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CONTROL TRANSFORMER SECONDARY CLASS CC		
DESIGNATION	VOLTAGE	RATING
1F13 2F13	380V 400V 460V 575V	10A
CONTROL TRANSFORMER PRIMARY CLASS CC		
1F15 1F16 2F15 2F16	380V 400V 460V 575V	5A

CONDENSER FANS CLASS CC		
DESIGNATION	TONNAGE	RATING
1F1		
1F2		
1F3		
1F4	280	
1F5	310	
1F6	350 / 390	
1F7	410	
1F8	450	
1F9	500 / 520	
1F10		
1F11		
1F12		

CONDENSER FANS CLASS CC		
DESIGNATION	TONNAGE	RATING
2F1	280	
2F2	310	
2F3	350 / 390	
2F4	410	
2F5	450	
2F6	500 / 520	
2F7	280	
2F8	310	
2F9	350 / 390	
2F10	410	
2F11	450	
2F12	500 / 520	

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:

- 1COMPONENT (LLIDS) ARE NOT NECESSARILY WIRED ON THE IPC BUS IN THE ORDER SHOWN ON SCHEMATIC.
- 2EXTERNAL STOP AND EMERGENCY STOP CONTACTS ARE JUMPERED IN THE FACTORY BY JUMPERS W1 & W2 TO ENABLE UNIT OPERATION. IF REMOTE CONTROL IS DESIRED, REMOVE THE JUMPERS AND CONNECT TO THE DESIRED CONFIGURATION.
- 3CONTACT CLOSURE ENABLES ICE MAKING.
- 4FIELD ASSIGNED PROGRAMMABLE RELAYS.
- 5ALL UNIT POWER WIRING MUST BE COPPER CONDUCTORS ONLY AND HAVE A MINIMUM INSULATION TEMPERATURE RATING OF 90C.
- 6CONNECTIONS ARE INTENDED FOR CLASS 2 ONLY.
- 7ONLY ONE OF THE SHOWN VOLTAGES CAN BE UTILIZED. REFER TO THE UNIT NAMEPLATE FOR THE CORRECT SUPPLY VOLTAGE.
- 8POWER FOR THE EVAPORATOR HEATER AND/OR OPTIONAL CONVENIENCE OUTLET IS SUPPLIED BY A CUSTOMER PROVIDED POWER SUPPLY, MAX FUSE SIZE IS 20 AMPS FOR EVAPORATORS AND 20 AMPS FOR OPTIONAL CONVENIENCE OUTLET.
- 9WIRING FOR 1K24 AS SHOWN IN INSET WHEN CHILLED WATER SETPOINT IS ENABLED VIA MODULE 1K25.
- 10TERMINALS 5 & 6 ARE TO BE WIRED TO CUSTOMER DEMAND LIMIT SETPOINT. INPUT CONFIGURED 2-10 VDC FROM FACTORY. SEE OPERATING INSTRUCTIONS TO CONFIGURE FOR 4-20 mA.
- 11TERMINALS 2 & 3 ARE TO BE WIRED TO CUSTOMER CHILLED WATER SETPOINT. INPUT CONFIGURED 2-10 VDC FROM FACTORY. SEE OPERATING INSTRUCTIONS TO CONFIGURE FOR 4-20 mA.
- 12TERMINALS 1 & 3 ARE TO BE WIRED TO REPORT % CAPACITY. OUTPUT CONFIGURED 2-10 VDC.
- 13WIRES 4B, 5B, 6B, 7B, 8B, 9B ONLY PRESENT WHEN PARALLEL WIRE SETS ARE USED.
- 14RELAY RATINGS AT 120VAC: 7.2 AMPS RESISTIVE, 2.88 AMPS PILOT DUTY, 1/3 HP, 7.2 FLA.
RELAY RATINGS AT 240VAC: 5 AMPS GENERAL PURPOSE.
- 15SEE AFD PARAMETER LABEL X39003970 FOR ADDITIONAL CONFIGURATION INFORMATION.
- 16CUSTOMER SUPPLIED POWER 115/60/1PH OR 230/50/1PH TO POWER RELAYS. MAX FUSE SIZE IS 20 AMPS. GROUND ALL CUSTOMER SUPPLIED POWER SUPPLIES AS REQUIRED BY APPLICABLE CODES. GREEN GROUND SCREWS ARE PROVIDED IN UNIT CONTROL PANEL.
- 17OPTIONAL HIGH AND WIDE AMBIENT CONFIGURATIONS, REFERENCE SHEET 13.
- 18SHIELDING TO BE GROUNDED AT THE JUNCTION BOX ONLY.
- 19OPTIONAL TOTAL FREE COOLING
- 20437A-440A DOES NOT HAVE A TERMINATION POINT

⚠️WARNING

HAZARDOUS VOLTAGE!

DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS AND FOLLOW LOCK OUT AND TAG PROCEDURES BEFORE SERVICING. INSURE 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 A DISTANCE, PUIS SUIVRE LES PROCEDURES DE VERROUILLAGE ET DES ÉTIQUETTES AVANT TOUTE INTERVENTION. VÉRIFIER QUE TOUS LES CONDENSATEURS DES MOTEURS SONT DÉCHARGÉS. DANS LE CAS D'UNITÉS COMPORTANT DES ENTRAÎNEMENTS À VITESSE VARIABLE, SE REPORTER AUX INSTRUCTIONS DE L'ENTRAÎNEMENT POUR DÉCHARGER LES CONDENSATEURS. UN MANQUEMENT À LA PROCÉDURE CI-DESSUS PEUT ENTRAÎNER DES BLESSURES GRAVES, VOIRE LA MORT.

⚠️ADVERTENCIA

¡VOLTAJE PELIGROSO!

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

NOTICE

USE COPPER CONDUCTORS ONLY! UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS. FAILURE TO DO THE ABOVE COULD RESULT IN EQUIPMENT DAMAGE.

AVIS

N'UTILISER QUE DES CONDUCTEURS EN CUIVRE! LES BORNES DE L'UNITÉ NE SONT PAS CONÇUES POUR RECEVOIR D'AUTRES TYPES DE CONDUCTEURS. UN MANQUEMENT À LA PROCÉDURE CI-DESSUS PEUT ENTRAÎNER DES DOMMAGES À L'ÉQUIPEMENT.

AVISO

¡UTILICE ÚNICAMENTE CONDUCTORES DE COBRE! LAS TERMINALES DE LA UNIDAD NO ESTÁN DISEÑADAS PARA ACEPTAR OTROS TIPOS DE CONDUCTORES. NO REALIZAR LO ANTEDICHO PUEDE PROVOCAR DAÑOS EN EL EQUIPO.

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CAD: CREO SCHEMATICS

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STANDARD EFFICIENCY 390, 520T
HIGH EFFICIENCY 280-500T

23115913

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C

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1B2	Temperature Switch; Ventilation Fan Enable	9-405
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1XP1	Plug; Condenser Fan Power Circuit 1 - Bank 1	6-152
2B1	Temperature Switch; Ventilation Fan Enable	12-667
2B2	Temperature Switch; Ventilation Fan Enable	10-490
2F1	Fuse; Class CC - Condenser Fan Motor	7-227
2F2	Fuse; Class CC - Condenser Fan Motor	7-228
2F3	Fuse; Class CC - Condenser Fan Motor	7-229
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2F5	Fuse; Class CC - Condenser Fan Motor	7-243
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2F8	Fuse; Class CC - Condenser Fan Motor	7-261
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DEVICE	DESCRIPTION	ZONE
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2K3	Relay; AFD Status - Compressor 2A	12-610
2K9	Module; Start - Compressor 2B	10-488
2K11	Module; Dual Triac Output - Compressor 2B Load/Unload	10-513
2K12	Module; Dual Triac Output - Compressor 2A Load/Unload	10-505
2K30	Module; Dual Analog I/O; Condenser Fan Speed, Circuit 2	8-356
2K31	Module; Quad Relay Output; Condenser Fan Enable, Circuit 2	8-369
2M1	Motor; Ventilation Fan 1	12-668
2M2	Motor; Ventilation Fan 2	10-490
2Q1	Circuit Breaker; Power Distribution Circuit 2	5-81
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2Q26	Contactor; Run - Compressor 2B	5-114
2Q27	Contactor; Shorting - Compressor 2B	5-114
2Q28	Contactor; Transition - Compressor 2B	5-113
2R1	Resistor; Transition - Compressor 2B, Line A	5-119
2R2	Resistor; Transition - Compressor 2B, Line B	5-116
2R3	Resistor; Transition - Compressor 2B, Line C	5-113
2T1	AFD; Compressor Circuit 2	5-109
2T5	Transformer; CLASS 1; 1000VA, 115V SEC	5-122
2T6	Transformer; CLASS 1; 180VA, 115V PRI, 27V SEC	5-134
2T7	Module; Power Supply	5-139
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2T9	Choke; Circuit 2	5-103
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2X4	Terminal Block; Neutral Distribution, Circuit 2	10-455
2X5	Terminal Block; Condensor Fan Controls, Circuit 2	8-349
2X7	Terminal Block; Unit side Wiring, Circuit 2	10-495
2X8	Terminal Block; Unit side Wiring - Ground, Circuit 2	10-455
2X9	Terminal Block; Panel 2 Controls	9-436
2X13	Terminal Block; 575V Fan Power Circuit 2	5-87
2X14	Terminal Block; Condensor Fan Controls, Circuit 1	8-349

DEVICE PREFIX LOCATION CODE	
AREA	LOCATION
1	CONTROL PANEL 1
2	CONTROL PANEL 2
3	CIRCUIT 1
4	CIRCUIT 2
5	CUSTOMER REMOTELY INSTALLED
6	UNIT WIRING

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LEGEND

STANDARD EFFICIENCY 390, 520T
HIGH EFFICIENCY 280-500T

23115913

SHEET 2

REV C

DEVICE	DESCRIPTION	ZONE
3B1	Switch; High Pressure Cutout - Compressor 1A	12-643
3B2	Switch; High Pressure Cutout - Compressor 1B	9-384
3B3	Temperature Switch; Ventilation Fan Enable	13-719
3BL1	Level Sensor; Oil Loss - Compressor 1A	11-595
3BP1	Pressure Transducer; Suction Pressure - Circuit 1A	15-860
3BP2	Pressure Transducer; Discharge Pressure Circuit 1	15-864
3BP3	Pressure Transducer; Oil Pressure Circuit 1A	15-868
3BP4	Liquid Line Pressure - Circuit 1	15-872
3BP11	Pressure Transducer; Suction Pressure - Circuit 1B	15-840
3BP13	Pressure Transducer; Oil Pressure Circuit 1B	15-844
3BT1	Temperature Sensor; Oil Temperature - Circuit 1A	15-844
3BT2	Temperature Sensor; Discharge Temperature - Circuit 1A	15-848
3BT3	Temperature Sensor; Liquid Line Temperature Microchannel Evap - Circuit 1A	15-852
3BT4	Temperature Sensor; Evaporator Pool Temperature - Circuit 1A	15-876
3BT11	Temperature Sensor; Oil Temperature - Circuit 1B	15-832
3BT12	Temperature Sensor; Discharge Temperature - Circuit 1B	15-836
3E30	Heater; Oil Separator - Circuit 1	9-410
3E31	Heater; Crankcase - Compressor 1A	9-412
3E32	Heater; Crankcase - Compressor 1B	9-407
3K1	Electronic Expansion Valve; Circuit 1A	15-856
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3M2	Motor; Compressor 1B	4-44
3M3	Solenoid; Proportional Unload Control - Compressor 1A	9-420
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3M19	Motor; Condenser Fan - Circuit 1	6-190
3M20	Motor; Condenser Fan - Circuit 1	6-210
3M21	Motor; Condenser Fan - Circuit 1	6-195
3M22	Motor; Condenser Fan - Circuit 1	6-215
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3M24	Motor; Condenser Fan - Circuit 1	6-220
3M25	Solenoid; Condenser Liquid Receiver, Circuit 1	11-545
3M41	Motor; Ventilation Fan 1	13-720
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3T9	Choke; Circuit 1	13-707
3X1	Terminal Block; Junction Box - Compressor 1A	9-445
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4M17	Motor; Condenser Fan - Circuit 2	7-260

DEVICE	DESCRIPTION	ZONE
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4M19	Motor; Condenser Fan - Circuit 2	7-265
4M20	Motor; Condenser Fan - Circuit 2	7-285
4M21	Motor; Condenser Fan - Circuit 2	7-270
4M22	Motor; Condenser Fan - Circuit 2	7-290
4M23	Motor; Condenser Fan - Circuit 2	7-275
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4M41	Motor; Ventilation Fan 1	13-693
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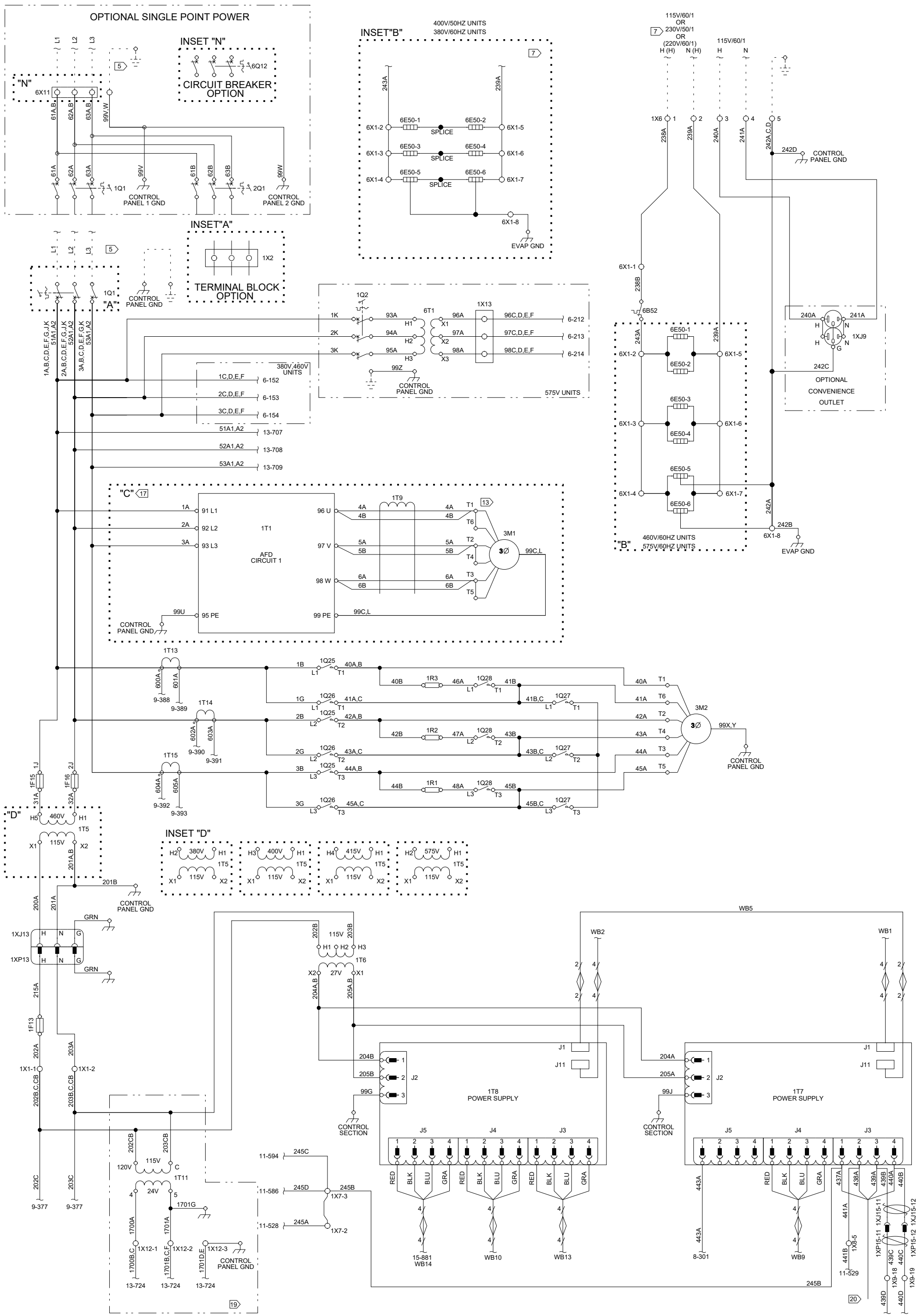
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STANDARD EFFICIENCY 390, 520T
HIGH EFFICIENCY 280-500T

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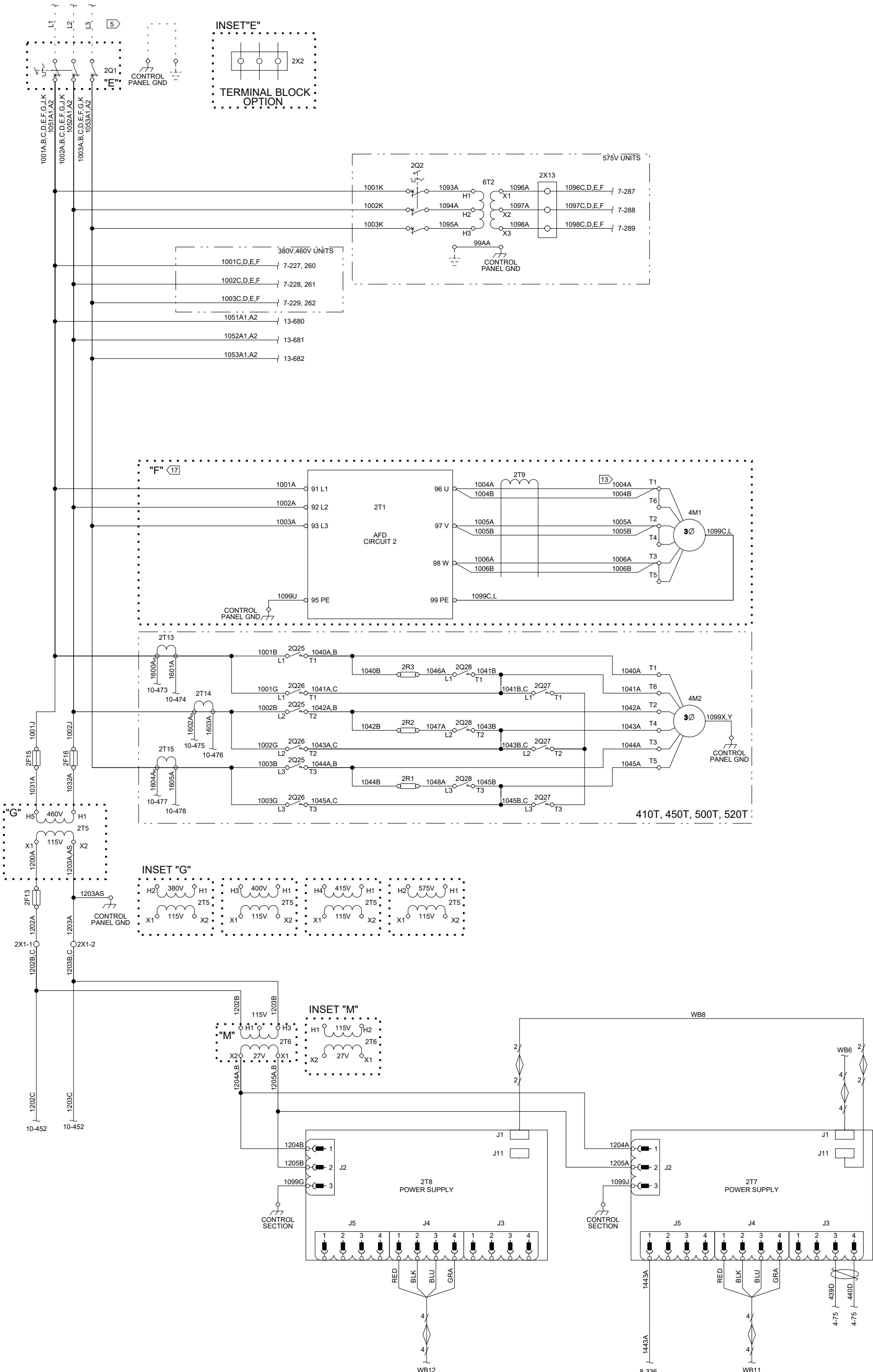
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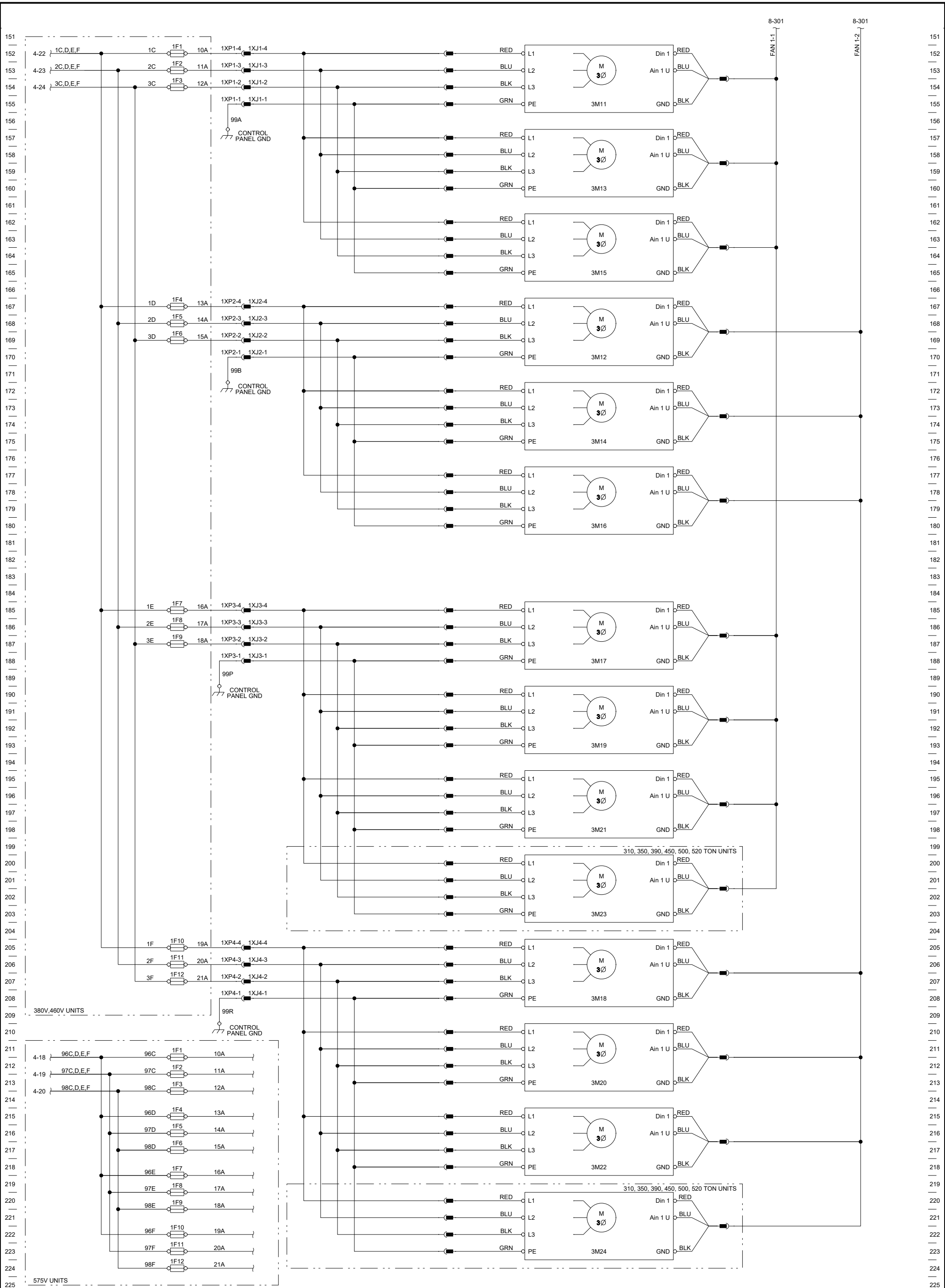
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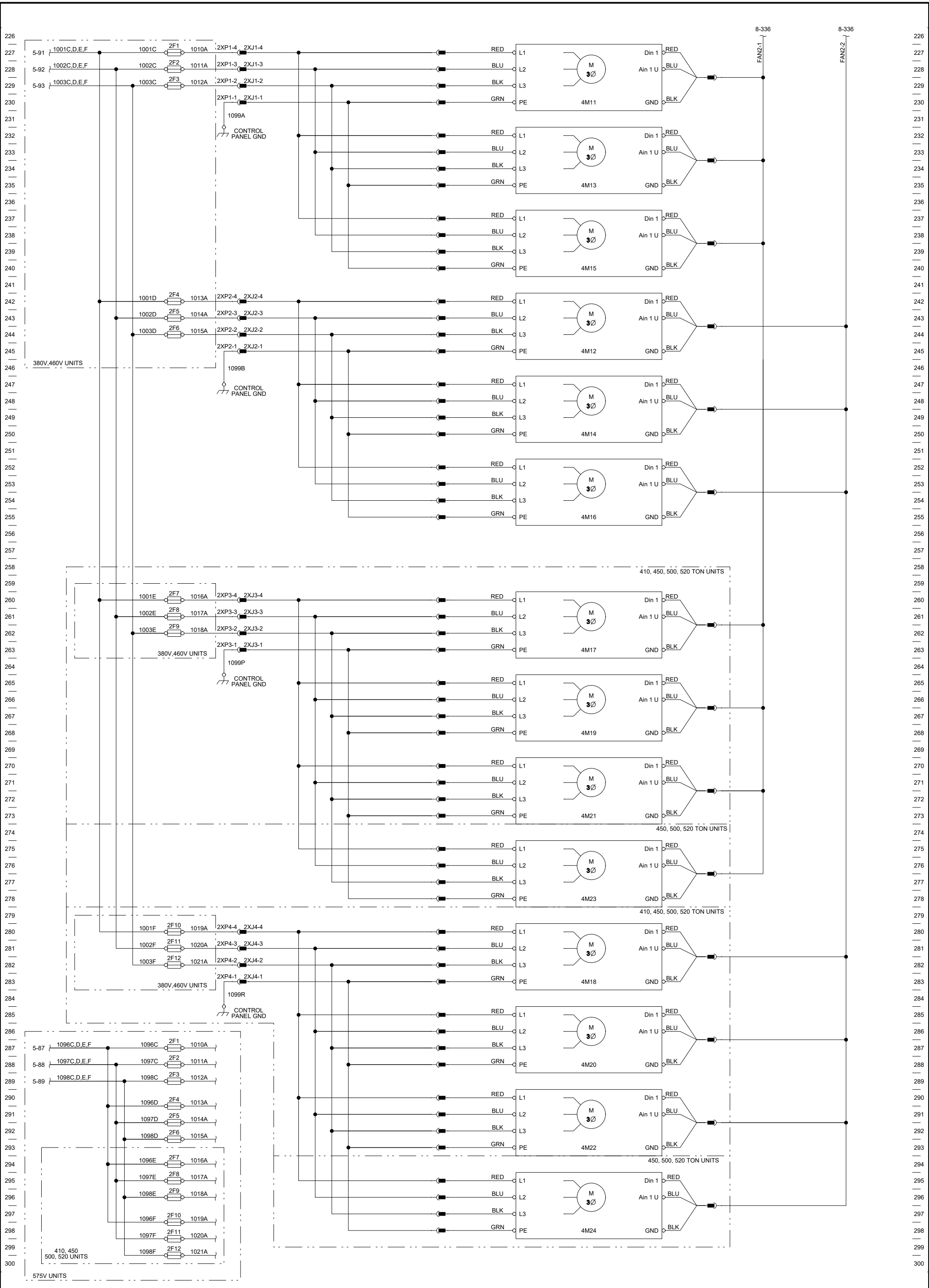
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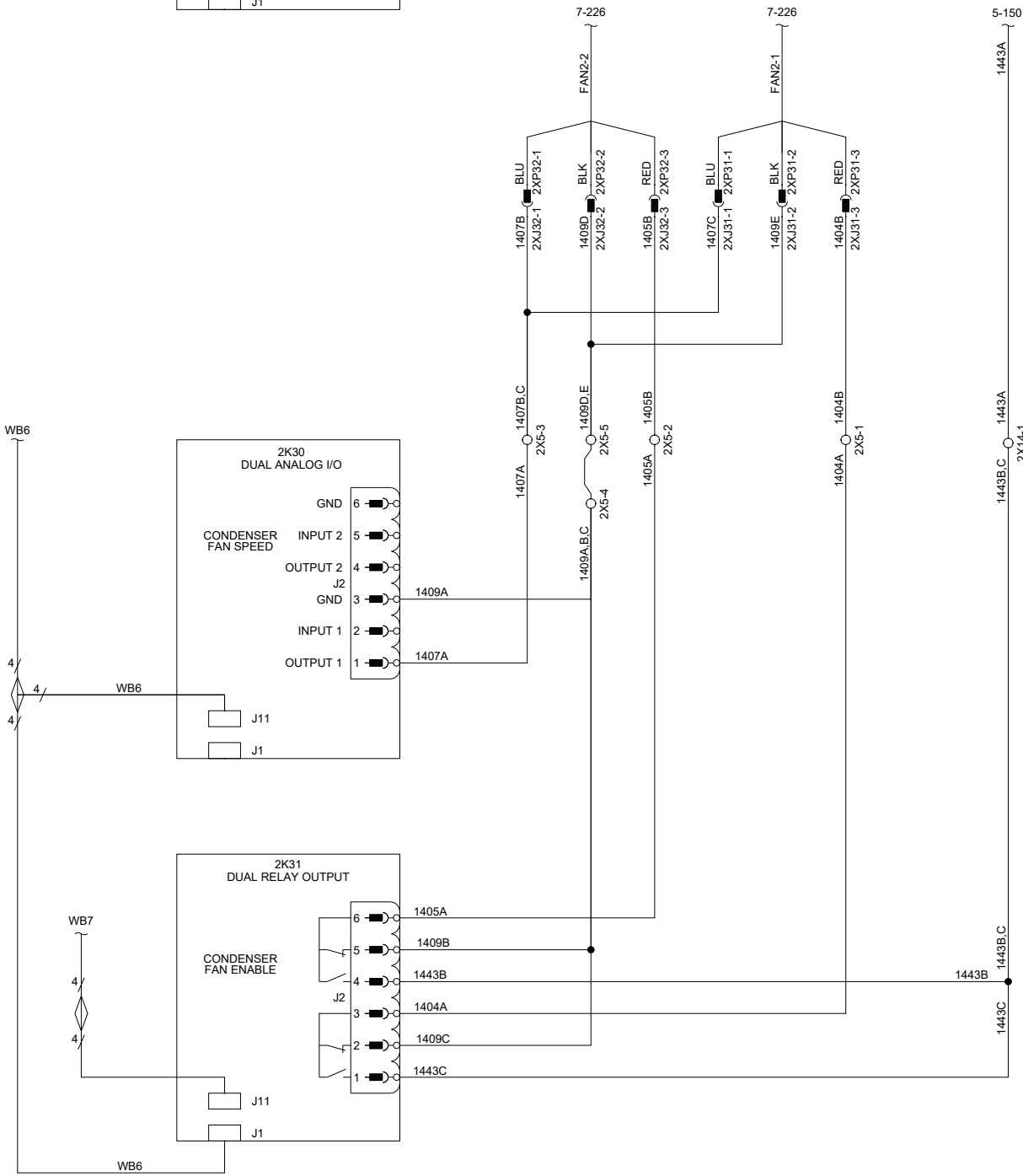
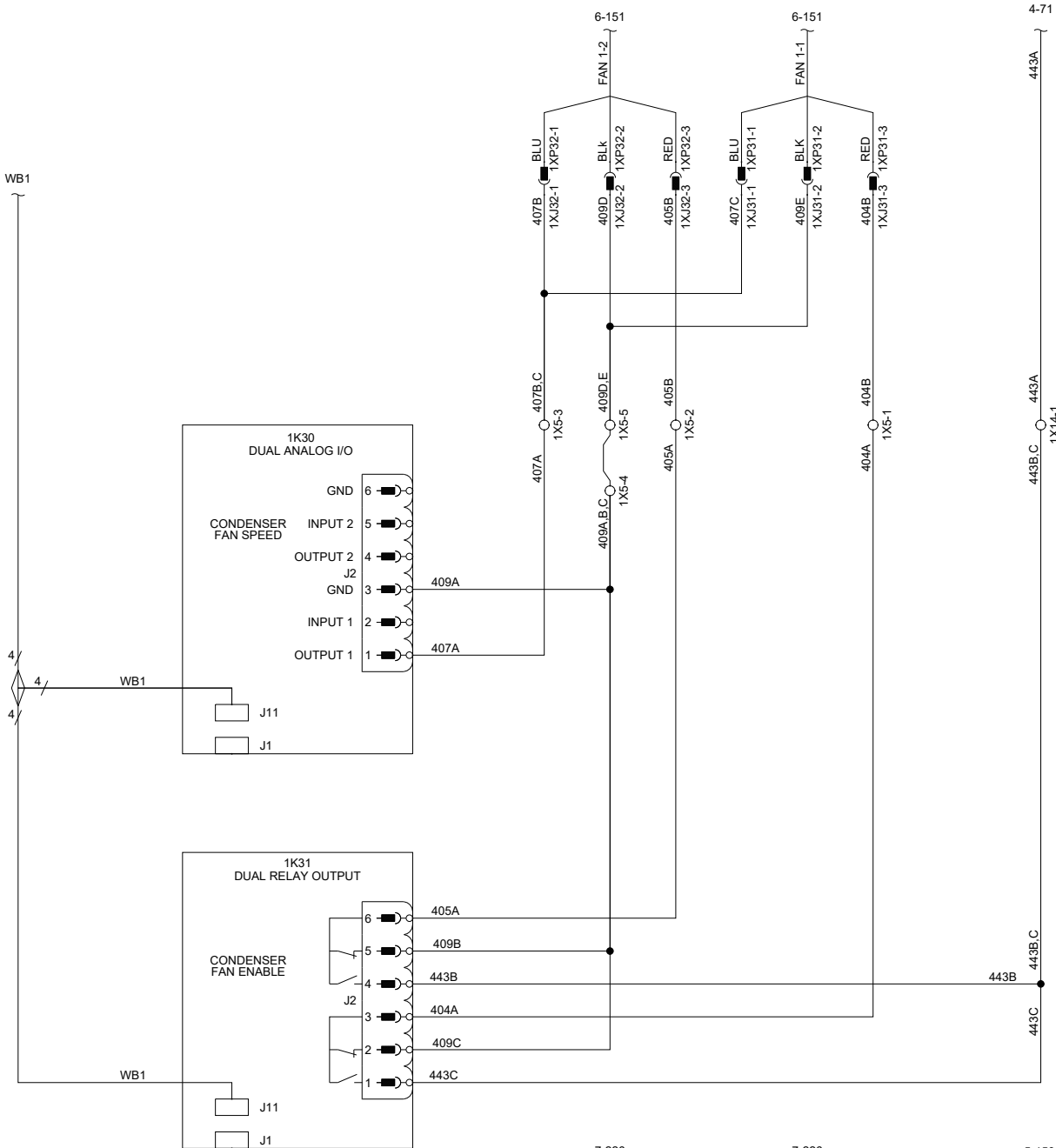
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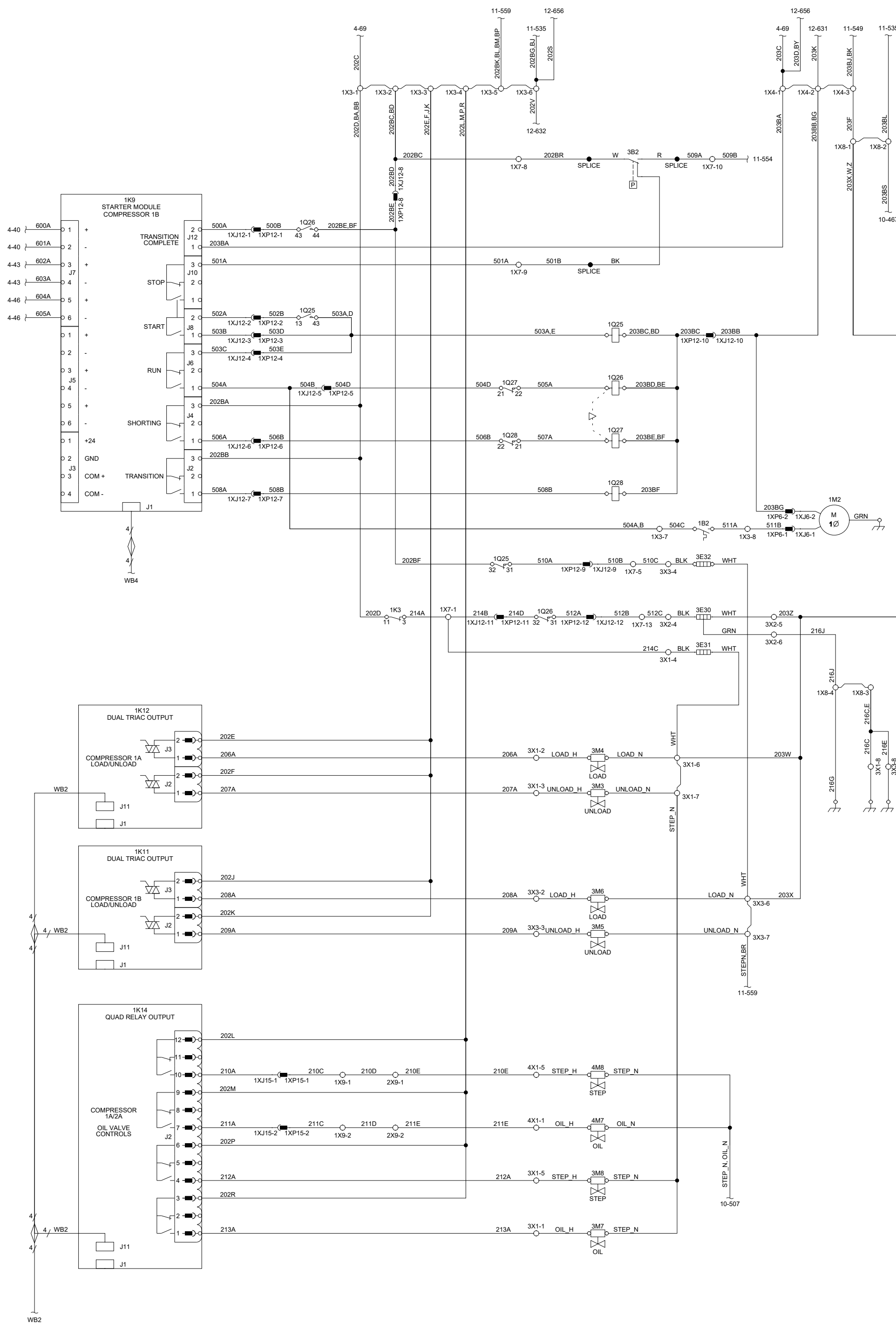
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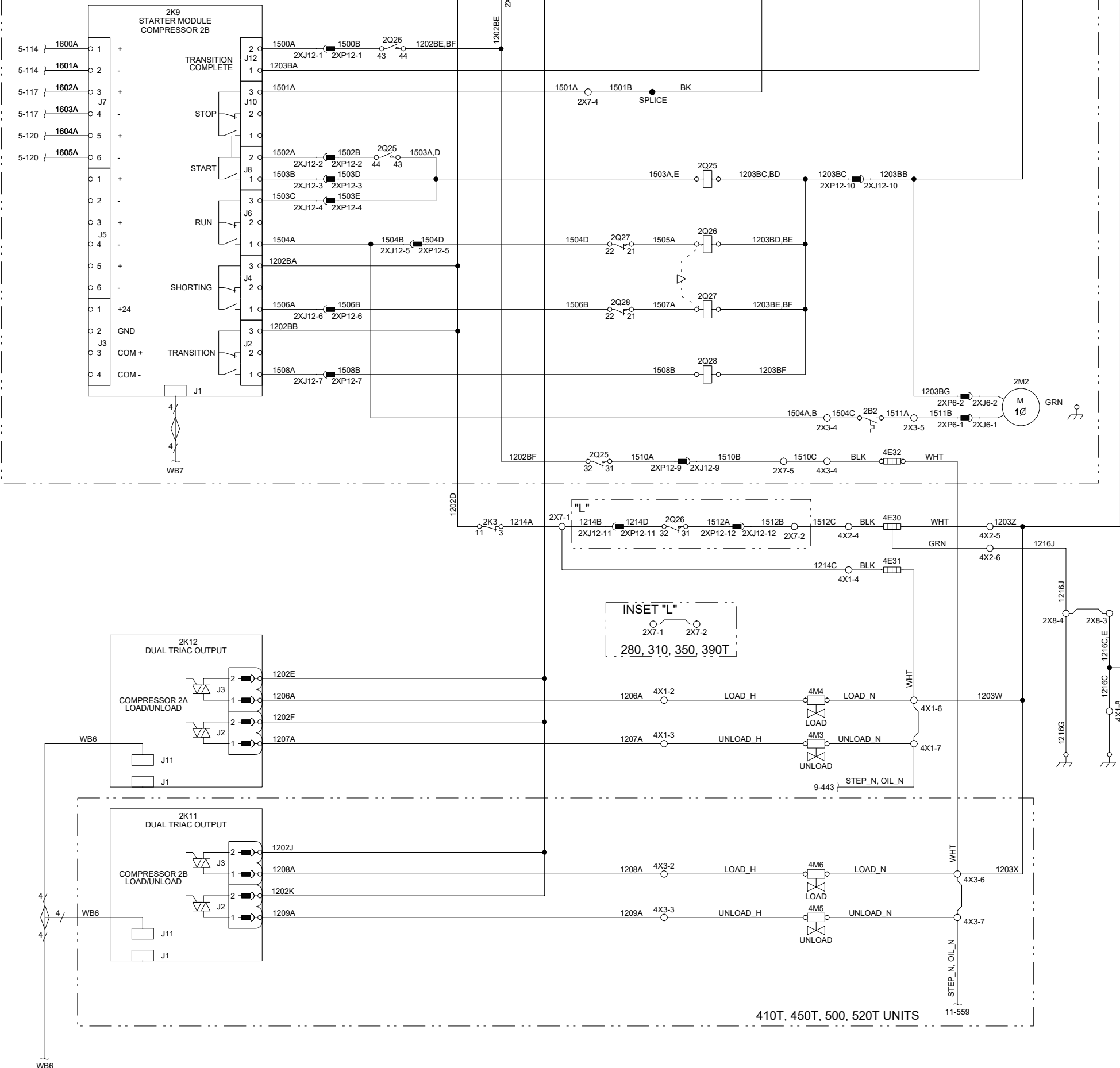
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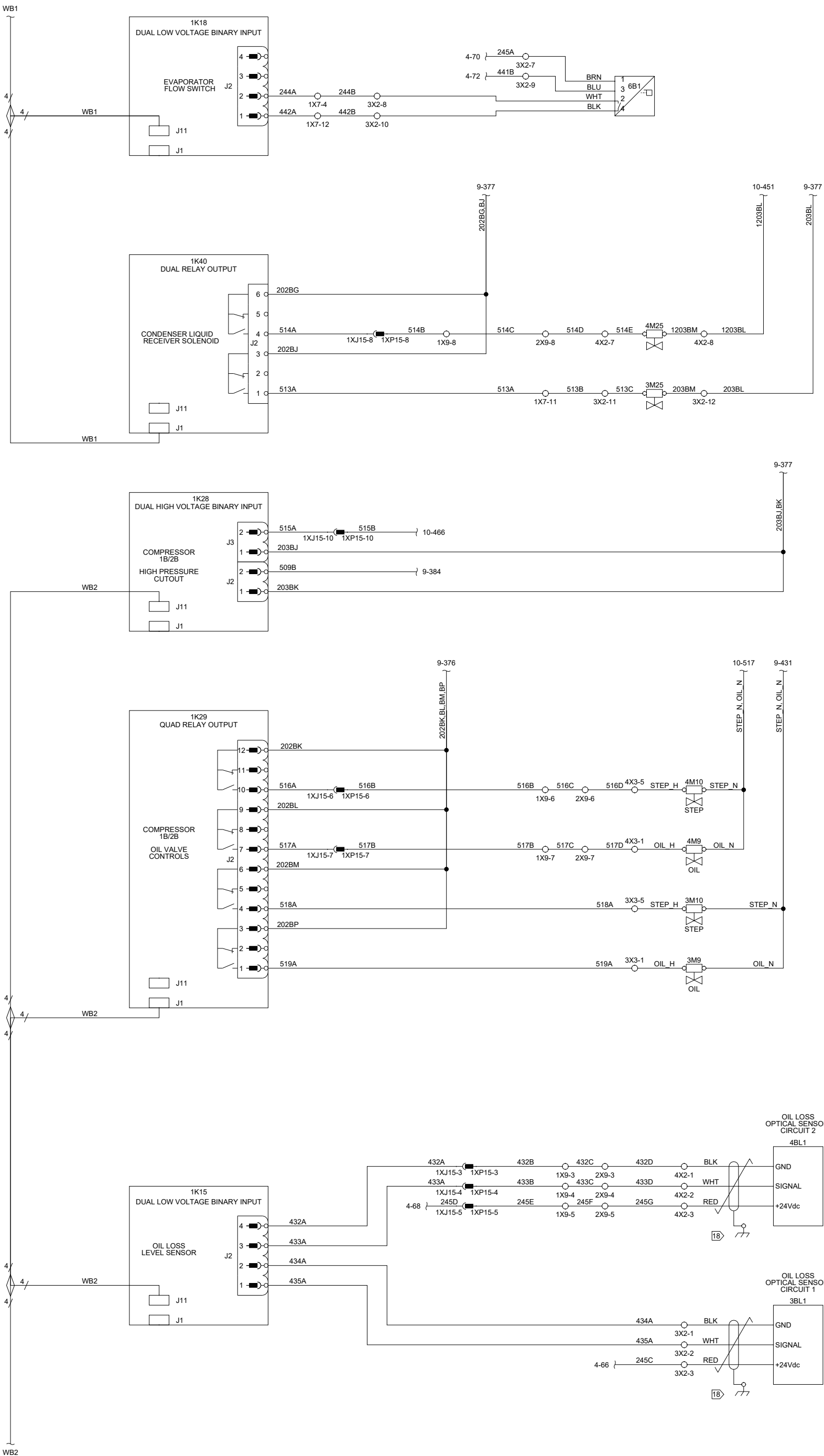
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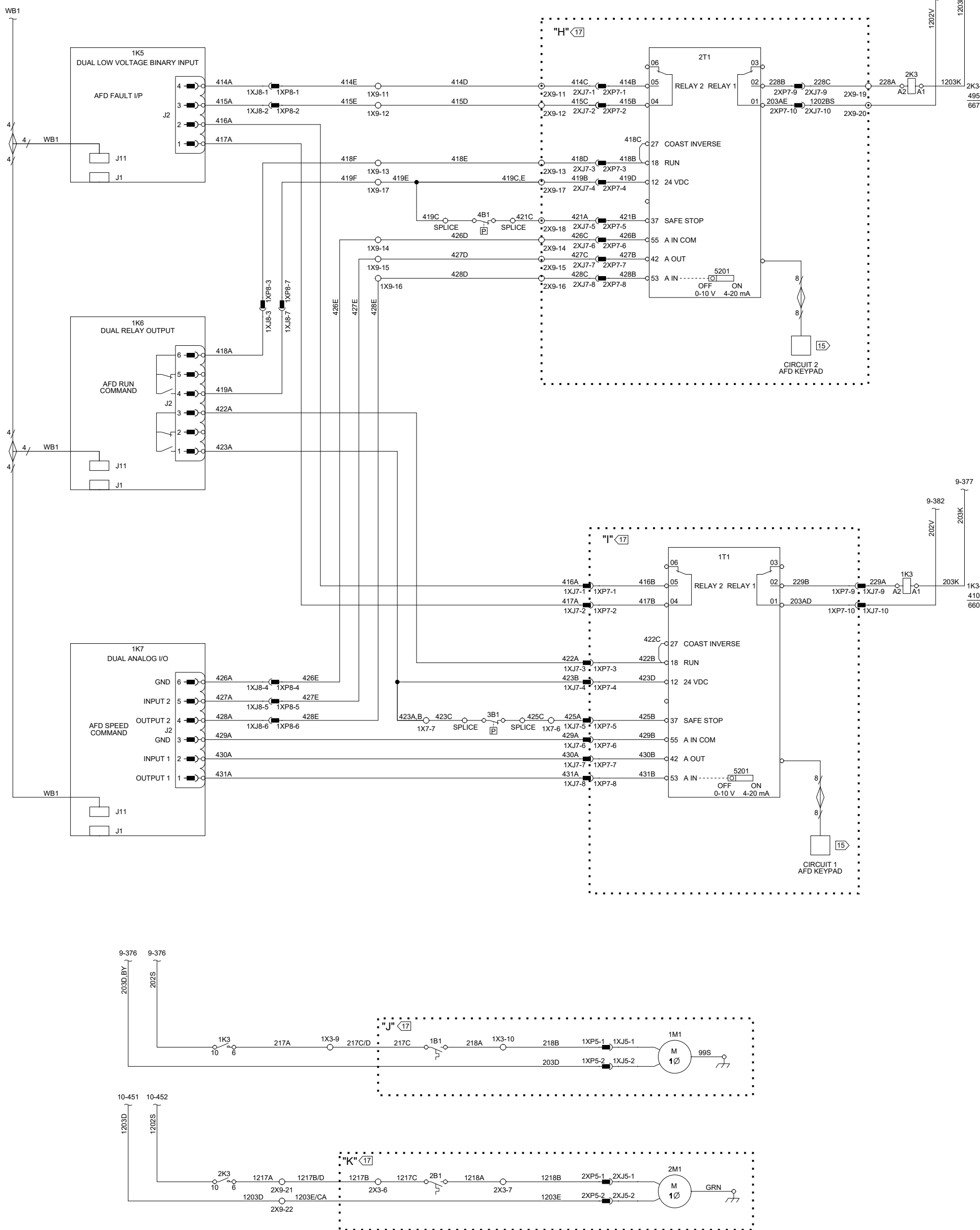
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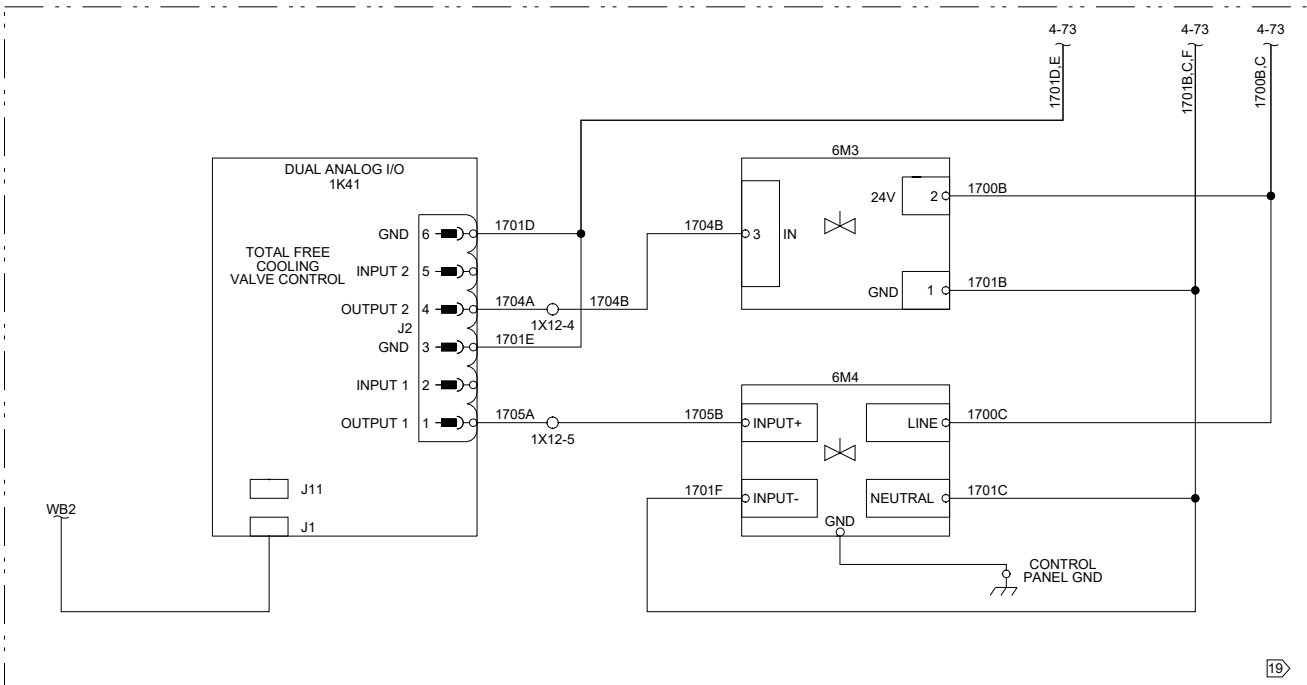
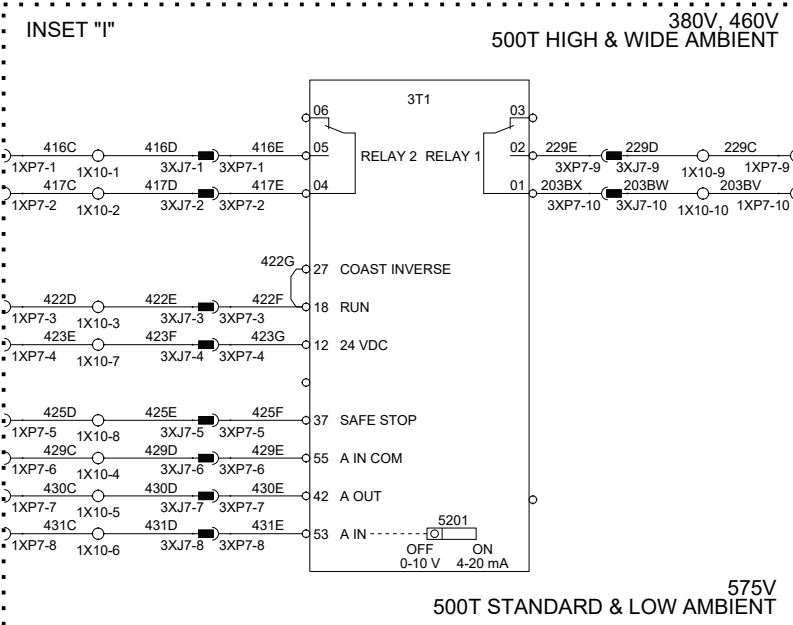
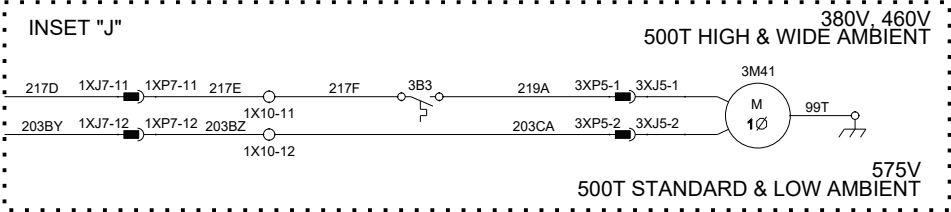
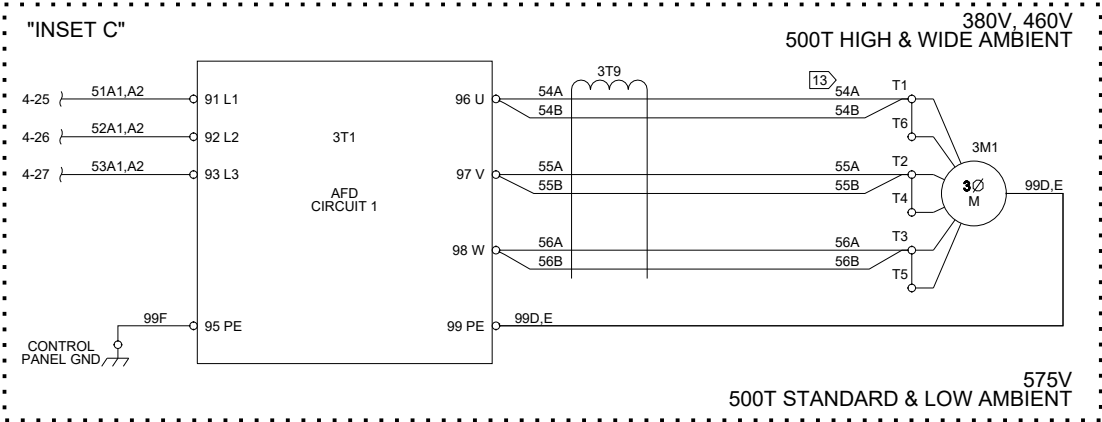
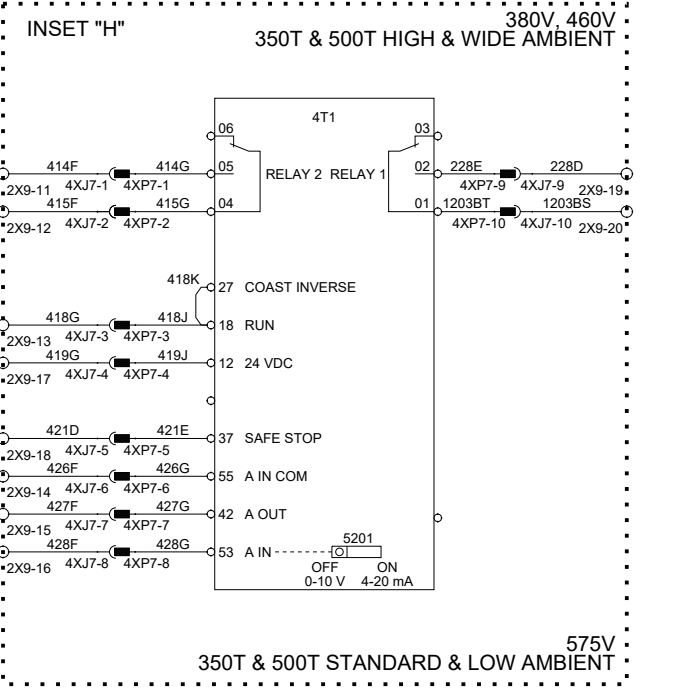
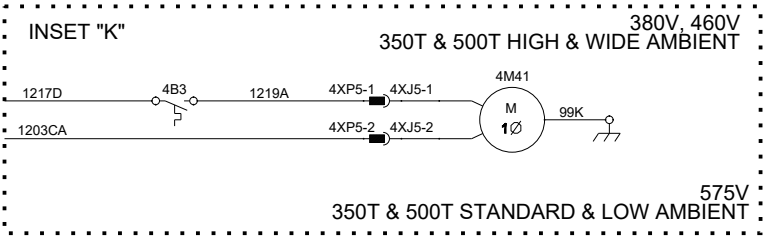
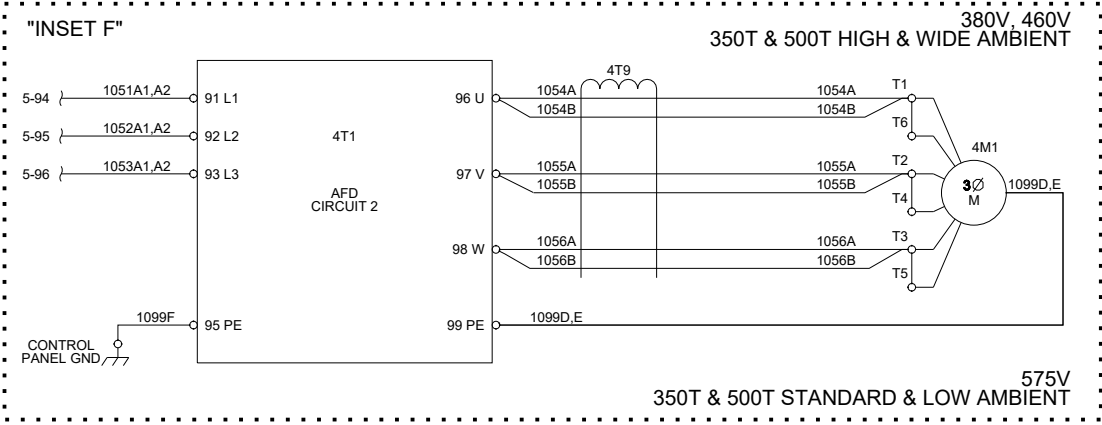
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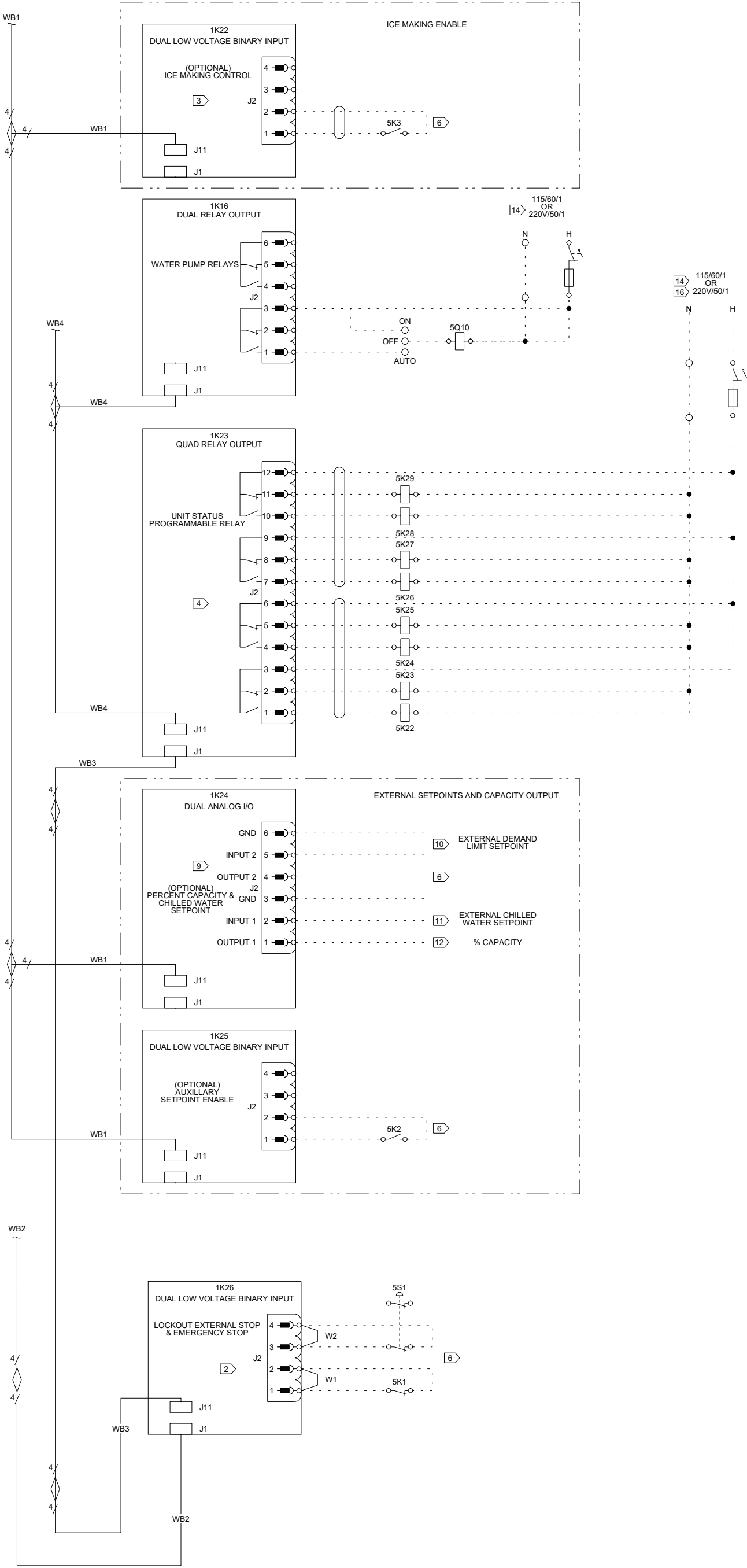
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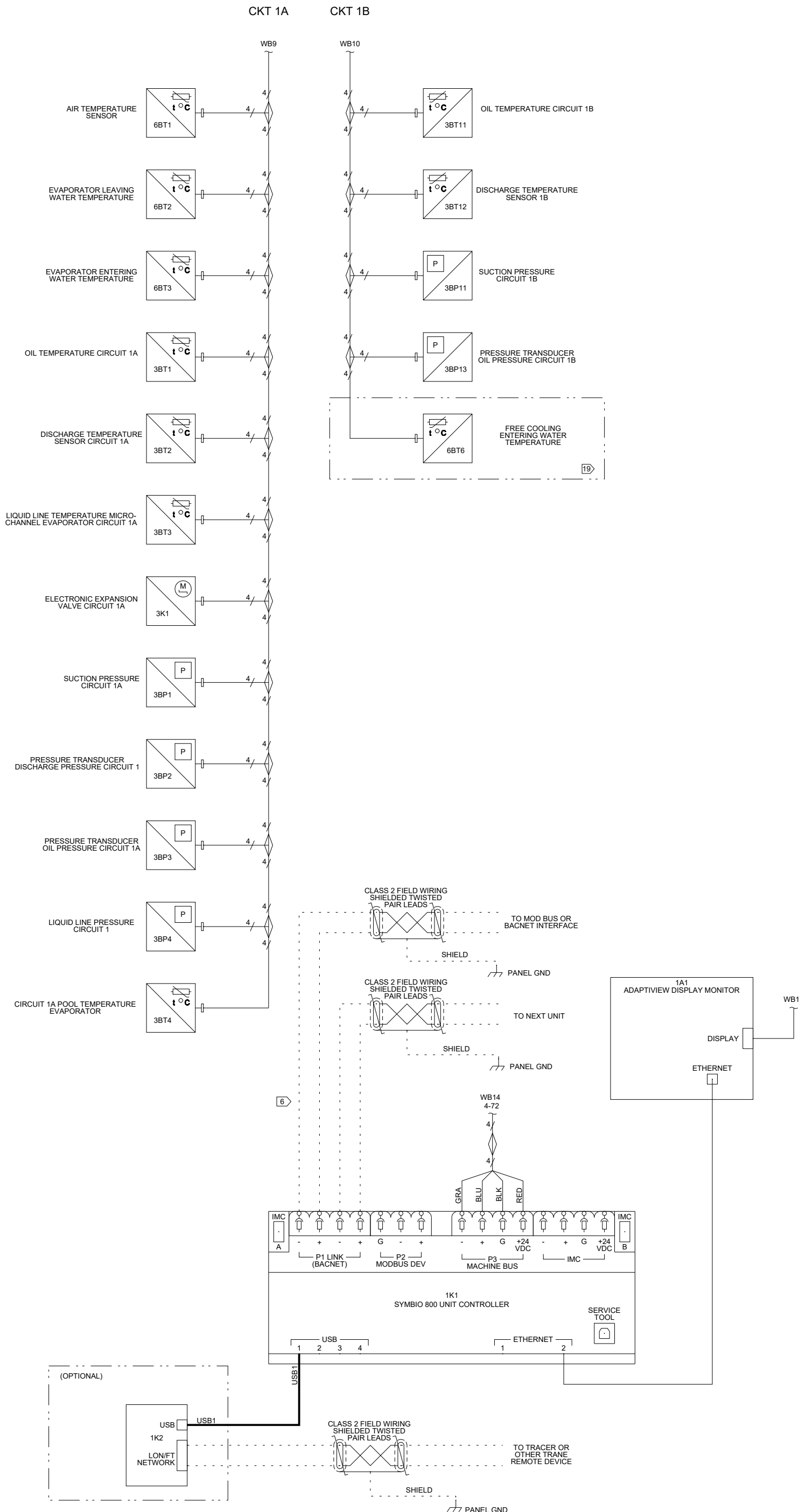
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CUSTOMER CONNECTIONS		
STANDARD EFFICIENCY 390, 520T HIGH EFFICIENCY 280-500T		
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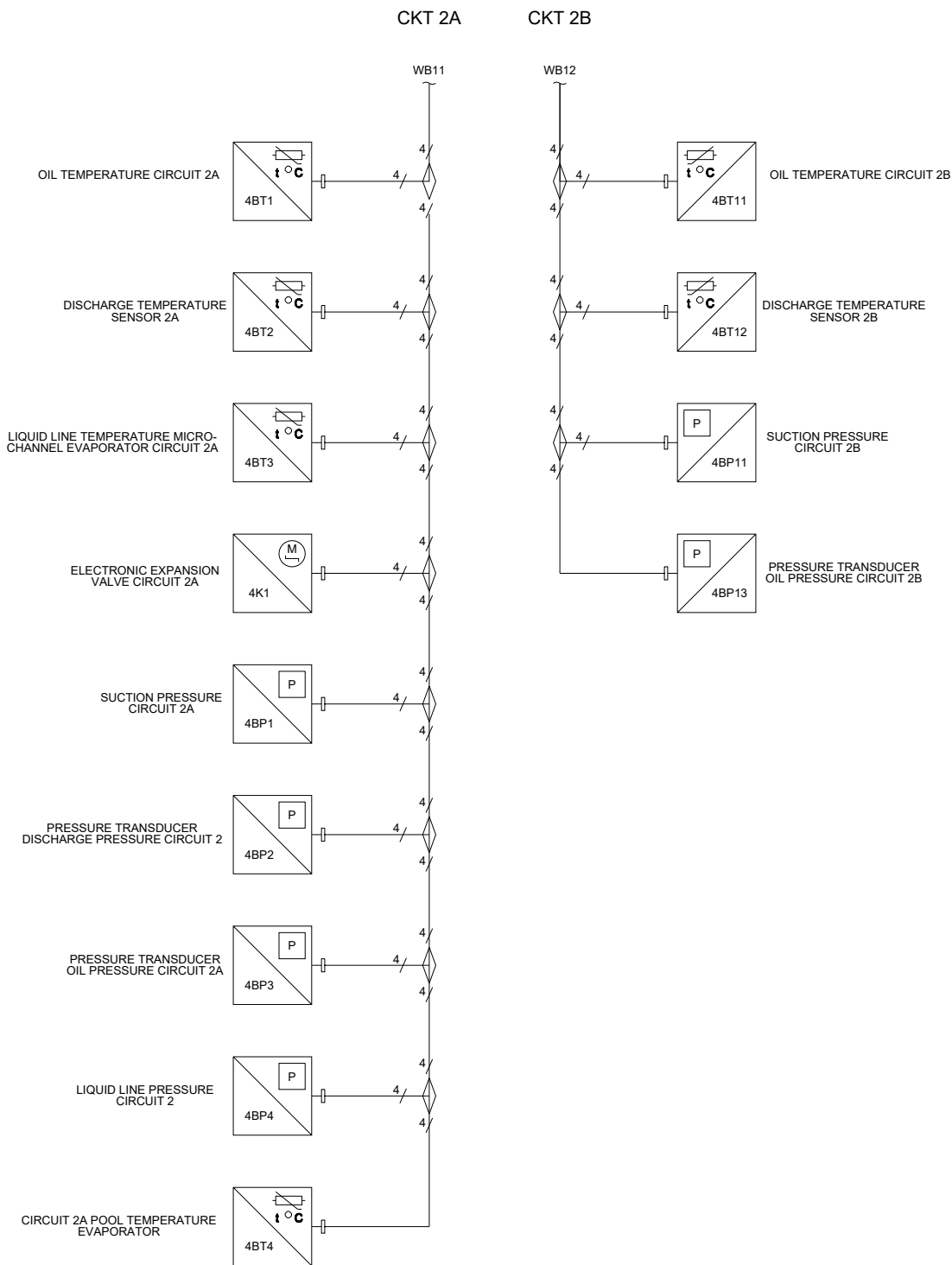
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UNIT SENSORS		
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