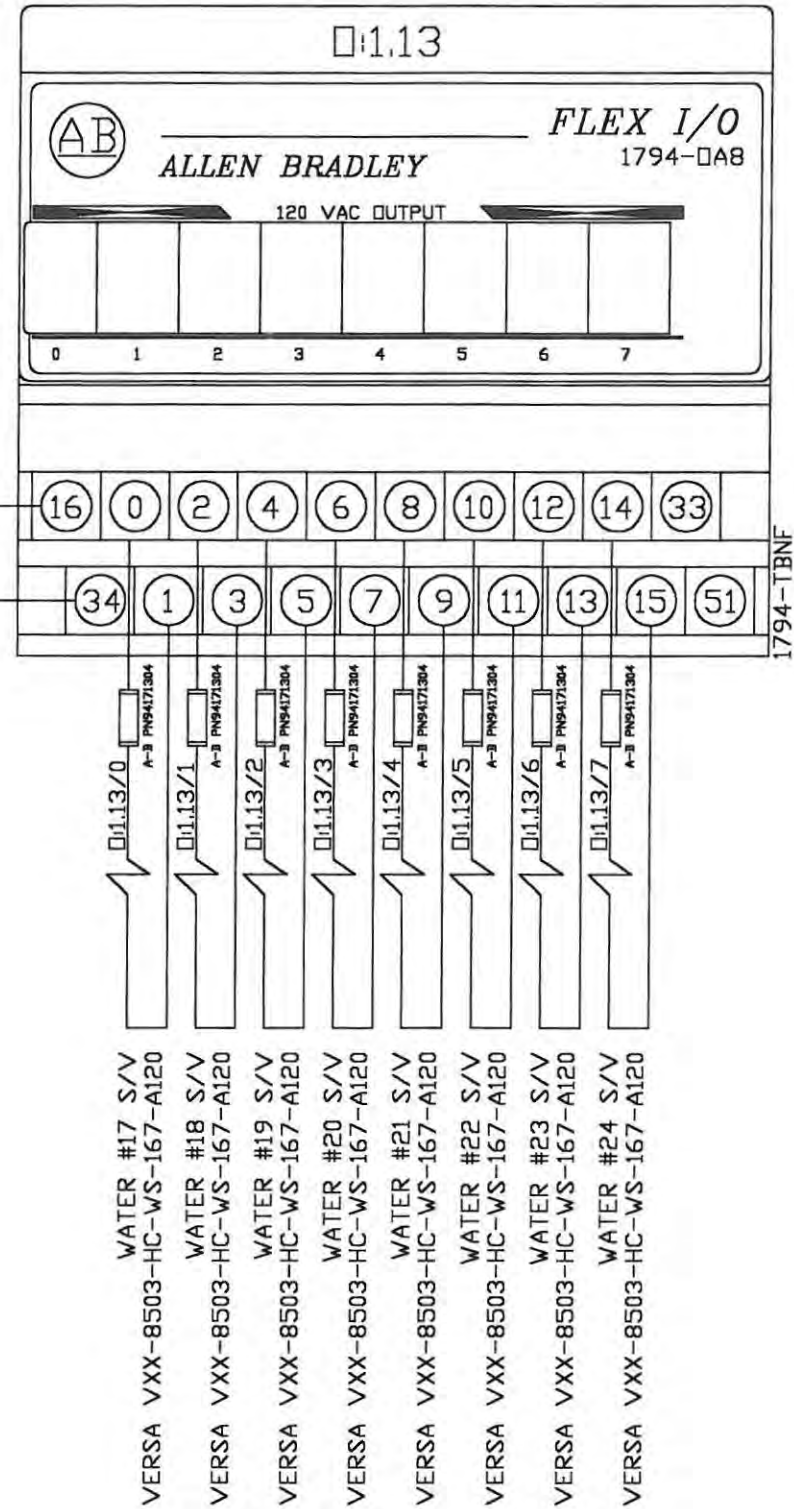
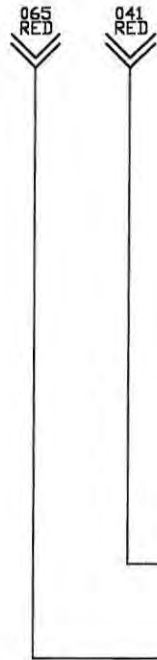
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NEXT ASSEMBLY NL	CUSTOMER PART NL	REV	DATE
1801119			
QTY: 1	SCALE TO FIT	SHEET 18 OF 27	

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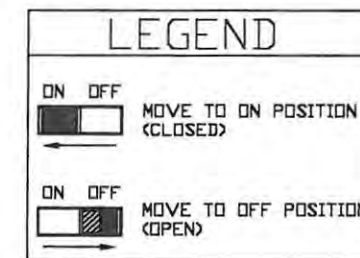
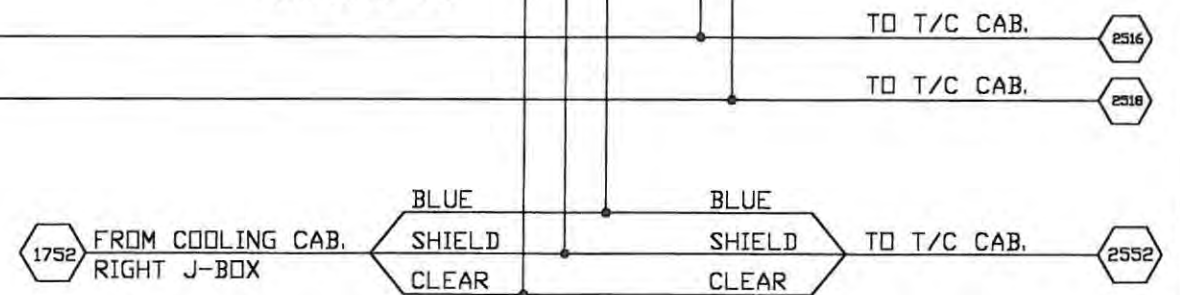
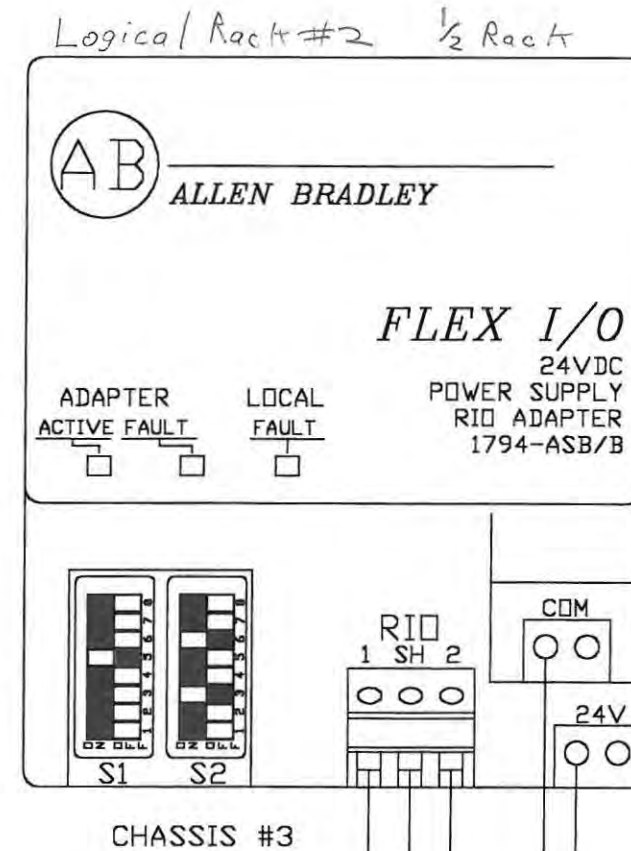
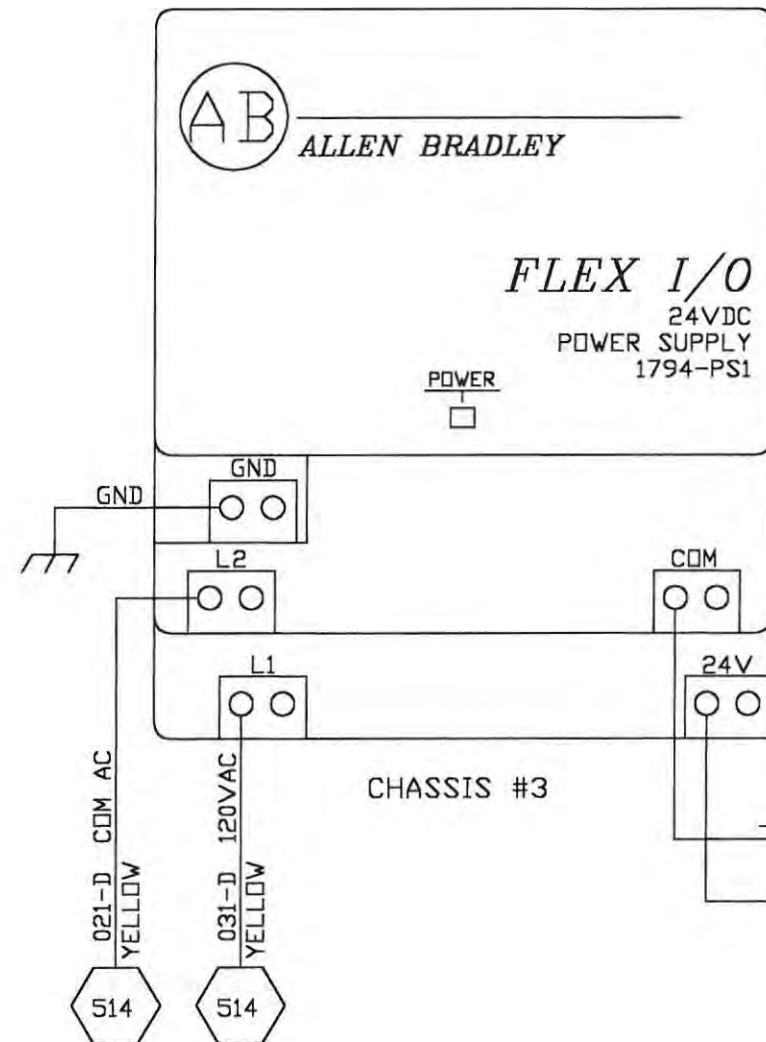
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- ENGINEERING RELEASE		REVISION	
REV	DESCRIPTION	DATE	APP'D
REVISIONS			
APPROVALS		DATE	
DRAWN BY	C. BLUMER	10/00	
CHECKED BY			
APPROVED BY			
ENGINEERING			
MANUFACTURING			
CUSTOMER	AAP St. Marys		
DO NOT SCALE DRAWING		QTY: 1	SCALE TO FIT

EMPIRE CASTINGS INC.	
3195 REGIONAL PARKWAY SANTA ROSA, CA 95403	
ELECTRICAL SCHEMATIC	
PAGE 20 COOLING CAB.	
EMPIRE WORK ORDER NO.	EMPIRE DRAWING NO.
AAPM008	1801120
NEXT ASSEMBLY NO.	CHASSIS PART NO.
1801121	
REV	

REF: MD-OP-06 (Sheet 21 of 28)	
CODE NO. MD 0257	SIGNATURE
EFF. DATE 08/10/00	



FLOW CABINET
 CIRCLE AW 8836-WT ENCLOSURE
 ECI 7 x 35 PANEL

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APPROVALS		DATE	REVISIONS	
DRAWN BY	G. BLUETNER	08/10/00	REV	DESCRIPTION
CHECKED BY			DATE	APP'D
APPROVED BY			EMPIRE CASTINGS INC.	
ENGINEERING			3195 REGIONAL PARKWAY SANTA ROSA, CA 95403	
MANUFACTURING			ELECTRICAL SCHEMATIC	
CUSTOMER			PAGE 21 FLOW CAB.	
DO NOT SCALE DRAWING			EMPIRE WORK ORDER NO. 1801122	
			NEXT ASSEMBLY NO. 1801122	
			CHASSIS PART NO.	
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			SHEET 21 OF 27	

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LOCATION:
FURNACE MMI

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RED

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YELLOW

802
blue

AAP Dist. agents
OCCUPATIONAL MEDICINE

SIGNATURE

CODE NO. MD0257

EFF. DATE 08/10/00

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UNPUBLISHED WORK 1968 KNOTTER CASTLE, INC.

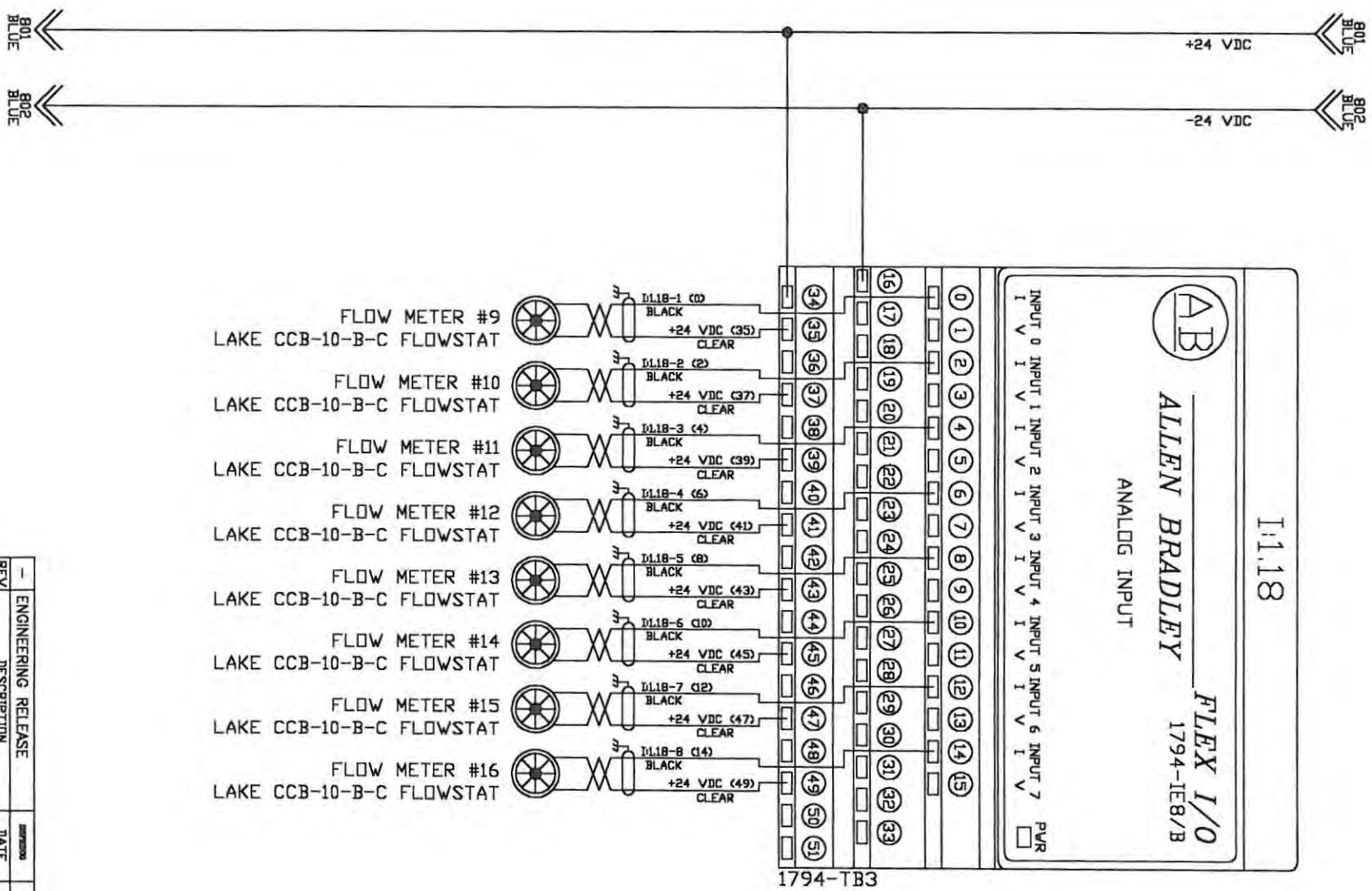
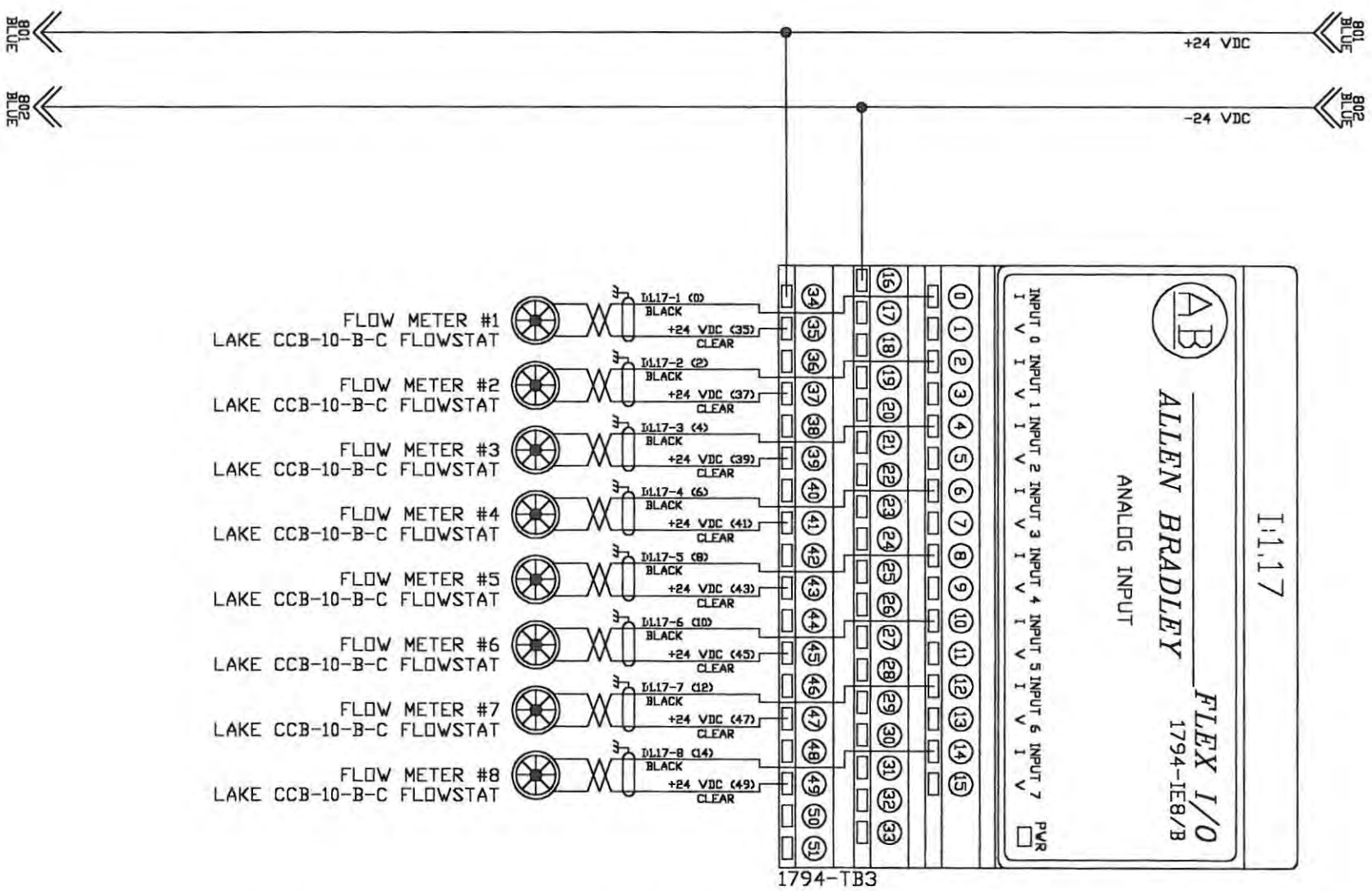
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REVISIONS			

APPROVALS		DATE	 EMPIRE CASTINGS INC. 3195 REGIONAL PARKWAY SANTA ROSA, CA 95405
DRAWN BY	C. PLETTNER	ISSUED	
CHECKED BY			
APPROVED BY			
ENGINEERING			
MANUFACTURED	X		
CUSTOMER AAP St. Marys			ELECTRICAL SCHEMATIC PAGE 22 FLOW CAB.
DO NOT SCALE DRAWING		EMPIRE WORK ORDER NO. AAPM008	EMPIRE DRAWING NO. 1801122
		NEXT ASSEMBLY NO. 1801123	CHASSIS PART NO. _____
		QTY: 1	SCALE: TO FIT
		SHEET 22 OF 27	

CODE NO. M00258
EXP. DATE 08/10/00

SIGNATURE

REF: MD-OP-06
(Sheet 23 of 28)



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CODE NO.

MD-OP-06

SIGNATURE

REF.

MD-OP-06

EFF. DATE

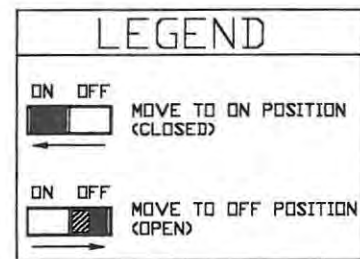
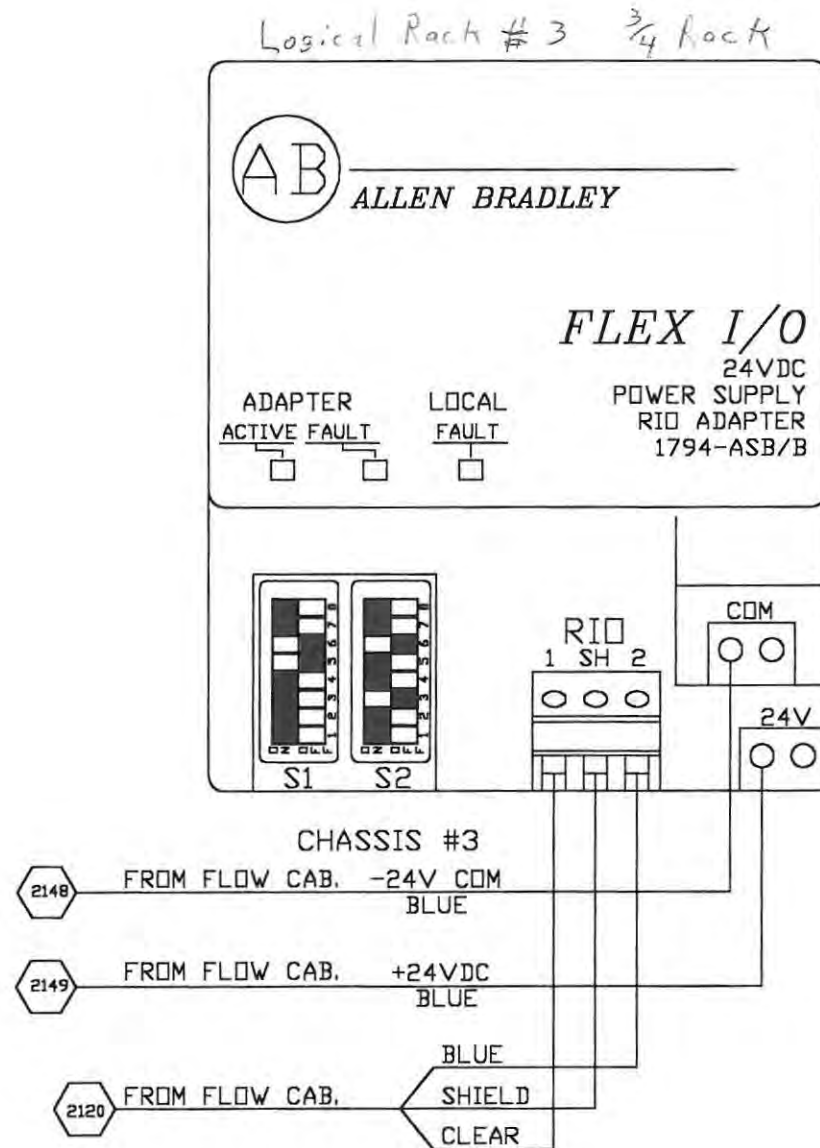
08/16/00

AAP

ST. MARYS

CORPORATION

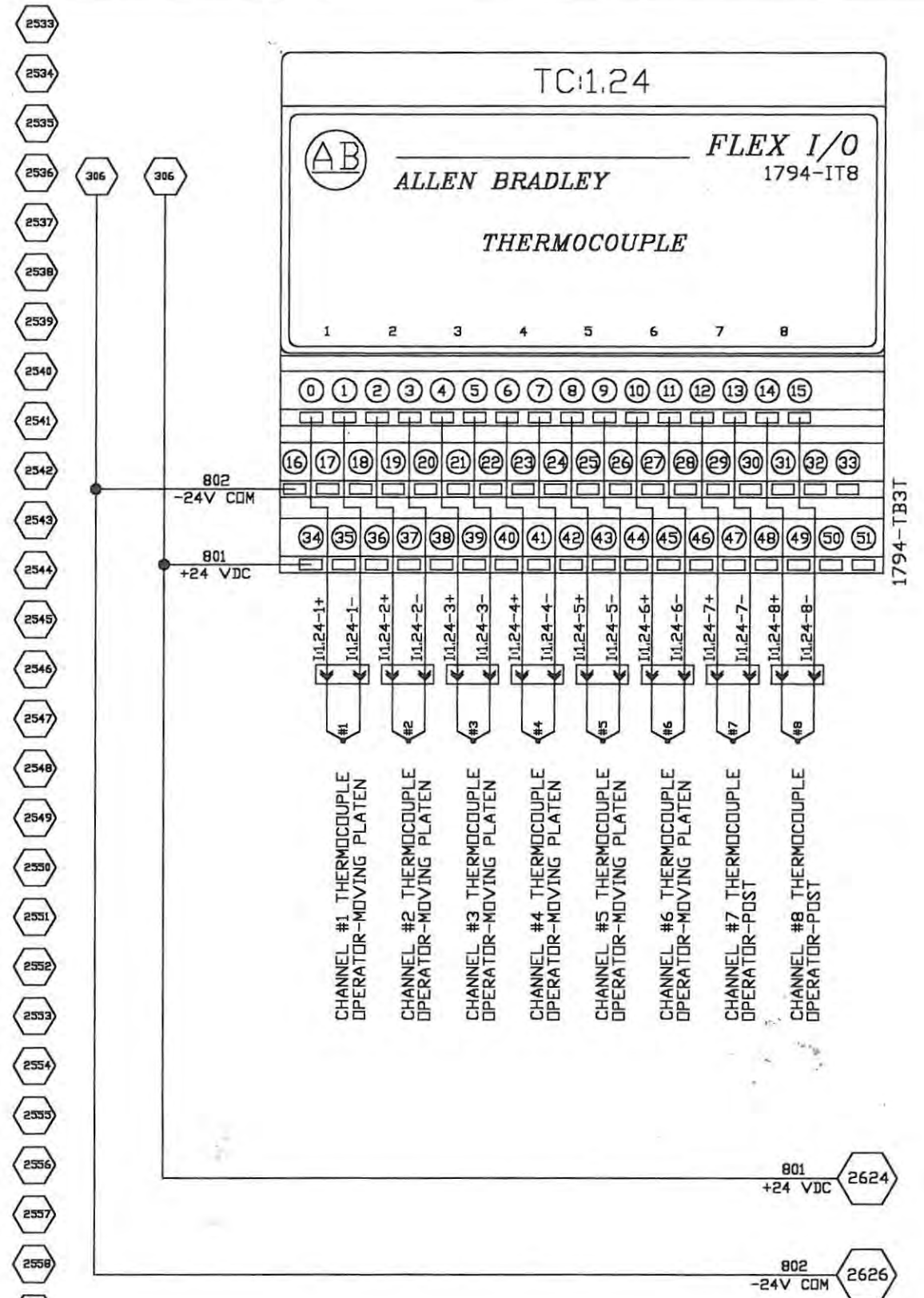
Sheet 25 of 28



T/C CABINET

CIRCLE AW 8836-WT ENCLOSURE

ECI 7 x 35 PANEL



NOTE: CUSTOMER SUPPLIED TYPE "K" THERMOCOUPLES.

T/C TERMINAL BOX

RJPCB-6-K-F

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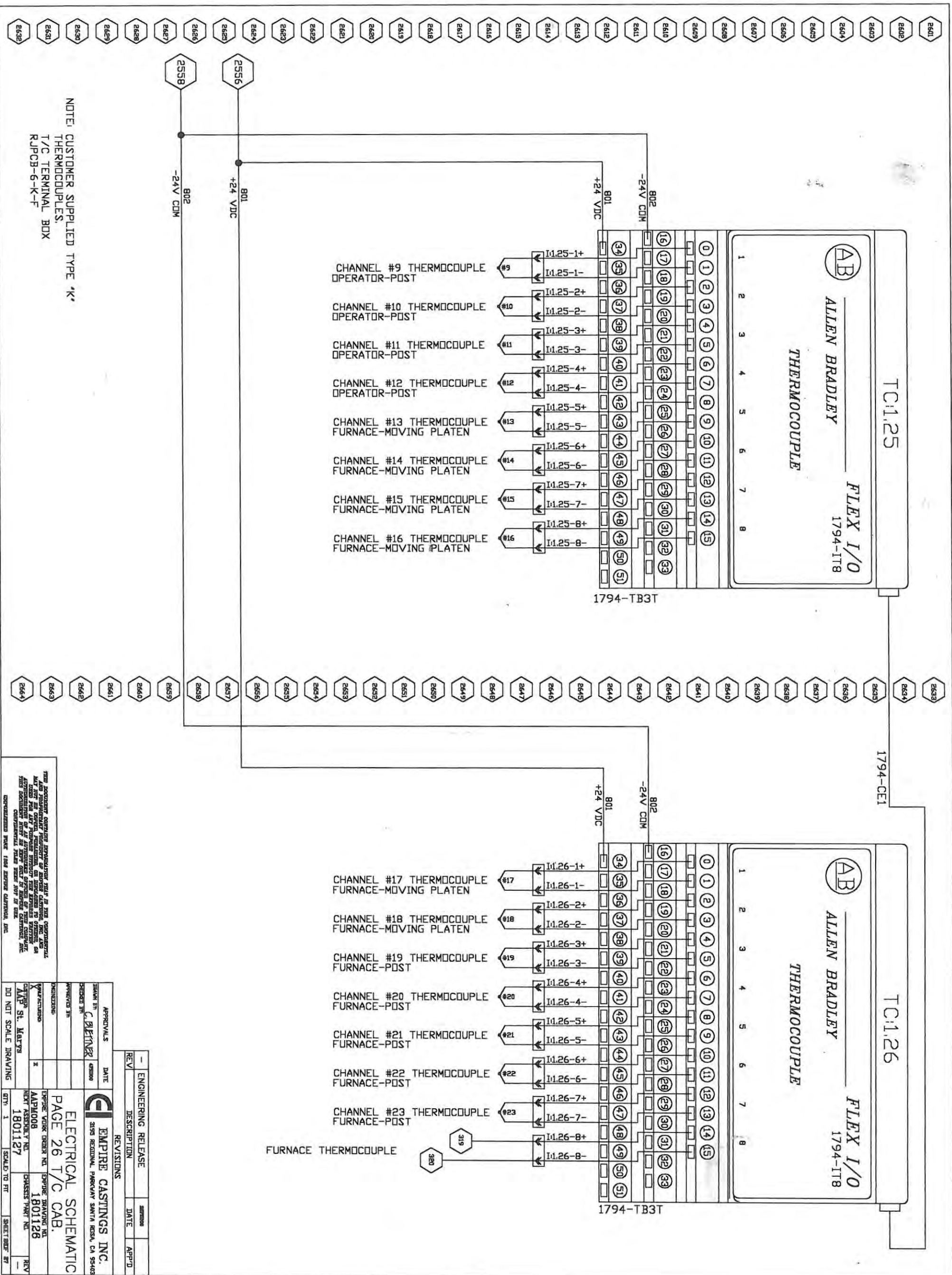
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APPROVALS			
DRAWN BY	C. BLUTNER	DATE	08/16/00
CHECKED BY			
APPROVED BY			
ENGINEER			
MANUFACTURING	X		
CUSTOMER	AAP St. Marys		
DO NOT SCALE DRAWING			

EMPIRE CASTINGS INC.			
3193 REGIONAL PARKWAY SANTA ROSA, CA 95403			
ELECTRICAL SCHEMATIC			
PAGE 25 T/C CAB.			
EMPIRE WORK ORDER NO.	1801125	EMPIRE DRAWING NO.	1801125
AAPM008		NEXT ASSEMBLY NO.	1801126
CHASSIS PART NO.		REV	
QTY: 1	SCALE TO FIT	SHEET 25 OF 27	

CODE NO. MD0258
EFF. DATE 08/10/00

REF:

AAP ART. 10000
CORPORATION

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REV	DESCRIPTION	DATE	APP'D
REVISIONS			
 EMPIRE CASTINGS INC. 2155 REGIONAL PARKWAY SANTA ROSA, CA 95404			
ELECTRICAL SCHEMATIC PAGE 26 T/C CAB.			
EXP'DR WORK UNDER NO.	EXP'DR DRAWING NO.		
ALPH008	1801126		
NEW ASS'Y IN TOL.	REV		
1801127	—		
CHECKS PART NO.			
QTY. 1	SCALED TO FIT	SHEET NO. 57	

CODE NO.
M00258

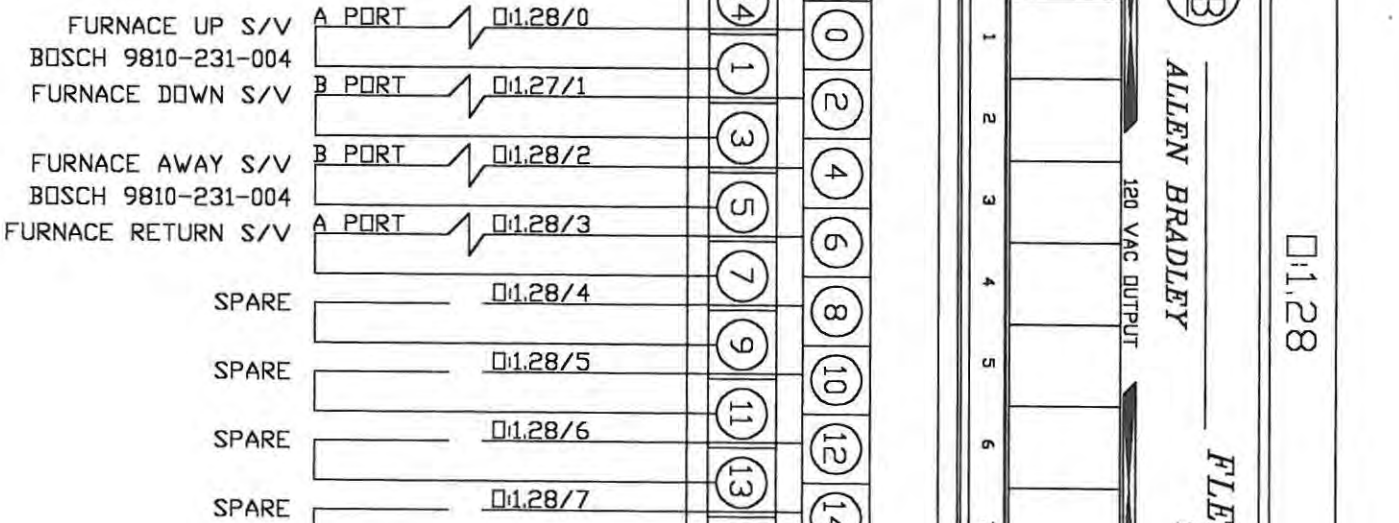
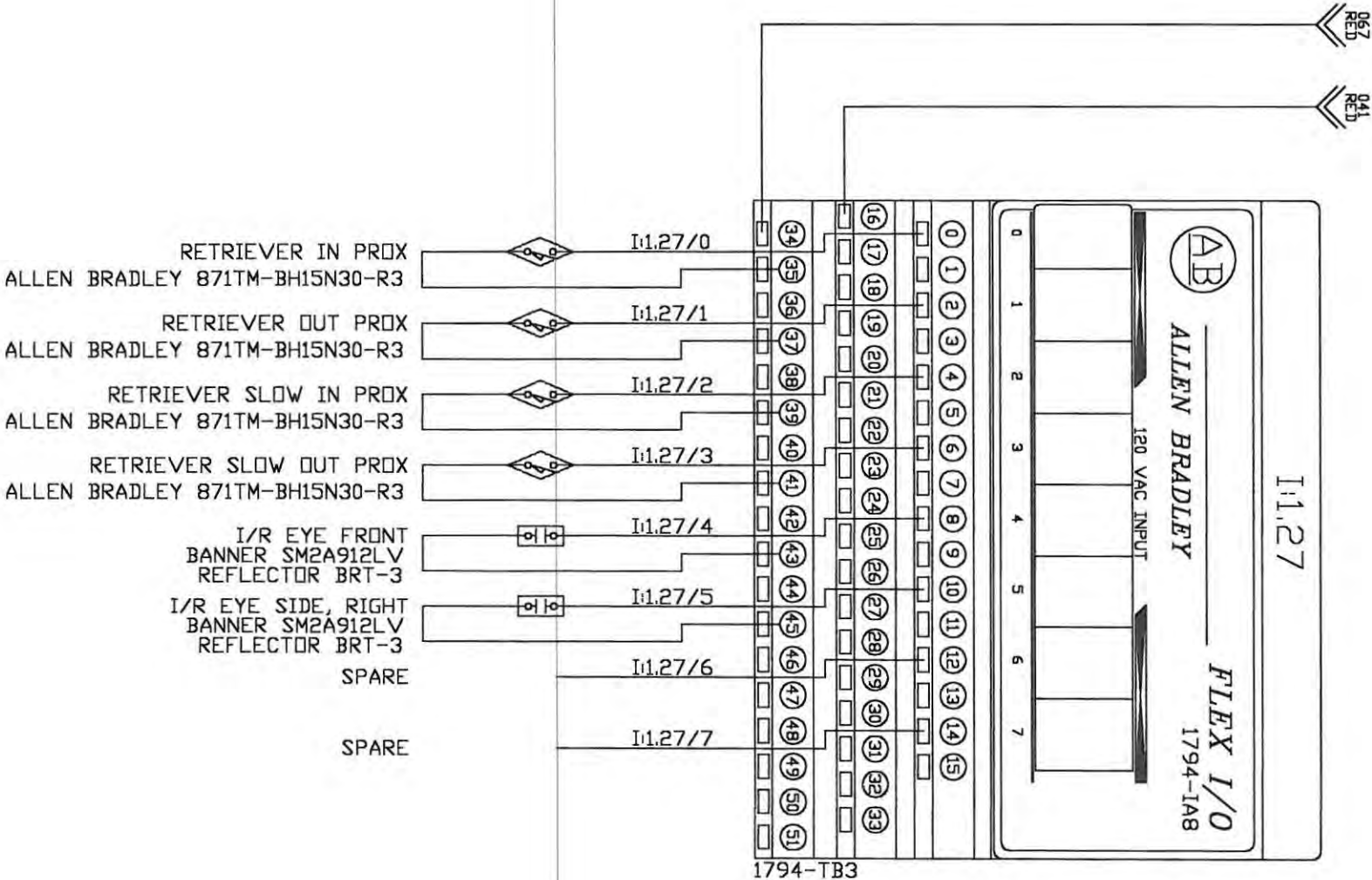
SIGNATURE

REF: MD-OP-06
(Sheet 27 of 28)

AAP
AUT. MFG.
CORPORATION

EFF. DATE 08/10/00

NOTE:
CENTERLINE OF I/R EYE IS 14"
ABOVE TOP OF BOTTOM PLATEN



REVISIONS

REV	DESCRIPTION	DATE	APP'D
1	ENGINEERING RELEASE		

APPROVALS

DATE	DATE	DATE	DATE
DATE	DATE	DATE	DATE

EMPIRE CASTINGS INC.

3125 REGIONAL PARKWAY SANTA ROSA, CA 95403

PAGE 27 T/C CAB.

ELECTRICAL SCHEMATIC

1801127

REV

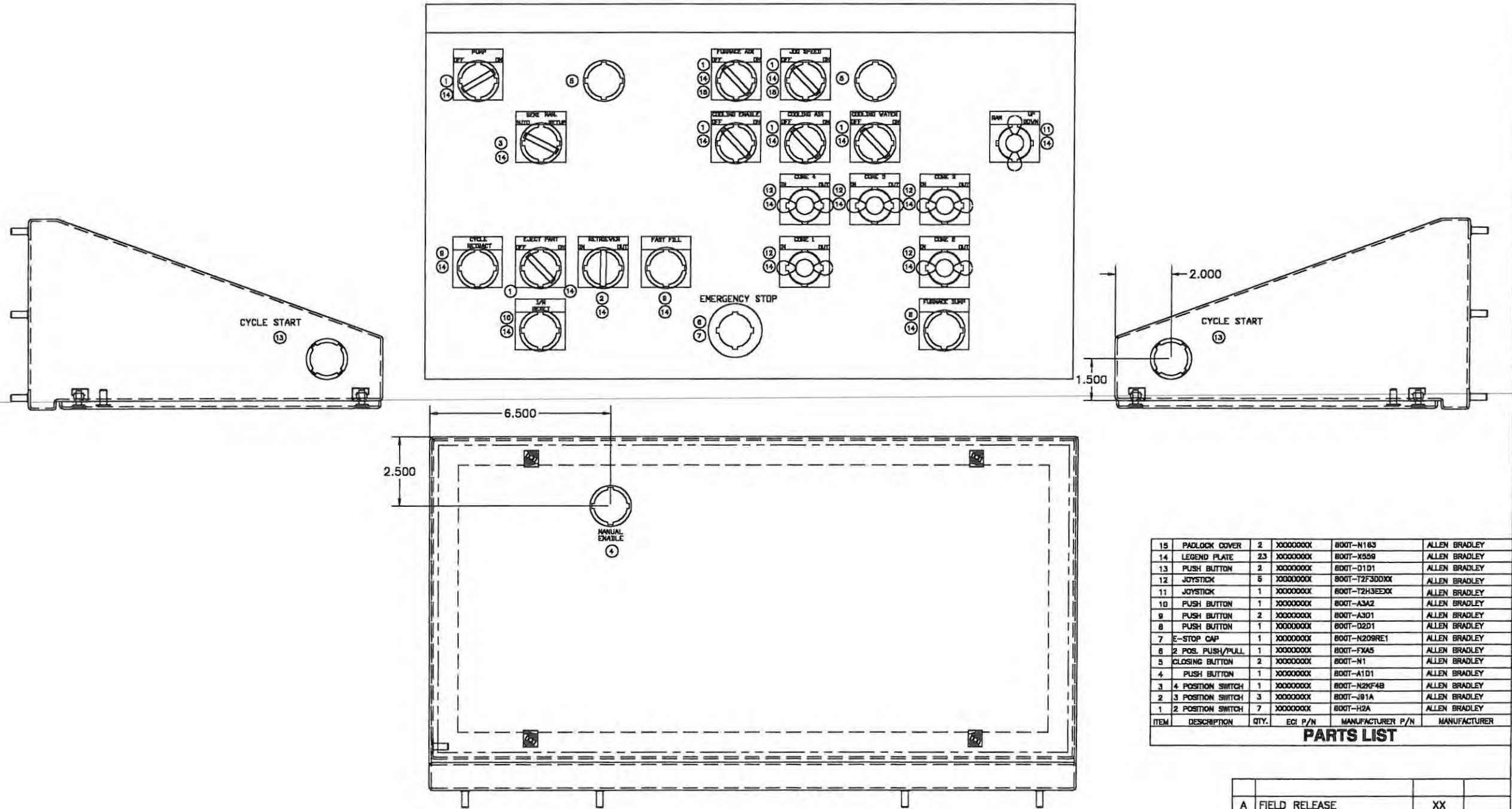
CODE NO.
MD-08

SIGNATURE

REF: MD-OP-06
(Sheet 28 of 28)

AAP INT. MFG. CORPORATION

OFF. DATE 08/10/00



15	PADLOCK COVER	2	XXXXXXX	800T-N163	ALLEN BRADLEY
14	LEGEND PLATE	23	XXXXXXX	800T-X559	ALLEN BRADLEY
13	PUSH BUTTON	2	XXXXXXX	800T-D1D1	ALLEN BRADLEY
12	JOYSTICK	5	XXXXXXX	800T-T2F3DDXX	ALLEN BRADLEY
11	JOYSTICK	1	XXXXXXX	800T-T2H3EEXX	ALLEN BRADLEY
10	PUSH BUTTON	1	XXXXXXX	800T-A3A2	ALLEN BRADLEY
9	PUSH BUTTON	2	XXXXXXX	800T-A3D1	ALLEN BRADLEY
8	PUSH BUTTON	1	XXXXXXX	800T-D2D1	ALLEN BRADLEY
7	E-STOP CAP	1	XXXXXXX	800T-N209RE1	ALLEN BRADLEY
6	2 POS. PUSH/PULL	1	XXXXXXX	800T-FXAS	ALLEN BRADLEY
5	CLOSING BUTTON	2	XXXXXXX	800T-N1	ALLEN BRADLEY
4	PUSH BUTTON	1	XXXXXXX	800T-A1D1	ALLEN BRADLEY
3	4 POSITION SWITCH	1	XXXXXXX	800T-N2KF4B	ALLEN BRADLEY
2	3 POSITION SWITCH	3	XXXXXXX	800T-JB1A	ALLEN BRADLEY
1	2 POSITION SWITCH	7	XXXXXXX	800T-H2A	ALLEN BRADLEY
ITEM	DESCRIPTION	QTY.	ECI P/N	MANUFACTURER P/N	MANUFACTURER

PARTS LIST

A	FIELD RELEASE	XX	
-	ENGINEERING RELEASE	4JAN00	
REV	DESCRIPTION	DATE	APP'D

REVISIONS

APPROVALS

DATE

DESIGNED BY

MANUFACTURING

CUSTOMER

AAP BY: MARYS

DO NOT SCALE DRAWING

EMPIRE CASTINGS INC.

3193 REGIONAL PARKWAY SANTA ROSA, CA 95403

OPERATOR PANEL

PUSH BUTTON Sht1 of 2

EMPIRE WORK ORDER NO.

EMPIRE DRAWING NO.

18011201

18011202

CUSTOMER PART NO.

REV

QTY: 1

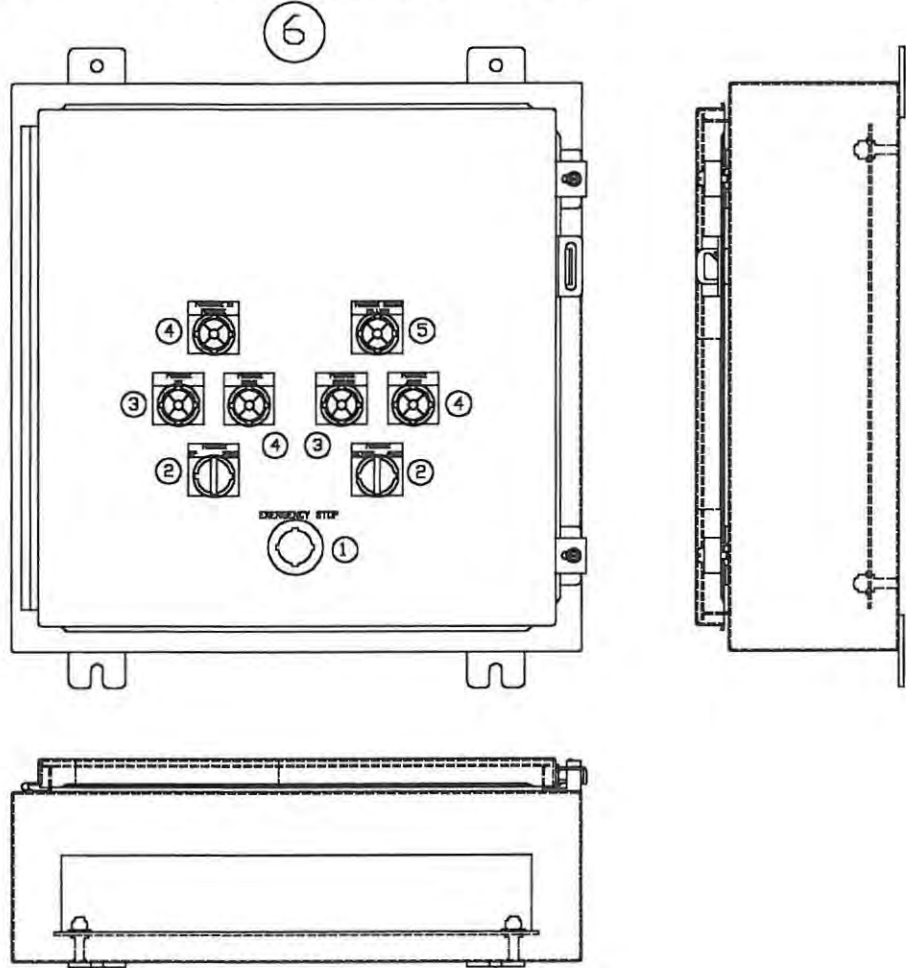
SCALE TO FIT

SHEET 1 OF 8

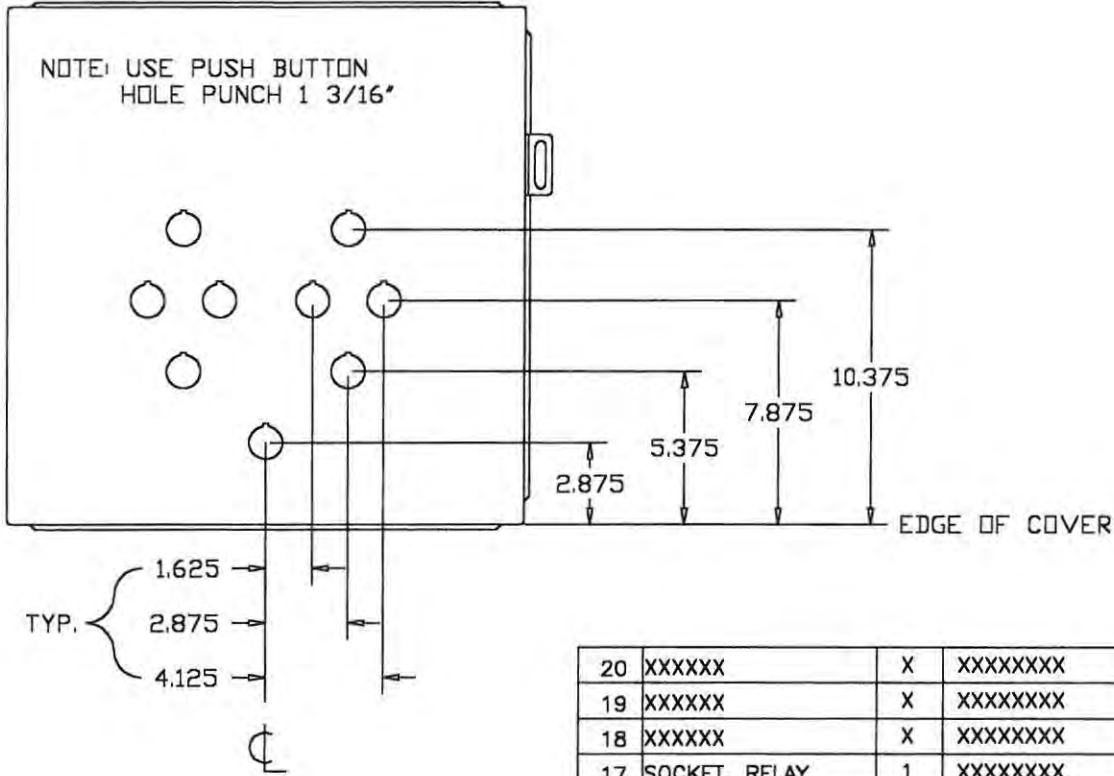
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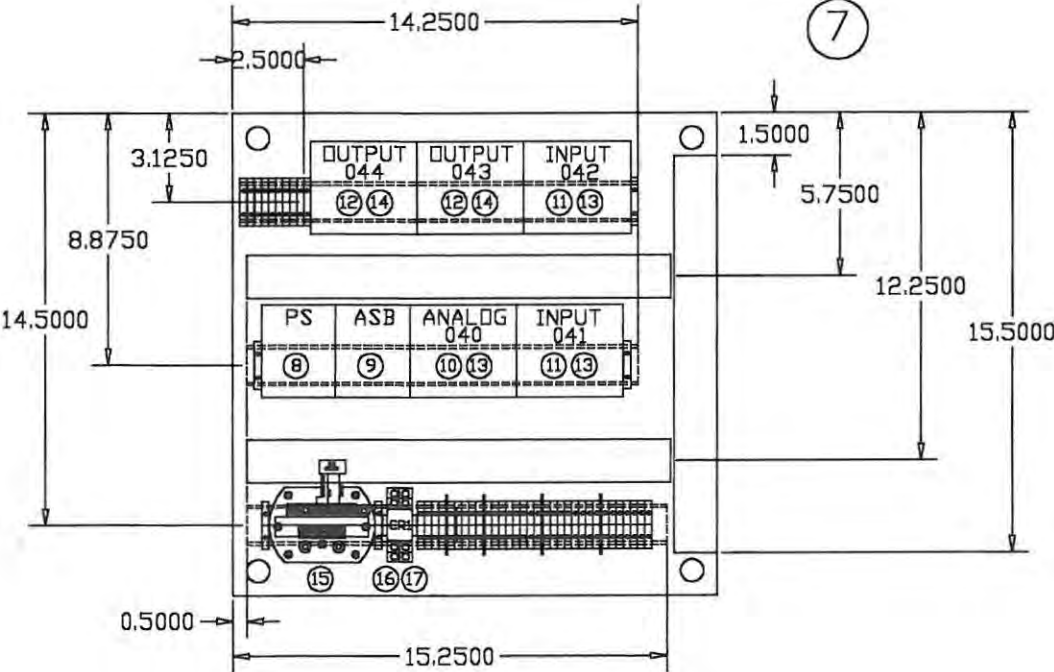
FURNACE PUSH BUTTON
STATION, JUNCTION BOX.



DOOR PANEL
HOLE PUNCHING



PANEL
7



REFERENCE

20	XXXXXX	X	XXXXXXXXX	XXXXXX	XXXXXX
19	XXXXXX	X	XXXXXXXXX	XXXXXX	XXXXXX
18	XXXXXX	X	XXXXXXXXX	XXXXXX	XXXXXX
17	SOCKET, RELAY	1	XXXXXXXXX	700-HV-116	ALLEN BRADLEY
16	RELAY	1	XXXXXXXXX	700-HF32-A1-4	ALLEN BRADLEY
15	T/C TRANSMITTER	1	XXXXXXXXX	6TS-K, 0-1400° F	M-SYSTEM CO., LTD.
14	TERMINAL BASE	2	XXXXXXXXX	1794-TBNF	ALLEN BRADLEY
13	TERMINAL BASE	3	XXXXXXXXX	1794-TB3	ALLEN BRADLEY
12	OUTPUT MODULE	2	XXXXXXXXX	1794-OA8	ALLEN BRADLEY
11	INPUT MODULE	2	XXXXXXXXX	1794-IA8	ALLEN BRADLEY
10	ANALOG MODULE	1	XXXXXXXXX	1794-IE4XOE2	ALLEN BRADLEY
9	ADAPTER ASB/B	1	XXXXXXXXX	1794-ASB/B	ALLEN BRADLEY
8	POWER SUPPLY PSI	1	XXXXXXXXX	1794-PS1	ALLEN BRADLEY
7	PANEL FOR ITEM #6	1	XXXXXXXXX	A-20P20	HOFFMAN
6	ENCLOSURE J-BOX	1	XXXXXXXXX	A-202006LP	HOFFMAN
5	PILOT LIGHT AMBER	1	XXXXXXXXX	800T-P16A	ALLEN BRADLEY
4	PILOT LIGHT RED	3	XXXXXXXXX	800T-P16R	ALLEN BRADLEY
3	PILOT LIGHT GREEN	2	XXXXXXXXX	800T-P16G	ALLEN BRADLEY
2	3 POSITION SWITCH	2	XXXXXXXXX	800T-J91A	ALLEN BRADLEY
1	2 POS. PUSH/PULL	1	XXXXXXXXX	800T-FXA5	ALLEN BRADLEY
ITEM	DESCRIPTION	QTY.	ECI P/N	MANUFACTURER P/N	MANUFACTURER

PARTS LIST

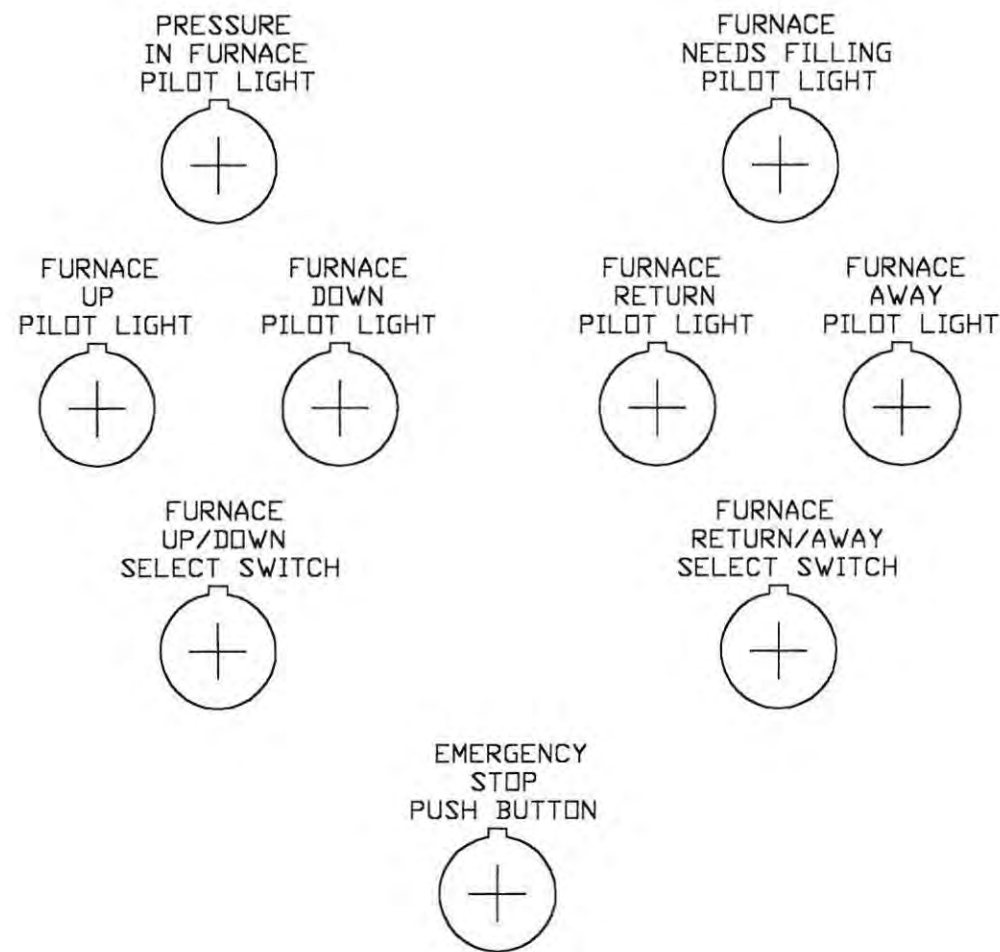
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-	ENGINEERING RELEASE	4JAN00	
REV	DESCRIPTION	DATE	APP'D
REVISIONS			

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APPROVALS	DATE	EMPIRE CASTINGS INC. 3195 REGIONAL PARKWAY SANTA ROSA, CA 95403	
DRAWN BY C. BUETNER	4/11/00	FURNACE PANEL OPERATOR STATION	
CHECKED BY		EMPIRE WORK ORDER NO. AAPM008	EMPIRE DRAWING NO. 1801202
APPROVED BY		NEXT ASSEMBLY NO. 1801203	CUSTOMER PART NO.
ENGINEERING		CUSTOMER AAP ST. MARYS	REV -
MANUFACTURING	X	DO NOT SCALE DRAWING	QTY: 1
		SCALE: TO FIT	SHEET # OF 8

DOOR PANEL HOLE TEMPLATE



REFERENCE

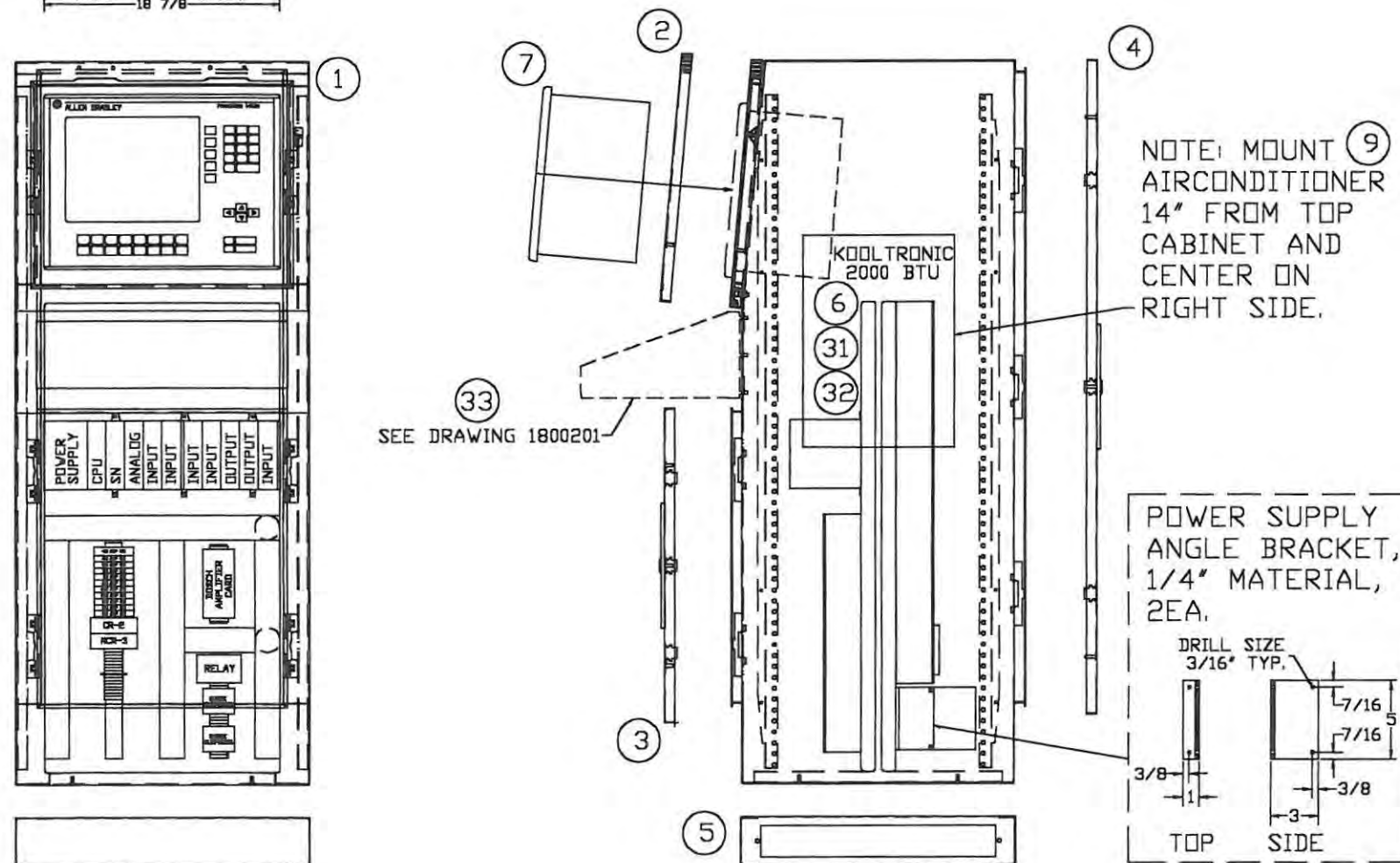
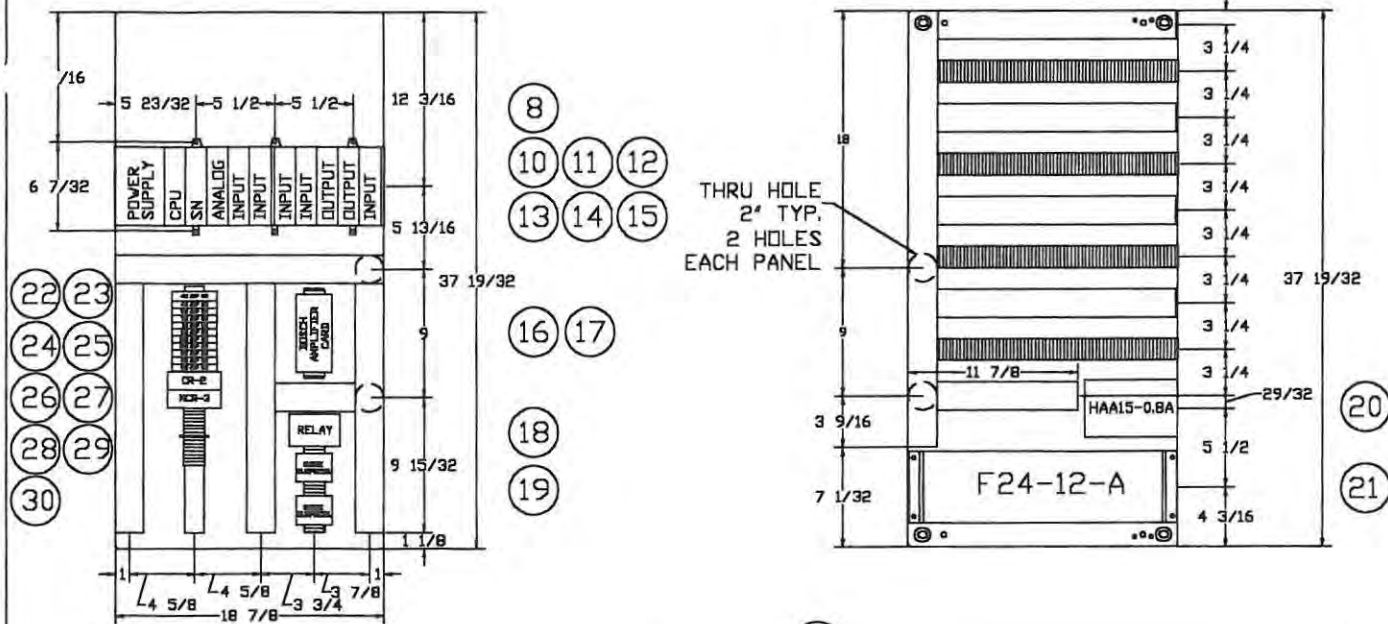
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A	FIELD RELEASE	XX	
-	ENGINEERING RELEASE	4JAN00	
REV	DESCRIPTION	DATE	APP'D
REVISIONS			
APPROVALS		DATE	
DRAWN BY C. BLETTNER		4JAN00	
CHECKED BY X		X	
APPROVED BY X		X	
ENGINEERING X		X	
MANUFACTURING X		X	
CUSTOMER AAP ST. MARYS			
DO NOT SCALE DRAWING		QTY: 1	SCALE TO FIT

EMPIRE CASTINGS INC. 3195 REGIONAL PARKWAY SANTA ROSA, CA 95403	
FURNACE PANEL HOLE TEMPLATE	
EMPIRE WORK ORDER NO. AAPM008	EMPIRE DRAWING NO. 1801203
NEXT ASSEMBLY NO. 1801204	CUSTOMER PART NO. REV -
SHEET 8 OF 8	

REAR PANEL



34	XXXXXX	X	XXXXXX	XXXXXX	XXXXXX
33	CONSOLE	1	XXXXXX	X-C20A6	HOFFMAN
32	FASTNER PACKAGE	2	XXXXXX	X-GFM6	HOFFMAN
31	STRAP, PANEL	2	XXXXXX	X-GH6S6	HOFFMAN
30	SOCKET, RELAY	4	XXXXXX	700-HV-116	ALLEN BRADLEY
29	RELAY	4	XXXXXX	700-HF32-A1-4	ALLEN BRADLEY
28	CIRCUIT BREAKER 4.0 AMP	1	XXXXXX	1492-GH040	ALLEN BRADLEY
27	CIRCUIT BREAKER 10.0 AMP	1	XXXXXX	1492-GH100	ALLEN BRADLEY
26	CIRCUIT BREAKER 2.5 AMP	2	XXXXXX	1492-GH025	ALLEN BRADLEY
25	CIRCUIT BREAKER 1 AMP	2	XXXXXX	1492-GH010	ALLEN BRADLEY
24	CIRCUIT BREAKER 5 AMP	2	XXXXXX	1492-GH050	ALLEN BRADLEY
23	CIRCUIT BREAKER 2 AMP	2	XXXXXX	1492-GH020	ALLEN BRADLEY
22	CIRCUIT BREAKER 7 AMP	2	XXXXXX	1492-GH070	ALLEN BRADLEY
21	POWER SUPPLY 15V	1	XXXXXX	HAA15-0.8A	POWER ONE
20	POWER SUPPLY 24V	1	XXXXXX	F24-12-A	POWER ONE
19	SURGE SUPPRESSOR	2	XXXXXX	199-GSMA1	ALLEN BRADLEY
18	RELAY	1	XXXXXX	700-PK800A1	ALLEN BRADLEY
17	CARD HOLDER, AMPLIFIER	1	XXXXXX	63010	MERREL KTRONIK
16	AMPLIFIER CARD	1	XXXXXX	0811 405 073	BOSCH
15	OUTPUT MODULE	2	XXXXXX	1794-PA16	ALLEN BRADLEY
14	INPUT MODULE	5	XXXXXX	1794-IA16	ALLEN BRADLEY
13	ANALOG MODULE	1	XXXXXX	1794-NI14V	ALLEN BRADLEY
12	REMOTE ADAPTER	1	XXXXXX	1747-SN	ALLEN BRADLEY
11	POWER SUPPLY	1	XXXXXX	1746-P2	ALLEN BRADLEY
10	CHASSIS, 10 SLOT	1	XXXXXX	1746-A10	ALLEN BRADLEY
9	AIR CONDITIONER	1	XXXXXX	KA4C20NP17L	KOOLTRONIC
8	CPU	1	XXXXXX	1746-I 442	ALLEN BRADLEY
7	OPERATOR INTERFACE	1	XXXXXX	2711E-K14C6	ALLEN BRADLEY
6	SUBPANEL	2	XXXXXX	X-PP106	HOFFMAN
5	BASE, CABINET	1	XXXXXX	P-B166	HOFFMAN
4	DOOR, REAR	1	XXXXXX	X-DS136	HOFFMAN
3	DOOR, FRONT	1	XXXXXX	X-DS76R	HOFFMAN
2	COVER, FRONT	1	XXXXXX	X-CSK56F6	HOFFMAN
1	CABINET, STANDUP	1	XXXXXX	X-FC1466	HOFFMAN
ITEM	DESCRIPTION	QTY.	ECI P/N	MANUFACTURER P/N	MANUFACTURER

PARTS LIST

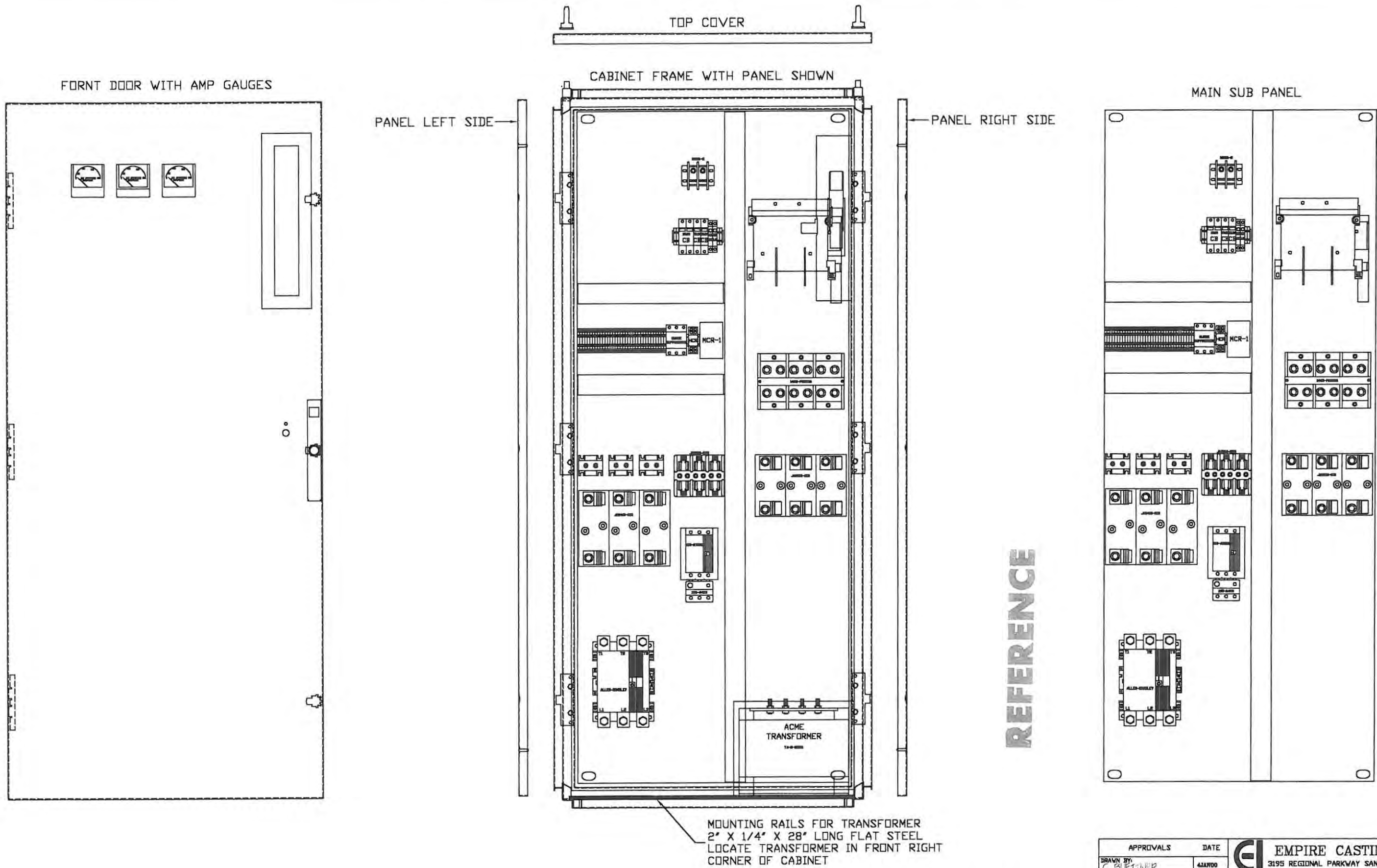
APPROVALS		DATE		 EMPIRE CASTINGS INC. 3195 REGIONAL PARKWAY SANAT ROSA, CA 95403	
DRAWN BY C. BUETTNER		4JAN00			
CHECKED BY:				OPERATER MMI CABINET	
APPROVED BY:					
ENGINEERING:					
MANUFACTURING:					
CUSTOMER: AAP ST.MARYS		EMPIRE WORK ORDER NO. AAPM008		EMPIRE DRAWING NO. 1801204	
DO NOT SCALE DRAWING		NEXT ASSEMBLY NO. 1801205		CUSTOMER PART NO.	
				REV —	
		QTY: 1		SCALE: TO FIT	
				SHEET 4 OF 6	

A	FIELD RELEASE	XX
—	ENGINEERING RELEASE	4JAN00
REV	DESCRIPTION	DATE
REVISIONS		

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NOTE: REAR PANEL NOT SHOWN.

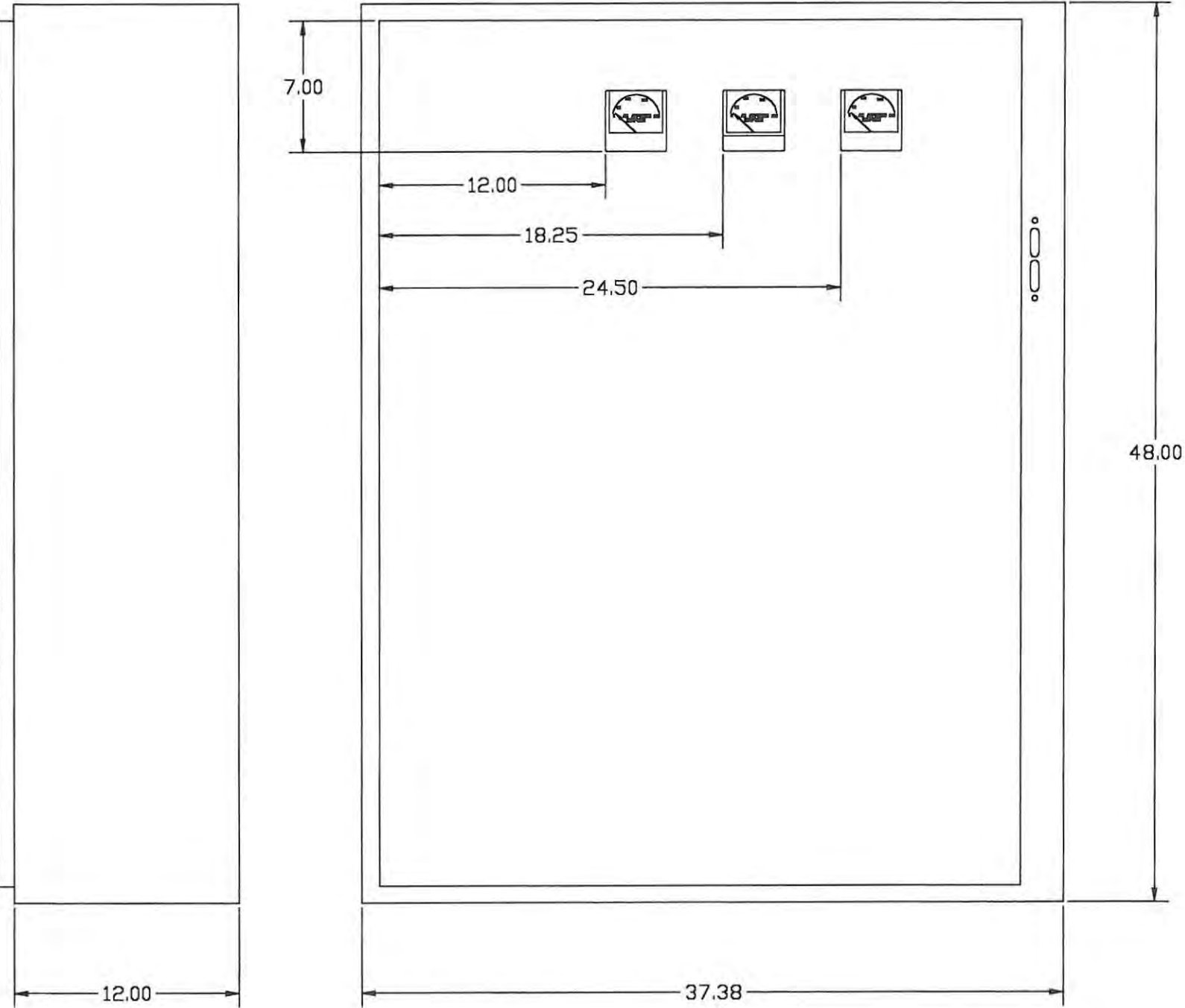
A	FIELD RELEASE	XX	
-	ENGINEERING RELEASE	4 JAN00	
REV	DESCRIPTION	DATE	APP'D
REVISIONS			

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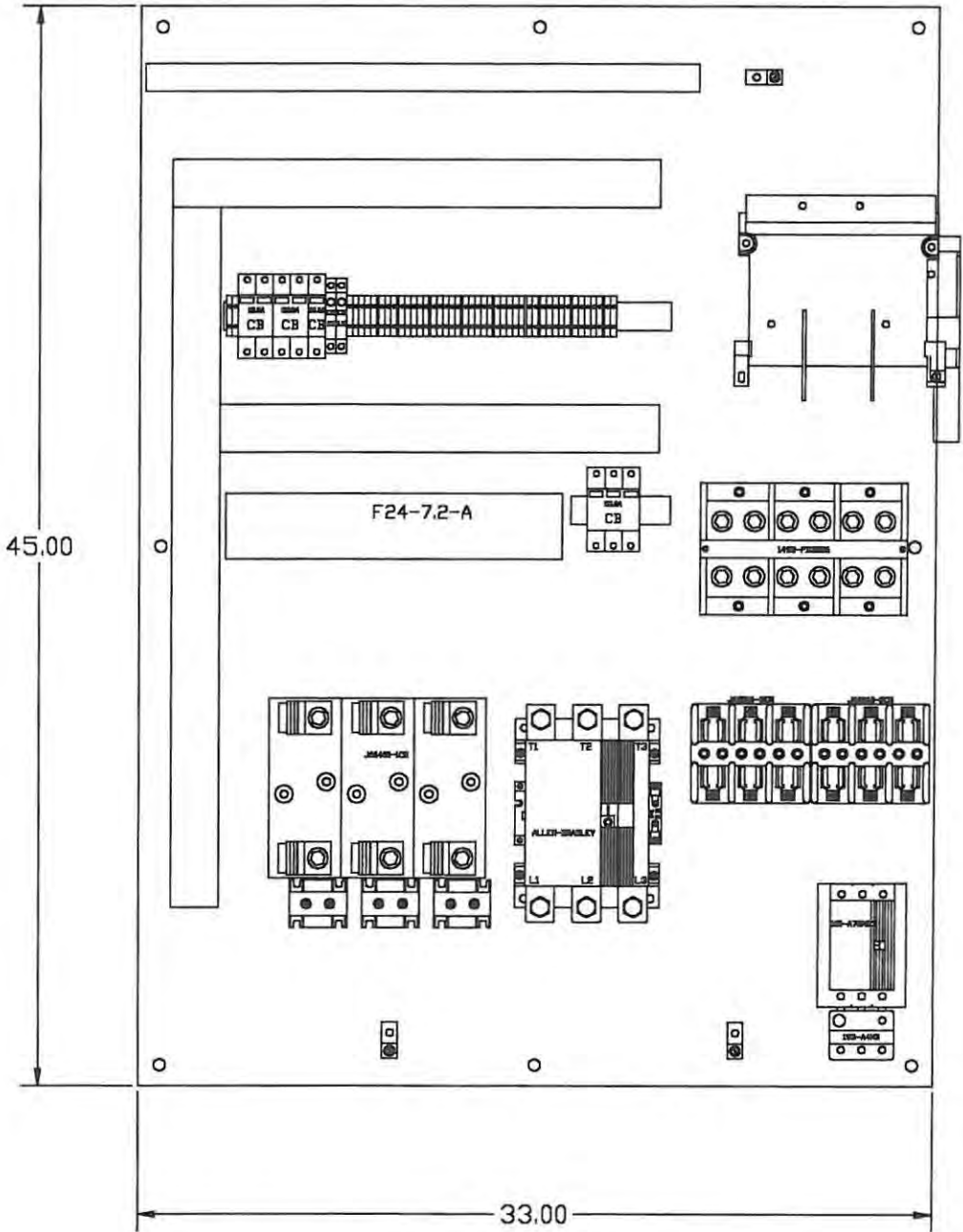
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APPROVALS		DATE	EMPIRE CASTINGS INC. 3195 REGIONAL PARKWAY SANTA ROSA, CA 95403		
DRAWN BY:	C. BLETNER	4 JAN00			
CHECKED BY:	X	X	PANEL LAYOUT MAIN POWER CABINET		
APPROVED BY:	X	X			
ENGINEERING:	X	X	EMPIRE WORK ORDER NO.	EMPIRE DRAWING NO.	
MANUFACTURING:	X	X	AAPM008	1801301	
CUSTOMER:	AAP ST. MARYS		NEXT ASSEMBLY NO.	CUSTOMER PART NO.	REV
			1801302		-
DO NOT SCALE DRAWING		QTY: 1	SCALE: TO FIT	SHEET 1 OF 2	

FORNT DOOR WITH AMP GAUGES



MAIN PANEL



REFERENCE

DISCONNECT CABINET:
CIRCLE AW: FD483712-12
HOFFMANN: A48A3812LP

PANEL:
CIRCLE AW: AW4836P
HOFFMANN: A-48P36

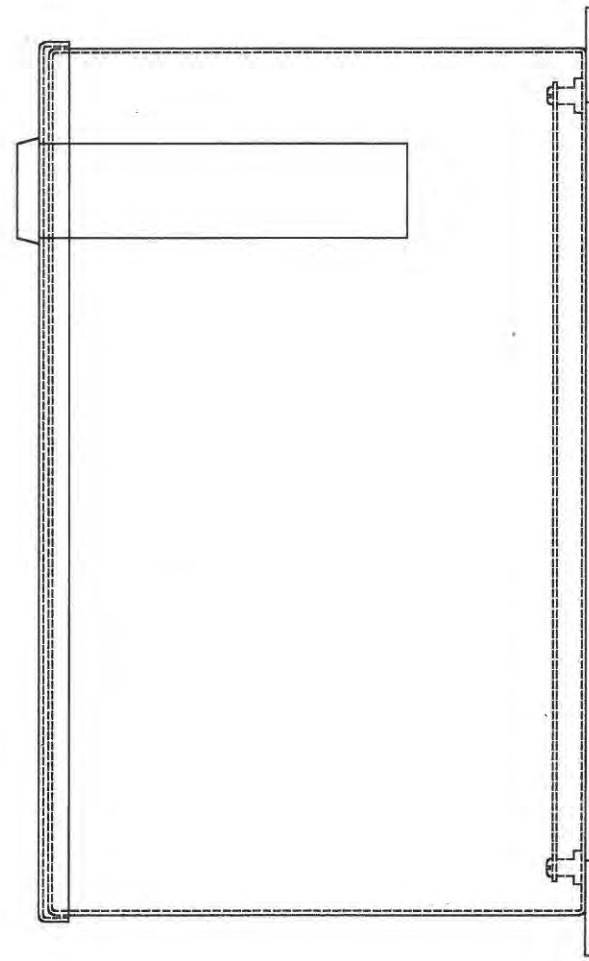
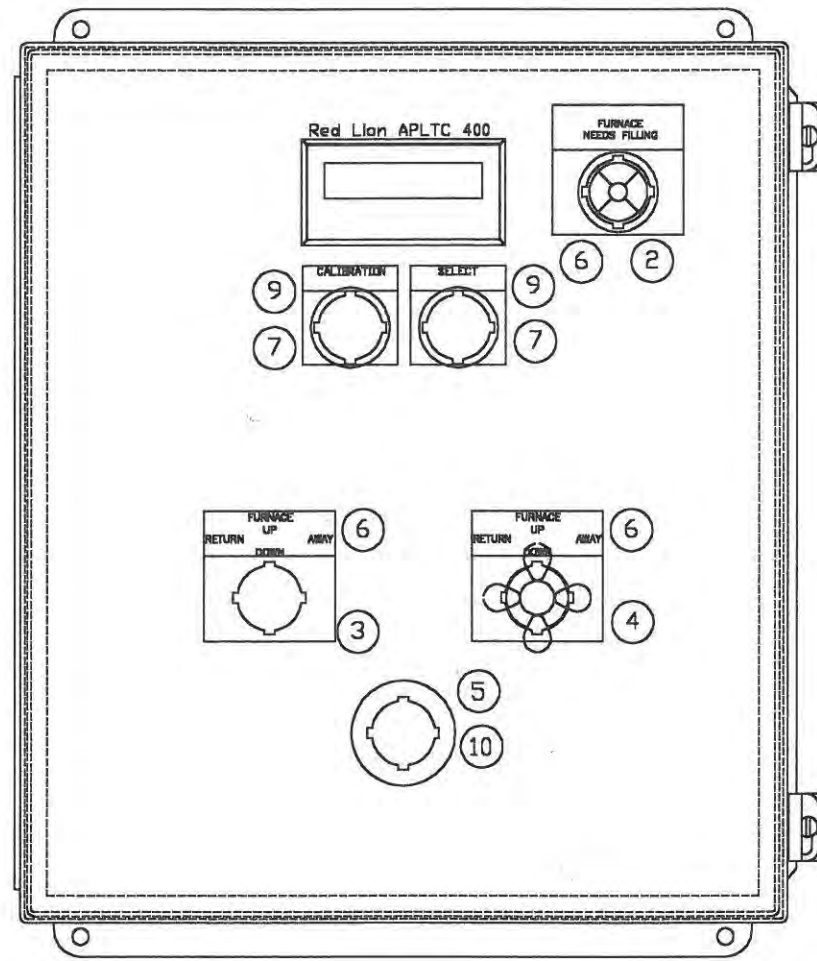
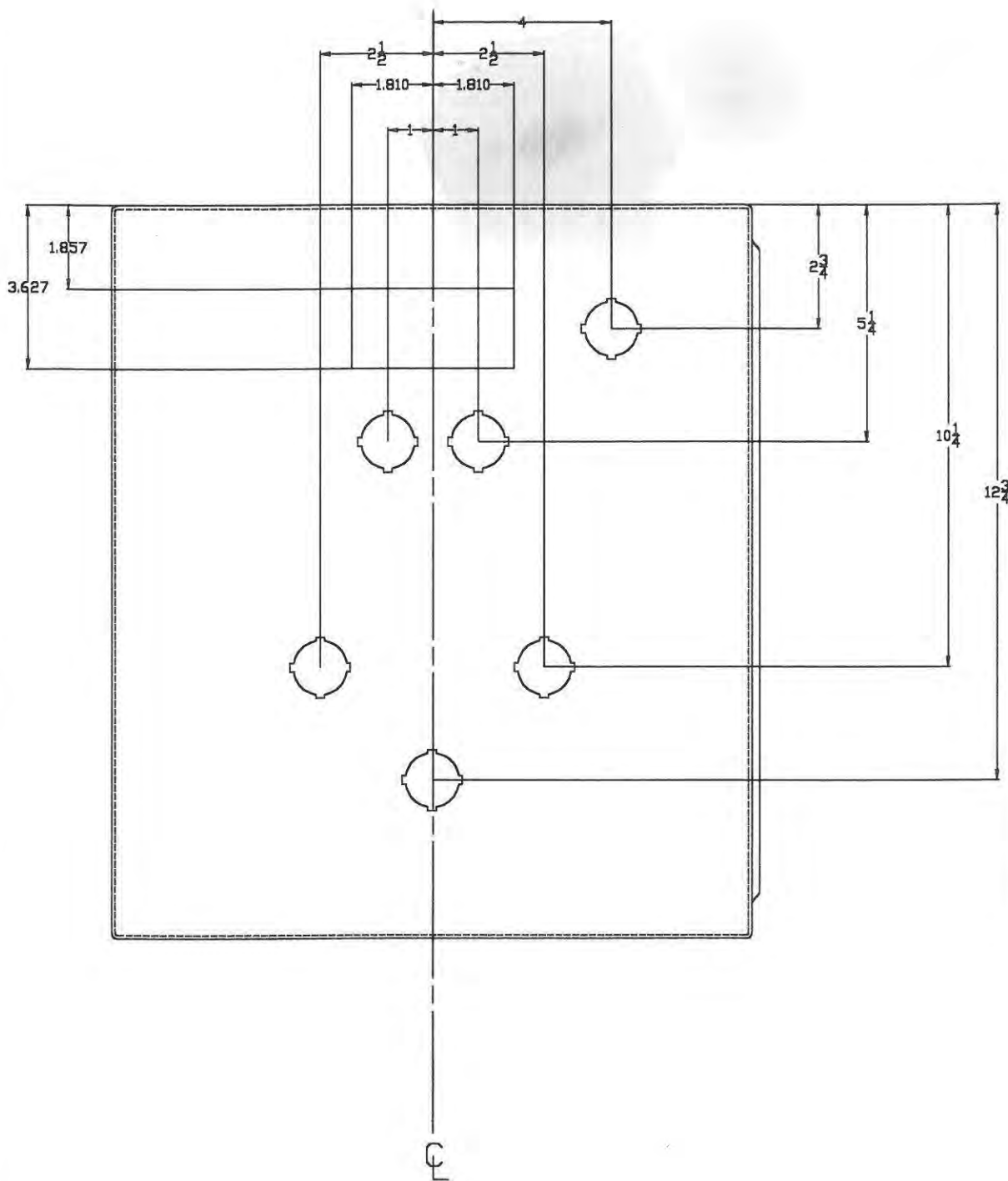
REV	DESCRIPTION	DATE	APP'D
A	FIELD RELEASE	XX	
-	ENGINEERING RELEASE	4JAN00	
REV	DESCRIPTION	DATE	APP'D
REVISIONS			

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APPROVALS		DATE	 EMPIRE CASTINGS INC. 3195 REGIONAL PARKWAY SANTA ROSA, CA 95403		
DRAWN BY: C. BLETNER		4JAN00			
CHECKED BY: X		X	PANEL DIMENSIONS MAIN POWER CABINET		
APPROVED BY: X		X			
ENGINEERING: X		X	EMPIRE WORK ORDER NO. AAPM008		
MANUFACTURING: X		X			
CUSTOMER: AAP ST. MARYS			EMPIRE DRAWING NO. 1801303		REV —
DO NOT SCALE DRAWING			NEXT ASSEMBLY NO.		
			CUSTOMER PART NO.		
QTY: 1			SCALE: TO FIT		SHEET 1 OF 2

CHANGES	
10FEB00	CHANGED TO HOFFMAN A-161410CH
14FEB00	MOVED FURNACE FILL P/B FROM 5' TO 4'



REFERENCE

1801205.dwg
AAPM008
- SHEET 1

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APPROVED BY	DATE	DRAWING NO.	PART NO.
		THIS SHEET ALSO USED FOR	
QUANTITIES		REVISIONS	
1 PLACE ± 0.5 mm	3 PLACE ± .01	 FIRST ANGLE PROJECTION	
2 PLACE ± 0.25 mm	3 PLACE ± .005		
3 PLACE ± 0.13 mm	4 PLACE ± .003		
TOLERANCES UNLESS OTHERWISE SPECIFIED		 DO NOT SCALE	

1	1	RED LION	APLTC 400
1	2	ALLEN BRADLEY	800T-PB16A
1	3	ALLEN BRADLEY	800T-PC416 GRRG
1	4	ALLEN BRADLEY	800T-T4T8 AAXX
1	5	ALLEN BRADLEY	800T-N209RE1
3	6	ALLEN BRADLEY	800T-X700
2	7	ALLEN BRADLEY	800TC-A2D1
1	8	HOFFMANN	A-161410CH
2	9	ALLEN-BRADLEY	800T-X539
1	10	ALLEN-BRADLEY	800T-FXJ16XA4
AMT. SYM.		PART NUMBER	
PART NO.		SHEET	SHEETS
		DRAWING NO.	1801205
DESIGN	DATE	TITLE	
CAB		AAP ST. MARY'S	
DESIGNED BY	REVISED BY	FURNACE HMI	
DATE	SCALE	 EMPIRE CASTINGS INC. 3195 REGIONAL PARKWAY SANTA ROSA, CA 95403	
17-MAR-00	DWG		