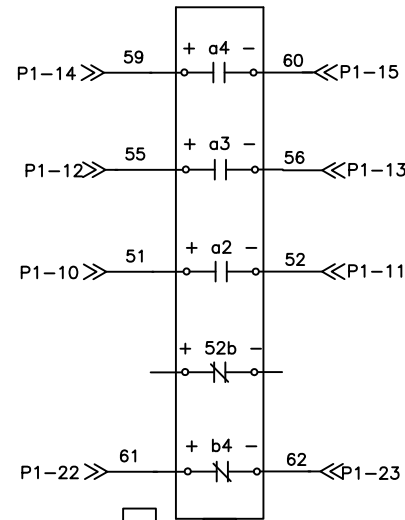


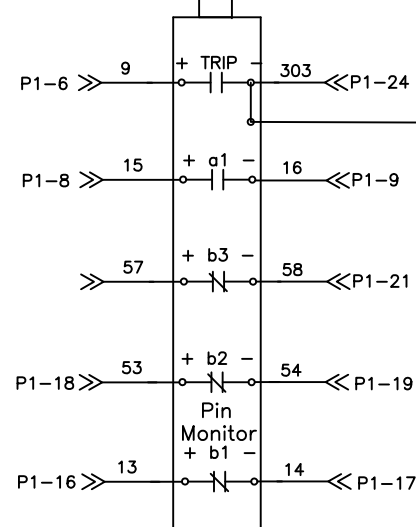
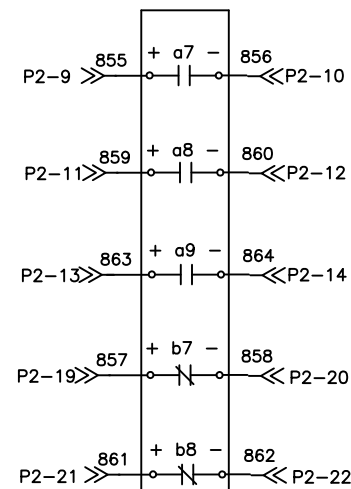
STANDARD TOLERANCE INFO. ON DWG. 52016  
 TOLERANCES - UNLESS SPECIFIED - ±  
 DIMENSIONS ARE IN INCHES

\*\*NOTE: CONTACTS SHOWN IN THE "OPEN BREAKER POSITION"  
 BB3 AND BB8 AUXILIARY SWITCHES ARE MECHANICALLY  
 ACTIVATED WHEN BREAKER IS OPEN

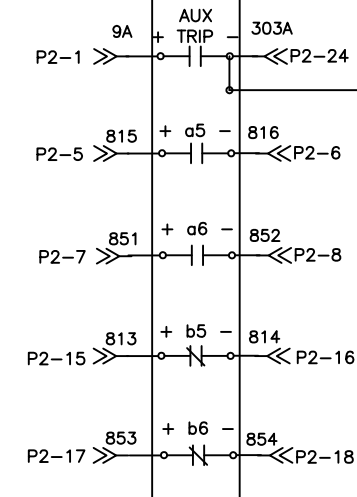
CIRCUIT BREAKER  
 CONTACT SWITCH (BB3)  
 2NO + 3NC \*\*SEE NOTE  
 TYPE 22



CIRCUIT BREAKER  
 CONTACT SWITCH (BB8)  
 2NO + 3NC \*\*SEE NOTE  
 TYPE 22

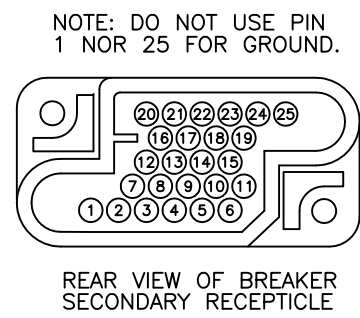
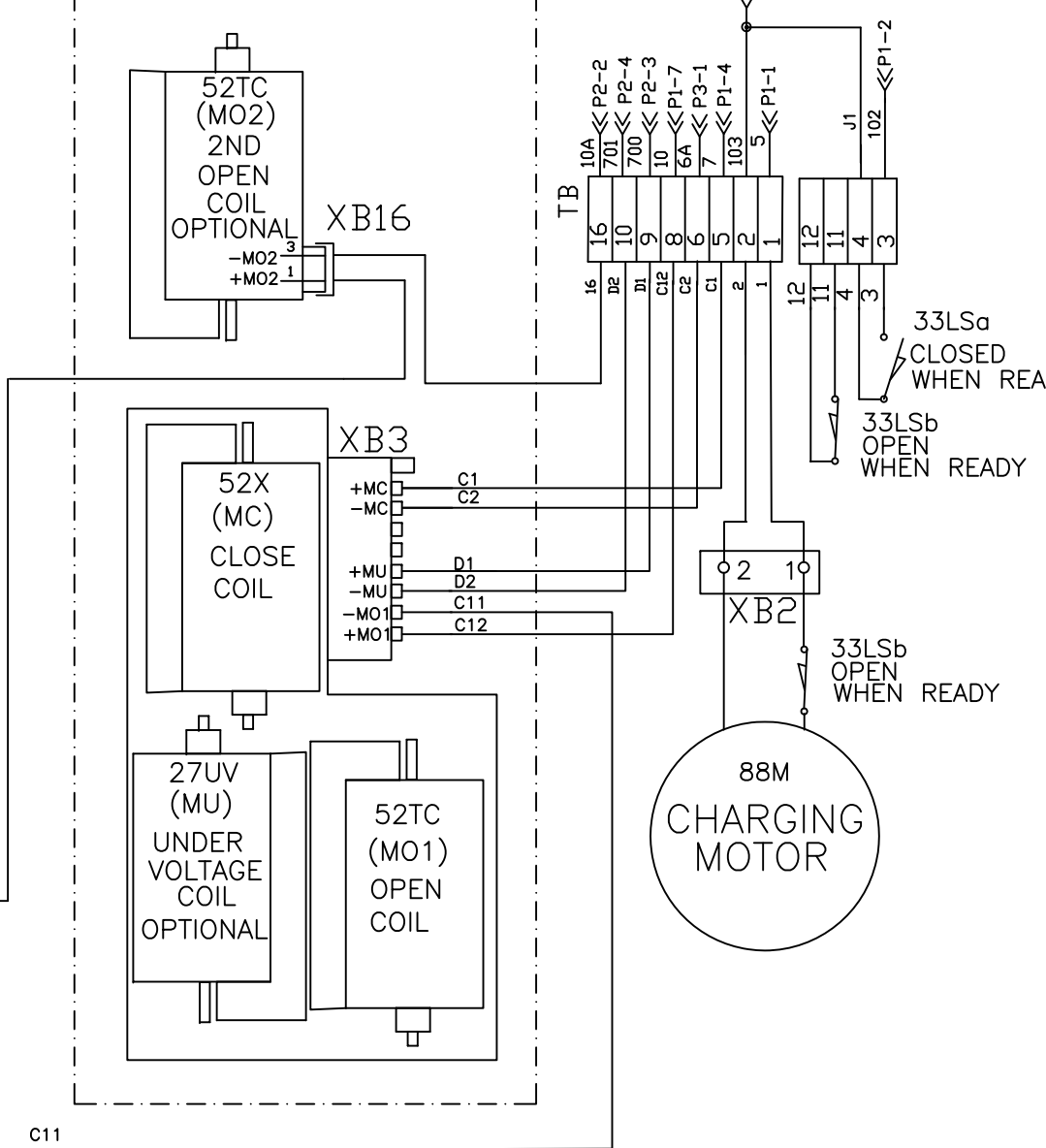


CIRCUIT BREAKER  
 CONTACT SWITCH (BB2)  
 2NO + 3NC  
 TYPE 22



CIRCUIT BREAKER  
 CONTACT SWITCH (BB1)  
 3NO + 2NC  
 TYPE 21

COILS SHOWN FROM SIDE  
 ← FRONT OF BREAKER



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

REAR VIEW OF BREAKER  
 SECONDARY RECEPTACLE

2 PLUG AUX G02

PIN #	WIRE LOCATION	FUNCTION
1	5	+ CTRL. PWR.
2	OPEN	
3	103	- CTRL. PWR.
4	7	CLOSE
5	6	CLOSE
6	9	+ TRIP
7	10	- TRIP
8	15	+ a1
9	16	- a1
10	51	+ a2
11	52	- a2
12	55	+ a3
13	56	- a3
14	59	+ a4
15	60	- a4
16	13	+ b1
17	14	- b1
18	53	+ b2
19	54	- b2
20	57	+ b3
21	58	- b3
22	61	+ b4
23	62	- b4
24	303	trip coil mon 1
25	OPEN	

Plug 1 - P1

PIN #	WIRE LOCATION	FUNCTION
1	9A	+ AUX TRIP
2	10A	- AUX TRIP
3	700	+ UVD
4	701	- UVD
5	815	+a5
6	816	-a5
7	851	+a6
8	852	-a6
9	855	+a7
10	856	-a7
11	859	+a8
12	860	-a8
13	863	+a9
14	864	-a9
15	813	+b5
16	814	-b5
17	853	+b6
18	854	-b6
19	857	+b7
20	858	-b7
21	861	+b8
22	862	-b8
23	OPEN	
24	303A	trip coil mon 2
25	OPEN	

Plug 2 - P2

# MODEL 4 ADVAC FIXED MOUNT POINT TO POINT WIRING DIAGRAM

**ABB Inc.** Power Technology Medium Voltage

1B11957

SIZE B SHT 3/4 CONT ON REV

NEXT ASSY:	BY: M CHRISTIAN DATE: 3/11/2011	CHD: M MURRAY DATE: 3/11/2011	APP: B GOODIN DATE: 3/11/2011	SHOP ORDER:
TYPE M	PROD 26	CLASS D	THIS DRAWING IS THE PROPERTY OF ABB Inc. POWER TECHNOLOGY MEDIUM VOLTAGE AND CONTAINS CONFIDENTIAL INFORMATION WHICH MUST NOT BE DUPLICATE USED, OR DISCLOSED OTHER THAN EXPRESSLY AUTHORIZED BY ABB Inc.	

NO.	REVISIONS	BY DATE	CHD. DATE	APP. DATE
D	cleaned up	MBC 9/15/11	Dinh le 9/15/11	BG 9/15/11

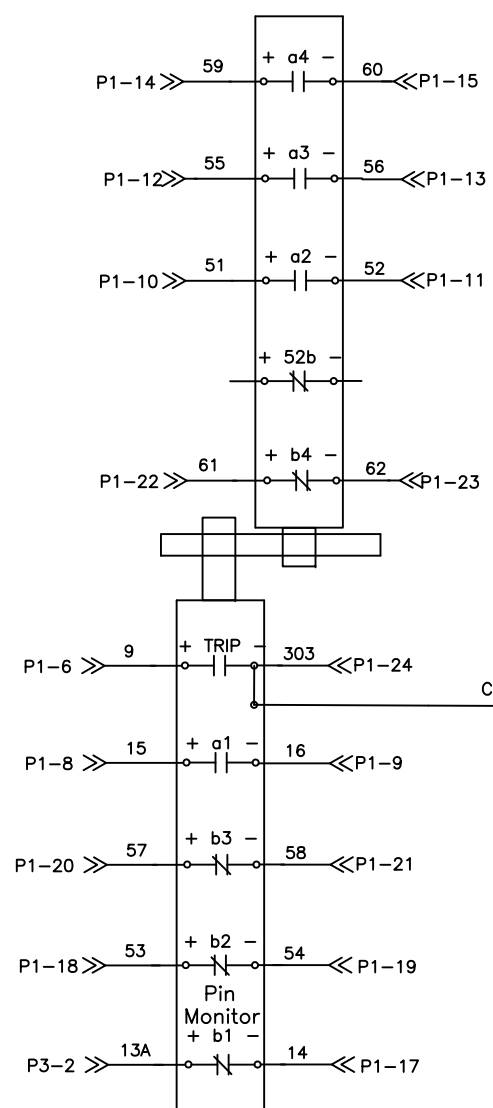
NO.	REVISIONS	BY DATE	CHD. DATE	APP. DATE
3	ADDED P1-2 AND NOTES	EG 6/9/11	MM 6/9/11	BG 6/9/11
2	MUTIPLE CORRECTIONS TO TABLES DWG TITLE AND WIRING DIAGRAMS	MC 2/7/11	MM 2/7/11	BG 2/7/11

DWG. NO.

STANDARD TOLERANCE INFO. ON DWG. 52016  
 TOLERANCES - UNLESS SPECIFIED - ±  
 DIMENSIONS ARE IN INCHES

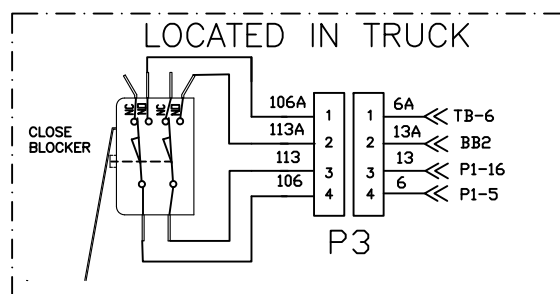
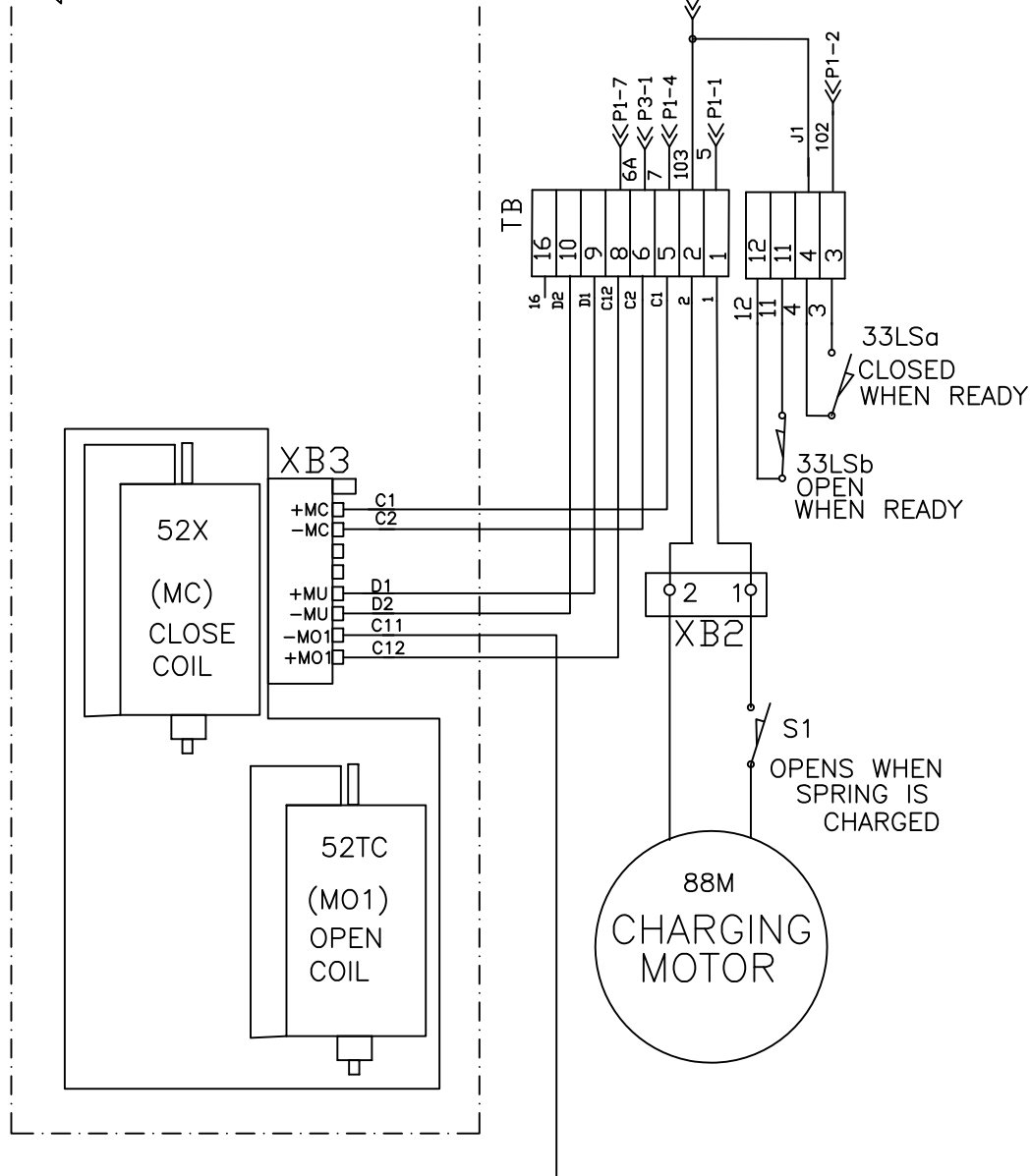
\*\*NOTE: CONTACTS SHOWN IN THE "OPEN BREAKER POSITION"  
 BB3 AUXILIARY CONTACTS ARE MECHANICALLY  
 ACTIVATED WHEN BREAKER IS OPEN

CIRCUIT BREAKER  
 CONTACT SWITCH (BB3)  
 2NO + 3NC \*\*SEE NOTE  
 TYPE 22

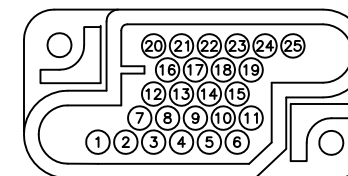


CIRCUIT BREAKER  
 CONTACT SWITCH (BB2)  
 2NO + 3NC  
 TYPE 22

COILS SHOWN FROM SIDE  
 ← FRONT OF BREAKER



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



REAR VIEW OF BREAKER  
 SECONDARY RECEPTACLE

1 PLUG AUX G01

PIN #	WIRE LOCATION	FUNCTION
1	5	+ CTRL. PWR.
2	102	+ Ready
3	103	- CTRL. PWR.
4	7	CLOSE
5	6	CLOSE
6	9	+ TRIP
7	10	- TRIP
8	15	+ a1
9	16	- a1
10	51	+ a2
11	52	- a2
12	55	+ a3
13	56	- a3
14	59	+ a4
15	60	- a4
16	13	Pin Monitor +b1
17	14	Pin Monitor -b1
18	53	+ b2
19	54	- b2
20	57	+ b3
21	58	- b3
22	61	+ b4
23	62	- b4
24	303	trip coil mon.
25	OPEN	

Plug 1 - P1

# MODEL 4 ADVAC EL

## STANDARD POINT TO POINT WIRING DIAGRAM

**ABB Inc.** Power Technology  
 Medium Voltage

1B11957

G

SIZE B SHT 1/4 CONT ON REV

NO.	REVISIONS	BY DATE	CHD. DATE	APP. DATE
5	ADDED P1-2 AND NOTES	EG 6/9/11	MM 6/9/11	BG 6/9/11
4	Changed layout and added NOTES	MC 3/08/11	MM 3/08/11	BG 3/08/11
6	CORRECTED S2 S3	MC 8/10/11	MM 6/9/11	BG 6/9/11
G	Cleaned up,	MC 9/15/11	MM 6/9/11	BG 6/9/11

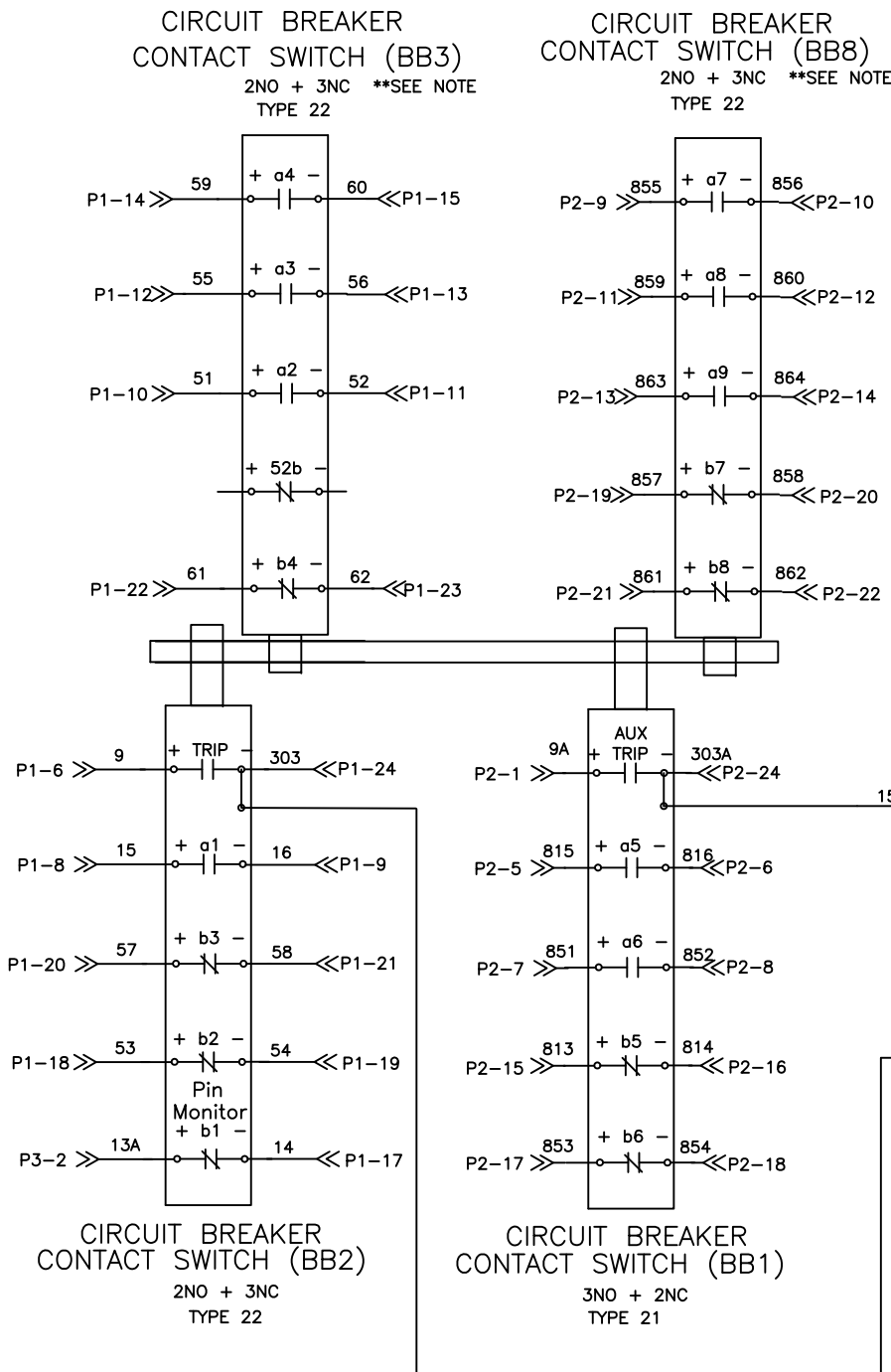
NO.	REVISIONS	BY DATE	CHD. DATE	APP. DATE
5	ADDED P1-2 AND NOTES	EG 6/9/11	MM 6/9/11	BG 6/9/11
4	Changed layout and added NOTES	MC 3/08/11	MM 3/08/11	BG 3/08/11

NEXT ASSY:	BY: R HOLMES	CHD: S BOUNSAVATH	APP: E DULLNI	SHOP ORDER:
	DATE: 3/20/09	DATE: 3/20/09	DATE: 3/20/09	

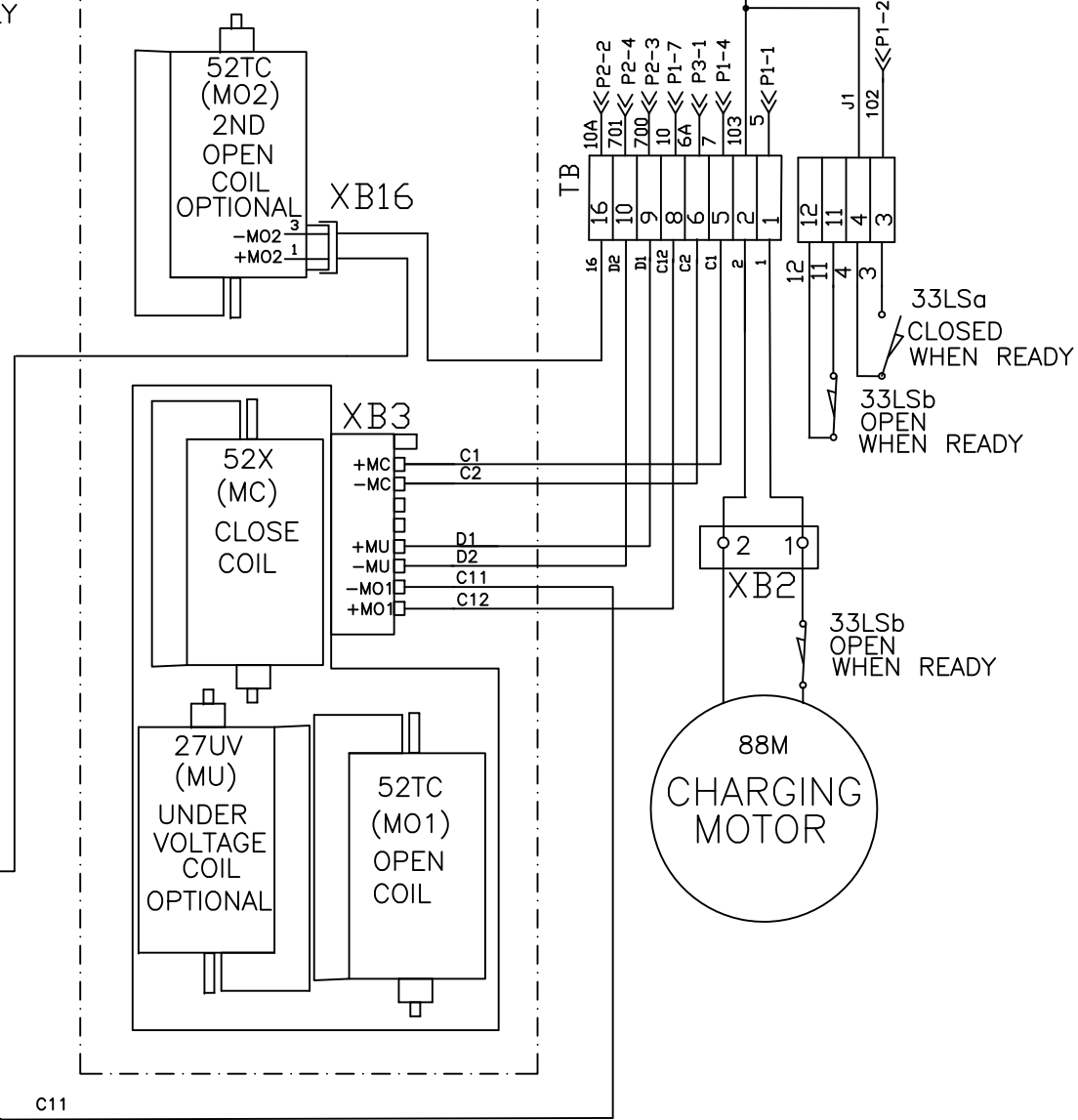
TYPE	PROD	CLASS	THIS DRAWING IS THE PROPERTY OF ABB Inc. POWER TECHNOLOGY MEDIUM VOLTAGE AND CONTAINS CONFIDENTIAL INFORMATION WHICH MUST NOT BE DUPLICATE USED, OR DISCLOSED OTHER THAN EXPRESSLY AUTHORIZED BY ABB Inc.		
M	26	D			

STANDARD TOLERANCE INFO. ON DWG. 52016  
 TOLERANCES - UNLESS SPECIFIED - ±  
 DIMENSIONS ARE IN INCHES

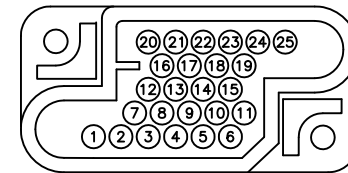
\*\*NOTE: CONTACTS SHOWN IN THE "OPEN BREAKER POSITION"  
 BB3 AND BB8 AUXILIARY SWITCHES ARE MECHANICALLY  
 ACTIVATED WHEN BREAKER IS OPEN



COILS SHOWN FROM SIDE  
 ← FRONT OF BREAKER



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



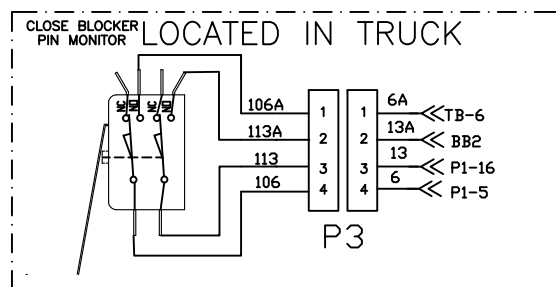
2 PLUG AUX G02

PIN #	WIRE LOCATION	FUNCTION
1	5	+ CTRL. PWR.
2	102	+ Ready
3	103	- CTRL. PWR.
4	7	+ CLOSE
5	6	- CLOSE
6	9	+ TRIP
7	10	- TRIP
8	15	+ a1
9	16	- a1
10	51	+ a2
11	52	- a2
12	55	+ a3
13	56	- a3
14	59	+ a4
15	60	- a4
16	13	Pin Monitor +b1
17	14	Pin Monitor -b1
18	53	+ b2
19	54	- b2
20	57	+ b3
21	58	- b3
22	61	+ b4
23	62	- b4
24	303	trip coil mon.
25	OPEN	

PIN #	WIRE LOCATION	FUNCTION
1	9A	+ AUX TRIP
2	10A	- AUX TRIP
3	700	+ UVD
4	701	- UVD
5	815	+a5
6	816	-a5
7	851	+a6
8	852	-a6
9	855	+a7
10	856	-a7
11	859	+a8
12	860	-a8
13	863	+a9
14	864	-a9
15	813	+b5
16	814	-b5
17	853	+b6
18	854	-b6
19	857	+b7
20	858	-b7
21	861	+b8
22	862	-b8
23	OPEN	
24	303A	trip coil mon.
25	OPEN	

Plug 1 - P1

Plug 2 - P2



MODEL 4 ADVAC EL  
 POINT TO POINT WIRING DIAGRAM

**ABB Inc.** Power Technology  
 Medium Voltage

1B11957

G

SIZE B SHT 2/4 CONT ON 4 REV

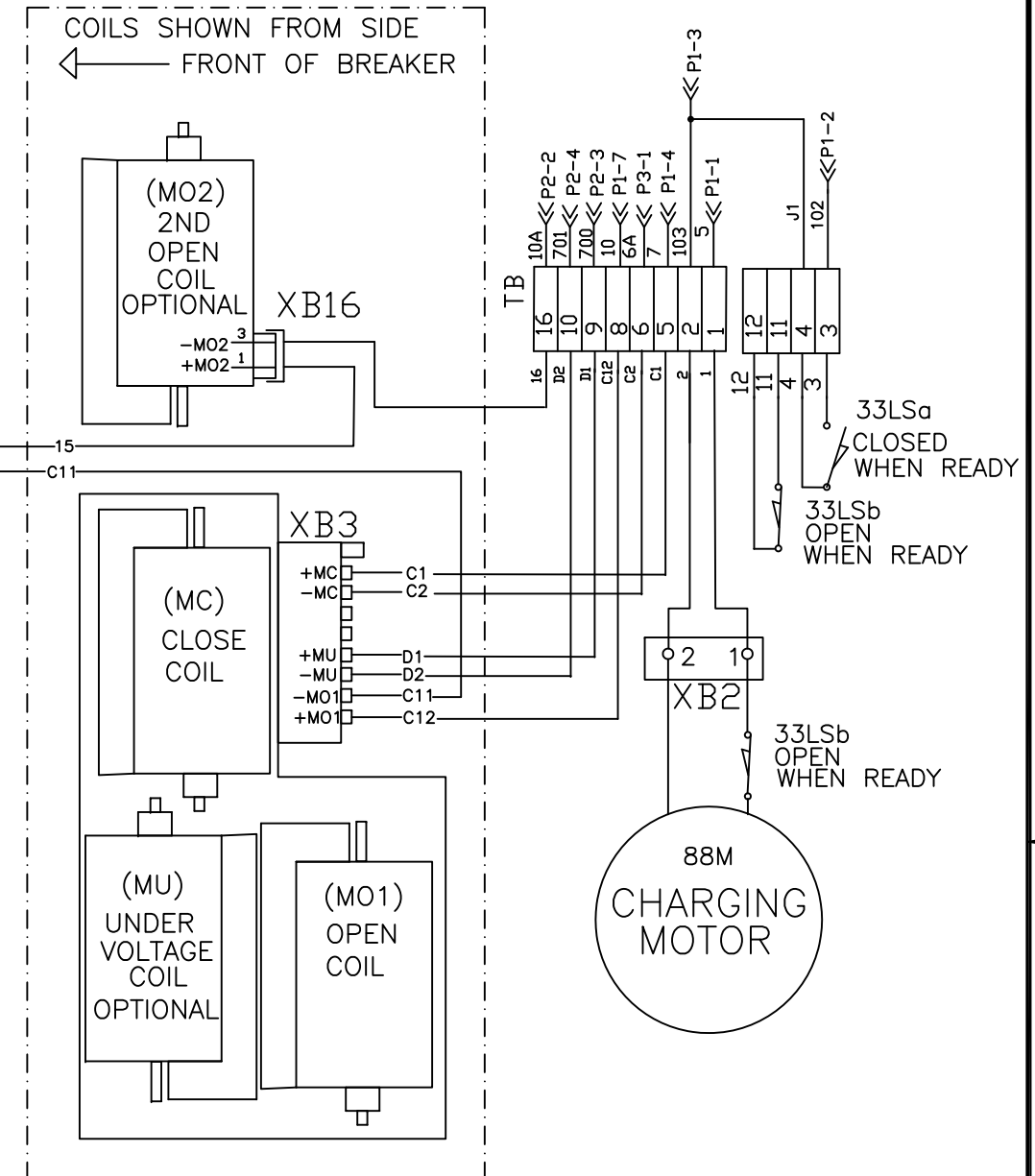
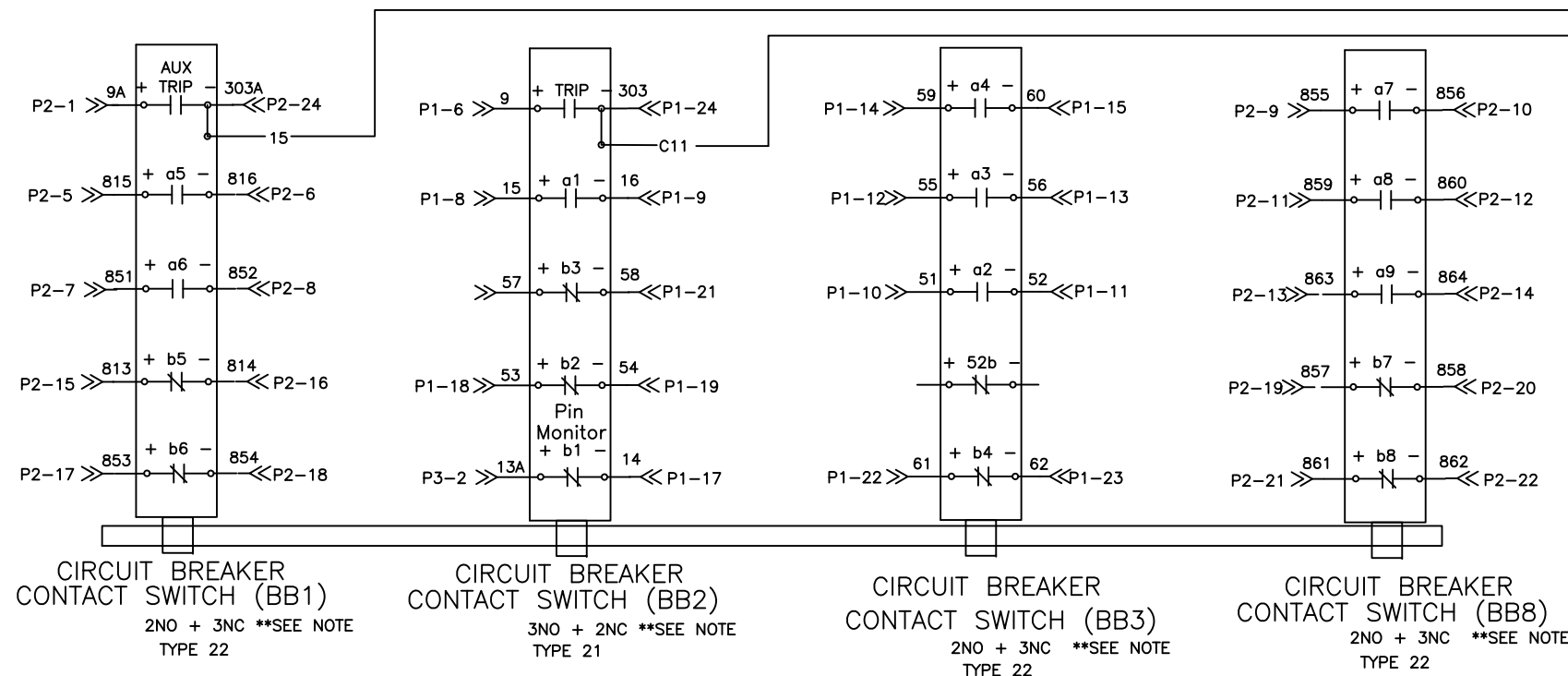
NEXT ASSY: BY: R HOLMES CHD: S BOUNSAVATH APP: E DULLNI SHOP ORDER:  
 DATE: 3/20/09 DATE: 3/20/09 DATE: 3/20/09

TYPE M PROD 26 CLASS D THIS DRAWING IS THE PROPERTY OF ABB Inc. POWER TECHNOLOGY MEDIUM VOLTAGE AND CONTAINS CONFIDENTIAL INFORMATION WHICH MUST NOT BE DUPLICATE USED, OR DISCLOSED OTHER THAN EXPRESSLY AUTHORIZED BY ABB Inc.

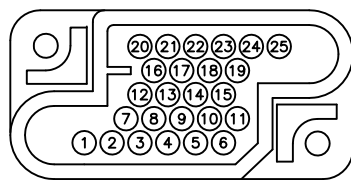
NO.	REVISIONS	BY DATE	CHD. DATE	APP. DATE	NO.	REVISIONS	BY DATE	CHD. DATE	APP. DATE
G	cleaned up	MBC 9/15/11	Dinh le 9/15/11	BG 9/15/11	5	ADDED P1-2 AND NOTES	EG 6/9/11	MM 6/9/11	BG 6/9/11
					4	Changed layout and added NOTES	MC 3/08/11	MM 3/08/11	BG 3/08/11

STANDARD TOLERANCE INFO. ON DWG. 52016  
 TOLERANCES - UNLESS SPECIFIED - ±  
 DIMENSIONS ARE IN INCHES

\*\*NOTE: CONTACTS SHOWN IN THE "OPEN BREAKER POSITION"  
 ALL AUXILIARY SWITCHES ARE MECHANICALLY  
 ACTIVATED WHEN BREAKER IS OPEN



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



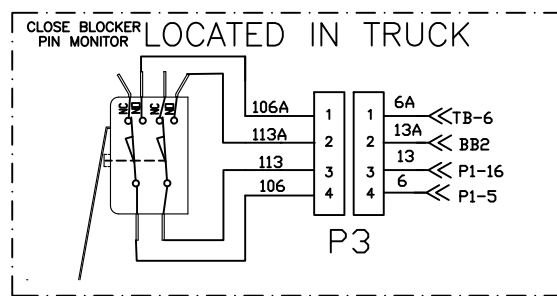
REAR VIEW OF BREAKER SECONDARY RECEPTACLE

PIN #	WIRE LOCATION	FUNCTION
1	5	+ CTRL. PWR.
2	OPEN	
3	103	- CTRL. PWR.
4	7	CLOSE
5	6	CLOSE
6	9	+ TRIP
7	10	- TRIP
8	15	+ a1
9	16	- a1
10	51	+ a2
11	52	- a2
12	55	+ a3
13	56	- a3
14	59	+ a4
15	60	- a4
16	13	Pin Monitor +b1
17	14	Pin Monitor -b1
18	53	+ b2
19	54	- b2
20	57	+ b3
21	58	- b3
22	61	+ b4
23	62	- b4
24	303	trip coil mon.
25	OPEN	

Plug 1 - P1

PIN #	WIRE LOCATION	FUNCTION
1	9A	+ AUX TRIP
2	10A	- AUX TRIP
3	700	+ UVD
4	701	- UVD
5	815	+a5
6	816	-a5
7	851	+a6
8	852	-a6
9	855	+a7
10	856	-a7
11	859	+a8
12	860	-a8
13	863	+a9
14	864	-a9
15	813	+b5
16	814	-b5
17	853	+b6
18	854	-b6
19	857	+b7
20	858	-b7
21	861	+b8
22	862	-b8
23	OPEN	
24	303A	trip coil mon.
25	OPEN	

Plug 2 - P2



MODEL 4 ADVAC TWIN EL  
 POINT TO POINT WIRING DIAGRAM

**ABB Inc. Power Technology Medium Voltage**

1B11957 C

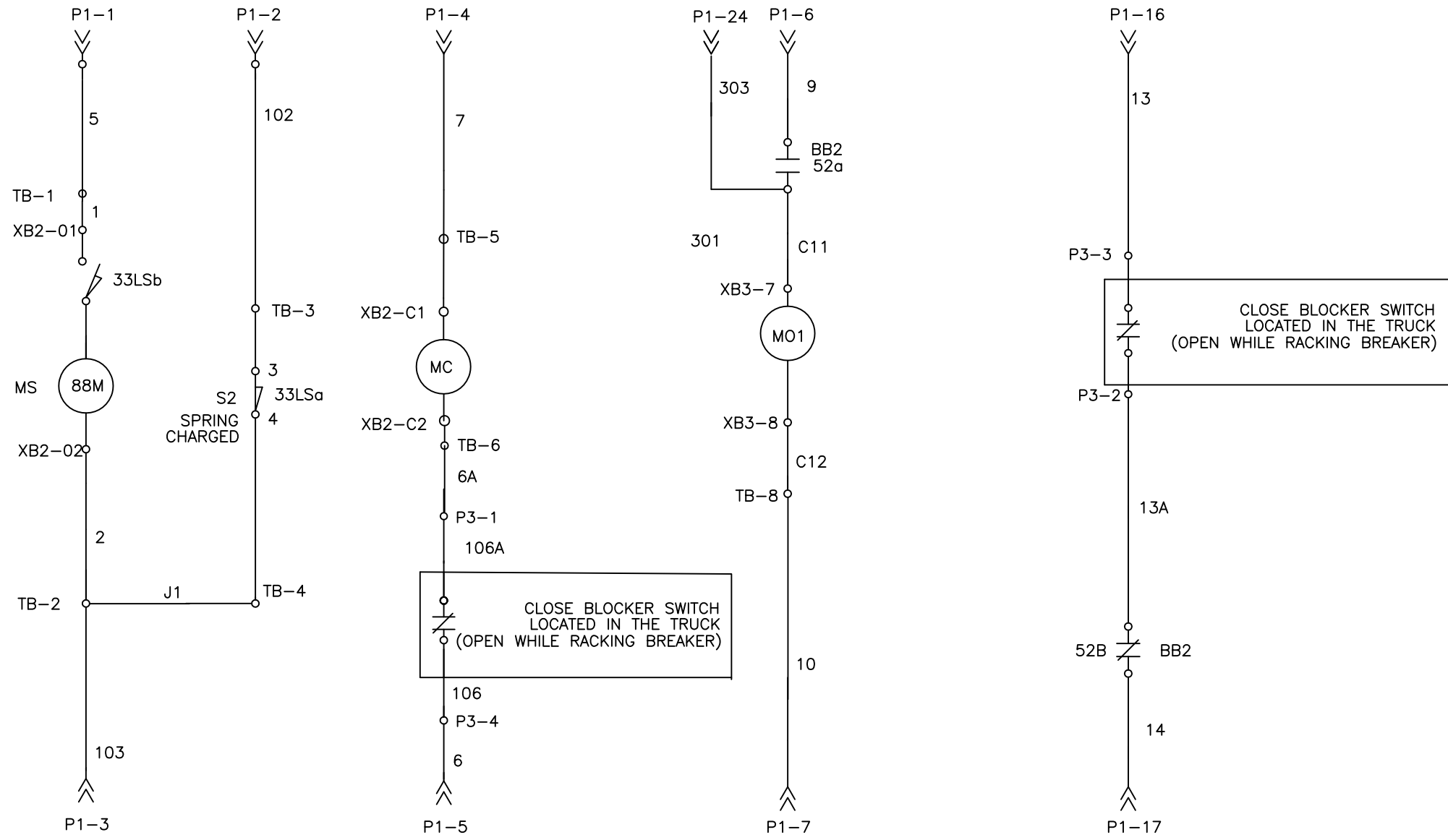
SIZE B SHT 04 CONT ON - REV

NEXT ASSY:	BY: M CHRSTIAN DATE: 3/11/2011	CHD: M Murry DATE: 3/11/2011	APP: B Goodin DATE: 3/11/2011	SHOP ORDER:
TYPE M	PROD 26	CLASS D	THIS DRAWING IS THE PROPERTY OF ABB Inc. POWER TECHNOLOGY MEDIUM VOLTAGE AND CONTAINS CONFIDENTIAL INFORMATION WHICH MUST NOT BE DUPLICATE USED, OR DISCLOSED OTHER THAN EXPRESSLY AUTHORIZED BY ABB Inc.	

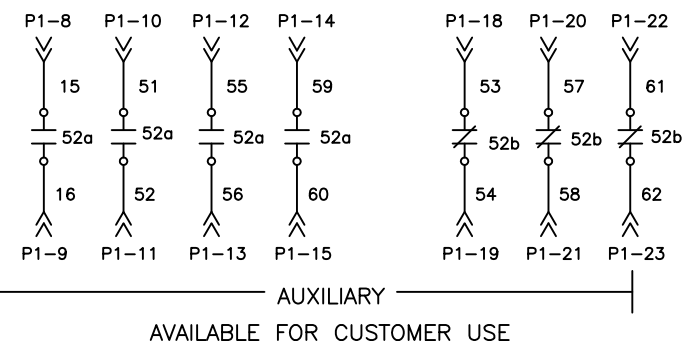
NO.	REVISIONS	BY DATE	CHD. DATE	APP. DATE	NO.	REVISIONS	BY DATE	CHD. DATE	APP. DATE
C	cleaned up	MBC 9/15/11	Dinh le 9/15/11	BG 9/15/11	1	ADDED P1-2 AND NOTES	EG 6/9/11	MM 6/9/11	BG 6/9/11

STANDARD TOLERANCE INFO. ON DWG. 52016  
 TOLERANCES - UNLESS SPECIFIED - ±  
 DIMENSIONS ARE IN INCHES

NOTE:  
 S1 IS OPEN WHEN  
 SPRING IS CHARGED.  
 S2 IS CLOSED WHEN  
 SPRING IS CHARGED.



— SPRING CHARGE —      — CLOSE —      — TRIP/OPEN —      — PIN MONITOR —



1 PLUG AUX G01

# MODEL 4 ADVAC EL SCHEMATIC

**ABB Inc.** Power Technology  
 Medium Voltage

1B11958			D
SIZE B	SHT 01	CONT ON 02	REV

NO.	REVISIONS	BY DATE	CHD. DATE	APP. DATE	NO.	REVISIONS	BY DATE	CHD. DATE	APP. DATE
D	cleaned up	MBC 9/15/11	Dinh le 9/15/11	BG 9/15/11	2	ADDED P1-2 AND NOTES	EG 6/9/11	MM 6/9/11	BG 6/9/11
					1	MOVED P1-17 FROM AUXILLARY, ADDED "MODEL 4" TO TITLE	EG 2/7/11	MM 2/7/11	BG 2/7/11

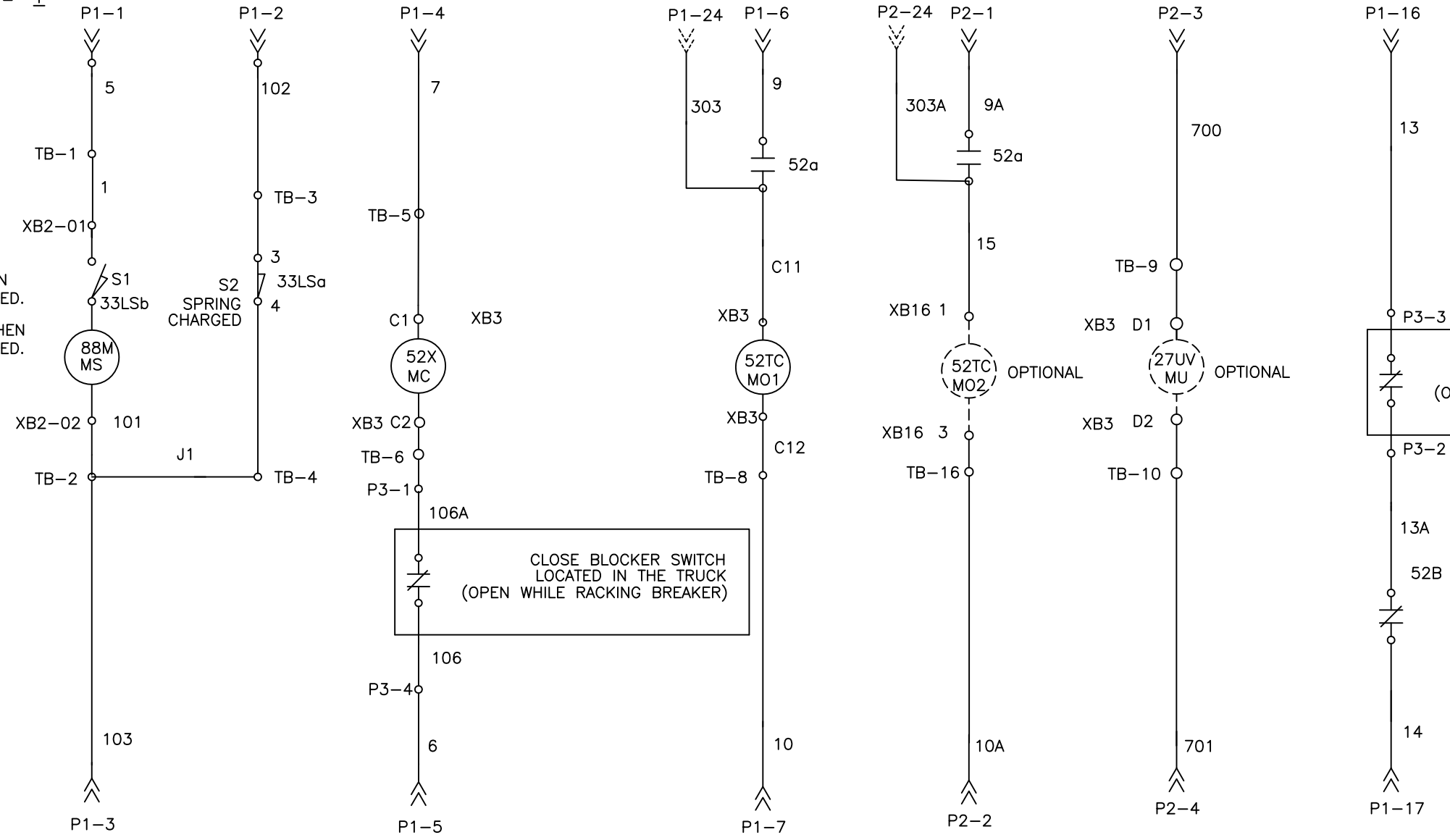
NEXT ASSY:	BY: R HOLMES DATE: 8/11/09	CHD: S BOUNSAV DATE: 8/11/09	APP: E DULLNI DATE: 8/11/08	SHOP ORDER:	
TYPE: M	PROD: 26	CLASS: D	THIS DRAWING IS THE PROPERTY OF ABB Inc. POWER TECHNOLOGY MEDIUM VOLTAGE AND CONTAINS CONFIDENTIAL INFORMATION WHICH MUST NOT BE DUPLICATE USED, OR DISCLOSED OTHER THAN EXPRESSLY AUTHORIZED BY ABB Inc.		

STANDARD TOLERANCE INFO. ON DWG. 52016  
 TOLERANCES - UNLESS SPECIFIED - ±  
 DIMENSIONS ARE IN INCHES

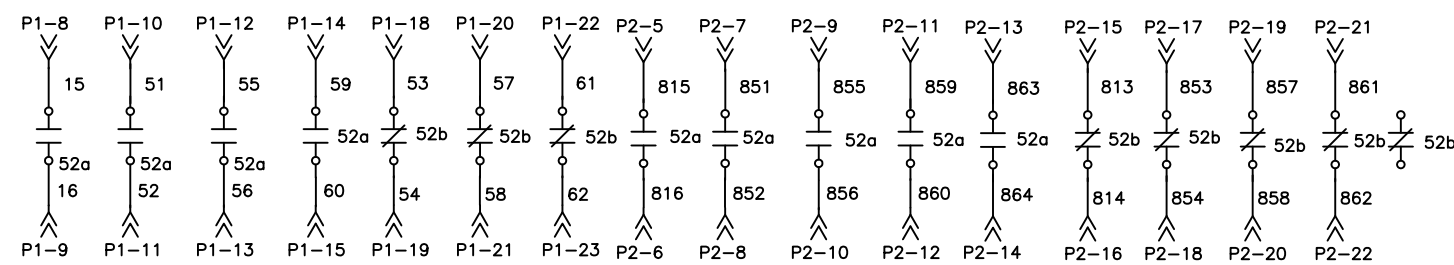
NOTE:

S1 IS OPEN WHEN  
 SPRING IS CHARGED.

S2 IS CLOSED WHEN  
 SPRING IS CHARGED.



SPRING CHARGE      CLOSE      TRIP/OPEN      2ND TRIP/OPEN      UNDERVOLTAGE TRIP/OPEN      PIN MONITOR



AUXILIARY  
 AVAILABLE FOR CUSTOMER USE

2 PLUG AUX G02

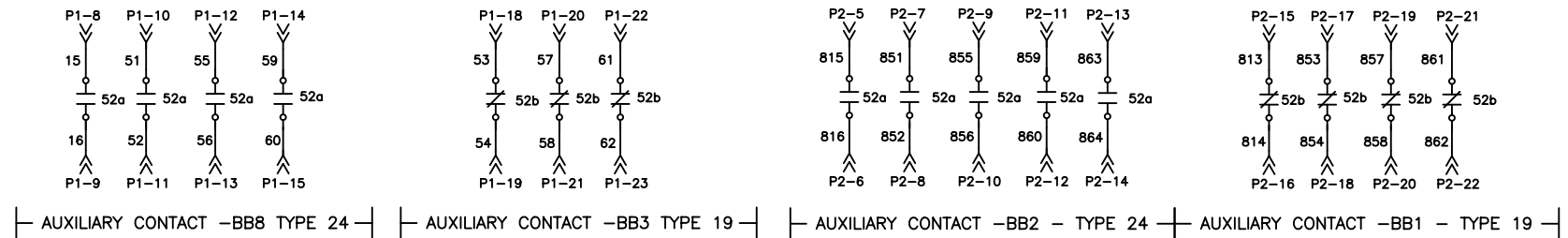
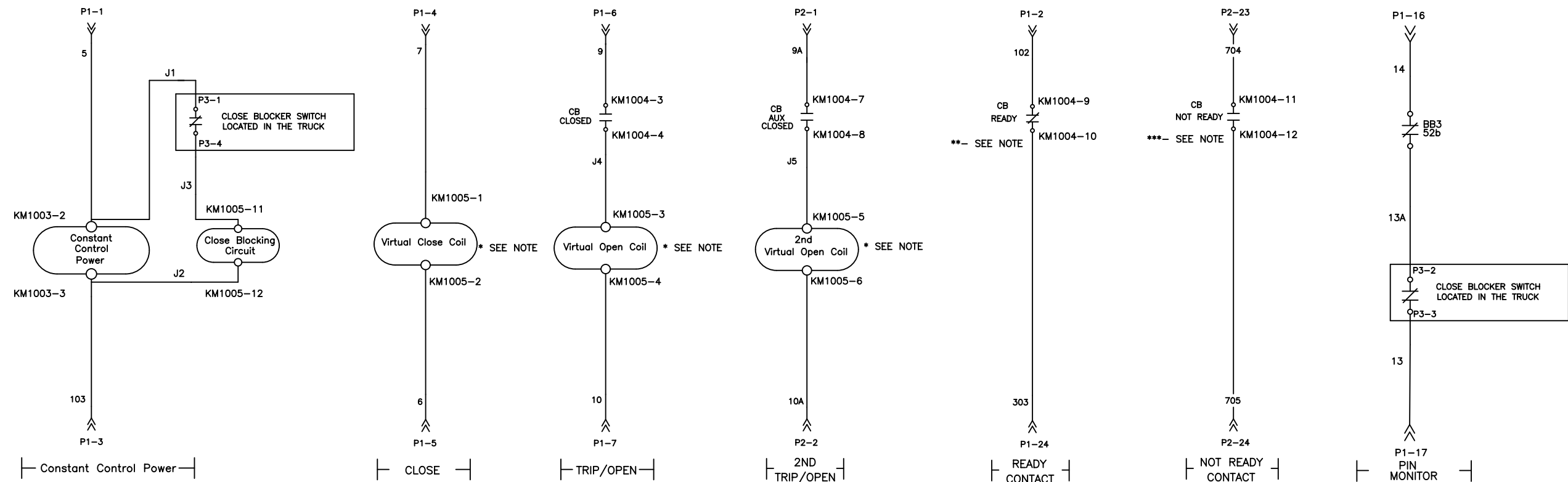
# MODEL 4 ADVAC EL SCHEMATIC

**ABB Inc.** Power Technology  
 Medium Voltage

1B11958  
 SIZE B    SHT 02    CONT ON 03    REV E

NO.	REVISIONS	BY DATE	CHD. DATE	APP. DATE	NO.	REVISIONS	BY DATE	CHD. DATE	APP. DATE
E	cleaned up	MBC 9/15/11	Dinh le 9/15/11	BG 9/15/11	2	VARIOUS CHANGES TO SCHEMATIC ADDED "MODEL 4" TO TITLE	EG 2/7/11	MM 2/7/11	BG 2/7/11
3	ADDED P1-2 AND NOTES	EG 6/9/11	MM 6/9/11	BG 6/9/11	1	Added pin monitor wiring	RH	DL	BG

NEXT ASSY:	BY: R HOLMES DATE: 8/11/09	CHD: S BOUNSAV DATE: 8/11/09	APP: E DULLNI DATE: 8/11/09	SHOP ORDER:	
TYPE M	PROD 26	CLASS D	THIS DRAWING IS THE PROPERTY OF ABB Inc. POWER TECHNOLOGY MEDIUM VOLTAGE AND CONTAINS CONFIDENTIAL INFORMATION WHICH MUST NOT BE DUPLICATE USED, OR DISCLOSED OTHER THAN EXPRESSLY AUTHORIZED BY ABB Inc.		



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

# AMVAC WIRING DIAGRAM

## MODEL 4

		1B11971		2	
		SIZE B	SHT 02	CONT ON 03	REV
NEXT ASSY:		BY: R HOLMES DATE: 7/1/09	CHD: S BOUNSAV DATE: 7/1/09	APPE DULLNI DATE: 7/1/09	SHOP ORDER:
TYPE	PROD	CLASS	THIS DRAWING IS THE PROPERTY OF ABB Inc. POWER TECHNOLOGY MEDIUM VOLTAGE AND CONTAINS CONFIDENTIAL INFORMATION WHICH MUST NOT BE DUPLICATE USED, OR DISCLOSED OTHER THAN EXPRESSLY AUTHORIZED BY ABB Inc.		

NO.	REVISIONS	BY DATE	CHD. DATE	APP. DATE	NO.	REVISIONS	BY DATE	CHD. DATE	APP. DATE
					2	ADDED "MODEL 4" TO TITLE MULTIPLE CHANGES TO SCHEMATICS	EG 2/2/11	MM 2/2/11	BG 2/2/11