

CUST. NAME: TOSHIBA INTERNATIONAL CORP.

PROJECT NO.: TIC STANDARD

P.O. NUMBER:

DESCRIPTION: GCI6722G050, POWER MODULE
FRAME 2, 4160V

FINAL

PRELIMINARY

FOR APPROVAL

Note: Final Engineering and Manufacturing will proceed upon receipt of final approval

- NOT APPROVED AS NOTED - RESUBMIT DRAWINGS FOR APPROVAL. DO NOT PROCEED WITH FINAL ENGINEERING OR MANUFACTURING.
- APPROVED AS NOTED - PROCEED WITH FINAL ENGINEERING AND MANUFACTURING.
- APPROVED AS SUBMITTED - PROCEED WITH FINAL ENGINEERING AND MANUFACTURING.

APPROVAL BY:

Initial

Date

NO	DRAWING NO	REV	DRAWING DESCRIPTION
00	1808D700	0	DRAWING LIST (1)
01	---	--	----
02	---	--	----
03	---	--	----
04	---	--	----
05	1808D705	0	RATING SHEET
06	---	--	----
07	---	--	----
08	---	--	----
09	---	--	----
10	---	--	----
11	1808D711	0	MAIN CIRCUIT (1)
12	1808D712	0	MAIN CIRCUIT (2)
13	---	--	----
14	---	--	----
15	1808D715	0	OPTICAL INTERFACE

NO	DRAWING NO	REV	DRAWING DESCRIPTION
16	---	--	----
17	---	--	----
18	---	--	----
19	---	--	----
20	1908D720	0	WIRING DIAGRAM - FIBER, TOP
21	---	--	----
22	1908D722	0	WIRING DIAGRAM - FIBER, LEFT
23	1908D723	0	WIRING DIAGRAM - FIBER, RIGHT
24	1908D724	0	WIRING DIAGRAM - FIBER, FRONT
25	---	--	----
26	---	--	----
27	---	--	----
28	1908D728	0	WIRING DIAGRAM - ELECTRICAL, LEFT
29	1908D729	0	WIRING DIAGRAM - ELECTRICAL, RIGHT
30	1908D730	0	WIRING DIAGRAM - ELECTRICAL, FRONT
31	---	--	----

4					
3					
2					
1					
0	03/25/03	FIRST ISSUE	TAW		
REV	DATE	DESCRIPTION	BY	CHK	APPR

TOSHIBA
TOSHIBA INTERNATIONAL CORPORATION
MADE IN HOUSTON, TEXAS U.S.A.

THIS MATERIAL IS THE EXCLUSIVE PROPERTY OF TOSHIBA INTERNATIONAL CORPORATION AND SHALL NOT BE REPRODUCED, USED, OR DISCLOSED TO OTHERS UNLESS PRIOR WRITTEN AUTHORIZATION IS OBTAINED.

TITLE: DRAWING LIST
POWER MODULE, FRAME 2, 4160V

PRODUCT: TOSVERT-300MV

REVISION: 0 SCALE: NTS

FILE NAME:

ITEM NUMBER: 1808D700

PAGE No.	DEVICE	GC6722G050 4160V, 333A, 1φ	
		TYPE FORM	RATING
11	11F1,2	A480T1E	1E, 4.8kV
	11T1	PC33110P110	100VA, 120:120VAC
	CHD	PC61910P110A	---
	CP1	17L1009TH	2x1000uF, 2000VDC
	CN1		
	DIODE A1,A2	DD200S33K2C	200A, 3300V, 2 IN 1
	GED1~2	PC61910P115A	---
	IGBT PACK 1~2A,B,C	FF20DR33KF2C	200A, 3300V, 2 IN 1
	IGD-A1	PC61910P075F1	---
	IGD-A2	PC61910P075E1	---
	PS1	VS50B-15	120VAC:+15VDC, 52.5W
	RGM1~2	PC61910P106A	---
	TH1	US602SYBVA90-194F30	90C, N.O.
	VDET	ARND-3127B	---
12	CP2	17L1009TH	2x1000uF, 2000VDC
	CN2		
	DIODE B1,B2	DD200S33K2C	200A, 3300V, 2 IN 1
	GED3~4	PC61910P115A	---
	IGBT PACK 3~4A,B,C	FF20DR33KF2C	200A, 3300V, 2 IN 1
	IGD-B1	PC61910P075F1	---
	IGD-B2	PC61910P075E1	---
RGM3~4	PC61910P106A	---	
15	OLB	ARND-8205A	---

4					
3					
2					
1					
0	01/23/04	FIRST ISSUE	TAW		
REV	DATE	DESCRIPTION	BY	CHK	APPR

TOSHIBA
TOSHIBA INTERNATIONAL CORPORATION
 MADE IN HOUSTON, TEXAS U.S.A.

THIS MATERIAL IS THE EXCLUSIVE PROPERTY OF TOSHIBA INTERNATIONAL CORPORATION AND SHALL NOT BE REPRODUCED, USED, OR DISCLOSED TO OTHERS UNLESS PRIOR WRITTEN AUTHORIZATION IS OBTAINED.

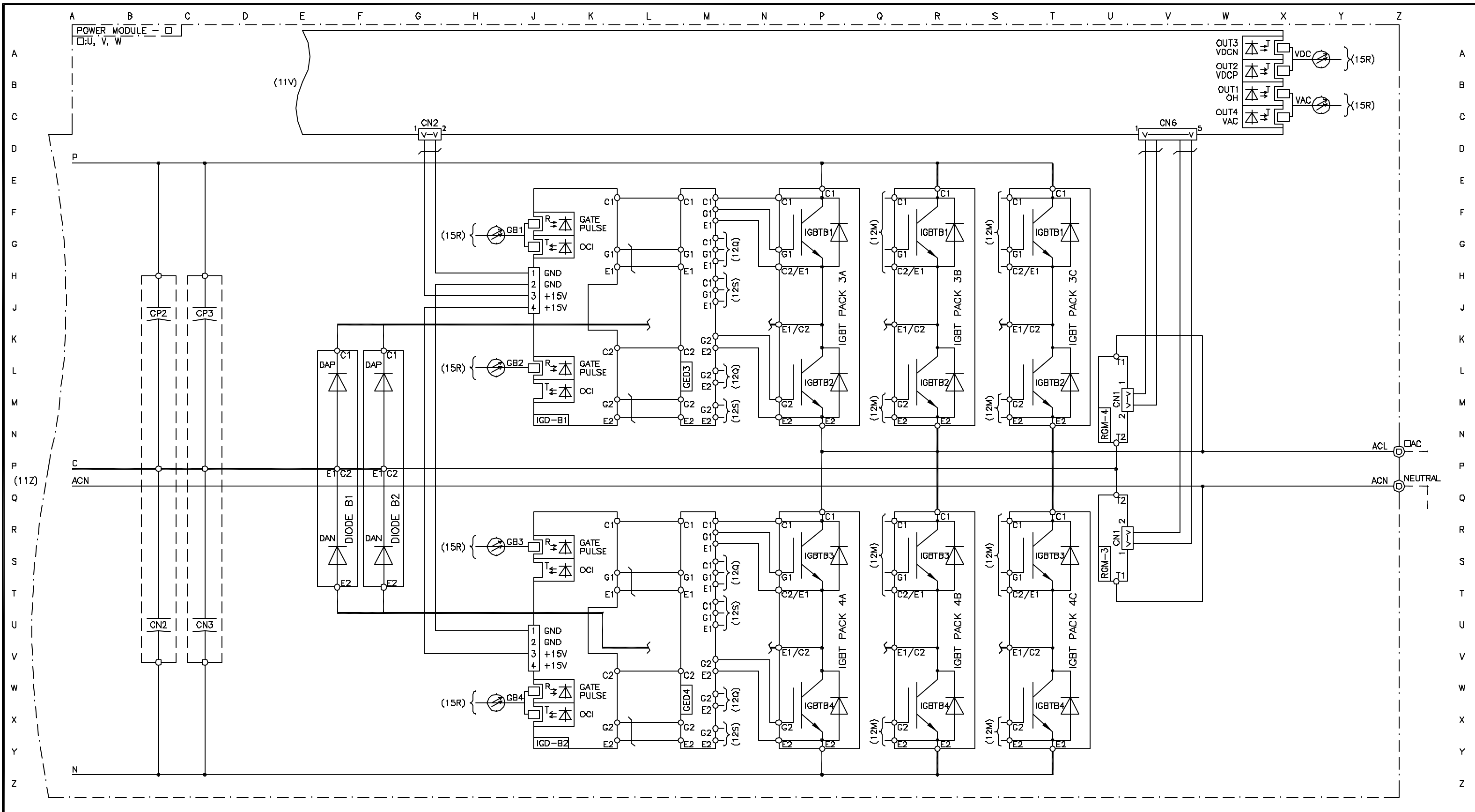
TITLE:
 RATING SHEET
 POWER MODULE, FRAME 2, 4160V

PRODUCT:
 TOSVERT-300MV

REVISION: 0 SCALE: NTS

FILE NAME:

ITEM NUMBER: 1808D705



4					
3					
2					
1					
0	03/25/03	FIRST ISSUE	TAW		
REV	DATE	DESCRIPTION	BY	CHK	APPR

TOSHIBA
TOSHIBA INTERNATIONAL CORPORATION
 MADE IN HOUSTON, TEXAS U.S.A.

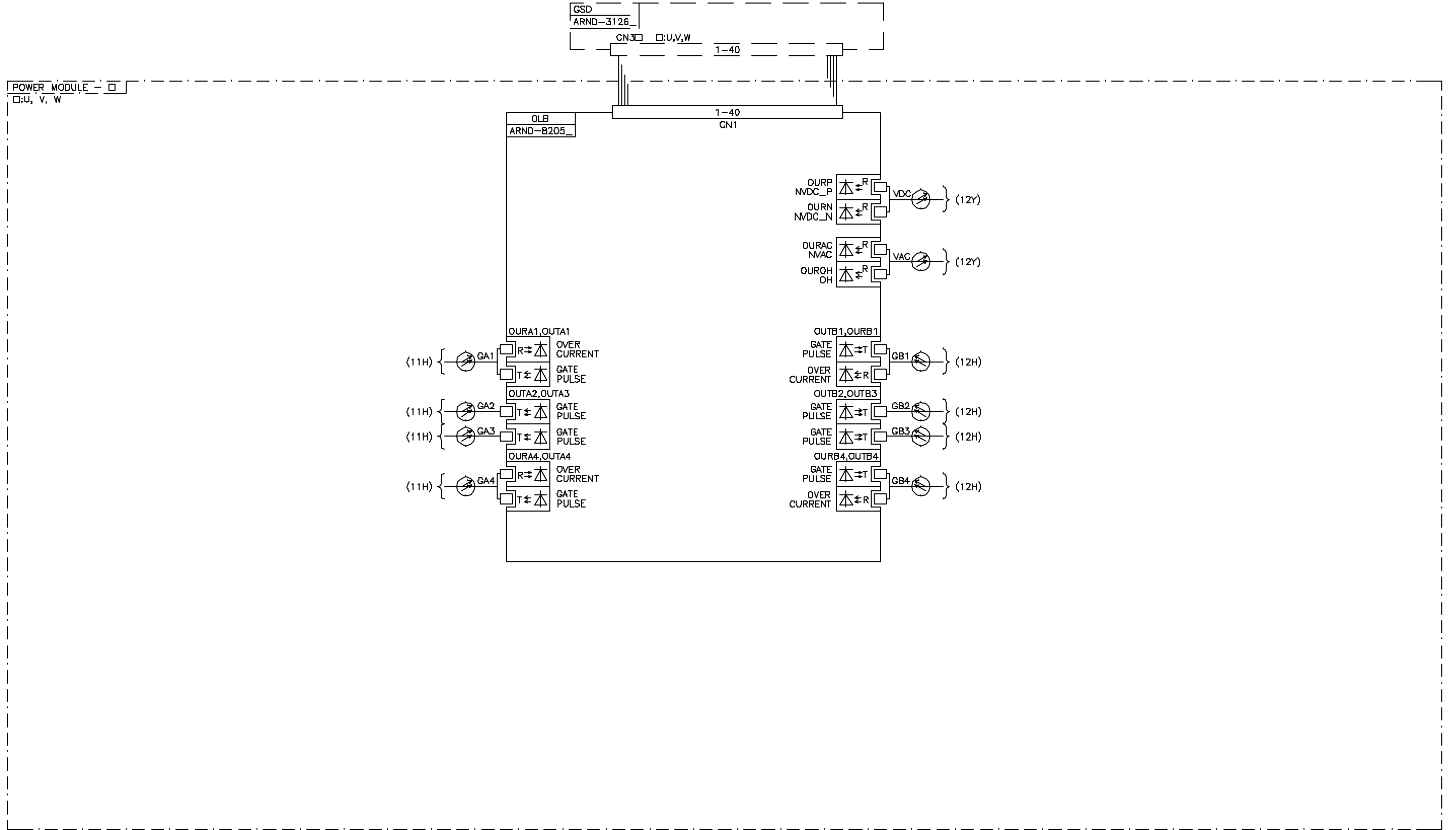
THIS MATERIAL IS THE EXCLUSIVE PROPERTY OF TOSHIBA INTERNATIONAL CORPORATION AND SHALL NOT BE REPRODUCED, USED, OR DISCLOSED TO OTHERS UNLESS PRIOR WRITTEN AUTHORIZATION IS OBTAINED.

TITLE:
 MAIN CIRCUIT (2)
 POWER MODULE, FRAME 2, 4160V

PRODUCT:
 TOSVERT-300MV

REVISION: 0	SCALE: NTS
FILE NAME:	
ITEM NUMBER: 1808D712	

A B C D E F G H J K L M N P Q R S T U V W X Y Z



4					
3					
2					
1					
D	01/23/04	FIRST ISSUE	TAW		
REV	DATE	DESCRIPTION	BY	CHK	APPR

TOSHIBA
TOSHIBA INTERNATIONAL CORPORATION
 MADE IN HOUSTON, TEXAS U.S.A.

THIS MATERIAL IS THE EXCLUSIVE PROPERTY OF TOSHIBA INTERNATIONAL CORPORATION AND SHALL NOT BE REPRODUCED, USED, OR DISCLOSED TO OTHERS UNLESS PRIOR WRITTEN AUTHORIZATION IS OBTAINED.

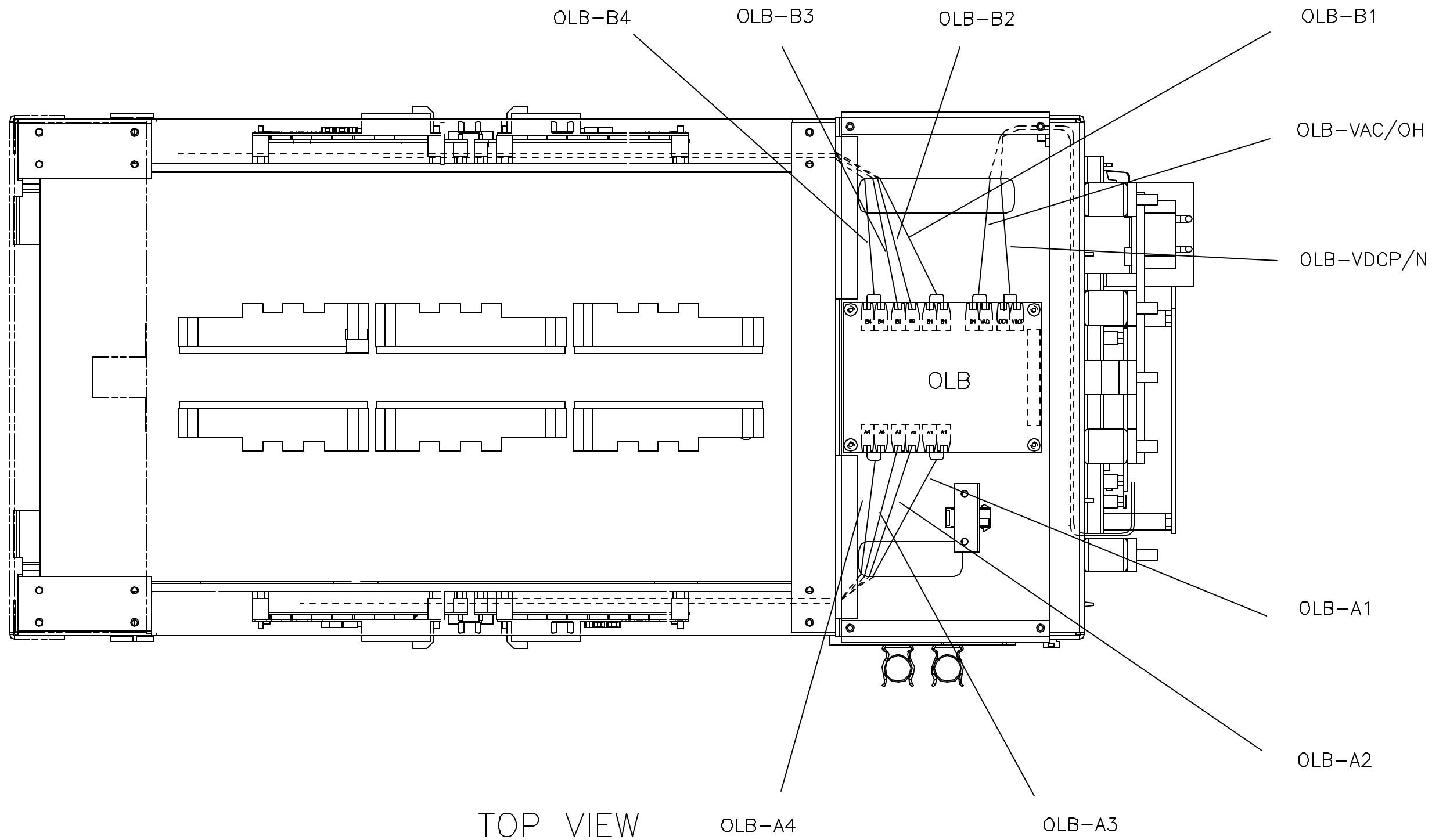
TITLE:
 OPTICAL INTERFACE
 POWER MODULE, FRAME 2, 4160V

PRODUCT:
 TOSVERT-300MV

REVISION: 0 SCALE: NTS

FILE NAME:

ITEM NUMBER: 1808D715



4					
3					
2					
1					
0	02/17/03	FIRST ISSUE	HHP		
REV	DATE	DESCRIPTION	BY	CHK	APPR

TOSHIBA
TOSHIBA INTERNATIONAL CORPORATION
 MADE IN HOUSTON, TEXAS U.S.A.

THIS MATERIAL IS THE EXCLUSIVE PROPERTY OF TOSHIBA INTERNATIONAL CORPORATION AND SHALL NOT BE REPRODUCED, USED, OR DISCLOSED TO OTHERS UNLESS PRIOR WRITTEN AUTHORIZATION IS OBTAINED.

TITLE:
 WIRING DIAGRAM, FIBER, TOP
 POWER MODULE, FRAME 2, 4160V

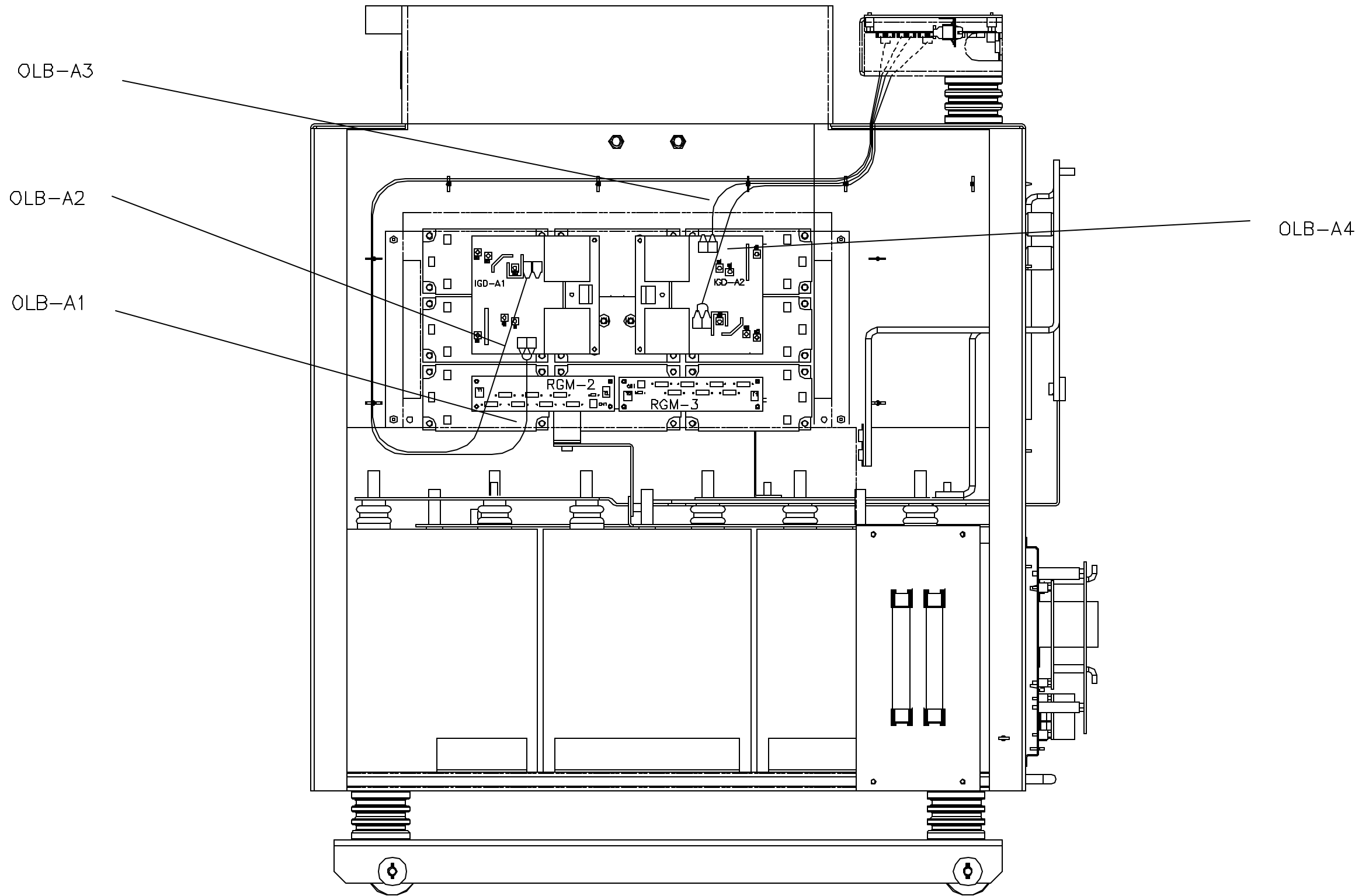
PRODUCT:
 TOSVERT-300MV

REVISION:
 0

SCALE:
 1.0=5.0

FILE NAME:

ITEM NUMBER:
 1908D720



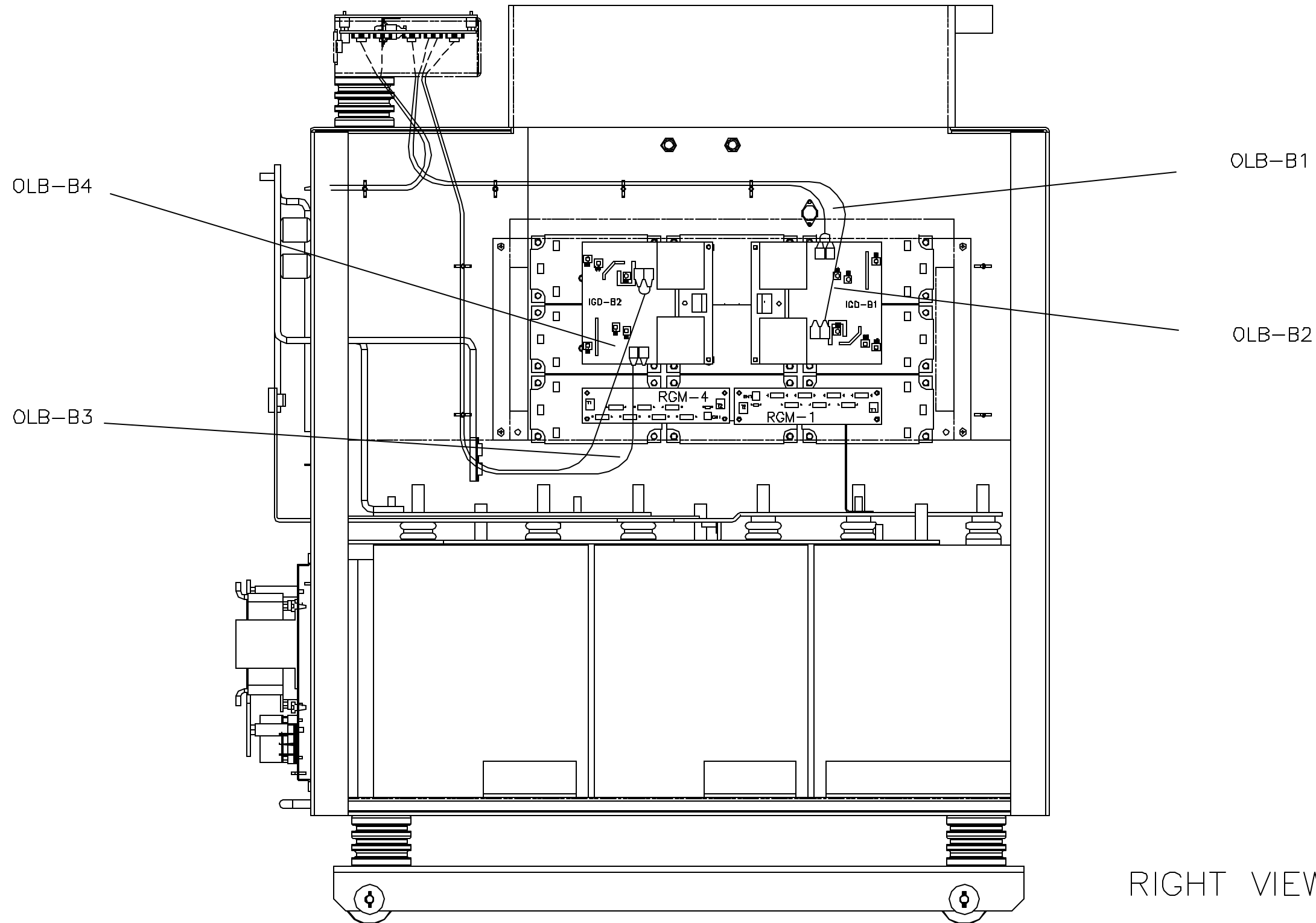
LEFT VIEW

4					
3					
2					
1					
0	06/03/03	FIRST ISSUE	HHP		
REV	DATE	DESCRIPTION	BY	CHK	APPR

TOSHIBA
TOSHIBA INTERNATIONAL CORPORATION
 MADE IN HOUSTON, TEXAS U.S.A.
 THIS MATERIAL IS THE EXCLUSIVE PROPERTY OF
 TOSHIBA INTERNATIONAL CORPORATION AND SHALL
 NOT BE REPRODUCED, USED, OR DISCLOSED TO OTHERS
 UNLESS PRIOR WRITTEN AUTHORIZATION IS OBTAINED.

TITLE:
 WIRING DIAGRAM, FIBER, LEFT
 POWER MODULE, FRAME 2, 4160V
 PRODUCT:
 TOSVERT-300MV

REVISION:
 0
 SCALE:
 1.0=5.0
 FILE NAME:
 ITEM NUMBER:
 I908D722



4					
3					
2					
1					
0	06/03/03	FIRST ISSUE	HHP		
REV	DATE	DESCRIPTION	BY	CHK	APPR

TOSHIBA
TOSHIBA INTERNATIONAL CORPORATION
MADE IN HOUSTON, TEXAS U.S.A.
THIS MATERIAL IS THE EXCLUSIVE PROPERTY OF
TOSHIBA INTERNATIONAL CORPORATION AND SHALL
NOT BE REPRODUCED, USED, OR DISCLOSED TO OTHERS
UNLESS PRIOR WRITTEN AUTHORIZATION IS OBTAINED.

TITLE:
WIRING DIAGRAM, FIBER, RIGHT
POWER MODULE, FRAME 2, 4160V
PRODUCT:
TOSVERT-300MV

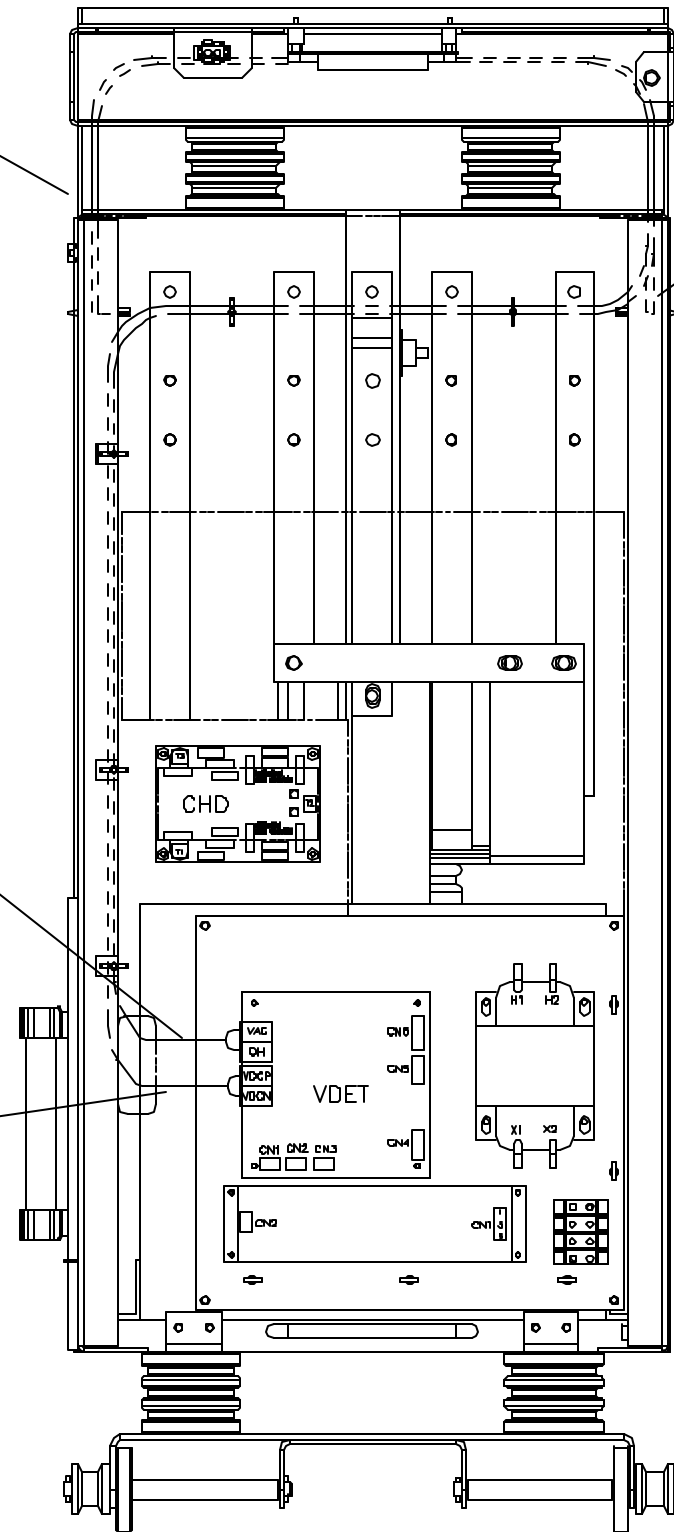
REVISION:
0
SCALE:
1.0=5.0
FILE NAME:
ITEM NUMBER:
1908D723

OLB-A1,A2,A3,A4

OLB-B1,B2,B3,B4

OLB-VAC/OH

OLB-VDCP/N



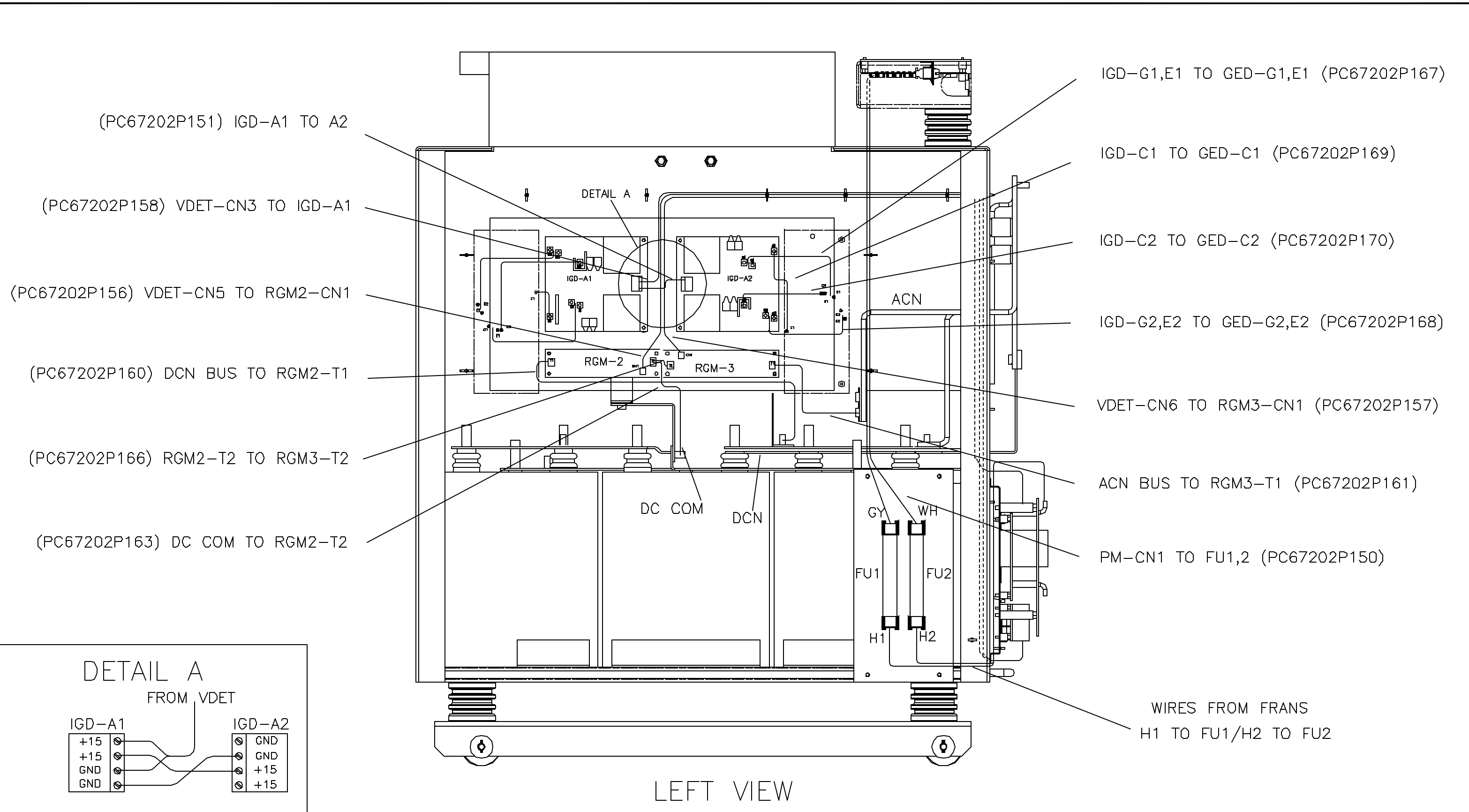
FRONT VIEW

4					
3					
2					
1					
0	02/17/03	FIRST ISSUE	HHP		
REV	DATE	DESCRIPTION	BY	CHK	APPR

TOSHIBA
TOSHIBA INTERNATIONAL CORPORATION
 MADE IN HOUSTON, TEXAS U.S.A.
 THIS MATERIAL IS THE EXCLUSIVE PROPERTY OF
 TOSHIBA INTERNATIONAL CORPORATION AND SHALL
 NOT BE REPRODUCED, USED, OR DISCLOSED TO OTHERS
 UNLESS PRIOR WRITTEN AUTHORIZATION IS OBTAINED.

TITLE:
 WIRING DIAGRAM, FIBER, FRONT
 POWER MODULE, FRAME 2, 4160V
 PRODUCT:
 TOSVERT-300MV

REVISION:
 0
 SCALE:
 1.0=5.0
 FILE NAME:
 ITEM NUMBER:
 I908D724



LEFT VIEW

4					
3					
2					
1					
0	06/03/03	FIRST ISSUE	HHP		
REV	DATE	DESCRIPTION	BY	CHK	APPR

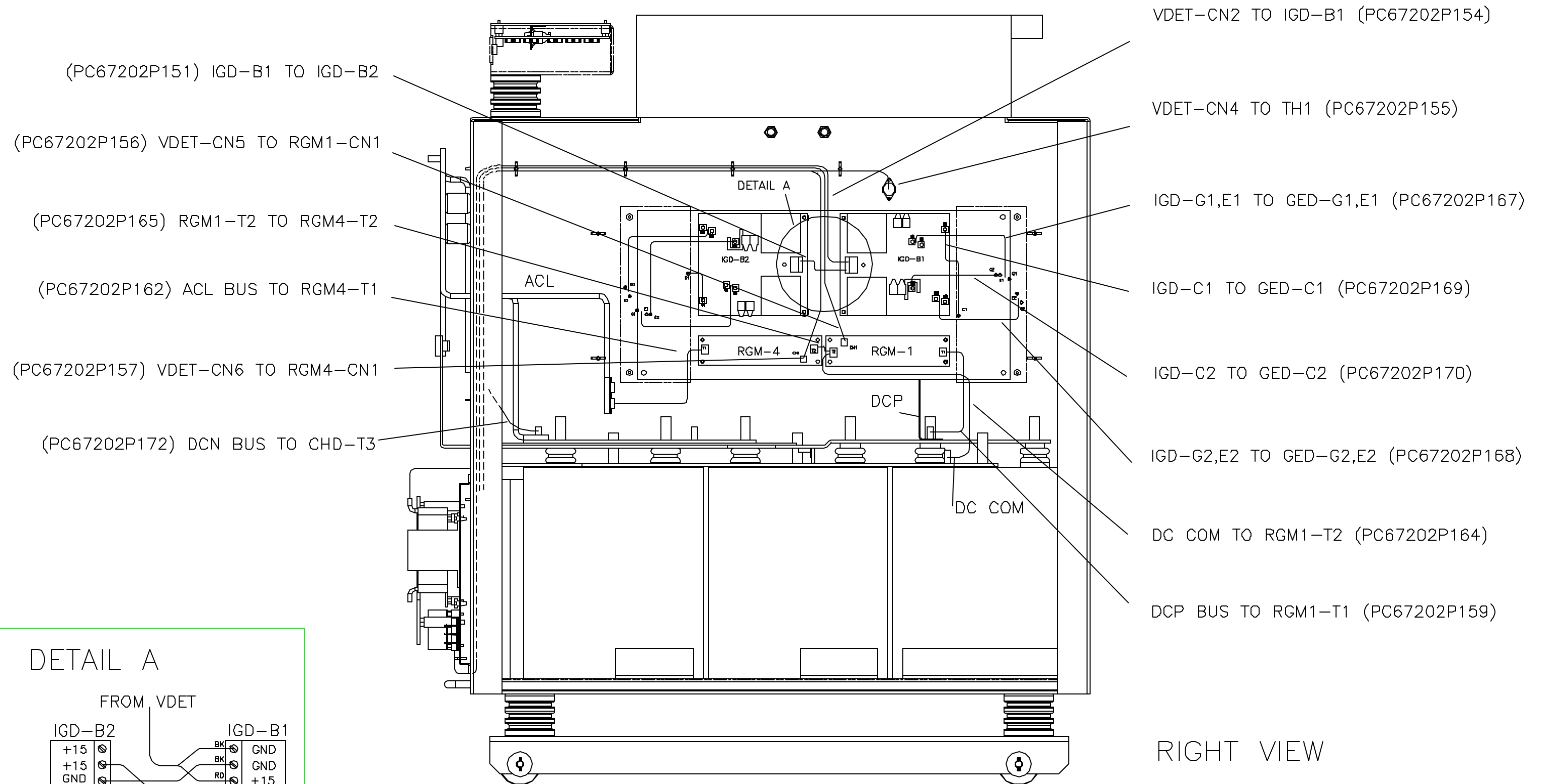
TOSHIBA
TOSHIBA INTERNATIONAL CORPORATION
 MADE IN HOUSTON, TEXAS U.S.A.

THIS MATERIAL IS THE EXCLUSIVE PROPERTY OF TOSHIBA INTERNATIONAL CORPORATION AND SHALL NOT BE REPRODUCED, USED, OR DISCLOSED TO OTHERS UNLESS PRIOR WRITTEN AUTHORIZATION IS OBTAINED.

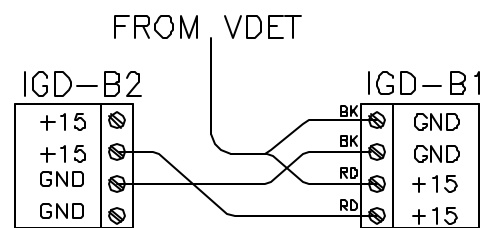
TITLE:
 WIRING DIAGRAM, ELECTRICAL, LEFT
 POWER MODULE, FRAME 2, 4160V

PRODUCT:
 TOSVERT-300MV

REVISION: 0	SCALE: 1.0=5.0
FILE NAME:	
ITEM NUMBER: 1908D728	



DETAIL A



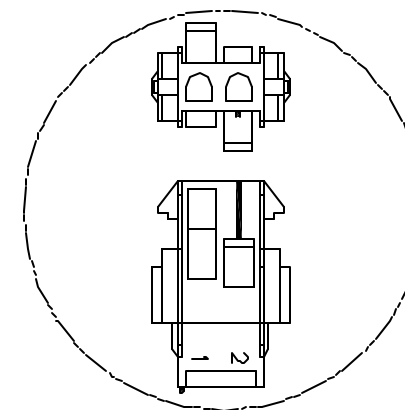
4					
3					
2					
1					
0	06/03/03	FIRST ISSUE	HHP		
REV	DATE	DESCRIPTION	BY	CHK	APPR

TOSHIBA
TOSHIBA INTERNATIONAL CORPORATION
MADE IN HOUSTON, TEXAS U.S.A.

THIS MATERIAL IS THE EXCLUSIVE PROPERTY OF TOSHIBA INTERNATIONAL CORPORATION AND SHALL NOT BE REPRODUCED, USED, OR DISCLOSED TO OTHERS UNLESS PRIOR WRITTEN AUTHORIZATION IS OBTAINED.

TITLE: WIRING DIAGRAM, ELECTRICAL, RIGHT POWER MODULE, FRAME 2, 4160V	REVISION: 0	SCALE: 1.0=5.0
PRODUCT: TOSVERT-300MV	FILE NAME:	
	ITEM NUMBER: I908D729	

DETAIL A



DETAIL A

(PC67202P172) DCN BUS TO CHD-T3

(PC67202P173) DC COM TO CHD-T2

(PC67202P174) DCP BUS TO CHD-T1

(PC67202P150) PM-CN1 TO FU1,2

(PC67202P154) VDET-CN2 TO IGD-B1

(PC67202P153) VDET-CN1 TO PS1-CN2

(PC67202P158) VDET-CN3 TO IGD-A1

VDET-CN6 TO RGM3,4-CN1 (PC67202P157)

VDET-CN5 TO RGM1,2-CN1 (PC67202P156)

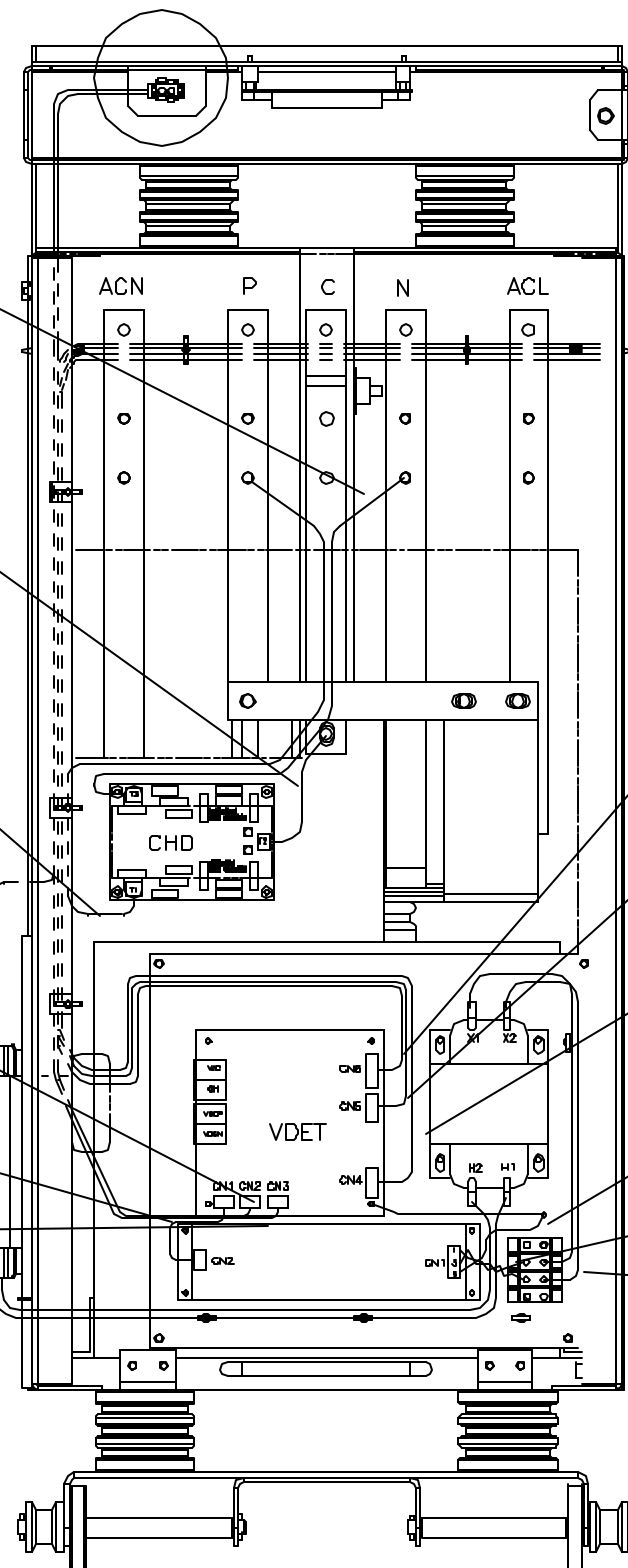
VDET-CN4 TO TH1 (PC67202P155)

VDET TO CHASSIS (PC67202P171)

PS1-CN1 TO TB (PC67202P152)

WIRES FROM TRANS-FU1 TO H1/FU2 TO H2

FRONT VIEW



4					
3					
2					
1					
0	02/27/03	FIRST ISSUE	HHP		
REV	DATE	DESCRIPTION	BY	CHK	APPR

TOSHIBA
 TOSHIBA INTERNATIONAL CORPORATION
 MADE IN HOUSTON, TEXAS U.S.A.
 THIS MATERIAL IS THE EXCLUSIVE PROPERTY OF TOSHIBA INTERNATIONAL CORPORATION AND SHALL NOT BE REPRODUCED, USED, OR DISCLOSED TO OTHERS UNLESS PRIOR WRITTEN AUTHORIZATION IS OBTAINED.

TITLE:
 WIRING DIAGRAM, ELECTRICAL, FRONT POWER MODULE, FRAME 2, 4160V
 PRODUCT:
 TOSVERT-300MV

REVISION:
 0
 SCALE:
 1.0=5.0
 FILE NAME:
 ITEM NUMBER:
 I908D730