# RHIC Accelerator Controls Section
# Bldg. 1004B Rack Diagrams
# BNL Drawing Numbers 94028512 to 94028528

Brookhaven National Laboratory, Upton, New York 11973

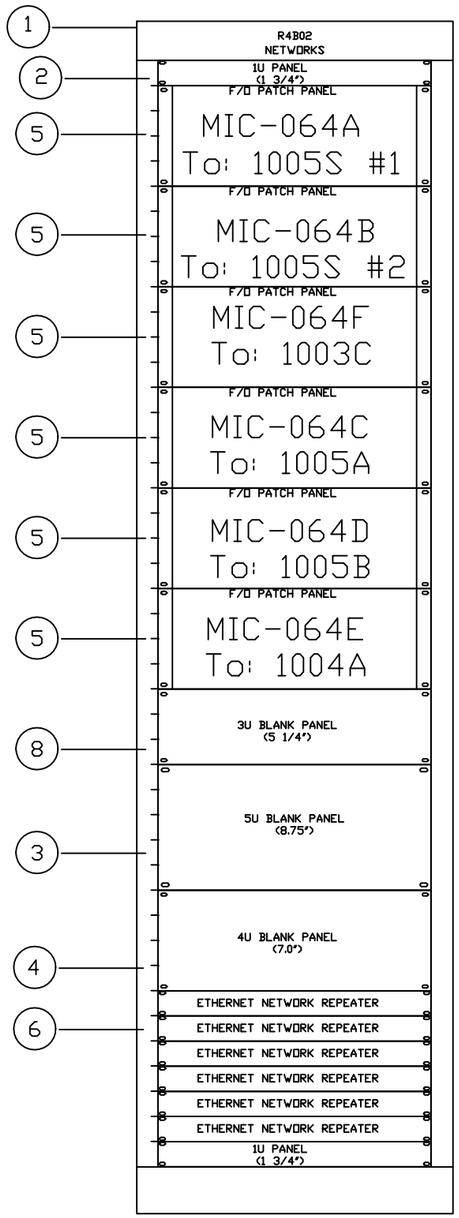
Created By: Ed Koropsak
Edited By: Phil Pape
Last Updated 9/16/2002

**CONTROLS RACKS**

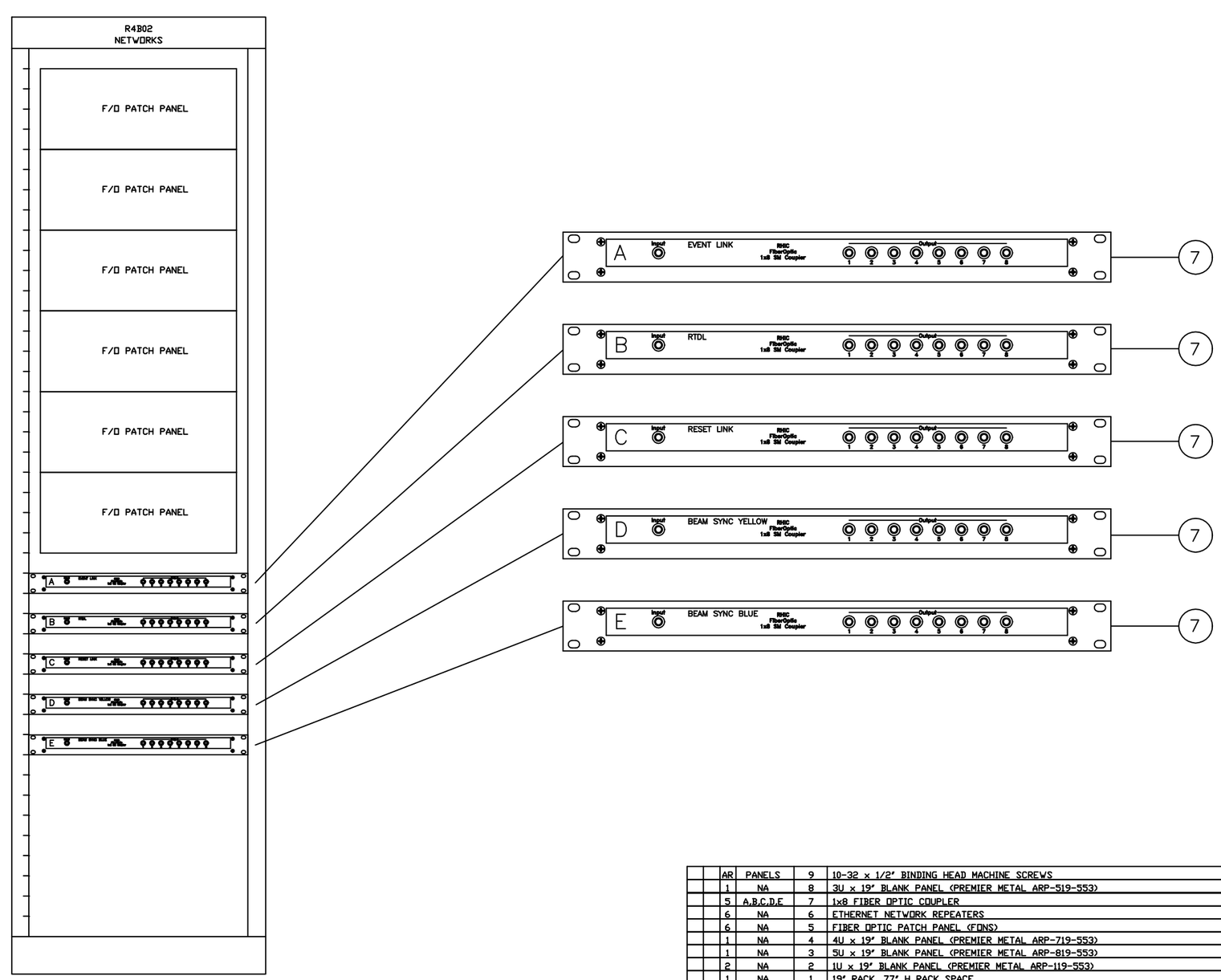
🕮 Rack R4B02 (FIBER PATCH PANELS)
🕮 Rack R4B03 (3U CHASSIS)
🕮 Rack R4B04 (EVENT & TIME CHASSIS)
🕮 Rack R4B05 (RTDL CHASSIS)
🕮 Rack R4B06 (PS4 & PS3)
🕮 Rack R4B07 (PS5 & PS1)
🕮 Rack R4B19 (PS2 & PS6)

| REV. | ZONE | ECN NO. | DATE | BY | CKR | APP. |
|---|---|---|---|---|---|---|

ACS, BNL 10/16/98 11:12 AM8512.dwg




FRONT VIEW




REAR VIEW

| QTY REQD -3 | QTY REQD -2 | QTY REQD -1 | REF DESIGNATOR | ITEM NO. | DESCRIPTION | MAT'L DWG NO.,BNL NO. |
|---|---|---|---|---|---|---|
| | | AR | PANELS | 9 | 10-32 x 1/2" BINDING HEAD MACHINE SCREWS | T-32276 |
| | | 1 | NA | 8 | 3U x 19" BLANK PANEL (PREMIER METAL ARP-519-553) | X |
| | | 5 | A,B,C,D,E | 7 | 1x8 FIBER OPTIC COUPLER | 58030006 |
| | | 6 | NA | 6 | ETHERNET NETWORK REPEATERS | X |
| | | 6 | NA | 5 | FIBER OPTIC PATCH PANEL (FONS) | X |
| | | 1 | NA | 4 | 4U x 19" BLANK PANEL (PREMIER METAL ARP-719-553) | X |
| | | 1 | NA | 3 | 5U x 19" BLANK PANEL (PREMIER METAL ARP-819-553) | X |
| | | 2 | NA | 2 | 1U x 19" BLANK PANEL (PREMIER METAL ARP-119-553) | X |
| | | 1 | NA | 1 | 19" RACK, 77" 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 | Phil Pape | 11/5/97 |
| CHECKED BY | | |
| DESIGN APPROVAL | | |
| ENGINEER APPROVAL | R. MICHNOFF | 11/6/97 |
| SUPVR. APPROVAL | | |

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973

RHIC CONTROLS

SERVICE BLDG. 1004B

RACK R4B02 ASSEMBLY

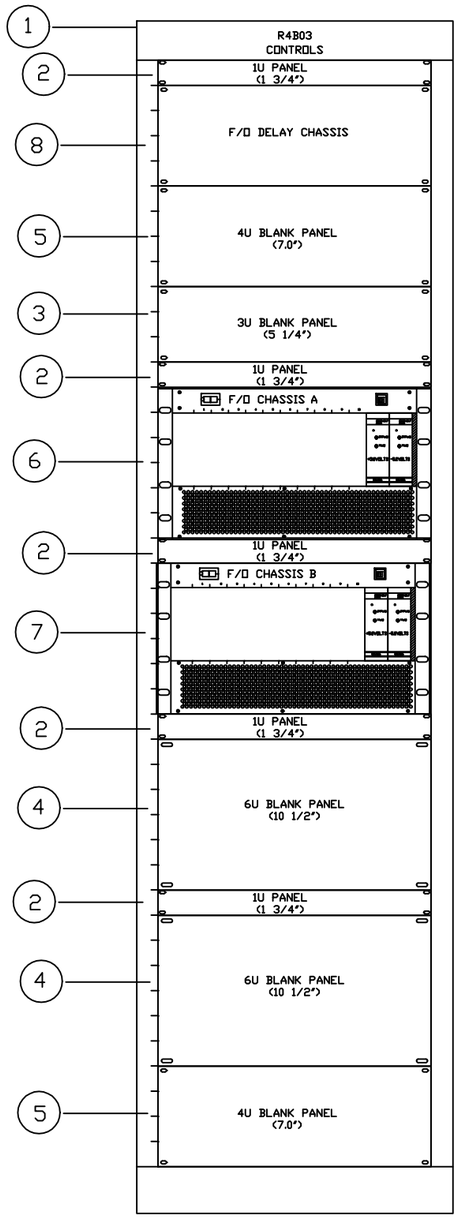
SIZE D | DRAWING NUMBER 94028512 | REV. A

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

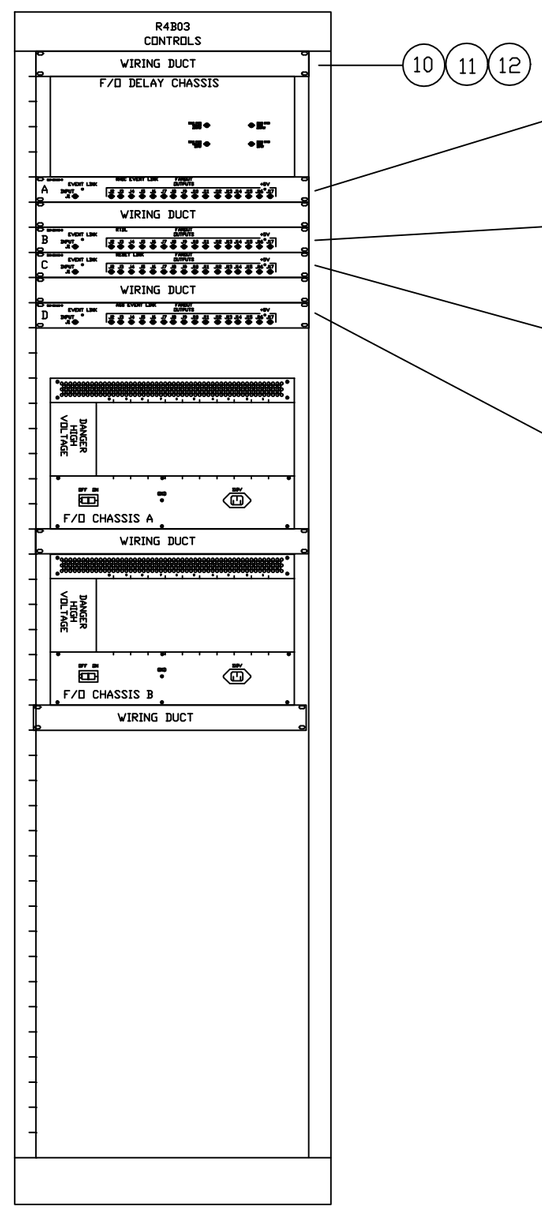
1 *AUTOCAD

| REV. | ZONE | ECN NO. | DATE | BY | CKR | APP. |
|---|---|---|---|---|---|---|

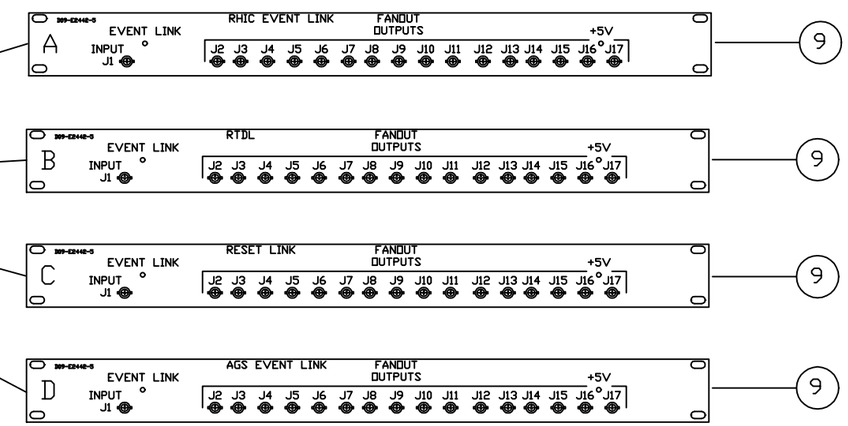
ACS, BNL 10/16/98 11:21 AM8513.dwg




FRONT VIEW




REAR VIEW




| -3 | -2 | -1 | REF DESIGNATOR | ITEM NO. | DESCRIPTION | MAT'L DWG NO.,BNL NO. |
|---|---|---|---|---|---|---|
| | | AR | PANELS | 13 | 10-32 x 1/2" BINDING HEAD MACHINE SCREWS | T-32276 |
| | | 10 | NA | 12 | WIRING DUCT SPRING CLIPS 1.5"W (PANDUIT S1.5-C) | X |
| | | 5 | NA | 11 | WIRING DUCT COVER 1.5"w (PANDUIT C1.5LG6) | X |
| | | 5 | NA | 10 | WIRING DUCT 1.5"W x 4"D (PANDUIT E1.5X4LG6) | X |
| | | 4 | A,B,C,D | 9 | FANOUT ASSEMBLY | DD9-E2442 |
| | | 1 | NA | 8 | FIBER OPTIC DELAY CHASSIS ASSY. | 94028277 |
| | | 1 | NA | 7 | F/O CHASSIS B | 94028519 |
| | | 1 | NA | 6 | F/O CHASSIS A | 94028518 |
| | | 2 | NA | 5 | 4U x 19" BLANK PANEL (PREMIER METAL ARP-719-553) | X |
| | | 2 | NA | 4 | 6U x 19" BLANK PANEL (PREMIER METAL ARP-1019-553) | X |
| | | 1 | NA | 3 | 3U x 19" BLANK PANEL (PREMIER METAL ARP-519-553) | X |
| | | 5 | NA | 2 | 1U x 19" BLANK PANEL (PREMIER METAL ARP-119-553) | X |
| | | 1 | NA | 1 | 19" RACK, 77" 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 | | DATE |
| DRAWN BY | Phil Pape | 11/5/97 |
| CHECKED BY | | |
| DESIGN APPROVAL | | |
| ENGINEER APPROVAL | R. MICHNOFF | 11/6/97 |
| SUPVR. APPROVAL | | |
| NEXT ASSEMBLY | | |

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973

RHIC CONTROLS
SERVICE BLDG. 1004B

RACK R4B03 ASSEMBLY

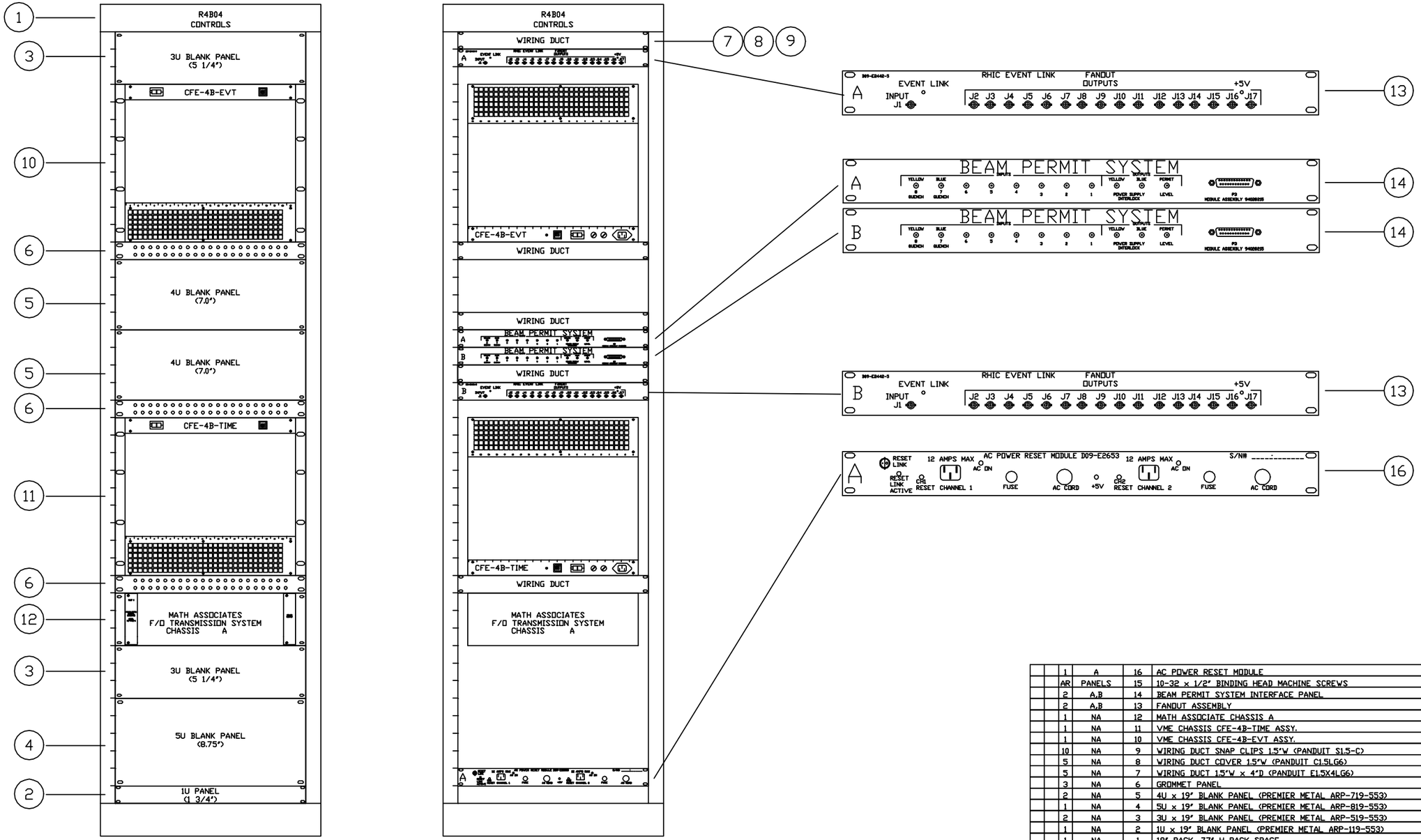
SIZE D — DRAWING NUMBER 94028513 — REV. A

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

1 *AUTOCAD

| REV. | ZONE | ECN NO. | DATE | BY | CKR | APP. |
|---|---|---|---|---|---|---|

BNL, BNL 8/17/00 1:06 PM 8514.dwg




| QTY REQD -3 | QTY REQD -2 | QTY REQD -1 | REF DESIGNATOR | ITEM NO. | DESCRIPTION | MAT'L DWG NO./BNL NO. |
|---|---|---|---|---|---|---|
| | | 1 | A | 16 | AC POWER RESET MODULE | D09-E2653 |
| | | AR | PANELS | 15 | 10-32 x 1/2" BINDING HEAD MACHINE SCREWS | T-32276 |
| | | 2 | A,B | 14 | BEAM PERMIT SYSTEM INTERFACE PANEL | 94028215 |
| | | 2 | A,B | 13 | FANOUT ASSEMBLY | D09-E2442 |
| | | 1 | NA | 12 | MATH ASSOCIATE CHASSIS A | 94028719 |
| | | 1 | NA | 11 | VME CHASSIS CFE-4B-TIME ASSY. | 94028521 |
| | | 1 | NA | 10 | VME CHASSIS CFE-4B-EVT ASSY. | 94028520 |
| | | 10 | NA | 9 | WIRING DUCT SNAP CLIPS 1.5"W (PANDUIT S1.5-C) | X |
| | | 5 | NA | 8 | WIRING DUCT COVER 1.5"W (PANDUIT C1.5LG6) | X |
| | | 5 | NA | 7 | WIRING DUCT 1.5"W x 4"D (PANDUIT E1.5X4LG6) | X |
| | | 3 | NA | 6 | GROMMET PANEL | 94028410 |
| | | 2 | NA | 5 | 4U x 19" BLANK PANEL (PREMIER METAL ARP-719-553) | X |
| | | 1 | NA | 4 | 5U x 19" BLANK PANEL (PREMIER METAL ARP-819-553) | X |
| | | 2 | NA | 3 | 3U x 19" BLANK PANEL (PREMIER METAL ARP-519-553) | X |
| | | 1 | NA | 2 | 1U x 19" BLANK PANEL (PREMIER METAL ARP-119-553) | X |
| | | 1 | NA | 1 | 19" RACK, 77" 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

| | | DATE |
|---|---|---|
| DRAWN BY | Phil Pape | 11/7/97 |
| CHECKED BY | | |
| DESIGN APPROVAL | | |
| ENGINEER APPROVAL | R. MICHNOFF | 11/7/97 |
| SUPVR. APPROVAL | | |

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973

RHIC CONTROLS

SERVICE BLDG. 1004B

RACK R4B04 ASSEMBLY

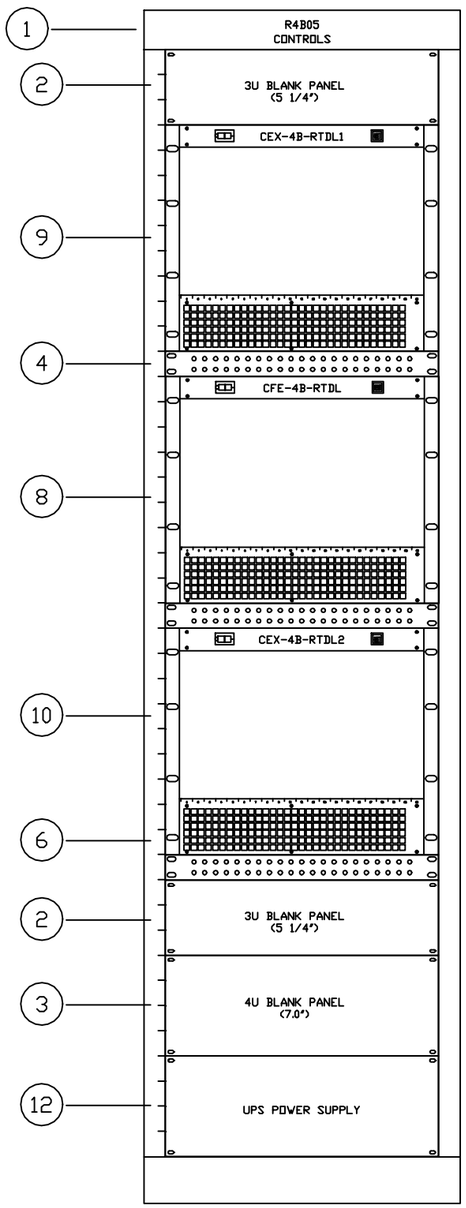
SIZE D | DRAWING NUMBER 94028514 | REV. A

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

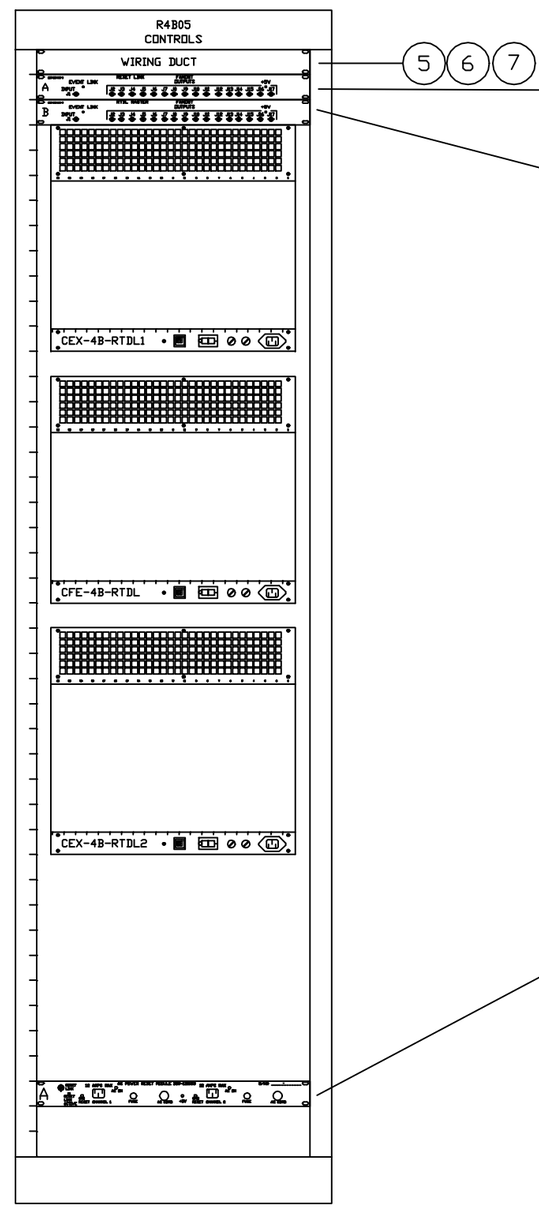
*AUTOCAD

| REV. | ZONE | ECN NO. | DATE | BY | CKR | APP. |
|---|---|---|---|---|---|---|

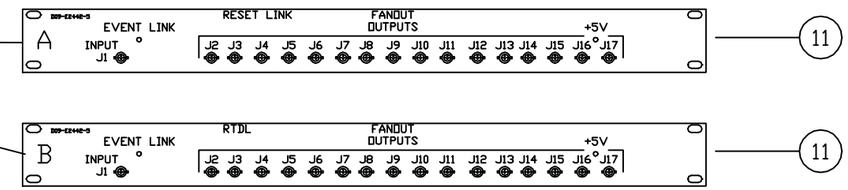
BNL, BNL 8/17/00 1:10 PM 8515.dwg




FRONT VIEW

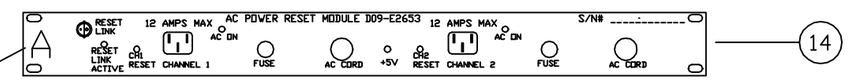



REAR VIEW










| QTY REQD -3 | QTY REQD -2 | QTY REQD -1 | REF DESIGNATOR | ITEM NO. | DESCRIPTION | MAT'L DWG NO./BNL NO. |
|---|---|---|---|---|---|---|
| | | 1 | A | 14 | AC POWER RESET MODULE | D09-E2653 |
| | | AR | PANELS | 13 | 10-32 x 1/2" BINDING HEAD MACHINE SCREWS | T-32276 |
| | | 1 | NA | 12 | UPS POWER SUPPLY | X |
| | | 2 | A,B | 11 | FANOUT ASSEMBLY | D09-E2442 |
| | | 1 | NA | 10 | VME CHASSIS CEX-4B-RTDL2 ASSY. | 94028524 |
| | | 1 | NA | 9 | VME CHASSIS CEX-4B-RTDL1 ASSY. | 94028523 |
| | | 1 | NA | 8 | VME CHASSIS CFE-4B-RTDL ASSY. | 94028522 |
| | | 2 | NA | 7 | WIRING DUCT SNAP CLIPS 1.5"W (PANDUIT S1.5-C) | X |
| | | 1 | NA | 6 | WIRING DUCT COVER 1.5"W (PANDUIT C1.5LG6) | X |
| | | 1 | NA | 5 | WIRING DUCT 1.5"W x 4"D (PANDUIT E1.5X4LG6) | X |
| | | 3 | NA | 4 | GROMMET PANEL | 94028410 |
| | | 1 | NA | 3 | 4U x 19" BLANK PANEL (PREMIER METAL ARP-719-553) | X |
| | | 2 | NA | 2 | 3U x 19" BLANK PANEL (PREMIER METAL ARP-519-553) | X |
| | | 1 | NA | 1 | 19" RACK, 77" 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 | Phil Pape | 11/21/97 |
| CHECKED BY | | |
| DESIGN APPROVAL | | |
| ENGINEER APPROVAL | R. MICHNOFF | 11/21/97 |
| SUPVR. APPROVAL | | |

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973

RHIC CONTROLS

SERVICE BLDG. 1004B

RACK R4B05 ASSEMBLY

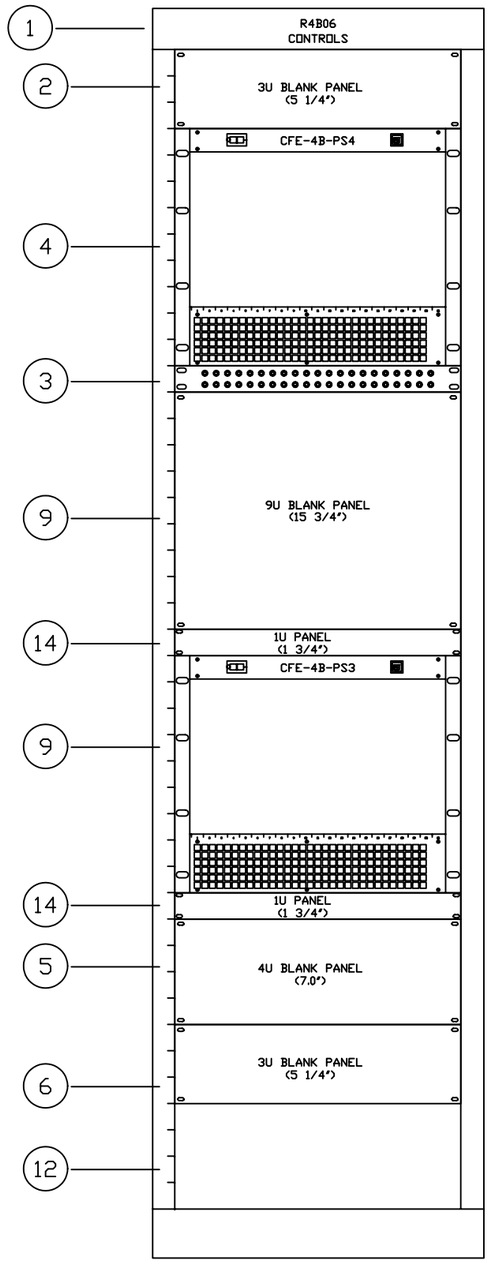
SIZE D | DRAWING NUMBER 94028515 | REV. A

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

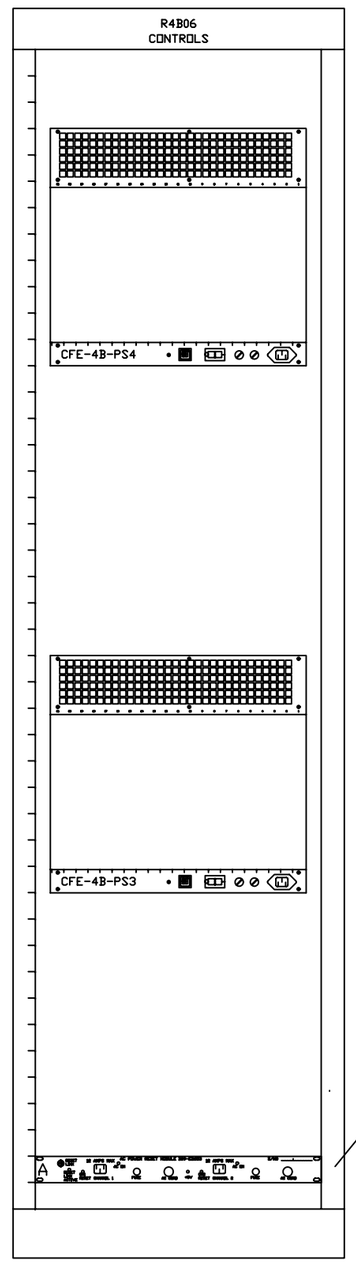
*AUTOCAD

| REV. | ZONE | ECN NO. | DATE | BY | CKR | APP. |
|---|---|---|---|---|---|---|

Phil Pape, Controls Division 9/16/2002 11:17 AM 8515a.dwg

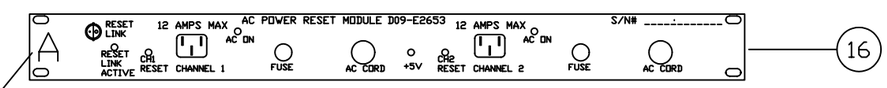



FRONT VIEW




REAR VIEW

THIS IS USED FOR PS1 & PS3 IN R4B07




| -3 | -2 | -1 | REF DESIGNATOR | ITEM NO. | DESCRIPTION | MAT'L DWG NO.,BML NO. |
|---|---|---|---|---|---|---|
| | | 1 | A | 16 | AC POWER RESET MODULE | D09-E2653 |
| | | AR | PANELS | 15 | 10-32 x 1/2" BINDING HEAD MACHINE SCREWS | T-32276 |
| | | 2 | NA | 14 | 1U x 19" BLANK PANEL (PREMIER METAL ARP-119-553) | |
| | | - | | 13 | | |
| | | - | | 12 | | |
| | | - | | 11 | | |
| | | - | | 10 | | |
| | | X | X | X | X | X |
| | | - | | 8 | | |
| | | - | | 7 | | |
| | | | | 6 | | |
| | | 1 | NA | 5 | 4U x 19" BLANK PANEL (PREMIER METAL APR-719-553) | |
| | | 2 | NA | 4 | VME CHASSIS CFE-4B-PS4, CFE-4B-PS3 | 94028527 |
| | | 1 | NA | 3 | GROMMET PANEL | 94028410 |
| | | 2 | NA | 2 | 3U x 19" BLANK PANEL (PREMIER METAL ARP-519-553) | X |
| | | 1 | NA | 1 | 19" RACK, 77" 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

| | | DATE |
|---|---|---|
| DRAWN BY | PAPE | 9/16/2002 |
| CHECKED BY | | |
| DESIGN APPROVAL | | |
| ENGINEER APPROVAL | R. MICHNOFF | |
| SUPVR. APPROVAL | | |

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973

RHIC CONTROLS

SERVICE BLDG. 1004B

RACK R4B06 ASSEMBLY

SIZE D

94028515A
DRAWING NUMBER

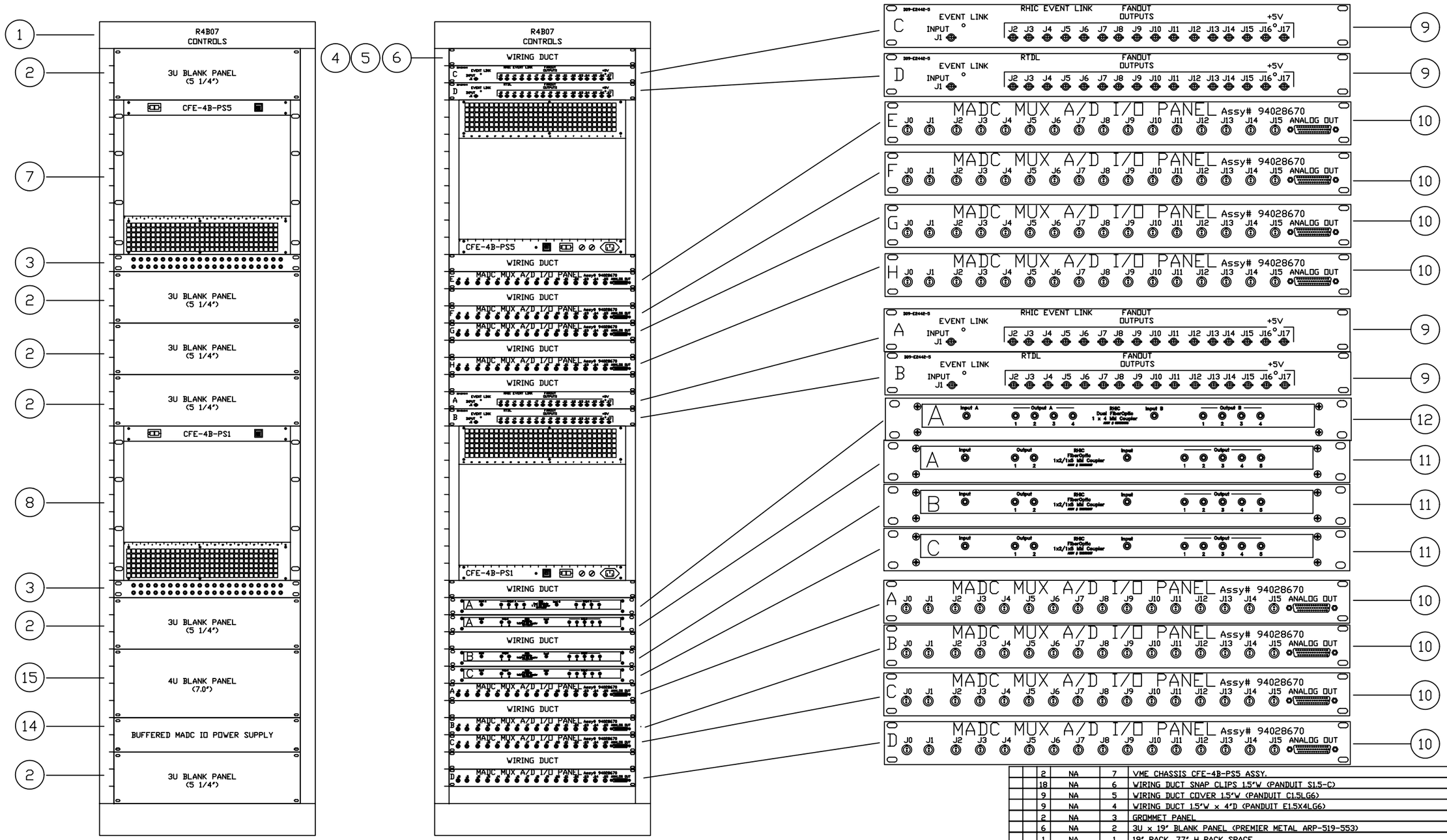
REV. A

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

*AUTOCAD

| REV. | ZONE | ECN NO. | DATE | BY | CKR | APP. |
|---|---|---|---|---|---|---|

Bill Venegas, BNL 8/29/2002 2:19 PM 8516.dwg




| QTY REQD -3 | QTY REQD -2 | QTY REQD -1 | REF DESIGNATOR | ITEM NO. | DESCRIPTION | MAT'L DWG NO.,SPNL NO. |
|---|---|---|---|---|---|---|
| | | 2 | NA | 7 | VME CHASSIS CFE-4B-PS5 ASSY. | 94028525 |
| | | 18 | NA | 6 | WIRING DUCT SNAP CLIPS 1.5"W (PANDUIT S1.5-C) | X |
| | | 9 | NA | 5 | WIRING DUCT COVER 1.5"W (PANDUIT C1.5LG6) | X |
| | | 9 | NA | 4 | WIRING DUCT 1.5"W x 4"D (PANDUIT E1.5X4LG6) | X |
| | | 2 | NA | 3 | GROMMET PANEL | 94028410 |
| | | 6 | NA | 2 | 3U x 19" BLANK PANEL (PREMIER METAL ARP-519-553) | X |
| | | 1 | NA | 1 | 19" RACK, 77" H RACK SPACE | X |
| | | 1 | NA | 15 | 4U x 19" BLANK PANEL (PREMIER METAL APR-719-553) | X |
| | | 1 | NA | 14 | MADC POWER SUPPLY | 94028808 |
| | | AR | PANELS | 13 | 10-32 x 1/2" BINDING HEAD MACHINE SCREWS | T-32276 |
| | | 1 | A | 12 | DUAL 1 x 4 MM COUPLER | 58030008 |
| | | 3 | A,B,C | 11 | 1x2/1x5 MM COUPLER | 58030007 |
| | | 8 | A-H | 10 | BUFFERED MADC A/D I/O PANEL | 94028670 |
| | | 4 | A,B,C,D | 9 | FANOUT ASSEMBLY | D09-E2442 |
| | | 1 | NA | 8 | VME CHASSIS CFE-4B-PS1 ASSY. | 94028526 |

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 | 10/26/98 |
| CHECKED BY | | |
| DESIGN APPROVAL | | |
| ENGINEER APPROVAL | R. MICHNOFF | 10/26/98 |
| SUPVR. APPROVAL | | |

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973

RHIC CONTROLS

SERVICE BLDG. 1004B

RACK R4B07 ASSEMBLY

SIZE D

94028516 DRAWING NUMBER

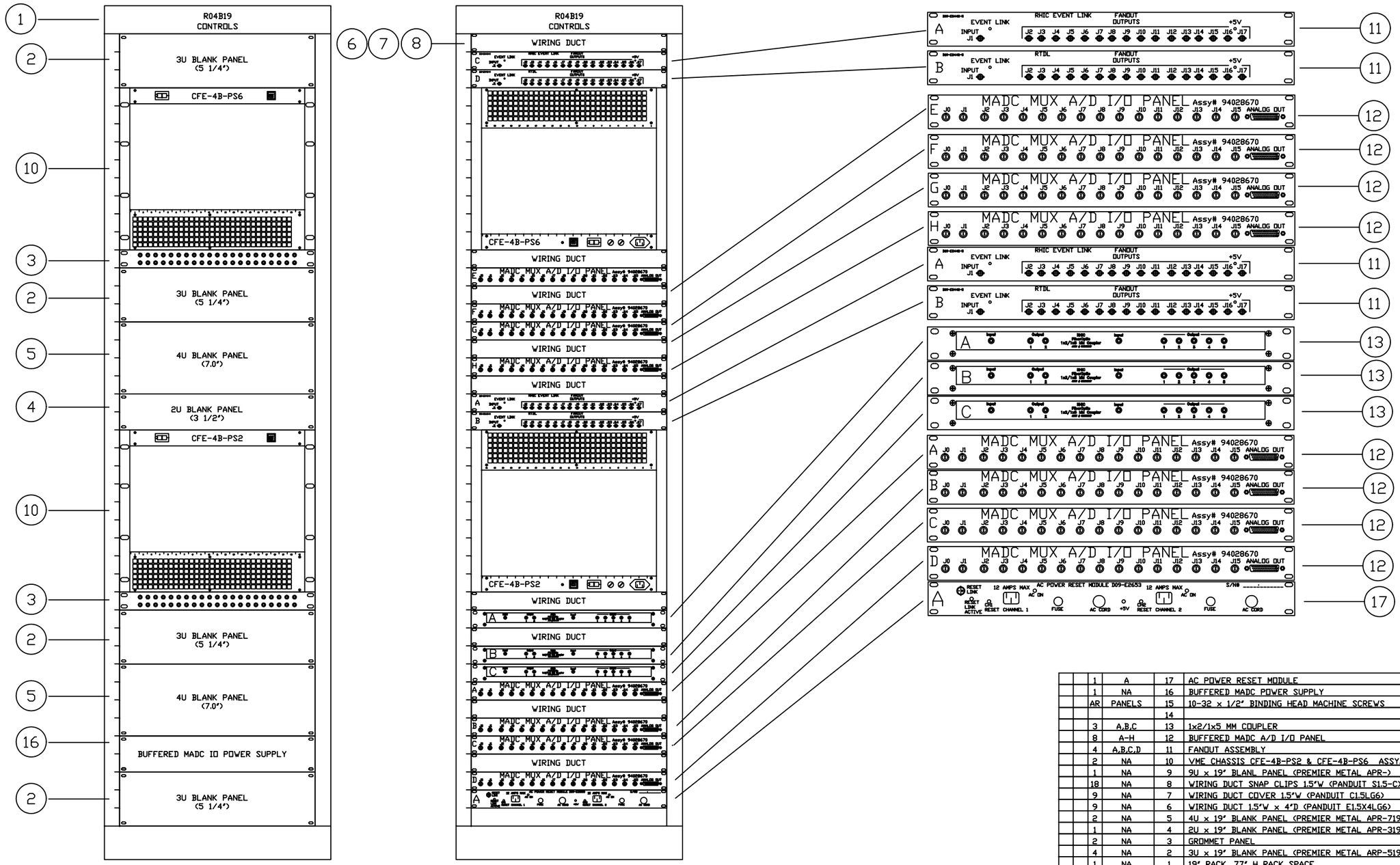
REV. A

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

1 *AUTOCAD

| REV. | ZONE | ECN NO. | DATE | BY | CKR | APP. |
|---|---|---|---|---|---|---|

Bill Venegas, BNL 8/29/2002 2:29 PM 8517.dwg




| QTY REQD -3 | QTY REQD -2 | QTY REQD -1 | REF DESIGNATOR | ITEM NO. | DESCRIPTION | MAT'L DWG NO.,BNL NO. |
|---|---|---|---|---|---|---|
| | | 1 | A | 17 | AC POWER RESET MODULE | D09-E2653 |
| | | 1 | NA | 16 | BUFFERED MADC POWER SUPPLY | 94028808 |
| | | AR | PANELS | 15 | 10-32 x 1/2" BINDING HEAD MACHINE SCREWS | T-32276 |
| | | | | 14 | | |
| | | 3 | A,B,C | 13 | 1x2/1x5 MM COUPLER | 58030007 |
| | | 8 | A-H | 12 | BUFFERED MADC A/D I/O PANEL | 94028670 |
| | | 4 | A,B,C,D | 11 | FANOUT ASSEMBLY | D09-E2442 |
| | | 2 | NA | 10 | VME CHASSIS CFE-4B-PS2 & CFE-4B-PS6 ASSY. | 94028528 |
| | | 1 | NA | 9 | 9U x 19" BLANL PANEL (PREMIER METAL APR-) | |
| | | 18 | NA | 8 | WIRING DUCT SNAP CLIPS 1.5"W (PANDUIT S1.5-C) | X |
| | | 9 | NA | 7 | WIRING DUCT COVER 1.5"W (PANDUIT C1.5LG6) | X |
| | | 9 | NA | 6 | WIRING DUCT 1.5"W x 4"D (PANDUIT E1.5X4LG6) | X |
| | | 2 | NA | 5 | 4U x 19" BLANK PANEL (PREMIER METAL APR-719-553) | |
| | | 1 | NA | 4 | 2U x 19" BLANK PANEL (PREMIER METAL APR-319-553) | |
| | | 2 | NA | 3 | GROMMET PANEL | 94028410 |
| | | 4 | NA | 2 | 3U x 19" BLANK PANEL (PREMIER METAL ARP-519-553) | X |
| | | 1 | NA | 1 | 19" RACK, 77" 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 | Ed Koropsak | 10/26/98 |
| CHECKED BY | | |
| DESIGN APPROVAL | | |
| ENGINEER APPROVAL | R. MICHNOFF | 10/26/98 |
| SUPVR. APPROVAL | | |

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973

RHIC CONTROLS
SERVICE BLDG. 1004B

RACK R04B19 ASSEMBLY

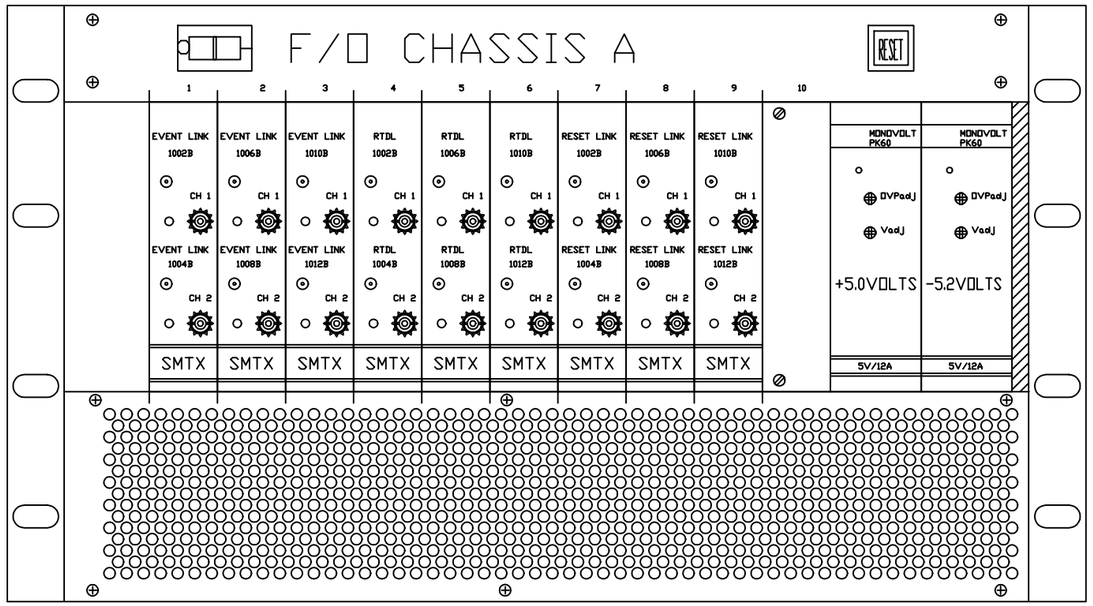
SIZE D — DRAWING NUMBER 94028517 — REV. A

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

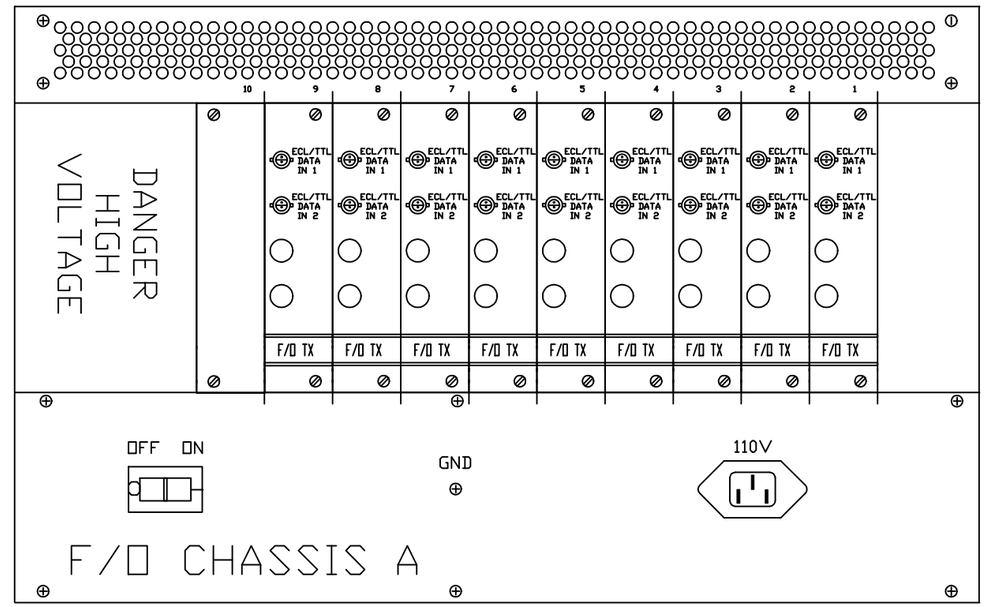
*AUTOCAD

| REV. | ZONE | ECN NO. | DATE | BY | CKR | APP. |
|---|---|---|---|---|---|---|

ACS, BNL10/16/98 11:30 AM8518.dwg




FRONT VIEW




REAR VIEW

| QTY REQD -3 | QTY REQD -2 | QTY REQD -1 | REF DESIGNATOR | ITEM NO. | DESCRIPTION | MAT'L DWG NO.,BNL NO. |
|---|---|---|---|---|---|---|
| | | 2 | ALL UNUSED | 4 | 3U x 6HP BLANK PANEL (ELECTRO SPACE ESFE-3032) | X |
| | | 9 | SLOT 1-9 | 3 | 3U FIBER OPTIC TRANSMITTER TRANSISTION MODULE, TTL | DD9-E2495-3 |
| | | 9 | SLOT 1-9 | 2 | 3U FIBER OPTIC TRANSMITTER MODULE, SINGLEMODE | 94028103 |
| | | 1 | NA | 1 | 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°

NA FINISH

BREAK SHARP EDGES
MAX. XX MIN. XX

OUTSTANDING ECN

Q.A. CATEGORY A-3

| | | DATE |
|---|---|---|
| DRAWN BY | Phil Pape | 11/21/97 |
| CHECKED BY | | |
| DESIGN APPROVAL | | |
| ENGINEER APPROVAL | R. MICHNOFF | 11/21/97 |
| SUPVR. APPROVAL | | |

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973

RHIC CONTROLS

BLDG 1004B RACK R4B03

F/O CHASSIS A ASSY.

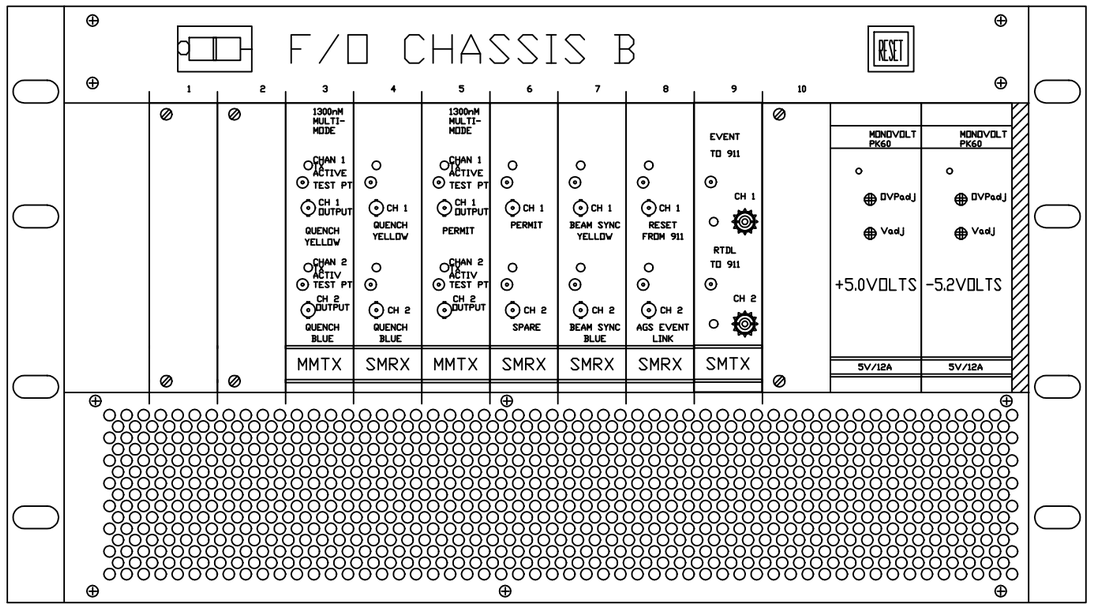
SIZE D | DRAWING NUMBER 94028518 | REV. A

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

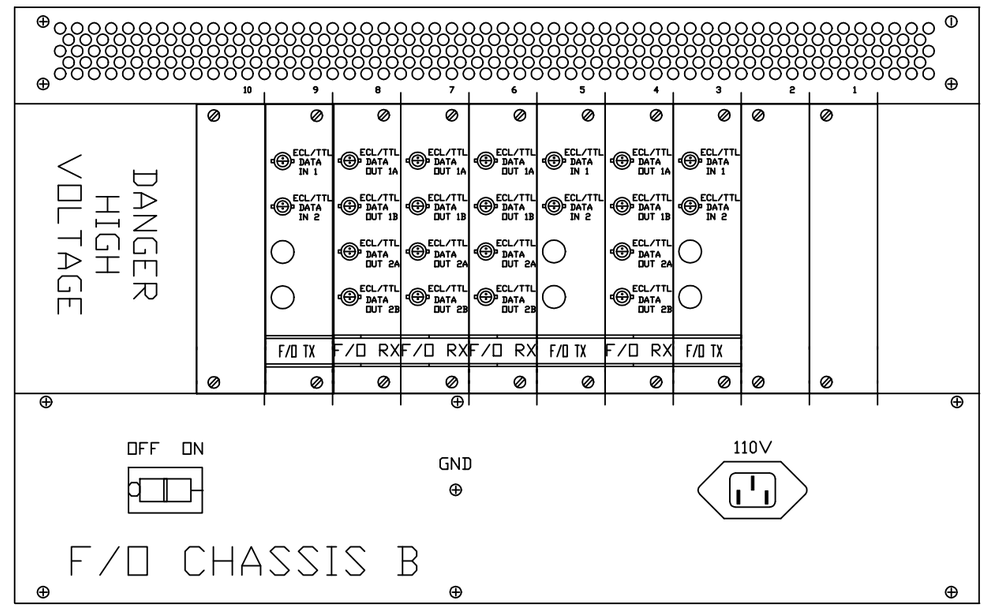
*AUTOCAD

| REV. | ZONE | ECN NO. | DATE | BY | CKR | APP. |
|---|---|---|---|---|---|---|

ACS, BNL 10/16/98 11:32 AM8519.dwg




FRONT VIEW




REAR VIEW

| QTY REQD -3 | QTY REQD -2 | QTY REQD -1 | REF DESIGNATOR | ITEM NO. | DESCRIPTION | MAT'L DWG NO.,BNL NO. |
|---|---|---|---|---|---|---|
| | | 1 | SLOT 9 | 8 | 3U FIBER OPTIC TRANSMITTER MODULE, SINGLEMODE | 94028103 |
| | | 1 | SLOT 7 | 7 | 3U FIBER OPTIC TRANSISTION MODULE, ECL | DD9-E2541-3 |
| | | 8 | ALL UNUSED | 6 | 3U x 6HP BLANK PANEL (ELECTRO SPACE ESFE-3032) | X |
| | | 4 | SLT 4,6,7,8 | 5 | 3U FIBER OPTIC RECEIVER TRANSISTION MODULE, TTL | DD9-E2542-3 |
| | | 4 | SLT 4,6,7,8 | 4 | 3U FIBER OPTIC RECEIVER MODULE, MULTIMODE/SINGLEMODE | 94028101 |
| | | 3 | SLOT 3,5,9 | 3 | 3U FIBER OPTIC TRANSMITTER TRANSISTION MODULE, TTL | DD9-E2495-3 |
| | | 2 | SLOT 3,5 | 2 | 3U FIBER OPTIC TRANSMITTER MODULE, MULTIMODE | 94028168 |
| | | 1 | NA | 1 | 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°

NA FINISH

BREAK SHARP EDGES
MAX. XX MIN. XX

OUTSTANDING ECN

Q.A. CATEGORY A-3

| | | DATE |
|---|---|---|
| DRAWN BY | Phil Pape | 11/21/97 |
| CHECKED BY | | |
| DESIGN APPROVAL | | |
| ENGINEER APPROVAL | R. MICHNOFF | 11/21/97 |
| SUPVR. APPROVAL | | |

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973

RHIC CONTROLS

BLDG 1004B RACK R4B03

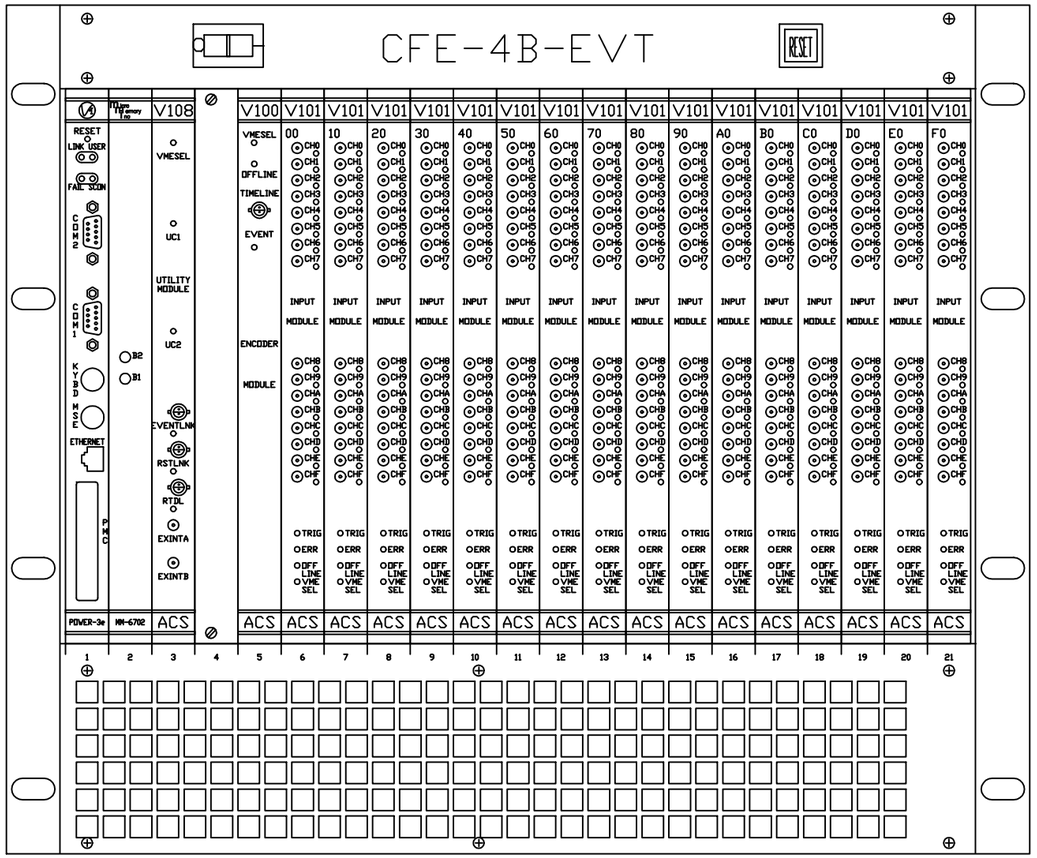
F/O CHASSIS B ASSY.

SIZE D | DRAWING NUMBER 94028519 | REV. A

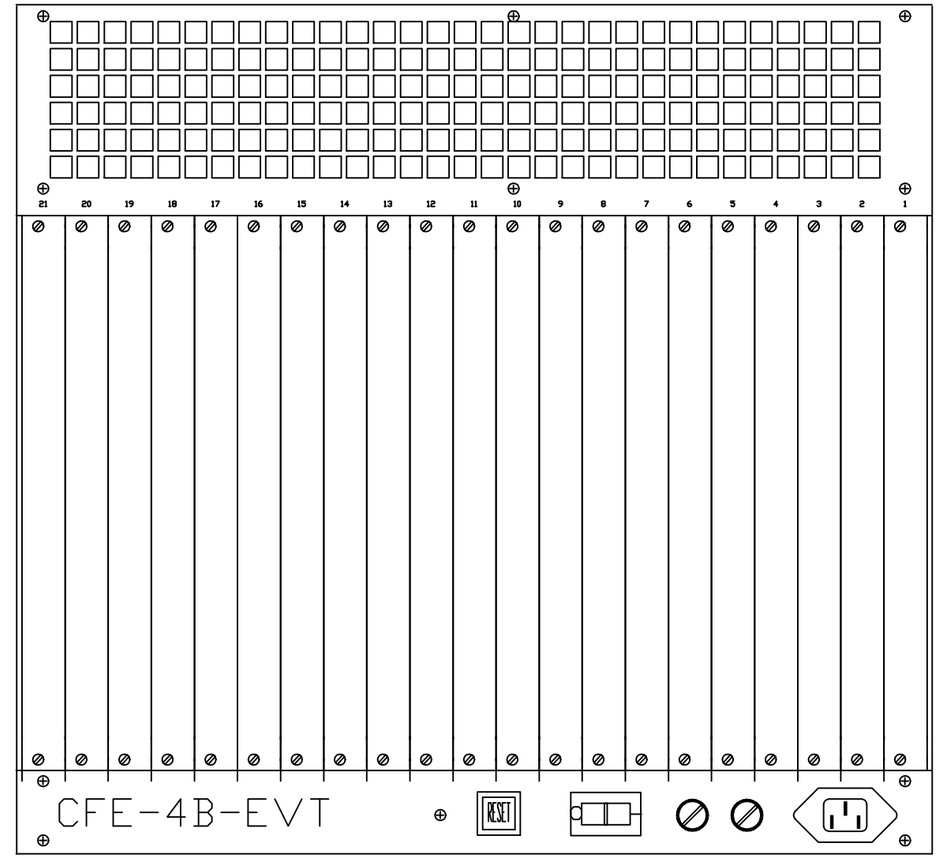
MATERIAL: ——— | SCALE: NA | WEIGHT: – | SHEET 1 OF 1

*AUTOCAD

| REV. | ZONE | ECN NO. | DATE | BY | CKR | APP. |
|---|---|---|---|---|---|---|
| C-A, BNL | | | 3/20/01 11:39 AM | 8520.dwg | | |




FRONT VIEW




REAR VIEW

NOTE:

1. ALL UNUSED SLOTS, FRONT AND REAR

2. SPECIAL P2 BACKPLANE INSTALLED AND NO OTHER BOARDS ARE TO BE USED IN SLOTS 4 TO 21 HARDWARE DAMAGE WILL RESULT!!!

| -3 | -2 | -1 | REF DESIGNATOR | ITEM NO. | DESCRIPTION | MAT'L. DWG NO.,BNL NO. |
|---|---|---|---|---|---|---|
| | | X | | | | |
| | | X | | | | |
| | AR | | SEE NOTE 1 | 8 | VME BLANK PANEL (ELECTRO-SPACE ESFE-2985) | |
| | 1 | | SLOT 2 | 7 | MEMORY BOARD | MM-6702 |
| | 1 | | NOTE 2 | 6 | P2 BACKPLANE | 94028031 |
| | 16 | | SLOTS 6-21 | 5 | V101 EVENT INPUT MODULES | 94028050 |
| | 1 | | SLOT 5 | 4 | V100 EVENT LINE ENCODER | 94028046 |
| | 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 |

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 | | DATE | BROOKHAVEN NATIONAL LABORATORY |
| DRAWN BY | Phil Pape | 11/20/97 | UPTON, N.Y. 11973 |
| CHECKED BY | | | RHIC CONTROLS |
| DESIGN APPROVAL | | | SERVICE BLDG 1004B |
| ENGINEER APPROVAL | R. MICHNOFF | 11/20/97 | VME CHASSIS CFE-4B-EVT |
| SUPVR. APPROVAL | | | 94028520 |
| NEXT ASSEMBLY | | | |

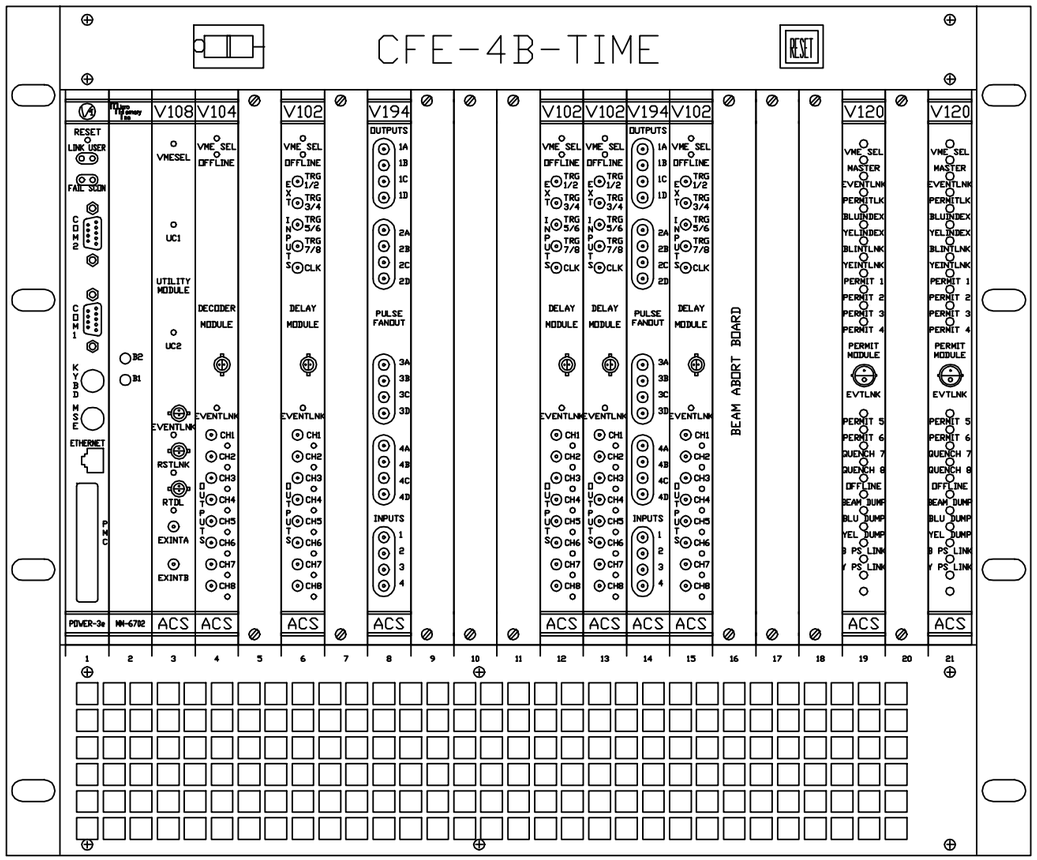
SIZE D — DRAWING NUMBER — REV. A

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

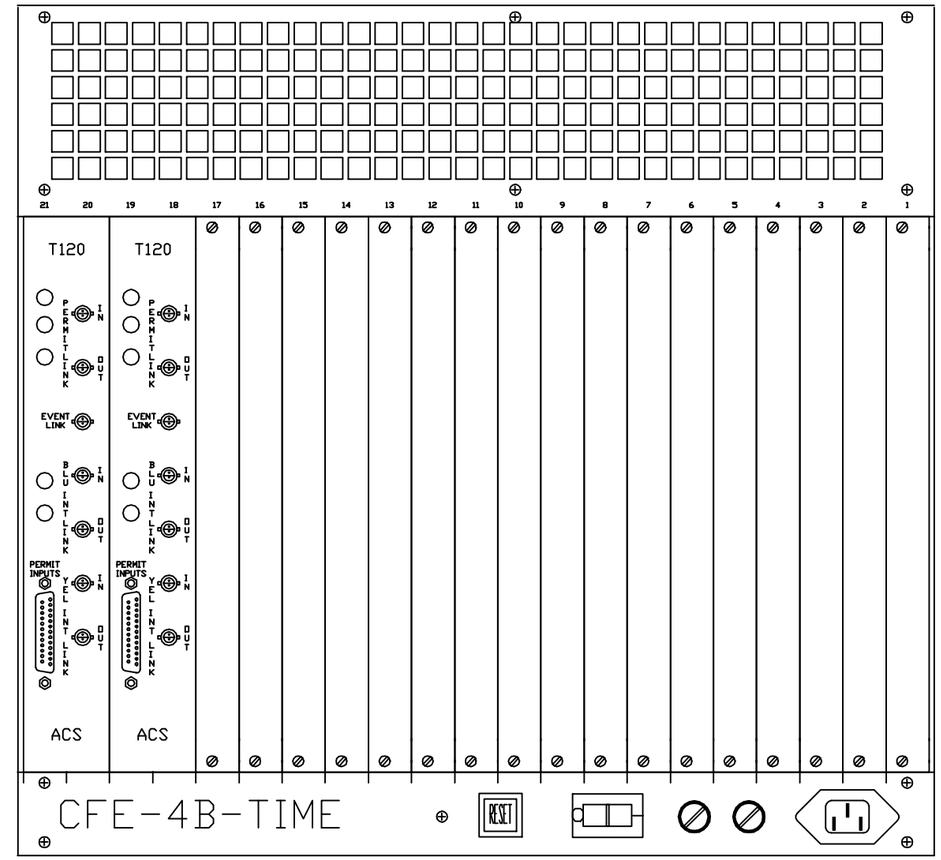
*AUTOCAD

| REV. | ZONE | ECN NO. | DATE | BY | CKR | APP. |
|---|---|---|---|---|---|---|

BNL, BNL 8/17/00 1:16 PM 8521.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 16 | 11 | BEAM ABORT BOARD | ??? |
| | | 2 | SLOT 19,21 | 10 | T120 PERMIT SYSTEM TRANSITION MODULE | 94028199-2 |
| | | 2 | SLOT 19,21 | 9 | V120 PERMIT SYSTEM MODULE | 94028077 |
| | | x | SEE NOTE 1 | 8 | VME BLANK PANEL (ELECTRO-SPACE ESFE-2985) | |
| | | 1 | SLOT 4 | 7 | V104 EVENT DECODER MODULE | 94028175 |
| | | 2 | SLOTS 8,14 | 6 | V194 PULSE FANOUT MODULE | 94028196 |
| | | 4 | SL6,12,13,15 | 5 | V102 DELAY MODULES | 94028072 |
| | | 1 | SLOT 3 | 4 | V108 UTILITY MODULE | 94028094 |
| | | 1 | SLOT 2 | 3 | MEMORY BOARD | MM-6702 |
| | | 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

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 | Phil Pape | 11/20/97 |
| CHECKED BY | | |
| DESIGN APPROVAL | | |
| ENGINEER APPROVAL | R. MICHNOFF | 11/20/97 |
| SUPVR. APPROVAL | | |

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973
RHIC CONTROLS
SERVICE BLDG 1004B

VME CHASSIS CFE-4B-TIME

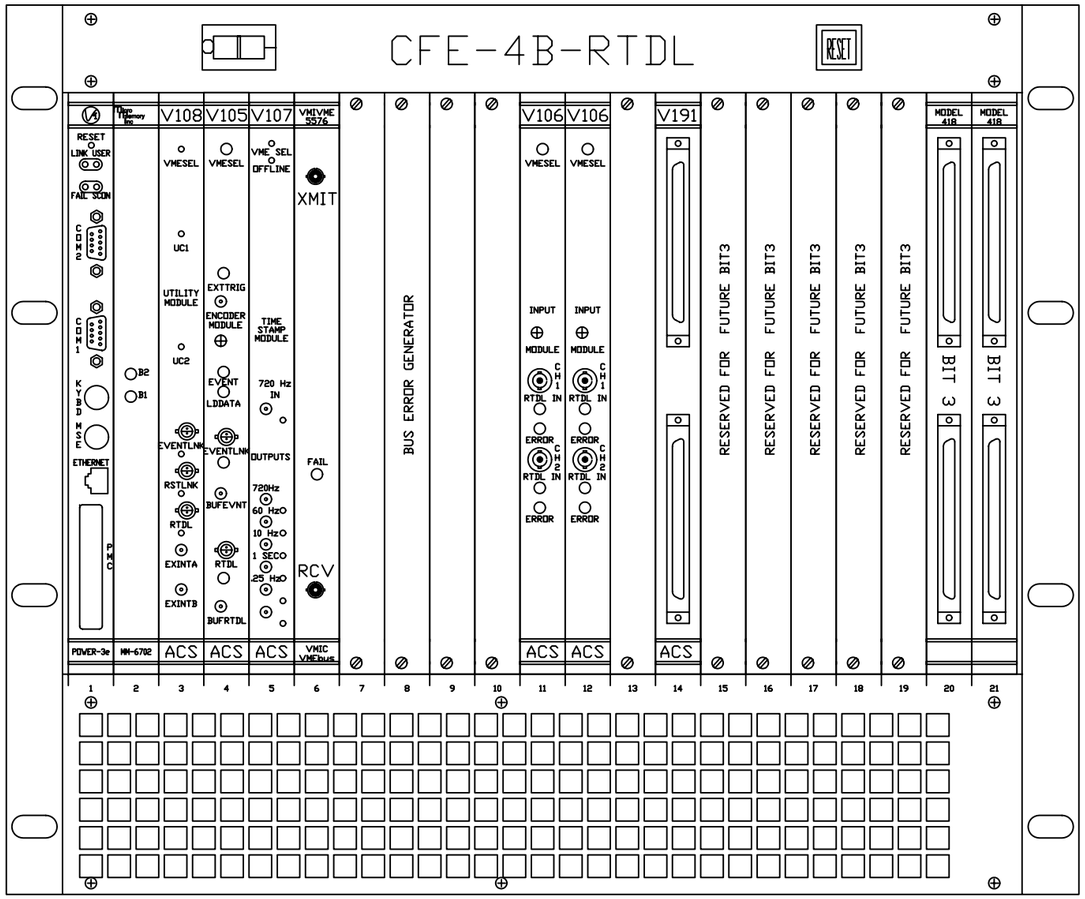
SIZE D | DRAWING NUMBER 94028521 | REV. A

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

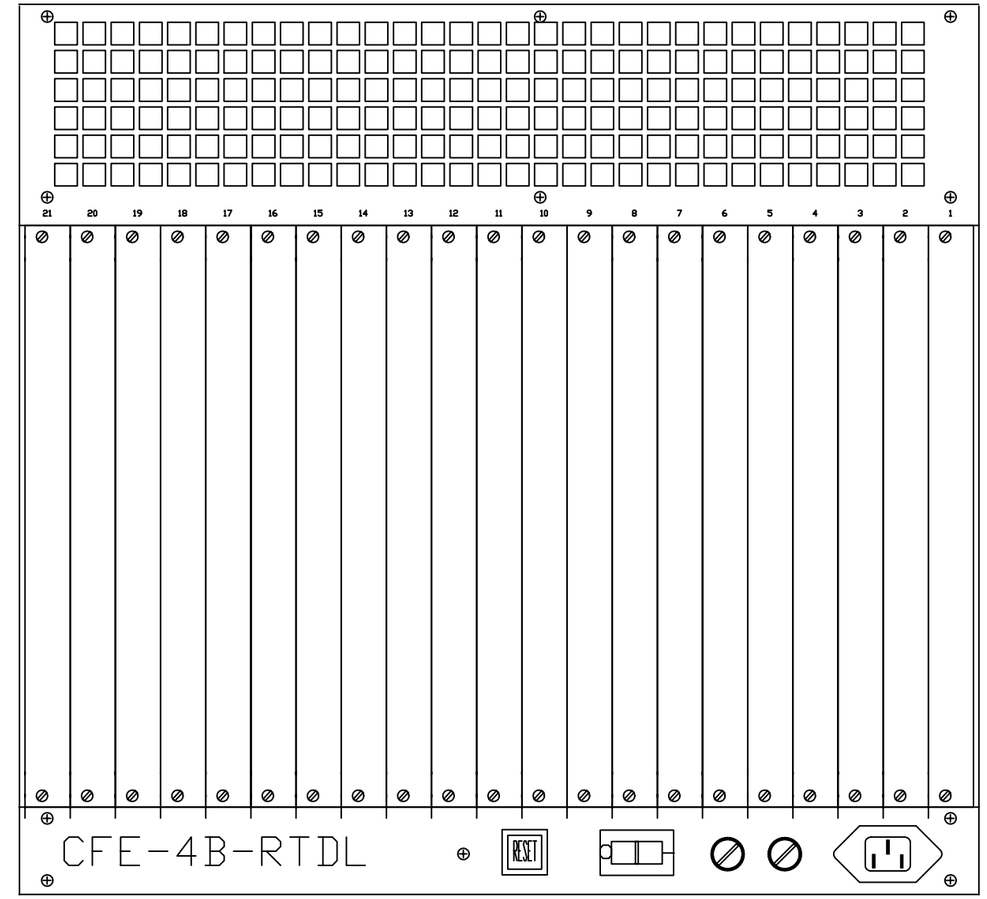
*AUTOCAD

| REV. | ZONE | ECN NO. | DATE | BY | CKR | APP. |
|---|---|---|---|---|---|---|

Phil Pape, Controls Division 9/13/2002 9:10 AM 8522.dwg




FRONT VIEW




REAR VIEW

NOTE:

1. ALL UNUSED SLOTS, FRONT AND REAR

2. SPECIAL P2 BACKPLANE INSTALLED AND NO OTHER BOARDS ARE TO BE USED IN SLOTS 4 TO 21 HARDWARE DAMAGE WILL RESULT!!!

| -3 | -2 | -1 | REF DESIGNATOR | ITEM NO. | DESCRIPTION | MAT'L DWG NO.,BNL NO. |
|---|---|---|---|---|---|---|
| | | 1 | SLOT 6 | 13 | REFLECTIVE MEMORY BOARD | VMIVME 5576 |
| | | 1 | SLOT 8 | 12 | BUS ERROR GENERATOR | ???? |
| | | 1 | NOTE 2 | 11 | RTDL BACLPLANE ASSEMBLY | 94028157 |
| | | x | SEE NOTE 1 | 10 | VME BLANK PANEL (ELECTRO-SPACE ESFE-2985) | |
| | | 1 | SLOT 2 | 9 | MEMORY BOARD | MM-6702 |
| | | 2 | SLOT 20,21 | 8 | BIT 3 BUS EXTENDER | MODEL 418 |
| | | 1 | SLOT 14 | 7 | V191-1 RTDL BUS EXTENDER | 94028409 |
| | | 0 | SLOT 11,12 | 6 | V106 RTDL INPUT MODULE | 94028042 |
| | | 1 | SLOT 4 | 5 | V105 RTDL ENCODER MODULE | 94028068 |
| | | 1 | SLOT 5 | 4 | V107 TIME STAMP MODULE | 94028632 |
| | | 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 WITH RTDL BACKPLANE | 94028XXX |

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

| | | DATE |
|---|---|---|
| DRAWN BY | PAPE | 09/13/2002 |
| CHECKED BY | | |
| DESIGN APPROVAL | | |
| ENGINEER APPROVAL | H. HARTMANN | |
| SUPVR. APPROVAL | | |

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973
RHIC CONTROLS
SERVICE BLDG 1004B
VME CHASSIS CFE-4B-RTDL

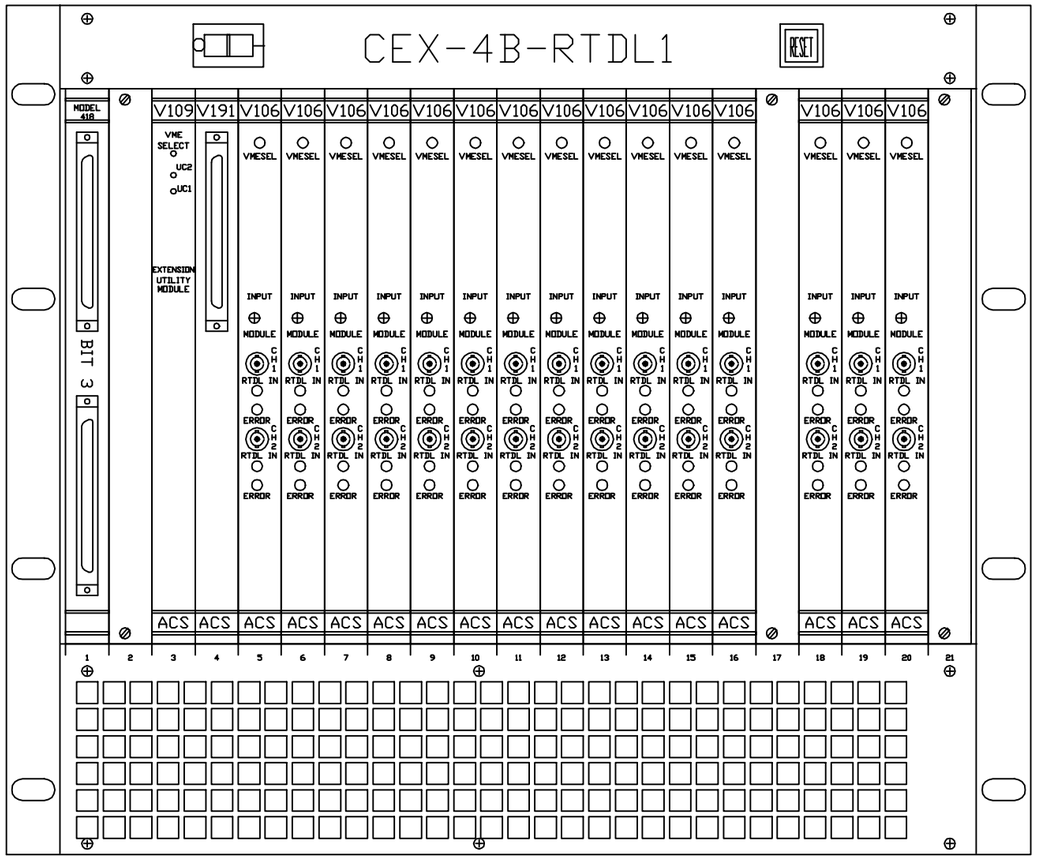
SIZE D | DRAWING NUMBER 94028522 | REV. A

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

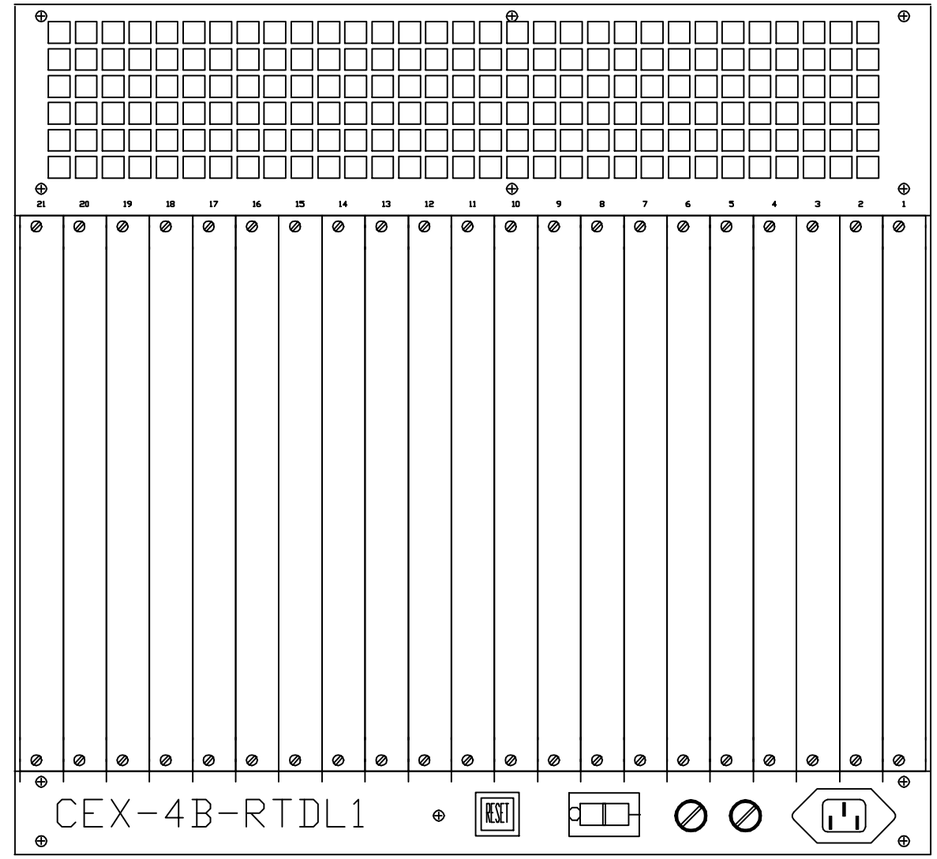
*AUTOCAD

| REV. | ZONE | ECN NO. | DATE | BY | CKR | APP. |
|---|---|---|---|---|---|---|

ACS, BNL 1/28/00 1:26 PM 8523.dwg




FRONT VIEW




REAR VIEW

NOTE:

1. ALL UNUSED SLOTS, FRONT AND REAR

2. SPECIAL P2 BACKPLANE INSTALLED AND NO OTHER BOARDS ARE TO BE USED IN SLOTS 4 TO 21 HARDWARE DAMAGE WILL RESULT!!!

| -3 | -2 | -1 | REF DESIGNATOR | ITEM NO. | DESCRIPTION | MAT'L DWG NO.,BNL NO. |
|---|---|---|---|---|---|---|
| | | x | | | | |
| | | x | | | | |
| | | x | SEE NOTE 1 | 8 | VME BLANK PANEL (ELECTRO-SPACE ESFE-2985) | |
| | | - | | 7 | | |
| | | 1 | NOTE 2 | 6 | RTDL BACKPLANE ASSEMBLY | 94028157 |
| | | 15 | 5-16,18-20 | 5 | V106 RTDL INPUT MODULES REV E OR HIGHER | 9402804 2 |
| | | 1 | SLOT 4 | 4 | V191-2 RTDL BUS EXTENDER | 94028409 |
| | | 1 | SLOT 3 | 3 | V109 UTILITY MODULE | 94028152 |
| | | 1 | SLOT 1 | 2 | BIT 3 BUS EXTENDER | MODEL 418 |
| | | 1 | N/A | 1 | VME CHASSIS RHIC-93008000 WITH RTDL BACKPLANE | 94028XXX |

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 | | DATE |
| DRAWN BY | Ed Koropsak | 9/29/98 |
| CHECKED BY | | |
| DESIGN APPROVAL | | |
| ENGINEER APPROVAL | R. MICHNOFF | 9/28/98 |
| SUPVR. APPROVAL | | |

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973
RHIC CONTROLS
SERVICE BLDG 1004B

# VME CHASSIS CEX-4B-RTDL1

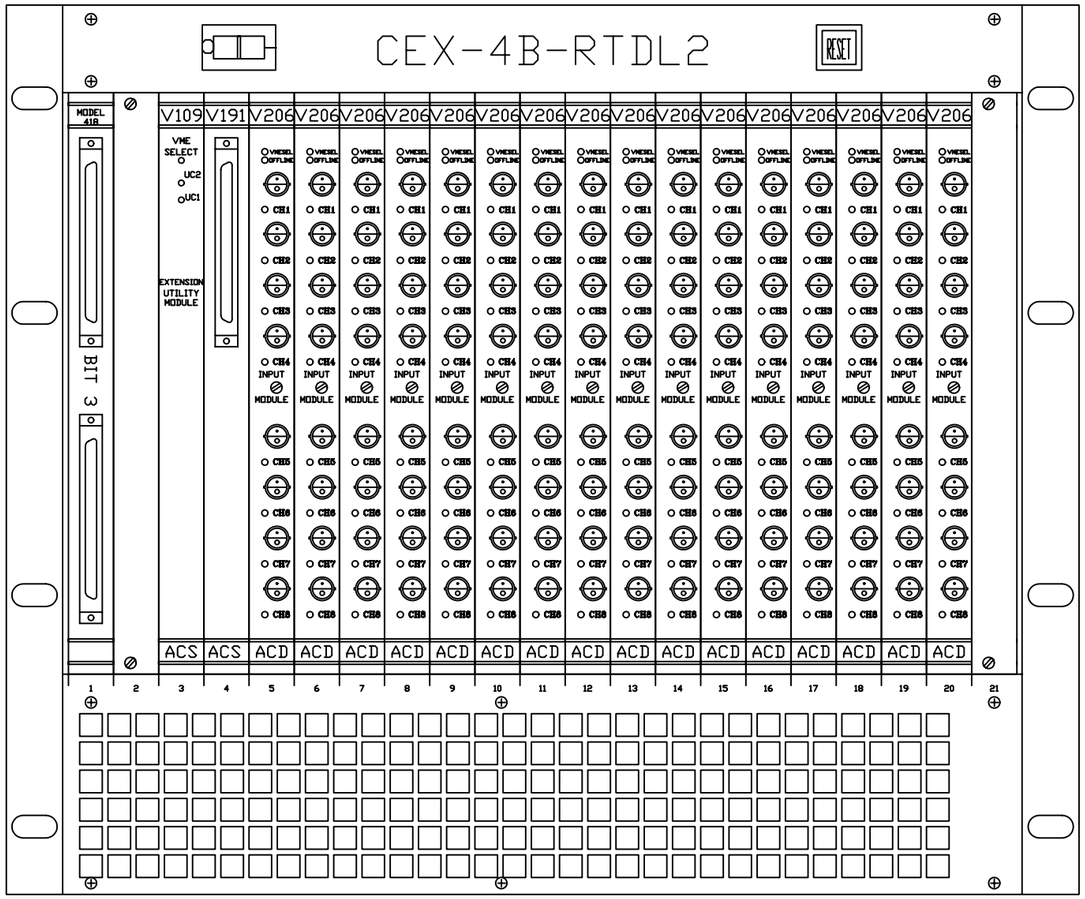
SIZE D | DRAWING NUMBER 94028523 | REV. A

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

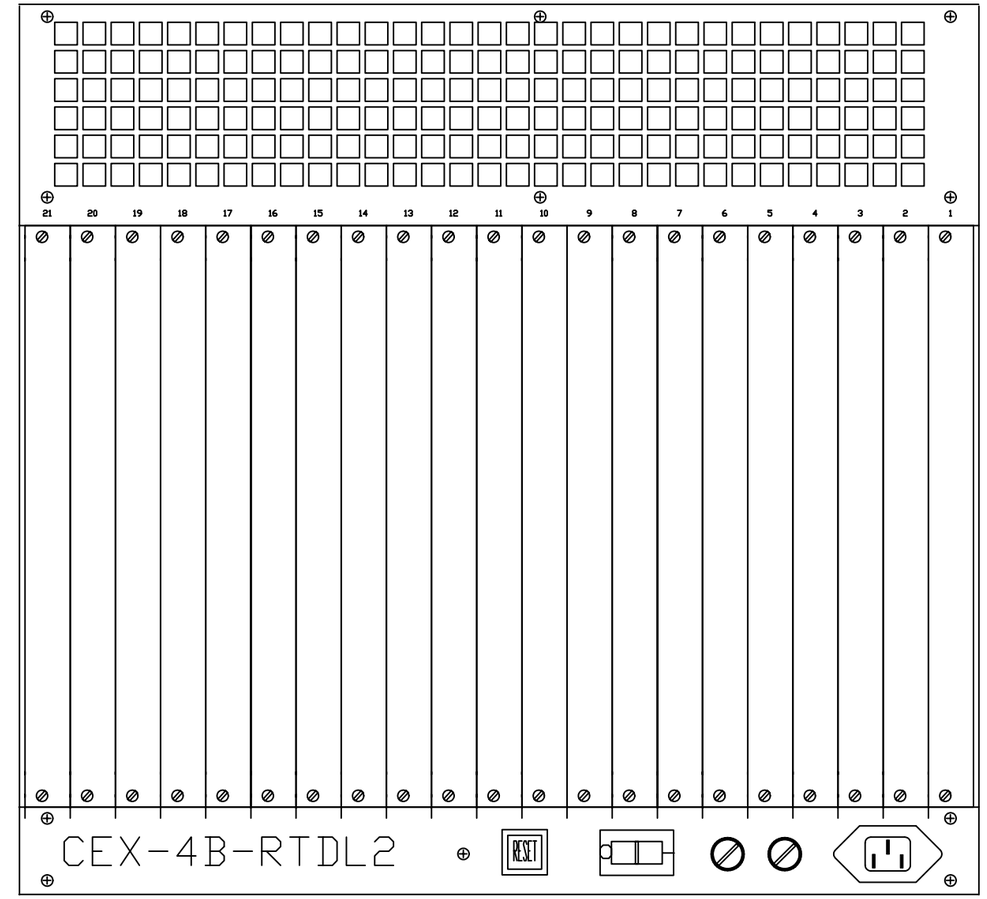
*AUTOCAD

| REV. | ZONE | ECN NO. | DATE | BY | CKR | APP. |
|---|---|---|---|---|---|---|

Phil Pape, Controls Division 9/13/2002 9:24 AM 8524.dwg




FRONT VIEW




REAR VIEW

NOTE:

1. ALL UNUSED SLOTS, FRONT AND REAR

2. SPECIAL P2 BACKPLANE INSTALLED AND NO OTHER BOARDS ARE TO BE USED IN SLOTS 4 TO 21 HARDWARE DAMAGE WILL RESULT!!!

| -3 | -2 | -1 | REF DESIGNATOR | ITEM NO. | DESCRIPTION | MAT'L DWG NO.,BML NO. |
|---|---|---|---|---|---|---|
| | | x | SEE NOTE 1 | 8 | VME BLANK PANEL (ELECTRO-SPACE ESFE-2985) | |
| | | 6 | SLOT 5-20 | 5 | V206 RTDL INPUT MODULES | 94028882 |
| | | 1 | SLOT 4 | 4 | V191-2 RTDL BUS EXTENDER | 94028409 |
| | | 1 | SLOT 3 | 3 | V109 EXTENSION UTILITY MODULE | 94028152 |
| | | 1 | SLOT 1 | 2 | BIT 3 BUS EXTENDER | MODEL 418 |
| | | 1 | N/A | 1 | VME CHASSIS RHIC-93008000 WITH RTDL BACKPLANE | 94028XXX |

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

| | | DATE |
|---|---|---|
| DRAWN BY | PAPE | 09/13/2002 |
| CHECKED BY | | |
| DESIGN APPROVAL | | |
| ENGINEER APPROVAL | H. HARTMANN | |
| SUPVR. APPROVAL | | |

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973

RHIC CONTROLS
SERVICE BLDG 1004B

VME CHASSIS CEX-4B-RTDL2

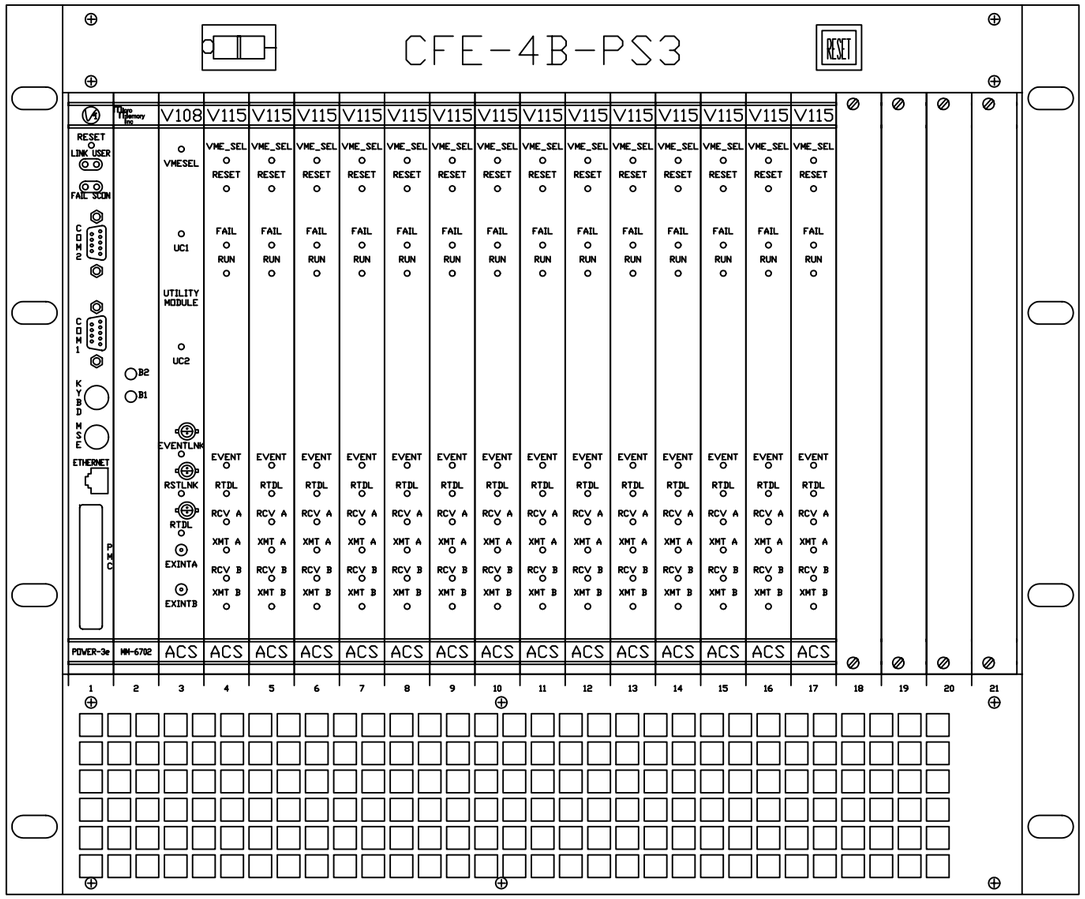
SIZE D
DRAWING NUMBER 94028524
REV. A

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

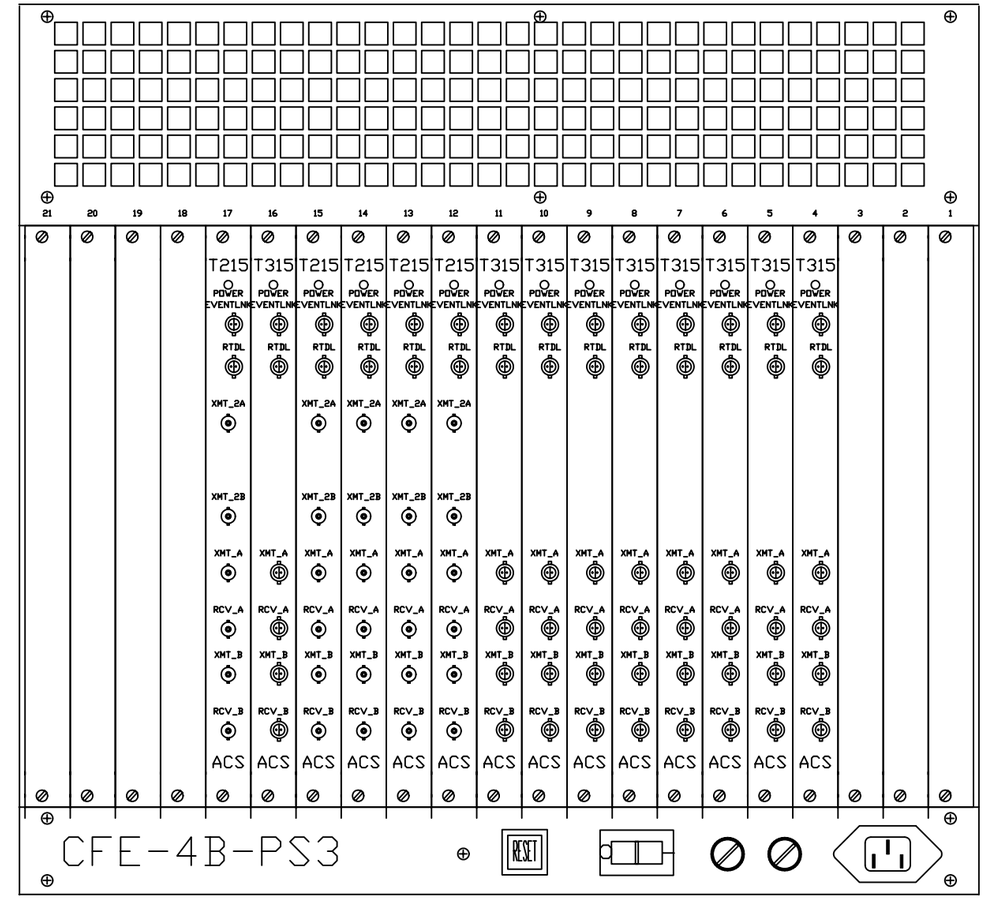
*AUTOCAD

| REV. | ZONE | ECN NO. | DATE | BY | CKR | APP. |
|---|---|---|---|---|---|---|

Phil Pape, Controls Division 9/13/2002 9:55 AM 8525.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.,BML NO. |
|---|---|---|---|---|---|---|
| | | x | SEE NOTE 1 | 9 | VME BLANK PANEL (ELECTRO-SPACE ESFE-2985) | |
| | | 5 | SLT12-15,17 | 8 | T215-2 WAVEFORM GENERATOR TRANSITION MODULE | 94028441-2 |
| | | 9 | SLT4-11,16 | 6 | T-315 WAVEFORM GENERATOR TRANSITION MODULE | 94028865 |
| | | 14 | SLOT 4-17 | 6 | V115 WAVEFORM GENERATOR MODULE | 94028108 |
| | | 1 | SLOT 2 | 5 | MEMORY BOARD | MM-6702 |
| | | – | | 4 | | |
| | | 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

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 | PAPE | 09/13/2002 |
| CHECKED BY | | |
| DESIGN APPROVAL | | |
| ENGINEER APPROVAL | H. HARTMANN | |
| SUPVR. APPROVAL | | |

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973
RHIC CONTROLS
SERVICE BLDG 1004B

VME CHASSIS CFE-4B-PS3

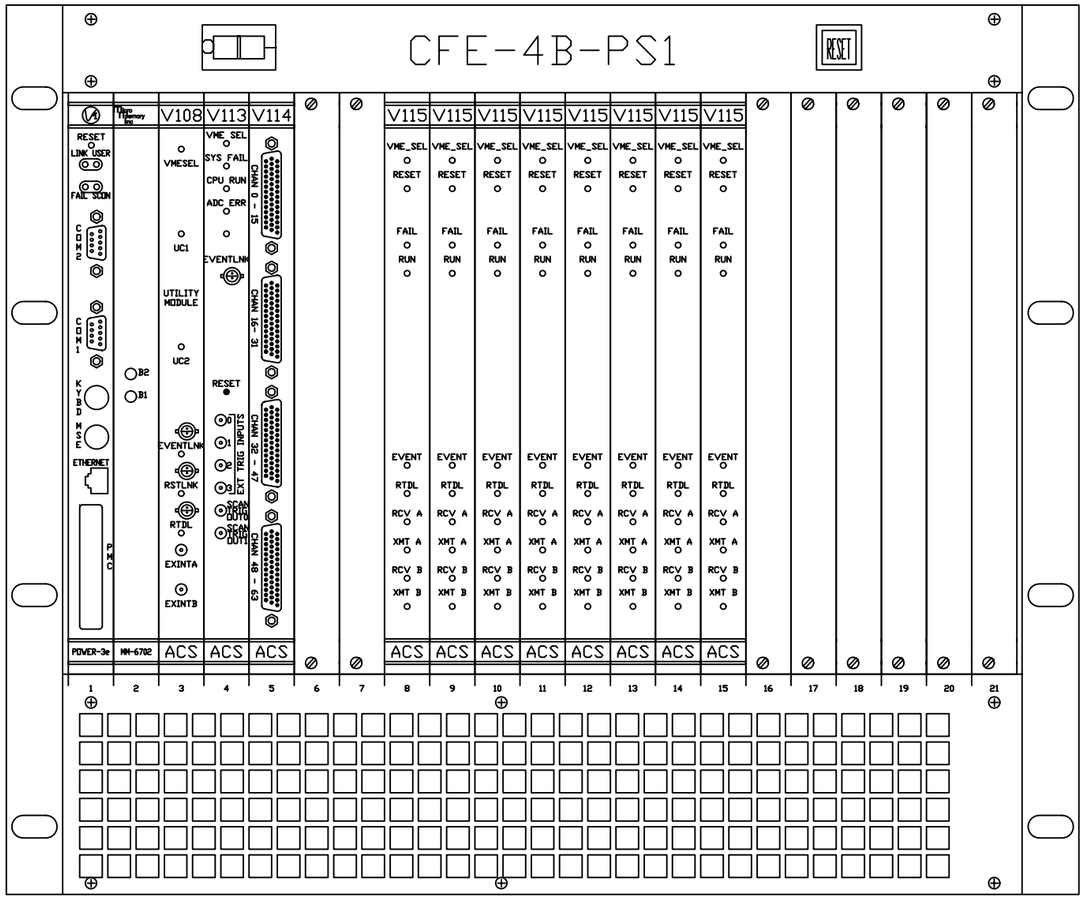
SIZE D | DRAWING NUMBER 94028525 | REV. A

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

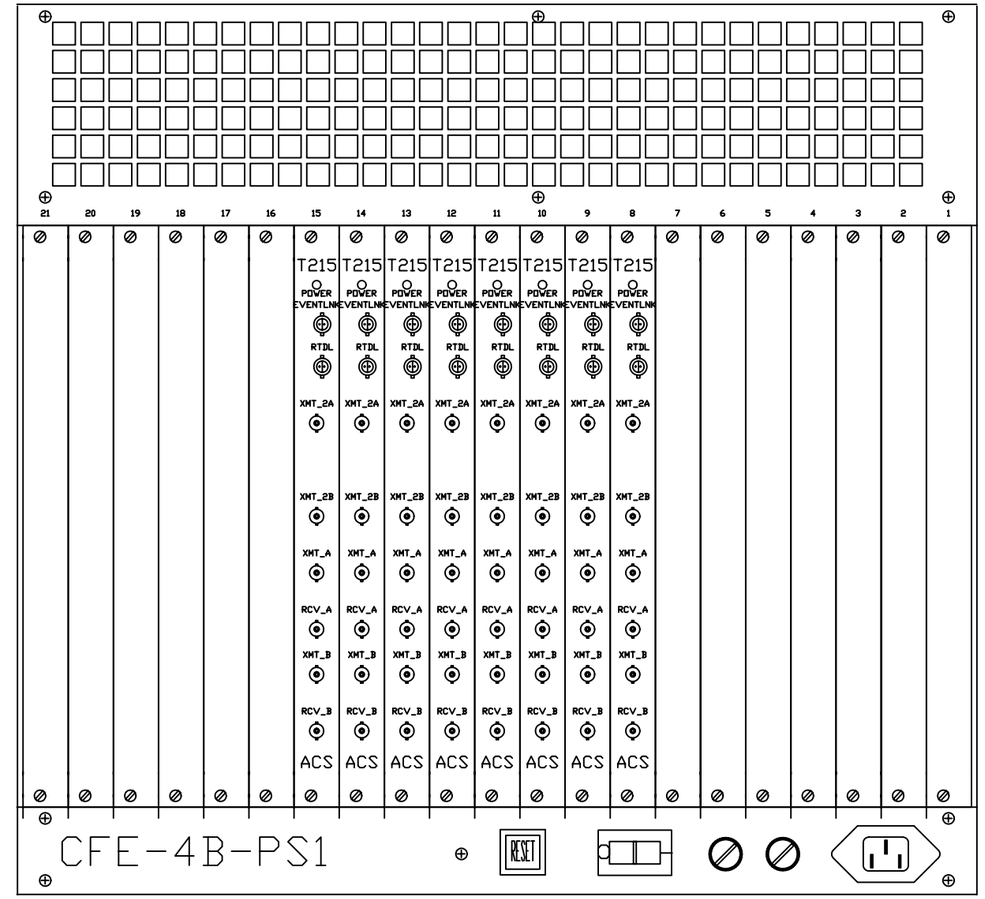
*AUTOCAD

| REV. | ZONE | ECN NO. | DATE | BY | CKR | APP. |
|---|---|---|---|---|---|---|

Bill Venegas, BNL 9/4/2002 7:22 AM 8526.dwg




FRONT VIEW




REAR VIEW

NOTE:

1. ALL UNUSED SLOTS, FRONT AND REAR

| -3 | -2 | -1 | REF DESIGNATOR | ITEM NO. | DESCRIPTION | MAT'L DWG NO.,BNL NO. |
|---|---|---|---|---|---|---|
| | | x | SEE NOTE 1 | 10 | VME BLANK PANEL (ELECTRO-SPACE ESFE-2985) | |
| | | 1 | SLOT 2 | 9 | MEMORY BOARD | MM-6702 |
| | | 6 | 8-12,14 | 8 | T215-2 WAVEFORM GENERATOR TRANSITION MODULE | 94028441-2 |
| | | 2 | SL 13,15 | 7 | T215-1 WAVEFORM GENERATOR TRANSITION MODULE | 94028441-1 |
| | | 8 | SLOT 8-15 | 6 | V115 WAVEFORM GENERATOR MODULE | 94028108 |
| | | 1 | SLOT 5 | 5 | V114 MADC A/D CONVERTER MODULE | 94028226 |
| | | 1 | SLOT 4 | 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 |

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

| | | DATE |
|---|---|---|
| DRAWN BY | Ed Koropsak | 1/15/98 |
| CHECKED BY | | |
| DESIGN APPROVAL | | |
| ENGINEER APPROVAL | R. MICHNOFF | 1/15/98 |
| SUPVR. APPROVAL | | |

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973
RHIC CONTROLS
SERVICE BLDG 1004B

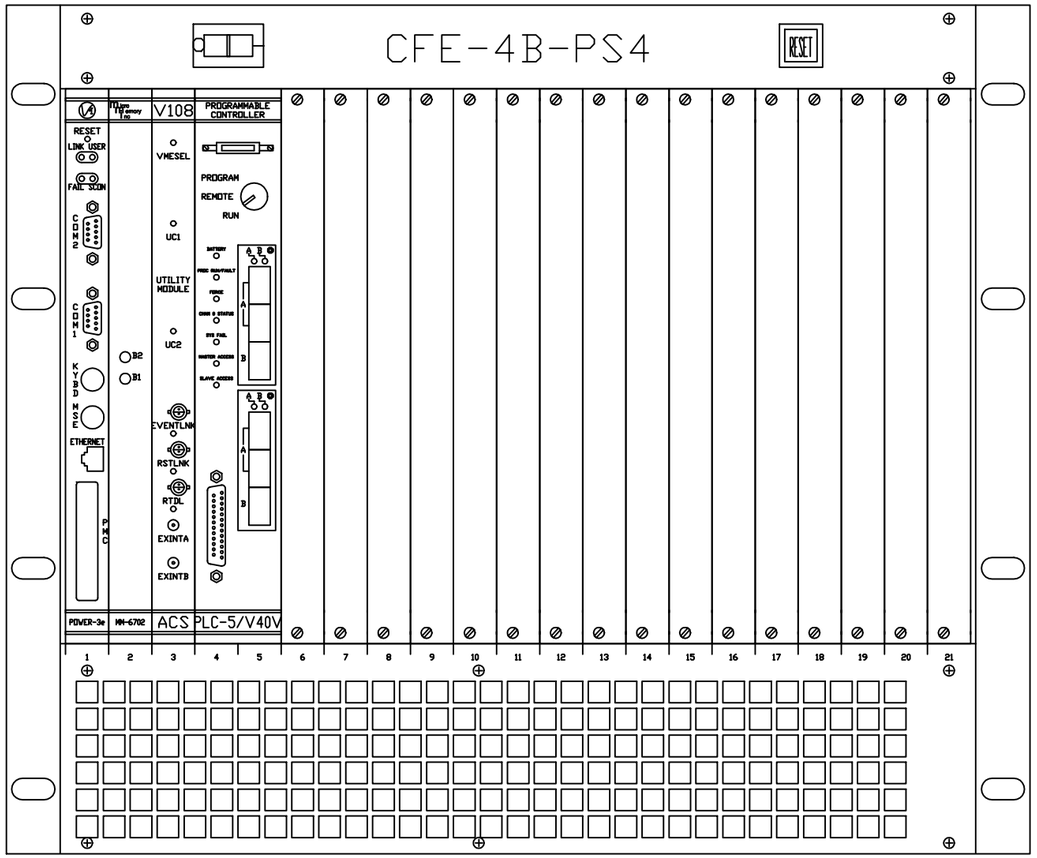
VME CHASSIS CFE-4B-PS1

SIZE D
DRAWING NUMBER 94028526
REV. A

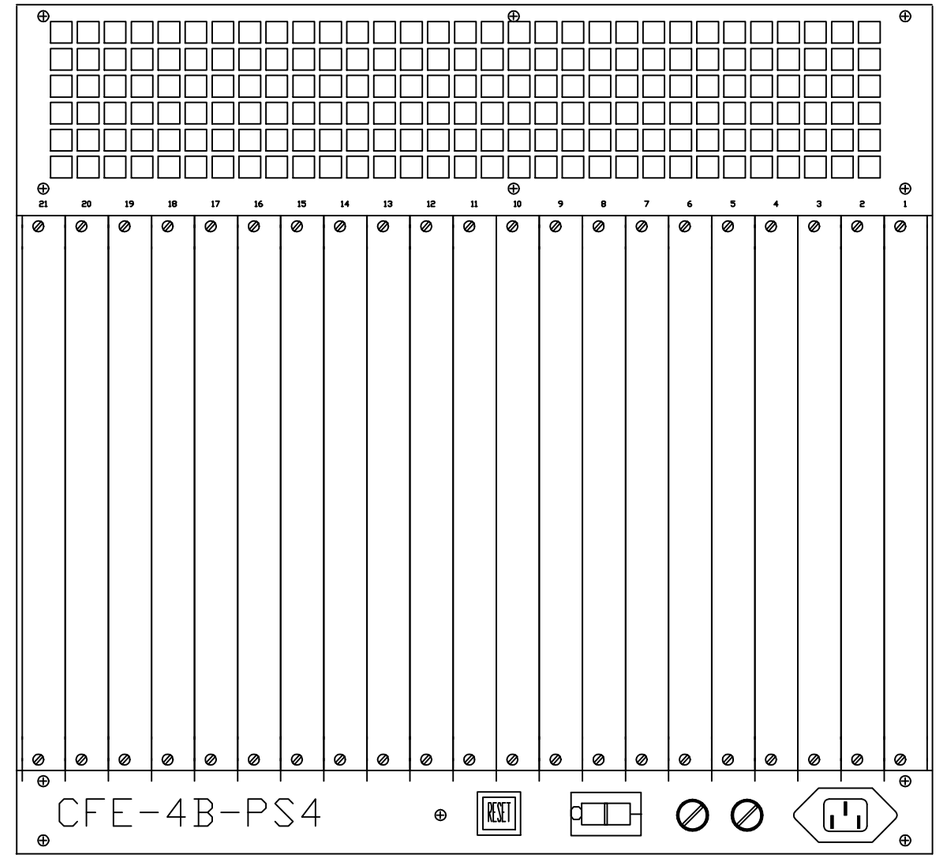
MATERIAL: ——— SCALE: NA WEIGHT: – SHEET 1 OF 1

*AUTOCAD

| REV. | ZONE | ECN NO. | DATE | BY | CKR | APP. |
|---|---|---|---|---|---|---|
| | C-A, BNL | | 3/20/01 11:41 AM | | 8527.dwg | |




FRONT VIEW




REAR VIEW

NOTE:

1. ALL UNUSED SLOTS, FRONT AND REAR

| -3 | -2 | -1 | REF DESIGNATOR | ITEM NO. | DESCRIPTION | MAT'L. DWG NO.,BNL NO. |
|---|---|---|---|---|---|---|
| | | x | SEE NOTE 1 | 7 | VME BLANK PANEL (ELECTRO-SPACE ESFE-2985) | |
| | | 1 | SLOT4,5 | 6 | ALLEN BRADLEY PLC | PLC-5V/40V |
| | | 1 | SLOT 2 | 5 | MEMORY BOARD | MM-6702 |
| | | | | 4 | | |
| | | 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 |

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°

OUTSTANDING ECN

NA FINISH

BREAK SHARP EDGES MAX. XX MIN. XX

| | | |
|---|---|---|
| Q.A. CATEGORY A-3 | | DATE |
| DRAWN BY | Venegas | 3/28/98 |
| CHECKED BY | | |
| DESIGN APPROVAL | | |
| ENGINEER APPROVAL | | |
| SUPVR. APPROVAL | | |
| NEXT ASSEMBLY | | |

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973
RHIC CONTROLS
SERVICE BLDG 1004B
VME CHASSIS CFE-4B-PS4

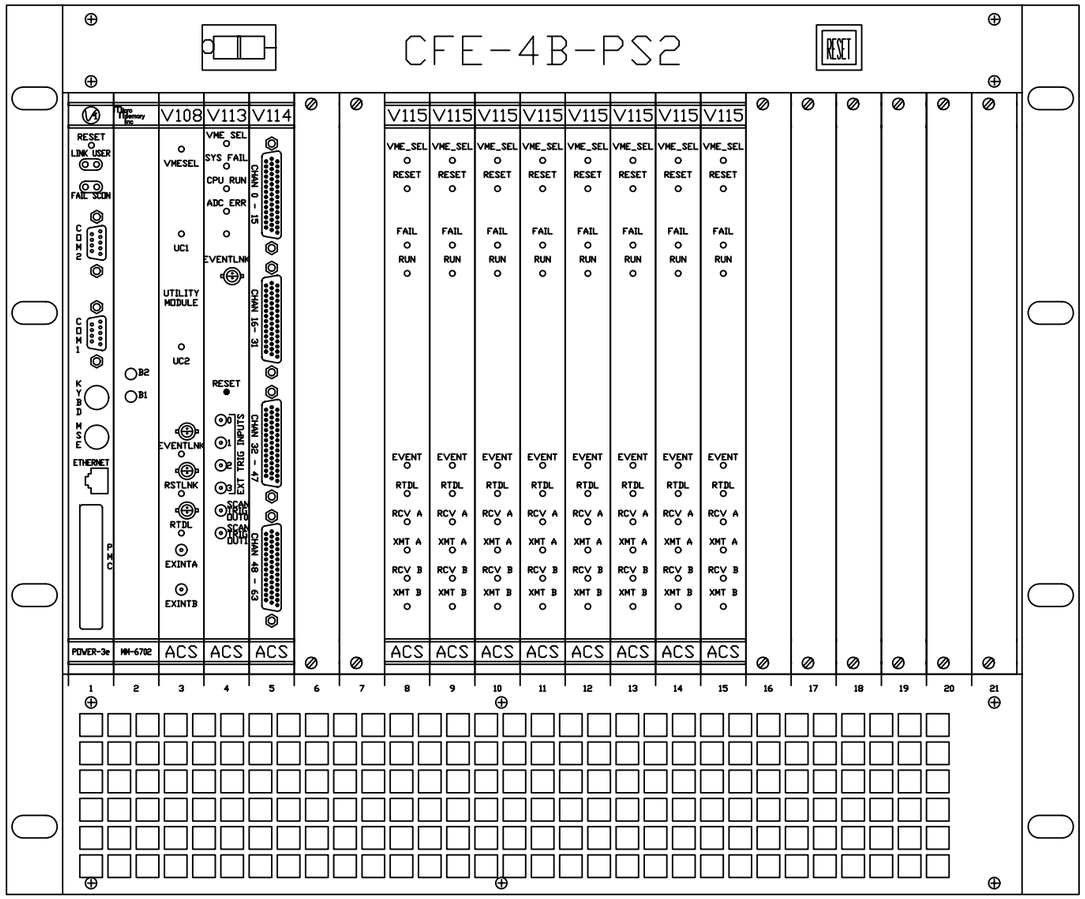
SIZE D | DRAWING NUMBER 994028527 | REV. A

MATERIAL: ——— | SCALE: NA | WEIGHT: – | SHEET

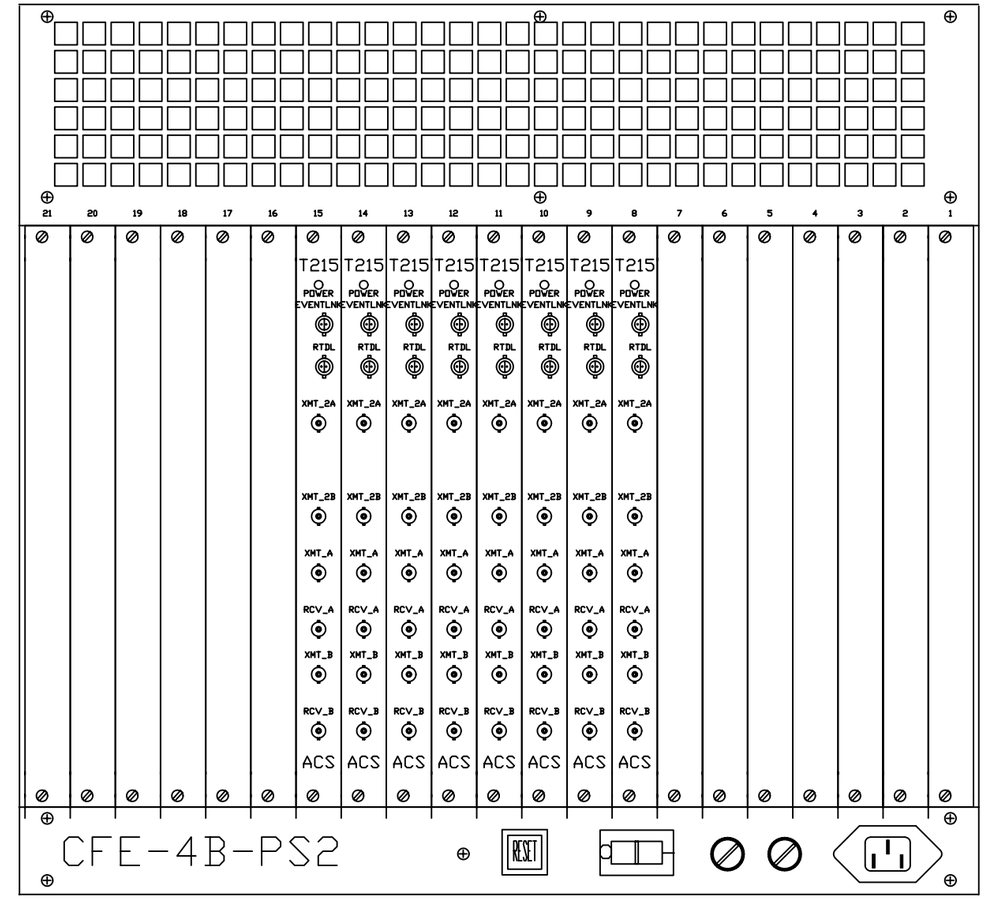
*AUTOCAD

| REV. | ZONE | ECN NO. | DATE | BY | CKR | APP. |
|---|---|---|---|---|---|---|

Bill Venegas, BNL 9/4/2002 7:15 AM 8528.dwg




FRONT VIEW




REAR VIEW

NOTE:

1. ALL UNUSED SLOTS, FRONT AND REAR

| -3 | -2 | -1 | REF DESIGNATOR | ITEM NO. | DESCRIPTION | MAT'L DWG NO.,BNL NO. |
|---|---|---|---|---|---|---|
| | | x | SEE NOTE 1 | 10 | VME BLANK PANEL (ELECTRO-SPACE ESFE-2985) | |
| | | 1 | SLOT 2 | 9 | MEMORY BOARD | MM-6702 |
| | | 6 | 8-12,14 | 8 | T215-2 WAVEFORM GENERATOR TRANSITION MODULE | 94028441-2 |
| | | 2 | SL 13,15 | 7 | T215-1 WAVEFORM GENERATOR TRANSITION MODULE | 94028441-1 |
| | | 8 | SLOT 8-15 | 6 | V115 WAVEFORM GENERATOR MODULE | 94028108 |
| | | 1 | SLOT 5 | 5 | V114 MADC A/D CONVERTER MODULE | 94028226 |
| | | 1 | SLOT 4 | 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 |

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

| | | DATE |
|---|---|---|
| DRAWN BY | Ed Koropsak | 1/15/98 |
| CHECKED BY | | |
| DESIGN APPROVAL | | |
| ENGINEER APPROVAL | R. MICHNOFF | 1/15/98 |
| SUPVR. APPROVAL | | |

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973

RHIC CONTROLS

SERVICE BLDG 1004B

VME CHASSIS CFE-4B-PS2

SIZE D

DRAWING NUMBER 94028528

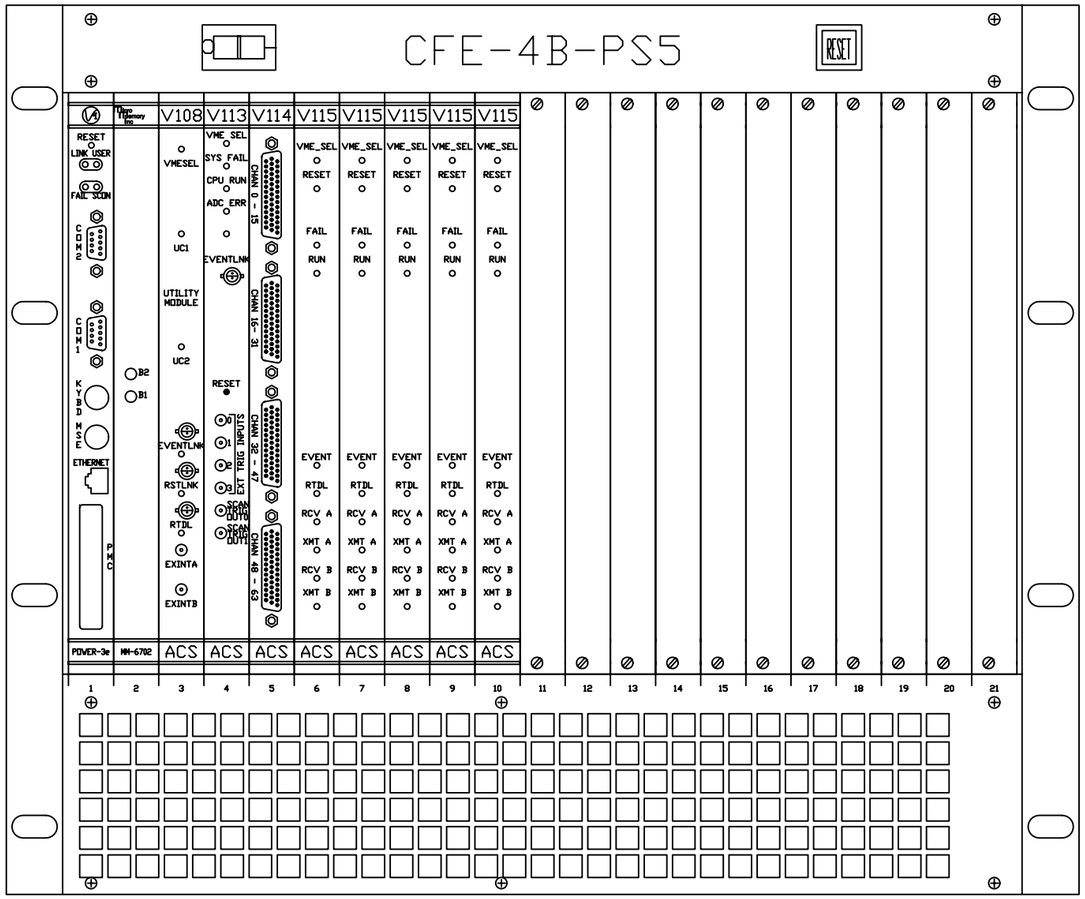
REV. A

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

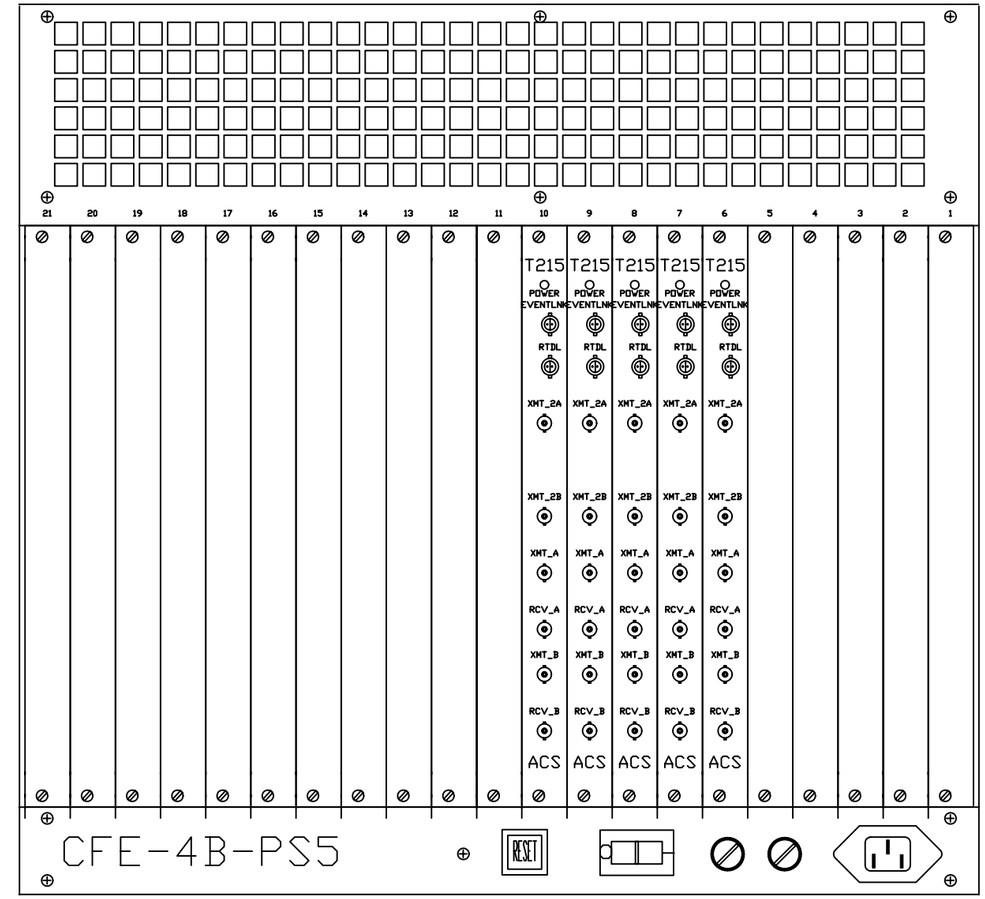
*AUTOCAD

| REV. | ZONE | ECN NO. | DATE | BY | CKR | APP. |
|---|---|---|---|---|---|---|

Bill Venegas, BNL 9/4/2002 7:37 AM 4b_ps5.dwg




FRONT VIEW




REAR VIEW

NOTE:

1. ALL UNUSED SLOTS, FRONT AND REAR

| -3 | -2 | -1 | REF DESIGNATOR | ITEM NO. | DESCRIPTION | MAT'L DWG NO.,BNL NO. |
|---|---|---|---|---|---|---|
| | | x | SEE NOTE 1 | 10 | VME BLANK PANEL (ELECTRO-SPACE ESFE-2985) | |
| | | 1 | SLOT 2 | 9 | MEMORY BOARD | MM-6702 |
| | | 2 | 9,10 | 8 | T215-2 WAVEFORM GENERATOR TRANSITION MODULE | 94028441-2 |
| | | 3 | SL 6-8 | 7 | T215-1 WAVEFORM GENERATOR TRANSITION MODULE | 94028441-1 |
| | | 5 | SLOT 6-10 | 6 | V115 WAVEFORM GENERATOR MODULE | 94028108 |
| | | 1 | SLOT 5 | 5 | V114 MADC A/D CONVERTER MODULE | 94028226 |
| | | 1 | SLOT 4 | 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 |

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

| | | DATE |
|---|---|---|
| DRAWN BY | Ed Koropsak | 1/15/98 |
| CHECKED BY | | |
| DESIGN APPROVAL | | |
| ENGINEER APPROVAL | R. MICHNOFF | 1/15/98 |
| SUPVR. APPROVAL | | |

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973

RHIC CONTROLS

SERVICE BLDG 1004B

VME CHASSIS CFE-4B-PS5

SIZE D

DRAWING NUMBER 9402XXXX

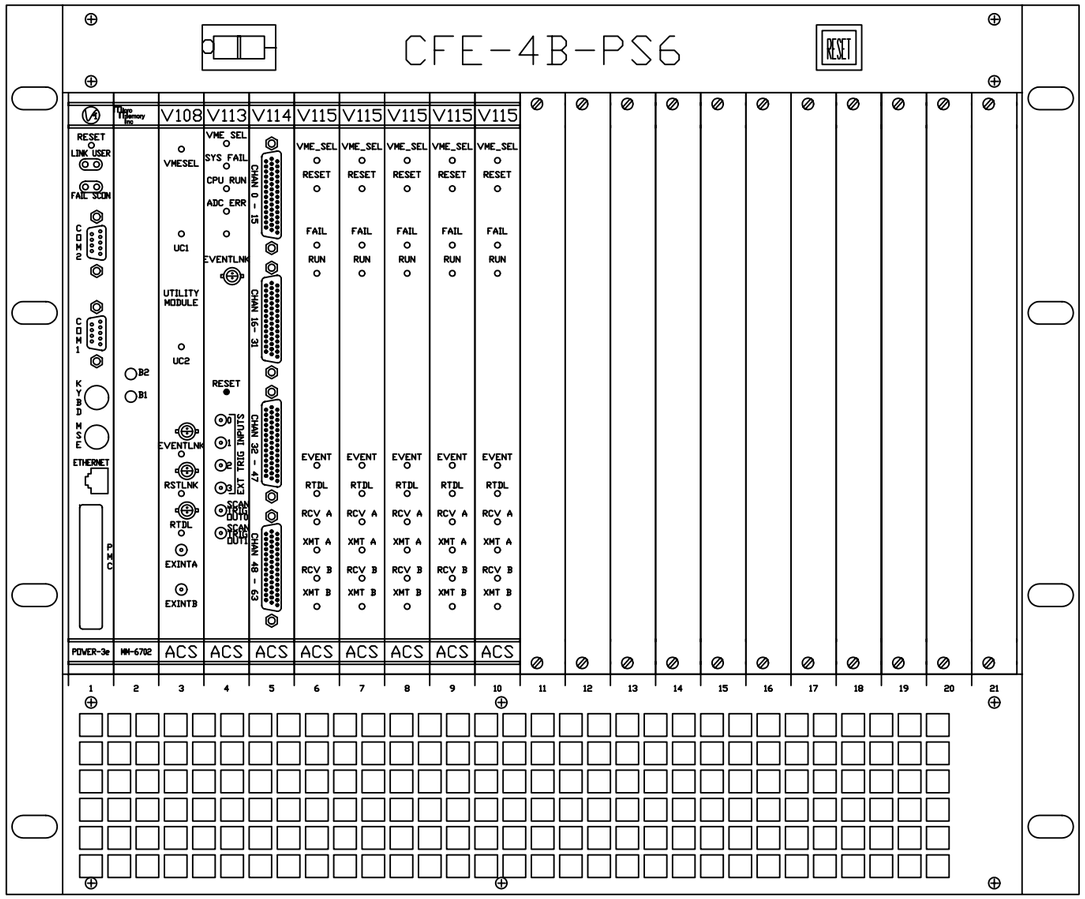
REV. A

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

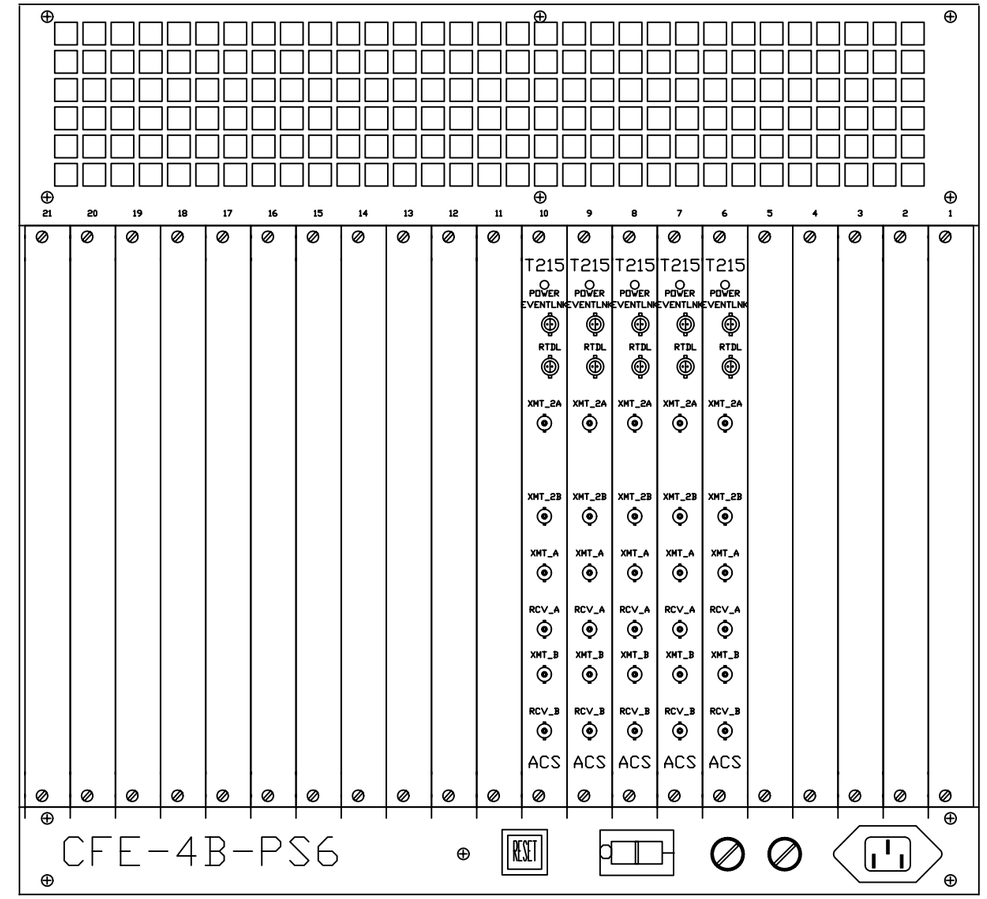
*AUTOCAD

| REV. | ZONE | ECN NO. | DATE | BY | CKR | APP. |
|---|---|---|---|---|---|---|

Phil Pape, Controls Division 9/16/2002 2:20 PM 4b_ps6.dwg




FRONT VIEW




REAR VIEW

NOTE:

1. ALL UNUSED SLOTS, FRONT AND REAR

| -3 | -2 | -1 | REF DESIGNATOR | ITEM NO. | DESCRIPTION | MAT'L DWG NO.,BML NO. |
|---|---|---|---|---|---|---|
| | | x | SEE NOTE 1 | 10 | VME BLANK PANEL (ELECTRO-SPACE ESFE-2985) | |
| | | 1 | SLOT 2 | 9 | MEMORY BOARD | MM-6702 |
| | | 2 | 9,10 | 8 | T215-2 WAVEFORM GENERATOR TRANSITION MODULE | 94028441-2 |
| | | 3 | SL 6-8 | 7 | T215-1 WAVEFORM GENERATOR TRANSITION MODULE | 94028441-1 |
| | | 5 | SLOT 6-10 | 6 | V115 WAVEFORM GENERATOR MODULE | 94028108 |
| | | 1 | SLOT 5 | 5 | V114 MADC A/D CONVERTER MODULE | 94028226 |
| | | 1 | SLOT 4 | 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 |

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

| | | DATE |
|---|---|---|
| DRAWN BY | Ed Koropsak | 1/15/98 |
| CHECKED BY | | |
| DESIGN APPROVAL | | |
| ENGINEER APPROVAL | R. MICHNOFF | 1/15/98 |
| SUPVR. APPROVAL | | |

NEXT ASSEMBLY

BROOKHAVEN NATIONAL LABORATORY
UPTON, N.Y. 11973

RHIC CONTROLS

SERVICE BLDG 1004B

VME CHASSIS CFE-4B-PS6

SIZE D

DRAWING NUMBER 9402XXXX

REV. A

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

*AUTOCAD