

- DENOTES INTERNAL CONNECTIONS BY ELECTRICAL CONTRACTOR

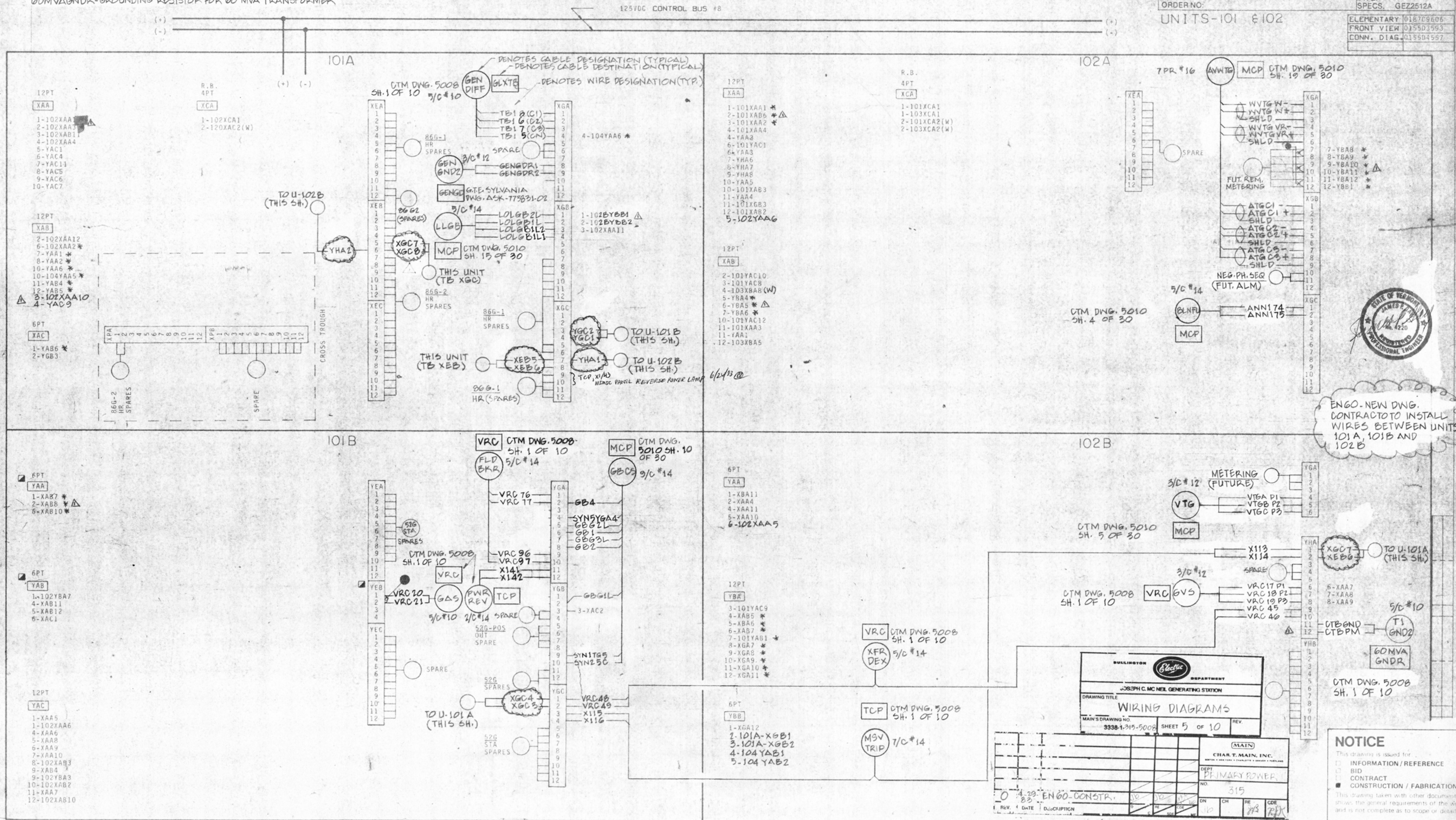
THIS DRAWING
NOT TO SCALE

TITLE :
INTERCONNECTION DIAGRAM
USER: BURLINGTON, ELECTRIC DEPARTMENT
LOCATION: INTERVALE ROAD, BURLINGTON, V.
STATION: JOSEPH C. MCNEILL GENERATING STATION
CONSULTANT: C.T. MAIN, INC.
CONTRACTOR:
DISTRIBUTOR :
ORDER NO:

REQ. ITEM NO.
INSTALL.
DWG.
SPECS. GE72512A

ELEMENTARY	018709606
FRONT VIEW	015503593
CONN. DIAG.	015504557

UNITS-101 & 102



This drawing is issued for:

☐ INFORMATION / REFERENCE

☐ BID

☐ CONTRACT

☒ CONSTRUCTION / FABRICATION

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THIS DRAWING
NOT TO SCALE

TITLE:
INTERCONNECTION DIAGRAM

GE S
GE SU
GE REQ. 297-913

SHORT CIRCUITING TERMINAL BLOCK

MCP
60MVA XFMR CB
7.5MVA XFMR CB
60MVA ZIGZAG GROUNDING TRANSFORMER
60MVA GNDR
GMPDUP
VRC

MIMIC CONTROL PANEL
60MVA TRANSFORMER CONTROL BOX
7.5MVA TRANSFORMER CONTROL BOX
60MVA ZIGZAG GROUNDING TRANSFORMER
60MVA TRANSFORMER GRDG. RESISTOR
GREEN MOUNTAIN POWER DUPLEX PANEL
VOLTAGE REGULATOR CUBICLE OR EXCITATION CONT. CUBICLE

REMOVE JUMPERS WHEN
CIRCUIT IS COMPLETE
* RING TERMINALS

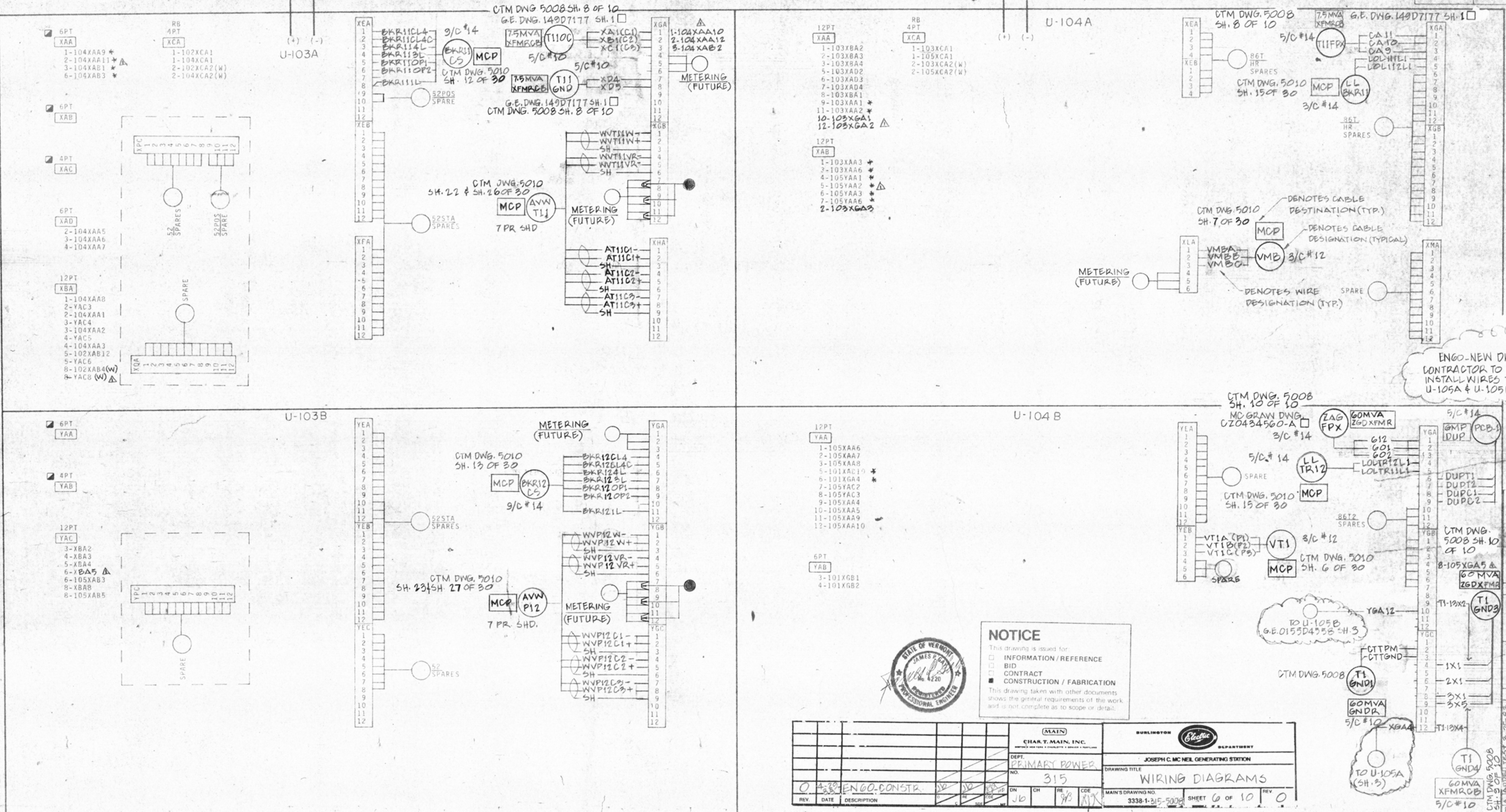
○ DENOTES INTERNAL WIRING
BY ELECTRICAL CONTRACTOR

□ DENOTES REFERENCE DWG.

125VDC CONTROL BUS #8

UNIT-103-104

ELEMENTARY 0187
FRONT VIEW 0155D
CONN. DIAG. 015504



SHORT CIRCUITING TERMINAL BLOCK
 MCP MIMIC CONTROL PANEL
 TCP TURBINE CONTROL PANEL
 MPP MISC. POWER PANEL
 GMDUP GREEN MOUNTAIN POWER DUPLEX PANEL
 GOMVA 60MVA TRANSFORMER CONTROL BOX
 XFMRCB
 PCB 3310 PWR CIRCUIT BRK #3310

○ DENOTES INTERNAL WIRING BY ELECTRICAL CONTRACTOR

* DENOTES REF. DRAWING

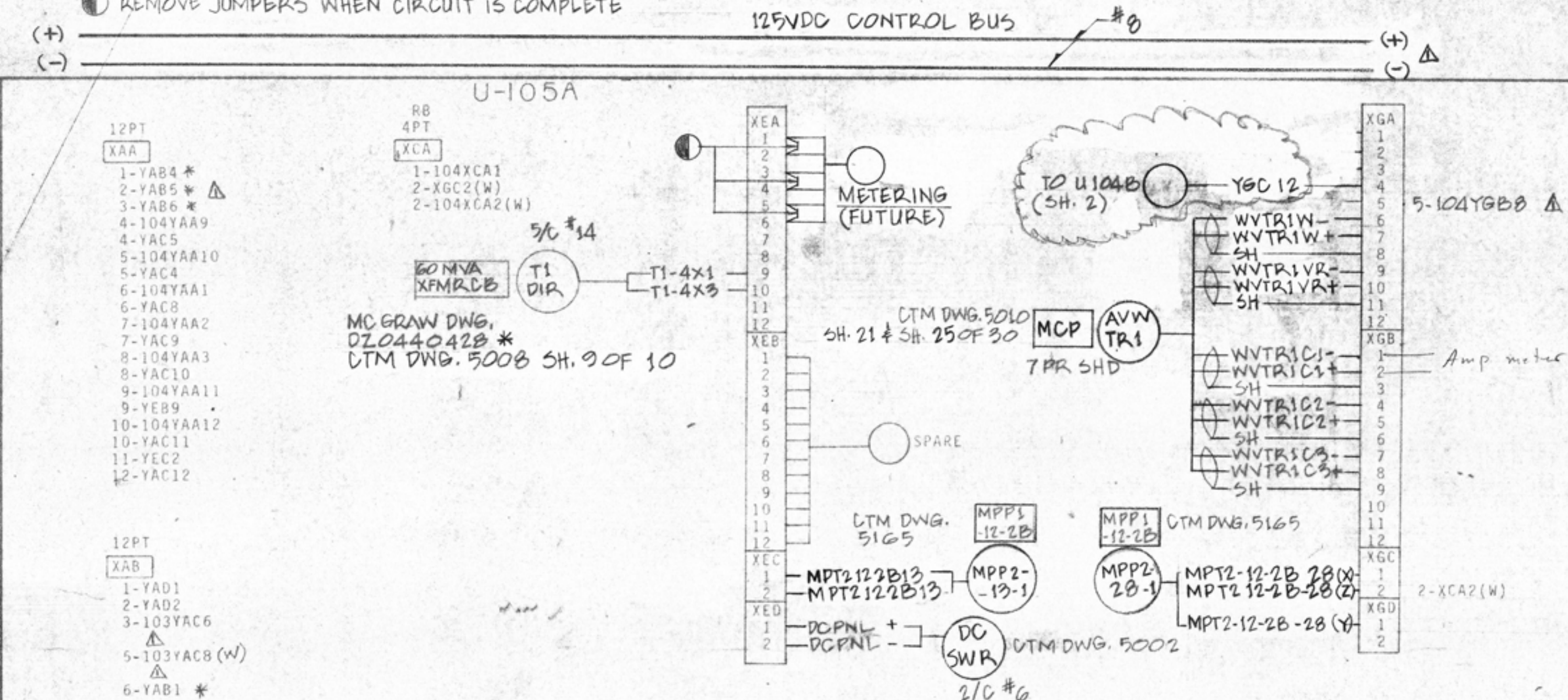
○ REMOVE JUMPERS WHEN CIRCUIT IS COMPLETE

THIS DRAWING NOT TO SCALE

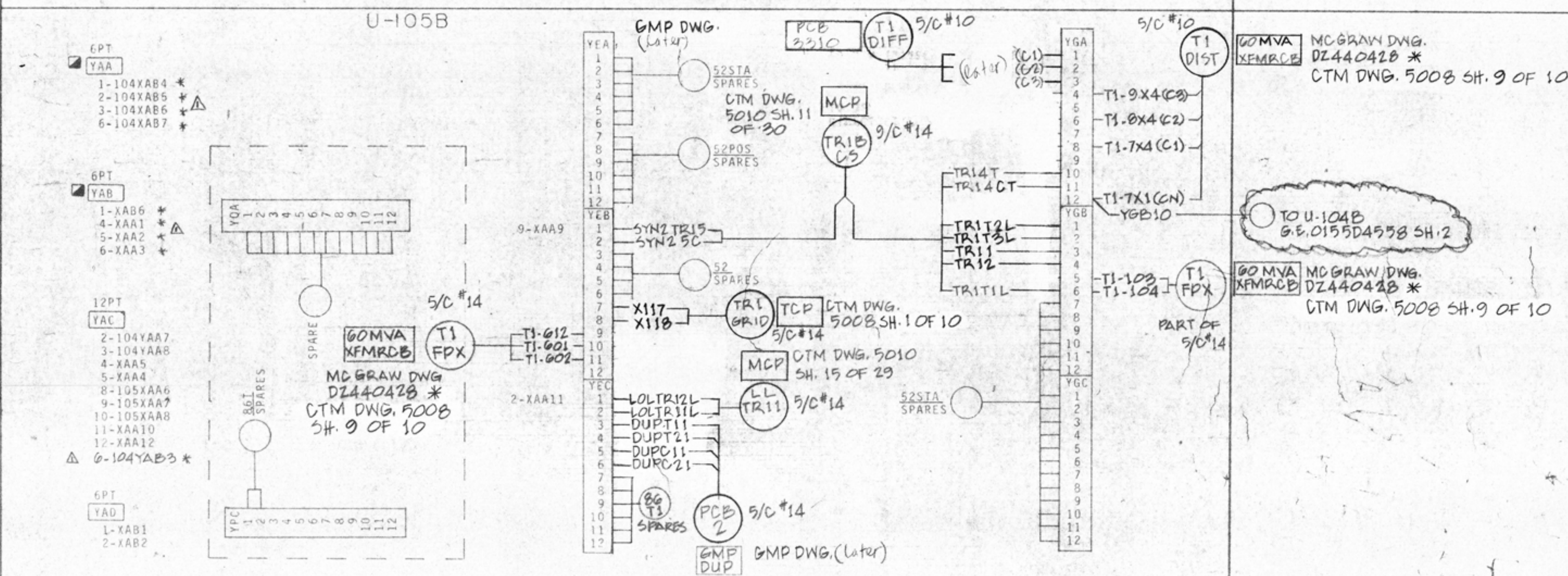
TITLE: INTERCONNECTION DIAGRAM

UNIT-105

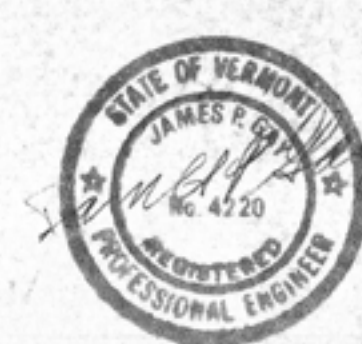
GE
 GE
 GE REQ. 297-
 REQ. ITE
 INSTALL.
 DWG.
 SPECS. GE
 ELEMENTARY 0
 FRONT VIEW 01
 CONN. DIAG. 015



ENGO-NEW DWG.
 CONTRACTOR TO PROVIDE &
 CONNECT WIRES TO U-104B
 (SAME WIRES INDICATED ON
 DWG. 5008 SH. 6 OF 10).



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 BID
 CONTRACT
 CONSTRUCTION / FABRICATION
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BURLINGTON
 DEPARTMENT
 JOSEPH C. MCNEIL GENERATING STATION
 DRAWING TITLE
 WIRING DIAGRAMS
 MAIN'S DRAWING NO.
 3331-1-315-5008 SHEET 7 OF 10

REV.	DATE	DESCRIPTION	BY	CHK	APP	CODE
0	4-29-83	ENGO-CONSTR.	JG			

CONNECTION DIAGRAM

FIELD MADE FOR

LEGEND

- 49 WINDING TEMPERATURE INDICATOR RELAY
 43A SELECTOR SWITCH-COOLING EQUIP (HAND AUTO)
 63FP FAULT PRESENCE RELAY
 88F FAN MOTOR
 CT CURRENT TRANSFORMER
 CTO CURRENT TRANSFORMER OUTLET
 GS GROUND STUD
 MCP MIMIC CONTROL PANEL
 MPT1 MISC. POWER PANEL
 SWGR 15 KV SWITCHGEAR
 U-103A UNIT 103A

* DENOTES REFERENCE DWG.

ENGO-NEW DWG.
 CONTRACTOR TO INSTALL
 JUMPERS.

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☒ CONSTRUCTION / FABRICATION

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BURLINGTON		Electric		DEPARTMENT	
JOSEPH C. MCNEIL GENERATING STATION					
DRAWING TITLE					
WIRING DIAGRAMS					
MAIN'S DRAWING NO.					
3338-1-215-5008					
SHEET 8 OF 10					
REV. 0					

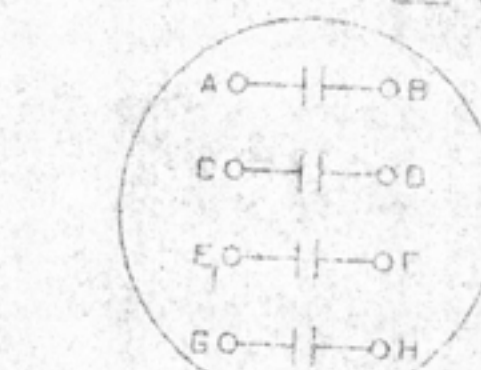
REV.		DATE		BY		CHK		APP		CDE	
0		1-18-83		ENGO-CONSTR		JG		JG		JG	

NOTES

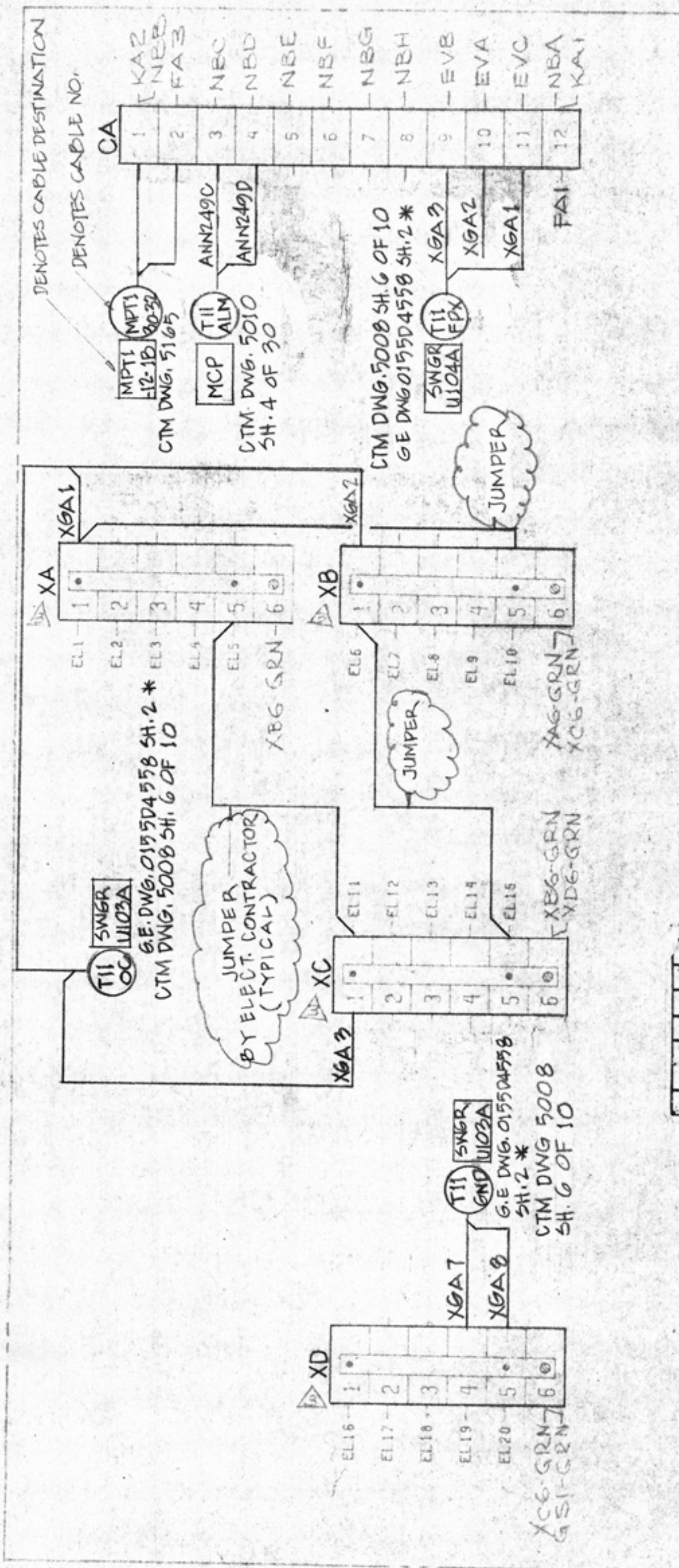
1. TAPE UP WIRE
 2. LOCATED IN TERMINAL BOX
 3. SHORT CIRCUITING TERMINAL BOARD
 • SHORTING SCREW
 ○ GROUNDING SCREW
 GRN GREEN GROUNDED WIRE

PO# MC-161
 EQUIP.# 315,01,5000
 UN# 54MB81142
 CUST SPEC# 3338-1-27
 KVA 7500

49 (E/E LEVEL)



NB
 A-CA12-BLACK
 B-CA1-WHITE
 C-CA3-RED
 D-CA4-GREEN
 E-CA5-ORANGE
 F-CA6-BLUE
 G-CA7-WHITE OR YELLOW
 H-CA8-BROWN OR RED
 * WITH BLACK TRACER

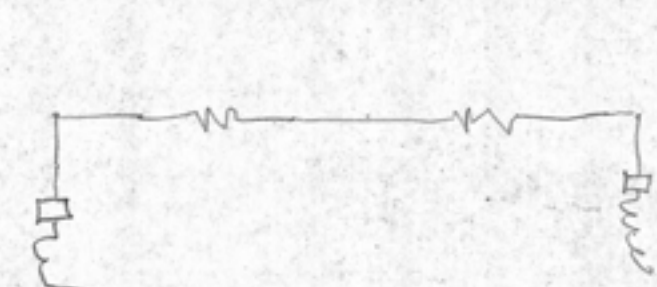
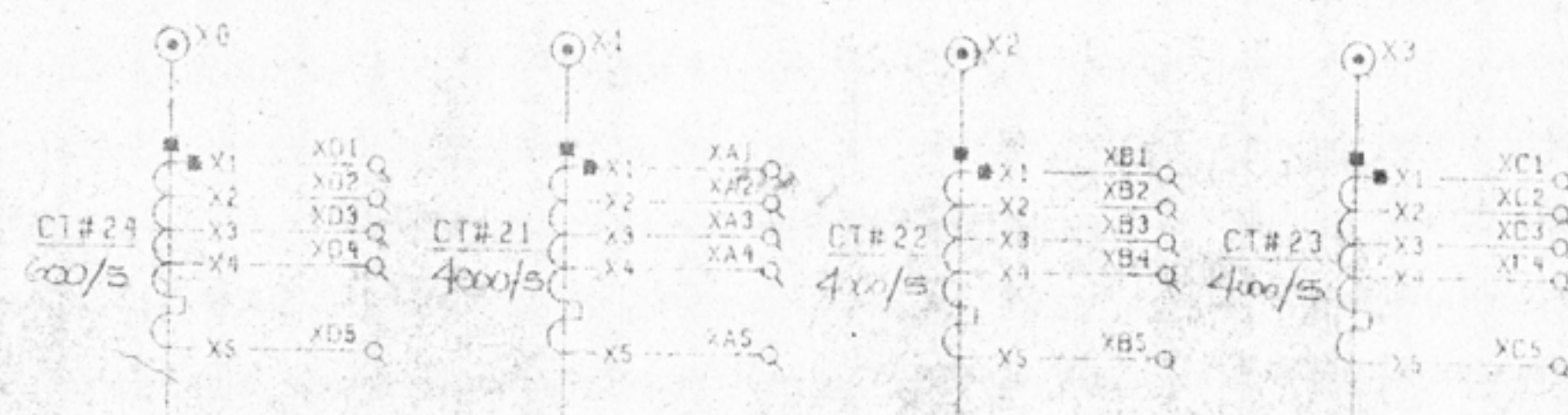


TERMINAL BOARD PANEL

USE 15,230V
 1 PH, 60 HZ
 POWER SUPPLY



(COOLING CIRCUIT)



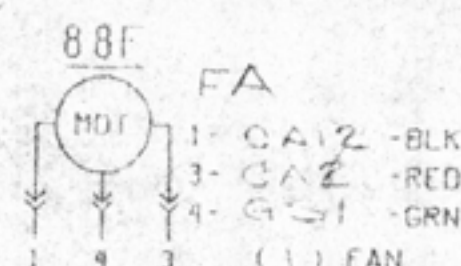
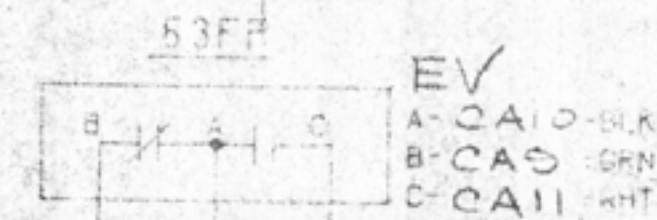
CTO-5

SHORT CIRCUIT LINK
FACTORY CONNECT:

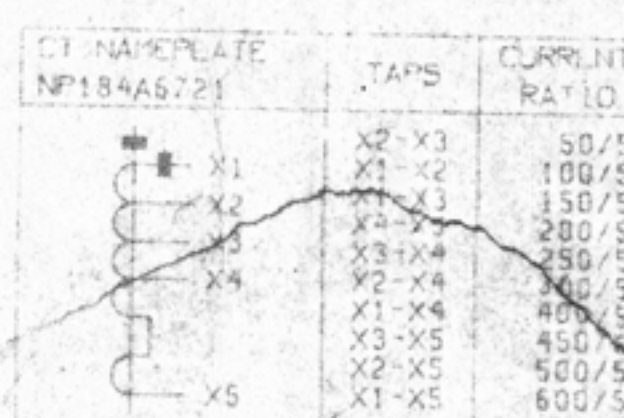
1 TO 5
6 TO 10
11 TO 15
16 TO 20

STUD NO.	INTERNAL CONNECTION	EXTERNAL CONNECTION
1	X1C21	XA1
2	X2C21	XA2
3	X3C21	XA3
4	X4C21	XA4
5	X5C21	XA5
6	X1C22	XB1
7	X2C22	XB2
8	X3C22	XB3
9	X4C22	XB4
10	X5C22	XB5
11	X1C23	XC1
12	X2C23	XC2
13	X3C23	XC3
14	X4C23	XC4
15	X5C23	XC5
16	X1C24	XD1
17	X2C24	XD2
18	X3C24	XD3
19	X4C24	XD4
20	X5C24	XD5
21		

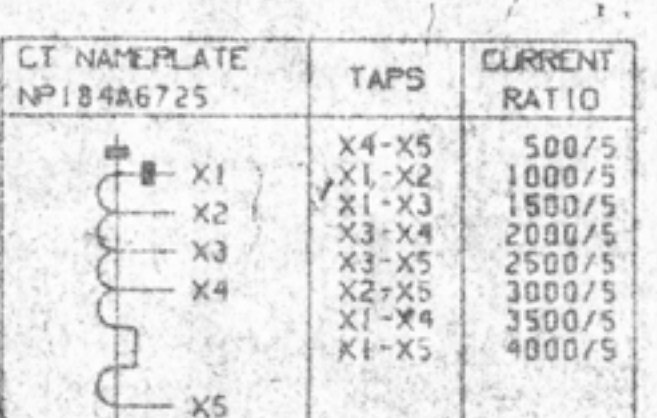
SEE NAMEPLATE CT#21, 22, 23-184A6725
 CT 24-184A6724



GRD STUD
 1-FA4-GRN
 1-XDG-GRN



CT NAMEPLATE
 NP184A6721



CT NAMEPLATE
 NP184A6725

CONNECTIONS ARE INDICATED BY DESIGNATIONS
 DERIVED FROM IDENTIFICATION LETTERS OF THE
 DEVICES AND THEIR TERMINAL DESIGNATIONS.
 FOR COMPLETE INSTRUCTIONS SEE INSTRUCTION
 BOOK FURNISHED WITH TRANSFORMER.
 DEVICE FUNCTION NUMBERS AND LETTERS WERE
 USED ARE ANSI STANDARDS.

THIS DRAWING SHOWS ELECTRICAL CONNECTIONS
 ONLY. THE EXACT LOCATION OF DEVICES MUST
 NOT BE READ FROM IT.

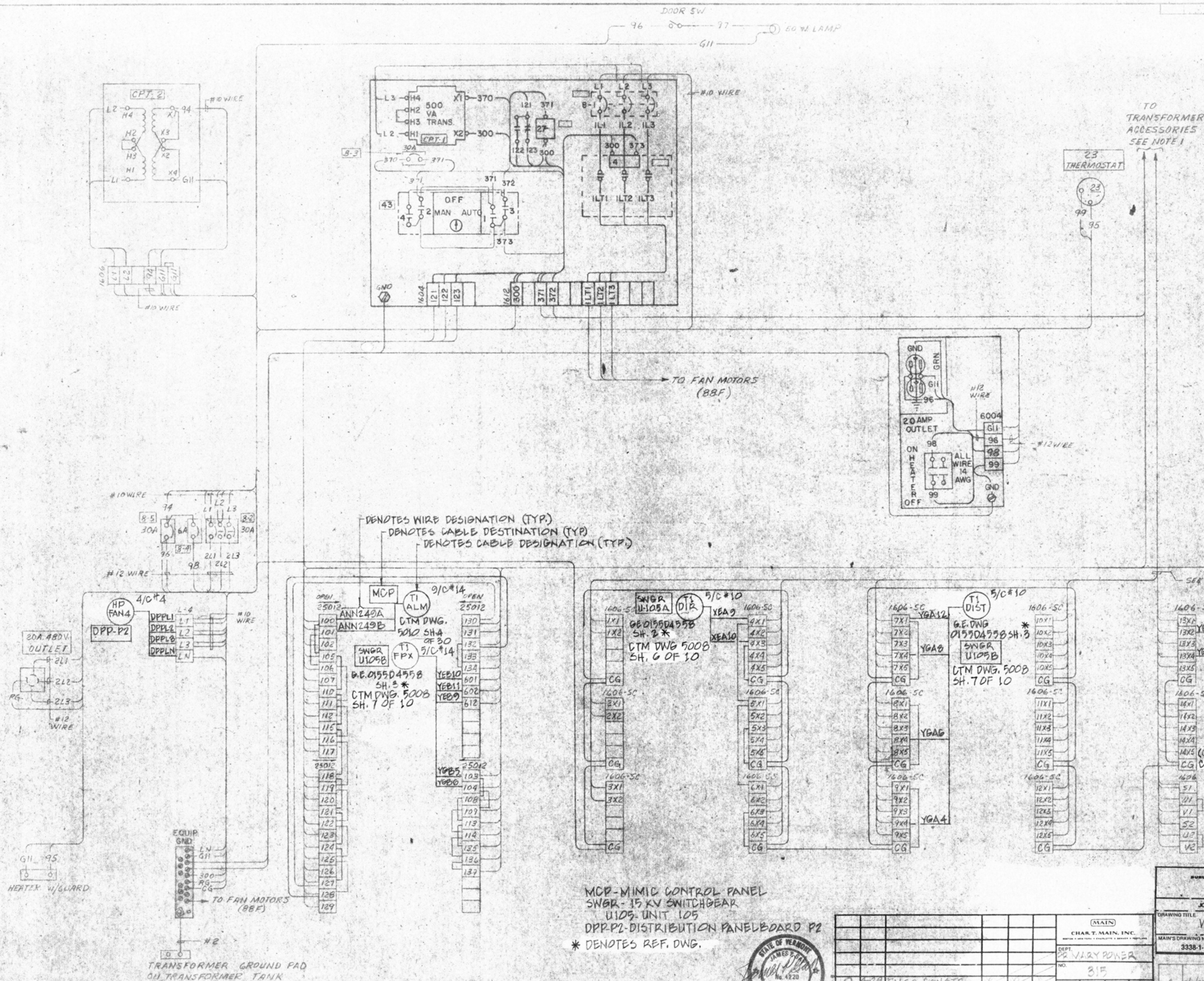
710
 HA-DEVICE FUNCTION NUMBER
 A-IDENTIFICATION LETTERS
 B-CA2-LEAD DESIGNATION
 C-CA3

TYPE BR
 FREQUENCY
 60 HERTZ

CAUTION - READ
 INSTRUCTIONS
 GE1-65093

REV.	DATE	REVISIONS	PRINTS TO
1-18-83	ADDED WIRE NO'S, SWGR UNIT NO'S		CTM
2-18-83	ADDED WIRE NO'S, SWGR UNIT NO'S		CTM

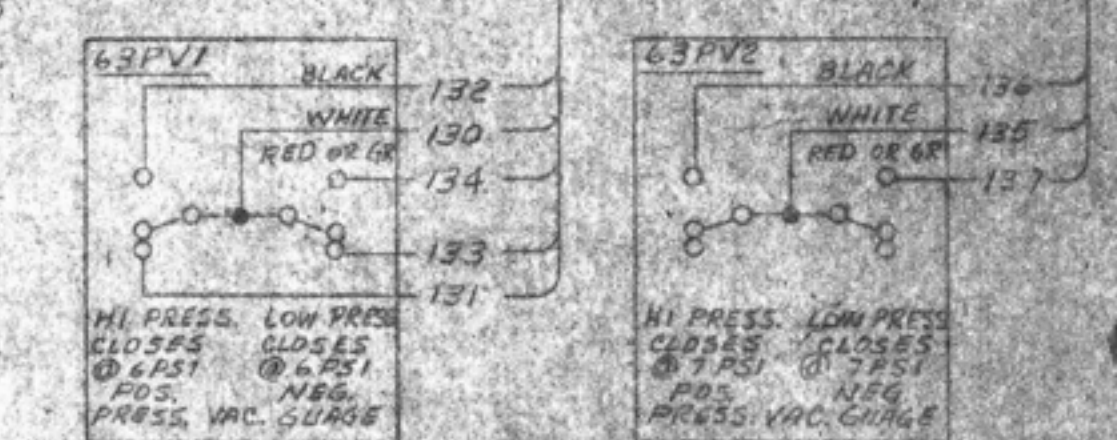
149D7177



TO
TRANSFORMER
ACCESSORIES
SEE NOTE 1

ENG0-NEW DWG.
NO CHANGE

- NOTES
1. FOR ACCESSORY SCHEMATIC, SEE DWG. DE0440426
 2. UNLESS OTHERWISE NOTED, ALL WIRE IN THE CABINET AND CONDUIT IS #14 AWG, 600 VOLT CLASS TYPE XHHW.
 3. ALL GROUNDING CONDUCTORS HAVE GREEN COLOR INSULATION.
 4. CAUTION: WITH MAIN TRANSFORMER ENERGIZED, CURRENT TRANSFORMER SECONDARY LEADS MUST BE SHORT CIRCUITED OR LOADED BEFORE REMOVING JUMPER FOR TESTING PURPOSES.
 5. USE #10 WIRE, 1000 VOLT INSULATION.
 6. USE AMP PRE-INSULATED DIAMOND GRIP RING-TONGUE CONNECTORS BOTH THROUGHOUT THE ENTIRE CABINET AND FOR ALL EXTERNAL CONNECTIONS.
 7. ALL DEVICES WILL BE IDENTIFIED USING LAMICOLOR NAMEPLATES WITH BLACK LETTERS ON A WHITE BACKGROUND PER MEPS NAMEPLATE SCHEDULE A20440434.
 8. SECONDARY LEADS OF ALL CURRENT TRANSFORMERS SHALL BE SEGREGATED BY RUNNING PRIMARY AND SECONDARY RELAYING CURRENT TRANSFORMER LEADS IN SEPARATE CONDUITS FROM EACH BUSHING LOCATION TO THE CONTROL CABINET.
 9. ALL GROUNDING CONDUCTORS HAVE WHITE COLOR INSULATION.



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MCP-MIMIC CONTROL PANEL
SWGR-15 KV SWITCHGEAR
U105 UNIT 105
DPP-P2 DISTRIBUTION PANELBOARD P2
* DENOTES REF. DWG.



REV.				DATE				DESCRIPTION			
0	1/23	ENG0-CONSTR.									

BURLINGTON Electric DEPARTMENT	
JOSEPH C. MCNEIL GENERATING STATION	
DRAWING TITLE	
WIRING DIAGRAMS	
MAINS DRAWING NO.	3338-1-315-500
SHEET	9 OF 10
REV.	0

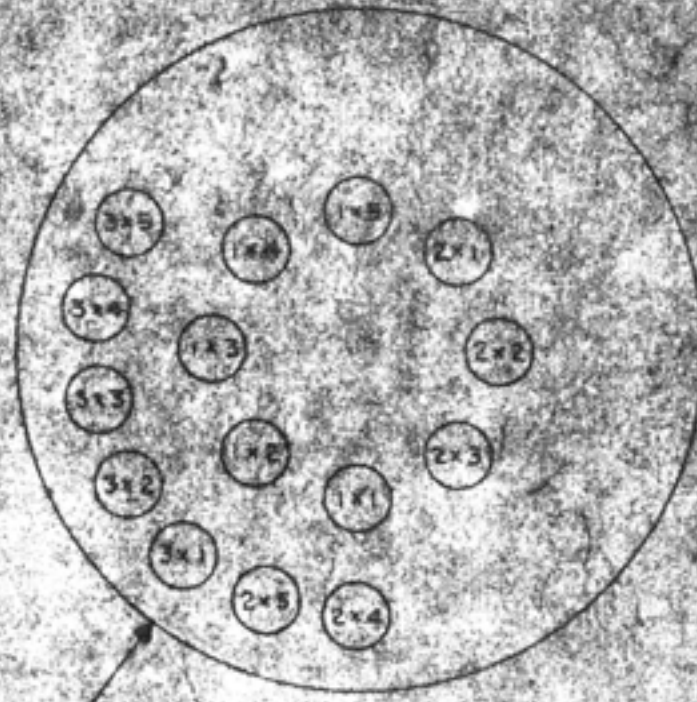
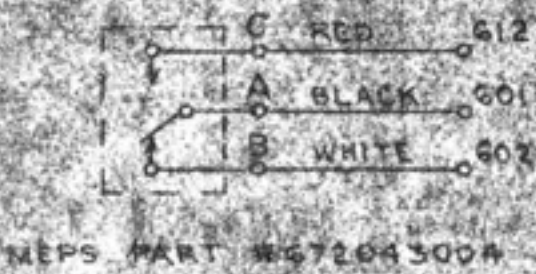
McGraw-Edison	
CHECKED BY	DATE
DESIGNED BY	DATE
APPROVED BY	DATE
DESCRIPTION	
WIRING DIAGRAM	
DE0440428	

RECEIVED

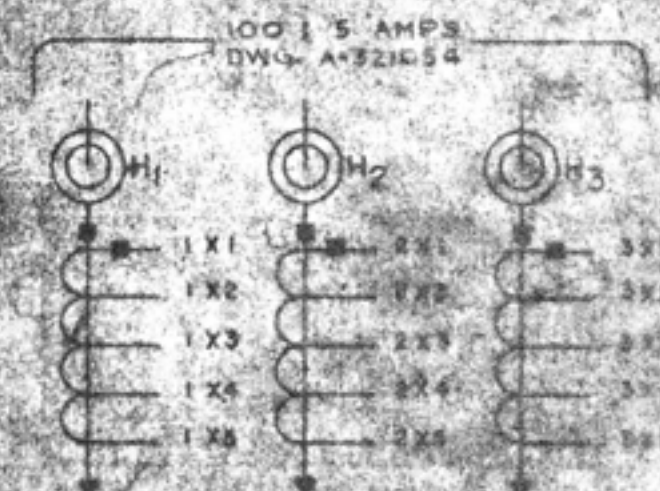
MAY 2 1988

BURLINGTON ELECTRIC DEPT.
Joseph C. McNeil, General Manager

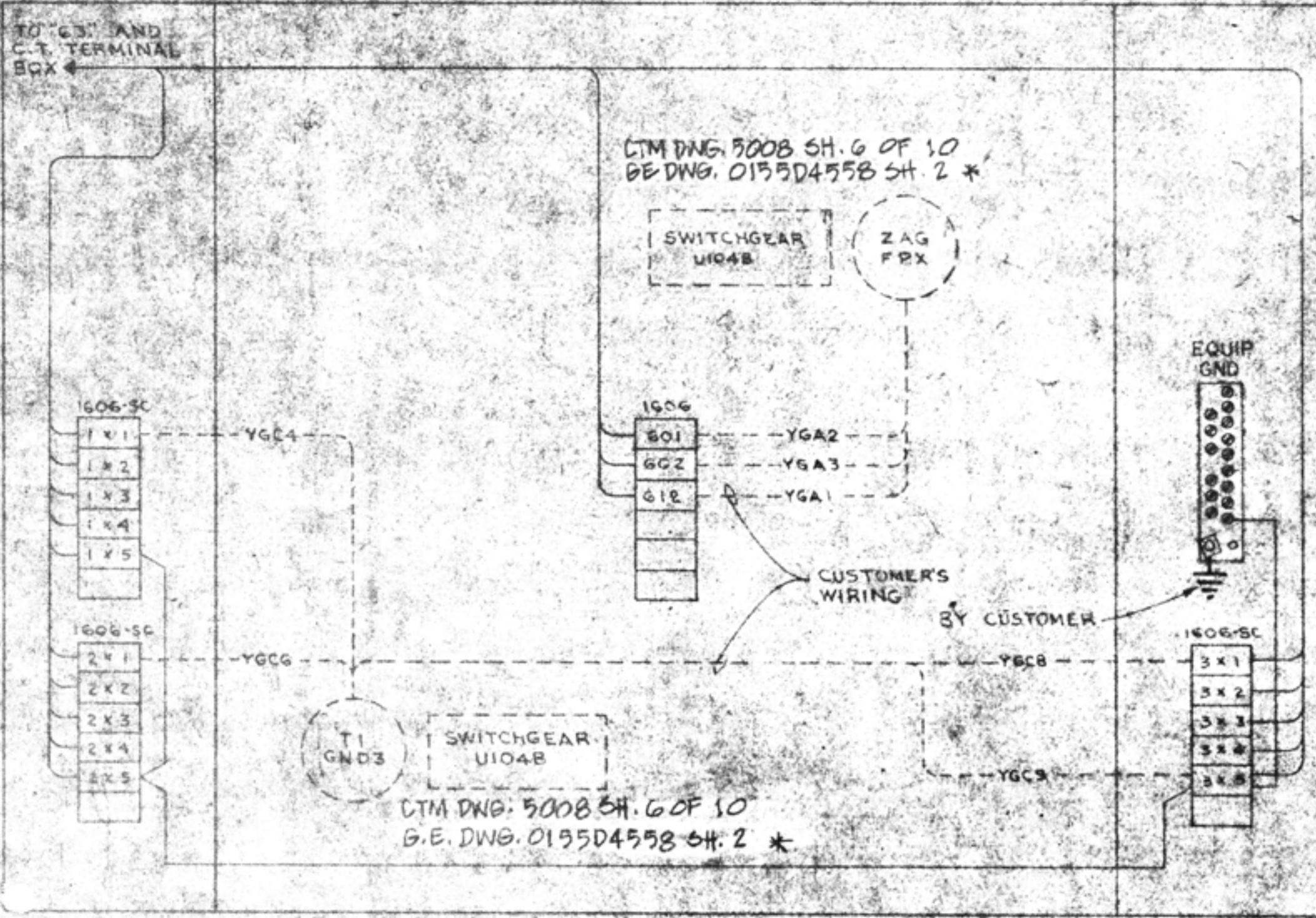
G-3 QUALITROL FAULT PRESSURE RELAY
LOCATED ON TOP OF MAIN TANK



CURRENT TRANSFORMER MULTI-RATIO TYPE 100-5 AMPERES		
RATIO	TURNS	TRPS
25:5	5	X1-X2
50:5	10	X1-X3
75:5	15	X1-X4
100:5	20	X1-X5



CAUTION: WITH MAIN TRANSFORMER ENERGIZED,
CURRENT TRANSFORMER SECONDARY LEADS MUST
BE SHORT-CIRCUITED OR LOADED. THESE LEADS
CONNECTED TO SHORT-CIRCUITING TYPE TERMINAL
BLOCKS AND ARE SHORT-CIRCUITED AT FACTORY
FOR SHIPMENT.

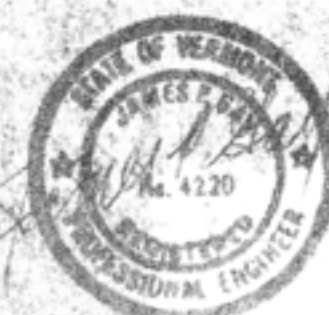


ENG-NEW DWG.
NO CHANGE

* DENOTES REFERENCE DWG.

NOTES:

1. CURRENT TRANSFORMER SECONDARY LEADS ARE TO BE #22 AWG, 600 VOLT CLASS, NEPS STD. P-235-125.
2. ALL WIRE IN THE CONTROL CABINET AND CONDUIT IS TO BE #14 AWG, 600 VOLT CLASS, TYPE KUHN UNLESS OTHERWISE NOTED.
3. ALL GROUNDING CONDUCTORS ARE TO HAVE GREEN COLOR INSULATION.



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BURLINGTON ELECTRIC DEPARTMENT	
JOSEPH C. MCNEIL, GENERAL MANAGER	
DRAWING TITLE: WIRING DIAGRAMS	
DATE: 3/3/88	SHEET 10 OF 10

PURCHASE ORDER NO. MC-196
 TRANSFORMER EQUIPMENT NO. 315.01.5009
 JOB NUMBER
 SPECIFICATION NO. C.E. MAIN 3338-1-104
 1500 KVA, 3 PHASE, 60 CYCLE, 13800 VOLT
 ZIG ZAG GROUNDING TRANSFORMER

REV	DATE	DESCRIPTION	BY	CHK	APP	DATE
1	3-3-88	ENG-CONSTR	JO	RE	RE	3-3-88
2	3-3-88	MURRAY	RE	RE	RE	3-3-88
3	3-3-88	RE	RE	RE	RE	3-3-88
4	3-3-88	RE	RE	RE	RE	3-3-88
5	3-3-88	RE	RE	RE	RE	3-3-88
6	3-3-88	RE	RE	RE	RE	3-3-88
7	3-3-88	RE	RE	RE	RE	3-3-88
8	3-3-88	RE	RE	RE	RE	3-3-88
9	3-3-88	RE	RE	RE	RE	3-3-88
10	3-3-88	RE	RE	RE	RE	3-3-88

ITEM REQ. NAME WINDING ORDER CHECKED BY DATE APPROVED BY DATE DESIGN APPROVAL CONFIDENTIAL MUST NOT BE USED IN ANY WAY DERIVATIVE TO MCGRAW-EDISON		DRAWING NUMBER OR DESCRIPTION MCGRAW-EDISON POWER SYSTEMS DIVISION CINCINNATI, OHIO 45202-1217 ACCESSORY SCHEMATIC & WIRING DIAGRAM CUSTOMER: BURLINGTON ELECTRIC DEPARTMENT CUSTOMER ORDER: MC-196		PLOT NO. C20434560-1
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