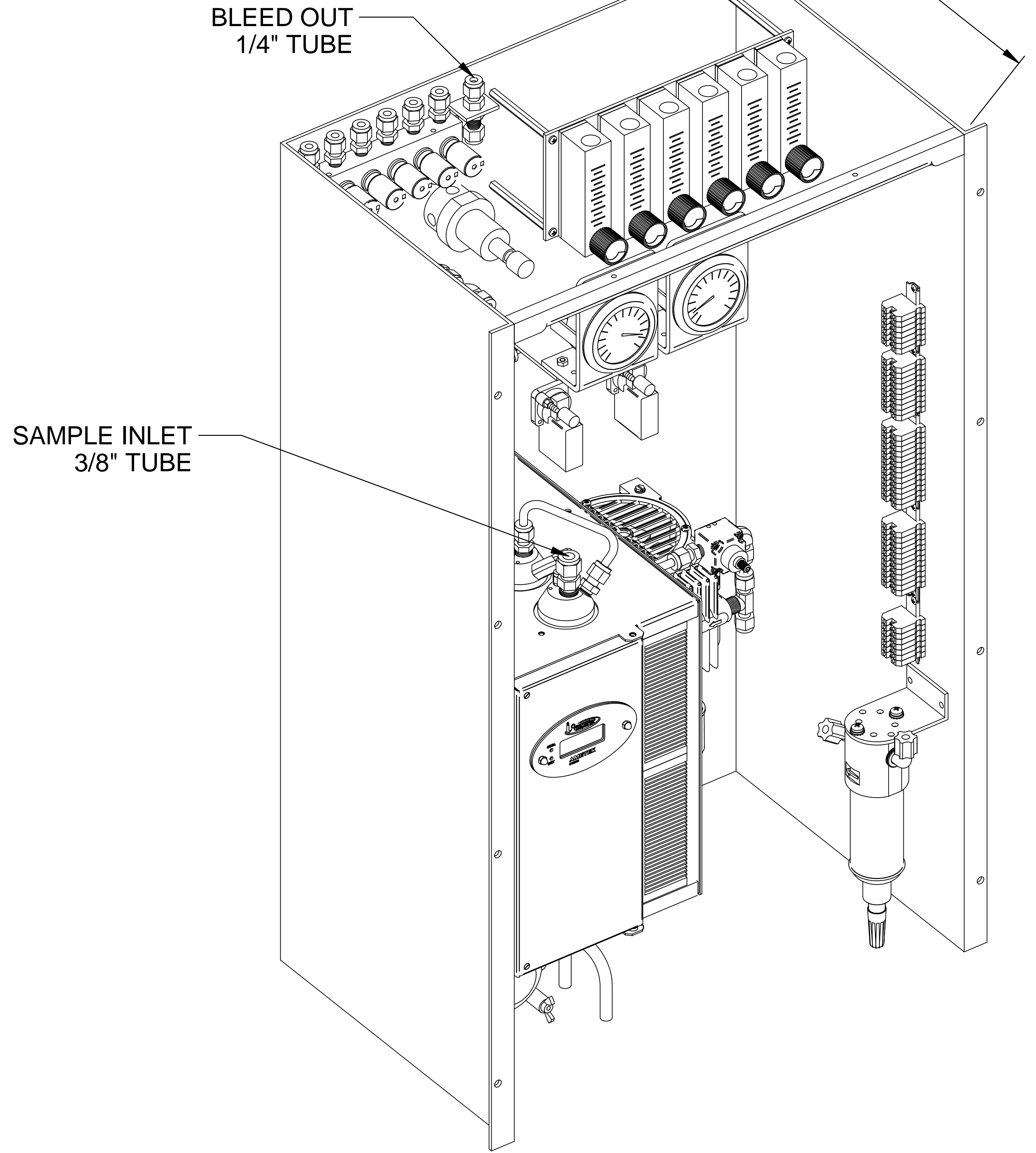


DRAIN TUBE ↓

FRONT VIEW

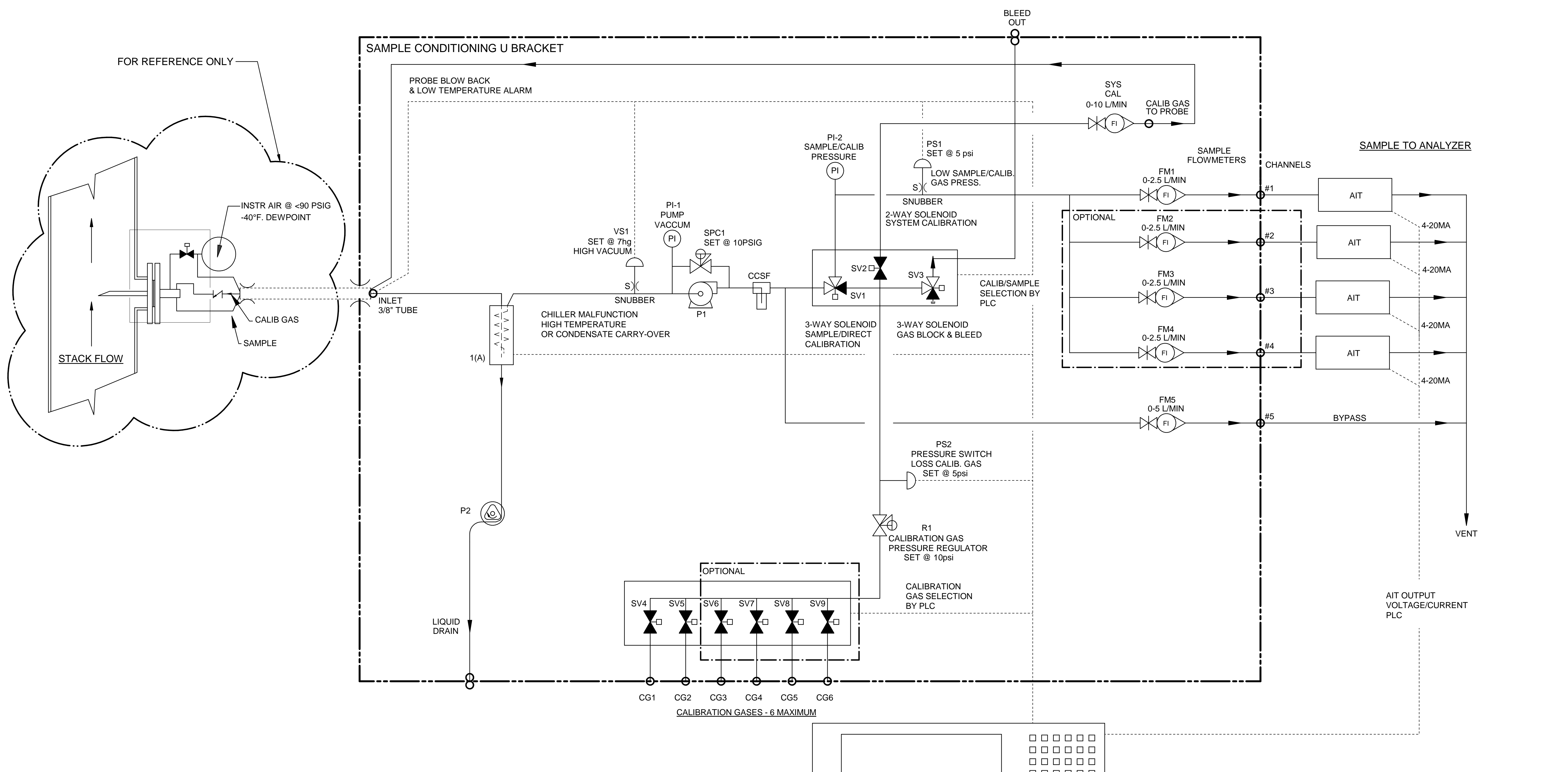
NOTES:

- 1). ARRANGEMENT MAY VARY ACCORDING TO BEST ENGINEERING PRACTICES.
- 2). SEE SHEET 2, 3, & 4 FOR P&ID.
- 3). SEE SHEET 5 FOR WIRING SCHEMATICS.

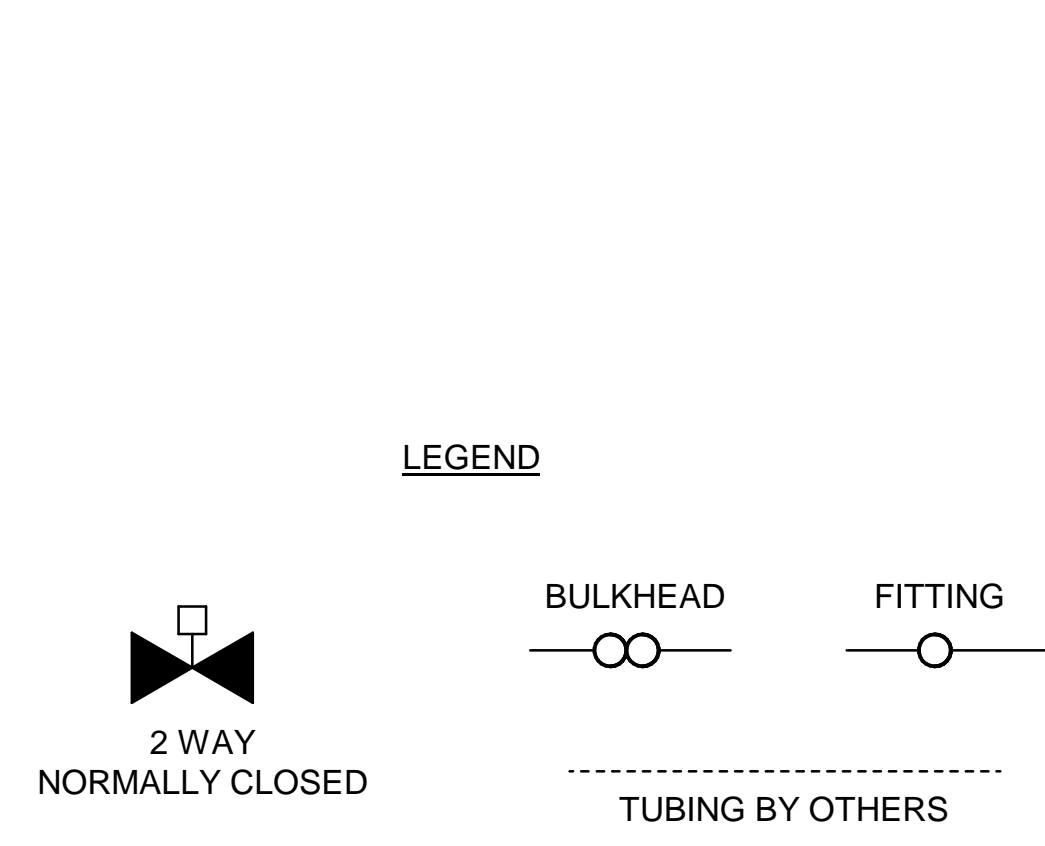


ISOMETRIC VIEW

				A 5/4/16 AS BUILT CK MW
5200 Convoir Drive Carson City, NV 89706 PH(775)883-2500 FAX (775)883-6388		REV DATE	DESCRIPTION	DWN/APVD
<b>3000 SERIES</b> <b>ARRANGMENT &amp; LAYOUT DIMENSIONS</b>		REVISIONS		
PART NO. 3000-SCU-INT	FOR 3000 Series	DATE 08/12/2014	SCALE NTS	SIZE D
DRAWN BY APVD BY	M. Walser M. Withrow	ECO# 2808	SHEET 1 OF 5	DRAWING NO. P2133



Item	Qty	Description	UAI Part No.
VS1	1	Vacuum Switch Air-Logic 0-29"hg	3103-0017
CCSF	1	Condensate Sensor	CCSF-0007
PI-1	1	Gauge - Vacuum 0-30"Hg Liquid Filled S.S.	3019-0009
SPC1	1	Sample Pressure Controller	4955-0246
P1	1	Pump - Sample 115Vac Single Head	4958-0025
P1	1	Pump - Sample 230Vac Single Head	4958-0015
PS1,2	2	Pressure Switch Air-Logic F-5100-15 15psig	3103-0018
SV1,3	2	Solenoid Valve - Burkert 6012SER	4955-0041
SV2	1	Solenoid Valve - Burkert 6011SER 85psig	4955-0040
SV4-9	2-6	Solenoid Valve - 2 Way	4955-0247
PI-2	1	Gauge - Pressure 0-15psig Liquid Filled S.S.	3019-0008
SYS CAL	1	Flowmeter W/Needle Valve 0-10 l/m	4965-0007
FM1-4	4	Flowmeter W/Needle Valve 0-2.5 l/m	4965-0018
FM5	1	Flowmeter W/Needle Valve 0-5 l/m	4965-0008
CHILLER	1	Universal Analyzers Model 3040	3040 - 115Vac
CHILLER	1	Universal Analyzers Model 3040	3040 - 230Vac
R1	1	Regulator - Porter Model #8268 0-30psig	8200-0008
S)	1	Snubber - #6-32	0000-0000
P2	1	Pump - Peristaltic Drain 115Vac	4958-0028
P2	1	Pump - Peristaltic Drain 230Vac	4958-0045

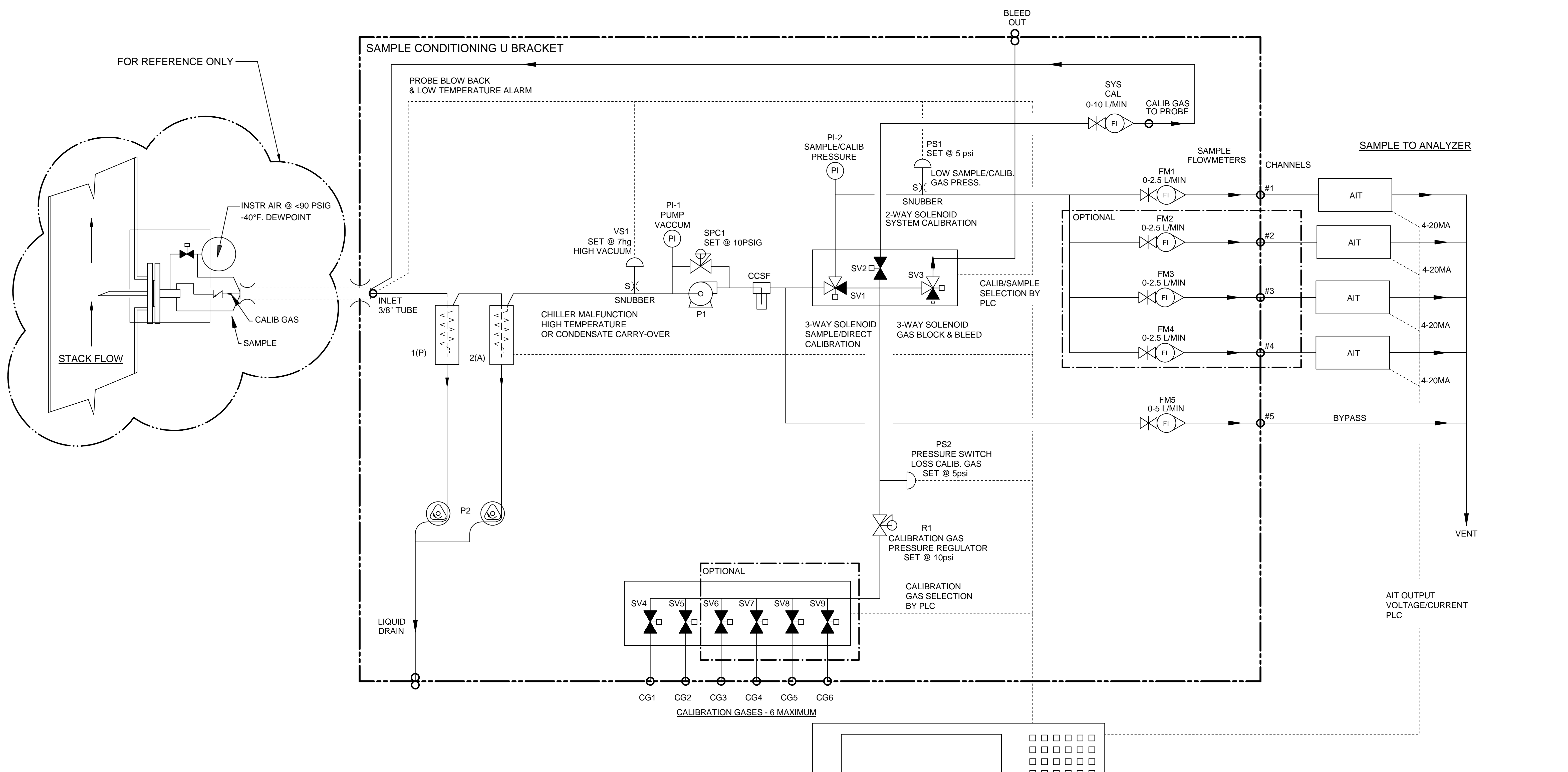


- PLC OR DATA LOGGER**
- 1) CALIBRATION/SAMPLE SELECT
  - 2) CALIBRATION GAS SELECT
  - 3) SYSTEM/DIRECT CALIBRATION SELECT-SYSTEM BIAS CALCULATION
  - 4) PROBE BLOW BACK
  - 5) PROBE LOW TEMPERATURE ALARM
  - 6) CHILLER MALFUNCTION-HIGH TEMPERATURE OR CONDENSATE CARRY-OVER
  - 7) HIGH INLET VACUUM - PROBE FILTER INITIATE BLOWBACK OR MAINTENANCE
  - 8) SAMPLE/CALIB. GAS PRESS LOW-ALARM FOR MAINTENANCE

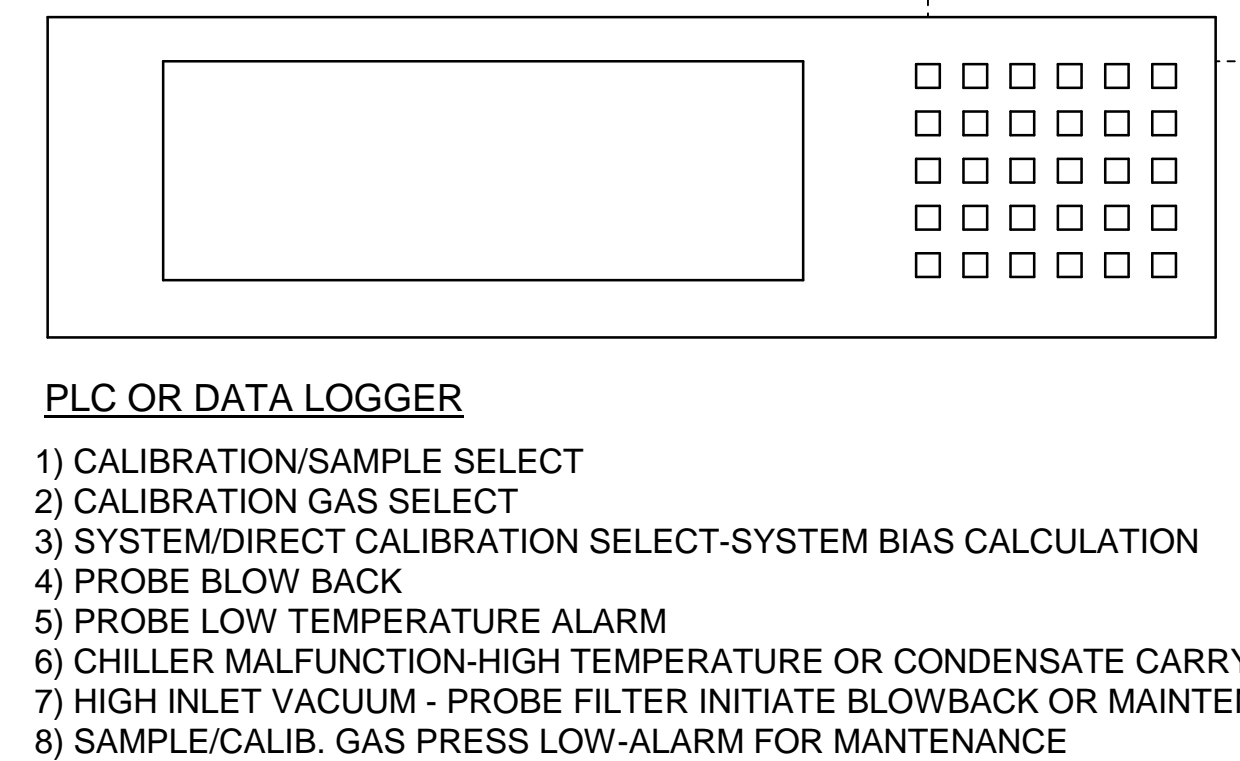
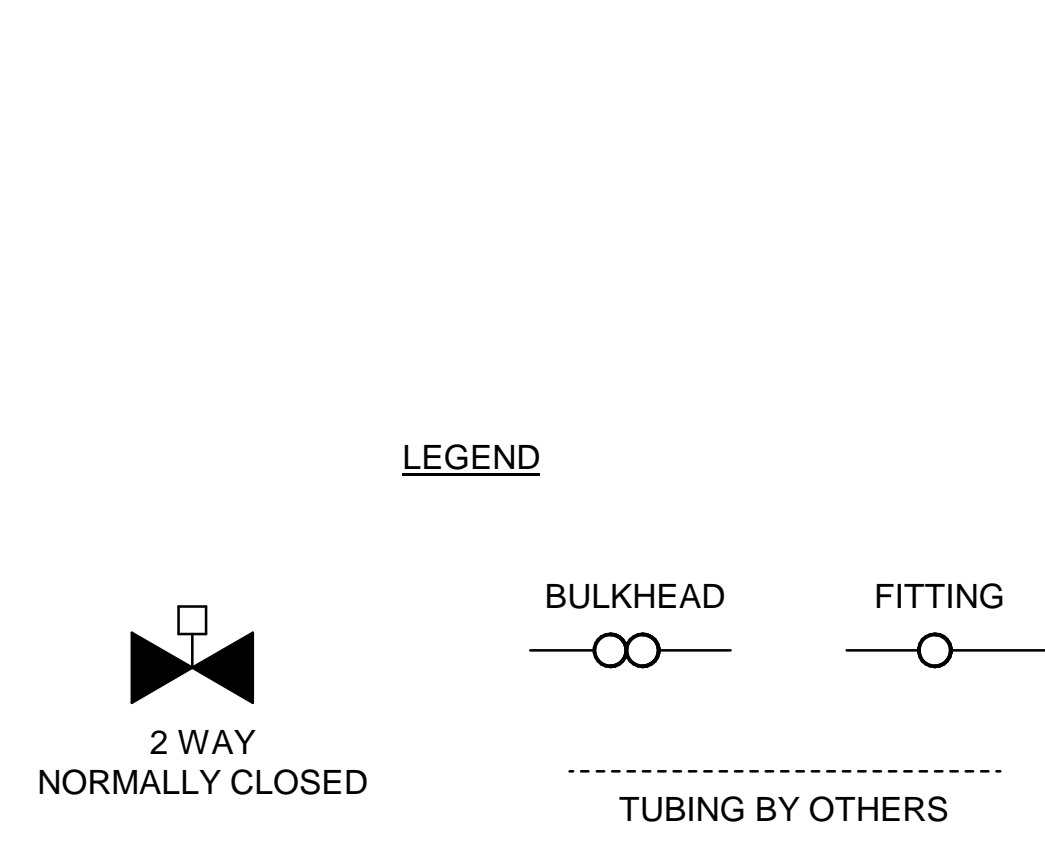
**NOTES:**

1. ALL FITTINGS 1/4" TUBE (UNLESS OTHERWISE NOTED).

			A	5/4/16	AS BUILT	CK	MW
<b>3000 SERIES P&amp;ID</b>		DATE: 08/12/2014		SCALE: NTS		SIZE: D	
PART NO. 3000-SCU-INT		FOR 3000 Series		DRAWN BY: M. Walser		ECO#: 2808	
		APVD BY: M. Withrow		SHEET 2 OF 5		DRAWING NO. P2133	



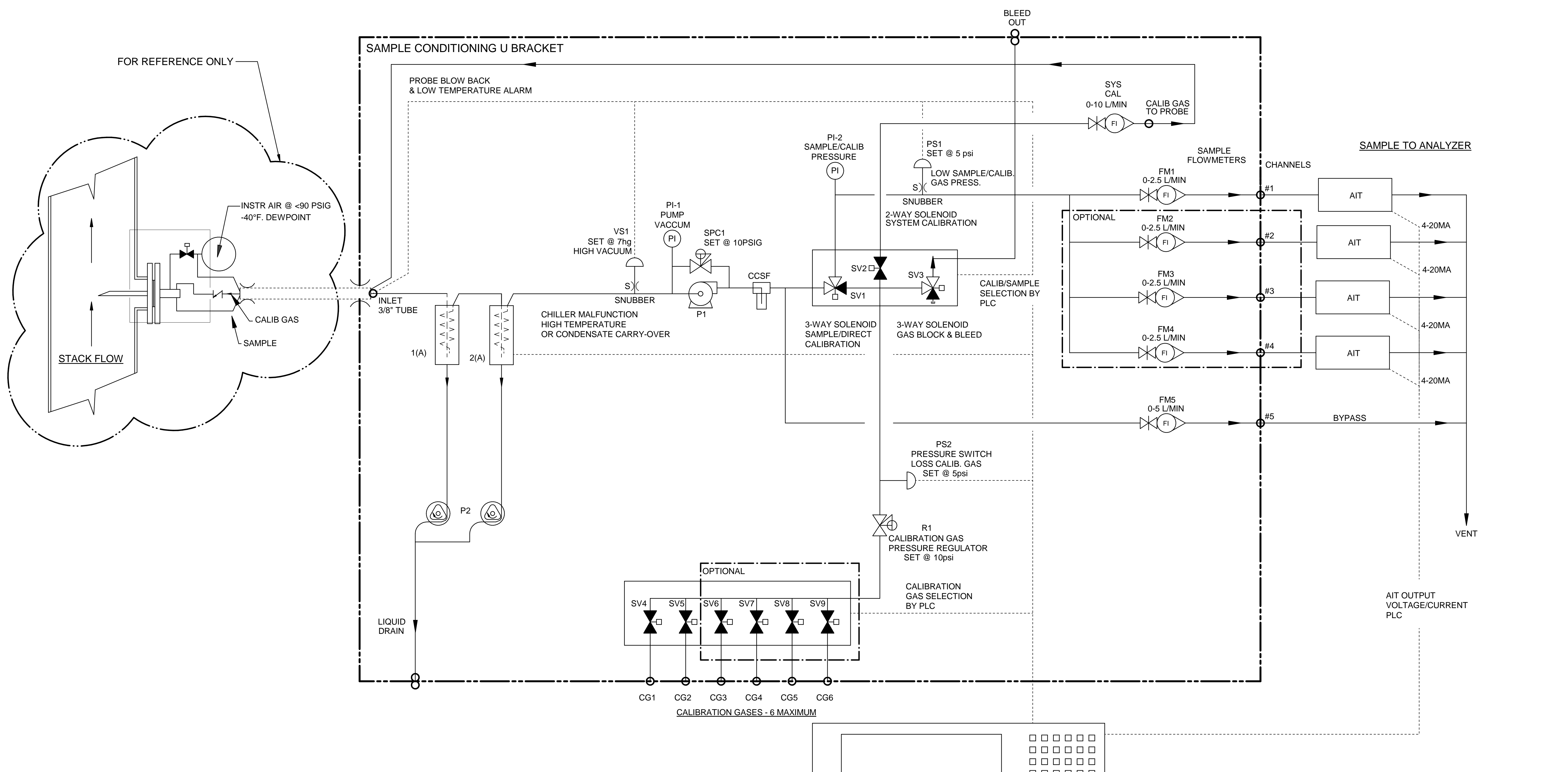
Item	Qty	Description	UAI Part No.
VS1	1	Vacuum Switch Air-Logic 0-29"hg	3103-0017
CCSF	1	Condensate Sensor	CCSF-0007
PI-1	1	Gauge - Vacuum 0-30"Hg Liquid Filled S.S.	3019-0009
SPC1	1	Sample Pressure Controller	4955-0246
P1	1	Pump - Sample 115Vac Single Head	4958-0025
P1	1	Pump - Sample 230Vac Single Head	4958-0015
PS1,2	2	Pressure Switch Air-Logic F-5100-15 15psig	3103-0018
SV1,3	2	Solenoid Valve - Burkert 6012SER	4955-0041
SV2	1	Solenoid Valve - Burkert 6011SER 85psig	4955-0040
SV4-9	2-6	Solenoid Valve 2 Way	4955-0247
PI-2	1	Gauge - Pressure 0-15psig Liquid Filled S.S.	3019-0008
SYS CAL	1	Flowmeter W/Needle Valve 0-10 l/m	4965-0007
FM1-4	4	Flowmeter W/Needle Valve 0-2.5 l/m	4965-0018
FM5	1	Flowmeter W/Needle Valve 0-5 l/m	4965-0008
CHILLER	1	Universal Analyzers Model 3050	3050 - 115Vac
CHILLER	1	Universal Analyzers Model 3050	3050 - 230Vac
R1	1	Regulator - Porter Model #8268 0-30psig	8200-0008
S)	1	Snubber - #6-32	0000-0000
P2	1	Pump - Peristaltic Drain 115Vac	4958-0028
P2	1	Pump - Peristaltic Drain 230Vac	4958-0045



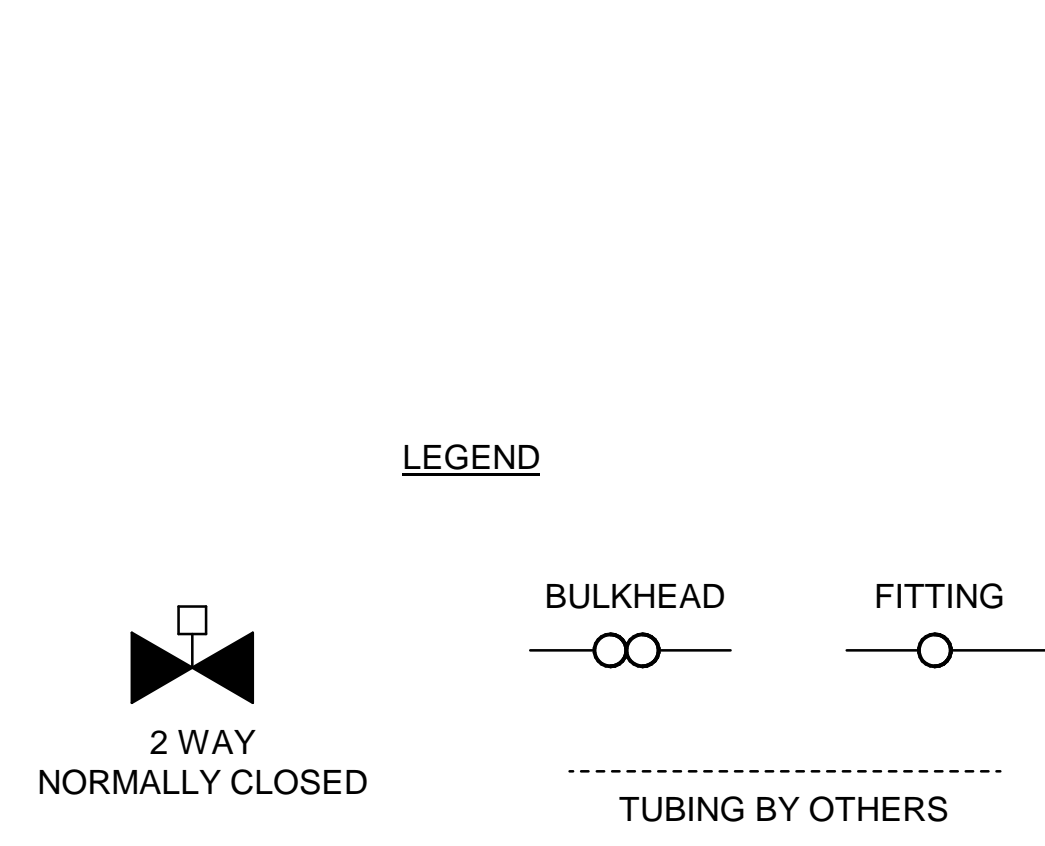
**NOTES:**

1. ALL FITTINGS 1/4" TUBE (UNLESS OTHERWISE NOTED).

		A	5/4/16	AS BUILT	CK	MW
		REV	DATE	DESCRIPTION	DWN/APVD	
<b>3000 SERIES P&amp;ID</b>		DATE		SCALE	SIZE	SHEET
PART NO. 3000-SCU-INT		FOR 3000 Series		NTS	D	3 OF 5
DRAWN BY M. Walser		APVD BY M. Withrow		ECO# 2808	DRAWING NO. P2133	



Item	Qty	Description	UAI Part No.
VS1	1	Vacuum Switch Air-Logic 0-29"hg	3103-0017
CCSF	1	Condensate Sensor	CCSF-0007
PI-1	1	Gauge - Vacuum 0-30"Hg Liquid Filled S.S.	3019-0009
SPC1	1	Sample Pressure Controller	4955-0246
P1	1	Pump - Sample 115Vac Single Head	4958-0025
P1	1	Pump - Sample 230Vac Single Head	4958-0015
PS1,2	2	Pressure Switch Air-Logic F-5100-15 15psig	3103-0018
SV1,3	2	Solenoid Valve - Burkert 6012SER	4955-0041
SV2	1	Solenoid Valve - Burkert 6011SER 85psig	4955-0040
SV4-9	2-6	Solenoid Valve - 2 Way	4955-0247
PI-2	1	Gauge - Pressure 0-15psig Liquid Filled S.S.	3019-0008
SYS CAL	1	Flowmeter W/Needle Valve 0-10 l/m	4965-0007
FM1-4	4	Flowmeter W/Needle Valve 0-2.5 l/m	4965-0018
FM5	1	Flowmeter W/Needle Valve 0-5 l/m	4965-0008
CHILLER	1	Universal Analyzers Model 3080	3080 - 115Vac
CHILLER	1	Universal Analyzers Model 3080	3080 - 230Vac
R1	1	Regulator - Porter Model #8268 0-30psig	8200-0008
S)	1	Snubber - #6-32	0000-0000
P2	1	Pump - Peristaltic Drain 115Vac	4958-0028
P2	1	Pump - Peristaltic Drain 230Vac	4958-0045

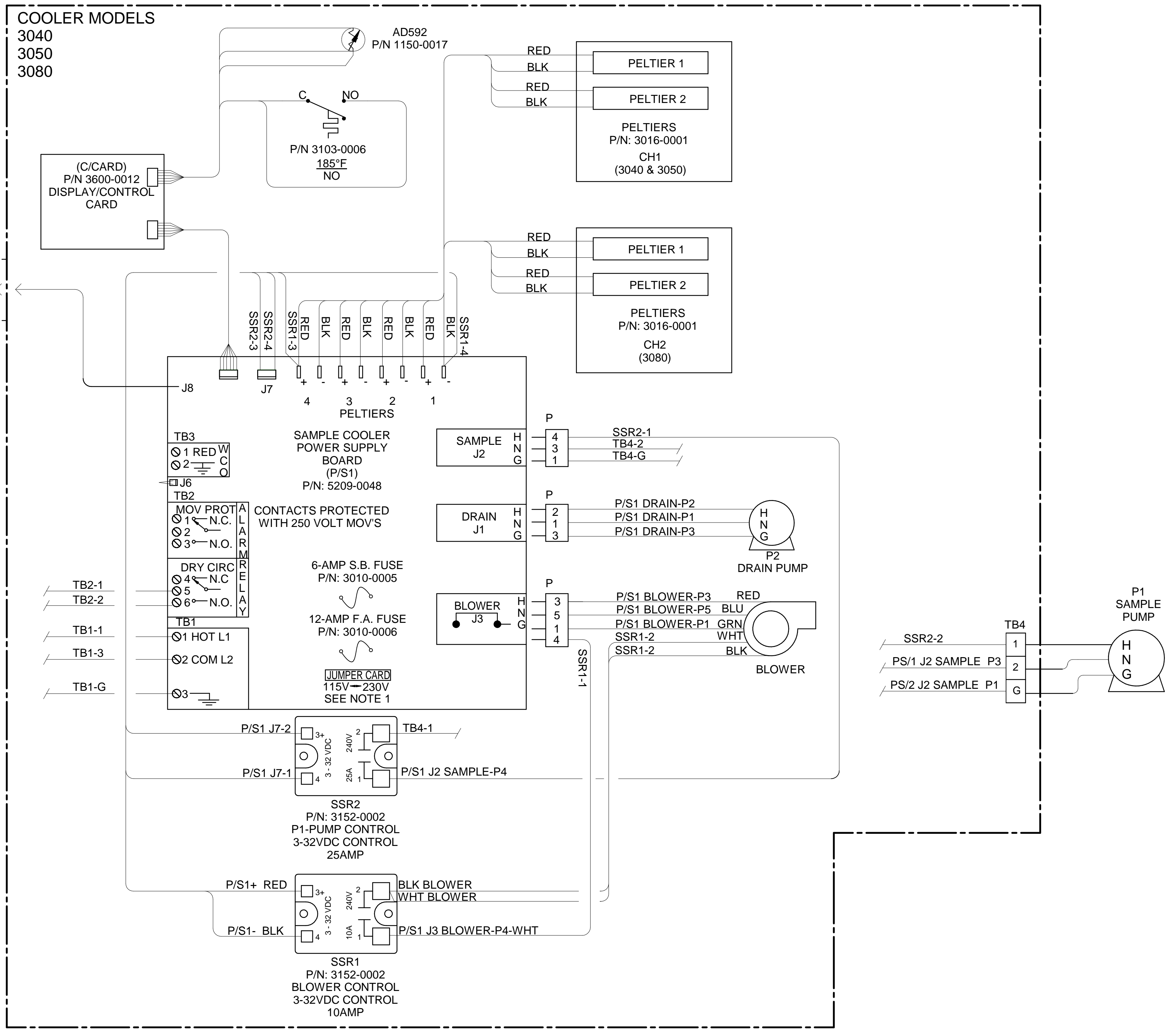
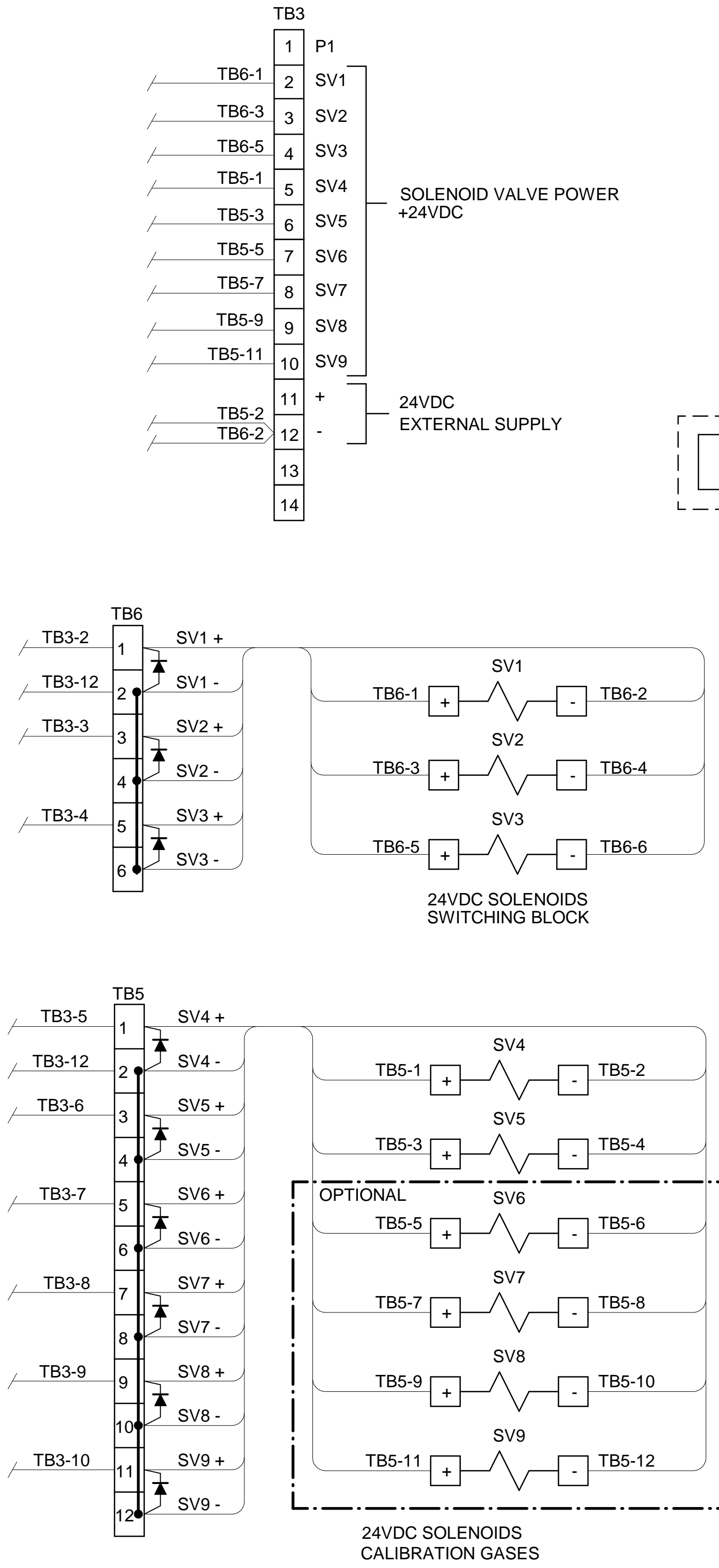
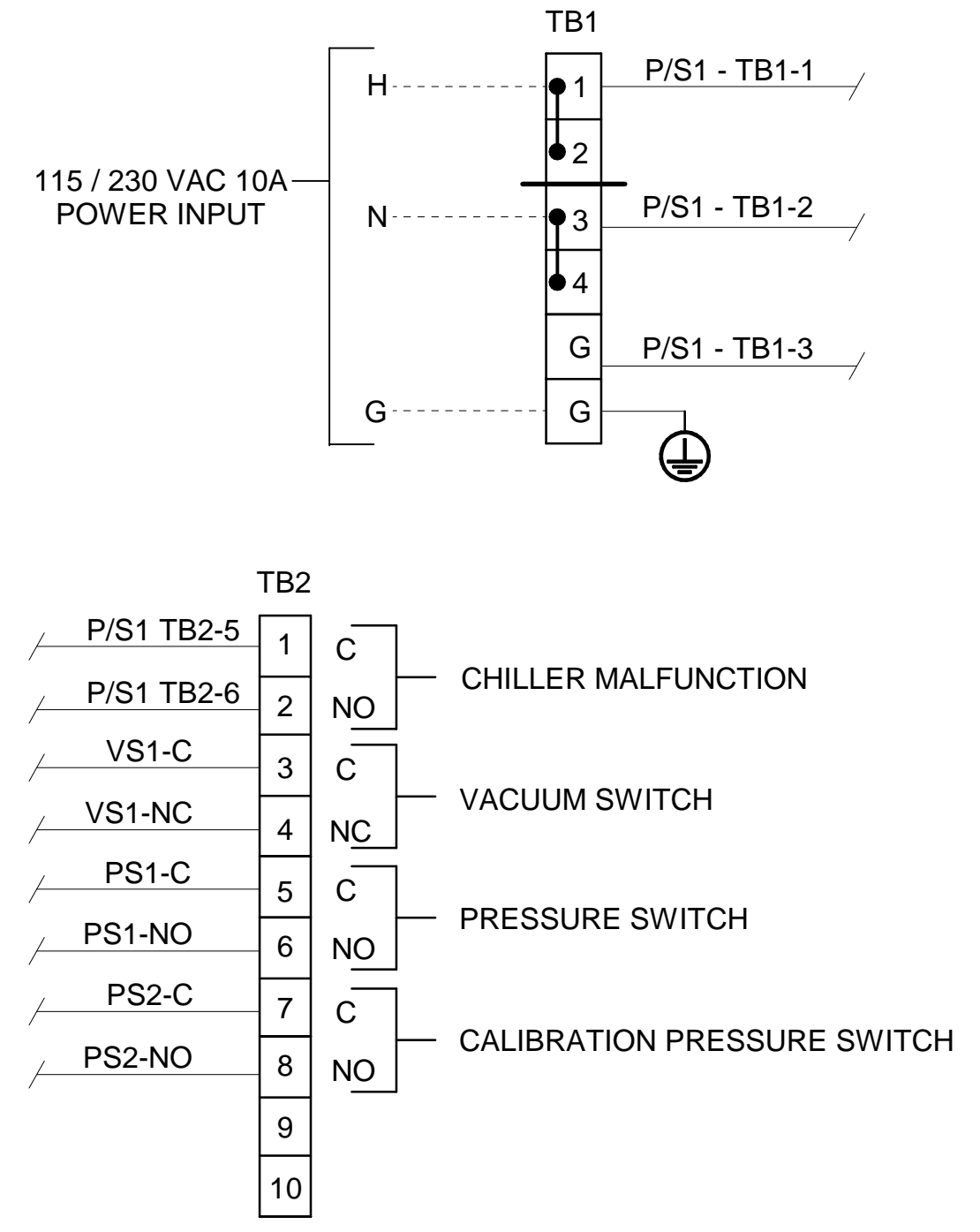


- PLC OR DATA LOGGER**
- 1) CALIBRATION/SAMPLE SELECT
  - 2) CALIBRATION GAS SELECT
  - 3) SYSTEM/DIRECT CALIBRATION SELECT-SYSTEM BIAS CALCULATION
  - 4) PROBE BLOW BACK
  - 5) PROBE LOW TEMPERATURE ALARM
  - 6) CHILLER MALFUNCTION-HIGH TEMPERATURE OR CONDENSATE CARRY-OVER
  - 7) HIGH INLET VACUUM - PROBE FILTER INITIATE BLOWBACK OR MAINTENANCE
  - 8) SAMPLE/CALIB. GAS PRESS LOW-ALARM FOR MAINTENANCE

**NOTES:**

1. ALL FITTINGS 1/4" TUBE (UNLESS OTHERWISE NOTED).

			A	5/4/16	AS BUILT	CK	MW
<b>3000 SERIES P&amp;ID</b>		REV		DATE	DESCRIPTION	DWN/APVD	
PART NO. 3000-SCU-INT		FOR 3000 Series		DATE 08/12/2014	SCALE NTS	SIZE D	SHEET 4 OF 5
DRAWN BY M. Walser		APVD BY M. Withrow		ECO# 2808	DRAWING NO. P2133		

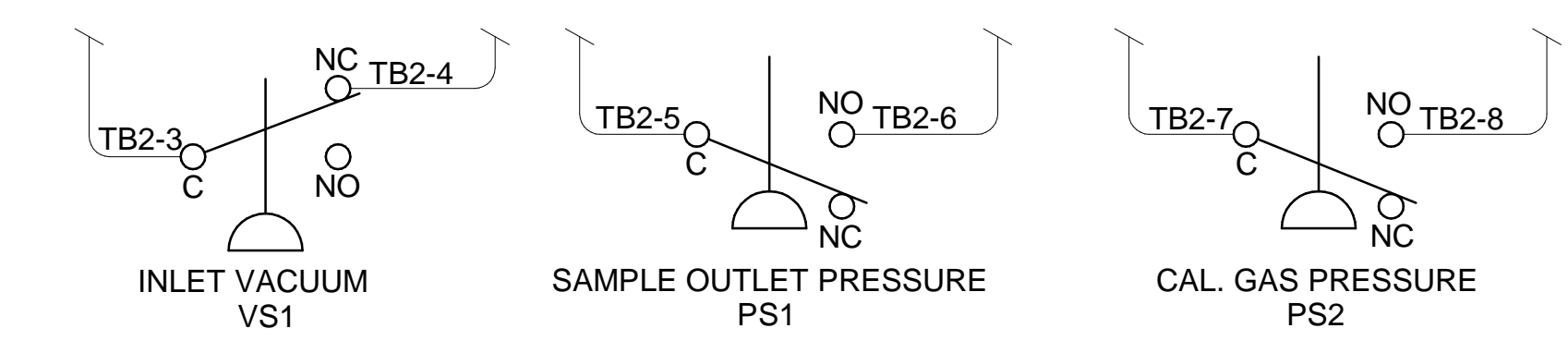


**CONDUIT AND WIRING NOTES**

- ELECTRICAL CLASSIFICATION : INSIDE - GENERAL PURPOSE SYSTEM IS CONFIGURED AT THE FACTORY FOR REQUIRED VOLTAGE. CONTACT FACTORY FOR VOLTAGE CHANGE REQUIREMENTS.
- AC WIRING SHALL BE INDIVIDUAL CONDUCTORS OF STRANDED TINNED COPPER WITH 300V, TYPE TFE INSULATION. MINIMUM WIRE SIZE SHALL BE 18 AWG UNLESS OTHERWISE SPECIFIED. COLOR CODE SHALL BE AS FOLLOWS:
 

115VAC	230VAC
HOT - BLACK	L1 - BROWN
NEUTRAL - WHITE	L2 - BLUE
GROUND - GREEN	G - GREEN
- DC WIRING SHALL BE INDIVIDUAL CONDUCTORS OF STRANDED TINNED COPPER WITH 300V, TYPE TFE INSULATION. MINIMUM WIRE SIZE SHALL BE 22 AWG UNLESS OTHERWISE SPECIFIED.
 

115VAC	230VAC
+VDC - RED	+VDC - RED
0V - BLUE	-VDC - BLACK



		A	5/4/16	AS BUILT	CK	MW
		REV	DATE	DESCRIPTION	DWN/APVD	
<b>3000 SERIES WIRING SCHEMATIC</b>		DATE		SCALE	SIZE	SHEET
		08/12/2014		NTS	D	5 OF 5
PART NO.	FOR	DRAWN BY	APVD BY	ECO#	DRAWING NO.	
3000-SCU-INT	3000 Series	M. Walsler	M. Withrow	2808	P2133	

FIELD TO WIRE