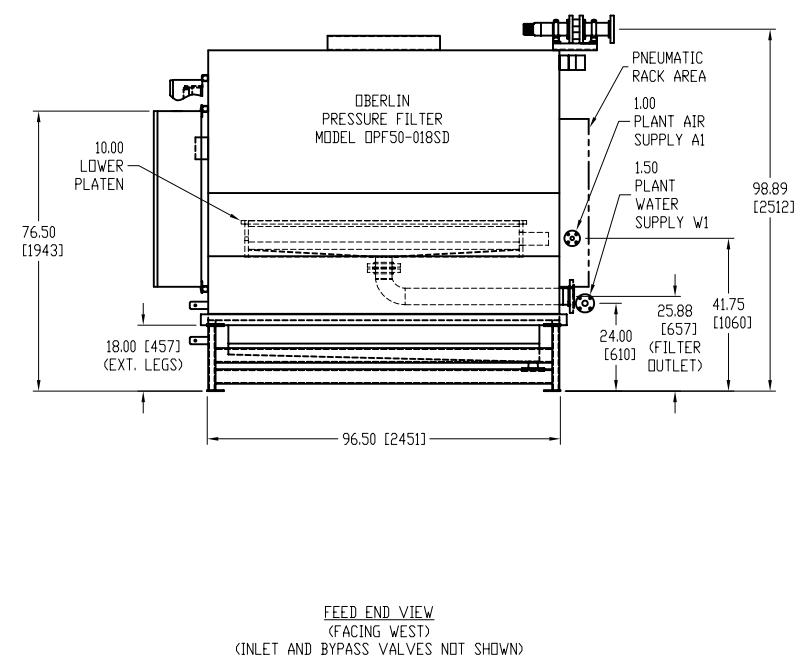
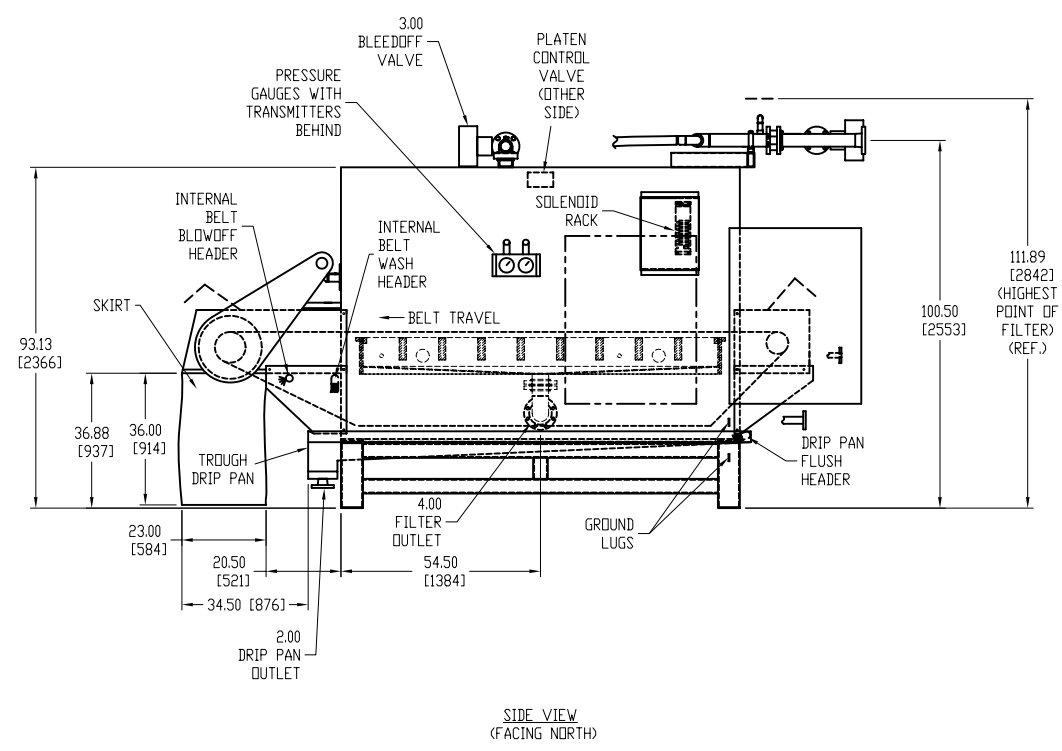
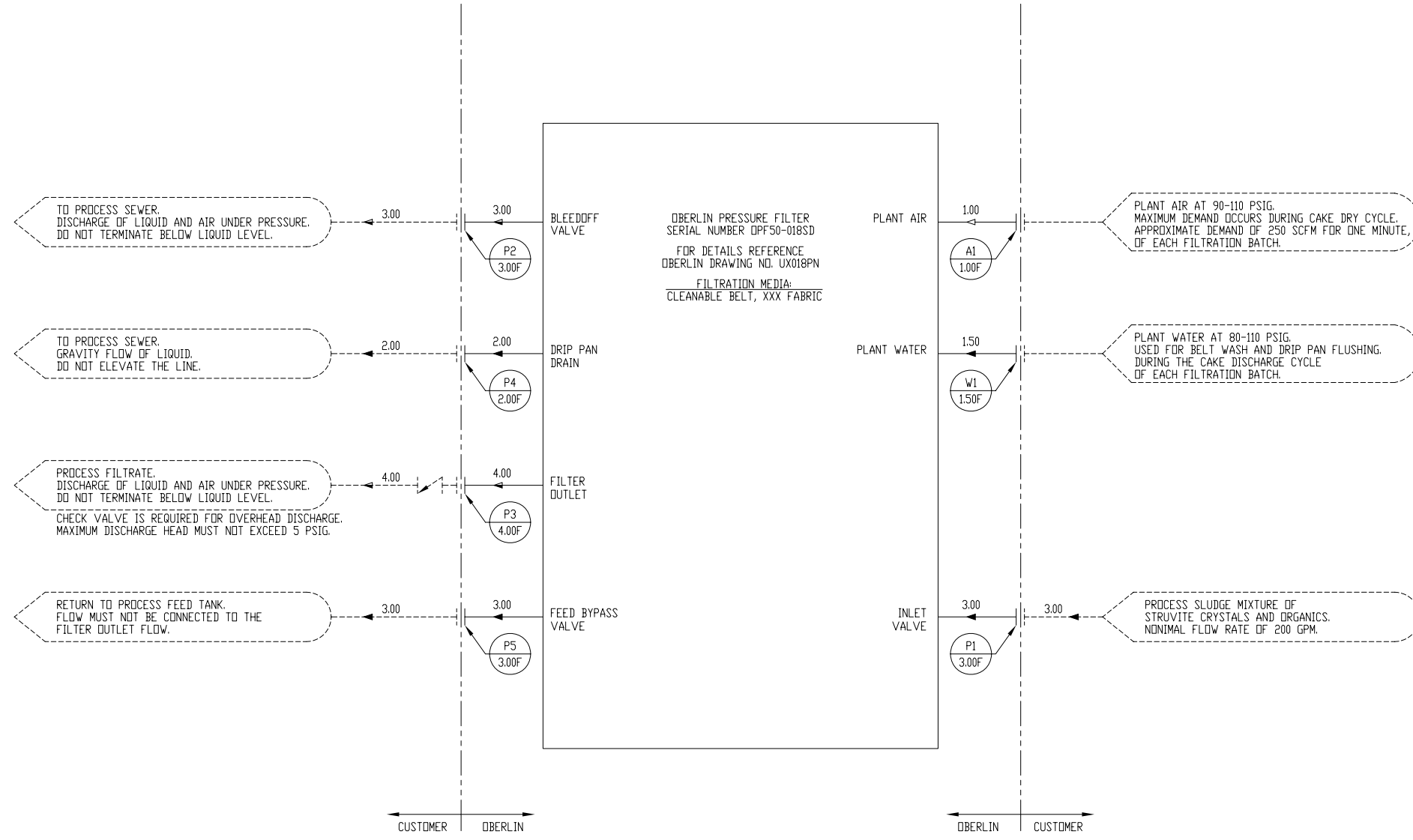


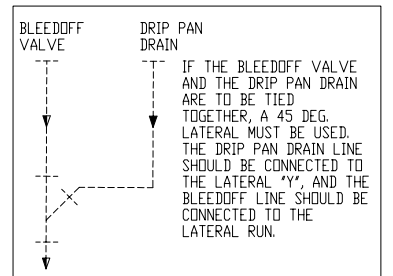
- NOTES:**
- 1) WEIGHTS: EMPTY = 20,000 LBS
OPERATING (FLOODED) = 26,000 LBS
LOADING IS EVENLY DISTRIBUTED BETWEEN THE FOUR FOOTPADS.
 - 2) FOR FILTER PROCESS CONNECTIONS REFER TO THE PROCESS SCHEMATIC, OBERLIN DRAWING UX018PR.
 - 3) SHEETMETAL MOUNTED COMPONENTS ARE TO BE LOCATED SO THAT THE PLATEN ACCESS PANELS CAN BE REMOVED WITHOUT REMOVING ADDITIONAL EQUIPMENT.
 - 4) FILTER FRAME IS NON-STANDARD, DUE TO THE 12 INCH UPPER PLATEN. THE FRAME HEIGHT IS 75.00 INCHES.
 - 5) FINISH COLOR FOR NON-STAINLESS STEEL STRUCTURES IS DUPONT IMRON SHALE GRAY.



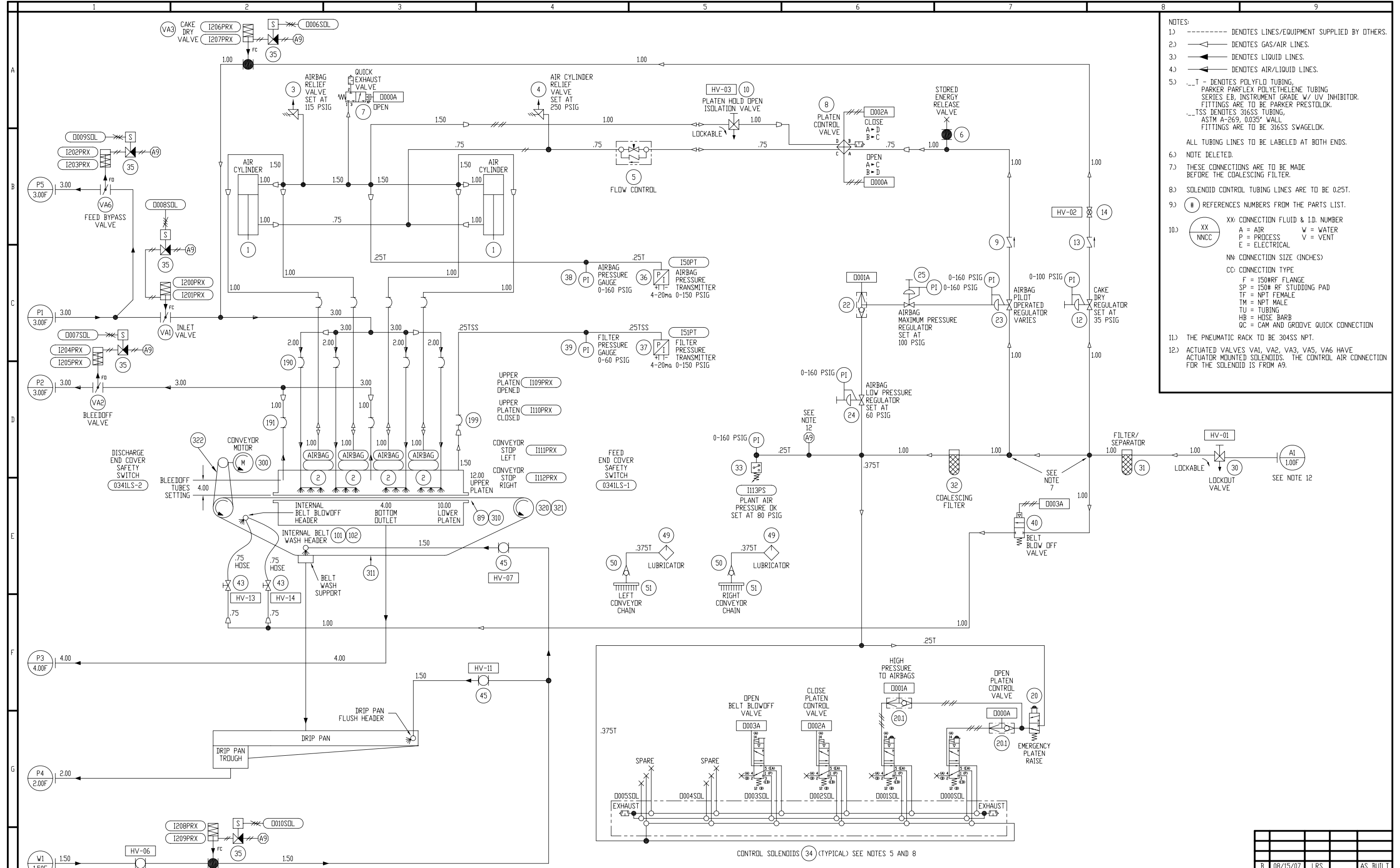
LOUDON - TATE & LYLE 198 BLAIR BEND DRIVE LOUDON, TN 37774 PURCHASE ORDER NO: LD-4800252530-GMT	S/N: DPF50-018SD SCALE: 1 = 24 UNLESS OTHERWISE NOTED DIMENSIONS IN INCHES (MM) DIMENSION TOLERANCES: < 25 (635) ±.25 (6) 25-50 (635)-112(70) ±.38 (10) > 50 (1270) ±.50 (13)	OBERLIN FILTER COMPANY 404 PILOT COURT WAUKESHA, WISCONSIN USA 53188-5785 PHONE: (262) 547-4900 FAX: (262) 547-0683	B 08/15/07 CGS AS BUILT
			A 06/14/07 CGS CUST REV
		TITLE: LOUDON - TATE & LYLE - LOUDON, TN FLOOR PLAN LAYOUT	REV DATE DRAWN OK NOTES 05/08/07 CGS ORIGINAL
		THIS DRAWING AND THE INFORMATION HEREON IS THE PROPERTY OF OBERLIN FILTER CO. ANY REPRODUCTION, TRANSMITTAL TO OTHERS, OR USE EXCEPT THAT FOR WHICH IT IS INTENDED IS PROHIBITED.	APPROVED BY: _____ DATE: _____ DRAWING NUMBER: UX018FP SHEET 1 OF 1



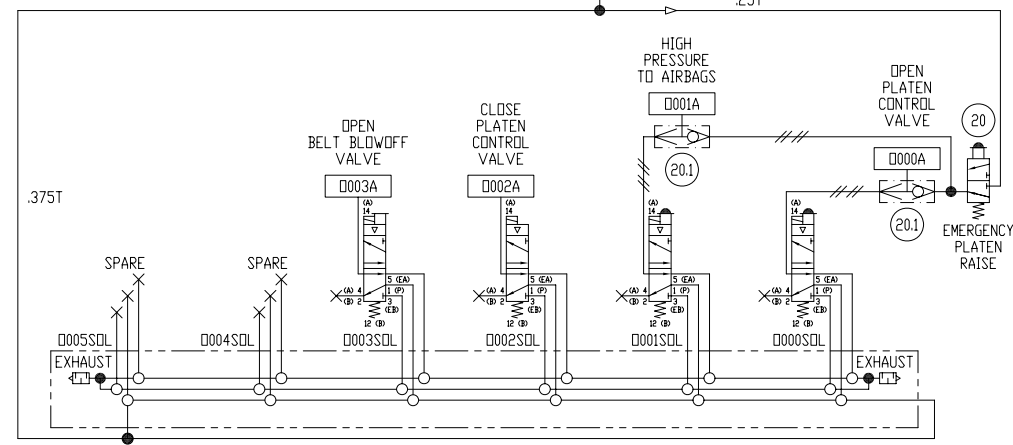
- NOTES:
- 1.) ----- DENOTES LINES/EQUIPMENT SUPPLIED BY OTHERS.
 - 2.) DENOTES GAS/AIR LINES.
 - 3.) DENOTES LIQUID LINES.
 - 4.) DENOTES AIR/LIQUID LINES.
 - 5.) ...T - DENOTES POLYFLO TUBING, PARKER PARFLEX POLYETHYLENE TUBING SERIES EB, INSTRUMENT GRADE W/ UV INHIBITOR. FITTINGS ARE TO BE PARKER PRESTOLDK.
...TSS DENOTES 316SS TUBING, ASTM A-269, 0.035" WALL. FITTINGS ARE TO BE 316SS SWAGelok.
 - ALL TUBING LINES TO BE LABELED AT BOTH ENDS.
 - 6.) NOTE DELETED.
 - 7.) THESE CONNECTIONS ARE TO BE MADE BEFORE THE COALESCING FILTER.
 - 8.) SOLENOID CONTROL TUBING LINES ARE TO BE 0.25T.
 - 9.) # REFERENCES NUMBERS FROM THE PARTS LIST.
 - 10.) XX: CONNECTION FLUID & I.D. NUMBER
 A = AIR W = WATER
 P = PROCESS V = VENT
 E = ELECTRICAL
 NN: CONNECTION SIZE (INCHES)
 CC: CONNECTION TYPE
 F = 150#RF FLANGE
 SP = 150# RF STUDDING PAD
 TF = NPT FEMALE
 TM = NPT MALE
 TU = TUBING
 HB = HOSE BARB
 QC = CAM AND GROOVE QUICK CONNECTION
 - 11.) NOTE DELETED.
 - 12.) THE PNEUMATIC RACK TO BE 304SS NPT.



LOUDON - TATE & LYLE 198 BLAIR BEND DRIVE LOUDON, TN 37774 PURCHASE ORDER NO: LD-4800252530-GMT	S/N: OPF50-018SD SCALE: N/A UNLESS OTHERWISE NOTED DIMENSIONS IN INCHES (MM) DIMENSION TOLERANCES: < 25 (635) ±.25 (.6) 25-50 (635)-112(70) ±.38 (10) > 50 (1270) ±.50 (13)	OBERLIN FILTER COMPANY 404 PILOT COURT WAUKESHA, WISCONSIN USA 53188-5785 PHONE: (262) 547-4900 FAX: (262) 547-0683	A	08/15/07	LRS	AS BUILT
				04/23/07	LRS	ORIGINAL
TITLE: LOUDON - TATE & LYLE - LOUDON, TN PROCESS SCHEMATIC			APPROVED BY:	DRAWING NUMBER:		
THIS DRAWING AND THE INFORMATION HEREON IS THE PROPERTY OF OBERLIN FILTER CO. ANY REPRODUCTION, TRANSMITTAL TO OTHERS, OR USE EXCEPT THAT FOR WHICH IT IS INTENDED IS PROHIBITED.			DATE:	UX018PR SHEET 1 OF 1		



- NOTES:
- 1) ----- DENOTES LINES/EQUIPMENT SUPPLIED BY OTHERS.
 - 2) DENOTES GAS/AIR LINES.
 - 3) DENOTES LIQUID LINES.
 - 4) DENOTES AIR/LIQUID LINES.
 - 5) ...T - DENOTES POLYFLO TUBING, PARKER PARFLEX POLYETHYLENE TUBING SERIES EB, INSTRUMENT GRADE W/ UV INHIBITOR. FITTINGS ARE TO BE PARKER PRESTOLDK. ...TSS DENOTES 316SS TUBING, ASTM A-269, 0.035" WALL. FITTINGS ARE TO BE 316SS SWAGelok.
- ALL TUBING LINES TO BE LABELED AT BOTH ENDS.
- 6.) NOTE DELETED.
 - 7.) THESE CONNECTIONS ARE TO BE MADE BEFORE THE COALESCING FILTER.
 - 8.) SOLENOID CONTROL TUBING LINES ARE TO BE 0.25T.
 - 9.) # REFERENCES NUMBERS FROM THE PARTS LIST.
- XX: CONNECTION FLUID & I.D. NUMBER
 A = AIR W = WATER
 P = PROCESS V = VENT
 E = ELECTRICAL
- NN: CONNECTION SIZE (INCHES)
 CC: CONNECTION TYPE
 F = 150#RF FLANGE
 SP = 150# RF STUDDING PAD
 TF = NPT FEMALE
 TM = NPT MALE
 TU = TUBING
 HB = HOSE BARB
 QC = CAM AND GROOVE QUICK CONNECTION
- 11.) THE PNEUMATIC RACK TO BE 304SS NPT.
 - 12.) ACTUATED VALVES VA1, VA2, VA3, VA5, VA6 HAVE ACTUATOR MOUNTED SOLENOIDS. THE CONTROL AIR CONNECTION FOR THE SOLENOID IS FROM A9.



CONTROL SOLENOIDS (34) (TYPICAL) SEE NOTES 5 AND 8

FOR FILTER CONNECTIONS
 REFERENCE THE PROCESS SCHEMATIC,
 OBERLIN DRAWING UX018PR.

LOUDON - TATE & LYLE
 198 BLAIR BEND DRIVE
 LOUDON, TN 37774
 PURCHASE ORDER NO.: LD-4800252530-GMT

S/N: DPF50-018SD
 SCALE: N/A
 UNLESS OTHERWISE NOTED
 DIMENSIONS IN INCHES (MM)
 DIMENSION TOLERANCES:
 < 25 (1635) +.25 (-0)
 25-50 (1635)-112(70) +.38 (-10)
 > 50 (1270) +.50 (-13)

OBERLIN FILTER COMPANY
 404 PILOT COURT WALKESHA, WISCONSIN USA 53188-5785
 PHONE: (262) 547-4900 FAX: (262) 547-0683

TITLE: LOUDON - TATE & LYLE - LOUDON, TN
 PNEUMATIC SCHEMATIC
 THIS DRAWING AND THE INFORMATION HEREON IS THE PROPERTY OF
 OBERLIN FILTER CO. ANY REPRODUCTION, TRANSMITTAL TO OTHERS,
 OR USE EXCEPT THAT FOR WHICH IT IS INTENDED IS PROHIBITED.

REV	DATE	DRAWN	CHK	NOTES
B	08/15/07	LRS		AS BUILT
A	05/14/07	LRS		DESN REV
	04/23/07	LRS		ORIGINAL
APPROVED BY:				DRAWING NUMBER:
DATE:				UX018PN
				SHEET 1 OF 1

0100	0101	0102	0103
0100	0101	0102	0103
0104	0105	0106	0107
0108	0109	0110	0111
0112	0113	0114	0115
0116	0117	0118	0119

CONTROL PANEL DETAILS	
SUPPLY VOLTAGE	460 VOLT, 3 PHASE, 60 HZ
CONTROL VOLTAGE	24VDC
PLC AND HMI	
BRAND	ALLEN-BRADLEY
HMI	PANELVIEW PLUS 700, COLOR, KEYPAD, DF1, ETHERNET
CONTROLLER	COMPACTLOGIX L32E
INPUT, VOLTAGE AND TYPE	24 VDC, SINKING
OUTPUT, VOLTAGE AND TYPE	24 VDC, RELAY

CONDUCTOR COLORS AND MINIMUM SIZES		
POWER, PHASE L1	BLACK	14 AWG
POWER, PHASE L2	BLACK	14 AWG
POWER, PHASE L3	BLACK	14 AWG
NEUTRAL	WHITE	14 AWG
GROUND	GREEN / YELLOW	14 AWG
115 VAC CONTROL	RED	16 AWG
115 VAC NEUTRAL	WHITE	16 AWG
24 VDC CONTROL	BLUE	16 AWG
24 VDC COMMON	WHITE / BLUE TRACER	16 AWG
ANALOG POSITIVE	BLACK	BELDEN #8761 OR EQUAL
ANALOG NEGATIVE	WHITE OR CLEAR	BELDEN #8761 OR EQUAL
INTERLOCKS	YELLOW	14 AWG
COMPONENT CABLES	MANUFACTOR COLOR AND GAUGE	
PLC I/O MODULES	COLOR REQUIRED FOR VOLTAGE	18 AWG
TERMINATIONS		
TERMINAL - POWER WIRING	ALLEN-BRADLEY 1492 QUICKCLAMP, BLACK	
TERMINAL - 115 VAC	ALLEN-BRADLEY 1492 QUICKCLAMP, GREY	
TERMINAL - 24 VDC CONTROL	ALLEN-BRADLEY 1492 QUICKCLAMP, GREY	
TERMINAL - INTERLOCK	ALLEN-BRADLEY 1492 QUICKCLAMP, YELLOW	
TERMINAL - GROUND	ALLEN-BRADLEY 1492 QUICKCLAMP, GREEN / YELLOW	
PURCHASED MULTI-CONDUCTOR CABLE METRIC EQUIVALENTS.		
20 AWG	0.50 mm ²	
18 AWG	0.75 mm ²	
16 AWG	1.5 mm ²	
14 AWG	2.5 mm ²	
12 AWG	4 mm ²	

LEGEND:

(SSLL) DENOTES DRAWING LOCATION, SS = SHEET NUMBER, LL = LINE NUMBER.

WIRE NUMBERS: EXAMPLE 0314-1
 03 - DRAWING SHEET NUMBER, WITH LEADING ZERO'S
 14 - DRAWING LINE NUMBER, WITH LEADING ZERO'S
 1 - INCREMENTAL WIRE NUMBER FOR THE LINE, STARTING WITH 0

DEVICE NUMBERS: EXAMPLE 0316CB
 03 - DRAWING SHEET NUMBER, WITH LEADING ZERO'S
 16 - DRAWING LINE NUMBER, WITH LEADING ZERO'S
 CB - DESCRIPTIVE SUFFIX

NO SYMBOL DENOTES EQUIPMENT LOCATED IN THIS PANEL.

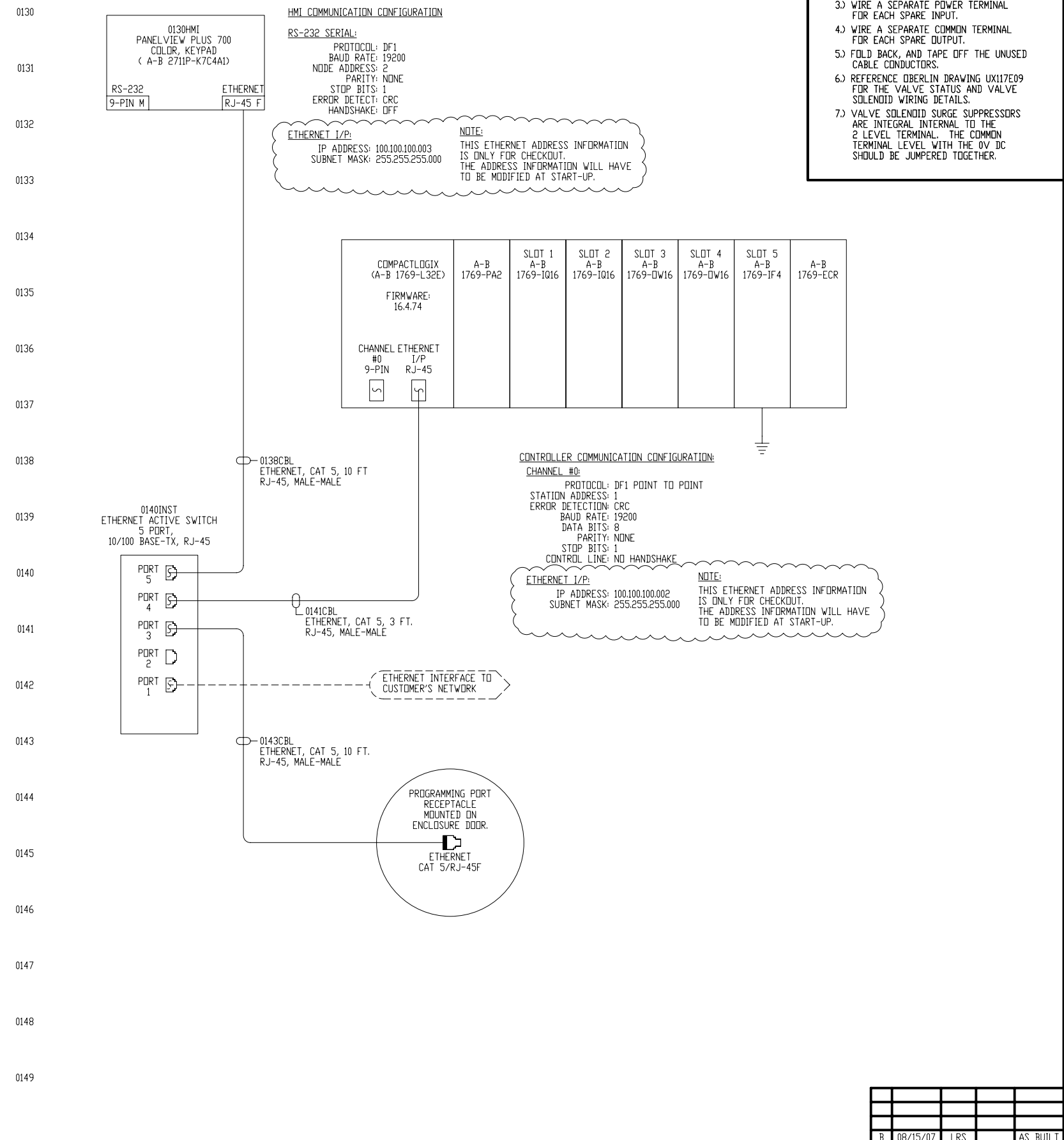
● DENOTES TERMINALS LOCATED IN THIS PANEL.

■ DENOTES EQUIPMENT LOCATED IN FIELD LOCATIONS.

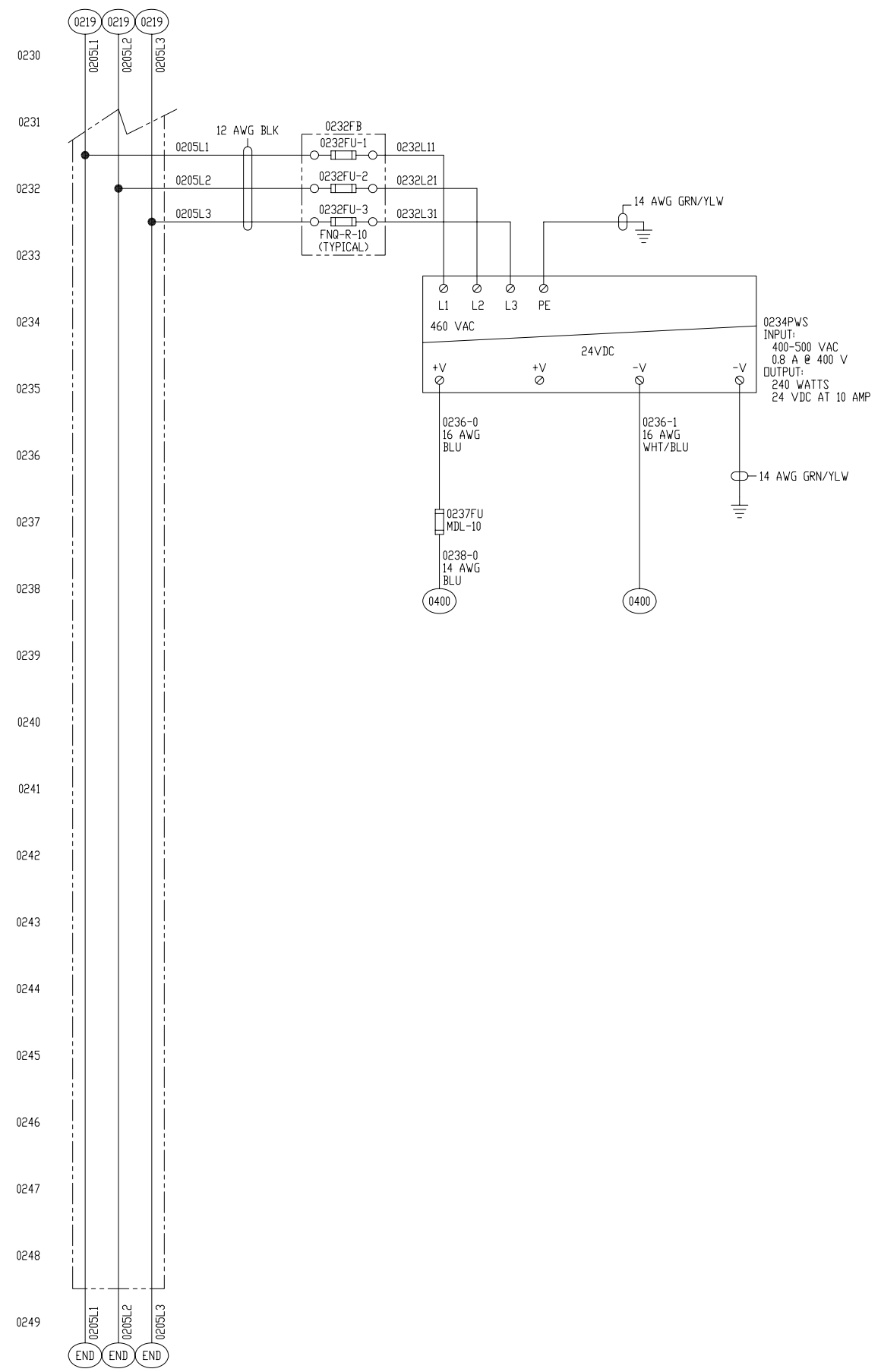
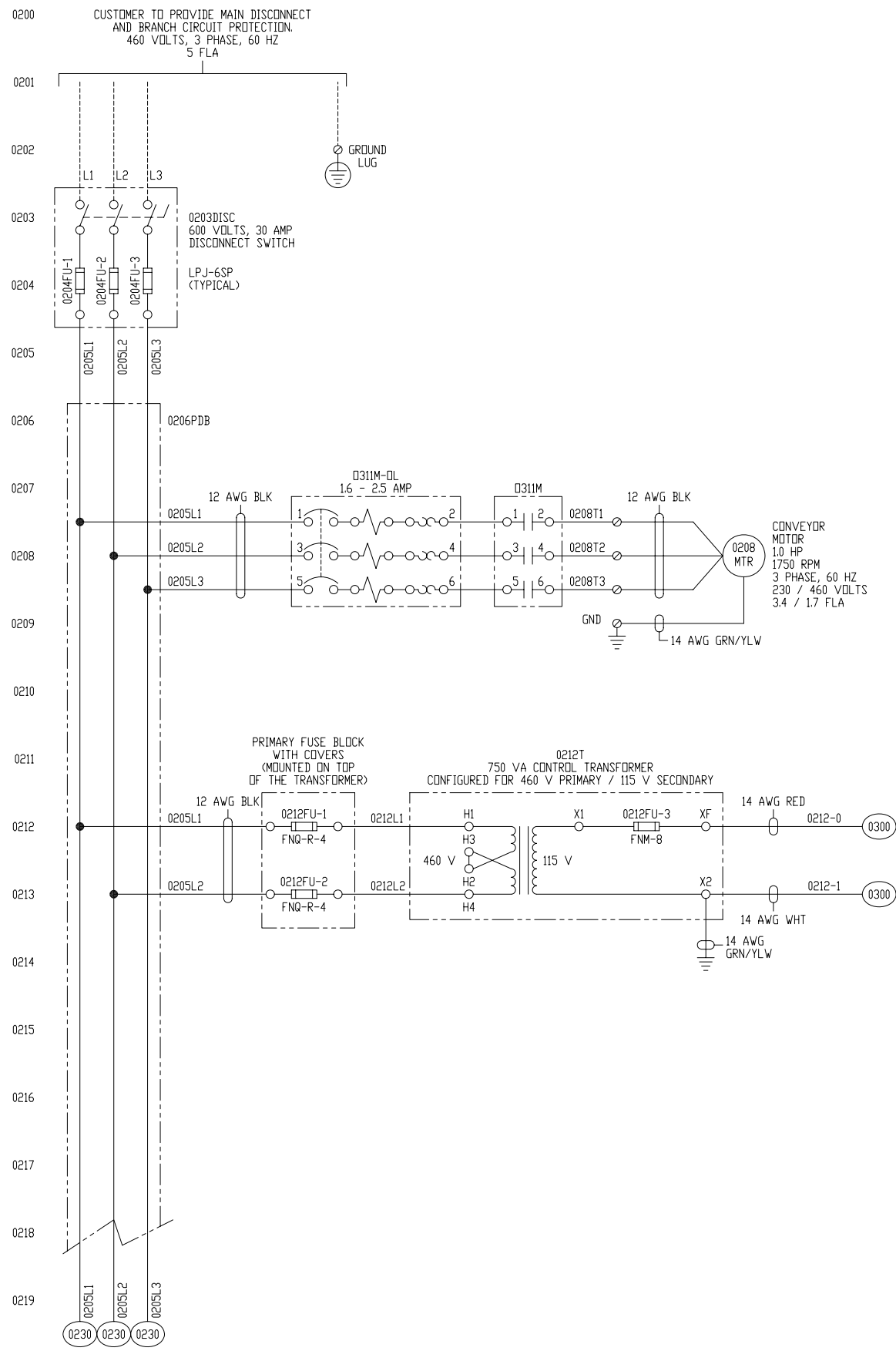
--- DENOTES WIRING TO FIELD DEVICES BY OTHERS.

NOTE:

- 1) WIRE ALL PLC POINTS TO TERMINALS.
- 2) CONNECTIONS FOR EXTERNAL DEVICES WIRES ARE TO HAVE INDIVIDUAL TERMINALS.
- 3) WIRE A SEPARATE POWER TERMINAL FOR EACH SPARE INPUT.
- 4) WIRE A SEPARATE COMMON TERMINAL FOR EACH SPARE OUTPUT.
- 5) FOLD BACK, AND TAPE OFF THE UNUSED CABLE CONDUCTORS.
- 6) REFERENCE OBERLIN DRAWING UX117E09 FOR THE VALVE STATUS AND VALVE SOLENOID WIRING DETAILS.
- 7) VALVE SOLENOID SURGE SUPPRESSORS ARE INTEGRAL INTERNAL TO THE 2 LEVEL TERMINAL. THE COMMON TERMINAL LEVEL WITH THE 0V DC SHOULD BE JUMPERED TOGETHER.

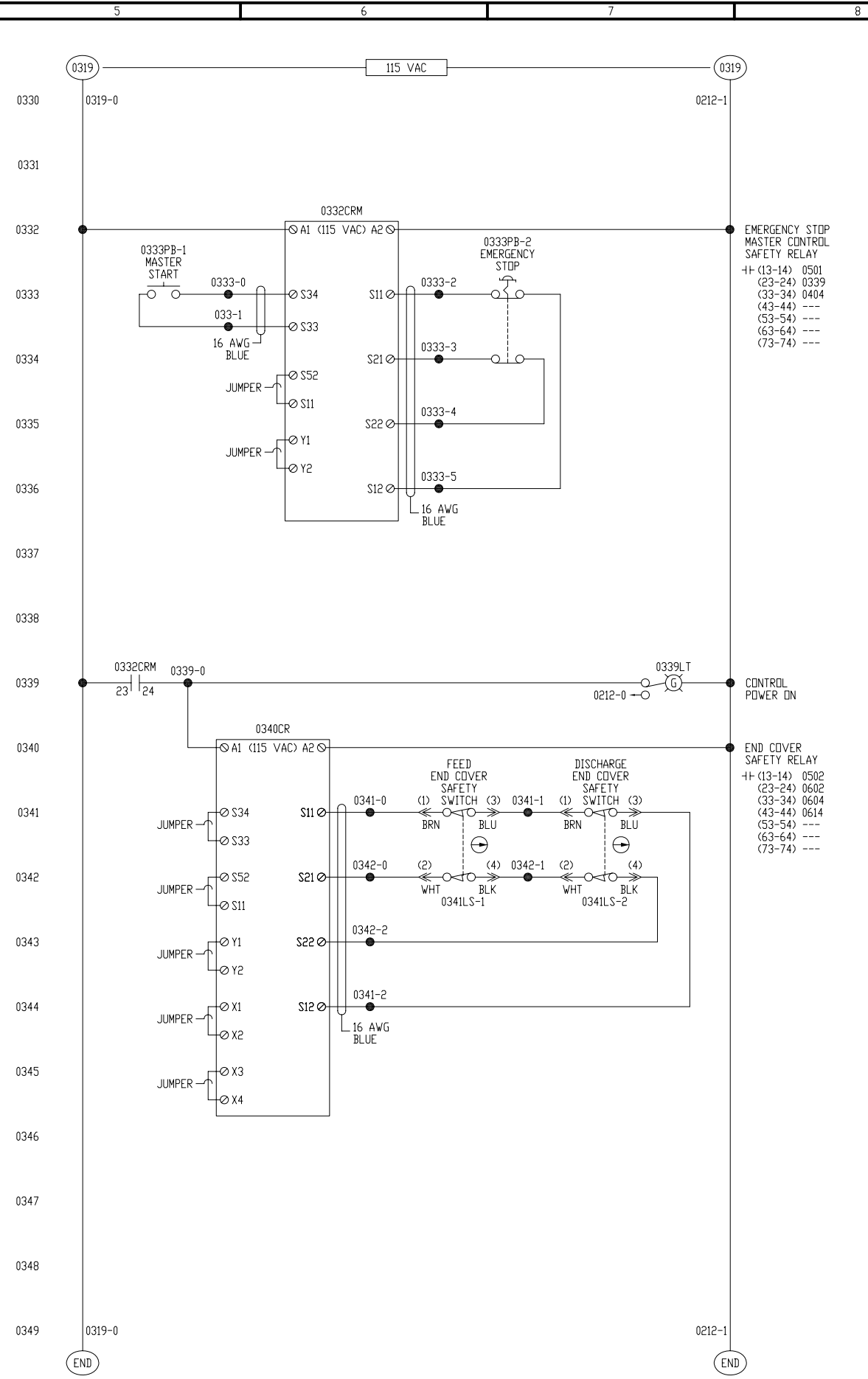
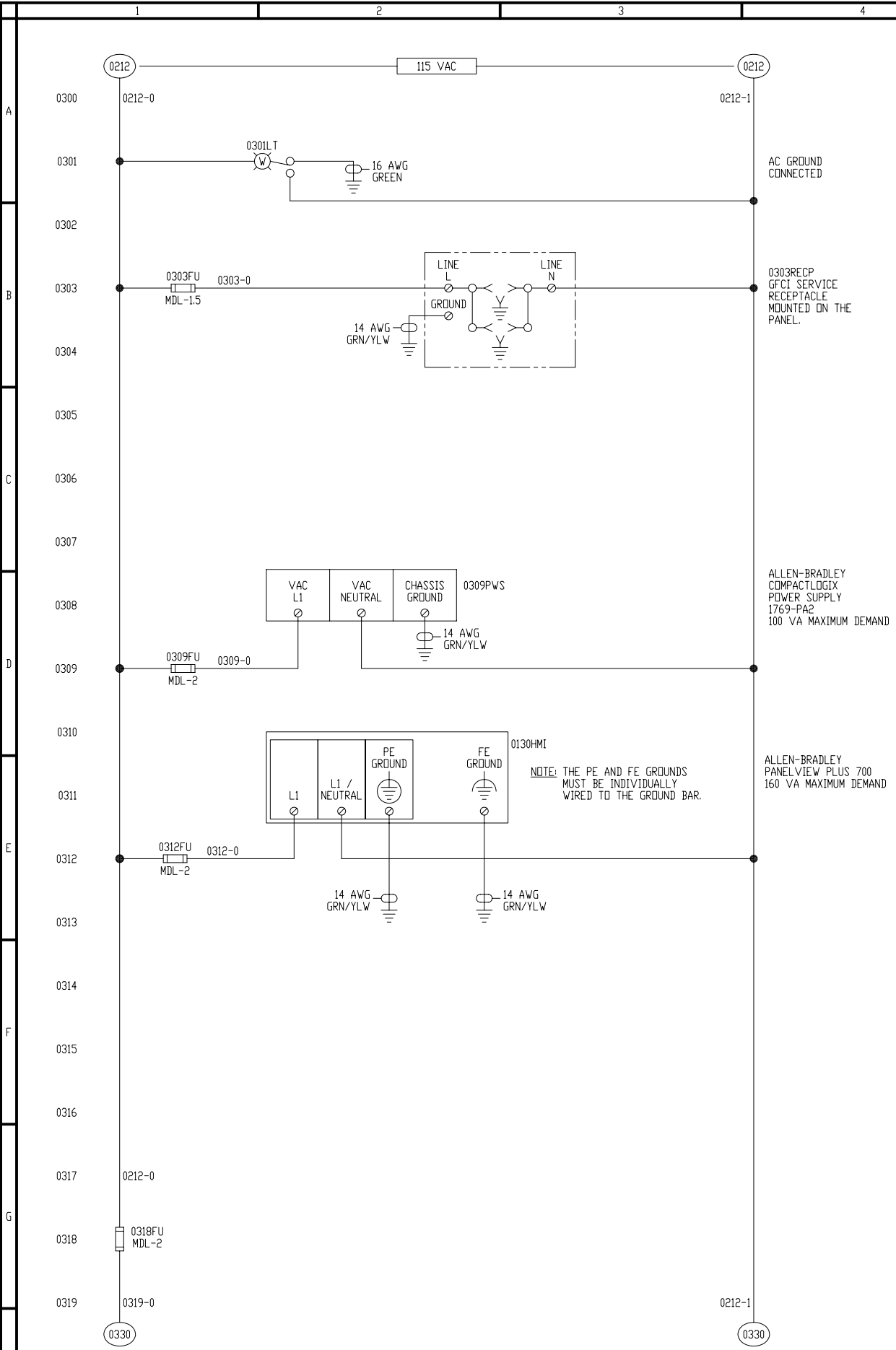


LOUDDON - TATE & LYLE 198 BLAIR BEND DRIVE LOUDDON, TN 37774	S/N: OPF50-018SD SCALE: N/A UNLESS OTHERWISE NOTED DIMENSIONS IN INCHES (MM) DIMENSION TOLERANCES: < 25 (635) ±.25 (.6) 25-50 (635)-(1270) ±.38 (.9) > 50 (1270) ±.50 (1.3)	OBERLIN FILTER COMPANY 404 PILOT COURT WAUKESHA, WISCONSIN USA 53188-5785 PHONE: (262) 547-4900 FAX: (262) 547-0683	REV: B 08/15/07 LRS AS BUILT A 06/25/07 LRS CUST REV 05/14/07 LRS ORIGINAL
PURCHASE ORDER NO: LO-4800252530-GMT	TITLE: TATE & LYLE - LOUDDON, TN GENERAL INFORMATION	APPROVED BY: DATE:	DRAWING NUMBER: UX018E01 SHEET 01 OF 13



- NOTE:**
- 1) WIRE ALL PLC POINTS TO TERMINALS.
 - 2) CONNECTIONS FOR EXTERNAL DEVICES Wires ARE TO HAVE INDIVIDUAL TERMINALS.
 - 3) WIRE A SEPARATE POWER TERMINAL FOR EACH SPARE INPUT.
 - 4) WIRE A SEPARATE COMMON TERMINAL FOR EACH SPARE OUTPUT.
 - 5) FOLD BACK, AND TAPE OFF THE UNUSED CABLE CONDUCTORS.
 - 6) REFERENCE OBERLIN DRAWING UX117E09 FOR THE VALVE STATUS AND VALVE SOLENOID WIRING DETAILS.
 - 7) VALVE SOLENOID SURGE SUPPRESSORS ARE INTEGRAL INTERNAL TO THE 2 LEVEL TERMINAL. THE COMMON TERMINAL LEVEL WITH THE 0V DC SHOULD BE JUMPED TOGETHER.

LOUDON - TATE & LYLE 198 BLAIR BEND DRIVE LOUDON, TN 37774 PURCHASE ORDER NO: LD-4800252530-GMT	S/N: DPF50-018SD SCALE: N/A UNLESS OTHERWISE NOTED DIMENSIONS IN INCHES (MM) DIMENSION TOLERANCES: < 25 (1635) +.25 (.6) 25-50 (1635)-112(70) +.38 (10) > 50 (1270) +.50 (13)	OBERLIN OBERLIN FILTER COMPANY 404 PILOT COURT WAUKESHA, WISCONSIN USA 53188-5785 PHONE: (262) 547-4900 FAX: (262) 547-0683	A 08/15/07 LRS AS BUILT
			05/14/07 LRS ORIGINAL
TITLE: TATE & LYLE - LOUDON, TN 460 VAC POWER SCHEMATIC		APPROVED BY:	DRAWING NUMBER: UX018E02
THIS DRAWING AND THE INFORMATION HEREON IS THE PROPERTY OF OBERLIN FILTER CO. ANY REPRODUCTION, TRANSMITTAL TO OTHERS, OR USE EXCEPT THAT FOR WHICH IT IS INTENDED IS PROHIBITED.		DATE:	SHEET 02 OF 13



NOTE:
 1) WIRE ALL PLC POINTS TO TERMINALS.
 2) CONNECTIONS FOR EXTERNAL DEVICES Wires ARE TO HAVE INDIVIDUAL TERMINALS.
 3) WIRE A SEPARATE POWER TERMINAL FOR EACH SPARE INPUT.
 4) WIRE A SEPARATE COMMON TERMINAL FOR EACH SPARE OUTPUT.
 5) FOLD BACK, AND TAPE OFF THE UNUSED CABLE CONDUCTORS.
 6) REFERENCE OBERLIN DRAWING UX117E09 FOR THE VALVE STATUS AND VALVE SOLENOID WIRING DETAILS.
 7) VALVE SOLENOID SURGE SUPPRESSORS ARE INTEGRAL INTERNAL TO THE 2 LEVEL TERMINAL. THE COMMON TERMINAL LEVEL WITH THE 0V DC SHOULD BE JUMPED TOGETHER.

0300	0212-0	0212-1	0330
0301			
0302			
0303			
0304			
0305			
0306			
0307			
0308			
0309			
0310			
0311			
0312			
0313			
0314			
0315			
0316			
0317			
0318			
0319			
0330			

0319-0	0319-0	0212-1	0319-0
0331			
0332			
0333			
0334			
0335			
0336			
0337			
0338			
0339			
0340			
0341			
0342			
0343			
0344			
0345			
0346			
0347			
0348			
0349			
END			END

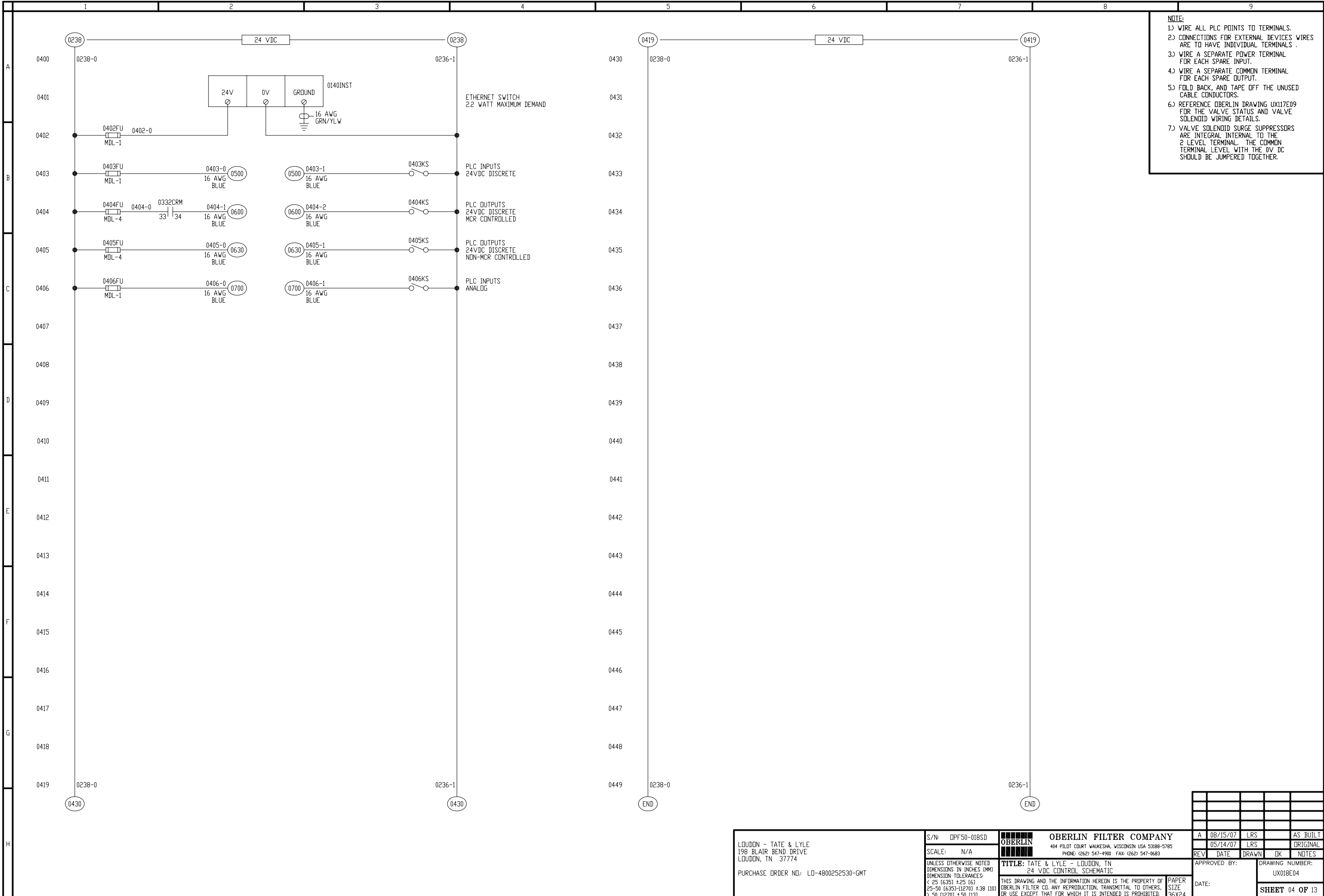
REV	DATE	DRAWN	OK	NOTES
B	08/15/07	LRS		AS BUILT
A	06/25/07	LRS		CUST REV
	05/14/07	LRS		ORIGINAL

LOUDDON - TATE & LYLE
 198 BLAIR BEND DRIVE
 LOUDDON, TN 37774
 PURCHASE ORDER NO: LO-4800252530-GMT

S/N: DPF50-018SD
 SCALE: N/A
 UNLESS OTHERWISE NOTED DIMENSIONS IN INCHES (MM)
 DIMENSION TOLERANCES:
 < 25 (1635) ±.25 (6)
 25-50 (1635)-112(70) ±.38 (10)
 > 50 (1270) ±.50 (13)

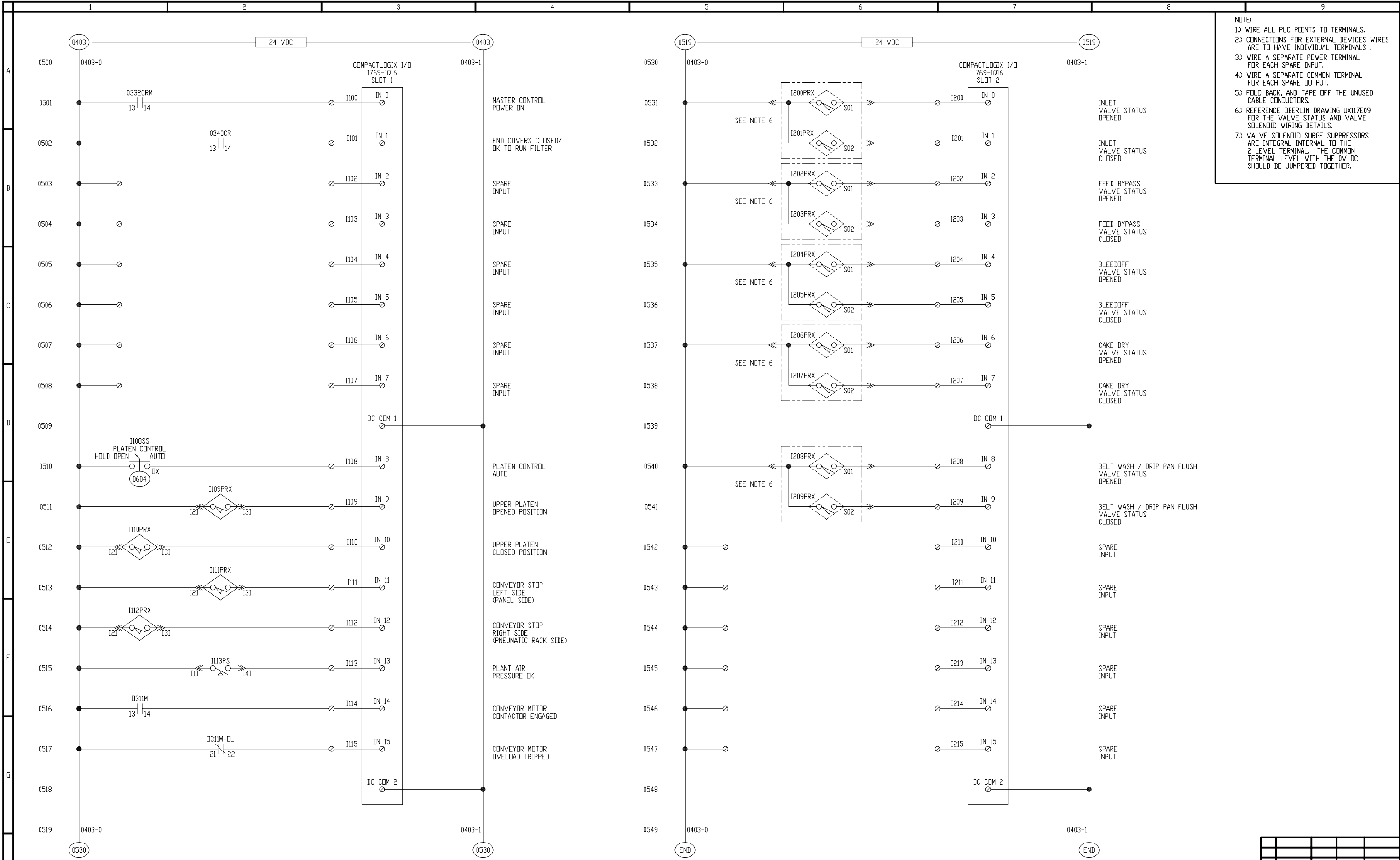
OBERLIN FILTER COMPANY
 404 PILOT COURT WAUKESHA, WISCONSIN USA 53188-5785
 PHONE: (262) 547-4900 FAX: (262) 547-0683
TITLE: TATE & LYLE - LOUDDON, TN
115 VAC CONTROL POWER
 THIS DRAWING AND THE INFORMATION HEREON IS THE PROPERTY OF OBERLIN FILTER CO. ANY REPRODUCTION, TRANSMITTAL TO OTHERS, OR USE EXCEPT THAT FOR WHICH IT IS INTENDED IS PROHIBITED.

APPROVED BY:
 DATE:
 DRAWING NUMBER:
 UX018E03
SHEET 03 OF 13



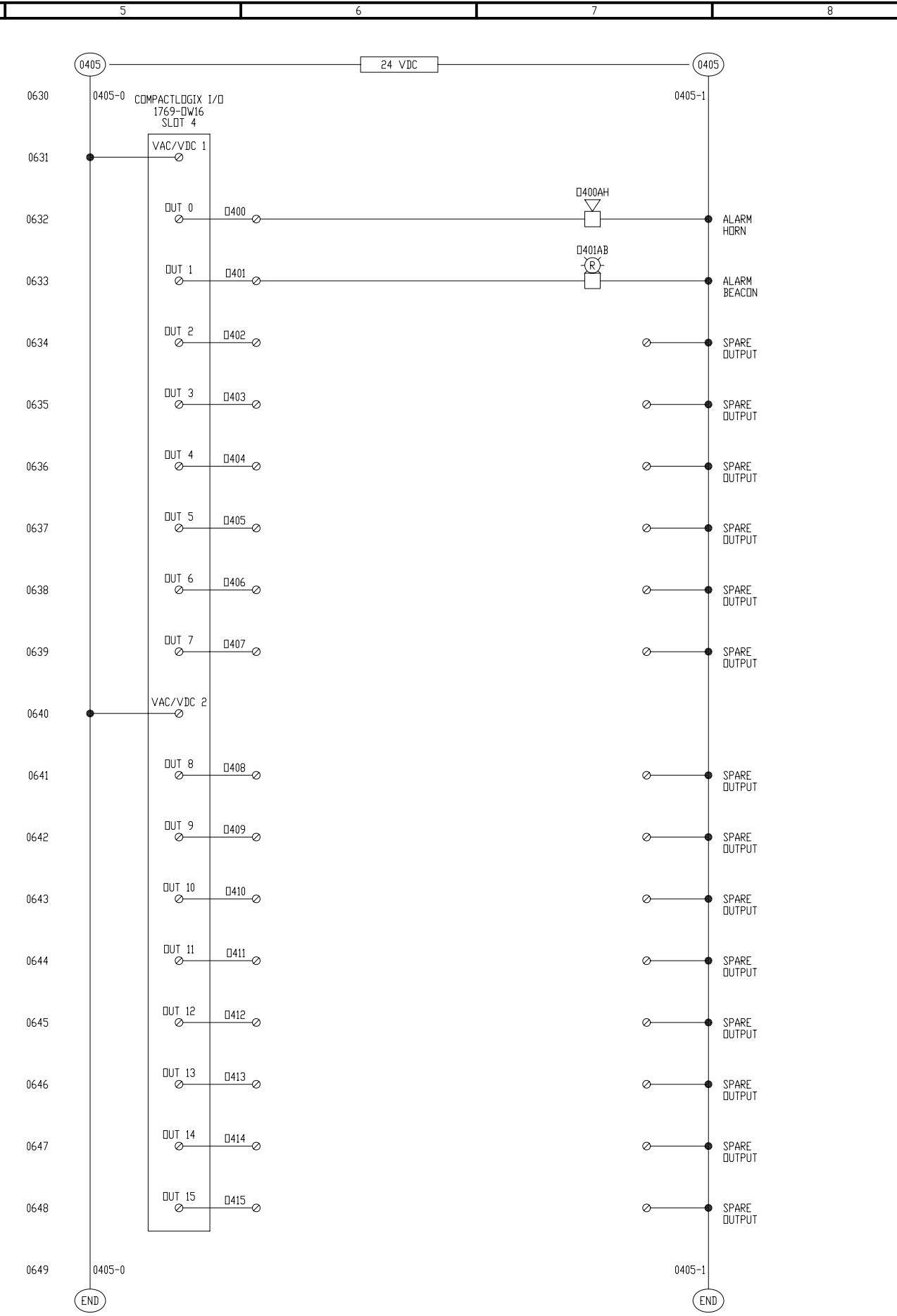
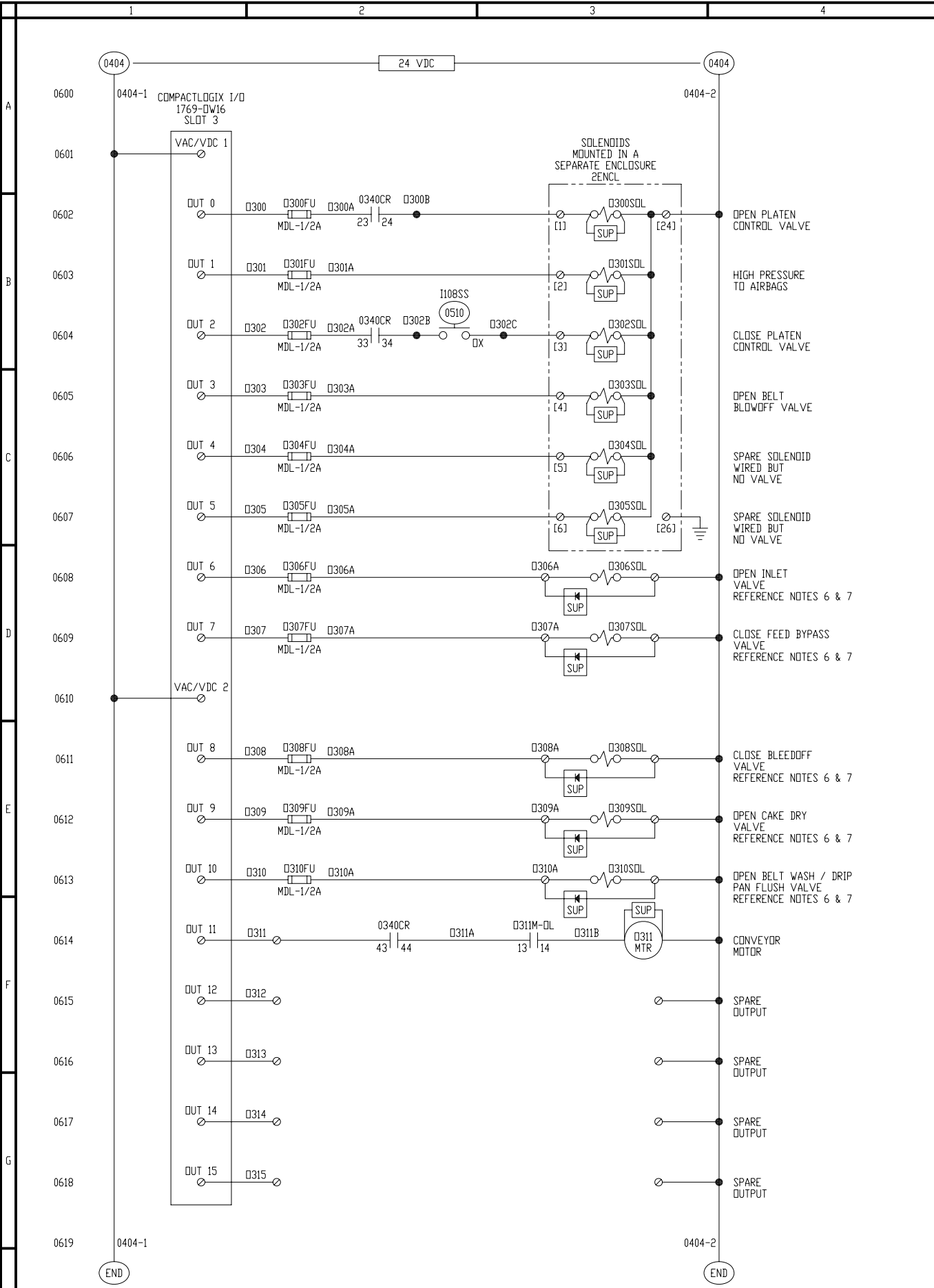
- NOTE:**
- 1) WIRE ALL PLC POINTS TO TERMINALS.
 - 2) CONNECTIONS FOR EXTERNAL DEVICES WIRES ARE TO HAVE INDIVIDUAL TERMINALS.
 - 3) WIRE A SEPARATE POWER TERMINAL FOR EACH SPARE INPUT.
 - 4) WIRE A SEPARATE COMMON TERMINAL FOR EACH SPARE OUTPUT.
 - 5) FOLD BACK, AND TAPE OFF THE UNUSED CABLE CONDUCTORS.
 - 6) REFERENCE OBERLIN DRAWING UX117E09 FOR THE VALVE STATUS AND VALVE SOLENOID WIRING DETAILS.
 - 7) VALVE SOLENOID SURGE SUPPRESSORS ARE INTEGRAL INTERNAL TO THE 2 LEVEL TERMINAL. THE COMMON TERMINAL LEVEL WITH THE 0V DC SHOULD BE JUMPED TOGETHER.

LOUDON - TATE & LYLE 198 BLAIR BEND DRIVE LOUDON, TN 37774 PURCHASE ORDER NO: LO-4800252530-GMT	S/N: OPF50-018SD	OBERLIN <small>404 PILOT COURT WAUKESHA, WISCONSIN USA 53188-5785 PHONE: (262) 547-4900 FAX: (262) 547-0683</small>	A 08/15/07 LRS AS BUILT
	SCALE: N/A		05/14/07 LRS ORIGINAL
<small>UNLESS OTHERWISE NOTED DIMENSIONS IN INCHES (MM) DIMENSION TOLERANCES: < 25 (635) ±.25 (6) 25-50 (635)-127(3) ±.38 (10) > 50 (1270) ±.50 (13)</small>	TITLE: TATE & LYLE - LOUDON, TN 24 VDC CONTROL SCHEMATIC		APPROVED BY: _____
	<small>THIS DRAWING AND THE INFORMATION HEREON IS THE PROPERTY OF OBERLIN FILTER CO. ANY REPRODUCTION, TRANSMITTAL TO OTHERS, OR USE EXCEPT THAT FOR WHICH IT IS INTENDED IS PROHIBITED.</small>		DRAWING NUMBER: UX018E04
			DATE: _____ SHEET 04 OF 13



NOTE:
 1) WIRE ALL PLC POINTS TO TERMINALS.
 2) CONNECTIONS FOR EXTERNAL DEVICES Wires ARE TO HAVE INDIVIDUAL TERMINALS.
 3) WIRE A SEPARATE POWER TERMINAL FOR EACH SPARE INPUT.
 4) WIRE A SEPARATE COMMON TERMINAL FOR EACH SPARE OUTPUT.
 5) FOLD BACK, AND TAPE OFF THE UNUSED CABLE CONDUCTORS.
 6) REFERENCE OBERLIN DRAWING UX117E09 FOR THE VALVE STATUS AND VALVE SOLENOID WIRING DETAILS.
 7) VALVE SOLENOID SURGE SUPPRESSORS ARE INTEGRAL INTERNAL TO THE 2 LEVEL TERMINAL. THE COMMON TERMINAL LEVEL WITH THE 0V DC SHOULD BE JUMPED TOGETHER.

LOUDON - TATE & LYLE 198 BLAIR BEND DRIVE LOUDON, TN 37774 PURCHASE ORDER NO: LO-4800252530-GMT	S/N: DPF50-018SD	OBERLIN OBERLIN FILTER COMPANY 404 PILOT COURT WAUKESHA, WISCONSIN USA 53188-5785 PHONE: (262) 547-4900 FAX: (262) 547-0683	REV: B	DATE: 08/15/07	DRAWN: LRS	OK:	NOTES: AS BUILT
	SCALE: N/A		REV: A	DATE: 06/25/07	DRAWN: LRS	OK:	NOTES: CUST REV
	UNLESS OTHERWISE NOTED DIMENSIONS IN INCHES (MM) DIMENSION TOLERANCES: < 25 (1.625) +.25 (6) 25-50 (1.625)-112(70) +.38 (10) > 50 (1.270) +.50 (13)		REV: 05/14/07	DATE: 05/14/07	DRAWN: LRS	OK:	NOTES: ORIGINAL
	PURCHASE ORDER NO: LO-4800252530-GMT		APPROVED BY:	DATE:	DRAWING NUMBER:	OK:	NOTES: SHEET 05 OF 13



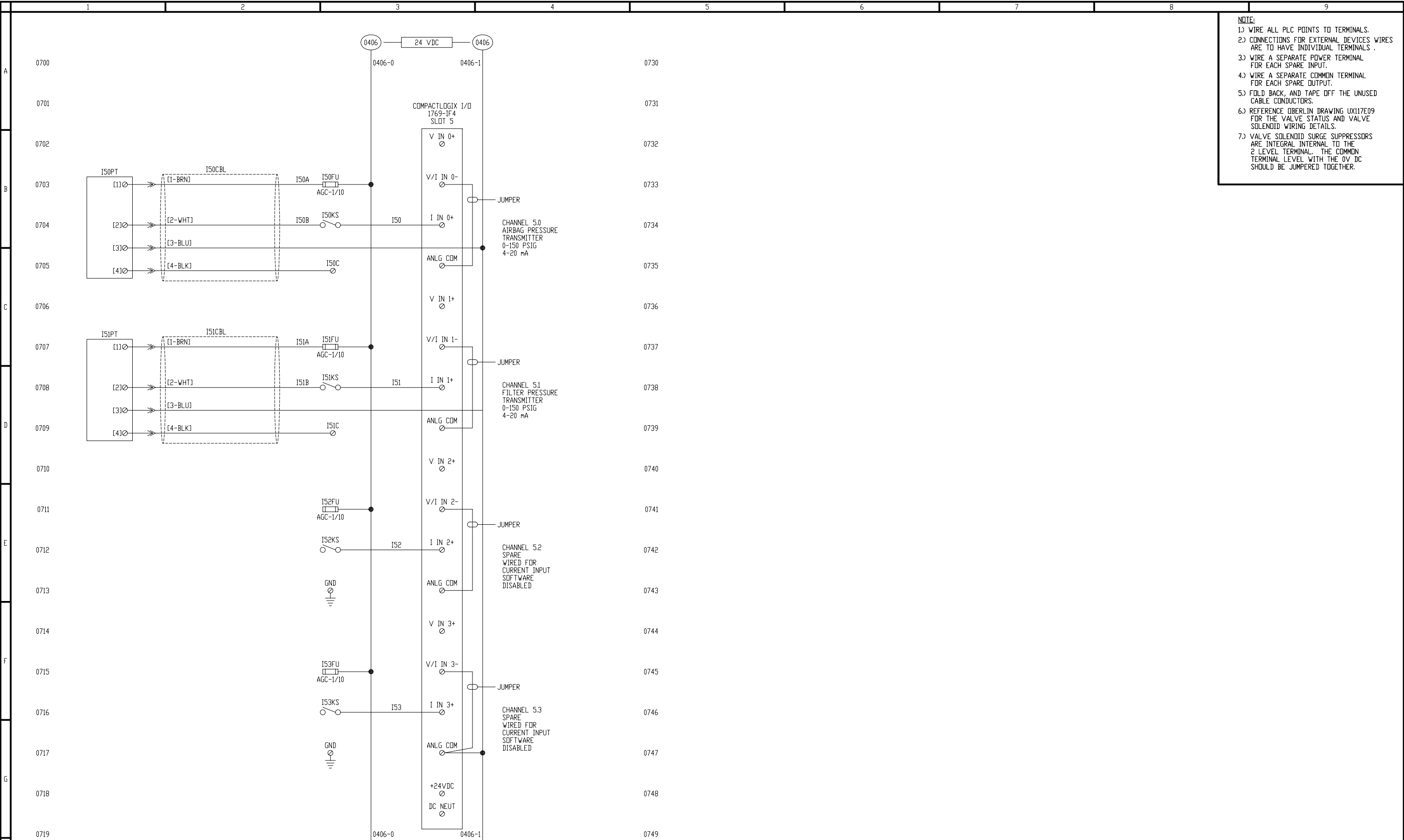
NOTE:
 1) WIRE ALL PLC POINTS TO TERMINALS.
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 3) WIRE A SEPARATE POWER TERMINAL FOR EACH SPARE INPUT.
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 6) REFERENCE OBERLIN DRAWING UX117E09 FOR THE VALVE STATUS AND VALVE SOLENOID WIRING DETAILS.
 7) VALVE SOLENOID SURGE SUPPRESSORS ARE INTEGRAL INTERNAL TO THE 2 LEVEL TERMINAL. THE COMMON TERMINAL LEVEL WITH THE 0V DC SHOULD BE JUMPED TOGETHER.

0600	0404-1	COMPACTLOGIX I/O 1769-DW16 SLOT 3	0404-2	END
0601	VAC/VDC 1			
0602	OUT 0	Q300 MDL-1/2A	Q300SDQ	OPEN PLATEN CONTROL VALVE
0603	OUT 1	Q301 MDL-1/2A	Q301SDQ	HIGH PRESSURE TO AIRBAGS
0604	OUT 2	Q302 MDL-1/2A	Q302SDQ	CLOSE PLATEN CONTROL VALVE
0605	OUT 3	Q303 MDL-1/2A	Q303SDQ	OPEN BELT BLOWOFF VALVE
0606	OUT 4	Q304 MDL-1/2A	Q304SDQ	SPARE SOLENOID WIRED BUT NO VALVE
0607	OUT 5	Q305 MDL-1/2A	Q305SDQ	SPARE SOLENOID WIRED BUT NO VALVE
0608	OUT 6	Q306 MDL-1/2A	Q306SDQ	OPEN INLET VALVE REFERENCE NOTES 6 & 7
0609	OUT 7	Q307 MDL-1/2A	Q307SDQ	CLOSE FEED BYPASS VALVE REFERENCE NOTES 6 & 7
0610	VAC/VDC 2			
0611	OUT 8	Q308 MDL-1/2A	Q308SDQ	CLOSE BLEEDOFF VALVE REFERENCE NOTES 6 & 7
0612	OUT 9	Q309 MDL-1/2A	Q309SDQ	OPEN CAKE DRY VALVE REFERENCE NOTES 6 & 7
0613	OUT 10	Q310 MDL-1/2A	Q310SDQ	OPEN BELT WASH / DRIP PAN FLUSH VALVE REFERENCE NOTES 6 & 7
0614	OUT 11	Q311	Q311 MTR	CONVEYOR MOTOR
0615	OUT 12	Q312		SPARE OUTPUT
0616	OUT 13	Q313		SPARE OUTPUT
0617	OUT 14	Q314		SPARE OUTPUT
0618	OUT 15	Q315		SPARE OUTPUT
0619	0404-1		0404-2	END

0630	0405-0	COMPACTLOGIX I/O 1769-DW16 SLOT 4	0405-1	END
0631	VAC/VDC 1			
0632	OUT 0	Q400	Q400AH	ALARM HORN
0633	OUT 1	Q401	Q401AB	ALARM BEACON
0634	OUT 2	Q402		SPARE OUTPUT
0635	OUT 3	Q403		SPARE OUTPUT
0636	OUT 4	Q404		SPARE OUTPUT
0637	OUT 5	Q405		SPARE OUTPUT
0638	OUT 6	Q406		SPARE OUTPUT
0639	OUT 7	Q407		SPARE OUTPUT
0640	VAC/VDC 2			
0641	OUT 8	Q408		SPARE OUTPUT
0642	OUT 9	Q409		SPARE OUTPUT
0643	OUT 10	Q410		SPARE OUTPUT
0644	OUT 11	Q411		SPARE OUTPUT
0645	OUT 12	Q412		SPARE OUTPUT
0646	OUT 13	Q413		SPARE OUTPUT
0647	OUT 14	Q414		SPARE OUTPUT
0648	OUT 15	Q415		SPARE OUTPUT
0649	0405-0		0405-1	END

LOUDON - TATE & LYLE 198 BLAIR BEND DRIVE LOUDON, TN 37774 PURCHASE ORDER NO: LD-4800252530-GMT	S/N: DPF50-018SD SCALE: N/A	OBERLIN OBERLIN FILTER COMPANY 404 PILOT COURT WALKESHA, WISCONSIN USA 53188-5785 PHONE: (262) 547-4900 FAX: (262) 547-0683	A 08/15/07 LRS AS BUILT 05/14/07 LRS ORIGINAL
	UNLESS OTHERWISE NOTED DIMENSIONS IN INCHES (MM) DIMENSION TOLERANCES: < 25 (1.625) ±.25 (6.3) 25-50 (1.625-12.70) ±.38 (10) > 50 (12.70) ±.50 (12.7)	TITLE: TATE & LYLE - LOUDON, TN PLC - SLOTS 3 & 4, 24VDC OUTPUTS	APPROVED BY: _____ DATE: _____

- NOTE:**
- 1) WIRE ALL PLC POINTS TO TERMINALS.
 - 2) CONNECTIONS FOR EXTERNAL DEVICES Wires ARE TO HAVE INDIVIDUAL TERMINALS.
 - 3) WIRE A SEPARATE POWER TERMINAL FOR EACH SPARE INPUT.
 - 4) WIRE A SEPARATE COMMON TERMINAL FOR EACH SPARE OUTPUT.
 - 5) FOLD BACK, AND TAPE OFF THE UNUSED CABLE CONDUCTORS.
 - 6) REFERENCE OBERLIN DRAWING UX117E09 FOR THE VALVE STATUS AND VALVE SOLENOID WIRING DETAILS.
 - 7) VALVE SOLENOID SURGE SUPPRESSORS ARE INTEGRAL INTERNAL TO THE 2 LEVEL TERMINAL. THE COMMON TERMINAL LEVEL WITH THE 0V DC SHOULD BE JUMPED TOGETHER.



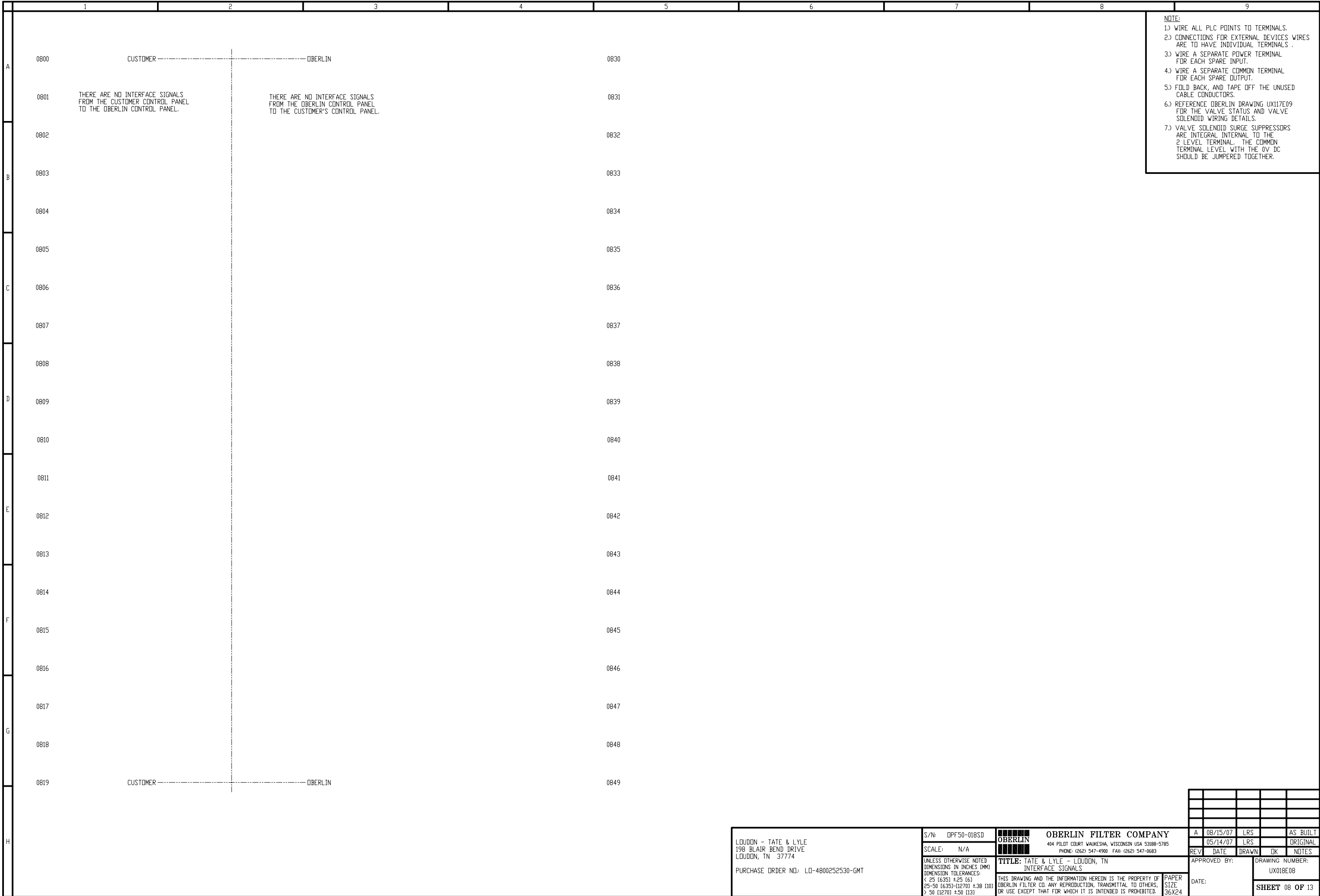
CHANNEL CONFIGURATION- SOFTWARE
 TYPE / RANGE: CURRENT MODE, 4-20 mA
 DATA FORMAT: ENGINEERING UNITS
 4 mA = 4000
 20 mA = 20000
 FILTER SELECT: 60 Hz

LOUDON - TATE & LYLE
 198 BLAIR BEND DRIVE
 LOUDON, TN 37774
 PURCHASE ORDER NO: LD-4800252530-GMT

S/N: DPF50-018SD
 SCALE: N/A
 UNLESS OTHERWISE NOTED
 DIMENSIONS IN INCHES (MM)
 DIMENSION TOLERANCES:
 < 25 (635) ±.25 (.6)
 25-50 (635)-127(3) ±.38 (.10)
 > 50 (1270) ±.50 (.13)

OBERLIN FILTER COMPANY
 404 PILOT COURT WAUKESHA, WISCONSIN USA 53188-5785
 PHONE: (262) 547-4900 FAX: (262) 547-0683
TITLE: TATE & LYLE - LOUDON, TN
PLC - SLOT 5, ANALOG INPUTS
 THIS DRAWING AND THE INFORMATION HEREON IS THE PROPERTY OF
 OBERLIN FILTER CO. ANY REPRODUCTION, TRANSMITTAL TO OTHERS,
 OR USE EXCEPT THAT FOR WHICH IT IS INTENDED IS PROHIBITED.

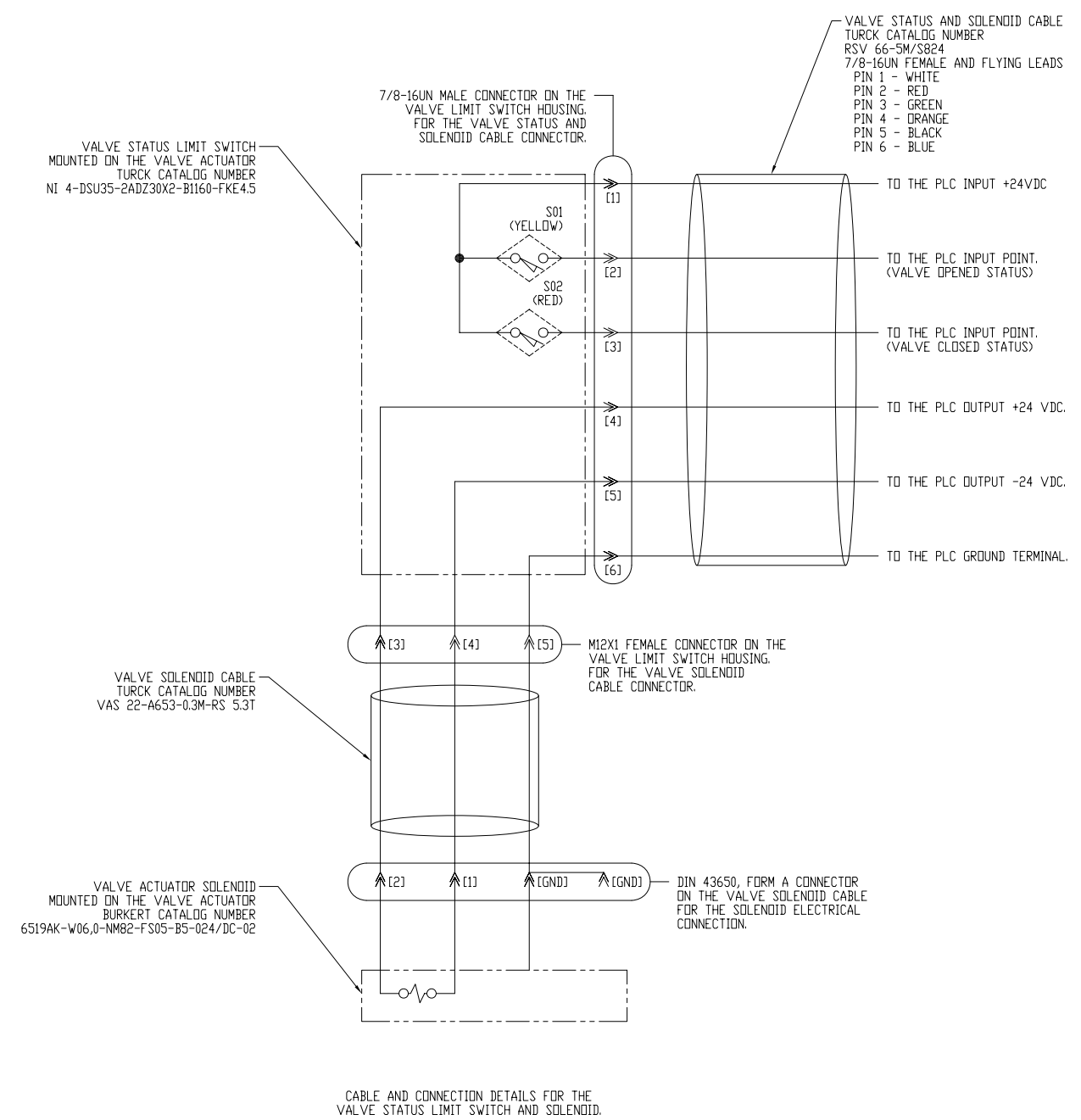
REV	DATE	DRAWN	CHK	NOTES
A	08/15/07	LRS		AS BUILT
	05/14/07	LRS		ORIGINAL
APPROVED BY:				DRAWING NUMBER:
DATE:				UX018E07
				SHEET 07 OF 13



NOTE:
 1) WIRE ALL PLC POINTS TO TERMINALS.
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 3) WIRE A SEPARATE POWER TERMINAL FOR EACH SPARE INPUT.
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 7) VALVE SOLENOID SURGE SUPPRESSORS ARE INTEGRAL INTERNAL TO THE 2 LEVEL TERMINAL. THE COMMON TERMINAL LEVEL WITH THE 0V DC SHOULD BE JUMPERED TOGETHER.

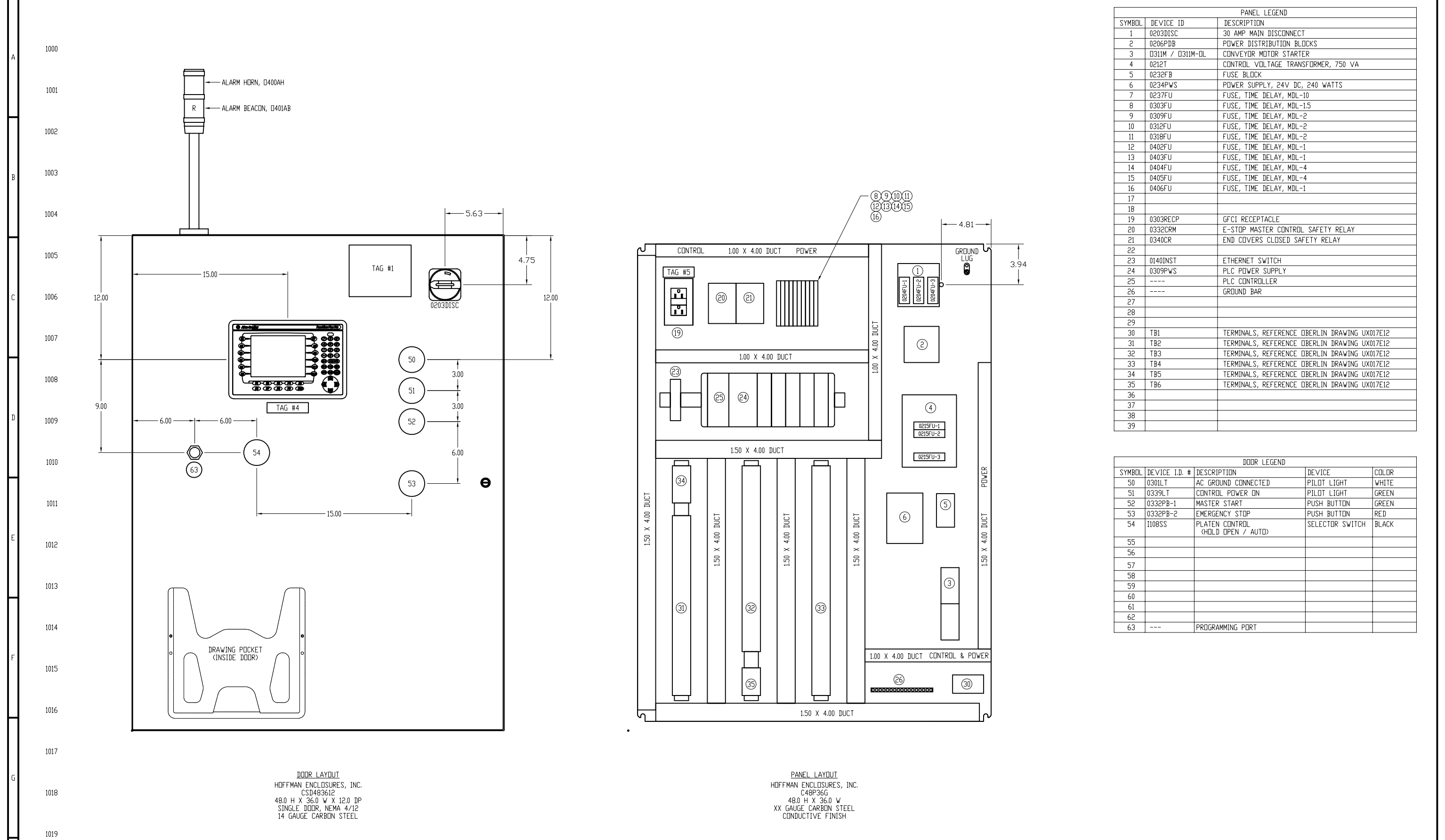
LOUDON - TATE & LYLE 198 BLAIR BEND DRIVE LOUDON, TN 37774 PURCHASE ORDER NO: LD-4800252530-GMT	S/N: DPF50-018SD SCALE: N/A	OBERLIN FILTER COMPANY 404 PILOT COURT WAUKESHA, WISCONSIN USA 53188-5785 PHONE: (262) 547-4900 FAX: (262) 547-0683	<table border="1"> <tr> <td>REV</td> <td>DATE</td> <td>DRAWN</td> <td>CHK</td> <td>NOTES</td> </tr> <tr> <td>A</td> <td>08/15/07</td> <td>LRS</td> <td></td> <td>AS BUILT</td> </tr> <tr> <td></td> <td>05/14/07</td> <td>LRS</td> <td></td> <td>ORIGINAL</td> </tr> </table>	REV	DATE	DRAWN	CHK	NOTES	A	08/15/07	LRS		AS BUILT		05/14/07	LRS		ORIGINAL
	REV	DATE	DRAWN	CHK	NOTES													
A	08/15/07	LRS		AS BUILT														
	05/14/07	LRS		ORIGINAL														
UNLESS OTHERWISE NOTED DIMENSIONS IN INCHES (MM) DIMENSION TOLERANCES: < 25 (635) ±.25 (6) 25-50 (635)-127(3) ±.38 (10) > 50 (1270) ±.50 (13)	TITLE: TATE & LYLE - LOUDON, TN INTERFACE SIGNALS THIS DRAWING AND THE INFORMATION HEREON IS THE PROPERTY OF OBERLIN FILTER CO. ANY REPRODUCTION, TRANSMITTAL TO OTHERS, OR USE EXCEPT THAT FOR WHICH IT IS INTENDED IS PROHIBITED.	APPROVED BY: DATE:	DRAWING NUMBER: UX018E08 SHEET 08 OF 13															

- NOTE:**
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 - 2) CONNECTIONS FOR EXTERNAL DEVICES WIRES ARE TO HAVE INDIVIDUAL TERMINALS.
 - 3) WIRE A SEPARATE POWER TERMINAL FOR EACH SPARE INPUT.
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 - 5) FOLD BACK, AND TAPE OFF THE UNUSED CABLE CONDUCTORS.
 - 6) REFERENCE OBERLIN DRAWING UX117E09 FOR THE VALVE STATUS AND VALVE SOLENOID WIRING DETAILS.
 - 7) VALVE SOLENOID SURGE SUPPRESSORS ARE INTEGRAL INTERNAL TO THE 2 LEVEL TERMINAL. THE COMMON TERMINAL LEVEL WITH THE 0V DC SHOULD BE JUMPED TOGETHER.



CABLE AND CONNECTION DETAILS FOR THE VALVE STATUS LIMIT SWITCH AND SOLENOID.

LOUDON - TATE & LYLE 198 BLAIR BEND DRIVE LOUDON, TN 37774 PURCHASE ORDER NO: LD-4800252530-GMT	S/N: DPF50-018SD SCALE: N/A	OBERLIN OBERLIN FILTER COMPANY 404 PILOT COURT WAUKESHA, WISCONSIN USA 53188-5785 PHONE: (262) 547-4900 FAX: (262) 547-0683	A 08/15/07 LRS AS BUILT 05/14/07 LRS ORIGINAL
	UNLESS OTHERWISE NOTED DIMENSIONS IN INCHES (MM) DIMENSION TOLERANCES: < 25 (635) ±.25 (6) 25-50 (635-1270) ±.38 (10) > 50 (1270) ±.50 (13)	TITLE: TATE & LYLE - LOUDON, TN CABLE DETAILS THIS DRAWING AND THE INFORMATION HEREON IS THE PROPERTY OF OBERLIN FILTER CO. ANY REPRODUCTION, TRANSMITTAL TO OTHERS, OR USE EXCEPT THAT FOR WHICH IT IS INTENDED IS PROHIBITED.	APPROVED BY: DATE:



PANEL LEGEND		
SYMBOL	DEVICE ID	DESCRIPTION
1	0203DISC	30 AMP MAIN DISCONNECT
2	0206PDB	POWER DISTRIBUTION BLOCKS
3	0311M / 0311M-DL	CONVEYOR MOTOR STARTER
4	0212T	CONTROL VOLTAGE TRANSFORMER, 750 VA
5	0232FB	FUSE BLOCK
6	0234PWS	POWER SUPPLY, 24V DC, 240 WATTS
7	0237FU	FUSE, TIME DELAY, MDL-10
8	0303FU	FUSE, TIME DELAY, MDL-1.5
9	0309FU	FUSE, TIME DELAY, MDL-2
10	0312FU	FUSE, TIME DELAY, MDL-2
11	0318FU	FUSE, TIME DELAY, MDL-2
12	0402FU	FUSE, TIME DELAY, MDL-1
13	0403FU	FUSE, TIME DELAY, MDL-1
14	0404FU	FUSE, TIME DELAY, MDL-4
15	0405FU	FUSE, TIME DELAY, MDL-4
16	0406FU	FUSE, TIME DELAY, MDL-1
17		
18		
19	0303RECP	GFCI RECEPTACLE
20	0332CRM	E-STOP MASTER CONTROL SAFETY RELAY
21	0340CR	END COVERS CLOSED SAFETY RELAY
22		
23	0140INST	ETHERNET SWITCH
24	0309PWS	PLC POWER SUPPLY
25	----	PLC CONTROLLER
26	----	GROUND BAR
27		
28		
29		
30	TB1	TERMINALS, REFERENCE OBERLIN DRAWING UX017E12
31	TB2	TERMINALS, REFERENCE OBERLIN DRAWING UX017E12
32	TB3	TERMINALS, REFERENCE OBERLIN DRAWING UX017E12
33	TB4	TERMINALS, REFERENCE OBERLIN DRAWING UX017E12
34	TB5	TERMINALS, REFERENCE OBERLIN DRAWING UX017E12
35	TB6	TERMINALS, REFERENCE OBERLIN DRAWING UX017E12
36		
37		
38		
39		

DOOR LEGEND				
SYMBOL	DEVICE I.D. #	DESCRIPTION	DEVICE	COLOR
50	0301LT	AC GROUND CONNECTED	PILOT LIGHT	WHITE
51	0339LT	CONTROL POWER ON	PILOT LIGHT	GREEN
52	0332PB-1	MASTER START	PUSH BUTTON	GREEN
53	0332PB-2	EMERGENCY STOP	PUSH BUTTON	RED
54	I108SS	PLATEN CONTROL (HOLD OPEN / AUTD)	SELECTOR SWITCH	BLACK
55				
56				
57				
58				
59				
60				
61				
62				
63	---	PROGRAMMING PORT		

DOOR LAYOUT
 HOFFMAN ENCLOSURES, INC.
 CSD483612
 48.0 H X 36.0 W X 12.0 DP
 SINGLE DOOR, NEMA 4/12
 14 GAUGE CARBON STEEL

PANEL LAYOUT
 HOFFMAN ENCLOSURES, INC.
 C48P36G
 48.0 H X 36.0 W
 XX GAUGE CARBON STEEL
 CONDUCTIVE FINISH

- NOTES:**
- DIMENSIONS FOR THE DOOR MOUNTED DEVICES ARE REFERENCED OFF THE DOOR EDGES.
 - DOOR DEVICES ARE ALLEN-BRADLEY 800P, ON 3.00 INCH SPACINGS. LOCATE THE ANTI-ROTATION NOTCH AT 12 O'CLOCK.
 - DOOR NAME PLATES ARE TO BE 2.50 INCH SQUARE LAMINATED PLASTIC, PUNCHED WITH A 0.88 INCH DIAMETER HOLE. DOOR NAME PLATE TEXT IS TO HAVE A MINIMUM HEIGHT OF 0.125 INCHES. THE DEVICE I.D. # IS TO BE ENGRAVED IN THE LOWER LEFT HAND CORNER.
 - ALL DEVICES ON THE SUBPLATE WHICH ARE NOT TOUCH PROOF ARE TO BE COVERED BY 0.125 INCH THICK CLEAR POLYCARBONATE.
 - REFERENCE OBERLIN DRAWING UX017E11 FOR THE DOOR TAGS AND NAMEPLATES.

LOUDON - TATE & LYLE
 198 BLAIR BEND DRIVE
 LOUDON, TN 37774
 PURCHASE ORDER NO: LO-4800252530-GMT

S/N: OPF50-018SD
 SCALE: 1 = 4
 UNLESS OTHERWISE NOTED
 DIMENSIONS IN INCHES (MM)
 DIMENSION TOLERANCES:
 < 25 (1635) ±.25 (6.3)
 25-50 (1635)-112(70) ±.38 (10)
 > 50 (1270) ±.50 (12.7)

OBERLIN FILTER COMPANY
 404 PILOT COURT WAUKESHA, WISCONSIN USA 53188-5785
 PHONE: (262) 547-4900 FAX: (262) 547-0683
 TITLE: TATE & LYLE - LOUDON, TN
 PANEL AND DOOR LAYOUT
 THIS DRAWING AND THE INFORMATION HEREON IS THE PROPERTY OF OBERLIN FILTER CO. ANY REPRODUCTION, TRANSMITTAL TO OTHERS, OR USE EXCEPT THAT FOR WHICH IT IS INTENDED IS PROHIBITED.

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A	06/25/07	LRS	CUST REV
	05/14/07	LRS	ORIGINAL
REV	DATE	DRAWN	OK NOTES
APPROVED BY:			DRAWING NUMBER:
DATE:			UX018E10
			SHEET 10 OF 13

NOTE:

- 1.) WIRE ALL PLC POINTS TO TERMINALS.
- 2.) CONNECTIONS FOR EXTERNAL DEVICES Wires ARE TO HAVE INDIVIDUAL TERMINALS.
- 3.) WIRE A SEPARATE POWER TERMINAL FOR EACH SPARE INPUT.
- 4.) WIRE A SEPARATE COMMON TERMINAL FOR EACH SPARE OUTPUT.
- 5.) FOLD BACK, AND TAPE OFF THE UNUSED CABLE CONDUCTORS.
- 6.) REFERENCE OBERLIN DRAWING UX117E09 FOR THE VALVE STATUS AND VALVE SOLENOID WIRING DETAILS.
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OBERLIN PRESSURE FILTER

MODEL: OPF 50 SERIAL NUMBER: 018SD

SUPPLY POWER: 460 VOLTS, 3 PHASE, 60 HZ

FULL LOAD CURRENT: 5 AMPS

LARGEST MOTOR: 1.0 HP, 1.7 FLA

SHORT CIRCUIT CURRENT: 100 KA

RMS SYMMETRICAL, 460 V MAXIMUM

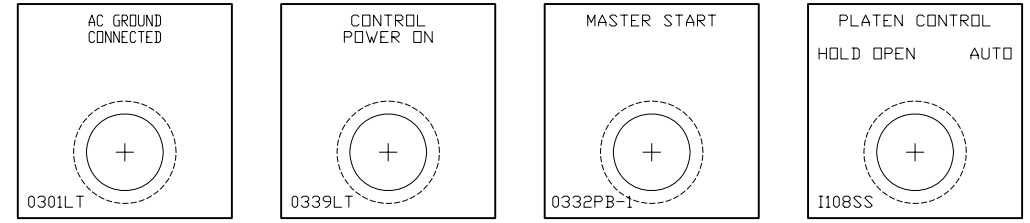
MAIN OVERCURRENT PROTECTION PROVIDED AT MACHINE SUPPLY TERMINALS: YES SIZE: 6 AMPS

30 AMP DISCONNECT SWITCH

ELECTRICAL DRAWINGS: UX018

MANUFACTURED DATE: AUGUST, 2007

ENCLOSURE TYPE: NEMA-4 / 12



TAG #1
OBERLIN MACHINE NAMEPLATE
4.75" X 6.75" WHITE WITH BLACK TEXT

AFTER 30 MINUTES, THE SCREEN DISPLAY WILL GO BLANK. TOUCH A KEY TO RESTORE THE DISPLAY.

TAG #2
1" X 4.00" WHITE
WITH 1/8" BLACK LETTERS

FUSE LEGEND

0204FU-1	BUSSMANN	LPJ-6SP
0204FU-2	BUSSMANN	LPJ-6SP
0204FU-3	BUSSMANN	LPJ-6SP
0212FU-1	BUSSMANN	FNQ-R-4
0212FU-2	BUSSMANN	FNQ-R-4
0212FU-3	BUSSMANN	FNM-8
0232FU-1	BUSSMANN	FNQ-R-10
0232FU-2	BUSSMANN	FNQ-R-10
0232FU-3	BUSSMANN	FNQ-R-10
0237FU	BUSSMANN	MDL-10
0303FU	BUSSMANN	MDL-1.5
0309FU	BUSSMANN	MDL-2
0312FU	BUSSMANN	MDL-2
0318FU	BUSSMANN	MDL-2
0402FU	BUSSMANN	MDL-1
0403FU	BUSSMANN	MDL-1
0404FU	BUSSMANN	MDL-4
0405FU	BUSSMANN	MDL-4
0406FU	BUSSMANN	MDL-1
SOLENOIDS	BUSSMANN	MDL-1/2
ANALOGS	BUSSMANN	AGC-1/10

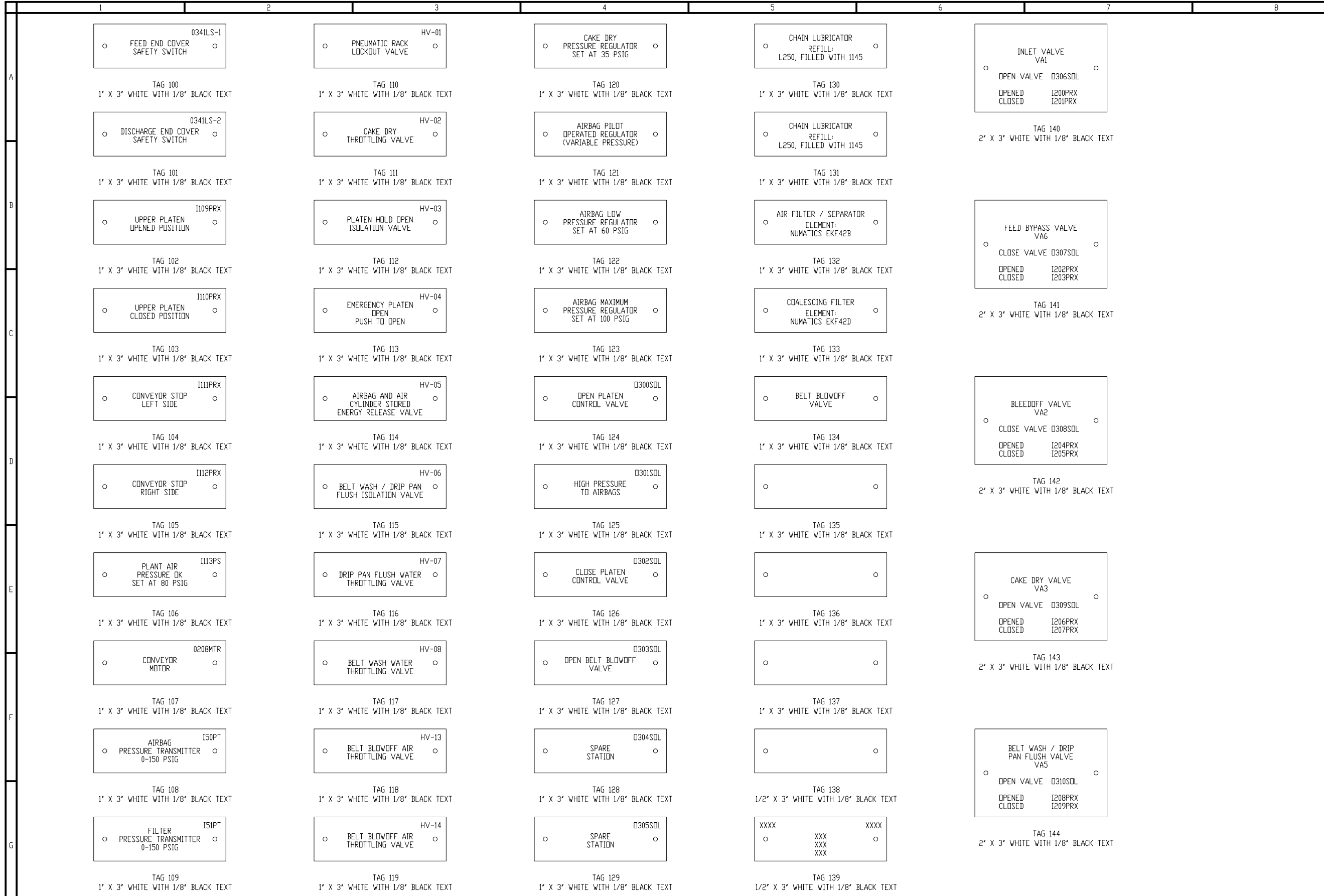
TAG #4
4.0" X 6.5" WHITE WITH 1/8" BLACK LETTERING
(MOUNTED ON THE INSIDE OF THE DOOR
BELOW THE MAIN DISCONNECT SWITCH.)

GFIC RECEPTACLE
FOR PROGRAMMING DEVICES
ONLY - NO TOOLS
PROTECTED BY 0303FU FUSE.

TAG #5
1" X 3.00" YELLOW
WITH 1/8" BLACK LETTERS

B	08/15/07	LRS		AS BUILT
A	06/25/07	LRS		CUST REV
	05/14/07	LRS		ORIGINAL
REV	DATE	DRAWN	OK	NOTES

LOUDON - TATE & LYLE 198 BLAIR BEND DRIVE LOUDON, TN 37774 PURCHASE ORDER NO: LD-4800252530-GMT	S/N: OPF50-018SD SCALE: N/A	OBERLIN FILTER COMPANY 404 PILOT COURT WAUKESHA, WISCONSIN USA 53188-5785 PHONE: (262) 547-4900 FAX: (262) 547-0683	APPROVED BY: DATE:	DRAWING NUMBER: UX018E11 SHEET 11 OF 13
	UNLESS OTHERWISE NOTED DIMENSIONS IN INCHES (MM) DIMENSION TOLERANCES: < 25 (1.625) ±.25 (.64) 25-50 (1.625-12.70) ±.38 (.10) > 50 (12.70) ±.50 (.13)	TITLE: TATE & LYLE - LOUDON, TN DOOR TAGS AND NAMEPLATES		PAPER SIZE 36X24
THIS DRAWING AND THE INFORMATION HEREON IS THE PROPERTY OF OBERLIN FILTER CO. ANY REPRODUCTION, TRANSMITTAL TO OTHERS, OR USE EXCEPT THAT FOR WHICH IT IS INTENDED IS PROHIBITED.				



NOTE:

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LOUDON - TATE & LYLE 198 BLAIR BEND DRIVE LOUDON, TN 37774 PURCHASE ORDER NO: LO-4800252530-GMT	S/N: DPF50-018SD SCALE: N/A	OBERLIN FILTER COMPANY 404 PILOT COURT WALKESHA, WISCONSIN USA 53188-5785 PHONE: (262) 547-4900 FAX: (262) 547-0683	A 08/15/07 LRS AS BUILT 05/14/07 LRS ORIGINAL
	UNLESS OTHERWISE NOTED DIMENSIONS IN INCHES (MM) DIMENSION TOLERANCES: < 25 (1.625) +.25 (.63) 25-50 (1.625)-112(70) +.38 (10) > 50 (112(70)) +.50 (12.7)	TITLE: TATE & LYLE - LOUDON, TN GENERAL INFORMATION THIS DRAWING AND THE INFORMATION HEREON IS THE PROPERTY OF OBERLIN FILTER CO. ANY REPRODUCTION, TRANSMITTAL TO OTHERS, OR USE EXCEPT THAT FOR WHICH IT IS INTENDED IS PROHIBITED.	APPROVED BY: DATE: