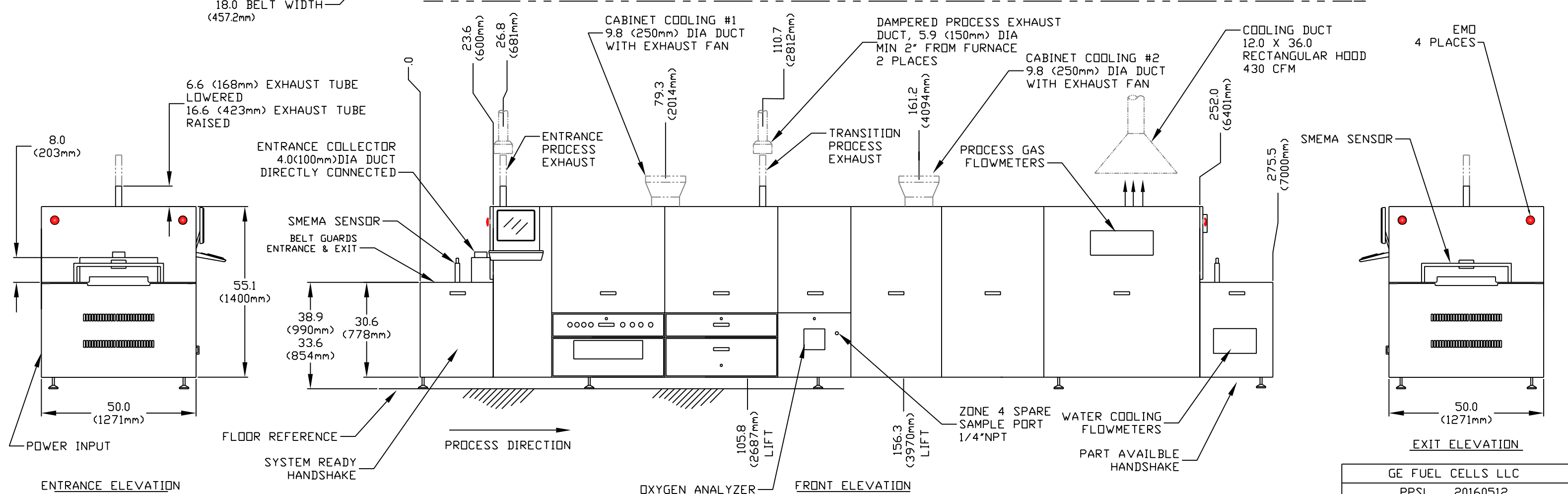
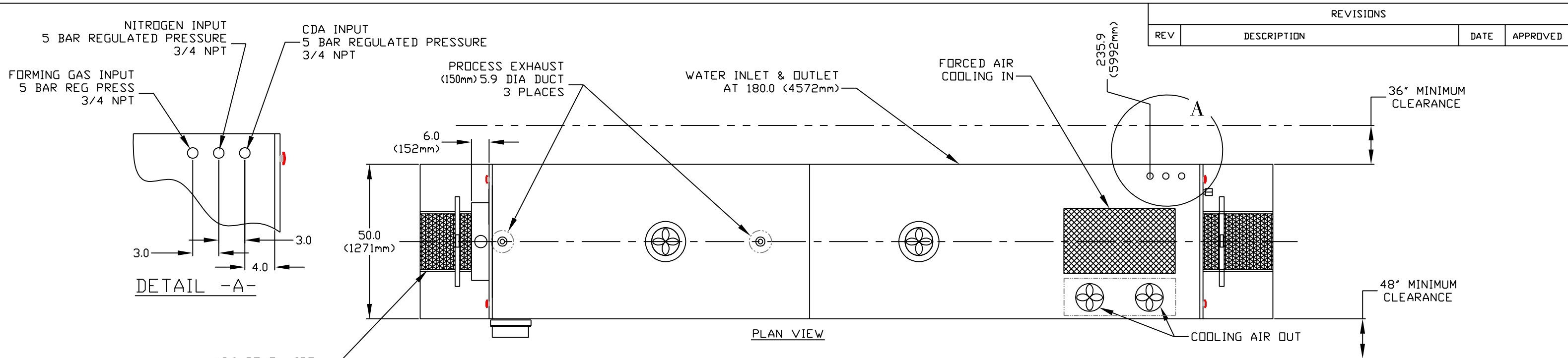


DRAWINGS & SCHEMATICS

Job/Master	Drawing Nbr.	Title
16-005	399-11001-661	FURNACE ARRANGEMENT, TF-618
16-005	412-10119-618-01	CHAMBER ARRANGEMENT
16-005	802-101465-02	SUPPLY GAS SWITCHING
STD	801-090776-08	GAS SAMPLE SYSTEM, OXYGEN ANALYZER
STD	800-10001-01	SAFETY ENCLOSURE
STD	800-10001-02	POWER CONTROL CIRCUIT
STD	800-10001-03	FRAME WIRING
16-005	802-10001-04	I/O ANALOG CONTROL
16-005	802-10001-05	ELEMENT WIRING
16-005	802-10001-06	EDGE HEAT
STD	802-198258-100	SMEMA



- NOTES:
1. ALL DIMENSIONS ARE APPROXIMATE.
 2. MAXIMUM LOAD ON BELT: 8 LBS PER FOOT

REVISIONS				GE FUEL CELLS LLC			
REV	DESCRIPTION	DATE	APPROVED	PPSL 20160512			
				TP SOLAR, INC 16310 DOWNEY AVE PARAMOUNT, CA 90723			
				FURNACE ARRANGEMENT			
				SIZE	JOB NO.	DWG. NO.	REV.
				SCALE NONE		399-11001-661	0
				SHEET 1 OF 1			

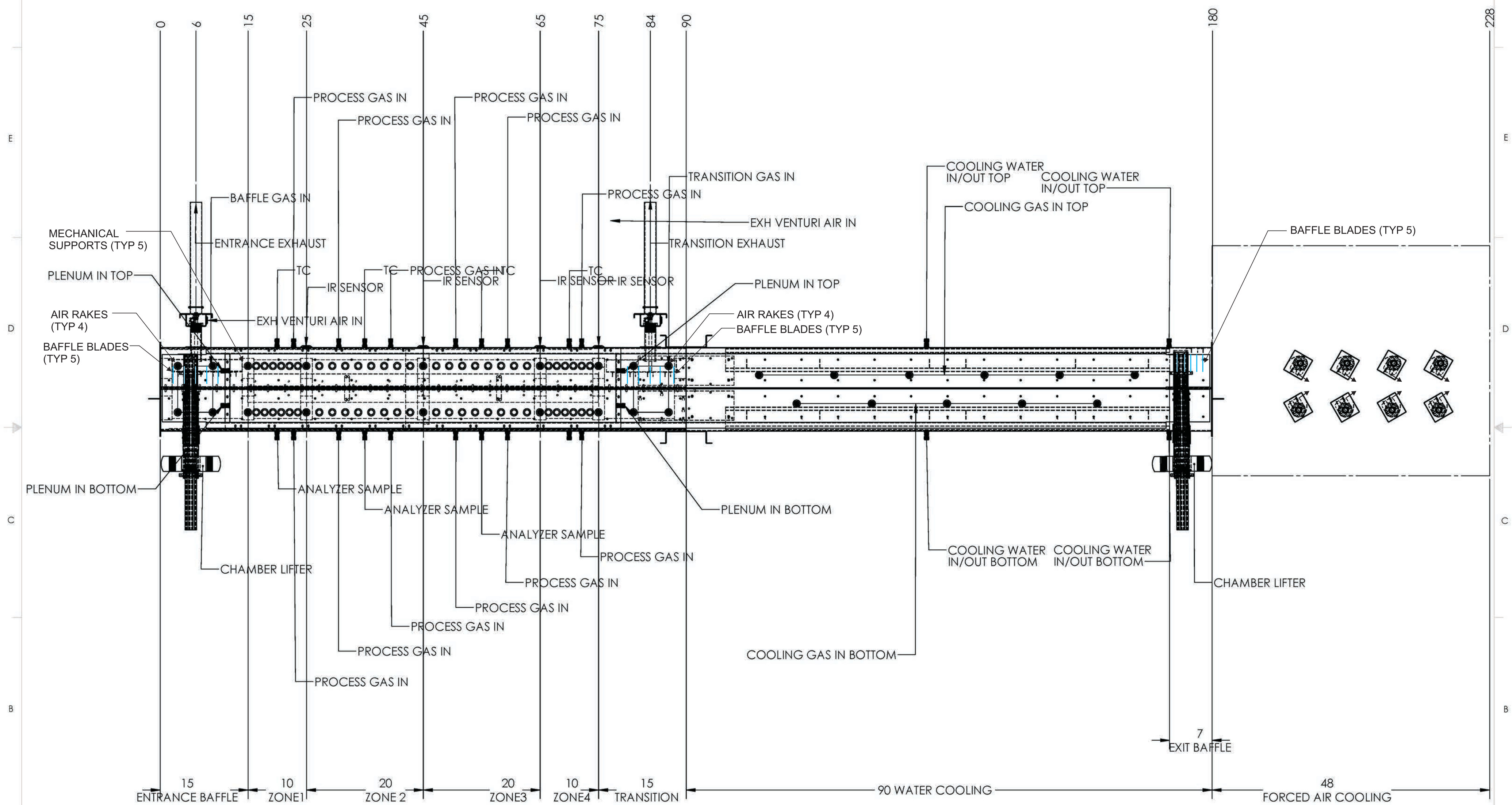
PROPRIETARY AND CONFIDENTIAL				UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES MILLIMETERS ARE IN (XXXXmm) FORMAT			
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF TP SOLAR, INC.				TOLERANCES ARE: DECIMALS ANGLES FRACTIONS X ± .3 XX ± .5° X/X ± 1/4			
ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF TP SOLAR, INC. IS PROHIBITED.				MATERIAL			
				FINISH			
				DO NOT SCALE DRAWING			

CONFIG.		USED ON		APPROVALS		DATE	
NEXT ASSY				DRAWN		5/23/16	
				CHECKED		5/23/16	
				ISSUED		5/23/16	

MODEL NO.		TF618X	
APPROVALS		DATE	
C ROODE		5/23/16	
J CLARK		5/23/16	
A REY		5/23/16	

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412-10119-618, GE FUEL CELL CHAMBER LAYOUT

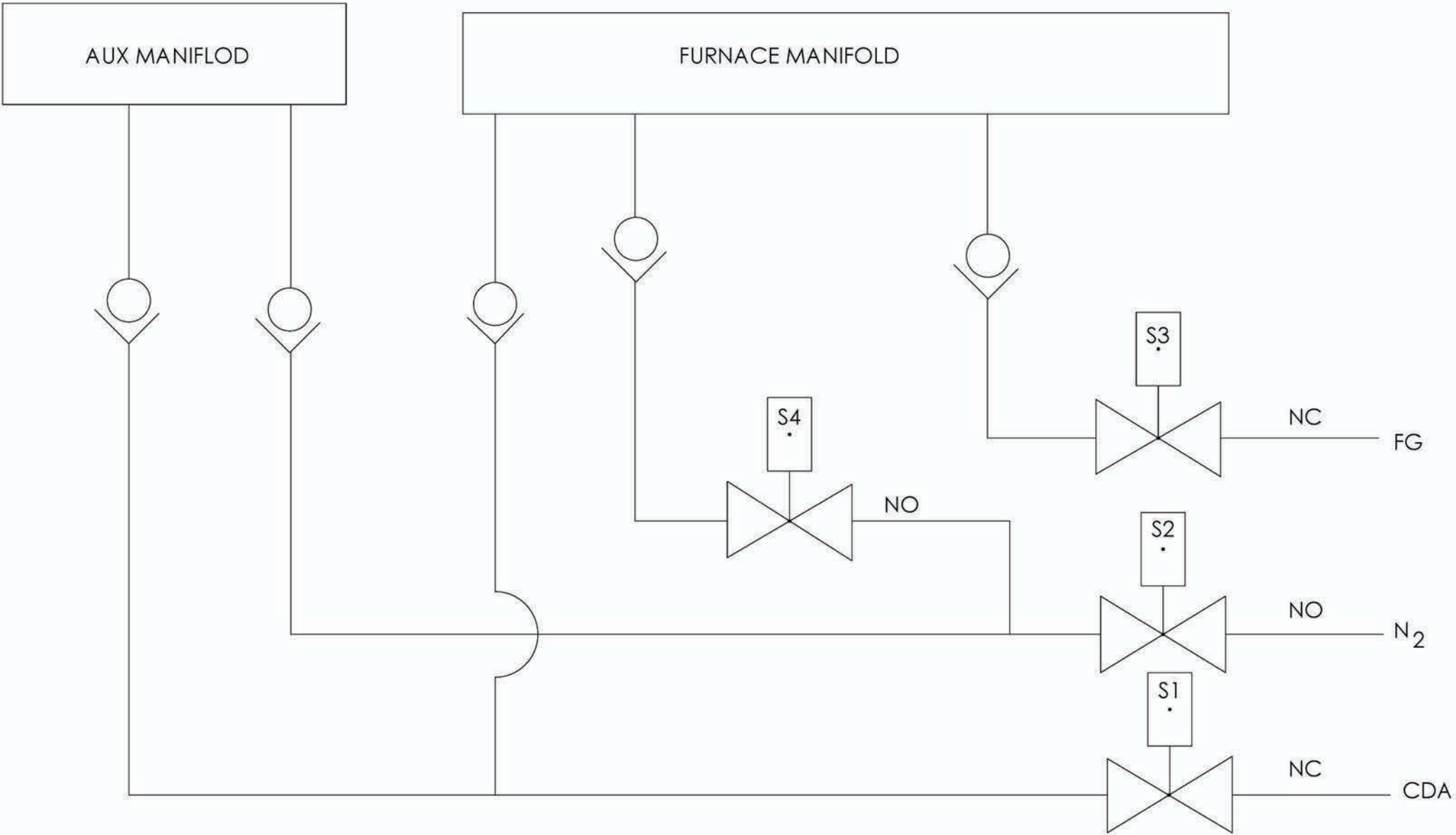
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UNLESS OTHERWISE SPECIFIED:		NAME	DATE	GE FUEL CELLS LLC
DIMENSIONS ARE IN INCHES		DRAWN	PGR 5/17/16	
TOLERANCES:		CHECKED	JMC 5/23/16	
FRACTIONAL: $\pm .001$		ENG APPR.		
ANGULAR: MACH $\pm .5$ deg		MFG APPR.		
ONE PLACE DECIMAL $\pm .05$		Q.A.		CHAMBER LAYOUT TF-618 SN 2016xxx
TWO PLACE DECIMAL $\pm .0025$				
INTERPRET GEOMETRIC TOLERANCING PER:				
MATERIAL				
NEXT ASSY	USED ON	FINISH		SIZE DWG. NO. REV
				C 412-10119-618-01 A.00
APPLICATION		DO NOT SCALE DRAWING		SCALE: 1:12 WEIGHT: SHEET 1 OF 1



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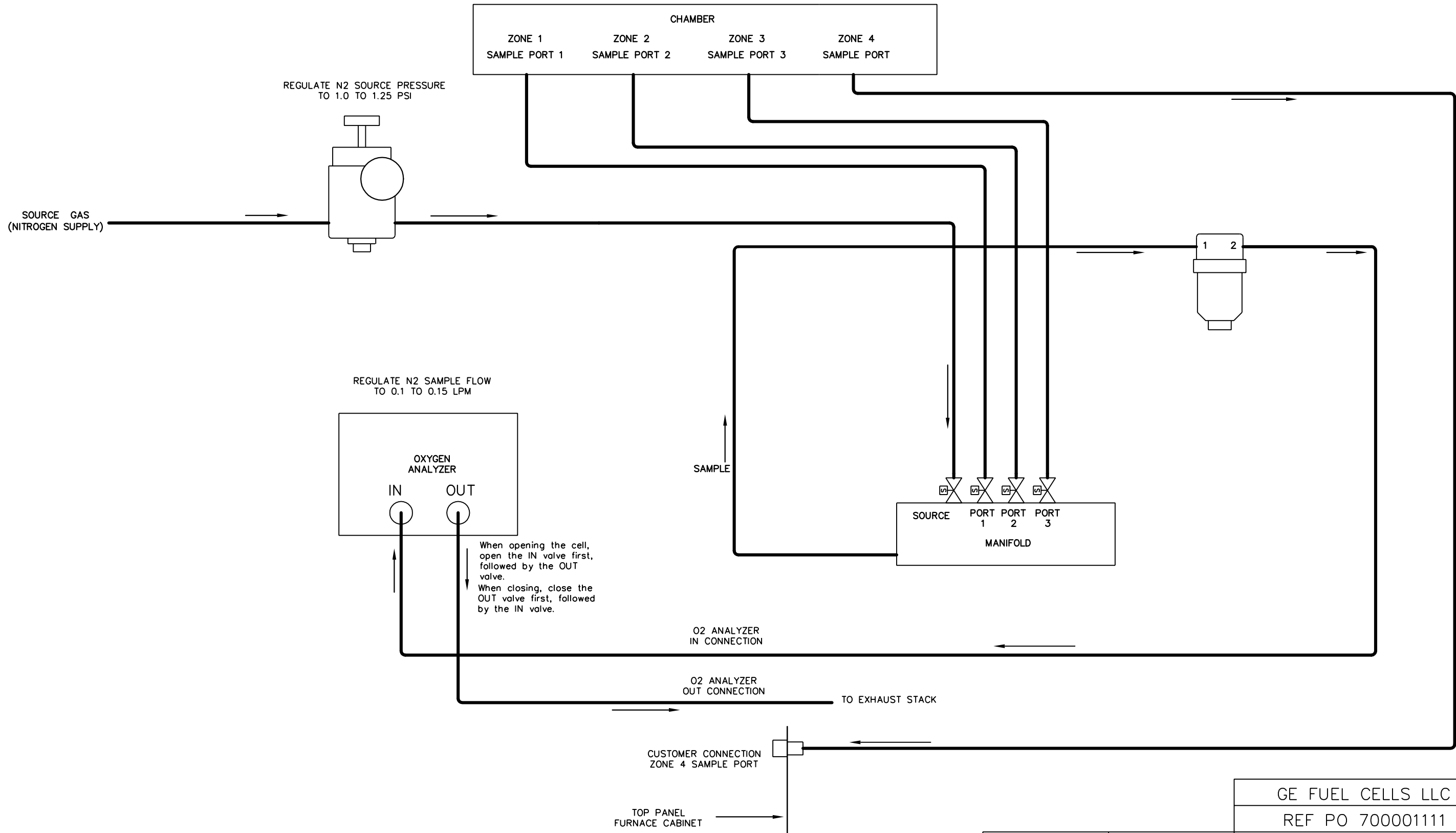
VALVE CONDITION		GAS	S1	S2	S3	S4
CDA MODE	AIR FIRING	CDA	ON	ON	OFF	ON
Nitrogen MODE		LOW O2	OFF	OFF	OFF	OFF
Forming Gas MODE		VL O2 FIRING	OFF	OFF	ON	ON



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		UNLESS OTHERWISE SPECIFIED:		NAME		DATE			
		DIMENSIONS ARE IN INCHES		DRAWN				TITLE: Supply Gas Switching	
		TOLERANCES:		CHECKED					
		FRACTIONAL: $\frac{x}{y} \pm 1/32$		ENG APPR.					
		ANGULAR: MACH $\pm 0.5 \text{ deg}$		MFG APPR.					
		$\langle XX \rangle \pm 1.2 \text{ deg}$		Q.A.				SIZE DWG. NO. REV C 802-101465-02 02	
		ONE PLACE DECIMAL $\langle .XX \rangle \pm 0.05$							
		TWO PLACE DECIMAL $\langle .XXX \rangle \pm 0.025$							
		INTERPRET GEOMETRIC TOLERANCING PER:							
		MATERIAL							
NEXT ASSY		USED ON		FINISH					
		APPLICATION		DO NOT SCALE DRAWING					





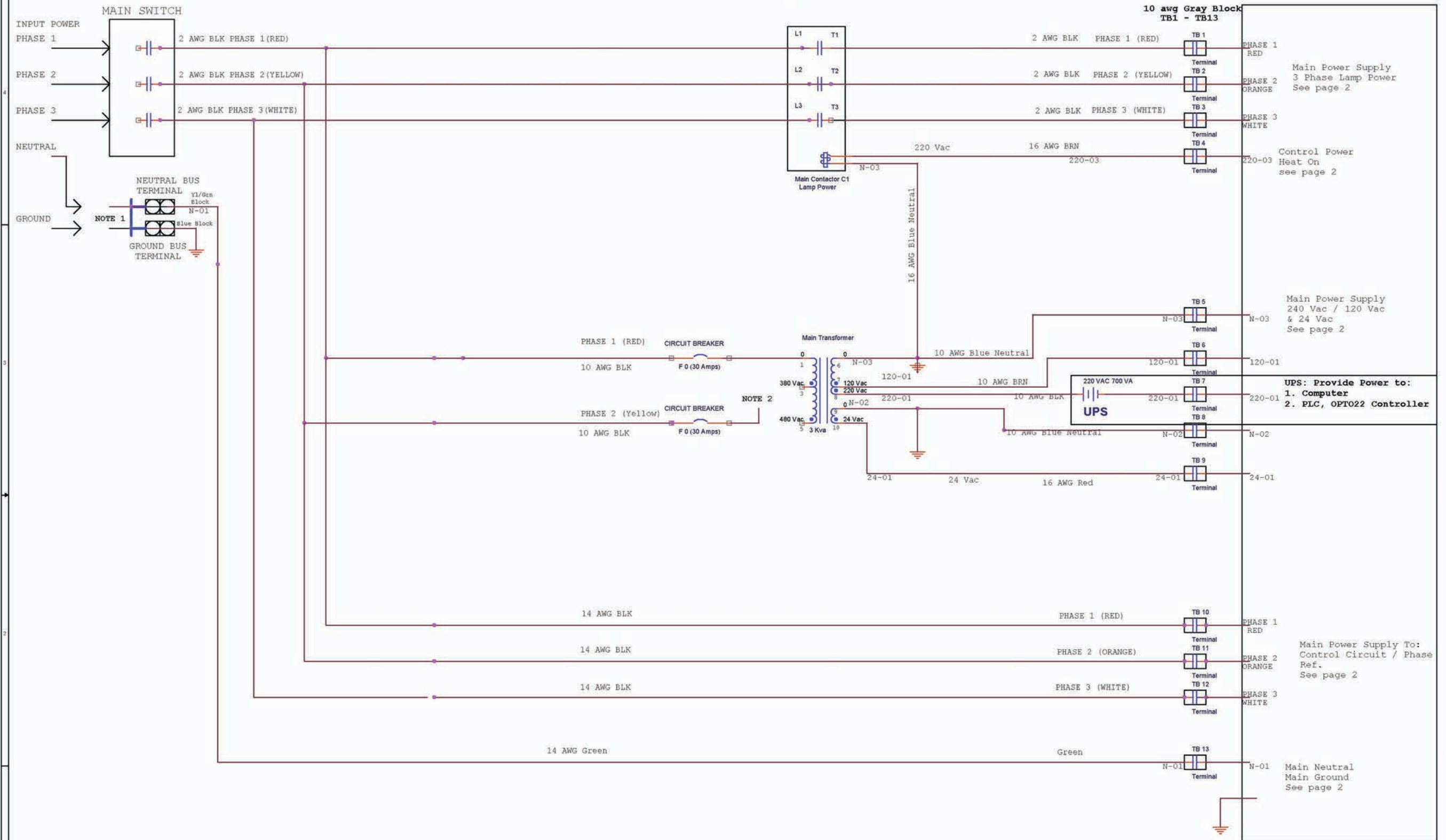
1	ADDED CUSTOMER P.O / CONTRACT RELEASE	9/30/15	J CLARK
REV	DESCRIPTION	DATE	APPROVED
REVISIONS			

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		
DECIMALS .XX±.03 .XXX±.010	ANGLES XX±.5° XX.X±.2°	FRACTIONS X/X±1/32
MATERIAL		
FINISH		
DO NOT SCALE DRAWING		

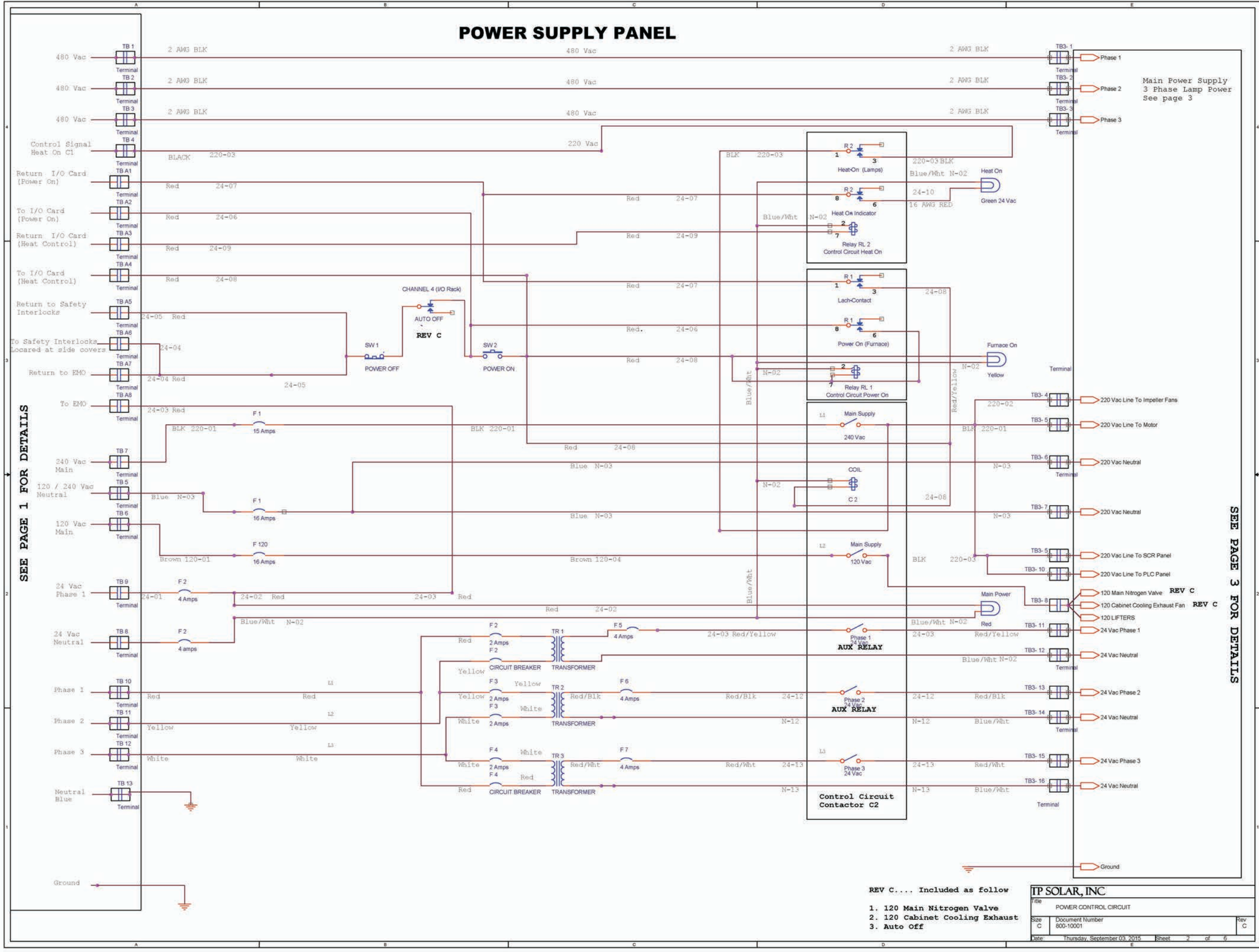
MODEL NO		TF-618	
CONTRACT NO.			
APPROVALS		DATE	
DRAWN	C ROODE	9/09/15	
CHECKED	J CLARK	9/09/15	
ISSUED	A REY	9/09/15	

GE FUEL CELLS LLC			
REF PO 700001111			
		TP SOLAR, INC 16310 DOWNEY AVE PARAMOUNT, CA 90723	
TITLE GAS SAMPLING SYSTEM OXYGEN ANALYZER			
SIZE	JOB NO.	DWG NO.	REV.
D	15-004	801-090776-08	1
SCALE NONE		SHEET 1 OF 1	

SAFETY ENCLOSURE PANEL



NOTE 1:
- 5 WIRE SYSTEM: REMOVED JUMPER
- 4 WIRE SYSTEM: ADD JUMPER
NOTE 2:
- Tap transformer according input power



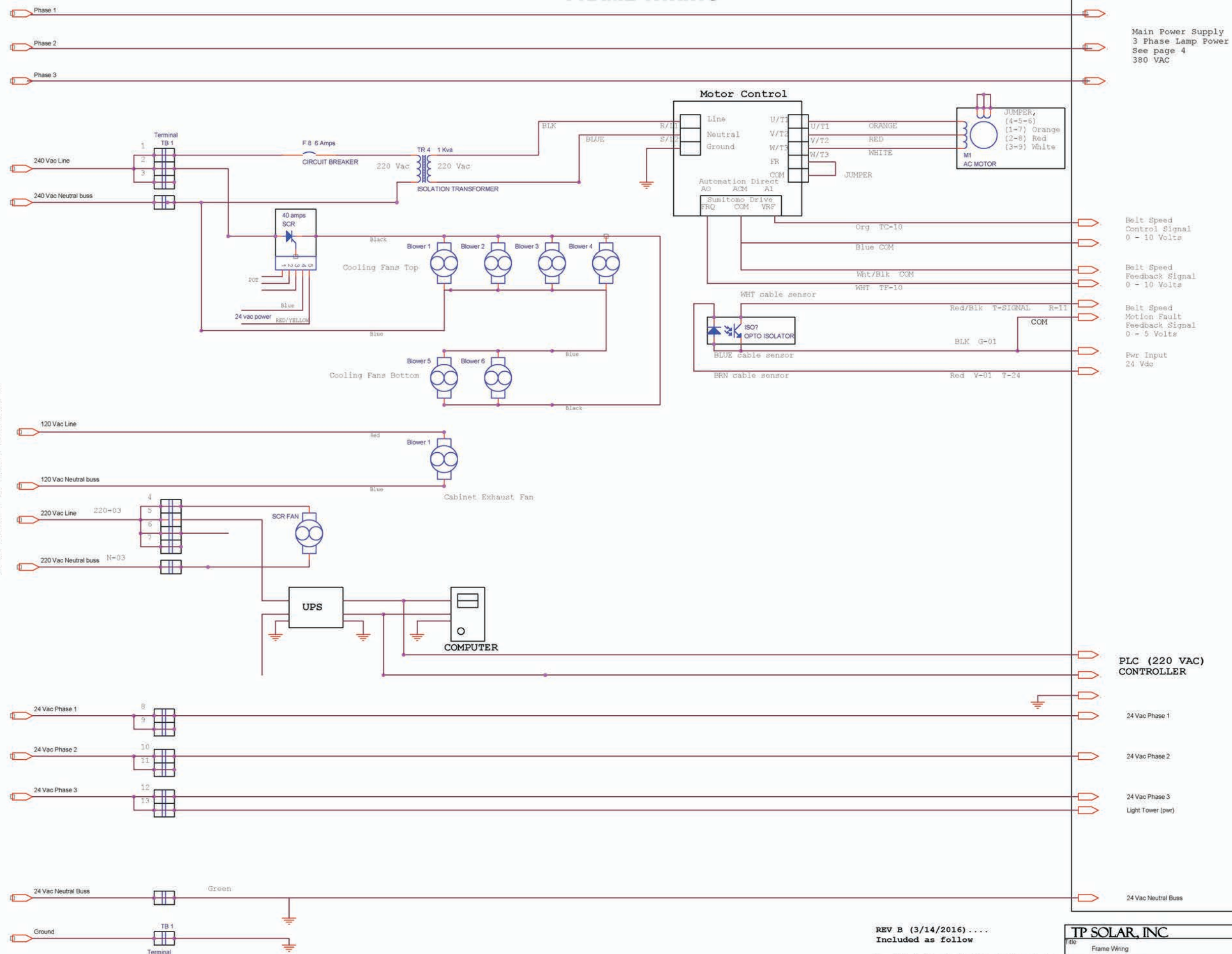
SEE PAGE 1 FOR DETAILS

SEE PAGE 3 FOR DETAILS

- REV C.... Included as follow
- 1. 120 Main Nitrogen Valve
 - 2. 120 Cabinet Cooling Exhaust Fan
 - 3. Auto Off

TP SOLAR, INC		
Title POWER CONTROL CIRCUIT		
Size C	Document Number 800-10001	Rev C
Date: Thursday, September 03, 2015 Sheet 2 of 6		

FRAME WIRING



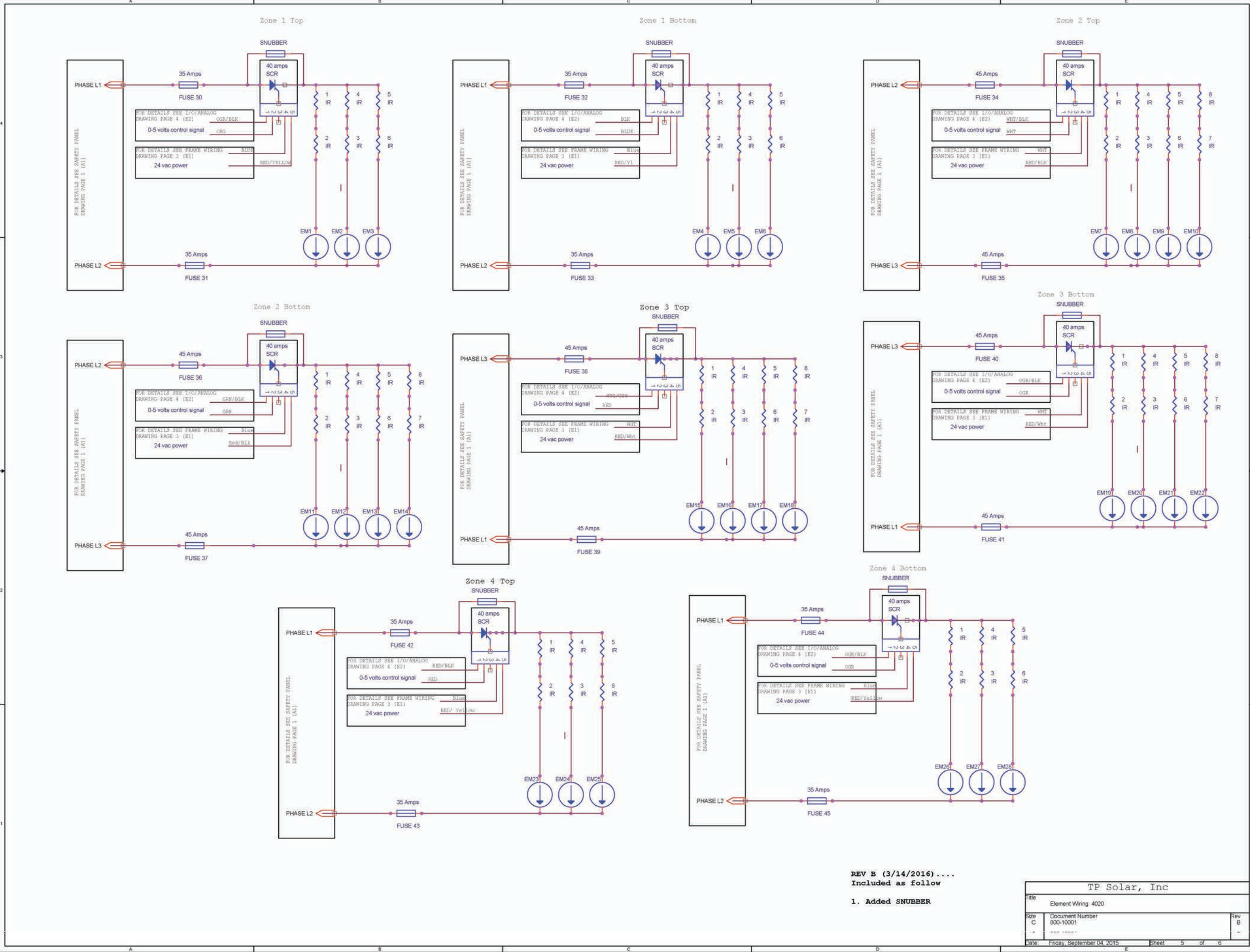
SEE PAGE 2 FOR DETAILS

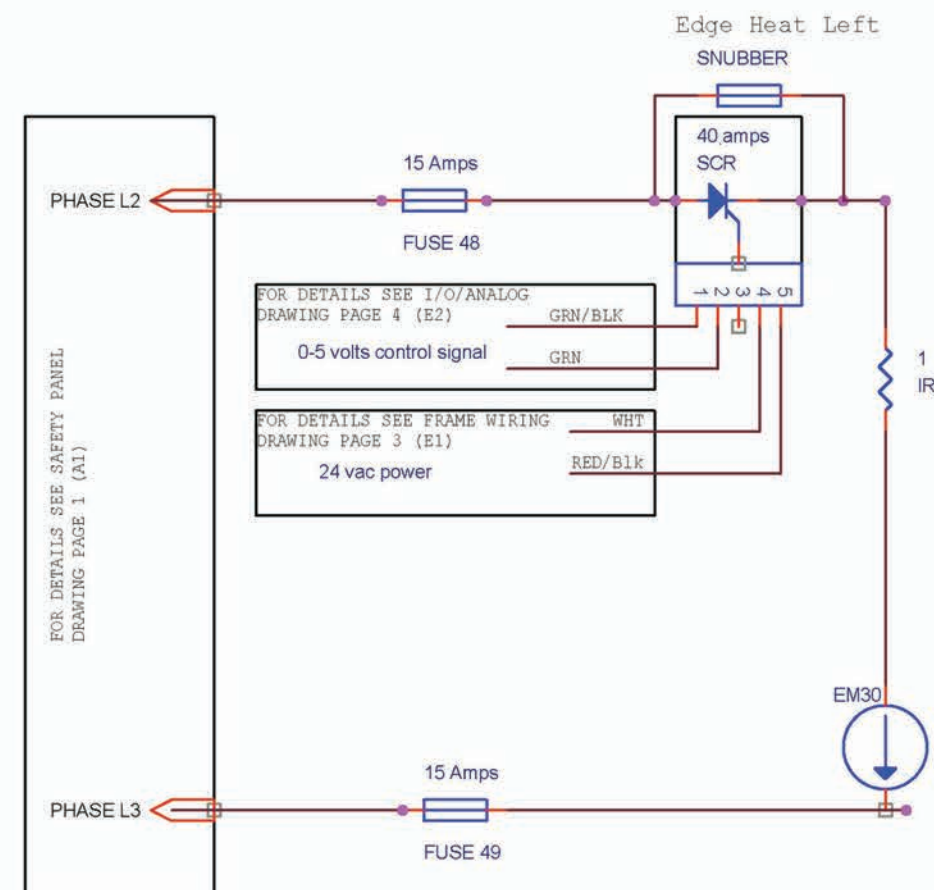
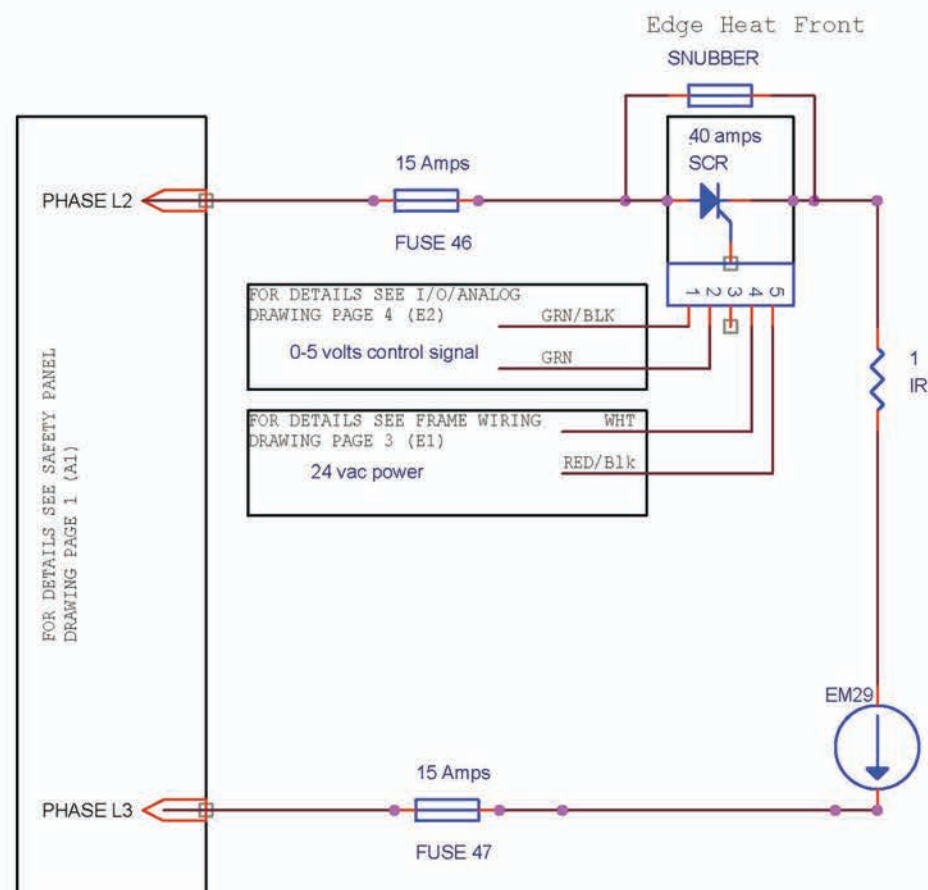
REV B (3/14/2016)....
Included as follow

1. 120 Cabinet Cooling Exhaust Fan

TP SOLAR, INC.

Title		Frame Wiring	
Size	Document Number	Rev	
C	800-10001	B	
Date	Thursday, September 03, 2015	Sheet	3 of 6

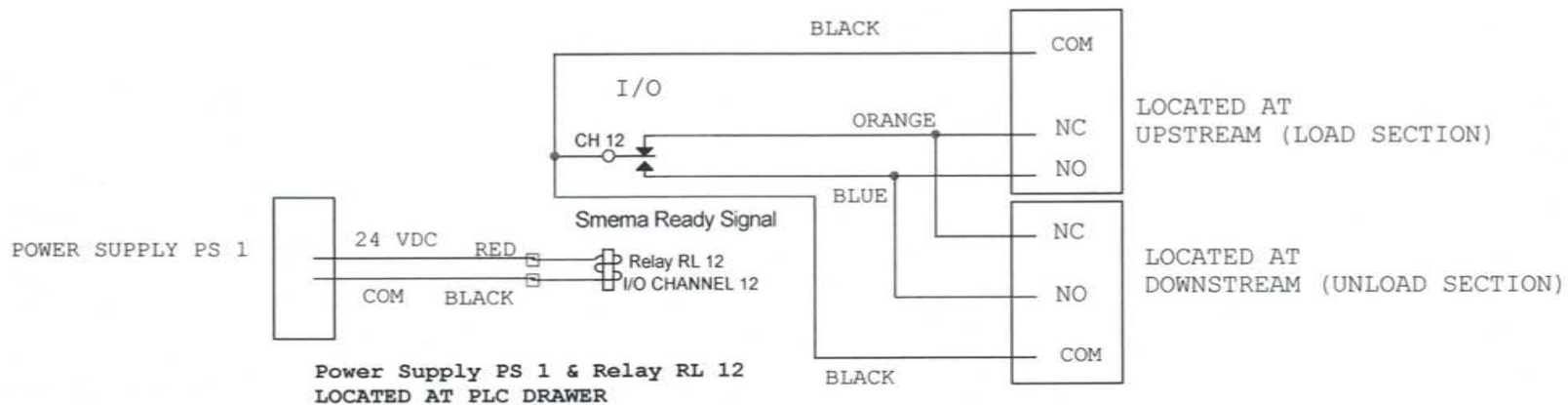




REV B (3/14/2016)
Included as follow

1. Added the Snubber

TP Solar, Inc		
Title	EDGE HEAT	
Size	Document Number	Rev
Custom	800-10001	A
Date:	Friday, September 04, 2015	Sheet 6 of 6



TP SOLAR Inc

Title

SMEMA

Size
A

Document Number
802-198258-100

Rev
A

Date: Thursday, September 03, 2015

Sheet 1 of 1

