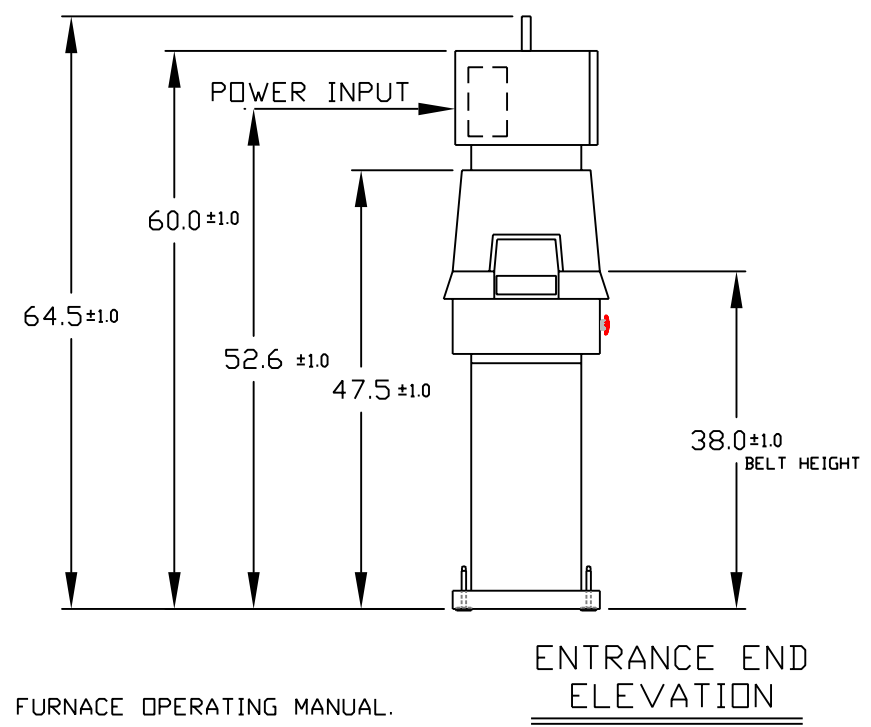
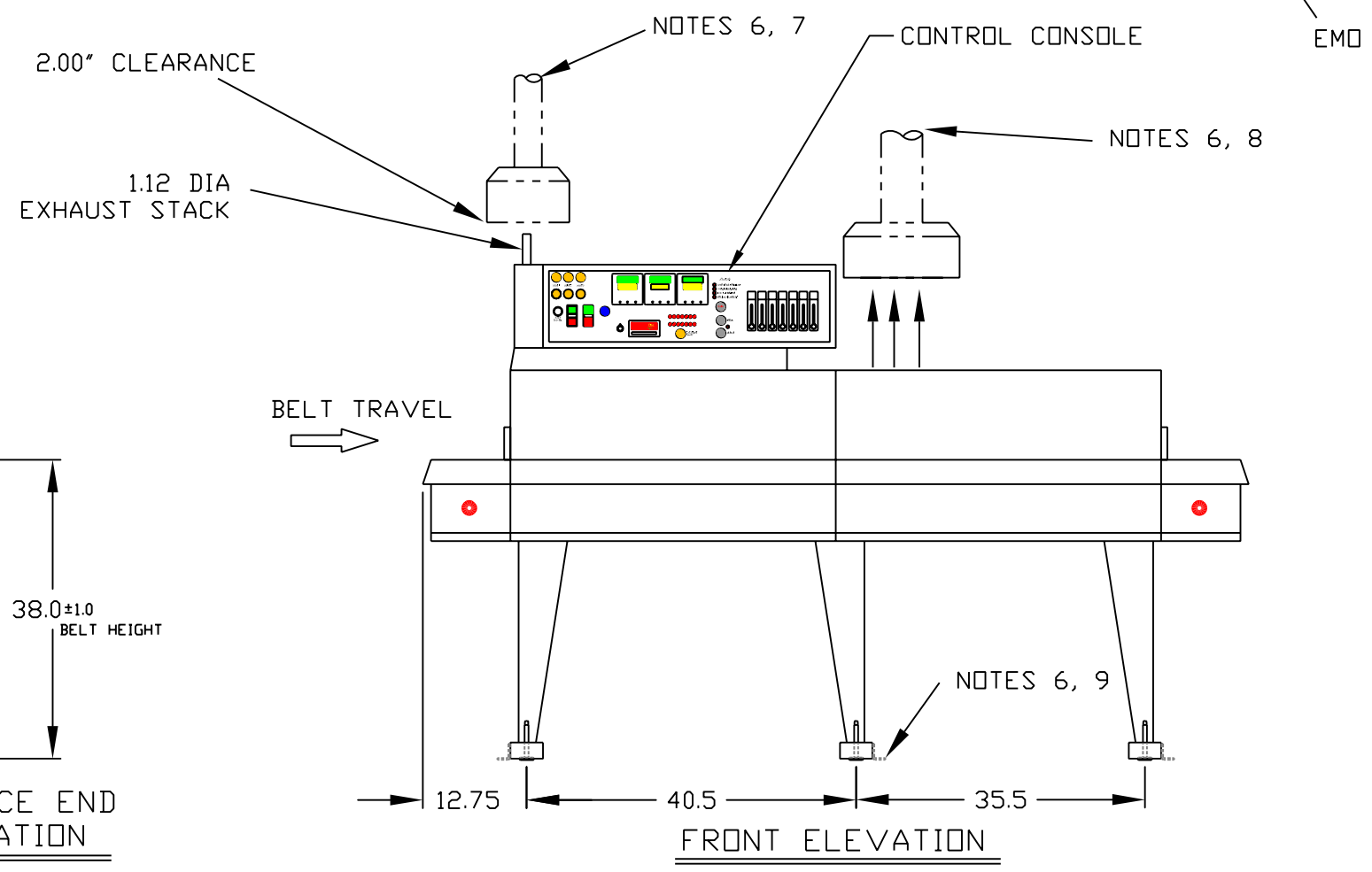
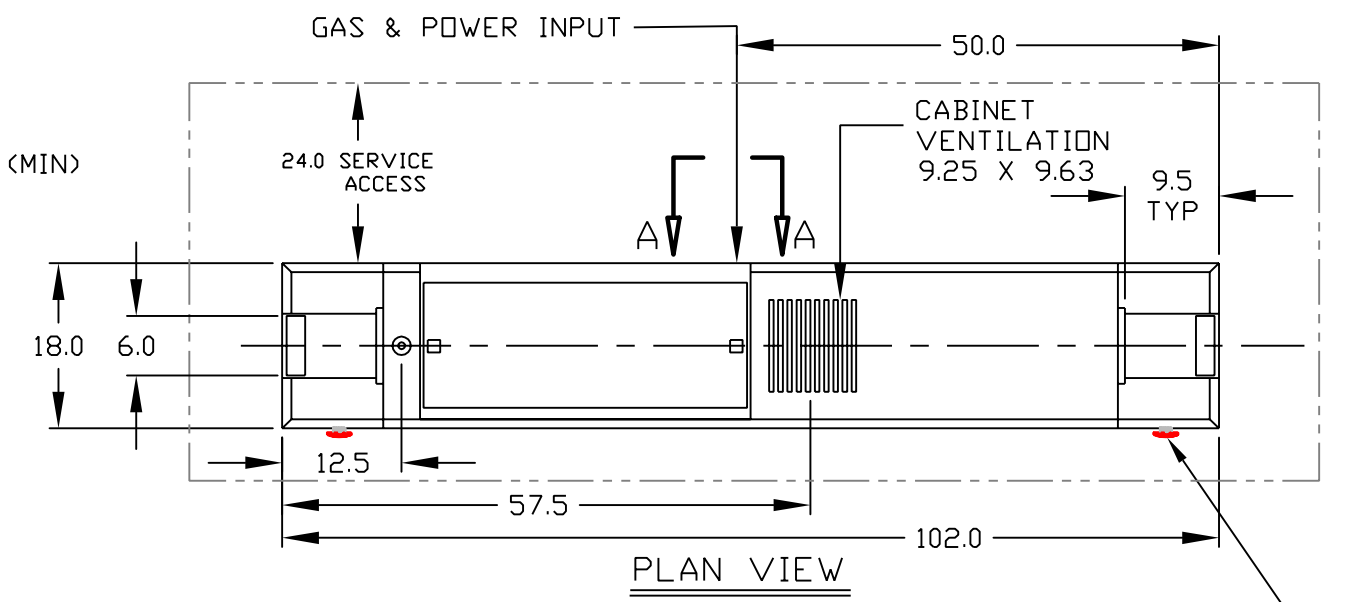
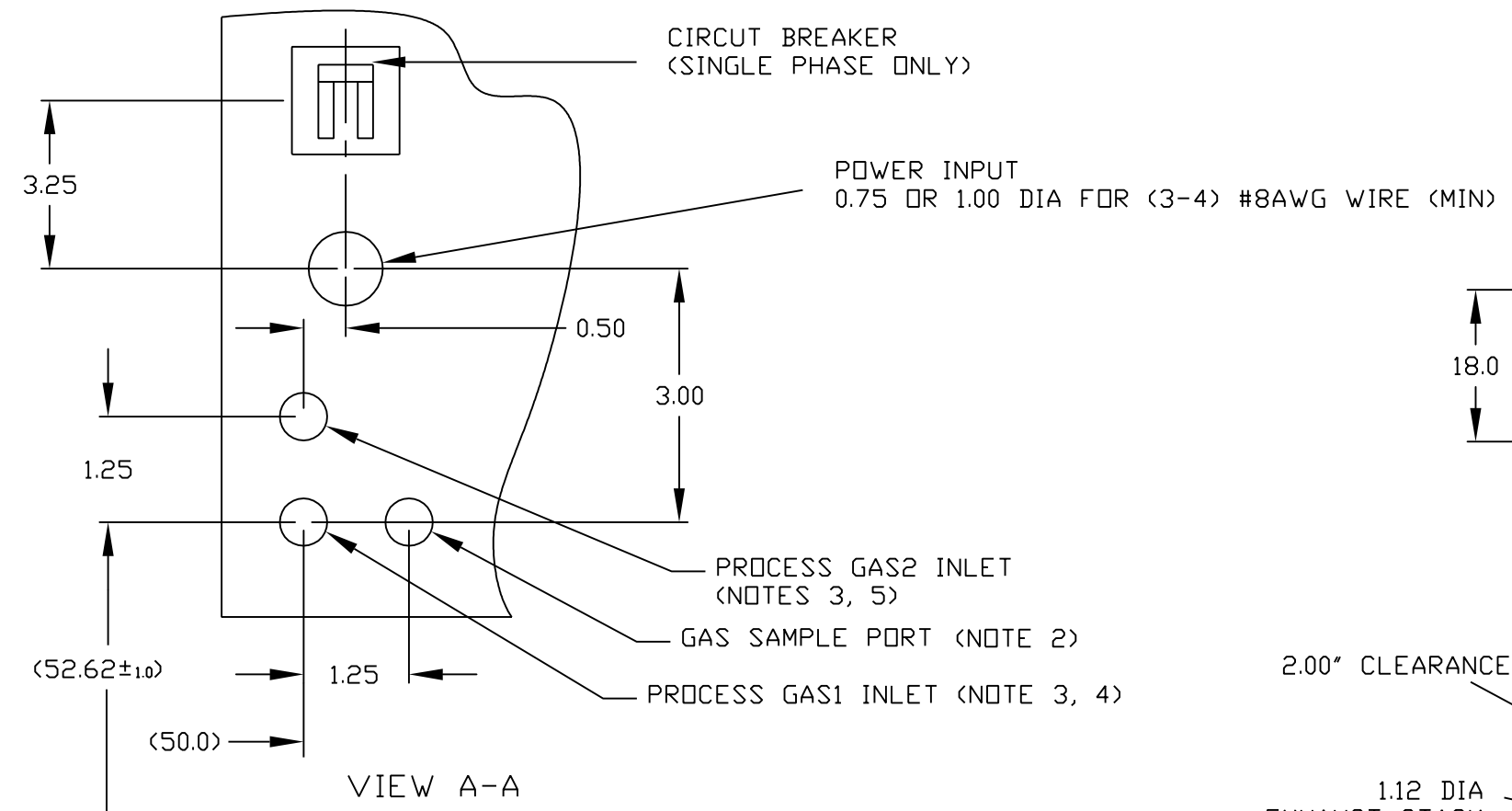



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

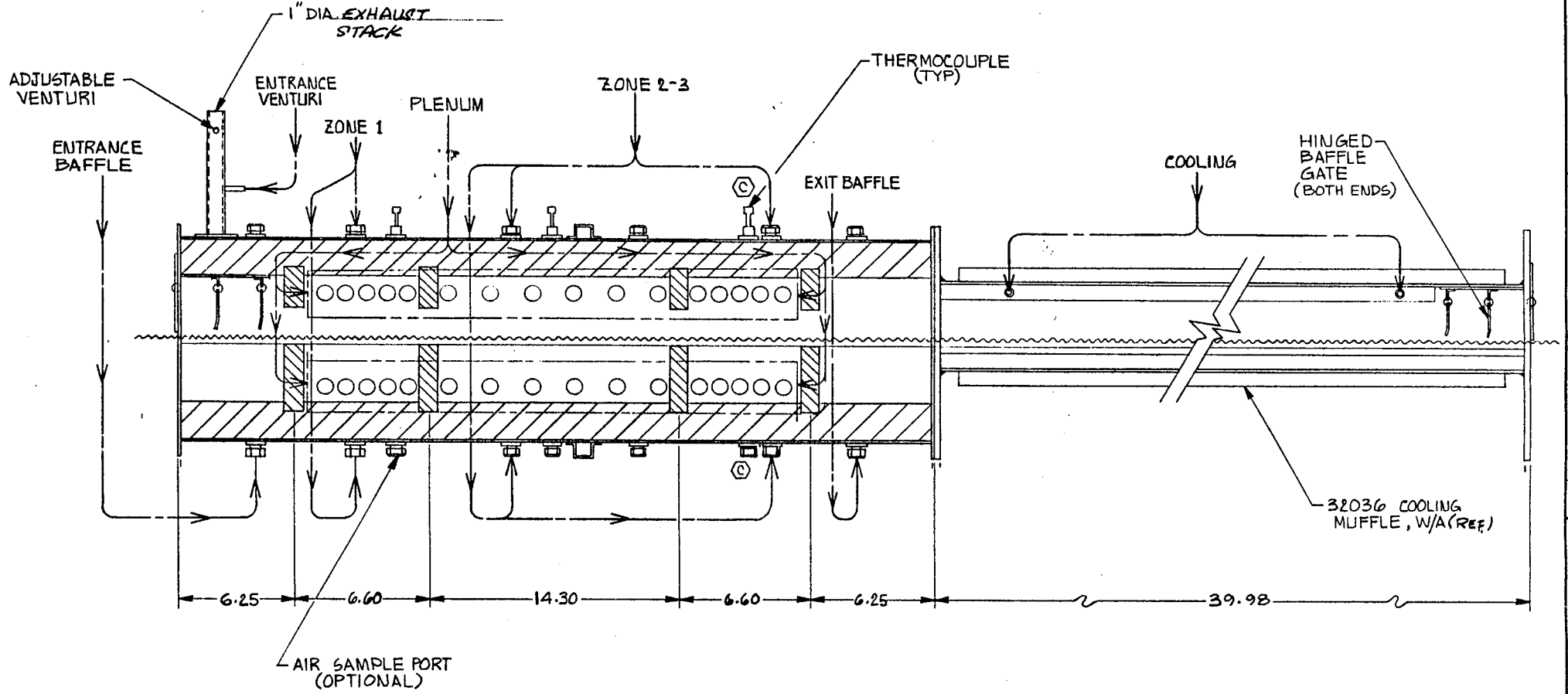


**NOTES, UNLESS OTHERWISE SPECIFIED:**

- FOR COMPLETE INSTALLATION INSTRUCTIONS SEE FURNACE OPERATING MANUAL.
- OPTIONAL EQUIPMENT.
- 3/4 NPT MINIMUM SUPPLY LINE REDUCED TO CONNECT TO 1/4 FEMALE NPT AT FURNACE.
- CONNECT TO GAS1 INLET, AIR (CDA) OR NITROGEN SUPPLY.
- DUAL GAS OPTION. CONNECT TO GAS2 INLET, FORMING GAS OR OTHER SPECIALTY GAS FOR HEATING ZONES.
- BY OTHERS.
- RECOMMENDED PROCESS GAS EXHAUST 4.0 DIA INSULATED DUCT WITH 8.0 DIA COLLECTOR HOOD FOR MAX 350 SCFH (150 STD L/MIN) @ 60C.
- OPTIONAL CABINET VENTILATION, 4.0 DIA DUCT WITH 10.0 SQUARE HOOD, FOR 550 ACFM (930 M3/H) @ <30C.
- AFTER LEVELING FURNACE IN POSITION: RECOMMEND FURNACE BE SECURED TO FLOOR USING ONE OR MORE BRACKETS, EACH 2" X 2" X 16" LONG, DRILL TO SUIT MOUNTING TO FURNACE WITH 1/4-20 MACHINE SCREW FASTENERS AND TO FLOOR WITH 1/4" DIA CONCRETE FASTENERS OR 1/4" LAG SCREWS (DEPENDING ON FLOOR MATERIAL).
- STANDARD TEMPERATURE; PRESSURE: 70F (21.1C); 14.7 PSIA (101.3 kPa).

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: DECIMALS ANGLES FRACTIONS .XX ± .03    XX±.5°    X/XX±1/32 .XXX ± .010    XX.X±.2	PROPOSAL NO.		 DIVISION OF LOCHABER CORNWALL INC
	APPROVALS	DATE	
MATERIAL	DRAWN C RODDE	8/16/13	FURNACE ARRANGEMENT RTC LA-306
FINISH	CHECKED J CLARK	8/16/13	
DO NOT SCALE DRAWING	ISSUED J CLARK	8/16/13	
SCALE NONE	SIZE STD	JOB NO. STD	DWG. NO. 803-100267-02
			REV. 0
			SHEET 1 OF 1

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION NOT TO BE REPRODUCED, TRANSMITTED, COPIED, OR DISCLOSED TO OTHERS WITHOUT PRIOR WRITTEN PERMISSION OF RADIANT TECHNOLOGY CORPORATION.



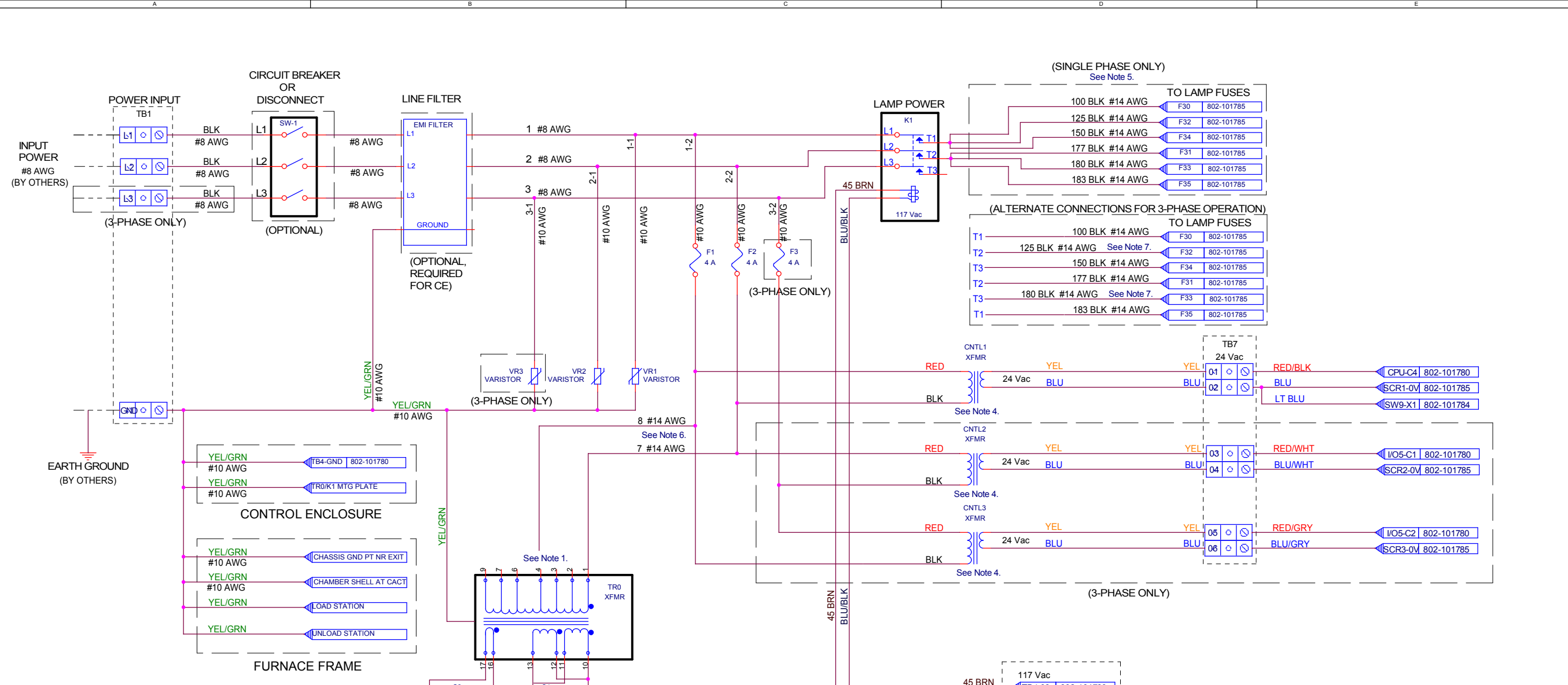
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED

QTY REQD	FRM NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		CONTRACT NO.		
FRACTIONS	DECIMALS	ANGLES	<b>radiant technology corp.</b> 13856 Bettecourt Street • Carlsbad, California 92011	
±	.XX ±	±		
MATERIAL		APPROVALS	DATE	<b>CHAMBER REF DRWG.</b> <b>LA-306</b>
PART NO.		DRAWN	6-1-87	
NEXT ASSY USED ON		CHECKED	ISSUED	
APPLICATION		DO NOT SCALE DRAWING		SIZE C FBCM NO. DWG. NO. 74948 REV B SCALE 1/4" SHEET 2 OF 2

D  
 C  
 DWG. NO. 74948  
 SH. 2  
 REV.

A





- NOTES**
- K1 - CONTACTOR CONTROLLING POWER TO LAMPS (117 Vac, 2PST or 3PST)  
 VRX - TRANSIENT SURGE SUPPRESSOR X
- CONNECT TAP ACCORDING TO LINE VOLTAGE.
 

PIN #	VOLTAGE
2	208
3	220
4	230 or 240
6	N/A
7	N/A
9	N/A
  - ALL WIRES #18 AWG EXCEPT WHERE NOTED.
  - WIRE COLOR CODE:  
 RED SOLID or STRIPE & YELLOW - 24 Vac CONTROL  
 BLUE SOLID or BLUE WITH WHITE OR GRAY STRIPE - 24 Vac NEUTRAL (COMMON)  
 BROWN SOLID - 117 Vac POWER  
 BLUE WITH BLACK STRIPE - 117 Vac NEUTRAL (COMMON)  
 BLACK SOLID - LINE TO LINE VOLTAGE (208-240 Vac)  
 YELLOW WITH GREEN STRIPE - SAFETY (EARTH) GROUND
  - CONNECT LEAD ACCORDING TO LINE VOLTAGE (SINGLE PHASE) OR LINE-TO-LINE VOLTAGE (3-PHASE).
 

LEAD	VOLTAGE
RED	208
RED	220
ORG	230 or 240
  - FOR 3-PHASE OPERATION USE ALTERNATE T1, T2, T3 CONNECTIONS
  - FOR 3-PHASE OPERATION CONNECT WIRE 8 FROM TR0 TAP TO F2 OUTPUT AND WIRE 7 FROM TR0-1 TO F3 OUTPUT
  - FOR HIGH-POWER CONFIGURATIONS, USE #10 AWG WIRE.

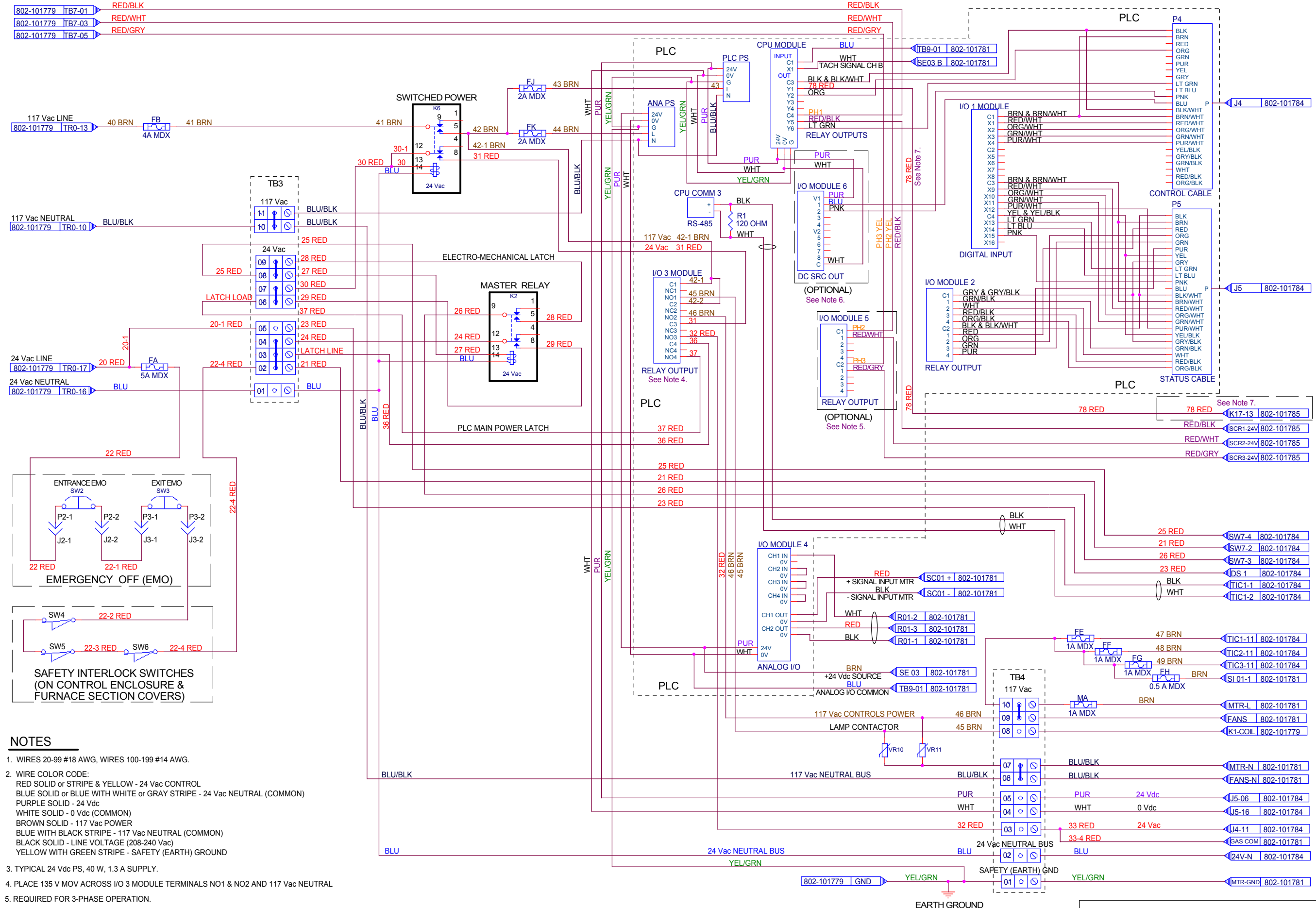
REV	DESCRIPTION	DATE	APPROVED	REV	DESCRIPTION	DATE	APPROVED	ISSUED	DATE	ISSUED	DATE
4	RE-LABELLED NOTE 5	09/12/16	S BARBER	4	RE-LABELLED NOTE 5	09/12/16	S BARBER	ISSUED	J CLARK	05/21/2013	05/21/2013
3	ADDED NOTE 7 FOR HI-POWER OPERATION	07/20/16	S BARBER	3	ADDED NOTE 7 FOR HI-POWER OPERATION	07/20/16	S BARBER	CHECKED	S BARBER	04/01/2013	04/01/2013
2	INCLUDED GROUND CONNECTION IN TB1	10/30/13	S BARBER	2	INCLUDED GROUND CONNECTION IN TB1	10/30/13	S BARBER	DRAWN	S BARBER	04/01/2013	04/01/2013
1	ADDED TB7 & CHANGED BLU/BLK DESTINATION	05/21/13	S BARBER	1	ADDED TB7 & CHANGED BLU/BLK DESTINATION	05/21/13	S BARBER	APPROVALS			

**LCI Furnaces**  
 DIVISION OF LOCHABER CORNWALL, INC.  
 675 NORTH ECKHOFF STREET, BLDG D, ORANGE, CA 92668 USA

**SAFETY PANEL, LA-306 (208-240 Vac)**

Size: C STD | 802-101779-01 | Rev: 6

Date: Wednesday, November 23, 2016 | Sheet: 1 of 1



**NOTES**

- WIRES 20-99 #18 AWG, WIRES 100-199 #14 AWG.
- WIRE COLOR CODE:  
 RED SOLID or STRIPE & YELLOW - 24 Vac CONTROL  
 BLUE SOLID or BLUE WITH WHITE or GRAY STRIPE - 24 Vac NEUTRAL (COMMON)  
 PURPLE SOLID - 24 Vdc  
 WHITE SOLID - 0 Vdc (COMMON)  
 BROWN SOLID - 117 Vac POWER  
 BLUE WITH BLACK STRIPE - 117 Vac NEUTRAL (COMMON)  
 BLACK SOLID - LINE VOLTAGE (208-240 Vac)  
 YELLOW WITH GREEN STRIPE - SAFETY (EARTH) GROUND
- TYPICAL 24 Vdc PS, 40 W, 1.3 A SUPPLY.
- PLACE 135 V MOV ACROSS I/O 3 MODULE TERMINALS NO1 & NO2 AND 117 Vac NEUTRAL
- REQUIRED FOR 3-PHASE OPERATION.
- REQUIRED FOR SENSLAS OPERATION.
- FOR LA-306 BUILT AFTER 2015, OMIT WIRE 78.

REV	DESCRIPTION	DATE	APPROVED
5	CNTL XFORMER & PWR SPLY WIRE COLORS CHANGED	11/21/16	S BARBER

REV	DESCRIPTION	DATE	APPROVED
4	ADDED NOTE 7	09/19/16	S BARBER
3	CLARIFIED I/O 4 MOTOR CONTROL CONNECTIONS SC01+ & SC01-	03/29/14	S BARBER
2	CHANGED WIRE 44-2 TO 42-2 AT I/O MODULE 3	03/29/14	S BARBER
1	CLARIFIED TB4 MOTOR POWER CONNECTIONS MTR-L & -N	03/19/14	S BARBER

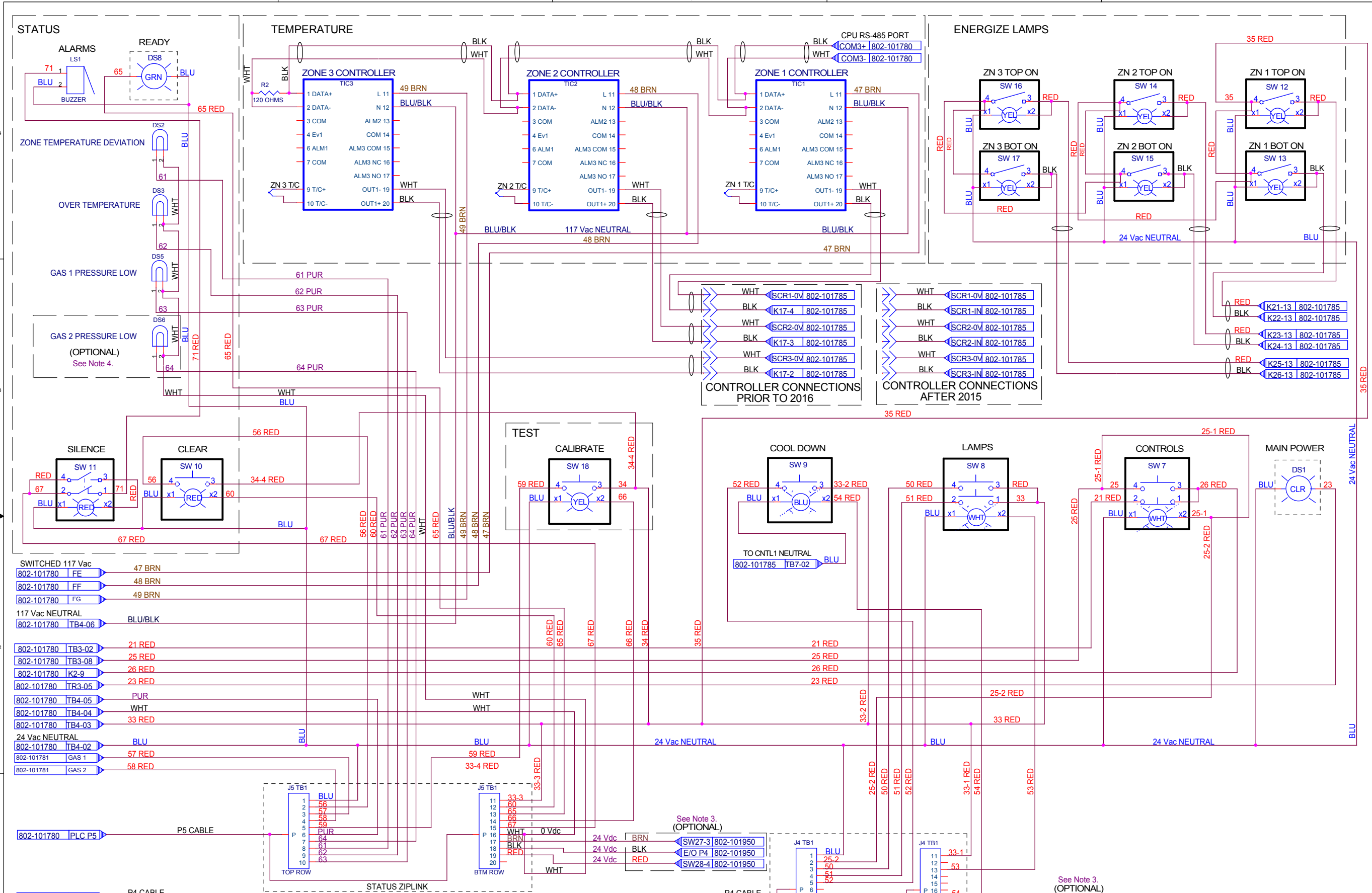
APPROVALS	DATE
DRAWN S BARBER	02/03/2014
CHECKED S BARBER	02/04/2014
ISSUED J CLARK	03/01/2014

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**POWER CONTROL LA-306**

Document Number: **802-101780-03**

Date: Wednesday, November 23, 2016 | Sheet 1 of 1



- NOTES**
1. ALL WIRES 20-99 #18 AWG.
  2. WIRE COLOR CODE:  
 RED SOLID or STRIPE - 24 Vac CONTROL  
 BLUE SOLID or BLUE WITH WHITE or GRAY STRIPE - 24 Vac NEUTRAL (COMMON)  
 PURPLE SOLID - 24 Vdc  
 WHITE SOLID - 0 Vdc (COMMON)  
 BROWN SOLID - 117 Vac POWER  
 BLUE WITH BLACK STRIPE - 117 Vac NEUTRAL (COMMON)  
 ALL 2- CONDUCTOR CABLES 24 V
  3. REQUIRED FOR SENSAS OPTION.
  4. REQUIRED FOR DUAL GAS OPTION.

REV	DESCRIPTION	DATE	APPROVED	REV	DESCRIPTION	DATE	APPROVED
7	ADDED ALTERNATE ZONE CONTROL CONNECTIONS	09/21/16	S BARBER	4	MOVED 33-4 GAS COMMON CONNECTION TO DWG 802-101780	10/30/13	S BARBER
6	UPDATED SENSAS OPTION CONNECTIONS	09/21/16	S BARBER	3	ADDED WIRE 67 RED AND CHANGED TERMINATION OF WIRE 60	05/31/13	S BARBER
5	MOVED 117 Vac NEUTRAL CONNECTION TO TB4-06	03/29/14	S BARBER	2	ADDED SENSAS OPTION CONNECTIONS	05/20/13	S BARBER
				1	REVISED GAS 1, GAS 2 & SW9-x1 CONNECTIONS; DELETED DS7	05/11/13	S BARBER

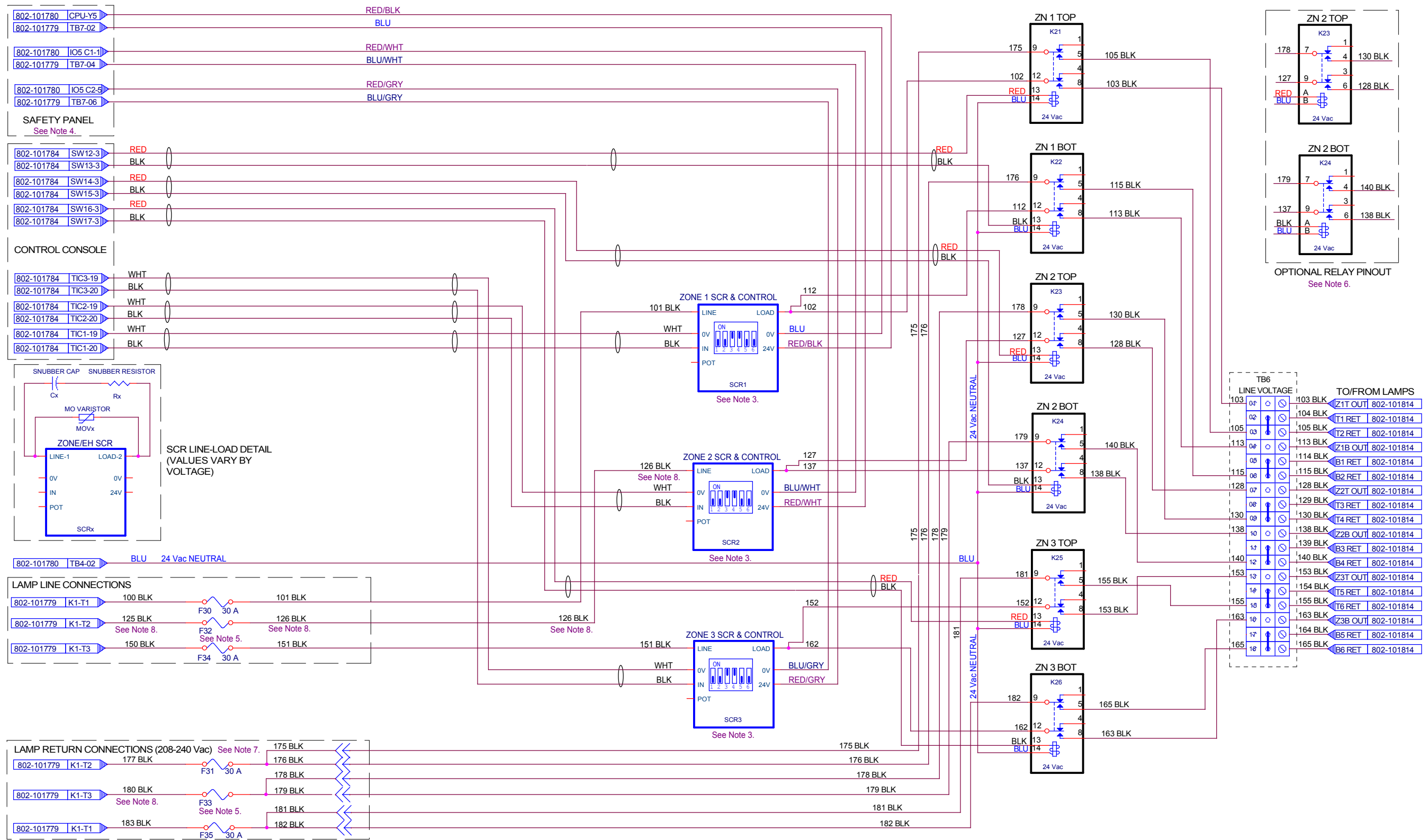
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 DIVISION OF LOCHABER CORNWALL, INC.  
 675 NORTH ECKHOFF STREET, BLDG D, ORANGE, CA 92668 USA

**CONTROL CONSOLE LA-306**

APPROVALS	DATE
DRAWN S BARBER	04/25/2013
CHECKED S BARBER	04/25/2013
ISSUED J CLARK	05/12/2013

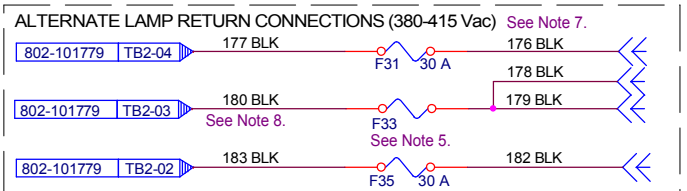
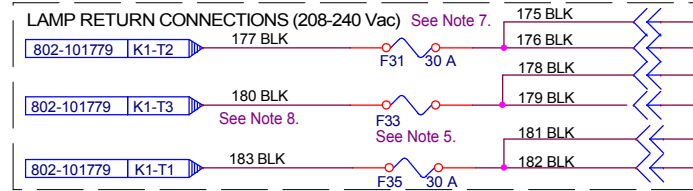
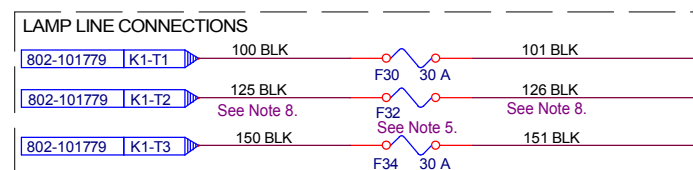
File: **CONTROL CONSOLE LA-306**  
 Size: Document Number  
 Part Number: **802-101784-02**  
 Date: Wednesday, November 23, 2016 Sheet 1 of 1





- NOTES**
- WIRES 20-99 #18 AWG, WIRES 100-199 #14 AWG. SEE NOTE 8.
  - WIRE COLOR CODE:  
 RED SOLID or STRIPE - 24 Vac CONTROL  
 BLUE SOLID or BLUE WITH WHITE or GRAY STRIPE - 24 Vac NEUTRAL (COMMON)  
 BROWN SOLID - 117 Vac POWER  
 BLUE WITH BLACK STRIPE - 117 Vac NEUTRAL (COMMON)  
 ALL 2-CONDUCTOR CABLE 24 V  
 WIRES 72-74 +5 Vdc  
 BLACK SOLID - LINE VOLTAGE (208-415 Vac)  
 YELLOW WITH GREEN STRIPE - SAFETY (EARTH) GROUND
  - SCRx DIP SW: SET 3 & 4 "ON" (UP), OTHERS "OFF" (DN)
  - CNTLx CONNECTS ONLY TO POWER 24V & 0V TERM. OF SCRx.
  - F32 & F33 30A STANDARD, 40A HIGH POWER MODELS

- USE INSET FOR OPTIONAL ZONE 2 HIGH POWER RELAY WIRING.
- USE APPROPRIATE LAMP RETURN CONNECTIONS BASED ON FURNACE LINE VOLTAGE.
- FOR HIGH POWER MODELS, WIRES 125, 126 & 180 ARE #10 AWG.



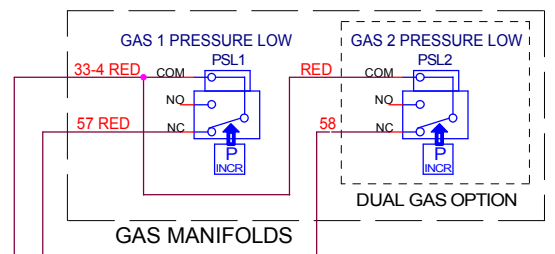
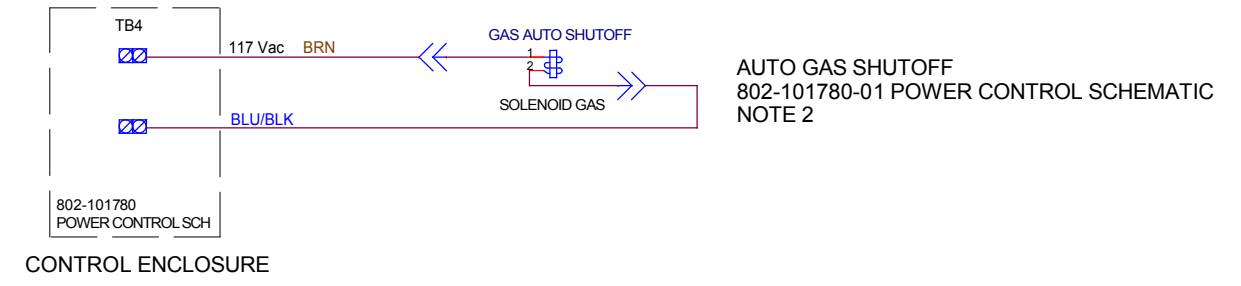
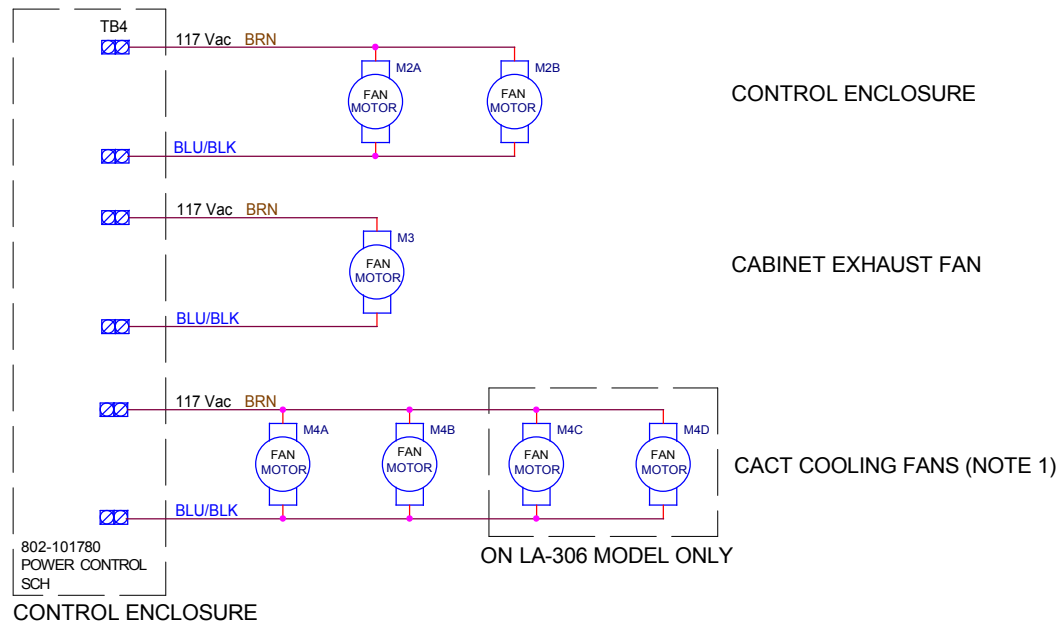
REV	DESCRIPTION	DATE	APPROVED

REV	DESCRIPTION	DATE	APPROVED
1	CLARIFIED CONNECTIONS FOR 208-240 Vac MODELS PER NOTE 7.	11/23/16	S BARBER
0	INITIAL RELEASE	09/20/16	S BARBER

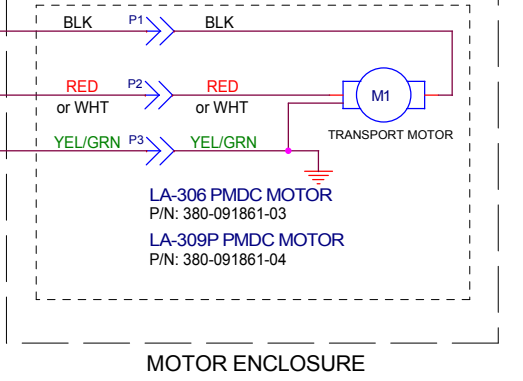
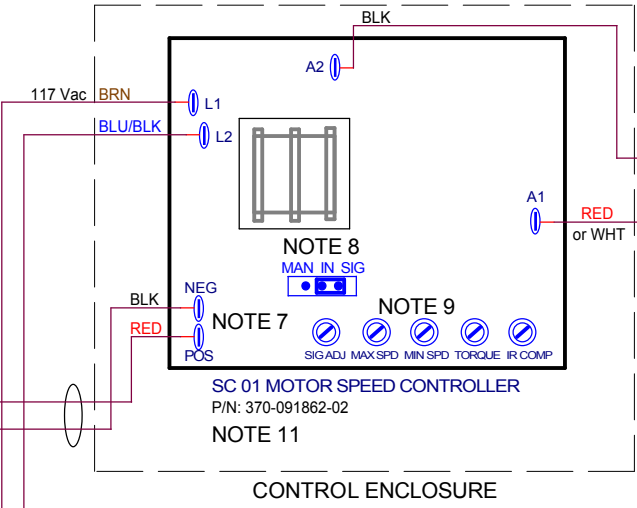
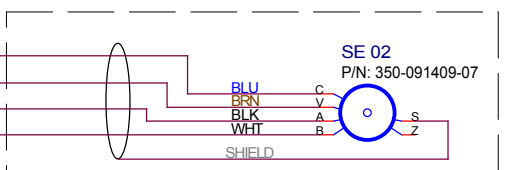
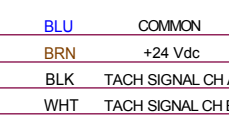
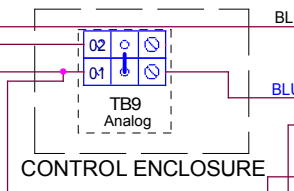
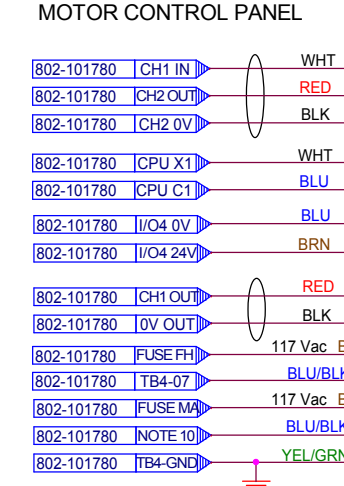
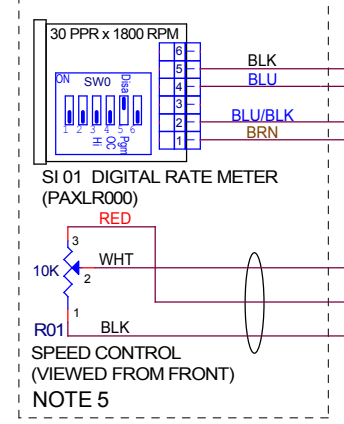
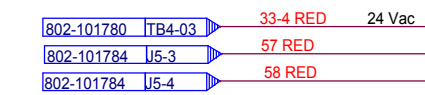
REV	DESCRIPTION	DATE	APPROVED

APPROVALS		DATE	TITLE
DRAWN	S BARBER	09/20/2016	ZONE CONTROL LA-306 AFTER 2015
CHECKED	S BARBER	09/20/2016	
ISSUED	J CLARK		

**LCI Furnaces**  
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TO ADJUST GAS PRESSURE SWITCH SETPOINT:  
 =====  
 CW = RAISES SETPOINT (ALARMS AT HIGHER PRESSURE, REQUIRES MORE PRESSURE TO RELEASE ALARM)  
 CCW = LOWERS SETPOINT (ALARMS AT LOWER PRESSURE, REQUIRES LOWER PRESSURE TO RELEASE ALARM)



- NOTES:
- NUMBER OF FANS MAY VARY.
  - SUPPLIED WITH OPTIONAL EQUIPMENT.
  - ALL WIRES 18 AWG UNLESS OTHERWISE NOTED.
  - ALL MULTI-CONDUCTOR CABLE 22 AWG WIRES.
  - WIRE R01 FOR CW INCREASE IN MOTOR SPEED.
  - INSERT LAMPS IN CORRESPONDING HOLES ON PANEL.
  - REVERSE +ARM AND -ARM FOR PROPER MOTOR ROTATION.
  - SET BOARD JUMPER TO SIGNAL AS SHOWN.

- NOTES (cont.):
- SET LA-306 MOTOR FOR 1/20 HP; LA-309P FOR 1/8 HP.
  - SOURCE OF BLU/BLK VARIES:  
 LA-306 -- 802-101780 / TB4-07  
 LA-309P -- 802-101780 / K3-8
  - A1 MOTOR CONNECTION COLOR VARIES BY MOTOR.

REV	DESCRIPTION	DATE	APPROVED
1	A1 MOTOR CONNECTION NOTE 11 ADDED	06/12/16	S BARBER
0	REVISED REV 0 FOR RELEASE 03/19/14		J CLARK

REV	DESCRIPTION	DATE	APPROVED
1	A1 MOTOR CONNECTION NOTE 11 ADDED	06/12/16	S BARBER
0	REVISED REV 0 FOR RELEASE 03/19/14		J CLARK

APPROVALS	DATE
DRAWN S BARBER	03/19/2014
CHECKED S BARBER	03/19/2014
ISSUED J CLARK	03/19/2014

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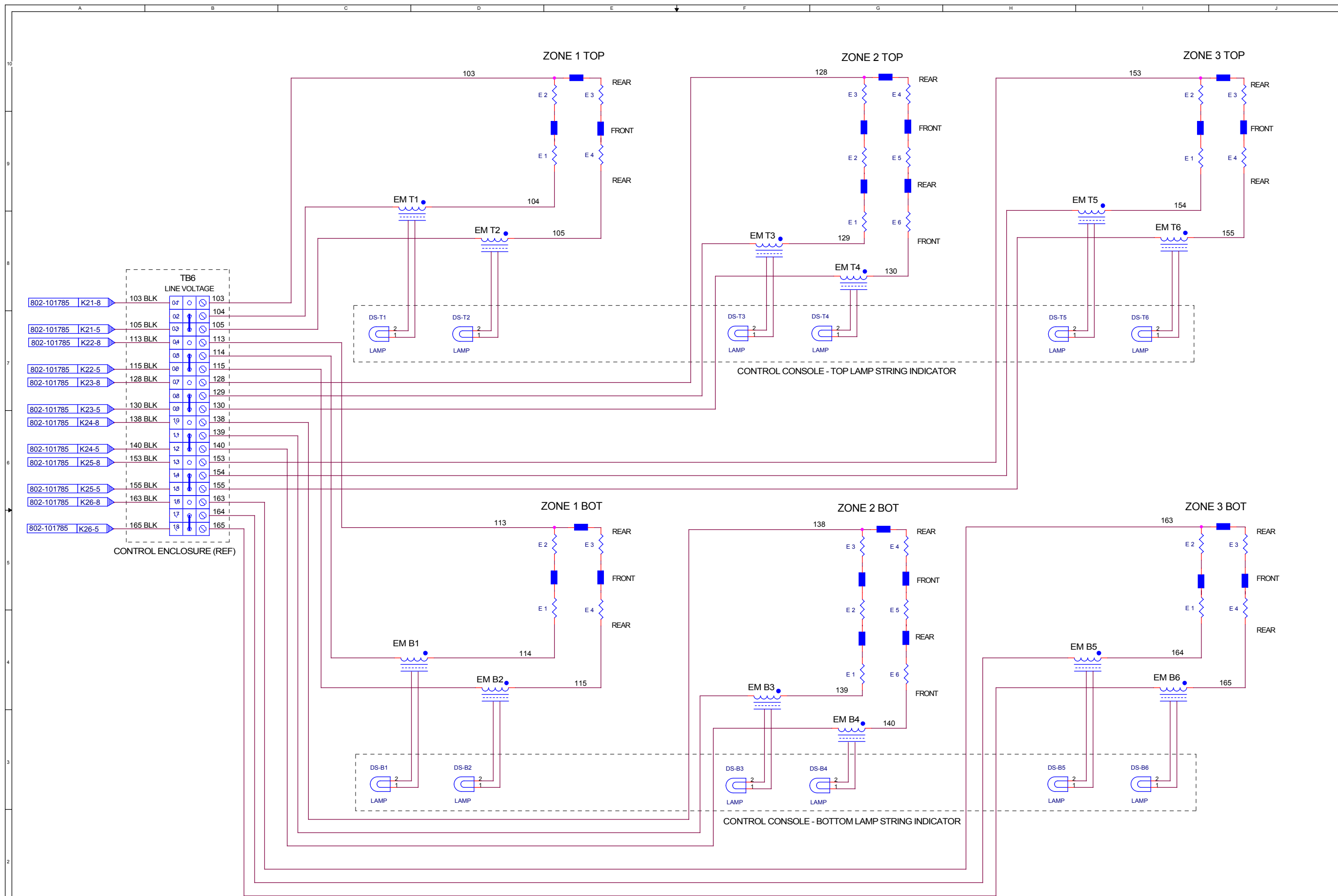
MODEL: LCI LA-306, -309P

Title: FRAME WIRING LA-306 & -309P

Size: STD | 802-101781-04 | Rev 1

Date: Monday, October 10, 2016 | Sheet 1 of 1





**NOTES**  
 1. ALL WIRE #14 AWG

REV	DESCRIPTION	DATE	APPROVED
2	CHANGED LAMP FRONT/REAR CONNECTIONS & 802-101780 ID	09/12/2012	S BARBER
1	CHANGED WIRE NUMBERS ON ZONES	07/26/2012	S BARBER

MODEL	LA-306	APPROVALS	DATE	1
DRAWN	J CLARK	CHECKED	07/12/2012	Title <b>ELEMENT WIRING</b> Size Document Number <b>STD   802-101814-306</b> Date: Wednesday, September 21, 2016 Sheet 1 of 3
ISSUED	S BARBER	07/13/2012	2	
	J CLARK	07/13/2012	2	

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 675 NORTH ECKHOFF STREET, BLDG D, ORANGE, CA 92868 USA