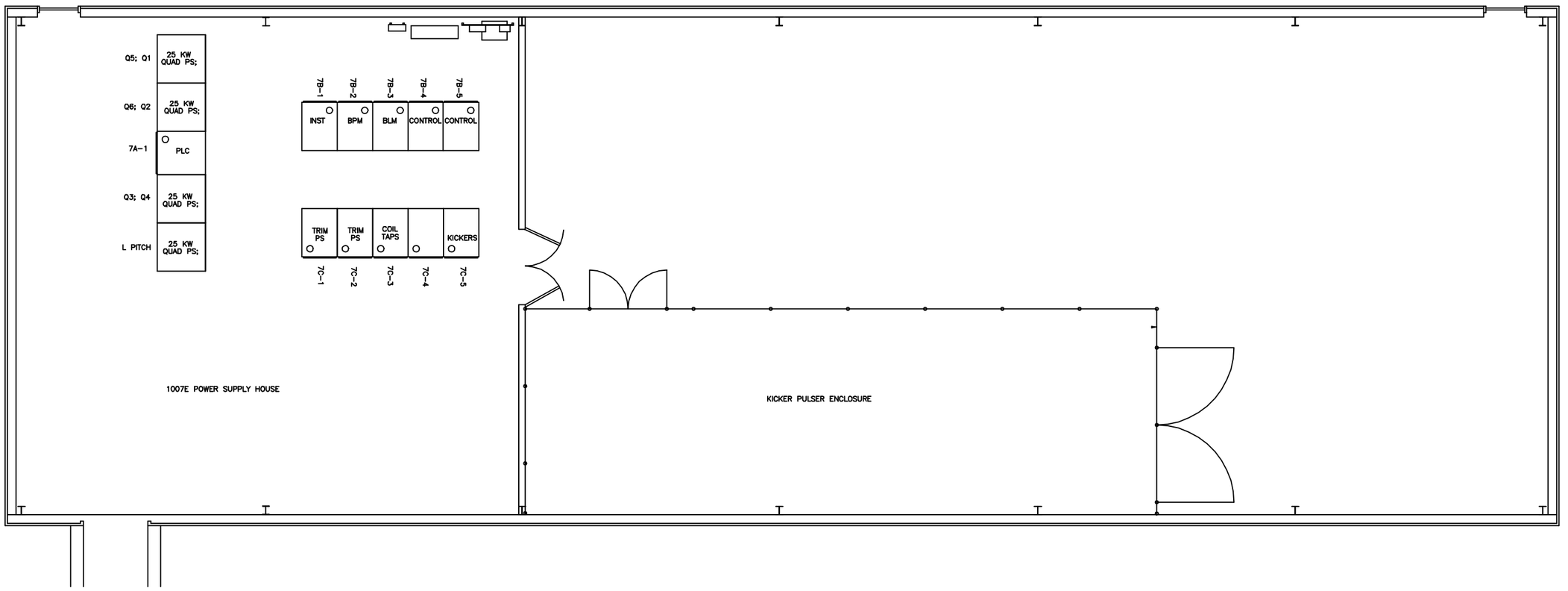
REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

ACS, BNL 9/27/99 3:41 PM 8265.dwg



QTY REQD -3	QTY REQD -2	QTY REQD -1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L DWG NO./PNL NO.
		1	7C-3	5	BLDG. 1007W RACK 7C-3 ASSY.	94028269
		1	7B-5	4	BLDG. 1007W RACK 7B-5 ASSY.	94028268
		1	7B-4	3	BLDG. 1007W RACK 7B-4 ASSY.	94028267
		1	7B-2	2	BLDG. 1007W RACK 7B-2 ASSY.	X
		1	X	1	RHIC CONTROLS BLDG. 1007W WIRING DIAGRAM	94028266

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M–1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±.030
.XX ±.015
.XXX ±.005
ANGULAR TOLERANCE ± .5°

NA FINISH

BREAK SHARP EDGES MAX. XX MIN. XX

OUTSTANDING ECN

NEXT ASSEMBLY

Q.A. CATEGORY A–3

		DATE
DRAWN BY	D. DITTRICH	03/20/97
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL	R. MICHNOFF	05/13/97
SUPVR. APPROVAL		

BROOKHAVEN NATIONAL LABORATORY
ASSOCIATED UNIVERSITIES, INC.
UPTON, N.Y. 11973

RHIC CONTROLS

BLDG. 1007W FLOOR PLAN

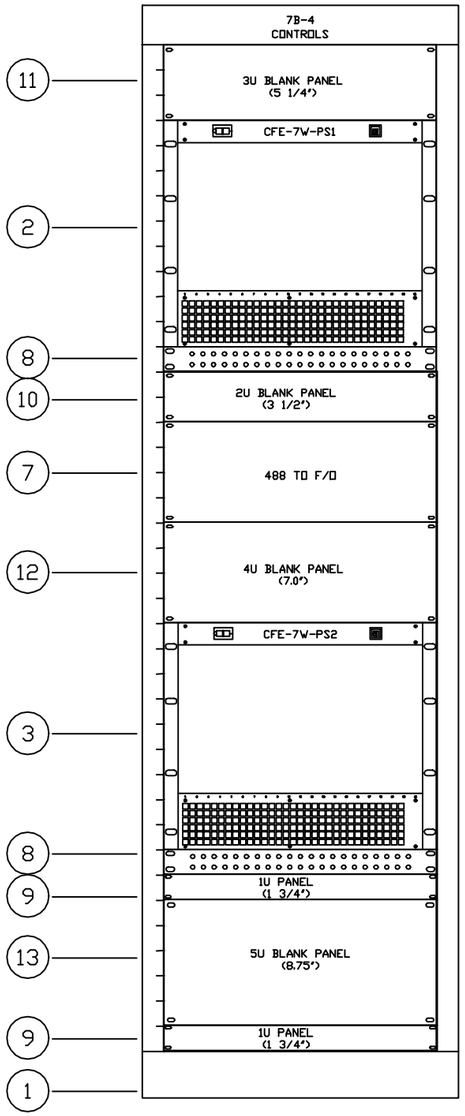
SIZE D | DRAWING NUMBER 94028265 | REV. A

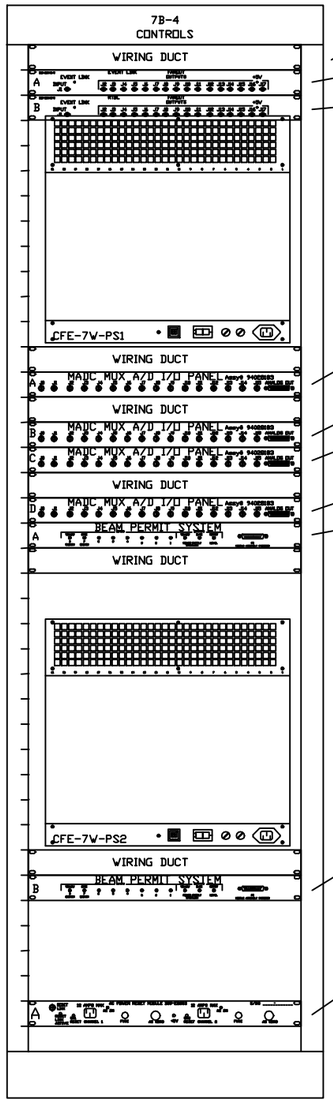
MATERIAL: ——— SCALE: FULL WEIGHT: – SHEET 1 OF 1

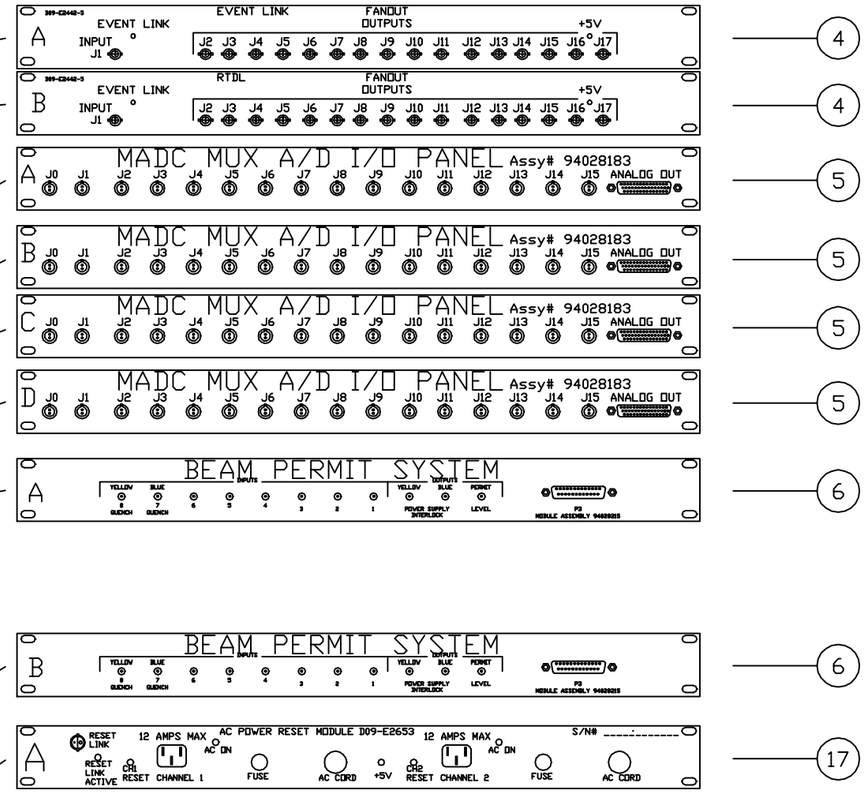
*AUTOCAD

REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

ACS, BNL 10/5/99 3:27 PM 8267.dwg







-3	-2	-1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MATL DWG NO./BNL NO.
		AR	N/A	18	10-32 x 1/2" BINDING HEAD MACHINE SCREWS	T-32276
		1	A	17	AC POWER RESET MODULE	D09-E2653
		12	N/A	16	WIRING DUCT SNAP CLIPS 1.5"W (PANDUIT SNS1.5-C)	X
		X	X	15	WIRING DUCT COVER 1.5" (PANDUIT C1.5LG6)	X
		X	X	14	WIRING DUCT 1.5"W x 4"D (PANDUIT E1.5X4LG6)	X
		1	N/A	13	5U x 19" BLANK PANEL (PREMIER METAL ARP-819-553)	X
		1	N/A	12	4U x 19" BLANK PANEL (PREMIER METAL ARP-719-553)	X
		1	N/A	11	3U x 19" BLANK PANEL (PREMIER METAL ARP-519-553)	X
		1	N/A	10	2U x 19" BLANK PANEL (PREMIER METAL ARP-319-553)	X
		2	N/A	9	1U x 19" BLANK PANEL (PREMIER METAL ARP-119-553)	X
		2	N/A	8	GROMMET PANEL	X
		1	N/A	7	488 TO F/O CONVERTER	X
		2	A,B	6	BEAM PERMIT SYSTEM INTERFACE PANEL	94028215
		8	A,B,C,D,	5	MADC A/D I/O PANEL	94028183
		2	A,B	4	FANOUT ASSEMBLY	D09-E2442
		1	N/A	3	VME CHASSIS CFE-7W-PS2 ASSY.	94028271
		1	N/A	2	VME CHASSIS CFE-7W-PS1 ASSY.	94028270
		1	7B-4	1	19" RACK 70"H RACK SPACE	X

QTY REQD

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±.030
.XX ±.015
.XXX ±.005
ANGULAR TOLERANCE ± .5'

NA FINISH

BREAK SHARP EDGES
MAX. XX MIN. XX

OUTSTANDING ECN

Q.A. CATEGORY A-3

DRAWN BY	D. DITTRICH	03/20/97
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL	R. MICHNOFF	05/13/97
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973
RHIC CONTROLS
BLDG. 1007W

RACK 7B-4 ASSY.

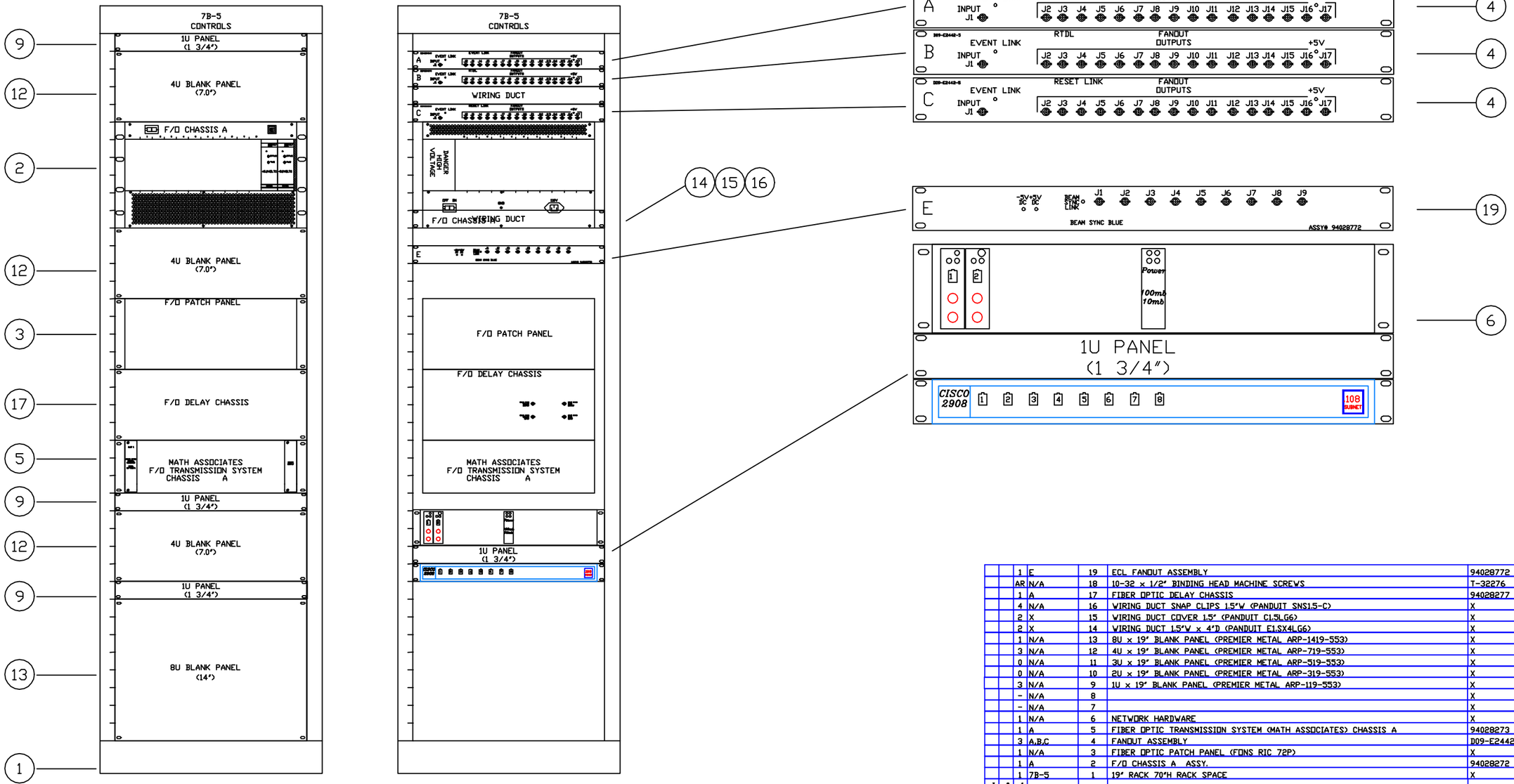
SIZE D | 94028267 | REV. A

MATERIAL: ——— | SCALE: FULL | WEIGHT: – | SHEET 1 OF 1

*AUTOCAD

REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

ACS, BNL 10/5/99 3:36 PM 8268.dwg



QTY REQD	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L DWG NO./BNL NO.
1	E	19	ECL FANOUT ASSEMBLY	94028772
AR	N/A	18	10-32 x 1/2" BINDING HEAD MACHINE SCREWS	T-32276
1	A	17	FIBER OPTIC DELAY CHASSIS	94028277
4	N/A	16	WIRING DUCT SNAP CLIPS 1.5"W (PANDUIT SNS1.5-C)	X
2	X	15	WIRING DUCT COVER 1.5" (PANDUIT C1.5LG6)	X
2	X	14	WIRING DUCT 1.5"W x 4"D (PANDUIT E1.5X4LG6)	X
1	N/A	13	8U x 19" BLANK PANEL (PREMIER METAL ARP-1419-553)	X
3	N/A	12	4U x 19" BLANK PANEL (PREMIER METAL ARP-719-553)	X
0	N/A	11	3U x 19" BLANK PANEL (PREMIER METAL ARP-519-553)	X
0	N/A	10	2U x 19" BLANK PANEL (PREMIER METAL ARP-319-553)	X
3	N/A	9	1U x 19" BLANK PANEL (PREMIER METAL ARP-119-553)	X
-	N/A	8		X
-	N/A	7		X
1	N/A	6	NETWORK HARDWARE	X
1	A	5	FIBER OPTIC TRANSMISSION SYSTEM (MATH ASSOCIATES) CHASSIS A	94028273
3	A,B,C	4	FANOUT ASSEMBLY	D09-E2442
1	N/A	3	FIBER OPTIC PATCH PANEL (FONS RIC 72P)	X
1	A	2	F/O CHASSIS A ASSY.	94028272
1	7B-5	1	19" RACK 70"H RACK SPACE	X

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±.030
.XX ±.015
.XXX ±.005
ANGULAR TOLERANCE ± .5'

OUTSTANDING ECN

NA FINISH

BREAK SHARP EDGES
MAX. XX MIN. XX

Q.A. CATEGORY A-3

DRAWN BY	D. DITTRICH	03/20/97
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL	R. MICHNOFF	05/13/97
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973
RHIC CONTROLS
BLDG. 1007W
RACK 7B-5 ASSY.

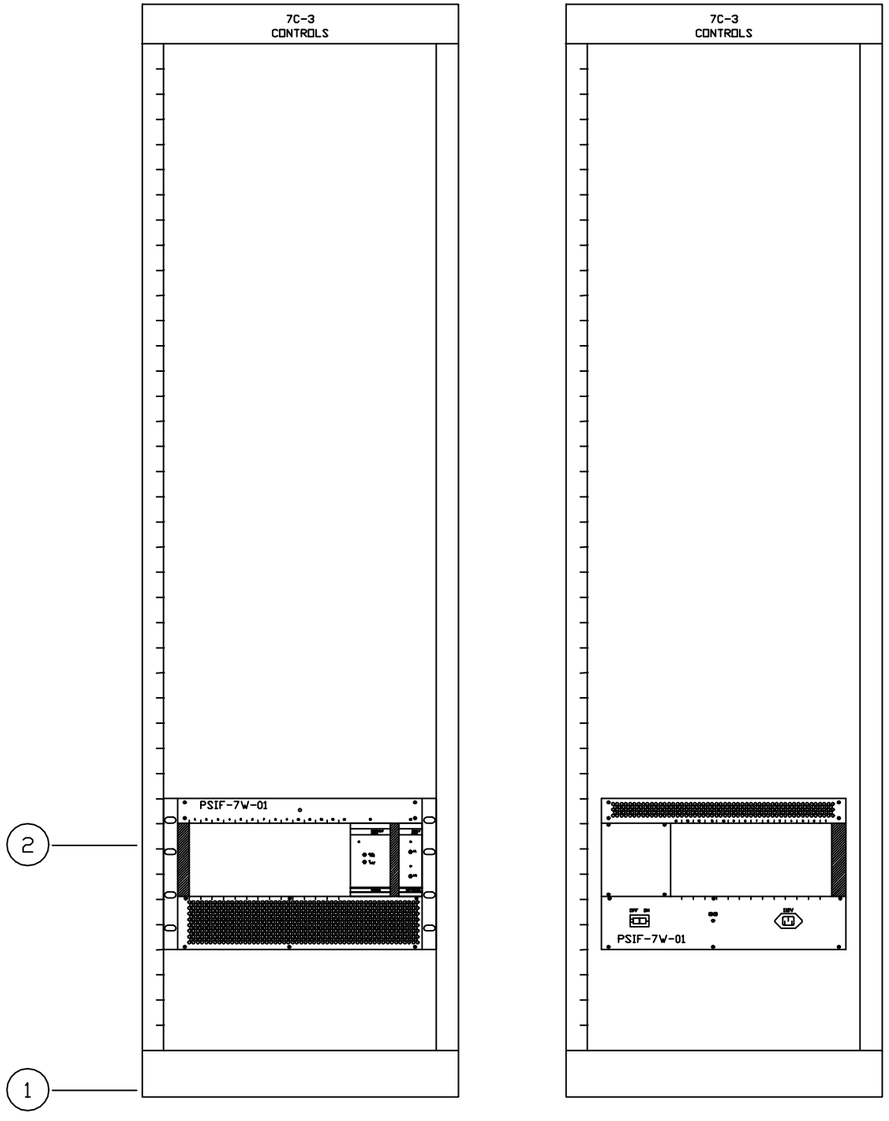
SIZE D | 94028268 | REV. A
DRAWING NUMBER

MATERIAL: —— | SCALE: FULL | WEIGHT: – | SHEET 1 OF 1

*AUTOCAD

REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

ACS, BNL 10/5/99 3:38 PM 8269.dwg



-3 QTY REQD	-2 QTY REQD	-1 QTY REQD	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MATL DWG NO./BNL NO.
		AR	N/A	3	10-32 x 1/2" BINDING HEAD MACHINE SCREWS	T-32276
		1	A	2	LD RES PS IF CHASSIS A ASSY.	94028275
		1	7C-3	1	19" RACK 70"H RACK SPACE	X

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±.030
.XX ±.015
.XXX ±.005
ANGULAR TOLERANCE ± .5°

NA FINISH

BREAK SHARP EDGES MAX. XX MIN. XX

OUTSTANDING ECN

Q.A. CATEGORY A-3		DATE
DRAWN BY	D. DITTRICH	03/20/97
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL	R. MICHNOFF	05/13/97
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973

RHIC CONTROLS

BLDG. 1007W

RACK 7C-3 ASSY.

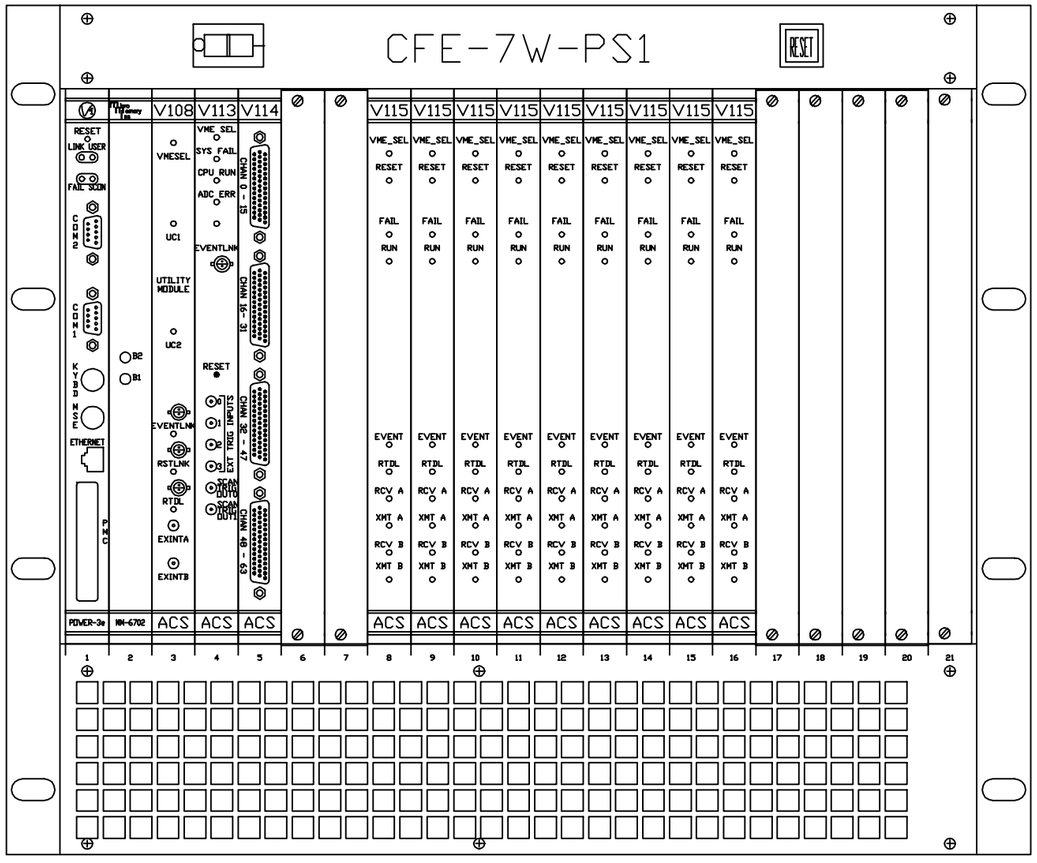
SIZE D | 94028269 DRAWING NUMBER | REV. A

MATERIAL: ——— | SCALE: FULL | WEIGHT: – | SHEET 1 OF 1

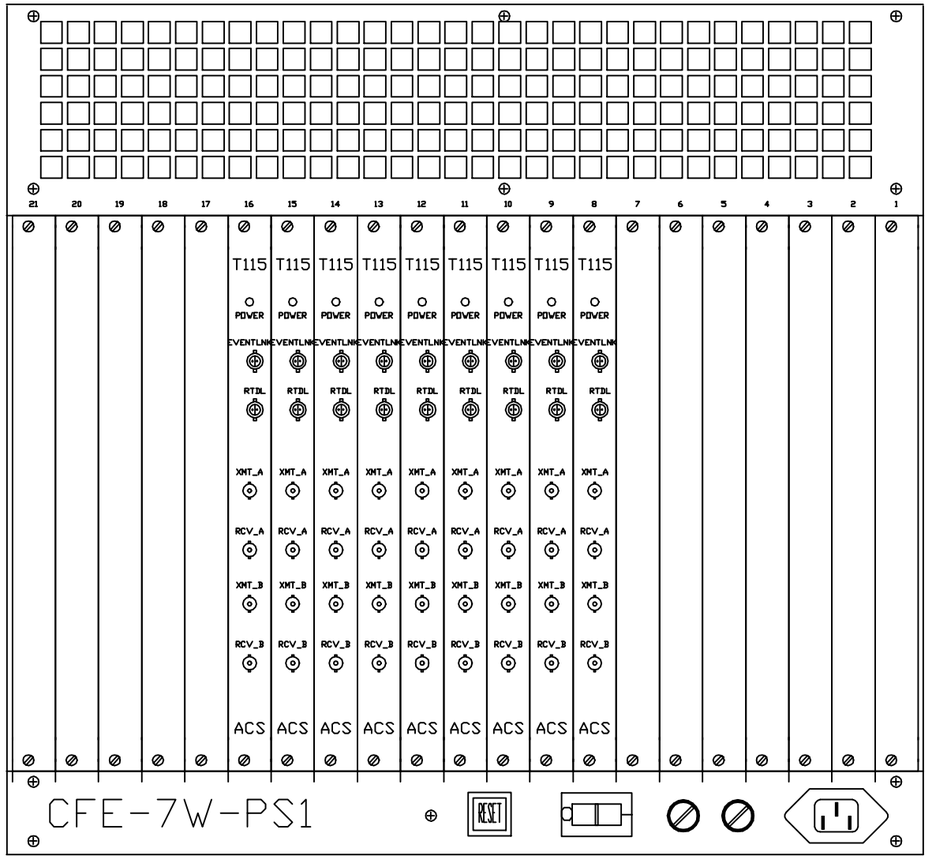
*AUTOCAD

REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

ACS, BNL 10/5/99 3:41 PM 8270.dwg



FRONT VIEW



REAR VIEW

NOTE:

1. ALL UNUSED SLOTS, FRONT AND REAR

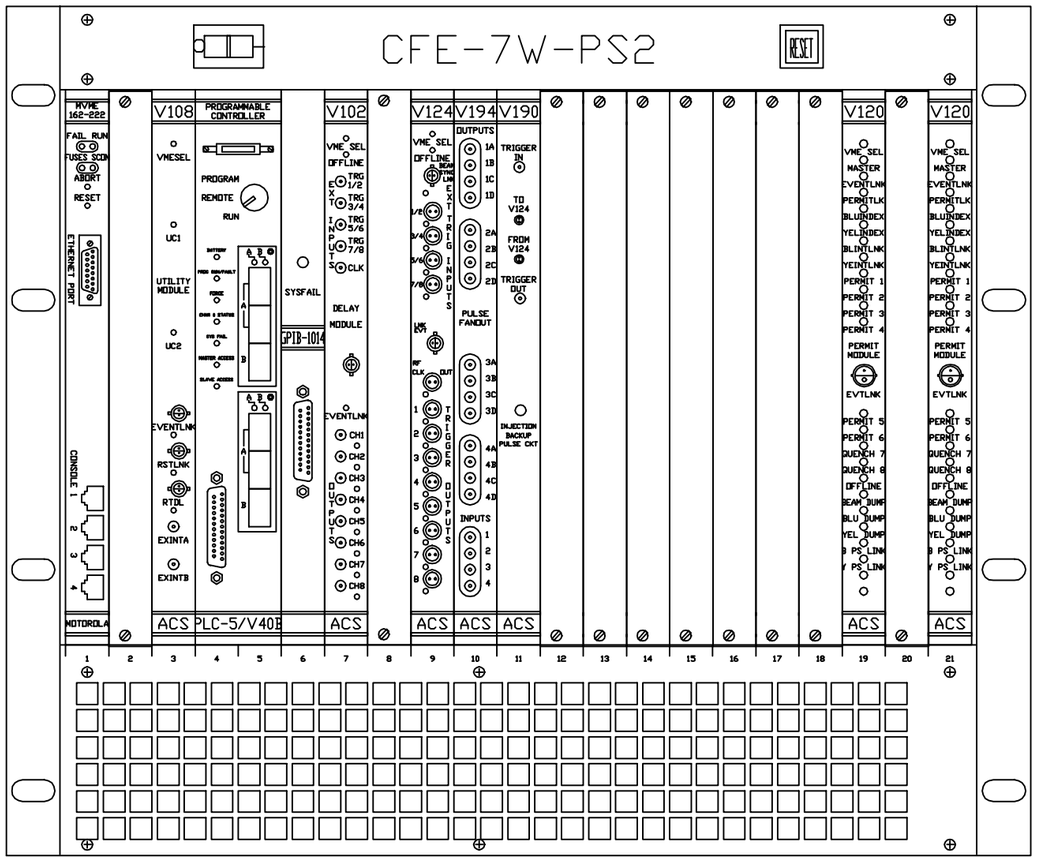
QTY REQD -3	QTY REQD -2	QTY REQD -1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MAT'L DWG NO./BNL NO.
		1	SLOT 2	9	MEMORY BOARD	MM-6702
		12	SEE NOTE 1	8	VME BLANK PANEL (ELECTRO-SPACE ESFE-2985)	
		9	SLOT 8-16	7	T115 WAVEFORM GENERATOR TRANSITION MODULE	94028126
		9	SLOT 8-16	6	V115 WAVEFORM GENERATOR MODULE	94028108
		1	SLOT5	5	V114 MADC A/D CONVERTER MODULE	94028226
		1	SLOT4	4	V113 MADC CONTROLLER MODULE	94028140
		1	SLOT 3	3	V108 UTILITY MODULE	94028094
		1	SLOT 1	2	FRONT END COMPUTER	POWER 3e
		1	N/A	1	VME CHASSIS	RHIC-93008000

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989	Q.A. CATEGORY A-3	DATE	BROOKHAVEN NATIONAL LABORATORY		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	DRAWN BY	Ed Koropsak	9/27/99	UPTON, N.Y. 11973	
DECIMAL TOLERANCES .X ±.030 .XX ±.015 .XXX ±.005 ANGULAR TOLERANCE ± .5°	CHECKED BY			RHIC CONTROLS	
	DESIGN APPROVAL			BLDG. 1007W RACK 7B-4	
	ENGINEER APPROVAL	R. MICHNOFF	9/27/99	VME CHASSIS CFE-7W-PS1 ASSY.	
	SUPVR. APPROVAL			SIZE D	94028270 REV. A
OUTSTANDING ECN	NA FINISH	BREAK SHARP EDGES MAX. XX MIN. XX	NEXT ASSEMBLY	MATERIAL: ——	DRAWING NUMBER SCALE: FULL WEIGHT: — SHEET 1 OF 1

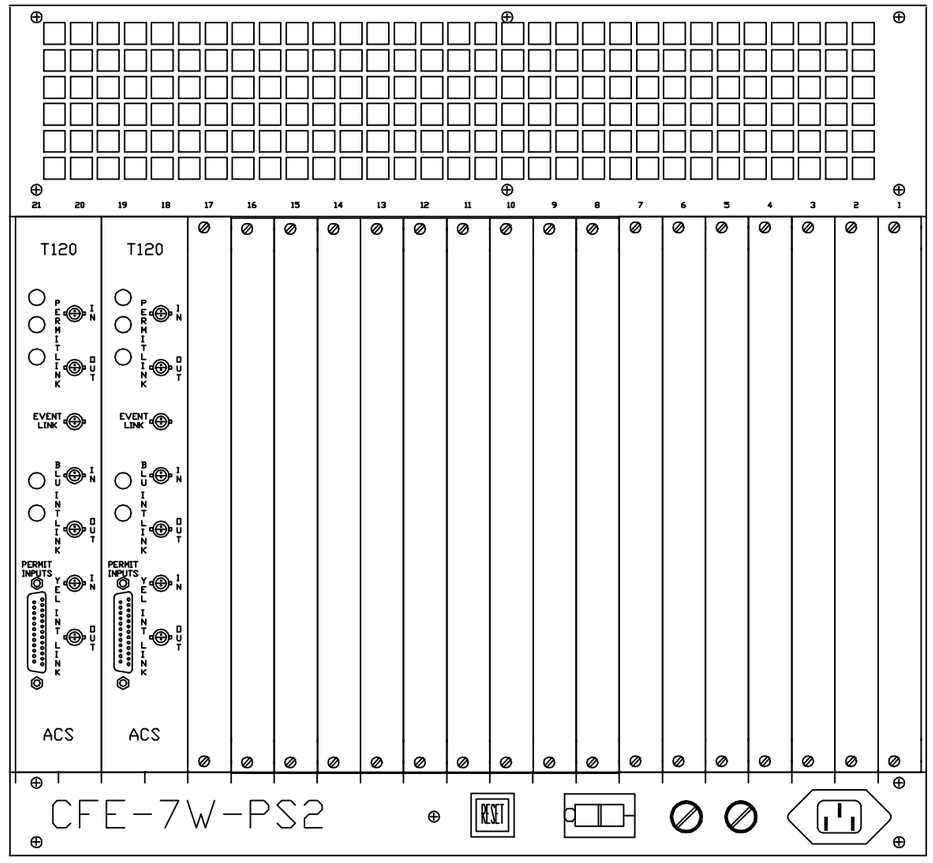
*AUTOCAD

REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

ACS, BNL 9/28/99 11:40 AM 8271.dwg



FRONT VIEW



REAR VIEW

NOTE:

1. ALL UNUSED SLOTS, FRONT AND REAR

-3 QTY REQD	-2	-1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MFG'L DWG NO./INT. NO.
		1	SLOT 11	11	V190 INJECTION BACKUP PLUSE MODULE	94028672
		1	SLOT 9	10	V124 BEAM SYNC TRIGGER MODULE	94028432
		1	SLOT 6	9	GPIB MODULE (GPIB-1014)	X
		27	SEE NOTE 1	8	VME BLANK PANEL (ELECTRO-SPACE ESFE-2985)	
		2	SLOT 19,21	7	V120 PERMIT SYSTEM TRANSITION MODULE	94028199-2
		2	SLOT 19,21	6	V120 PERMIT SYSTEM MODULE	94028077
		1	SLOT 7	5	V102 DELAY MODULE	94028072
		1	SLOT4,5	4	VME PLC PROCESSOR MODULE (ALLEN-BRADLEY PLC-5/40B)	X
		1	SLOT 3	3	V108 UTILITY MODULE	94028094
		1	SLOT 1	2	FRONT END COMPUTER (MOTOROLA)	MVME 162-222
		1	N/A	1	VME CHASSIS	RHIC-93008000

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES .X ±.030 .XX ±.015 .XXX ±.005

ANGULAR TOLERANCE ± .5°

OUTSTANDING ECN: NA

FINISH: √

BREAK SHARP EDGES MAX. XX MIN. XX

Q.A. CATEGORY A-3

		DATE
DRAWN BY	Ed Koropsak	9/27/99
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL	R. MICHNOFF	9/27/99
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973
RHIC CONTROLS
BLDG. 1007W RACK 7B-4
VME CHASSIS CFE-7W-PS2 ASSY.

SIZE D | 94028271 | REV. A

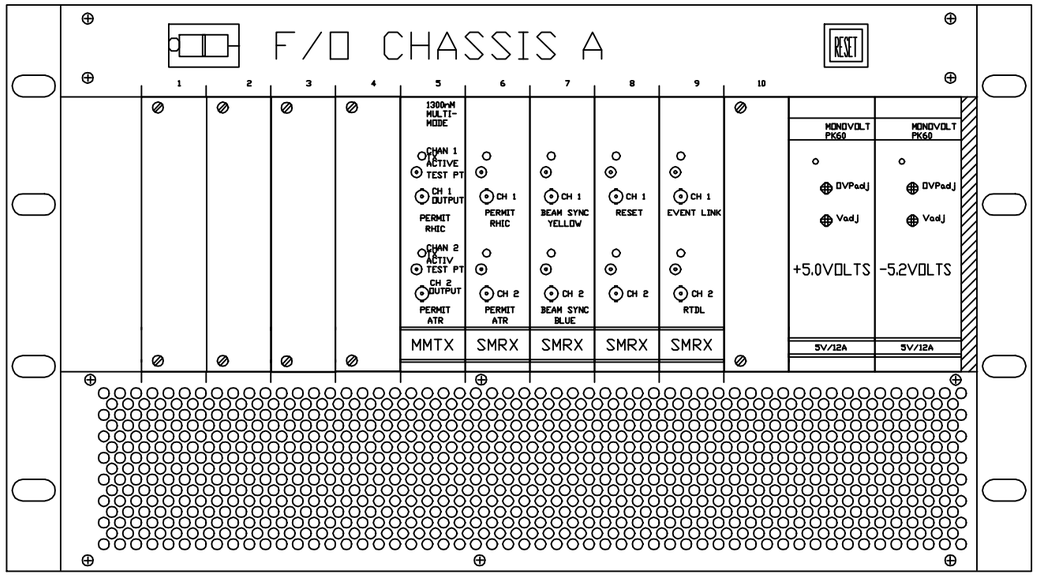
DRAWING NUMBER

MATERIAL: ——— SCALE: FULL WEIGHT: – SHEET 1 OF 1

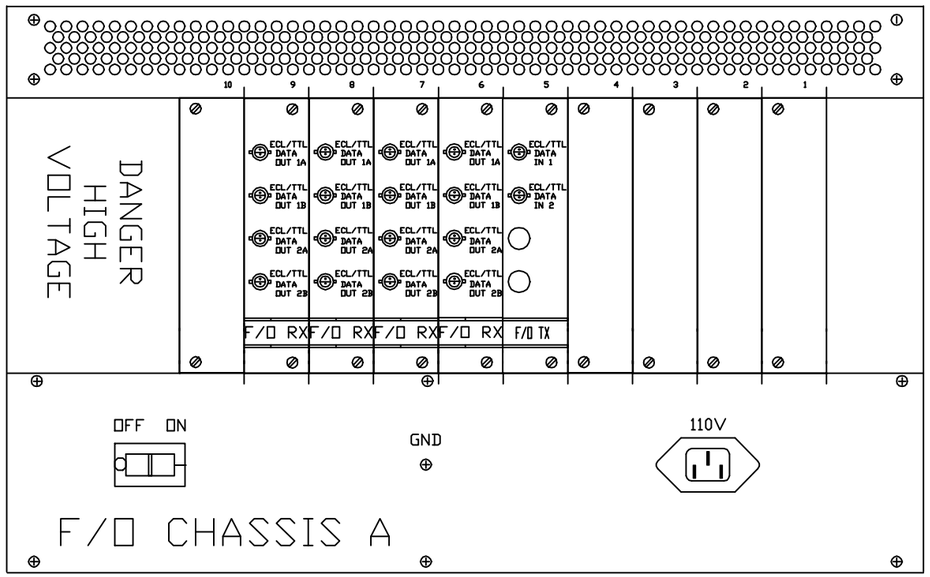
*AUTOCAD

REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

ACS, BNL 10/6/99 8:48 AM 8272.dwg



FRONT VIEW



REAR VIEW

QTY REQD	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MFG. DWG NO./PNL NO.
	1	7	SLOT 7	3U FIBER OPTIC RECEIVER TRANSITION MODULE, ECL	D09-E2541-3
	6	6	ALL UNUSED	3U x 6HP BLANK PANEL (ELECTRO-SPACE ESFE-3032)	X
	3	5	SLOT6,8,9	3U FIBER OPTIC RECEIVER TRANSITION MODULE, TTL	D09-E2542-3
	4	4	SLOT6,7,8,9	3U FIBER OPTIC RECEIVER MODULE, MULTIMODE/SINGLEMODE	94028101
	1	3	SLOT 5	3U FIBER OPTIC TRANSMITTER TRANSITION MODULE, TTL	D09-E2495-3
	1	2	SLOT 5	3U FIBER OPTIC TRANSMITTER MODULE, MULTIMODE	94028168
	1	1	N/A	3U FIBER OPTIC CHASSIS	94028261

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±.030
.XX ±.015
.XXX ±.005
ANGULAR TOLERANCE ± .5'

OUTSTANDING ECN

NA FINISH

BREAK SHARP EDGES
MAX. XX MIN. XX

Q.A. CATEGORY A-3

		DATE
DRAWN BY	Koropsak	9/27/99
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL	R. MICHNOFF	9/27/99
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973
RHIC CONTROLS
ALCOVE 1007W RACK 7B-5
F/O CHASSIS A ASSY.

SIZE D | 94028272 | REV. A

DRAWING NUMBER

MATERIAL: ——— SCALE: NA WEIGHT: – SHEET 1 OF 1

*AUTOCAD

REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

ACS, BNL 9/28/99 1:31 PM 8273.dwg

MATH ASSOCIATES
F/O TRANSMISSION SYSTEM
CHASSIS A

QTY REQD -3	-2	-1	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MATL DWG NO./BNL NO.
		1	SLOT 1	3	FIBER OPTIC DIGITAL RECEIVER (MATH ASSOCIATES)	RD-7430-1
		1	N/A	2	CHASSIS MOUNT ADAPTER PLATE (MATH ASSOCIATES)	AP-2000
		1	N/A	1	3U 10 SLOT CHASSIS WITH INTEGRATED POWER SUPPLY (MATH ASSOCIATES)	MCR1000A

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±.030
.XX ±.015
.XXX ±.005
ANGULAR TOLERANCE ± .5°

NA FINISH

BREAK SHARP EDGES MAX. XX MIN. XX

OUTSTANDING ECN

Q.A. CATEGORY A-3		DATE
DRAWN BY	Koropsak	9/27/99
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL	R. MICHNOFF	9/27/99
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973
RHIC CONTROLS
ALCOVE 1007W RACK 7B-5
MATH ASSOCIATES CHASSIS A ASSY.

SIZE D | 94028273 | REV. A

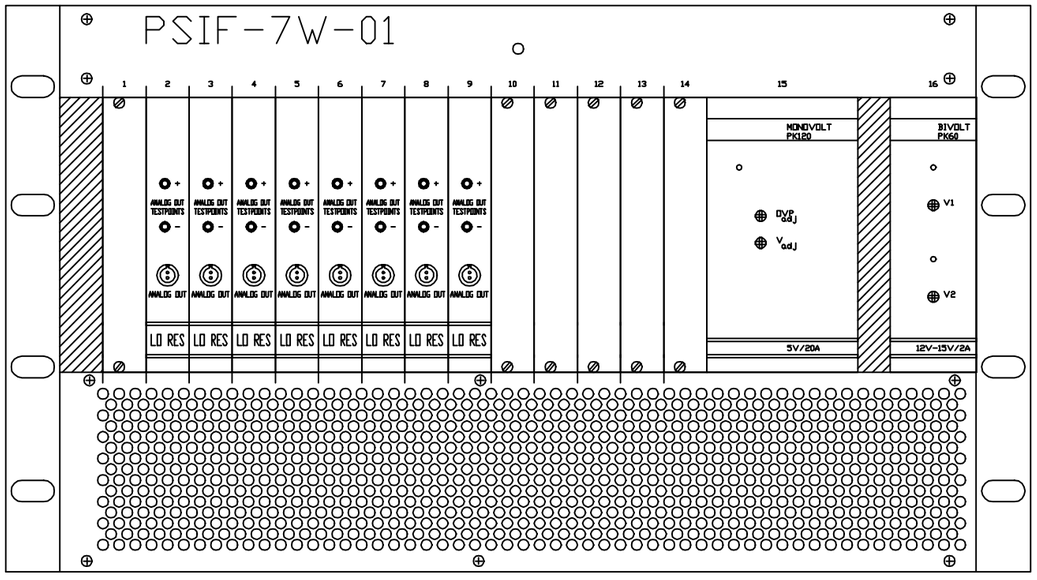
DRAWING NUMBER

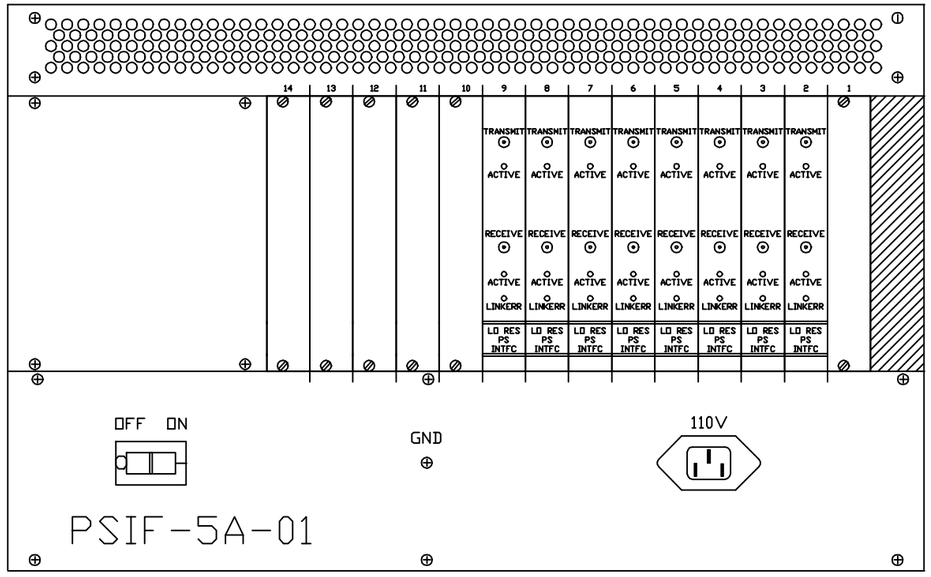
MATERIAL: ——— SCALE: NA WEIGHT: – SHEET 1 OF 1

*AUTOCAD

REV.	ZONE	ECN NO.	DATE	BY	CKR	APP.

ACS, BNL 9/28/99 2:18 PM 8275.dwg





12	SLOT1,10-14	4	3U x 4HP BLANK PANEL (ELECTRO-SPACE)	ESFE3549
8	SLOTS 2-9	3	LO RES PS INTERFACE TRANSITION MODULE	94028198
8	SLOTS 2-9	2	LO RES PS INTERFACE MODULE	94028191
1	N/A	1	3U LO RES POWER SUPPLY INTERFACE CHASSIS	94028262
-3 -2 -1 QTY REQD	REF DESIGNATOR	ITEM NO.	DESCRIPTION	MATL DWG NO./BNL NO.

INTERPRET IN GENERAL ACCORDANCE WITH ASME Y14.24M-1989

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMAL TOLERANCES
.X ±.030
.XX ±.015
.XXX ±.005
ANGULAR TOLERANCE ± .5'

NA FINISH

BREAK SHARP EDGES MAX. XX MIN. XX

OUTSTANDING ECN

Q.A. CATEGORY A-3

DRAWN BY	Koropsak	9/27/99
CHECKED BY		
DESIGN APPROVAL		
ENGINEER APPROVAL	R. MICHNOFF	9/27/99
SUPVR. APPROVAL		

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973
RHIC CONTROLS
ALCOVE 1007W RACK 7C-3
LO RES PS IF CHASSIS A ASSY.

SIZE D | DRAWING NUMBER 94028275 | REV. A

MATERIAL: ——— SCALE: NA WEIGHT: — SHEET 1 OF 1

*AUTOCAD