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GENERAL NOTES:

1. UNLESS OTHERWISE NOTED, ALL SWITCHES ARE SHOWN AT 25C (77F), AT ATMOSPHERIC PRESSURE, AT 50% RELATIVE HUMIDITY, WITH ALL POWER REMOVED, AND AFTER A NORMAL SHUTDOWN HAS OCCURRED.
2. WIRES REPRESENTED BY DASHED LINES INDICATE RECOMMENDED FIELD WIRING BY OTHERS. WIRES REPRESENTED BY SOLID LINES INDICATE FACTORY INSTALLED WIRING.
3. DASHED LINE ENCLOSURES AND/OR DASHED DEVICE OUTLINES INDICATE OPTIONAL COMPONENTS/WIRING.
4. NUMBERS ALONG THE RIGHT SIDE OF THE SCHEMATIC DESIGNATE THE LOCATION OF COMPONENT CONTACTS BY LINE NUMBER. AN UNDERLINED NUMBER INDICATES A NORMALLY CLOSED CONTACT.
5. ALL FIELD WIRING MUST BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (NEC), STATE, AND LOCAL CODES.
6. CLASS 1 FIELD WIRING INSULATION RATING IS REQUIRED TO BE EQUAL TO OR GREATER THAN THE EQUIPMENT SUPPLY VOLTAGE RATING. CLASS 2 FIELD WIRING INSULATION IS REQUIRED TO BE RATED AT 300 V MINIMUM.

FLAG NOTES:

- 1
- ALL UNIT POWER WIRING MUST BE COPPER CONDUCTORS ONLY, HAVE A MINIMUM INSULATION TEMPERATURE RATING OF 90
- 2
- TERMINAL BLOCK 1X1 IS PROVIDED AS STANDARD ON ALL UNITS PNCO=TERM. CIRCUIT BREAKER 1Q1 PNCO=CBH AVAILABLE AS AN OPTION. TERMINAL BLOCK IS REPLACED WITH CIRCUIT BREAKER WHEN THIS OPTION IS SELECTED.
- 3
- ELECTRONIC PROTECTION MODULE USED FOR 20-30 TON COMPRESSORS ONLY. FOR 10-15TON COMPRESSOR CONTROL CIRCUIT, TERMINALS 1X4-16, 20 ARE JUMPED BY W4, TERMINALS 1X4-16, 19 ARE JUMPED BY W5, TERMINALS 1X4-15, 18 ARE JUMPED BY W6, TERMINALS 1X4-15, 17 ARE JUMPED BY W7 IN SLANT AND V CONFIGURATION. (NTON= 20, 26, 30, 40, 52, 60 OR 70).
- 4
- REFER TO FAN CHART FOR VALID FAN CONFIGURATIONS.
- 5
- TRANSFORMER FOR 575V UNITS ONLY. (VOLT=575) AND (UAPP=EXTC OR WIDC).
- 6
- PUMP PACKAGE:
- AT LEAST ONE PUMP IS ALWAYS PRESENT AND IS EITHER FIELD OR FACTORY SUPPLIED.
- WHEN PUMPS ARE FACTORY SUPPLIED, THEY WILL BE DUAL PUMPS.
- 7
- OPTIONAL DUAL FACTORY SUPPLIED EVAP WATER PUMPS. WIRING SHOWN IS FOR VSD OF PUMP PACKAGE. (PTYP=DHHP).
- 8
- OPTIONAL DUAL CUSTOMER SUPPLIED EVAP WATER PUMP(S). 6M2 WIRING PRESENT FOR DUAL PUMP CONFIGURATION ONLY.
- PUMP CONTROL CONFIGURATION SHOWS WIRING WITH CONTACTORS AND OVERLOAD RELAYS. PUMP(S) CAN ALSO BE POWERED BY CUSTOMER CONTROLLED VSD(S).
- PUMP STARTER FAULT SIGNAL(S) TO BE FIELD WIRED TO 1A12 (INSET "V").
- 9
- CUSTOMER SUPPLIED PUMP RUN SIGNAL TO BE FIELD WIRED TO 1A9.
- 10
- WIRING FOR 200V/230V UNIT SHOWN. SEE INSET "B" FOR CONTROL POWER TRANSFORMER WIRING OF OTHER VOLTAGES.
- 11
- CONTACT CLOSURE ENABLES ICE MAKING WHEN ICE MAKING OPTION IS ORDERED. (EVLT=ICE).
- 12
- CLASS 1 FIELD WIRED MODULE.
- 13
- RELAY AT 120VAC: 7.2 AMPS RESISTIVE, 2.88 AMPS PILOT DUTY, 1/3 HP 7.2 FLA; AT 240VAC: 5 AMPS GENERAL PURPOSE.
- 14
- FIELD ASSIGNED PROGRAMMABLE RELAYS. (STAT=PRLY).
- 15
- CUSTOMER SUPPLIED POWER, 120V.
- 16
- ONLY USED WHEN PUMP PACKAGE OPTION IS ORDERED. (PTYP=DHHP).
- 17
- ONLY USED WHEN BUFFER TANK OPTION IS ORDERED. (BTNK=BTNK).
- 18
- THE CONTACTS FOR AUTO STOP AND EMERGENCY STOP SWITCHES ARE JUMPERED AT THE FACTORY BY JUMPERS W2 & W3 TO ENABLE UNIT OPERATION. IF REMOTE CONTROL IS DESIRED, REMOVE THE JUMPERS AND CONNECT TO THE DESIRED CONTROL CIRCUIT.
- 19
- PHASE PROTECTION RELAY USED ONLY FOR CIRCUIT(S) WITH 10 TON, 13 TON AND 15 TON COMPRESSORS (NTON = 20, 26, 30, 40, 52, 60 OR 70).
- 20
- NOT PRESENT WHEN BOTH OF THE COMPRESSORS ARE 10 TON, 13 TON AND 15 TON COMPRESSORS (NTON = 20, 26, 30, 40, 52, 60 OR 70).
- 21
- GROUND SCREW IN MAIN CONTROL PANEL.
- 22
- INSIDE THE PUMP VSD ENCLOSURE, MOUNTED ON UNIT FRAME WITH (PTYP=DHHP).
- 23
- ONLY USED WHEN PARTIAL HEAT RECOVERY (CDHR = PRTF) OPTION IS ORDERED.
- 24
- COMPRESSOR HEATER WIRE COLOR IS DETERMINED BY VOLTAGE IN CHART.
- 25
- PRESENT ON "V" FRAME UNITS (NTON = 40, 52, 60 or 70).
- 28
- DISCHARGE REFRIGERANT TEMPERATURE SENSOR PRESENT FOR ALL THE FOLLOWING OPTIONS:
- UNITS WITH ICEMAKING OPTION (EVLT = ICE), UNITS WITH LOW TEMPERATURE PROCESS COOLING (EVLT = PROC), UNITS WITH PHR FAN CONTROL OPTION (CDHR = PRTF).
- 29
- REFER TO FIELD WIRING DIAGRAM FOR SUGGESTED WIRING.
- 30
- JUMPERS W9, W10 AND W11 ARE INSTALLED BY THE FACTORY ON UNITS ORDERED WITH FIELD PROVIDED PUMPS (PTYP = NONE). JUMPERS W9, W10 AND W11 ARE TO BE REMOVED WHEN PUMPS AND CONTROL ARE INSTALLED.
- 35
- VENTILATION FAN PRESENT WHEN LINE (VOLT = 200, 230, 380).
- 37
- THERMOSTATS ARE REQUIRED IN THE COMPRESSOR JUNCTION BOXES ON ALL UNITS WITH COMMERCIAL COMPRESSORS AND SOUND WRAPS TO PREVENT THE PROTECTION MODUAL FROM GETTING TOO HOT. (NTON=70) (HRTZ = 60 AND SATT = LNUN OR HRTZ = 50 AND SATT = STDN).
- 38
- WIRING FOR 5M1 AND 5M2 WIRING IS BASED ON MOTOR HORSEPOWER AND VOLTAGE. USE DIAGRAMS FOR NOTE 38 ON PAGE 9 FOR WIRING
- 43
- TWO SPEED FAN 1 PRESENT WHEN:
- HIGH AMBIENT UNIT WITH THREE FANS PER CIRCUIT, (NTON= 060 OR 070) AND (UAPP=HATC AND VOLT =200, 230, 460)
- 44
- VSD AND ASSOCIATED CONTROL CIRCUITS ON FAN 1 PRESENT WHEN:
- LOW AMBIENT, AND WIDE AMBIENT UNITS. UNITS WITH PHR FAN CONTROL OPTION, 2 FAN HIGH AMBIENT AND 3 FAN 380/575V HIGH AMBIENT.
- 45
- CONVENIENCE OUTLET ASSEMBLY. POWER FOR THE OPTIONAL CONVENIENCE OUTLET IS SUPPLIED BY A CUSTOMER PROVIDED POWER SUPPLY, MAX FUSE SIZE IS 20 AMPS FOR OPTIONAL CONVENIENCE OUTLET
- 46
- ONLY USED WHEN ENGERGY METER OPTION IS ORDERED (PNCO=CBHE). 1T5, 1T6, AND 1T7 ARE WIRED TO 1A45 AND ARE LOOSE FOR FIELD INSTALLATION.
- INSTALLING CONTRACTOR TO LOOP EACH CURRENT TRANSFORMER AROUND INCOMING WIRING IN ACCORDANCE WITH VERIS MODEL #E23C6-12 INSTALLATION INSTRUCTIONS.
- BE MINDFUL OF PHASING AND THE DIRECTION THE ARROWS ARE POINTING ON THE CURRENT TRANSFORMERS

**WARNING**

HAZARDOUS VOLTAGE!
DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS AND FOLLOW LOCK OUT AND TAG PROCEDURES BEFORE SERVICING. ENSURE THAT ALL MOTOR CAPACITORS HAVE DISCHARGED STORED VOLTAGE. UNITS WITH VARIABLE SPEED DRIVE, REFER TO DRIVE INSTRUCTIONS FOR CAPACITOR DISCHARGE. FAILURE TO DO THE ABOVE COULD RESULT IN DEATH OR SERIOUS INJURY.

**AVERTISSEMENT**

TENSION DANGEREUSE!
COUPER TOUTES LES TENSIONS ET OUVRIR LES SECTIONNEURS LES PROC

V
DES MOTEURS SONT D
D'UNIT

INSTRUCTIONS DE L'ENTRA
D
UN MANQUEMENT
CI-DESSUS PEUT ENTRA
BLESSURES GRAVES, VOIRE LA MORT.

**ADVERTENCIA**

¡VOLTAJE PELIGROSO!
DESCONECTE TODA LA ENERG
INCLUSO LAS DESCONEXIONES REMOTAS Y SIGA LOS PROCEDIMIENTOS DE CIERRE Y ETIQUETADO ANTES DE PROCEDER AL SERVICIO. ASEG
DE QUE TODOS LOS CAPACITORES DEL MOTOR HAYAN DESCARGADO EL VOLTAJE ALMACENADO. PARA LAS UNIDADES CON TRANSMISI
DE VELOCIDAD VARIABLE, CONSULTE LAS INSTRUCCIONES PARA LA DESCARGA DEL CONDENSADOR.
NO REALIZAR LO ANTEDICHO PUEDE PROVOCAR LA MUERTE O LESIONES GRAVES.

WATER PUMP CONTROLS CLASS CC			
DESIGNATION	NTON	VOLTAGE	RATING
1F32-34	40T, 52T	200V, 230V	30A
		380V	N/A
		460V, 575V	25A
1F32-34	60T, 70T	200V, 230V	N/A
		380V	N/A
		460V, 575V	30A

CONDENSERS FANS CLASS CC		
DESIGNATION	VOLTAGE	RATING
1F14-16 1F17-19	200V, 230V	30A
	380V, 460V	30A
	575V	6A
1F38-1F40 1F44-1F46	200V, 230V	30A
	380V, 460V	30A
	575V	30A

CONTROL TRANSFORMES CLASS CC		
DESIGNATION	VOLTAGE	RATING
1F5,6	200V, 230V	10A
	380V, 460V, 575V	5A
1F11	200V, 230V	10A
	380V, 460V, 575V	10A
CRANKCASE HEATER CONTROLS CLASS CC		
1F1,2	200V, 230V	10A
	380V, 460V, 575V	10A
PHASE PROTECTION CLASS CC		
1F7	200V, 230V	10A
	380V, 460V, 575V	5A

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MASTER FILE:

REVISION DATE:

REPLACES:

SIMILAR TO:

USED BY:



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DIAGRAM SCHEMATIC WIRING

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NOTICE

USE COPPER CONDUCTORS ONLY!
FAILURE TO USE COPPER CONDUCTORS COULD RESULT IN EQUIPMENT DAMAGE AS THE EQUIPMENT WAS NOT DESIGNED OR QUALIFIED TO ACCEPT OTHER TYPES OF CONDUCTORS.

AVIS

N'UTILISER QUE DES CONDUCTEURS EN CUIVRE!
L'UTILISATION DE MAT AUTRES QUE LE CUIVRE, PEUT ENDOMMAGER L'CELUICI N'AYANT PAS HOMOLOGU
TYPES DE CONDUCTEURS.

AVISO

SI NO UTILIZA CONDUCTORES DE COBRE, EL EQUIPO PODR YA QUE NO HA SIDO DISE PARA ACEPTAR OTROS TIPOS DE CONDUCTORES.

DEVICES, DESCRIPTIONS AND DESIGNATIONS

DEVICE	DESCRIPTION	ZONE
1A1	ADAPTIVIEW TOUCH SCREEN DISPLAY	949
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6F2	RELAY, CUSTOMER PROVIDED, OVERLOAD PROTECTION, CHILLED WATER PUMP	470
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DEVICE PREFIX LOCATION CODE	
AREA	LOCATION
1	MAIN PANEL/AUXILIARY PANEL
2	NOT USED
3	REFERIGERATION CIRCUIT 1
4	REFERIGERATION CIRCUIT 2
5	UNIT MOUNTED
6	CUSTOMER PROVIDED

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DIAGRAM
SCHEMATIC WIRING

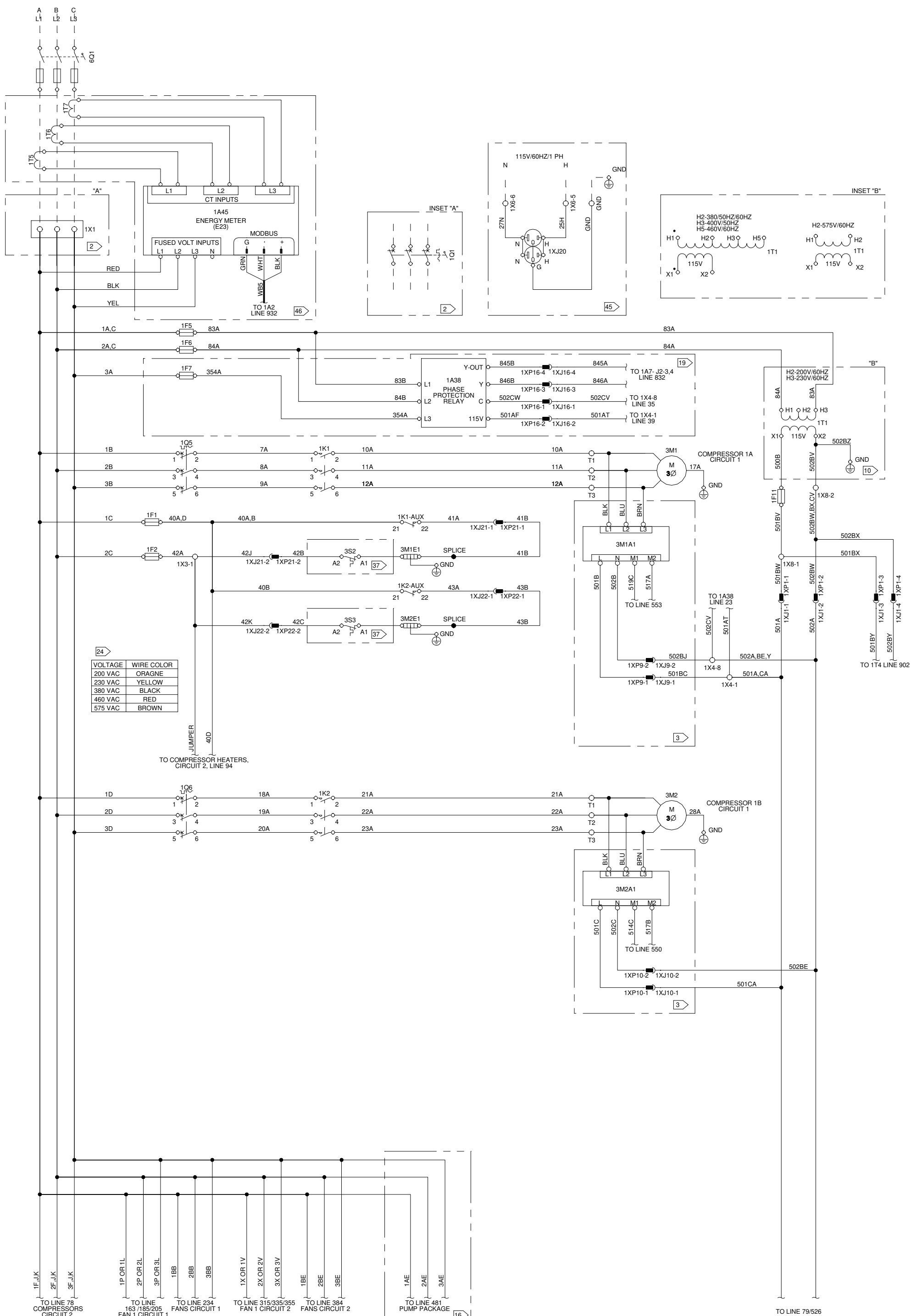
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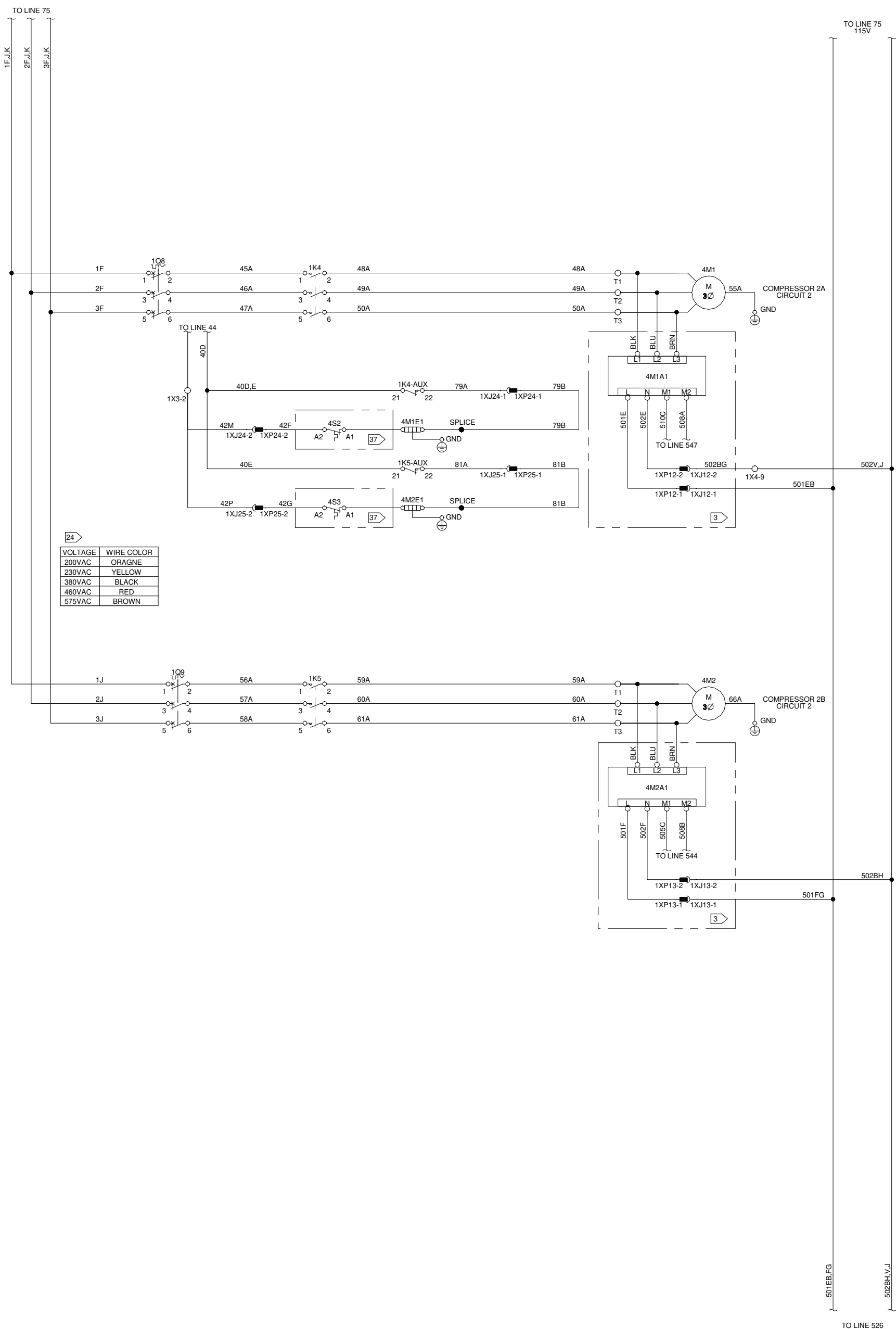
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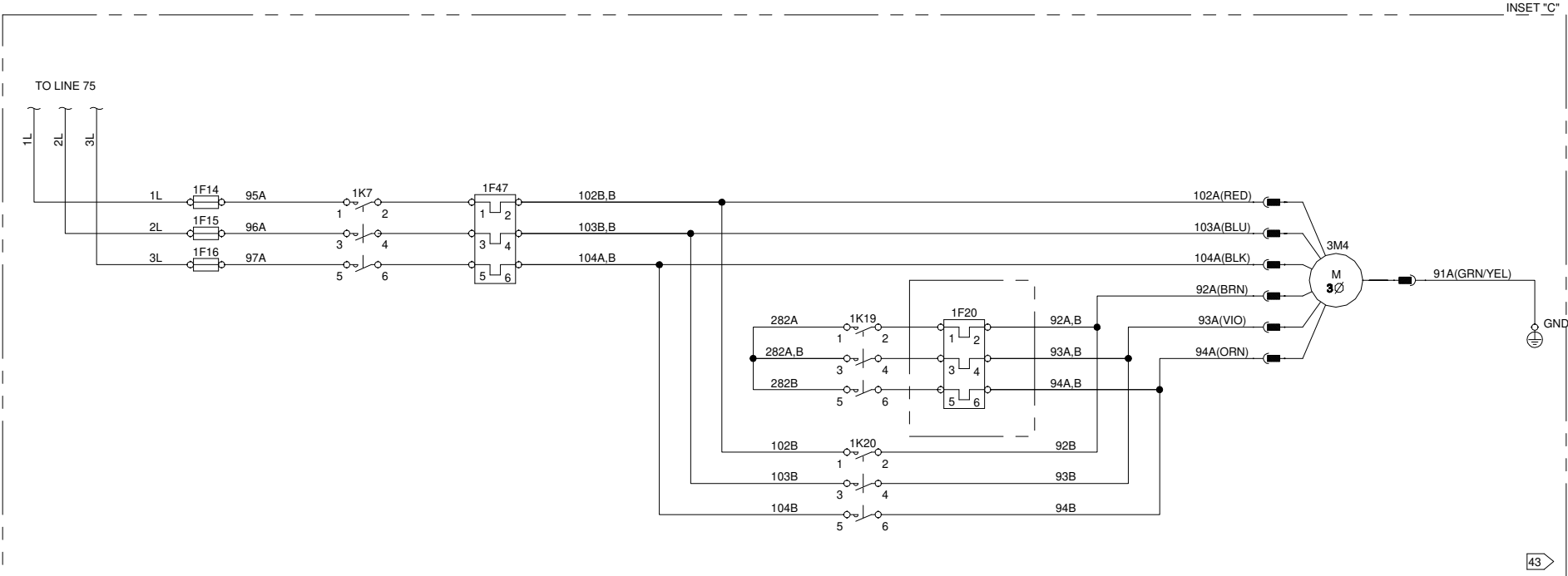
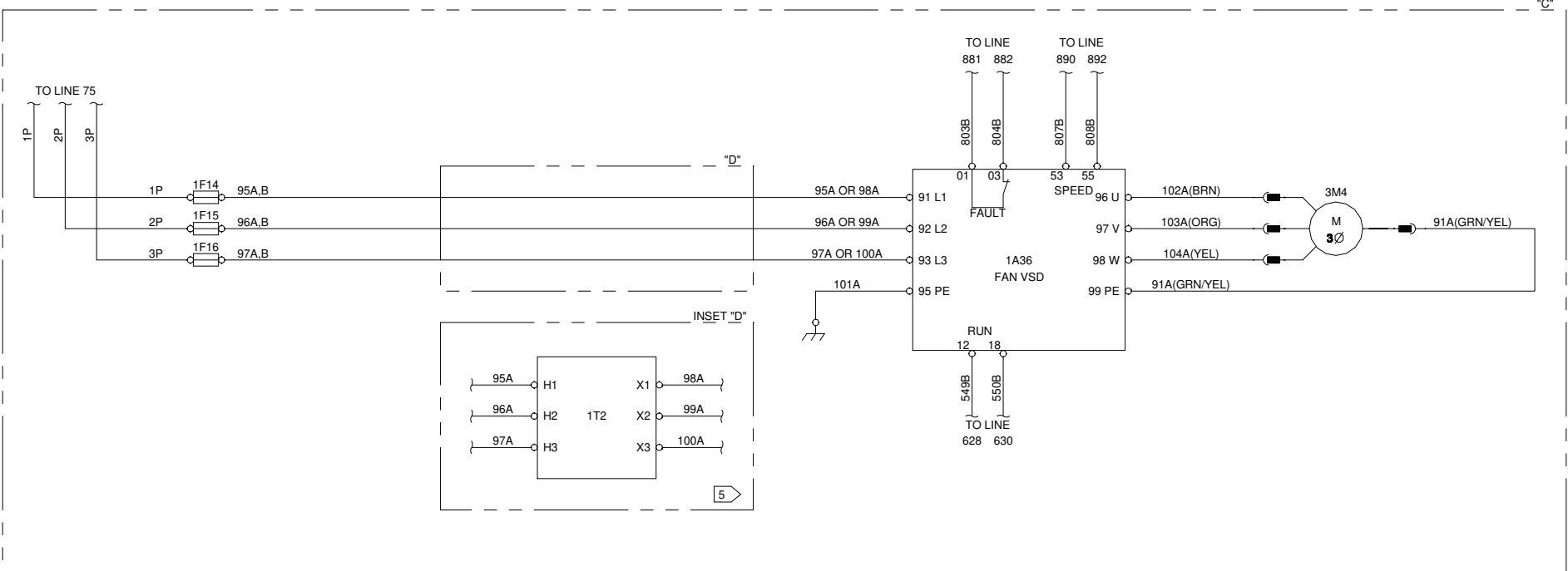
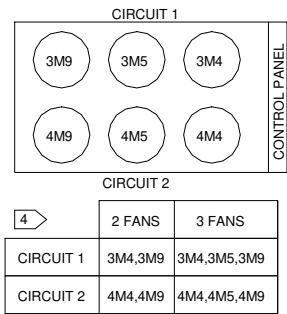
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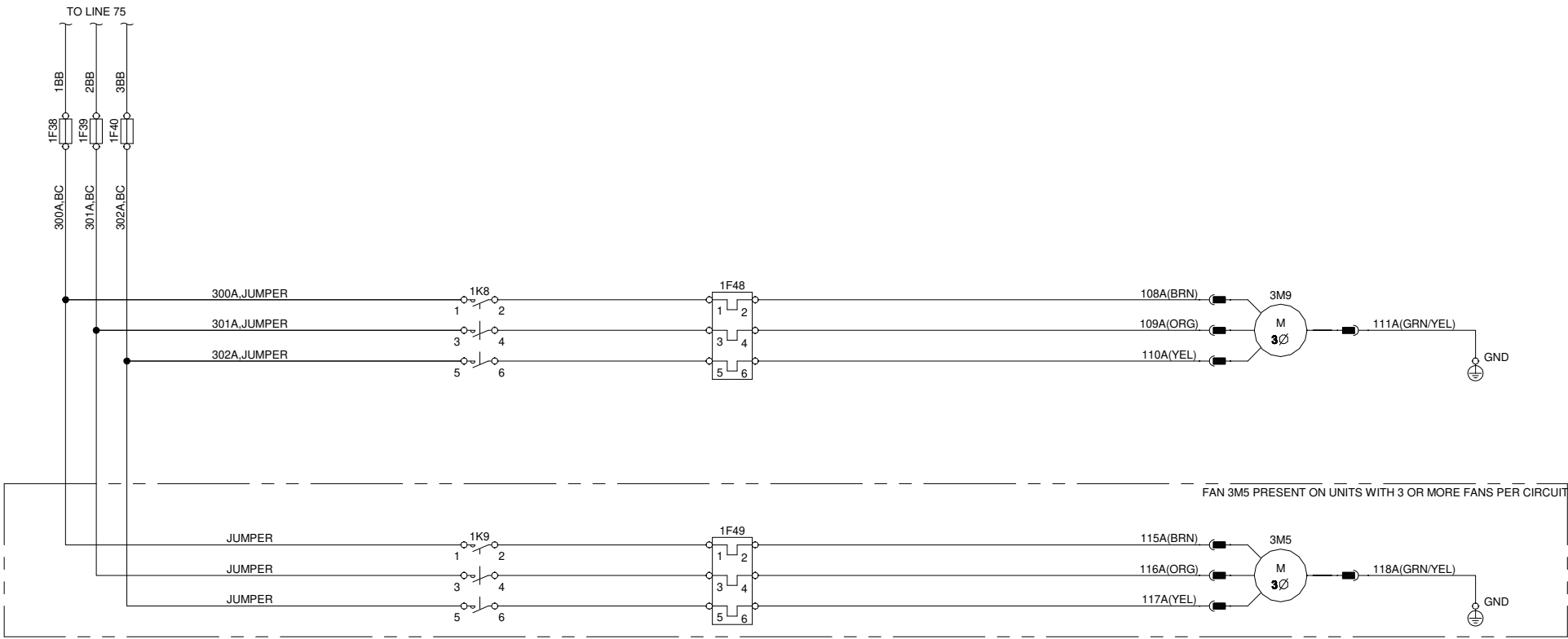




24	
VOLTAGE	WIRE COLOR
200VAC	ORAGNE
230VAC	YELLOW
380VAC	BLACK
460VAC	RED
575VAC	BROWN

FAN DECK CONFIGURATION





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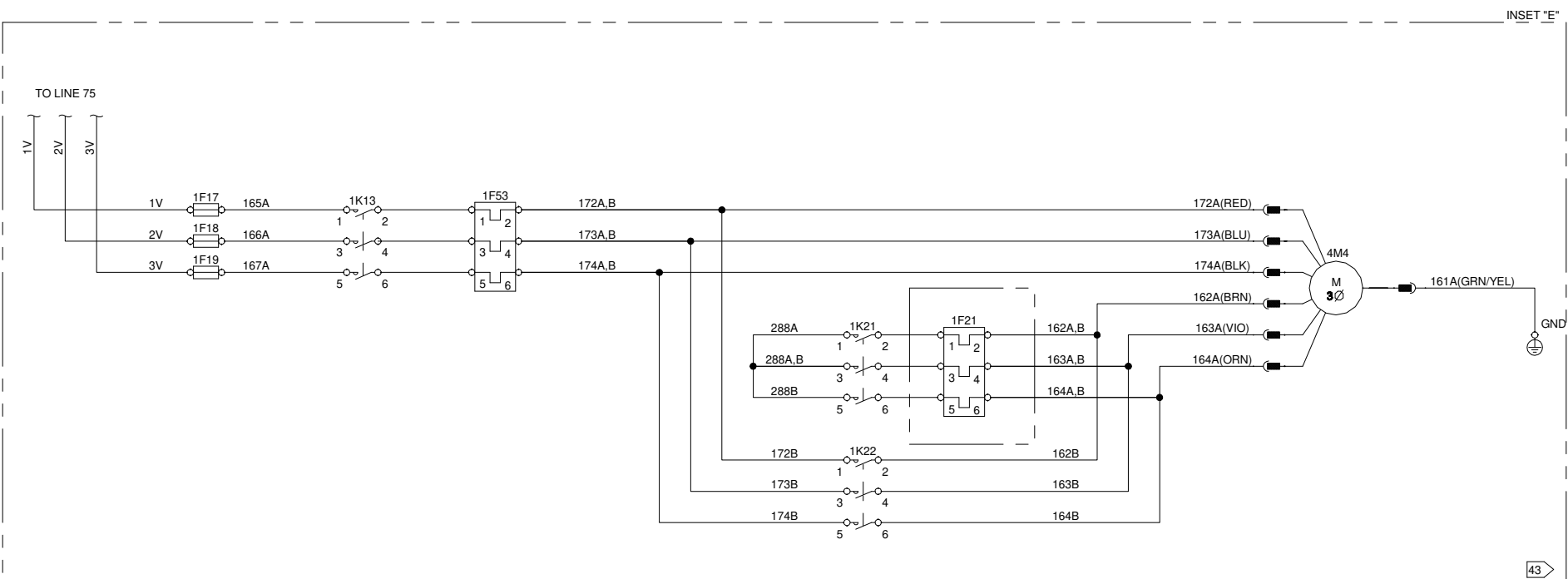
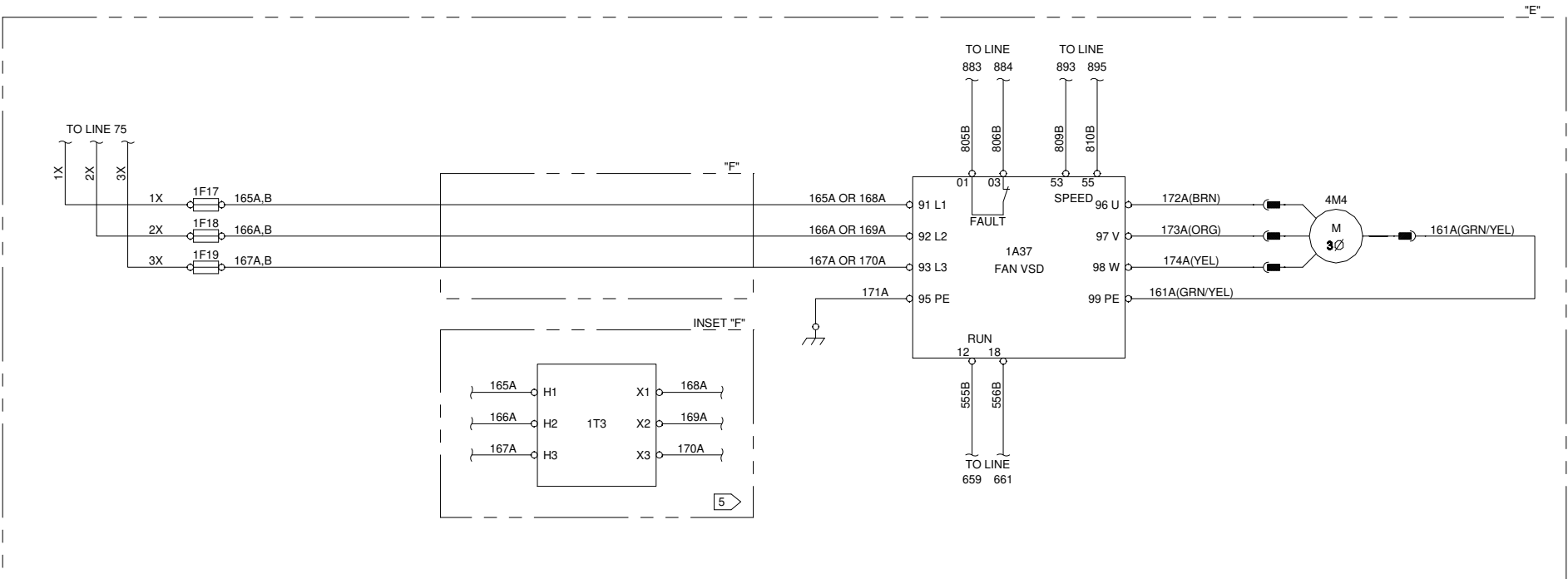
OTHER FANS, CIRCUIT 1

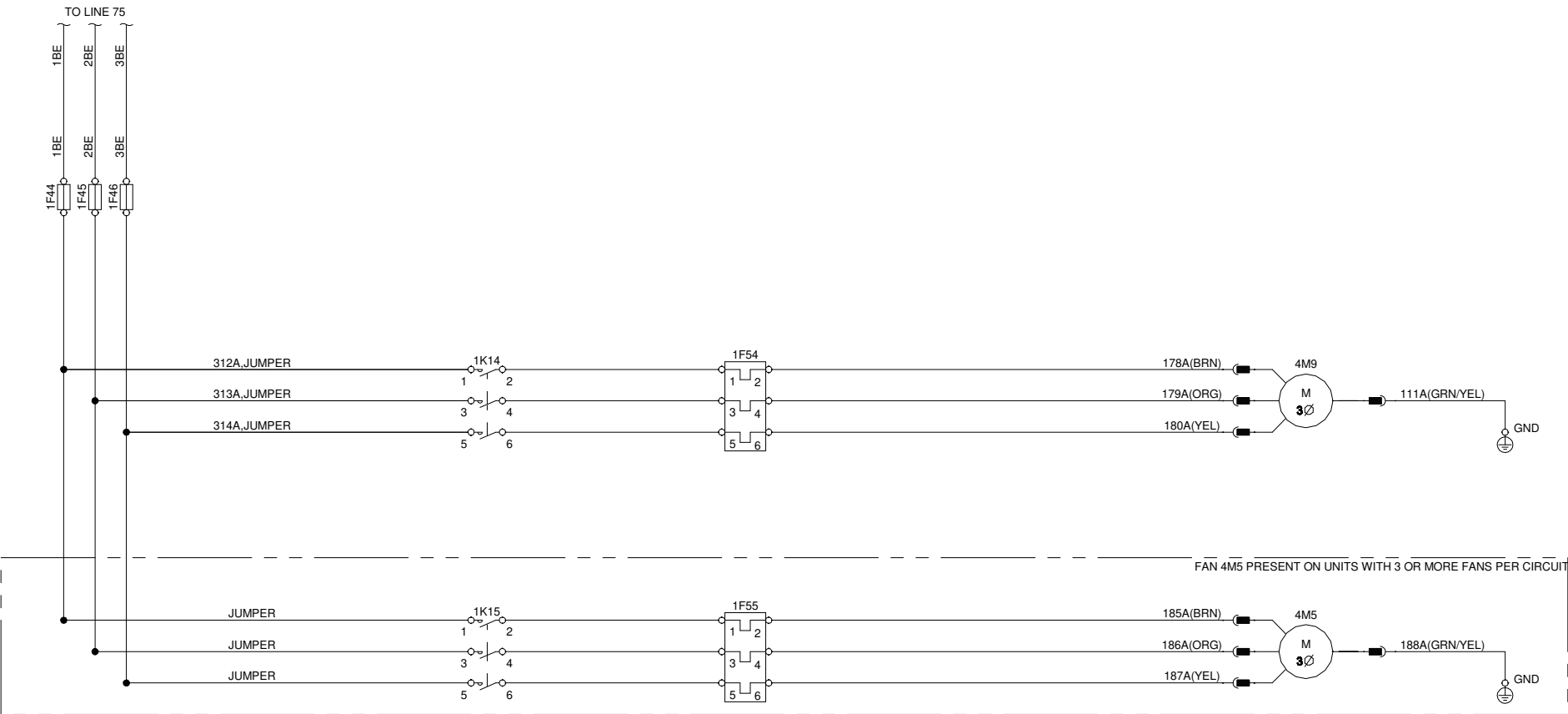
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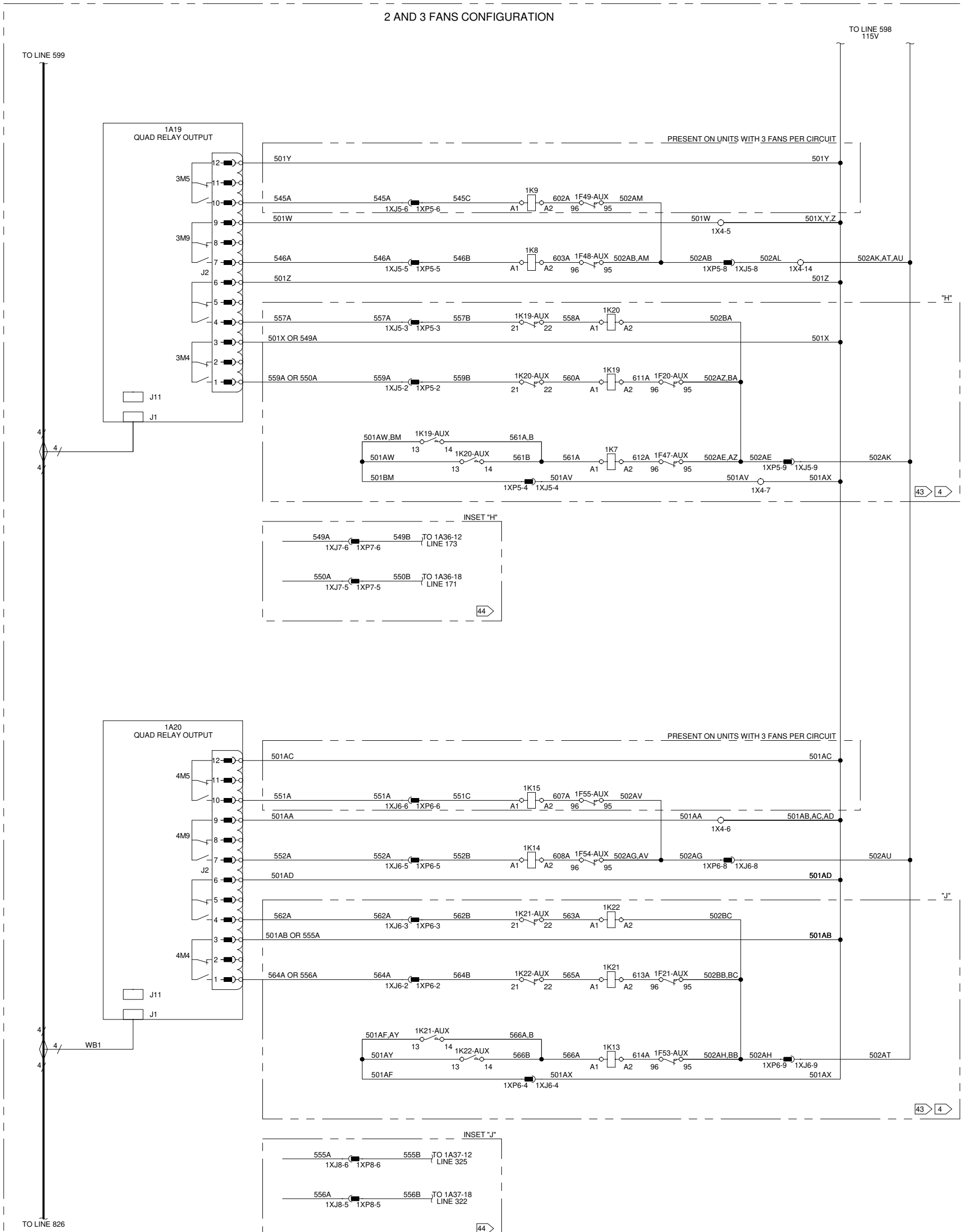
OTHER FANS, CIRCUIT 2

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3 FANS CONTROL

V FRAME
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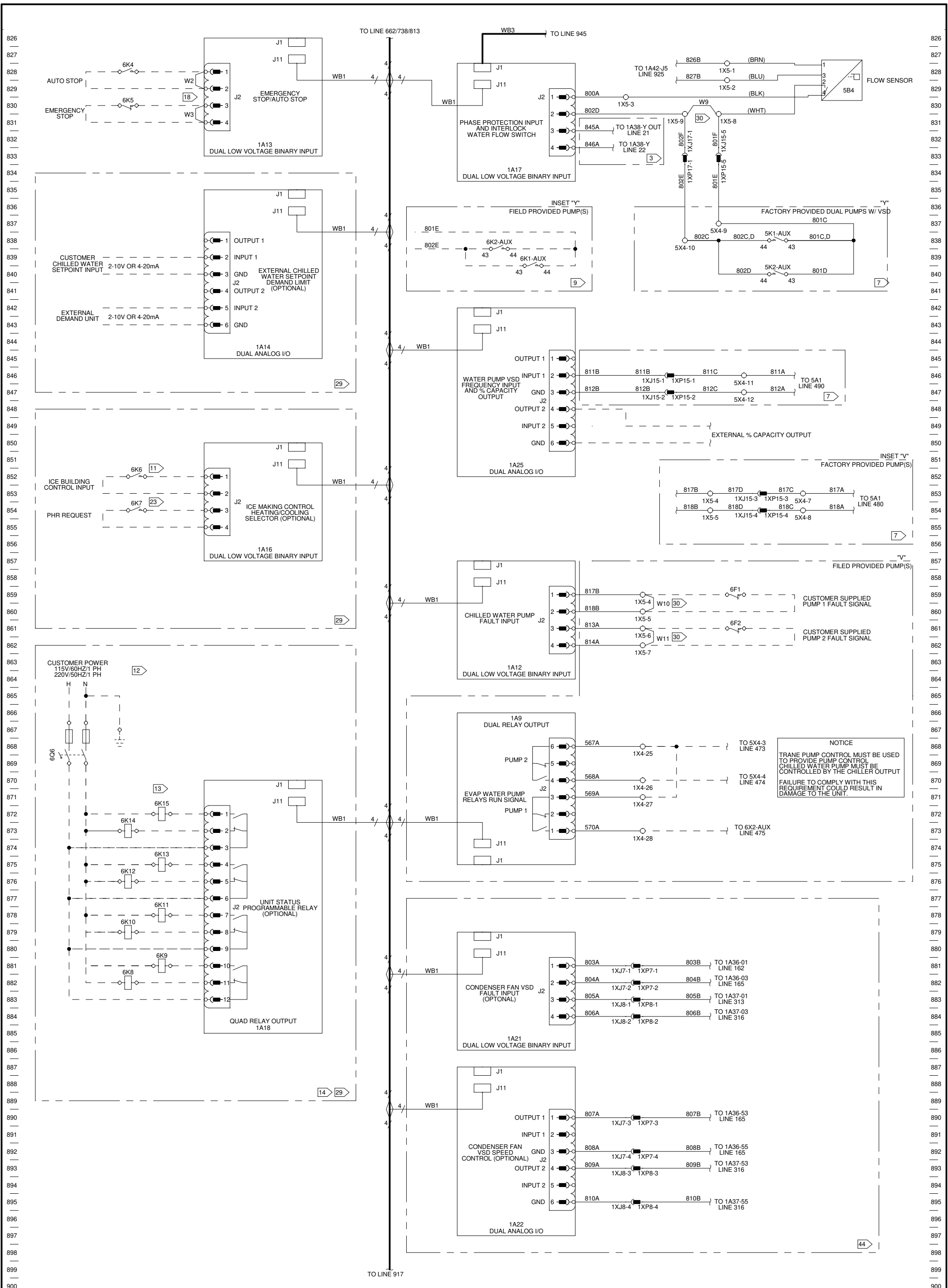
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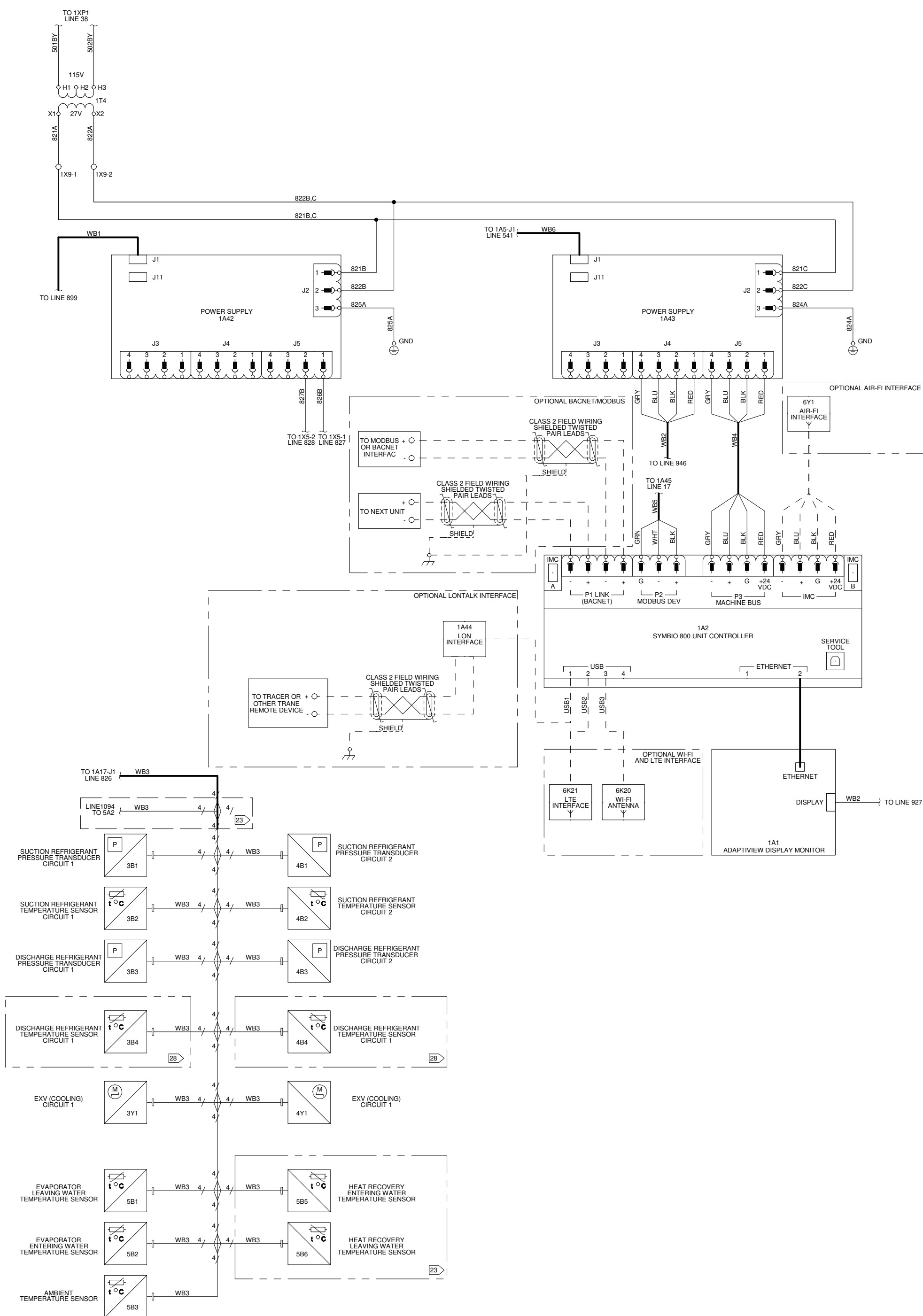
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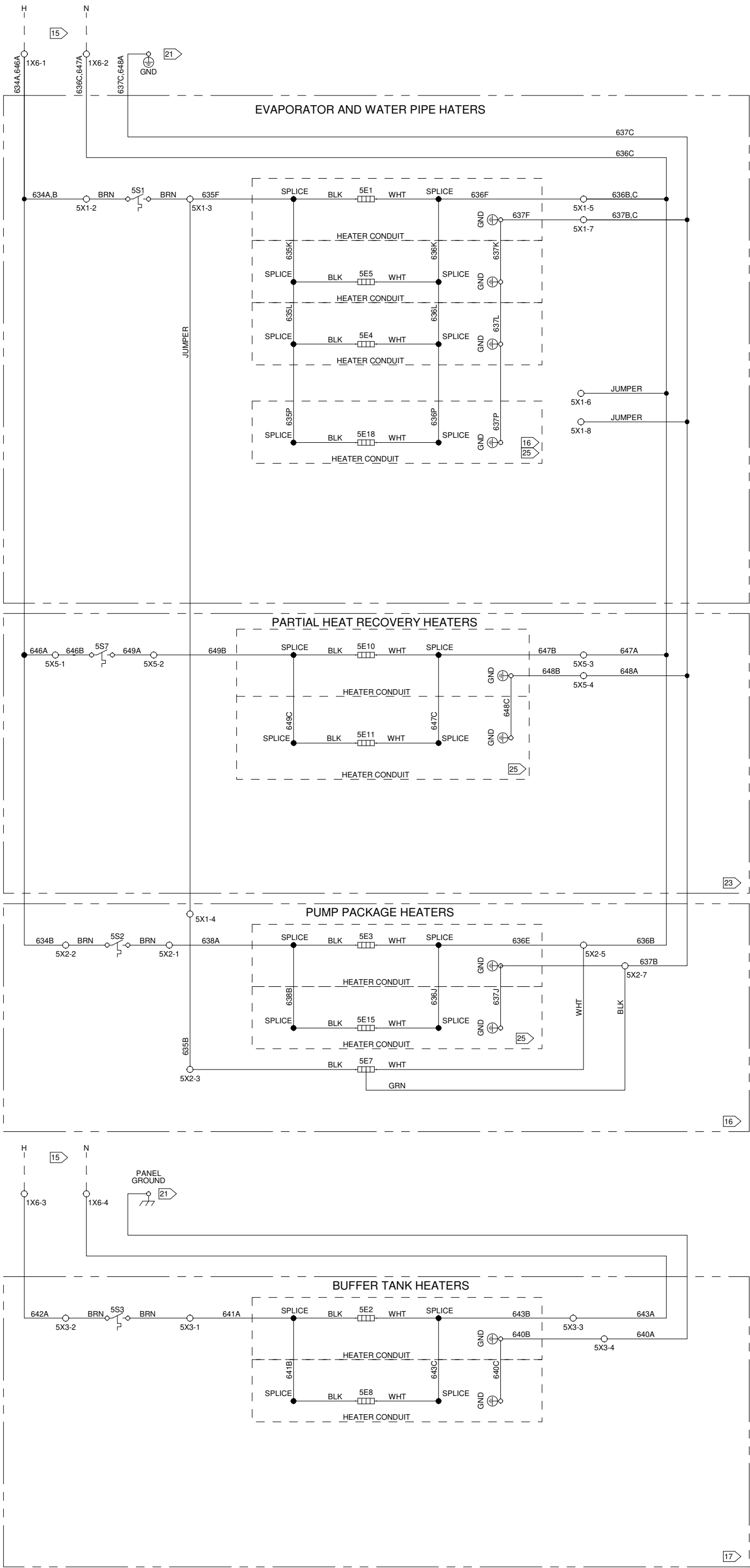
COMMON CONTROL

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DIAGRAM SCHEMATIC WIRING

FREEZE PROTECTION

V FRAME
CGAM REFRESH

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