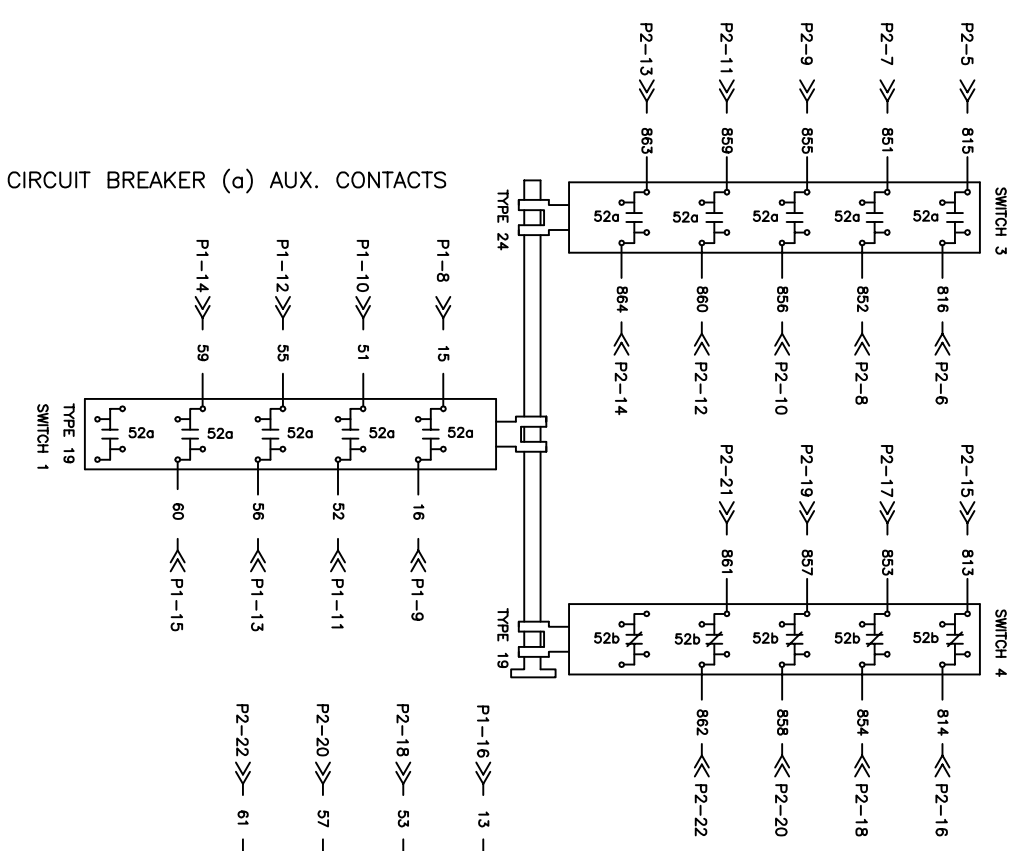
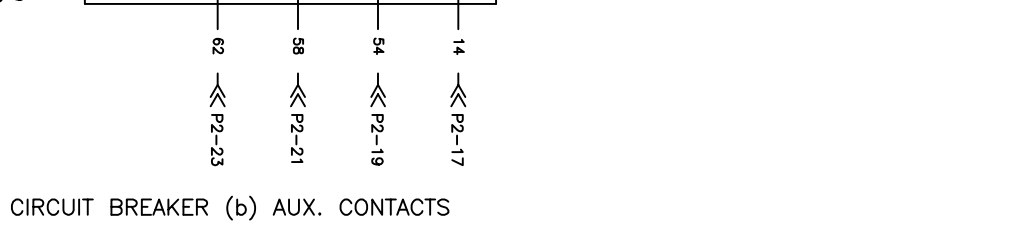


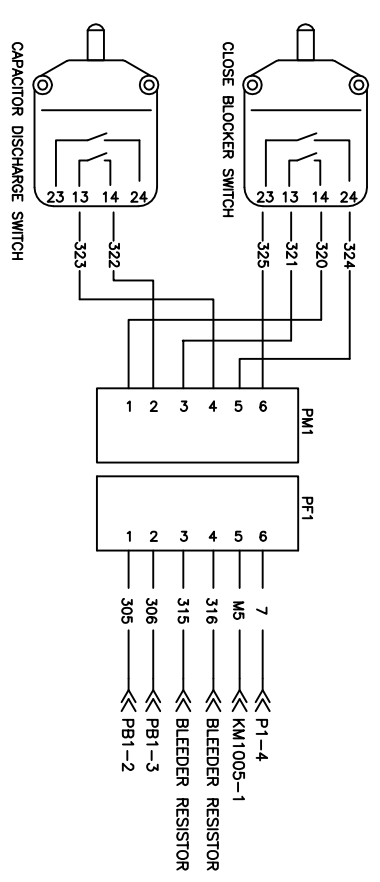
CIRCUIT BREAKER (a) AUX. CONTACTS



CIRCUIT BREAKER (b) AUX. CONTACTS

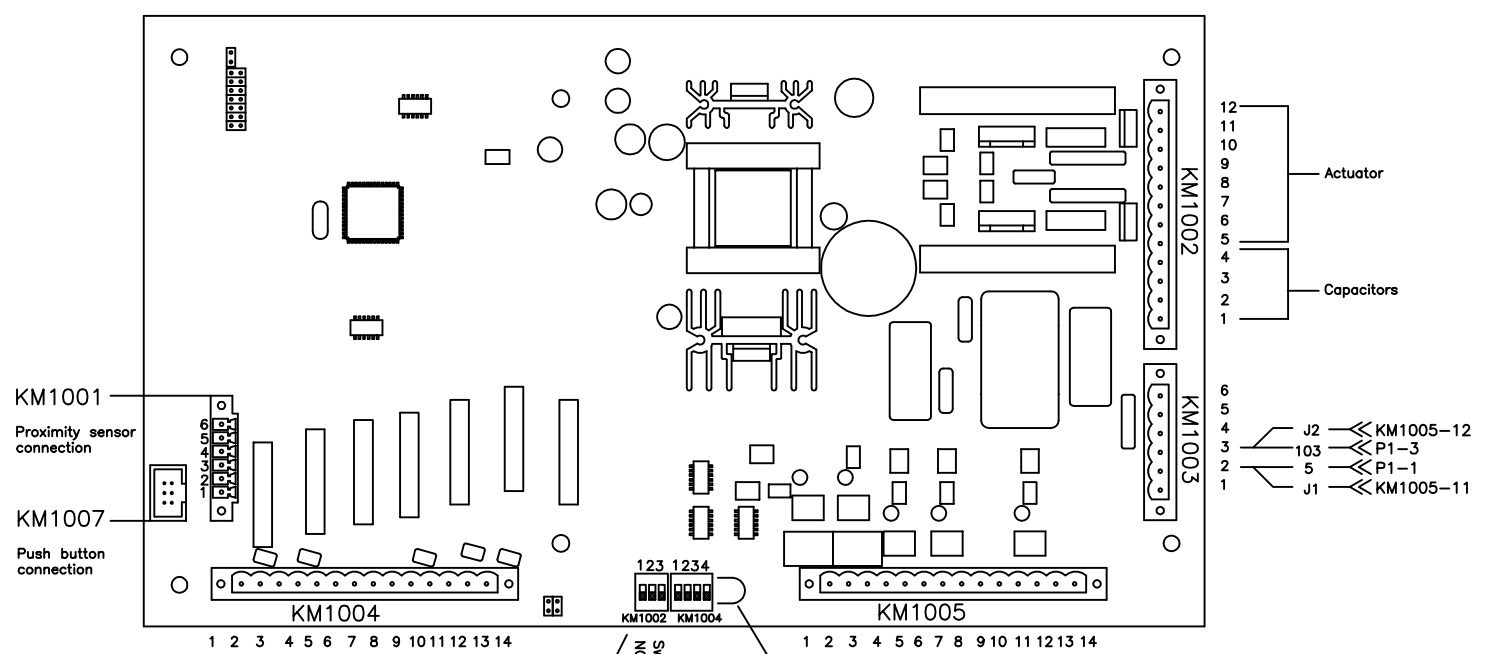


NOTE: CONTACTS SHOWN WITH BREAKER IN THE OPEN POSITION AND READY



REFERENCE SHEET 4

For Control Board Pin Functions, Reference Sheet 3



Undervoltage Threshold Voltage Settings  
note: Located on Binary Input Board plugged into KM1005

Rated Voltage	Operating Voltage Range
220-240 AC/DC	84-154
110-127 AC/DC	45-70
48-60 DC	21-33
24-30 DC	11-17

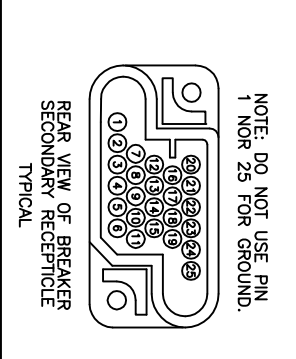
- NOTE: SHADED PORTION INDICATES SWITCH POSITION
- 701 <<< P2-4
  - 700 <<< P2-3
  - 42 <<< KM1003-3
  - J1 <<< KM1003-2
  - 10A <<< P2-2
  - 801 <<< KM1004-8
  - 10 <<< P1-7
  - 301 <<< KM1004-4
  - 6 <<< P1-5
  - M5 <<< PF1-5
- Jumper Always Cut for AMVAC

- NOTE: SHADED PORTION INDICATES SWITCH POSITION
- 705 <<< P2-24
  - 704 <<< P2-23
  - 303 <<< P1-24
  - 102 <<< P1-2
  - 801 <<< KM1005-5
  - 9A <<< P2-1
  - 301 <<< KM1005-3
  - 9 <<< P1-6

PIN #	WIRE #	PIN #	WIRE #
1	5	1	9A
2	10A	2	10A
3	103	3	700
4	701	4	701
5	6	5	815
6	6	6	816
7	10	7	851
8	15	8	852
9	16	9	855
10	51	10	856
11	52	11	859
12	55	12	860
13	56	13	863
14	59	14	864
15	60	15	813
16	13	16	814
17	14	17	853
18	18	18	854
19	54	19	857
20	57	20	858
21	58	21	861
22	61	22	862
23	62	23	704
24	303	24	705
25	OPEN	25	OPEN

PLUG 1 Toward Center of Breaker

PLUG 2 Toward Outside of Breaker



NOTE: DO NOT USE PIN 1 NOR 25 FOR GROUND.

Auto Open on Declining Capacitor Voltage (KM1004)

Setting	Delay
U-V Disabled	2s
U-V Enabled	3s
U-V Enabled	4s
U-V Enabled	5s

Auxiliary Trip on Processor Failure (KM1002)

Setting	Delay
Enabled	1s
Disabled	5s

NOTE: SHADED PORTION INDICATES SWITCH POSITION

A01 POINT TO POINT DIAGRAM - OPTIONAL

REV	DATE	BY	REV	DATE	DESCRIPTION
4	09/10/08		4	09/10/08	REVISED SECONDARY RECEPTICLE DETAIL
3	08/05/08		3	08/05/08	REVERSED 5 & 103 CONNECTIONS ON KM1003
2	06/26/06		2	06/26/06	[8283]+Switch Position Notes, Moved J1 & J2
1	05/05/06		1	05/05/06	[8224] -A00, + A01

REV	DATE	BY	REV	DATE	DESCRIPTION
4	09/10/08		4	09/10/08	REVISED SECONDARY RECEPTICLE DETAIL
3	08/05/08		3	08/05/08	REVERSED 5 & 103 CONNECTIONS ON KM1003
2	06/26/06		2	06/26/06	[8283]+Switch Position Notes, Moved J1 & J2
1	05/05/06		1	05/05/06	[8224] -A00, + A01

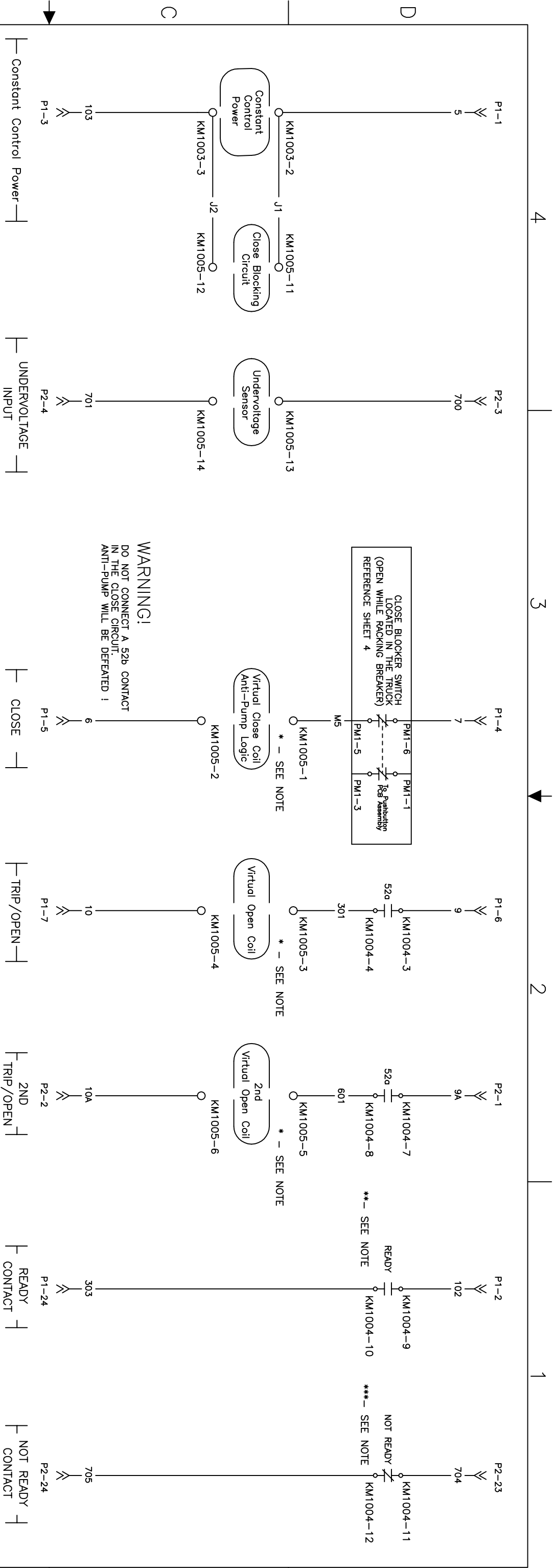
REV	DATE	BY	REV	DATE	DESCRIPTION
4	09/10/08		4	09/10/08	REVISED SECONDARY RECEPTICLE DETAIL
3	08/05/08		3	08/05/08	REVERSED 5 & 103 CONNECTIONS ON KM1003
2	06/26/06		2	06/26/06	[8283]+Switch Position Notes, Moved J1 & J2
1	05/05/06		1	05/05/06	[8224] -A00, + A01

REF	TITLE	REV	DATE DRN	DATE REL	DWG NO.	SHEET
4	5-27kV Dual Secondary Disconnect	4	02/01/05		19917	1 of 5
	AMVAC MOD3 WIRING DIAGRAM - OPTIONAL					

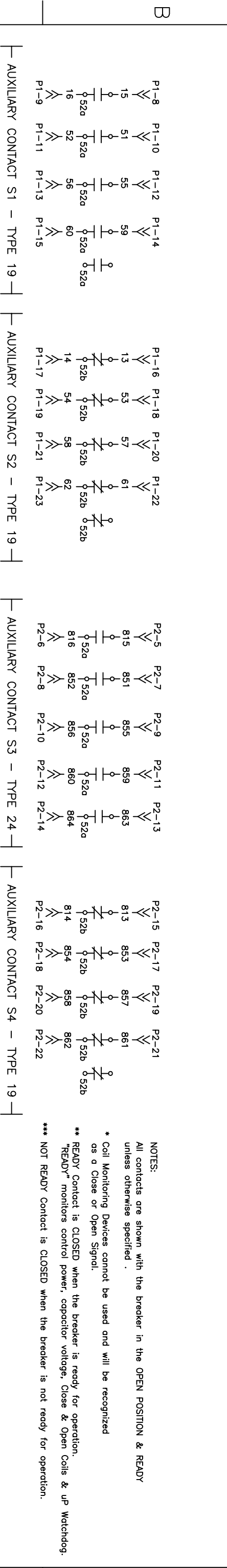


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**WARNING!**  
DO NOT CONNECT A 52b CONTACT IN THE CLOSE CIRCUIT. ANTI-PUMP WILL BE DEFEATED!



**NOTES:**  
 All contacts are shown with the breaker in the OPEN POSITION & READY unless otherwise specified.  
 \* Coil Monitoring Devices cannot be used and will be recognized as a Close or Open Signal.  
 \*\* READY Contact is CLOSED when the breaker is ready for operation. "READY" monitors control power, capacitor voltage, Close & Open Coils & UP Watchdog.  
 \*\*\* NOT READY Contact is CLOSED when the breaker is not ready for operation.

# A01 SCHEMATIC WIRING DIAGRAM - OPTIONAL

REV	DATE	REVISION DESCRIPTION	BY	REV	DATE	REVISION DESCRIPTION	BY
				1	05/05/06	[8224] -A00, + A01	RET
				2	06/26/06	[8283]+Switch Position Notes, Moved J1 & J2	JMP

REV	TITLE	DATE DRN	DATE REL	DWG NO.	SHEET
2	5-27kV Dual Secondary Disconnect AMVAC MOD3 WIRING DIAGRAM - OPTIONAL	02/01/05	DATE APP'D	19917	2 OF 5

STANDARD TOLERANCE INFORMATION ON DRAWING NO. 52016	TOLEANCES - UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES	3-PLACE DECIMAL ±
	2-PLACE DECIMAL ±
	ANGLES ±

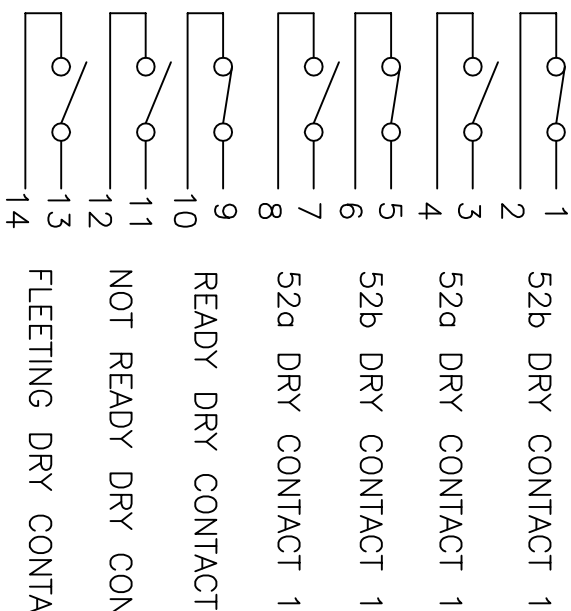
  

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## AMVAC CONTROL BOARD PIN FUNCTIONS

### KM1004 ON BOARD AUX SWITCHES

- KM1001  
PROXIMITY SENSORS**
- 1 ON SENSOR (dc-)
  - 2 OFF SENSOR (dc-)
  - 3 ON SENSOR (dc+)
  - 4 OFF SENSOR (dc+)
  - 5 ON SENSOR (SIGNAL)
  - 6 OFF SENSOR (SIGNAL)



CONTACTS SHOWN WITH BREAKER IN THE OPEN POSITION & READY

- KM1002  
ACTUATOR / CAPACITORS**
- 1 CAP 2 (+)
  - 2 CAP 1 (+)
  - 3 CAP 2 (-)
  - 4 CAP 1 (-)
  - 5 CLOSE COIL (+)
  - 7 OPEN COIL (+)
  - 9 CLOSE COIL (-)
  - 11 OPEN COIL (-)

- KM1005  
BREAKER CONTROL**
- 1 CLOSE (+)
  - 2 CLOSE (-)
  - 3 OPEN (+)
  - 4 OPEN (-)
  - 5 AUX OPEN (+)
  - 6 AUX OPEN (-)
  - 7 NOT USED
  - 8 NOT USED
  - 9 NOT USED
  - 10 NOT USED
  - 11 CLOSE BLOCK (+)
  - 12 CLOSE BLOCK (-)
  - 13 UNDER VOLTAGE INPUT (+)
  - 14 UNDER VOLTAGE INPUT (-)

- KM1003  
CONTROL POWER - CONTINUOUS**
- 2 CONTROL POWER (+)
  - 3 CONTROL POWER (-)
  - 4 80VDC - 10k (-)
  - 5 80VDC - 10k (+)

- KM1007  
LOCAL CONTROL  
(NON-RECONFIGURABLE)**

## A01 CONTROL BOARD PIN ASSIGNMENTS

REV	DATE	BY	REV	DATE	REVISION DESCRIPTION
			1	05/05/06	[8224] -A00, + A01
			2	06/26/06	[8283]+Switch Position Notes, Moved J1 & J2

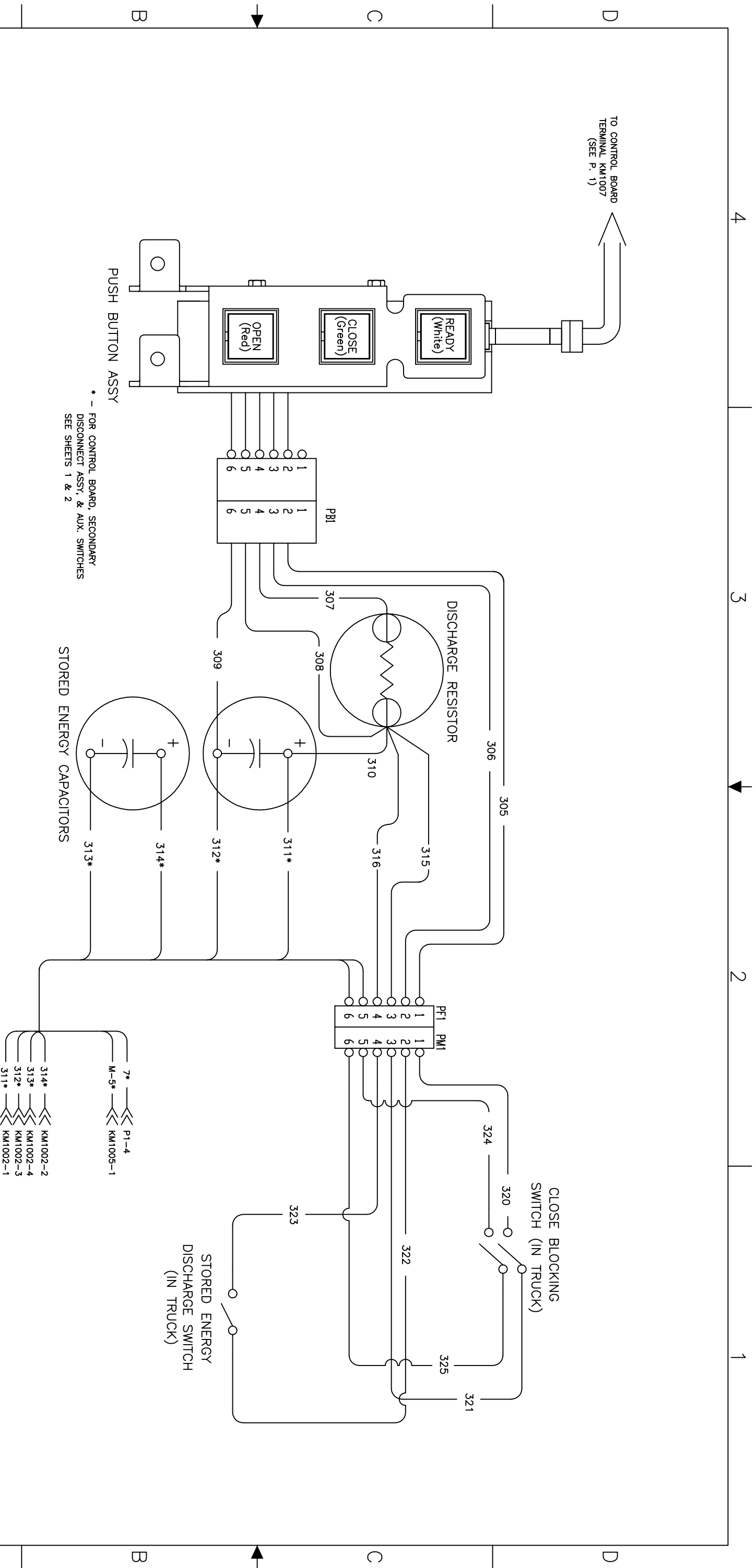
STANDARD TOLERANCE INFORMATION  
ON DRAWING No. 52016  
DIMENSIONS ARE IN INCHES  
TOLERANCES - UNLESS OTHERWISE SPECIFIED:  
3-PLACE DECIMAL ±  
2-PLACE DECIMAL ±  
ANGLES ±

REF	X	REV	TITLE	DATE DRN	DATE REL	DWG NO.	SHEET
X		2	5-27kV Dual Secondary Disconnect	10/29/03	10/31/03	19917	3 OF 5
X			AMVAC MOD3 WIRING DIAGRAM - OPTIONAL				

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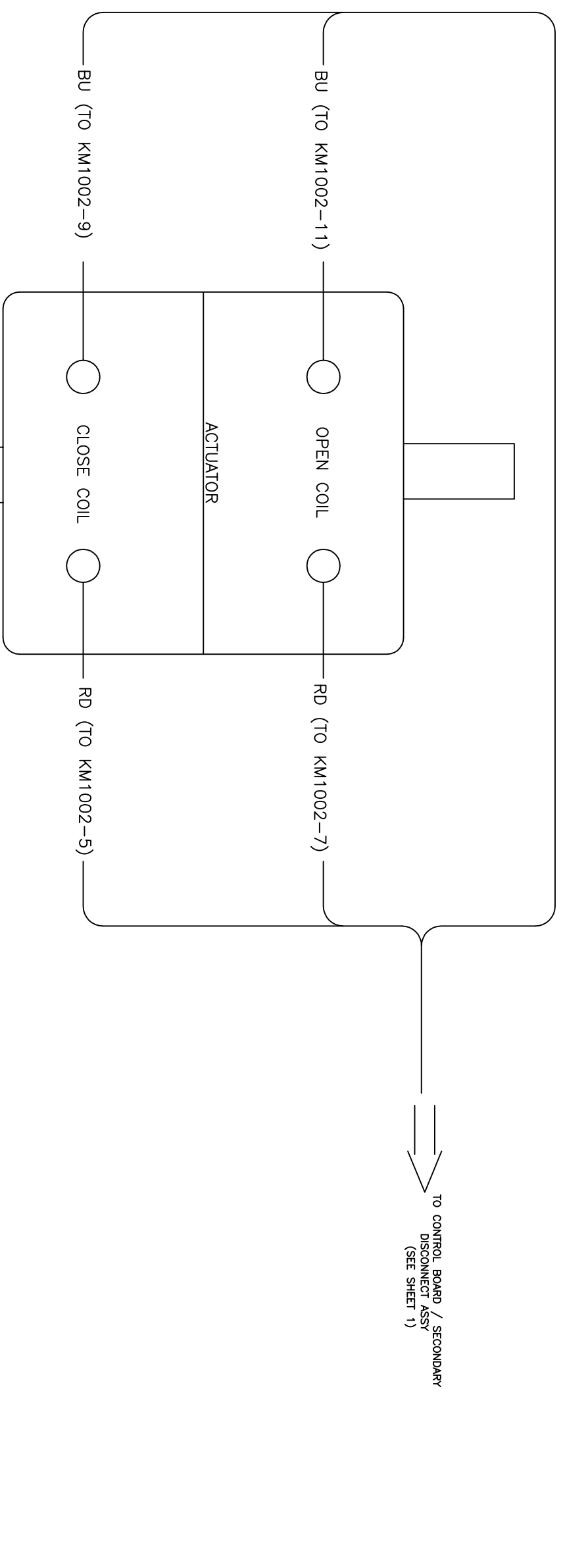
# A01 PUSH BUTTON ASSEMBLY

STANDARD TOLERANCE INFORMATION ON DRAWING No. 52016		DATE DRN		DATE REL		DWG NO.		SHEET	
DIMENSIONS ARE IN INCHES		03/12/04		03/12/04		19917		4 of 5	
TOLERANCES - UNLESS OTHERWISE SPECIFIED:		DRN		APP'D					
3-PLACE DECIMAL ±		RET		RET					
2-PLACE DECIMAL ±									
ANGLES ±									
NEXT ASSY		REV		TITLE					
NEXT ASSY		2		5-27kV Dual Secondary Disconnect					
NEXT ASSY		1		AMVAC MOD3 WIRING DIAGRAM - OPTIONAL					
NEXT ASSY		06/26/06		[8283]+Switch Position Notes, Moved J1 & J2					
NEXT ASSY		06/05/06		[8224]-A00, + A01					
NEXT ASSY		BY		JMP					
NEXT ASSY		RET		RET					
NEXT ASSY		REVISION DESCRIPTION		REVISION DESCRIPTION					
NEXT ASSY		4							
NEXT ASSY		BY		6594					
NEXT ASSY		DATE		EON No.					
NEXT ASSY		1		6594					
NEXT ASSY		05/05/06		6594					
NEXT ASSY		BY		6594					
NEXT ASSY		REVISION DESCRIPTION		6594					
NEXT ASSY		4		6594					
NEXT ASSY		DATE		6594					
NEXT ASSY		1		6594					
NEXT ASSY		06/26/06		6594					
NEXT ASSY		BY		6594					
NEXT ASSY		RET		6594					
NEXT ASSY		REVISION DESCRIPTION		6594					
NEXT ASSY		4		6594					
NEXT ASSY		DATE		6594					
NEXT ASSY		1		6594					
NEXT ASSY		06/26/06		6594					
NEXT ASSY		BY		6594					
NEXT ASSY		RET		6594					
NEXT ASSY		REVISION DESCRIPTION		6594					
NEXT ASSY		4		6594					
NEXT ASSY		DATE		6594					
NEXT ASSY		1		6594					
NEXT ASSY		06/26/06		6594					
NEXT ASSY		BY		6594					
NEXT ASSY		RET		6594					
NEXT ASSY		REVISION DESCRIPTION		6594					
NEXT ASSY		4		6594					
NEXT ASSY		DATE		6594					
NEXT ASSY		1		6594					
NEXT ASSY		06/26/06		6594					
NEXT ASSY		BY		6594					
NEXT ASSY		RET		6594					
NEXT ASSY		REVISION DESCRIPTION		6594					
NEXT ASSY		4		6594					
NEXT ASSY		DATE		6594					
NEXT ASSY		1		6594					
NEXT ASSY		06/26/06		6594					
NEXT ASSY		BY		6594					
NEXT ASSY		RET		6594					
NEXT ASSY		REVISION DESCRIPTION		6594					
NEXT ASSY		4		6594					

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4 3 2 1



PROXIMITY SWITCHES  
FOR PROXIMITY ASSEMBLY AND ADJUSTMENTS,  
SEE DRAWING NUMBER 19925

A01 ACTUATOR / PROX SENSOR

REV	DATE	REVISION DESCRIPTION	BY	REV	DATE	REVISION DESCRIPTION	BY
				1	05/09/06	[8224] - A00, + A01	RET
				2	06/26/06	[8283]+Switch Position Notes, Moved J1 & J2	JMP
				2	03/12/04		RET

REF	X	NEXT
	X	NEXT ASSY
	X	NEXT ASSY

DATE DRN	DATE REL	DWG NO.	SHEET
03/12/04	03/12/04	19917	5 of 5

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