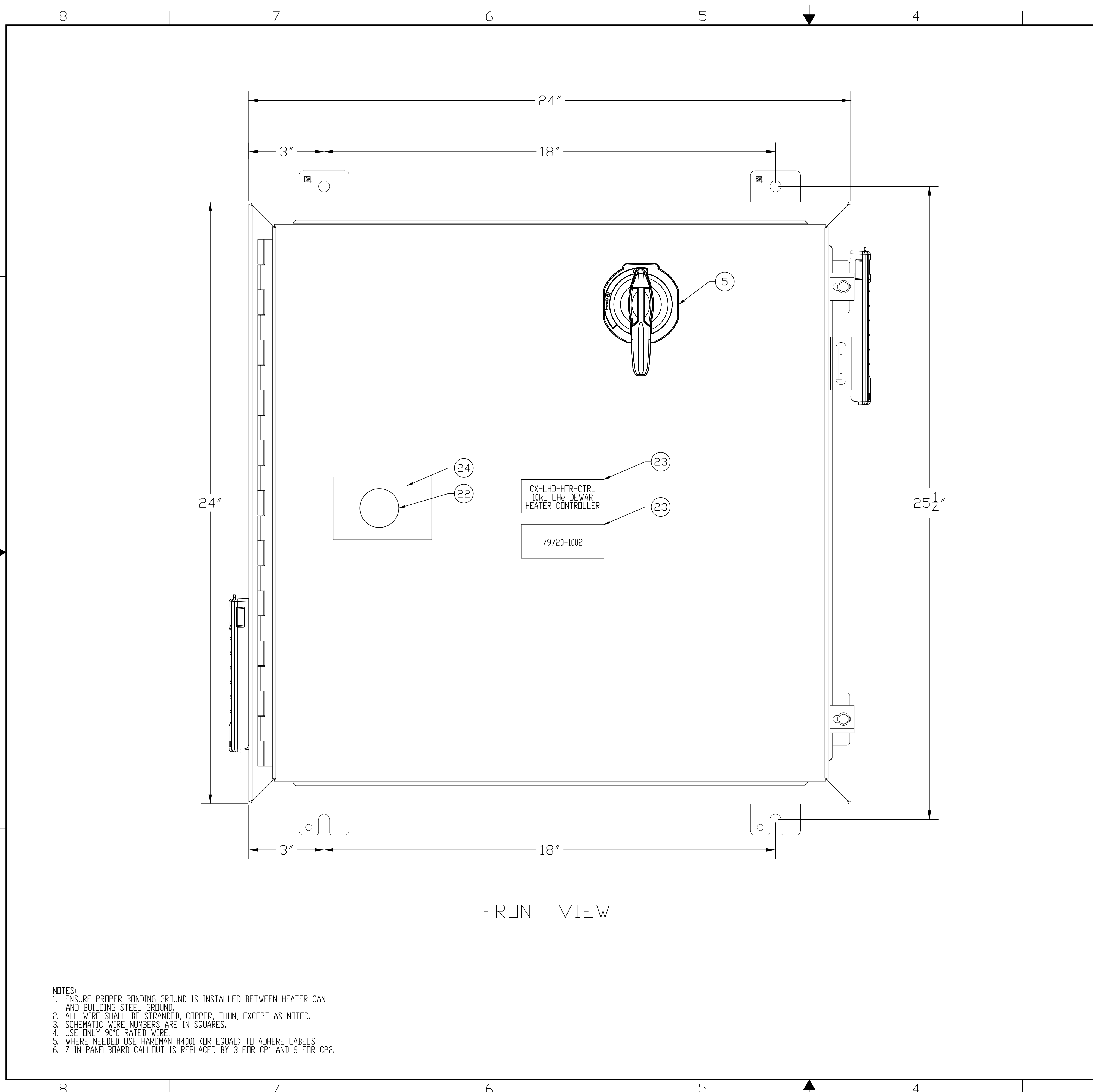


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REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	-	INITIAL SUBMITTAL	TMM 03NOV17	03NOV17 R. NORTON
SH3-A	A	1. REMOVED NON-CONTACT VOLTAGE PORT. 2. CHANGED POWER TRANSDUCER PART NUMBER. 3. ADDED THIRD HEATER ELEMENT AND FUSE BLOCK.	TMM 29MAR18	29MAR18 R. NORTON
SH3-B	B	1. REVISED SH3 ENTIRELY.	SS 04FEB19	04FEB19 R. NORTON

QTY REQD	ITEM NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	NOTES
4	25	WAGO 2004-1401	4-CONDUCTOR THROUGH TERMINAL BLOCK	-	-
1	24	GRACEPORT R3W-L	SAFESIDE VOLTAGE INDICATOR LABEL	-	-
A/R	23	GENERIC	LABEL, ENGRAVED OR PRINTED	TEXT AS SHOWN	NOTE 5
1	22	GRACEPORT R-3W	SAFESIDE VOLTAGE INDICATOR	-	-
2	21	WAGO 2002-991	END PLATE FOR FUSE TERMINAL BLOCKS	-	-
4	20	WAGO 249-116	END STOP	-	-
2	19	WAGO 870-568	3 LEVEL TB END BARRIER	-	-
4	18	WAGO 870-551	THREE LEVEL TERMINAL BLOCKS	-	-
1	17	HOFFMAN HF0526414	FAN	-	-
1	16	HOFFMAN HG0500404	EXHAUST GRILLE	-	-
1	15	ALLEN-BRADLEY 700-HN100	RELAY SOCKET, DPDT	-	-
1	14	ALLEN-BRADLEY 700-HA32Z24	RELAY, DPDT, 24VDC COIL	-	-
3	13	WAGO 2002-1611	2-CONDUCTOR FUSE DISCONNECT TERMINAL BLOCK WITH PIVOTING FUSE HOLDER	WITH 2EA 1/2A, 1EA 1A, 250V FUSES	-
A/R	12	WAGO 210-1142	35MM X 7.5MM CARRIER RAIL	-	-
3	11	BUSS CHCC2DU	FUSE BLOCK 2-POSITION	WITH KTK-R-10A FUSES	-
2	10	WAGO 2004-1491	END & INTERMEDIATE PLATE	-	-
1	9	WAGO 2004-1407	4-CONDUCTOR GROUND TERMINAL BLOCK	-	-
1	8	SAGINAW CONTROL SCE-24P24	ENCLOSURE PANEL, 24"x24"	-	-
1	7	SAGINAW CONTROL SCE-24H2416LP	ENCLOSURE, 24"x24"x16"	-	-
1	6	ALLEN-BRADLEY 194R-N1	DISCONNECT SWITCH SHAFT	-	-
1	5	ALLEN-BRADLEY 194R-PYT	DISCONNECT SWITCH HANDLE	-	-
1	4	DISCONNECT SWITCH 194R-N30-1753	DISCONNECT SWITCH	-	-
1	3	CUTLER-HAMMER CN35DN3AB	CONTACTOR, 3-POLE, 208V CNT 120V COIL	-	-
1	2	OHIOSEMITRONICS PCS-059E2Y25	POWER TRANSDUCER WITH EXTERNAL CURRENT SENSOR	-	-
1	1	HDR POWER SYSTEMS SHZF1-208-30-NC-01	SINGLE PHASE, 208VAC, 30A SCR POWER CONTROLLER	-	-

- NOTES:
- ENSURE PROPER BONDING GROUND IS INSTALLED BETWEEN HEATER CAN AND BUILDING STEEL GROUND.
 - ALL WIRE SHALL BE STRANDED, COPPER, THHN, EXCEPT AS NOTED.
 - SCHEMATIC WIRE NUMBERS ARE IN SQUARES.
 - USE ONLY 90°C RATED WIRE.
 - WHERE NEEDED USE HARDMAN #4001 (OR EQUAL) TO ADHERE LABELS.
 - Z IN PANELBOARD CALLOUT IS REPLACED BY 3 FOR CP1 AND 6 FOR CP2.

PARTS LIST

EACH SHEET OF A MULTI-SHEET DRAWING SHALL ALWAYS CARRY THE SAME REVISION LEVEL

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

TOLERANCES ARE:

FRACTIONS	DECIMAL	ANGLES
± 1/8	.XX ± .01	± .50°
	.XXX ± .005	

THIRD ANGLE PROJECTION

FINISH MACHINED SURFACES UNLESS OTHERWISE NOTED

DEBURR & BREAK ALL SHARP EDGES

DO NOT SCALE DRAWING

SCALE NONE

DATE 30AUG17

DRAWN T.MCCOOL

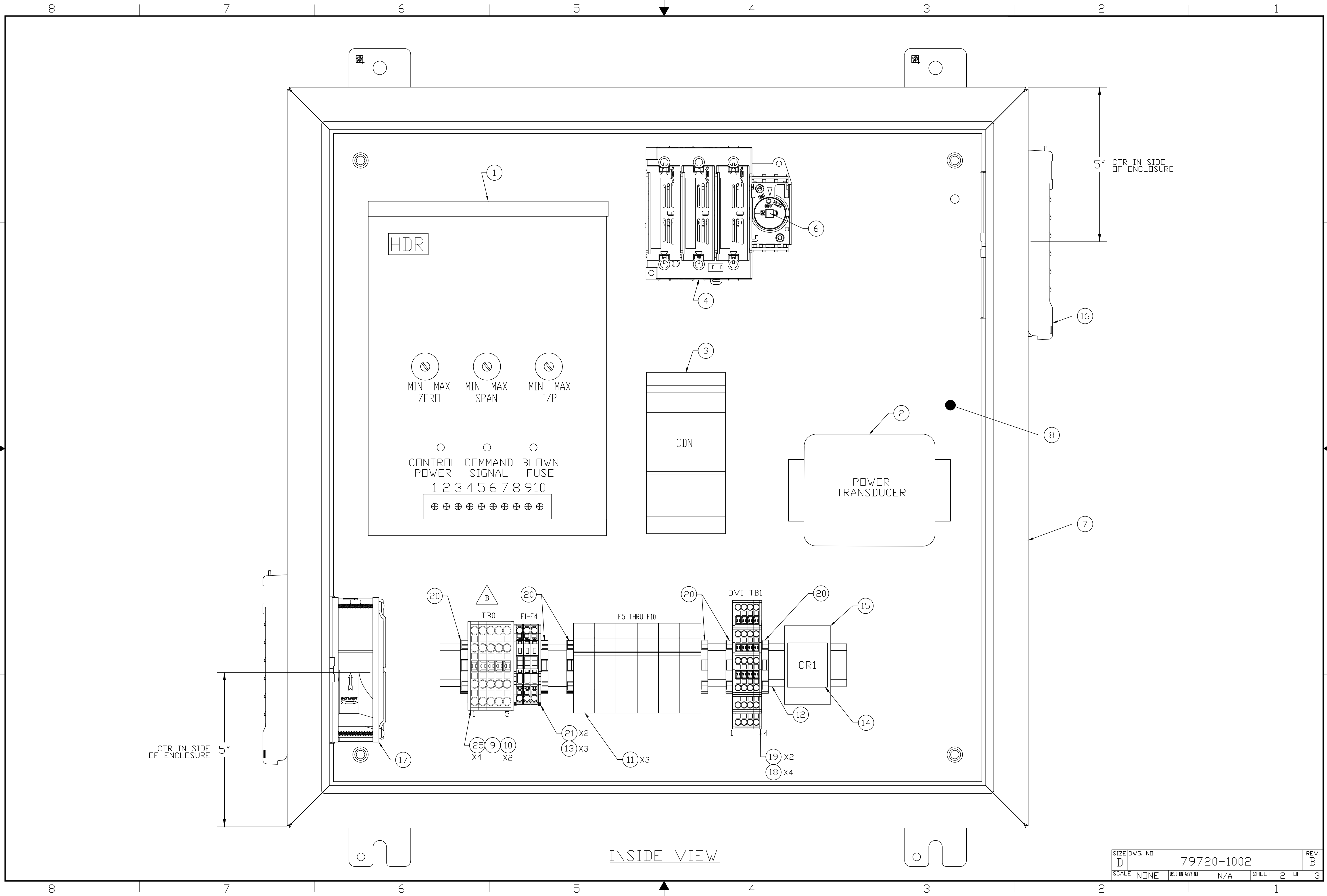
SIZE DWG. NO. 79720-1002

REV. B

SHEET 1 OF 3

Jefferson Lab
Thomas Jefferson National Accelerator Facility
LCLS II
4K COLD BOX SYSTEM
LHe DEWAR HEATER
CONTROLLER DETAILS & SCHEMATIC

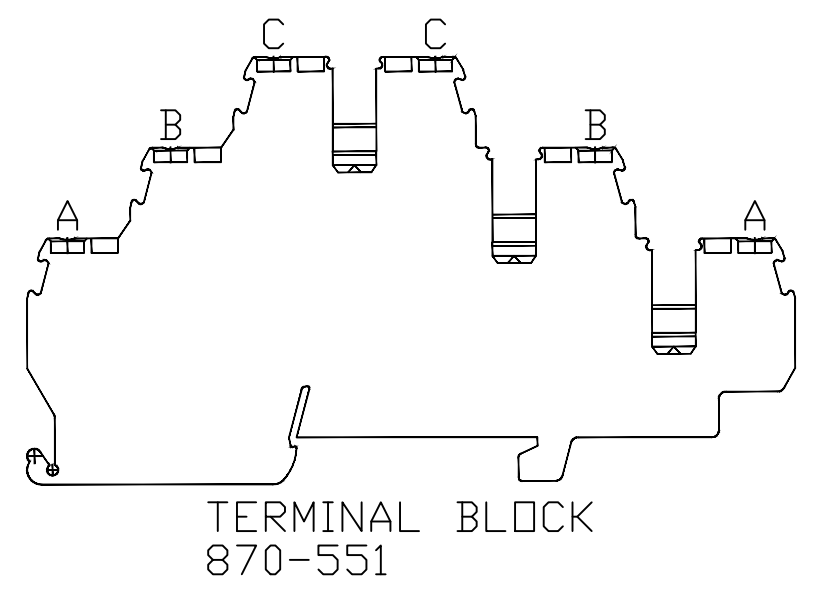
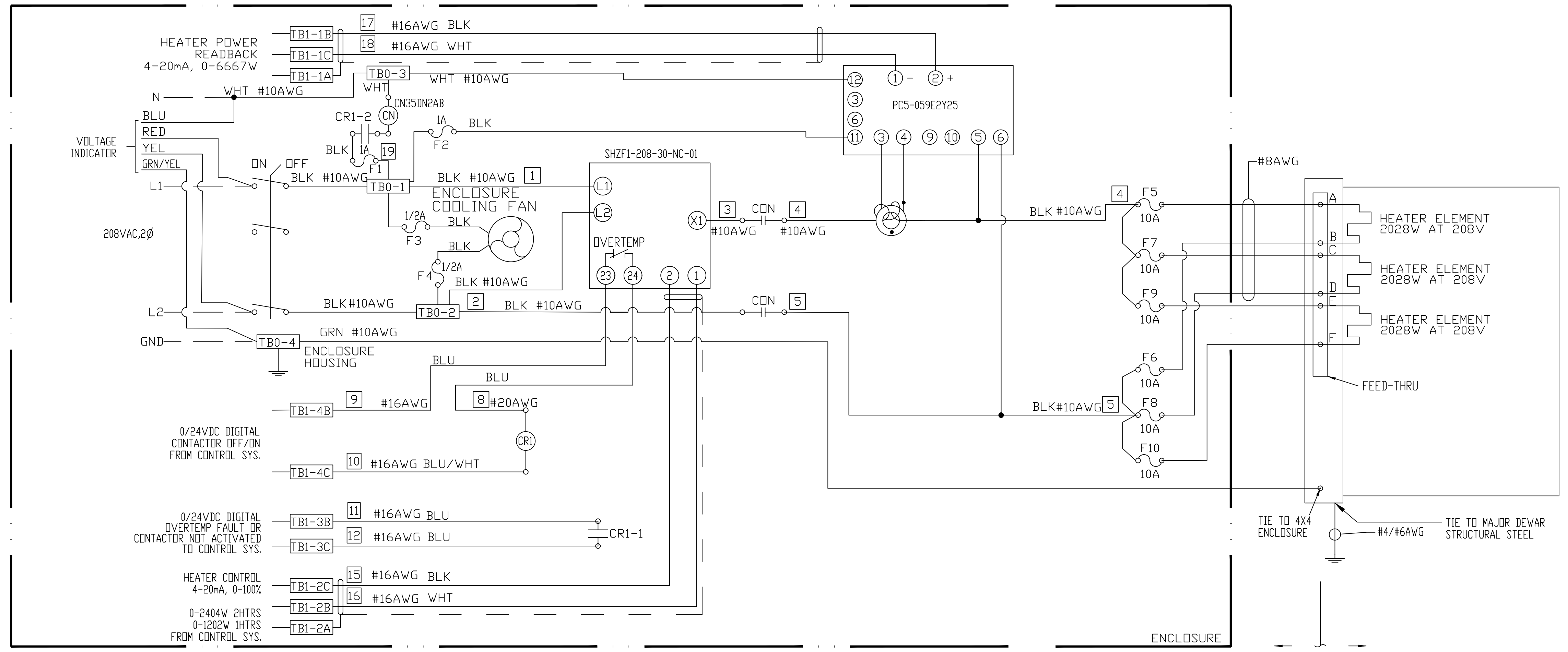
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SIZE	DWG. NO.	REV.
D	79720-1002	B
SCALE	USED ON ASSY NO.	SHEET 2 OF 3
NONE	N/A	

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8 7 6 5 4 3 2 1



SCHMATIC

ENCLOSURE
OUTSIDE VACUUM SHELL INSIDE VACUUM SHELL

NOTES:
1. 14AWG UNLESS OTHERWISE NOTED.

SIZE	DWG. NO.	REV.
D	79720-1002	B
SCALE	USED ON ASSY NO.	SHEET 3 OF 3
NONE	N/A	

8 7 6 5 4 3 2 1