NO.	REVISION	BY	CH	SUP	APPROVED	DATE
1	REVISED PER ECN-4876 ADDED CABLE NUMBERS LABELED COPPER BUS	RVK	J.N.	J.S.	S.RAMAKRISHNAN	8-09-04
2	REVISED PER ECN-5307 RECONFIGURED FOR COIL 1-6 & PFAB REVERSAL	RVK	EMB	J.S.	S.RAMAKRISHNAN	11-16-07

NOTES:

1. LABEL ENCLOSURE FRONT DOOR "B-RWM-01
2. INSTALL LABEL "CAUTION: 1000V INSIDE" ON ENCLOSURE FRONT DOOR.
3. TORQUE ALL DURIUM AND STEEL 1/2-13 BOLTS TO 480 INCH-POUNDS.
4. TORQUE ALL DURIUM AND STEEL 3/8-16 BOLTS TO 240 INCH-POUNDS.
5. EPOXY ITEM 10 INTO GROOVE OF ITEM 7.
6. MARK ITEM 2 WITH 5/16" HIGH BLACK CHARACTERS AS DEPICTED - 6 PLACES.
7. STAMP & MARK WITH 5/16" HIGH BLACK CHARACTERS ITEM 12-14 AS DEPICTED, SEE ITEM 2-4 ON DRAWING D-4FD123 SH-5. ALSO, ITEM 15 & 16, SEE ITEM 1 & 2 ON DRAWING D-4FD123 SH-7.
8. INSTALL ITEMS 22 & 23 INTO ITEMS 7 AND 9 AS DEPICTED BEFORE INSTALLING ITEMS 7 & 9 ONTO INSULATORS (ITEM 4).
9. BELLEVILLE WASHER, ITEM 19 SHALL ONLY BE INSTALLED ON TERMINAL ITEM 18.

03	02	01	PART NO.	NOMENCLATURE OR DESCRIPTION	DRAWING NO.	MATERIAL
		6	26	T&B P/N 54862BEUB TERMINAL, 90°< COMPRESSION, UNINSULATED, 2 HOLE LONG BARREL, 90°C, 600V-35kV, 2/0 AWG	(FUTURE)	WROUGHT COPPER ELECTRO-TIN
		3	25	HUBBELL-KELLEMS P/N SHC1092 CONNECTOR, CORD, MALE, STRAIGHT FORM F8, HUB=1-1/2", 4-1/c 500kcmil	COMMERCIAL	ALUMINUM
		12	24	HUBBELL-KELLEMS P/N SHC1057ZP CONNECTOR, CORD, MALE, STRAIGHT FORM F5, HUB = 1-1/2", 500kcmil	COMMERCIAL	MALLEABLE IRON CADMIUM
		48	23	BURNDY P/N 50x175, DURIUM BOLT, HEX HEAD, 1/2-13UNC-2 x 1-3/4" LONG	COMMERCIAL	SILICON BRONZE
		36	22	BURNDY P/N 50x200, DURIUM BOLT, HEX HEAD, 1/2-13UNC-2 x 2" LONG	COMMERCIAL	SILICON BRONZE
		84	21	BURNDY P/N 50C HEN, DURIUM NUT, HEX HEAD, 1/2-13UNC-2	COMMERCIAL	SILICON BRONZE
		72	20	McMASTER-CARR P/N 9294K11, WASHER BELLEVILLE, SPRING, 1/2", .100 THK	COMMERCIAL	17-7 PH SS
		96	19	SOLON MFG. CO. P/N 81862301, WASHER BELLEVILLE, SPRING, .062 THK, 800lbs. LD	COMMERCIAL	301 SS
		24	18	BURNDY P/N YA34/2N TERMINAL, COMPRESSION, UNINSULATED, 2 HOLE LONG BARREL, 90°C, 600V-35kV, 500kcmil	COMMERCIAL	WROUGHT COPPER ELECTRO-TIN
		18	17	SCREW,CAP, FLAT,HEX, 3/8-16 x 3/4" LG	COMMERCIAL	GALVS
		3	16	BUS BAR BOT ANGLE PLATE - COIL PFAB	D-4FD123-2-SH7	COOPER
		3	15	BUS BAR TOP ANGLE PLATE - COIL PFAB	D-4FD123-1-SH7	COOPER
		6	14	BUS BAR PLATE - REVERSAL	D-4FD123-3-SH5	COOPER
		6	13	BUS BAR ANGLE PLATE - REVERSAL	D-4FD123-4-SH5	COOPER
		6	12	BUS BAR NARROW PLATE - REVERSAL	D-4FD123-2-SH5	COOPER
		3	11	INSULATOR HARDWARE ISOLATION	D-4FD123-1-SH5	G10
		6	10	BUS BAR SEPERATOR - ISOLATION	D-4FD123-4-SH4	G10
		3	9	BUS BAR SUPPORT - ISOLATION	D-4FD123-3-SH4	G10
		—	8	BUS BAR LONG PLATE - NON REVERSAL	D-4FD123-2-SH4	COOPER
		6	7	BUS BAR LONG SUPPORT - ISOLATION	D-4FD123-1-SH4	G10
		18	6	BOLT, HEX HEAD, 3/8-16 x 5/8" LONG	COMMERCIAL	GALVS
		18	5	WASHER, SPLIT, 3/8" INSIDE DIAMETER	COMMERCIAL	GALVS
		18	4	ALT P/N 3868, INSULATOR, RED, 3200V 2 1/2" x 2 1/2", 3/8 - 16	COMMERCIAL	POLY THERMOSET
		6	3	NUT, HEX HEAD, 3/8-16	COMMERCIAL	GALVS
		X	2	HAMMOND INNER PANEL, 69"H x 27"W 12 GAUGE, WHITE, PART OF ITEM 1	D-4FD123 SH-3	STEEL
		1	1	HAMMOND MANUFACTURING P/N 1418U12 SINGLE DOOR, NEMA 12, 14 GAUGE 72"H x 30"W x 12"D, GRAY OUTSIDE	D-4FD123 SH-2	STEEL
		—	X	RWM BUS ENCLOSURE ASSEMBLY	THIS DRAWING	—

COMPUTER GENERATED DRAWING
MANUAL CHANGES NOT PERMITTED

AutoCAD2000

DO NOT VERIFY INFORMATION BY SCALING DRAWING

SCALE: 1/4" = 1"

NEXT ASSEMBLY

CENTRAL FILES:

UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN INCHES
MACHINE SURFACES 125

BREAK SHARP EDGES .005/.020

TOLERANCES NON-CUMULATIVE

DECIMAL-INCH		FRACTIONS	
.X	± .100	0"-12"	±1/16
.XX	± .030	12"-72"	±1/8
.XXX	± .005	72"-120"	±1/4
ANGULAR	±0°-15'	OVER 120"	±1/2

PRINCETON PLASMA PHYSICS LABORATORY
PRINCETON UNIVERSITY
NATIONAL SPHERICAL TORUS EXPERIMENT
ELECTRICAL POWER SYSTEMS
ENERGY CONVERSION SYSTEM
RESISTIVE WALL MODE
ENCLOSURE BOX COILS 1-6 & PFAB REVERSAL ASSEMBLY

DIV: ELECTRICAL | DATE: 5-5-2004 | CADD FILE: 2D4FD123.DWG

ENG: S. RAMAKRISHNAN | APPROVED S.RAMAKRISHNAN 5-5-2004

DWN: R. VAN KIRK

CHK: F. JONES | CHK FJ/JS | SUPV J.S.

NSTX
D-4FD123

SHEET 1 OF 9 | REV 2

WELDING ENGINEER
APPVD: _____ DATE _____

SEE INSTALLATION PROCEDURE D-NSTX-IP-2912 AND D-NSTX-IP-3077 FOR REVERSAL.

ENCLOSURE: L-SIDE VIEW

ENCLOSURE: FRONT VIEW

ENCLOSURE: R-SIDE VIEW

MechDsize