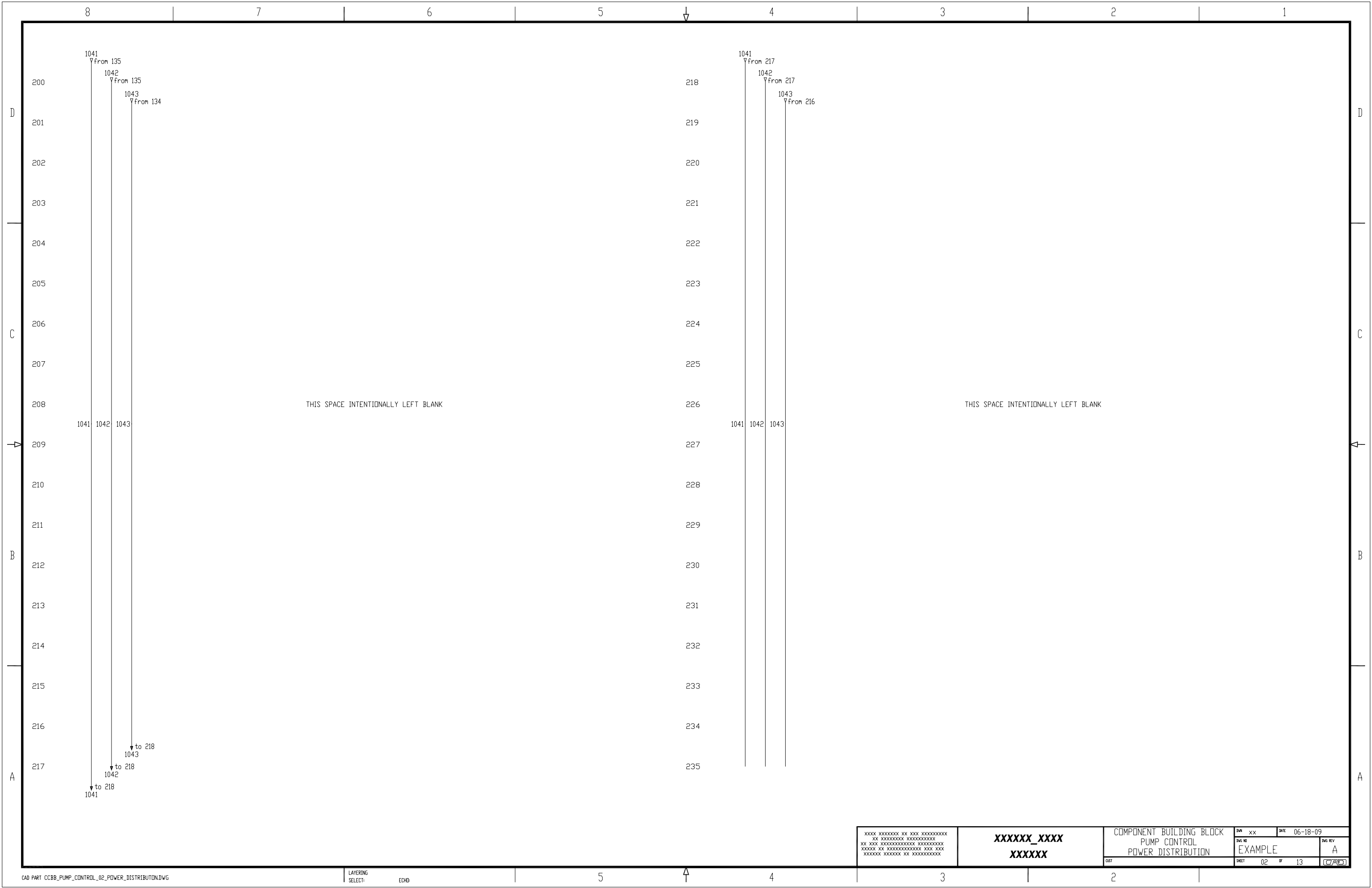
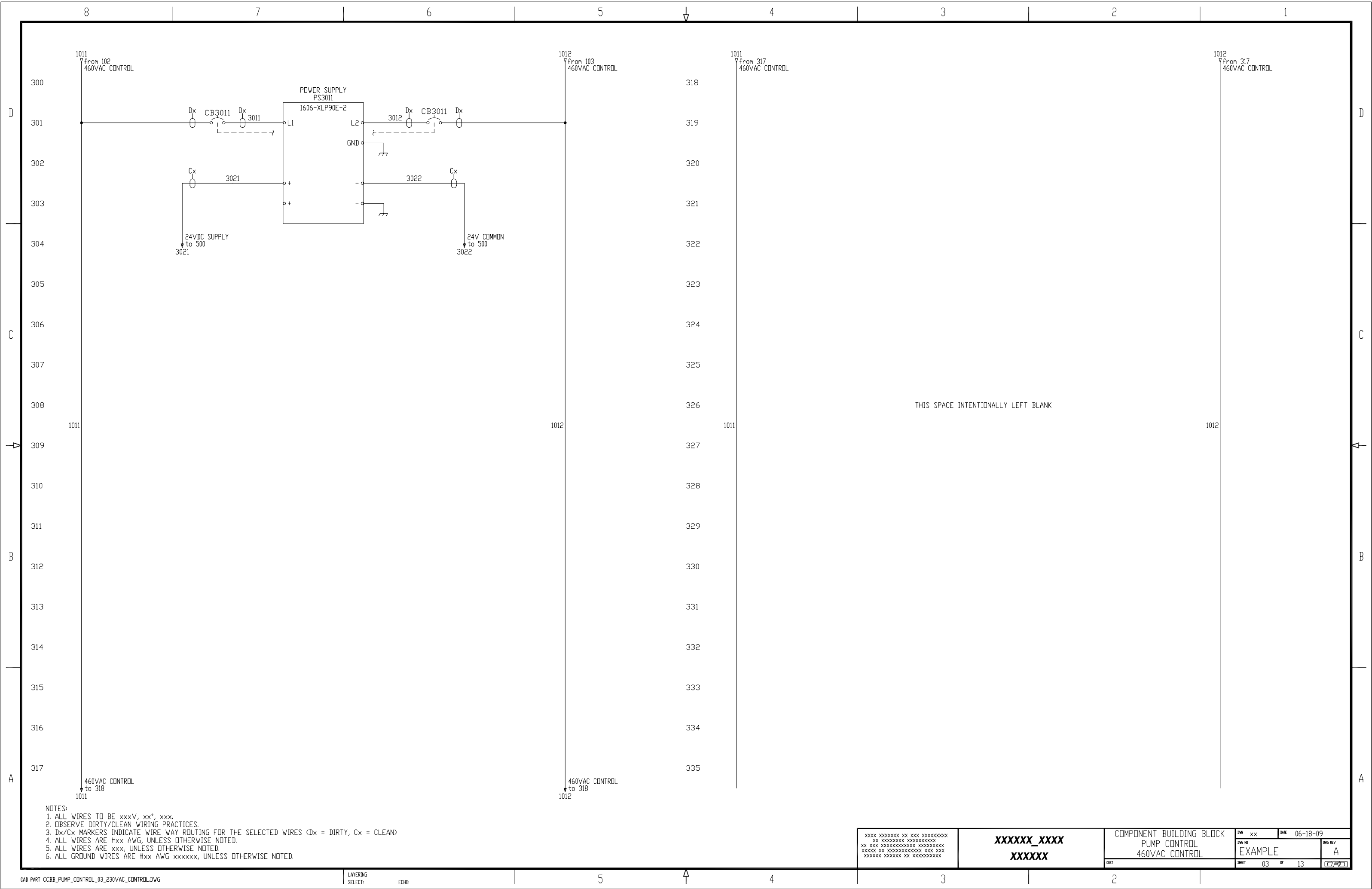
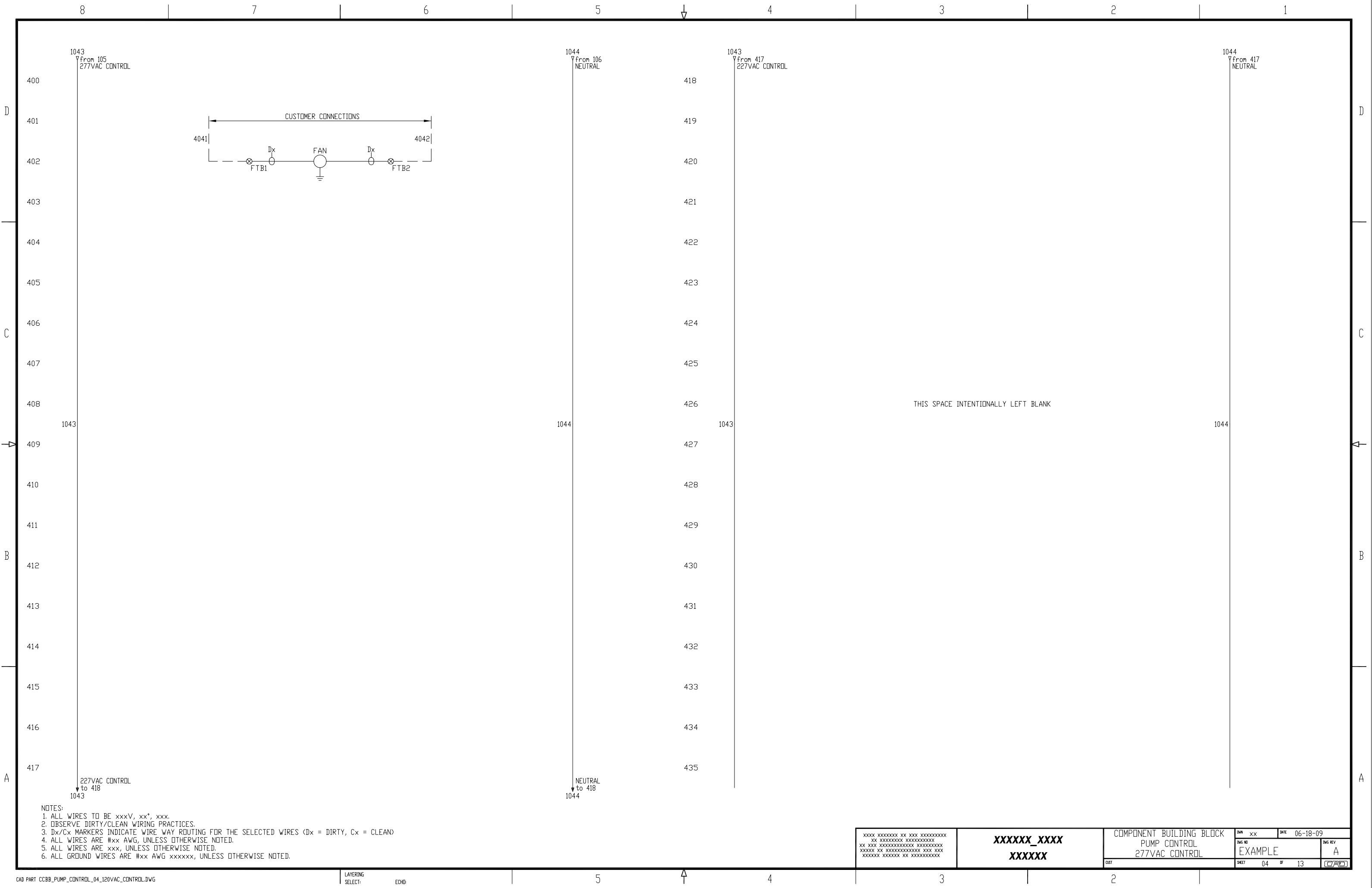


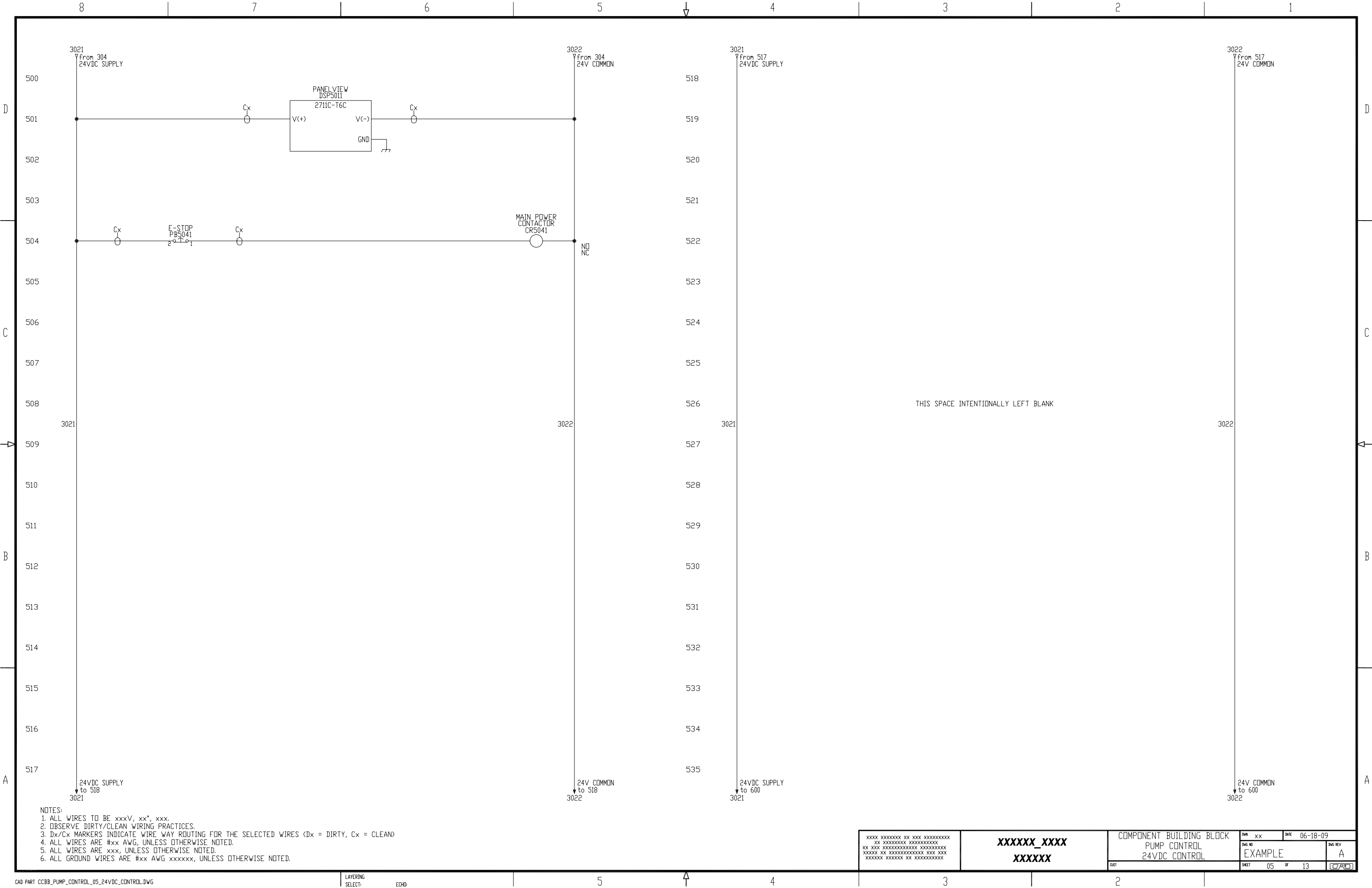
NOTES:
1. ALL WIRES TO BE xxxV, xx*, xxx.
2. OBSERVE DIRTY/CLEAN WIRING PRACTICES.
3. Dx/Cx MARKERS INDICATE WIRE WAY ROUTING FOR THE SELECTED WIRES (Dx = DIRTY, Cx = CLEAN)
4. ALL WIRES ARE #xx AWG, UNLESS OTHERWISE NOTED.
5. ALL WIRES ARE xxx, UNLESS OTHERWISE NOTED.
6. ALL GROUND WIRES ARE #xx AWG xxxxxx, UNLESS OTHERWISE NOTED.

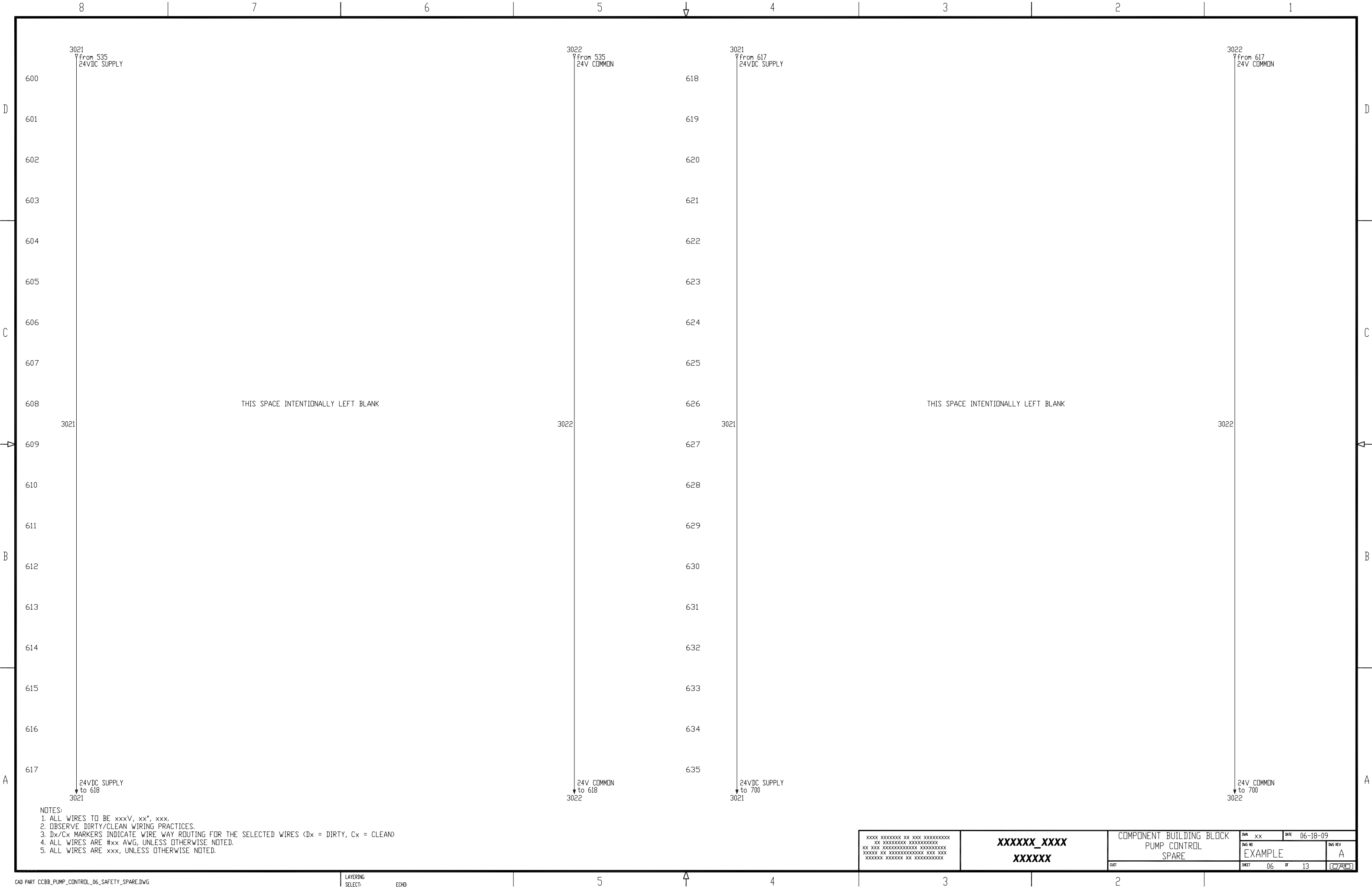
XXXXX XXXXXXXX XX XXX XXXXXXXXXX XX XXXXXXXXXX XXXXXXXXXX XX XXX XXXXXXXXXX XXXXXXXXXX XXXXXX XX XXXXXXXXXX XXX XXX XXXXXX XXXXXX XX XXXXXXXXXX	XXXXXX_XXXX XXXXXX	COMPONENT BUILDING BLOCK PUMP CONTROL POWER DISTRIBUTION		DWG XX	DATE 06-18-09
				DWG NO EXAMPLE	DWG REV A
		CUST		SHEET 01	OF 13

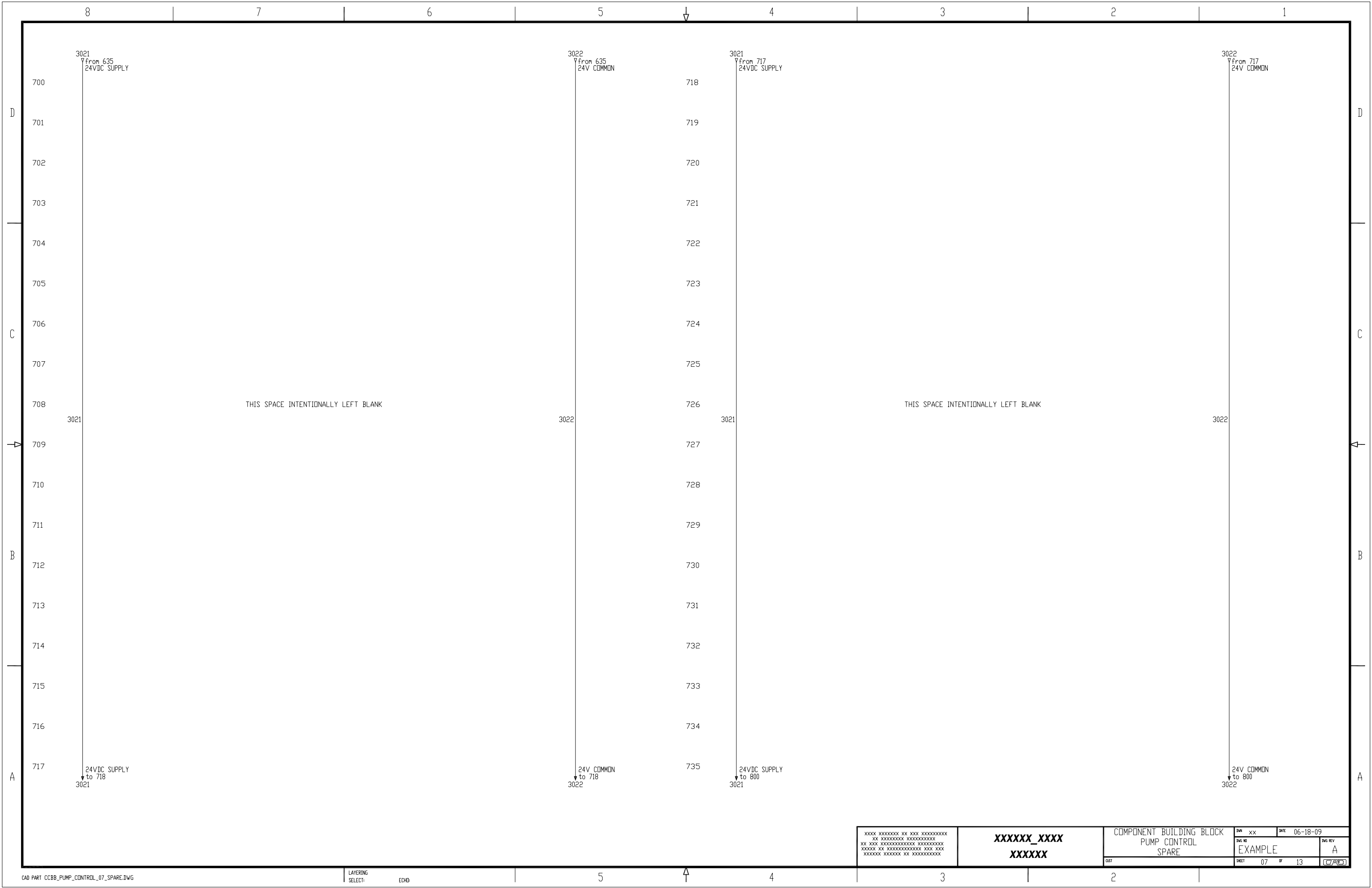






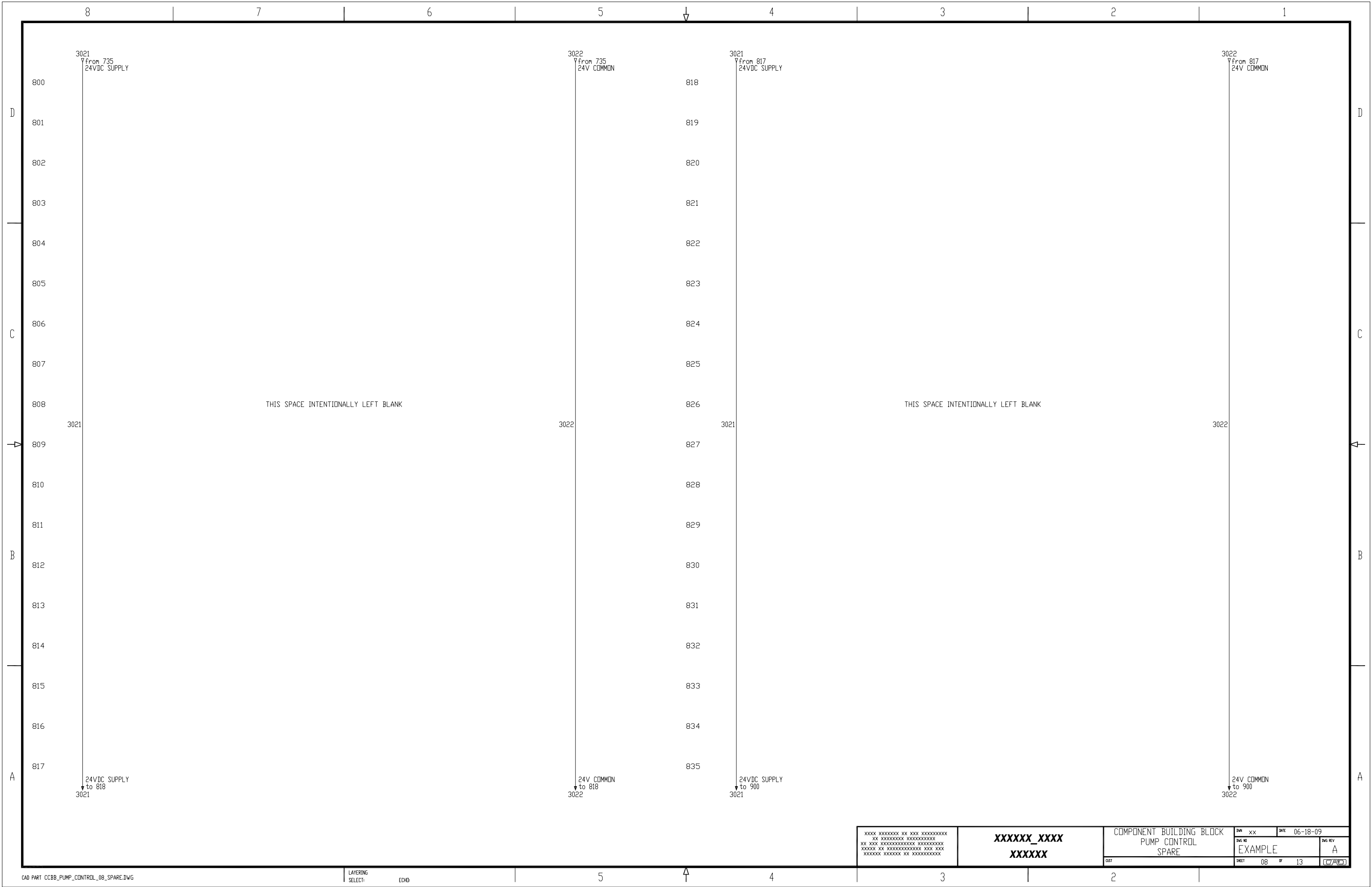






XXXX XXXXXXXX XX XXX XXXXXXXXXX XX XXXXXXXXXXXXXXXXXXXXXXXX XX XXXXXXXXXXXXXXXXXXXXXXXX XXXXXX XX XXXXXXXXXXXXXXXX XXX XXX XXXXXXXX XXXXXXXX XX XXXXXXXXXXXXXXXX	XXXXXX_XXXX XXXXXX	COMPONENT BUILDING BLOCK PUMP CONTROL SPARE		DWG XX	DATE 06-18-09
		EXAMPLE		DWG REV	A

001	SHEET 07	OF 13	CAD
-----	----------	-------	-----



D

C

B

A

D

C

B

A

3021
from 835
24VDC SUPPLY

3022
from 835
24V COMMON

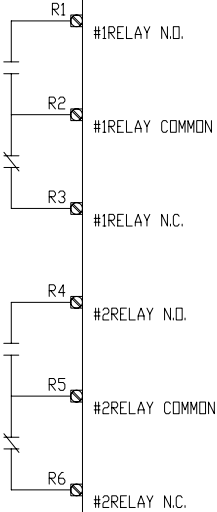
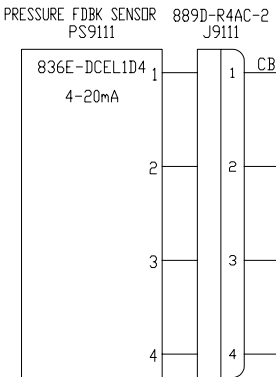
3021
from 917
24VDC SUPPLY

3022
from 917
24V COMMON

POWERFLEX 400
DRIVE1
DR1081

9011 E-STOP PB5041 21 504 22 Cx 9012

- 01 ENABLE
- 02 START/RUN FWD
- 03 DIRECTION/RUN/REV
- 04 DIGITAL COMMON
- 05 DIGITAL INPUT1
- 06 DIGITAL INPUT2
- 07 DIGITAL INPUT3
- 08 DIGITAL INPUT4
- 09 DIGITAL COMMON
- 10 OPTO COMMON
- 11 +24VDC SOURCE
- 12 +10VDC SOURCE
- 13 ANALOG INPUT1
- 14 ANALOG COMMON1
- 17 ANALOG INPUT2
- 18 ANALOG COMMON2
- 108



THIS SPACE INTENTIONALLY LEFT BLANK

XXXX XXXXXXXX XX XXX XXXXXXXXXX
XX XXXXXXXXXXXX XXXXXXXXXXXX
XX XXXXXXXXXXXX XXXXXXXXXXXX
XXXXXX XX XXXXXXXXXXXX XXX XXX
XXXXXX XXXXXXXX XX XXXXXXXXXXXX

XXXXXX_XXXX
XXXXXX

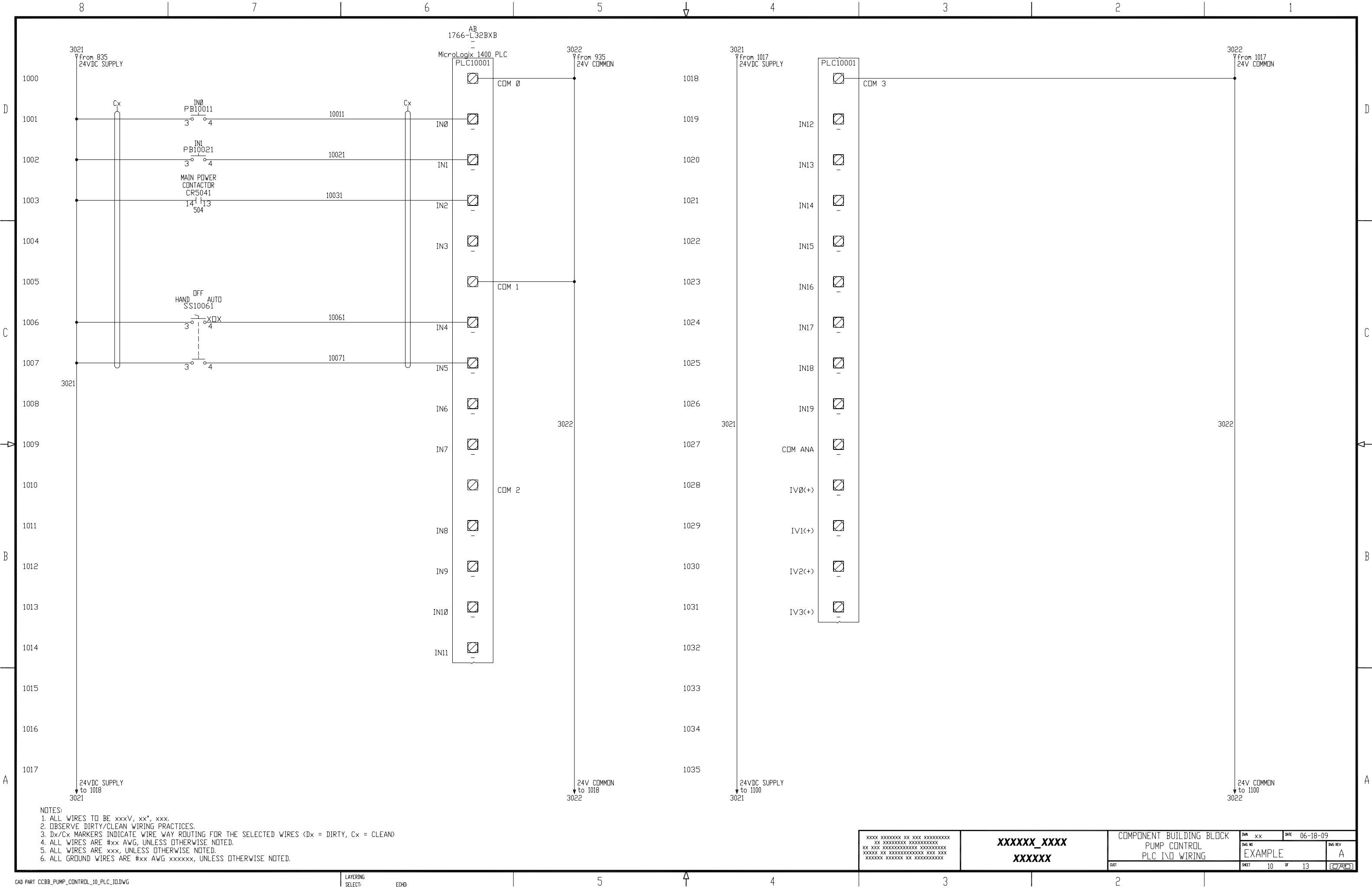
COMPONENT BUILDING BLOCK
PUMP CONTROL
POWER FLEX400 I/O

DWG NO
EXAMPLE

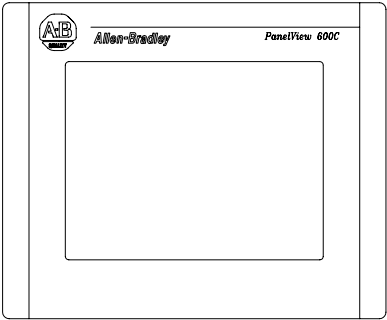
DWG REV
A

SHEET 09 OF 13

DATE 06-18-09

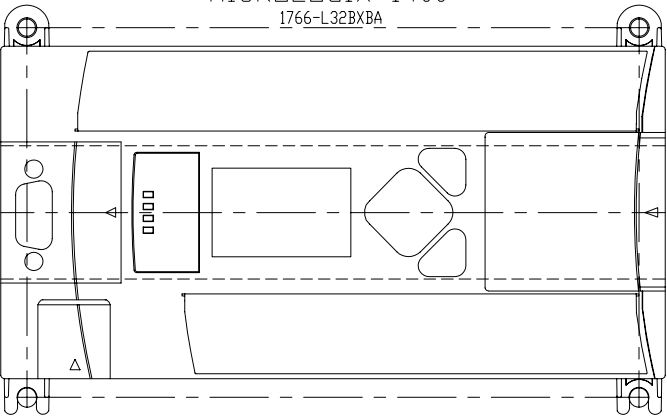


HMI PANELVIEW 600C
2711C-T6C

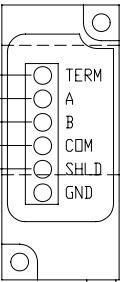


2711P-CBL-EX04

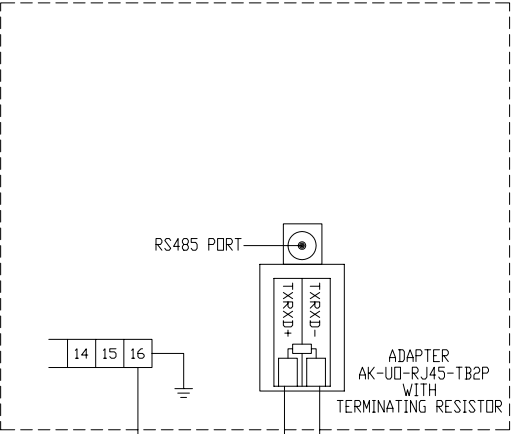
MICROLOGIX 1400
1766-L32BXBA



RS-485 BREAKOUT
1763-NC01



POWERFLEX
400 DRIVE
22C-D6P0N103



CBL12XX

SHLD

TO 485 DEVICES
(WHEN USED)

USE RS485 NETWORK CABLE OR EQUIVALENT

XXXX XXXXXXXX XX XXX XXXXXXXXXX
XX XXXXXXXXXX XXXXXXXXXX
XX XXX XXXXXXXXXX XXXXXXXXXX
XXXXXX XX XXXXXXXXXX XXX XXX
XXXXXX XXXXXX XX XXXXXXXXXX

XXXXXX_XXXX
XXXXXX

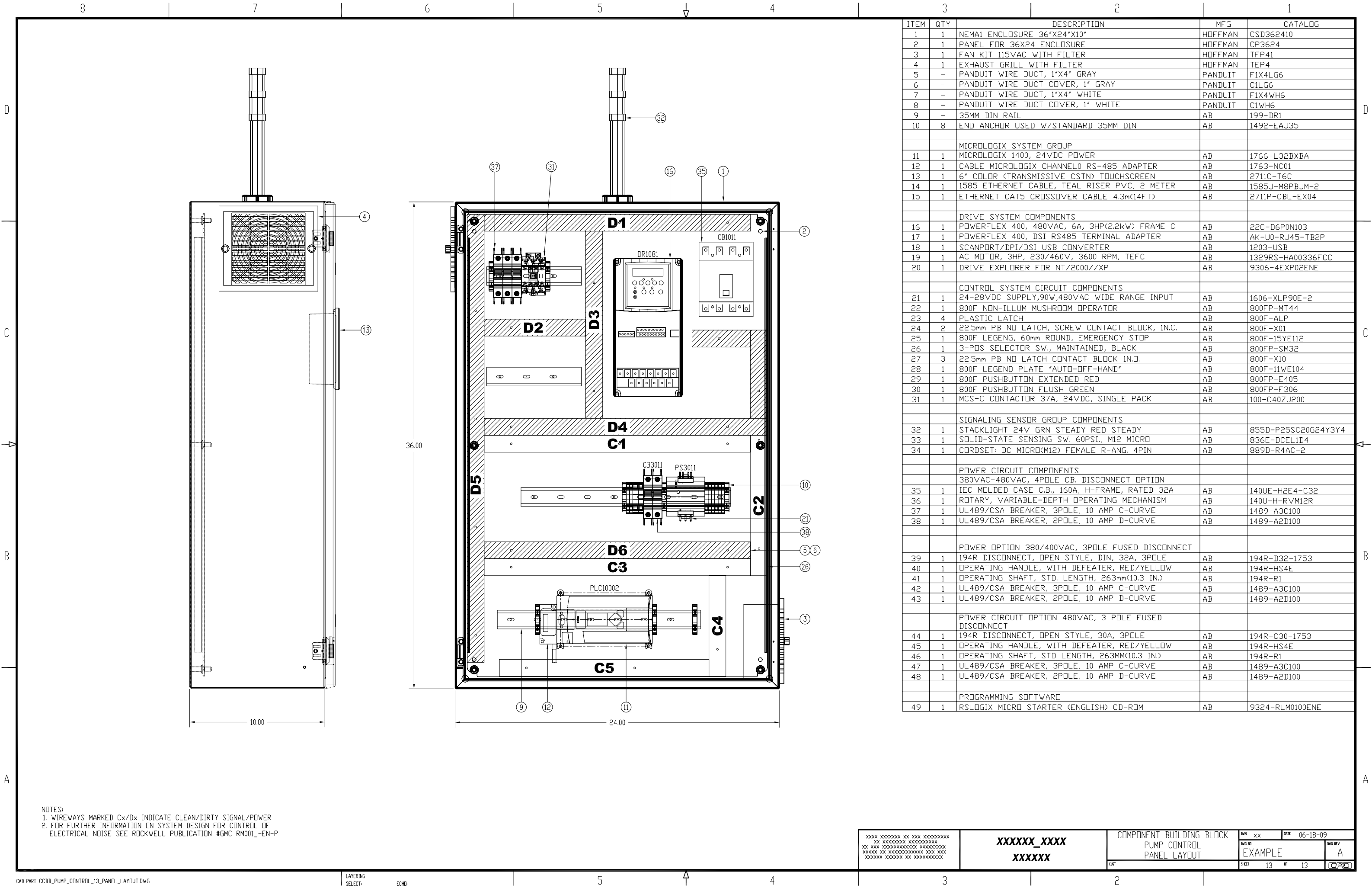
COMPONENT BUILDING BLOCK
PUMP CONTROL
COMMUNICATION DIAGRAM

DWG NO
EXAMPLE

DWG REV
A

SHEET 12 OF 13

DATE 06-18-09



ITEM		QTY	DESCRIPTION	MFG	CATALOG
1	1		NEMA1 ENCLOSURE 36"X24"X10"	HOFFMAN	CSD362410
2	1		PANEL FOR 36X24 ENCLOSURE	HOFFMAN	CP3624
3	1		FAN KIT 115VAC WITH FILTER	HOFFMAN	TFP41
4	1		EXHAUST GRILL WITH FILTER	HOFFMAN	TEP4
5	-		PANDUIT WIRE DUCT, 1"X4" GRAY	PANDUIT	F1X4LG6
6	-		PANDUIT WIRE DUCT COVER, 1" GRAY	PANDUIT	C1LG6
7	-		PANDUIT WIRE DUCT, 1"X4" WHITE	PANDUIT	F1X4WH6
8	-		PANDUIT WIRE DUCT COVER, 1" WHITE	PANDUIT	C1WH6
9	-		35MM DIN RAIL	AB	199-DR1
10	8		END ANCHOR USED W/STANDARD 35MM DIN	AB	1492-EAJ35
MICROLOGIX SYSTEM GROUP					
11	1		MICROLOGIX 1400, 24VDC POWER	AB	1766-L32BXBA
12	1		CABLE MICROLOGIX CHANNEL0 RS-485 ADAPTER	AB	1763-NC01
13	1		6" COLOR (TRANSMISSIVE CSTN) TOUCHSCREEN	AB	2711C-T6C
14	1		1585 ETHERNET CABLE, TEAL RISER PVC, 2 METER	AB	1585J-M8PBJM-2
15	1		ETHERNET CAT5 CROSSOVER CABLE 4.3m(14FT)	AB	2711P-CBL-EX04
DRIVE SYSTEM COMPONENTS					
16	1		POWERFLEX 400, 480VAC, 6A, 3HP(2.2kw) FRAME C	AB	22C-D6P0N103
17	1		POWERFLEX 400, DSI RS485 TERMINAL ADAPTER	AB	AK-U0-RJ45-TB2P
18	1		SCANPORT/DPI/DSI USB CONVERTER	AB	1203-USB
19	1		AC MOTOR, 3HP, 230/460V, 3600 RPM, TEFC	AB	1329RS-HA00336FCC
20	1		DRIVE EXPLORER FOR NT/2000//XP	AB	9306-4EXP02ENE
CONTROL SYSTEM CIRCUIT COMPONENTS					
21	1		24-28VDC SUPPLY,90W,480VAC WIDE RANGE INPUT	AB	1606-XLP90E-2
22	1		800F NON-ILLUM MUSHROOM OPERATOR	AB	800FP-MT44
23	4		PLASTIC LATCH	AB	800F-ALP
24	2		22.5mm PB NO LATCH, SCREW CONTACT BLOCK, IN.C.	AB	800F-X01
25	1		800F LEGENG, 60mm ROUND, EMERGENCY STOP	AB	800F-15YE112
26	1		3-POS SELECTOR SW., MAINTAINED, BLACK	AB	800FP-SM32
27	3		22.5mm PB NO LATCH CONTACT BLOCK IN.D.	AB	800F-X10
28	1		800F LEGEND PLATE "AUTO-OFF-HAND"	AB	800F-11WE104
29	1		800F PUSHBUTTON EXTENDED RED	AB	800FP-E405
30	1		800F PUSHBUTTON FLUSH GREEN	AB	800FP-F306
31	1		MCS-C CONTACTOR 37A, 24VDC, SINGLE PACK	AB	100-C40ZJ200
SIGNALING SENSOR GROUP COMPONENTS					
32	1		STACKLIGHT 24V GRN STEADY RED STEADY	AB	855D-P25SC20G24Y3Y4
33	1		SOLID-STATE SENSING SW. 60PSI., M12 MICRO	AB	836E-DCEL1D4
34	1		CORDSET: DC MICRO(M12) FEMALE R-ANG. 4PIN	AB	889D-R4AC-2
POWER CIRCUIT COMPONENTS					
380VAC-480VAC, 4POLE CB. DISCONNECT OPTION					
35	1		IEC MOLDED CASE C.B., 160A, H-FRAME, RATED 32A	AB	140UE-H2E4-C32
36	1		ROTARY, VARIABLE-DEPTH OPERATING MECHANISM	AB	140U-H-RVM12R
37	1		UL489/CSA BREAKER, 3POLE, 10 AMP C-CURVE	AB	1489-A3C100
38	1		UL489/CSA BREAKER, 2POLE, 10 AMP D-CURVE	AB	1489-A2D100
POWER OPTION 380/400VAC, 3POLE FUSED DISCONNECT					
39	1		194R DISCONNECT, OPEN STYLE, DIN, 32A, 3POLE	AB	194R-D32-1753
40	1		OPERATING HANDLE, WITH DEFEATER, RED/YELLOW	AB	194R-HS4E
41	1		OPERATING SHAFT, STD. LENGTH, 263mm(10.3 IN.)	AB	194R-R1
42	1		UL489/CSA BREAKER, 3POLE, 10 AMP C-CURVE	AB	1489-A3C100
43	1		UL489/CSA BREAKER, 2POLE, 10 AMP D-CURVE	AB	1489-A2D100
POWER CIRCUIT OPTION 480VAC, 3 POLE FUSED DISCONNECT					
44	1		194R DISCONNECT, OPEN STYLE, 30A, 3POLE	AB	194R-C30-1753
45	1		OPERATING HANDLE, WITH DEFEATER, RED/YELLOW	AB	194R-HS4E
46	1		OPERATING SHAFT, STD LENGTH, 263MM(10.3 IN.)	AB	194R-R1
47	1		UL489/CSA BREAKER, 3POLE, 10 AMP C-CURVE	AB	1489-A3C100
48	1		UL489/CSA BREAKER, 2POLE, 10 AMP D-CURVE	AB	1489-A2D100
PROGRAMMING SOFTWARE					
49	1		RSLOGIX MICRO STARTER (ENGLISH) CD-RDM	AB	9324-RLM0100ENE

NOTES:
1. WIREWAYS MARKED Cx/Dx INDICATE CLEAN/DIRTY SIGNAL/POWER
2. FOR FURTHER INFORMATION ON SYSTEM DESIGN FOR CONTROL OF ELECTRICAL NOISE SEE ROCKWELL PUBLICATION #GMC RM001_-EN-P

XXXX XXXXXXXX XX XXX XXXXXXXXXX XX XXXXXXXXXX XXXXXXXXXX XX XXX XXXXXXXXXX XXXXXXXXXX XXXXXX XX XXXXXXXXXX XXX XXX XXXXXX XXXXXX XX XXXXXXXXXX		XXXXXX_XXXX XXXXXX	COMPONENT BUILDING BLOCK PUMP CONTROL PANEL LAYOUT	REV XX EXAMPLE	DATE 06-18-09 A
CUST		SHEET 13	OF 13	CADD	