Wiring Diagrams

DIAGRAM INDEX

POWER SCHEMATICS			
Unit 30HXA,C	**Voltage**	**Figure Number**	**Label Diagram No. 30HX**
076-186	ALL	1	500768
206-271	ALL	2	500914

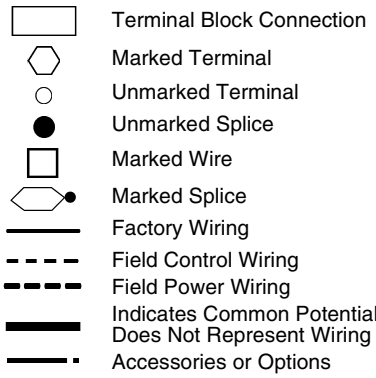
CONTROL SCHEMATICS			
Unit 30HXA,C	**Voltage**	**Figure Number**	**Label Diagram No. 30HX**
076-271	24	3	500913
	115,230	4	500778
206-271	24	5	500915
	115,230	6	500916

COMPONENT ARRANGEMENTS			
Unit 30HXA,C	**Voltage**	**Figure Number**	**Label Diagram No. 30HX**
076-186	ALL	7	500758
206-271	ALL	8	500917

NOTE: For operating sequence, refer to Controls, Start-Up, Operation, Service, and Troubleshooting literature.

LEGEND

ALM	— Alarm
C	— Contactor, Compressor
CB	— Circuit Breaker
CCN	— Carrier Comfort Network
CFC	— Condenser Fan Contactor
CD WP	— Condenser Water Pump
COMM	— Communications
COMP	— Compressor
CPM	— Compressor Protection Module
CR	— Control Relay
CWP	— Chilled Water Pump
CWPI	— Chilled Water Pump Interlock
DGT	— Discharge Gas Thermistor
DPT	— Discharge Pressure Transducer
DSIO EXV	— EXV Driver
ECWT	— Entering Chilled Water Temp.
EPT	— Economizer Pressure Transducer
EQUIP	— Equipment
EXV	— Electronic Expansion Valve
FIOP	— Factory-Installed Option
FU	— Fuse
GND	— Ground
HPS	— High-Pressure Switch
HSIO	— Keyboard and Display Module
HTR	— Heater
LCWT	— Leaving Chilled Water Temp.
LDR	— Loader
LL	— Liquid Level
LS	— Level Switch
MLC	— Minimum Load Control
NEC	— National Electrical Code (U.S.A.)
OP	— Oil Pump
OPC	— Oil Pump Contactor
OPT	— Oil Pressure Transducer
PL	— Plug Assembly
PRI	— Primary
PS	— Power Supply
PSIO	— Processor Module
PWR	— Power
RBPL	— Relay Board Plug Assembly
S	— Shorting
SEC	— Secondary
SN	— Sensor (Toroid)
SPT	— Suction Pressure Transducer
SW	— Switch
T	— Thermistor
TB	— Terminal Block
TEMP	— Temperature
TRAN	— Transformer
XL	— Across-the-Line Start
1M	— Wye
2M	— Delta



NOTES

1. Three-phase motors protected against primary single phasing conditions.
2. Replacement of original wires must be with type 105° C wire or its equivalent.
3. Numbers on the right side of label diagrams indicate the line location of applicable contacts. An underlined number signifies normally closed contacts; a plain number denotes normally open contacts. Line numbers are shown on the left side of the diagrams.
4. Factory wiring is in accordance with National Electrical Code (NEC) U.S.A. Field modifications or additions must be in compliance with all applicable codes.
5. Wiring for main field power supply must be rated 75° C minimum. Use copper for all units. Maximum incoming wire size for each terminal block is 500 kcmil.
6. Power for control circuit should be supplied from a separate source (except 380/415 v units) through a field-supplied disconnect with 30-amp maximum protection for 115-volt control circuits and 15-amp maximum protection for 230-volt control circuit. Connect control circuit power to terminals 1 and 2 of TB4. Connect neutral side of supply to terminal 2 of TB4. Control circuit conductors for all units must be copper only. Control circuit power is factory wired for 380/415-v units.
7. Terminals 13 and 14 of TB2 are for field external interlock connection for remote ON-OFF and terminals 11 and 12 of TB2 for CWP interlock and CWFS. The contacts must be rated for dry circuit application capable of handling a 24 vac to 50 mA load. Remove jumper between 13 and 14 of TB2 if remote ON-OFF is installed.
8. Separate field-supplied 115-v or 230-v power circuits:
   Terminals 4 and 5 of TB2 are for control of chilled water pump starter.
   Terminals 2 and 3 of TB2 are for alarm.
   The maximum allowable load for each of these circuits is 125 va sealed.
9. Terminal 6 of TB2 is for condenser fan contactor B (HXA) or condenser water pump (HXC). Terminal 1 of TB2 is for condenser fan contactor A (HXA). The maximum allowable load for each of these circuits is 125 va inrush, 125 va sealed. Separate field power supply is not required.

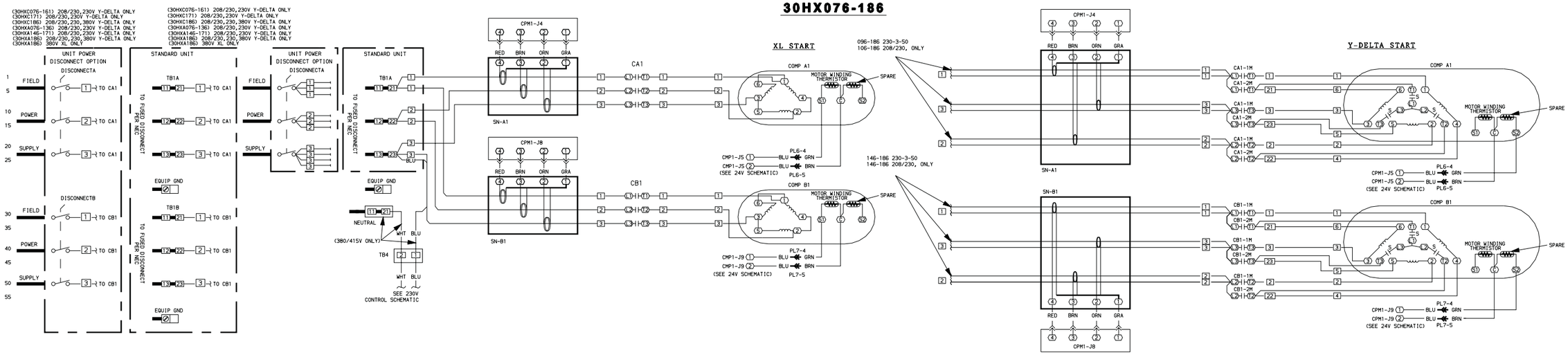


Fig. 1 — Power Wiring, 30HXA,C076-186

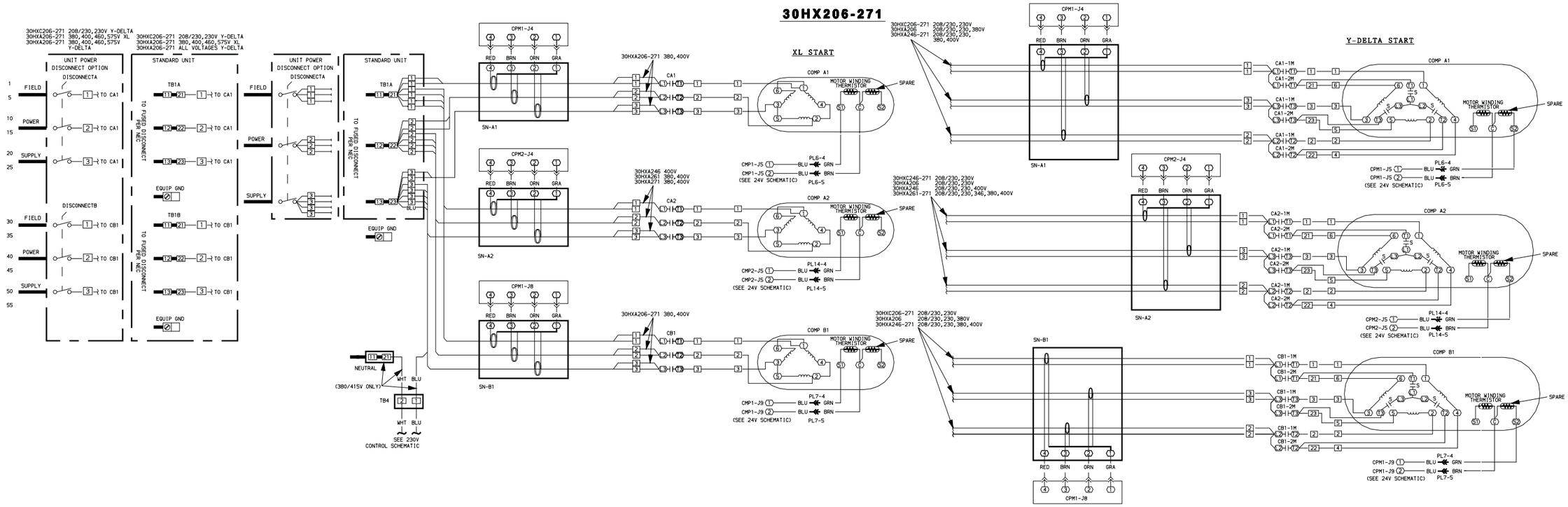


Fig. 2 — Power Wiring, 30HXA,C206-271

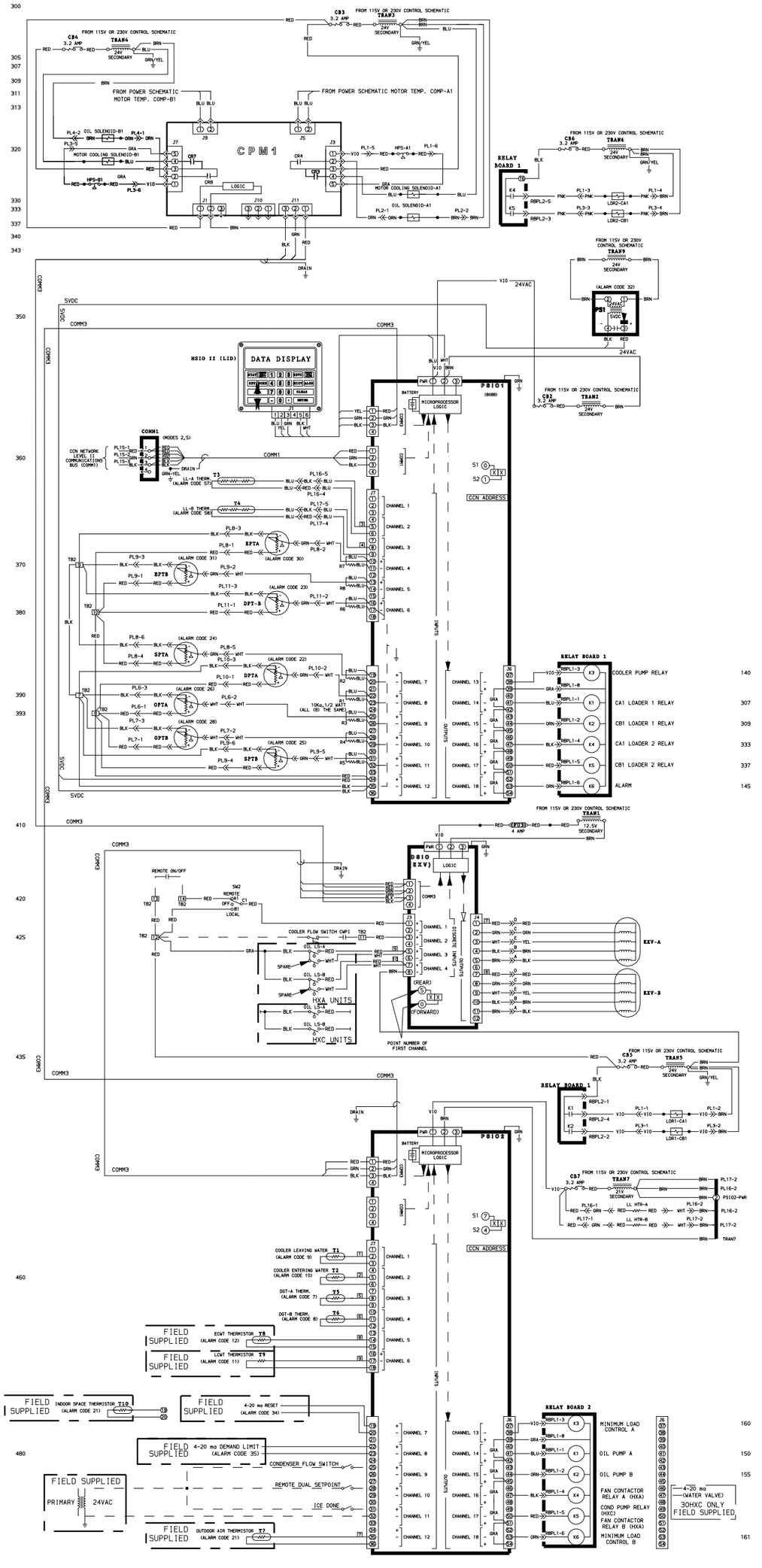


Fig. 3 — Control Schematic, 30HXA,C076-186; 24 V

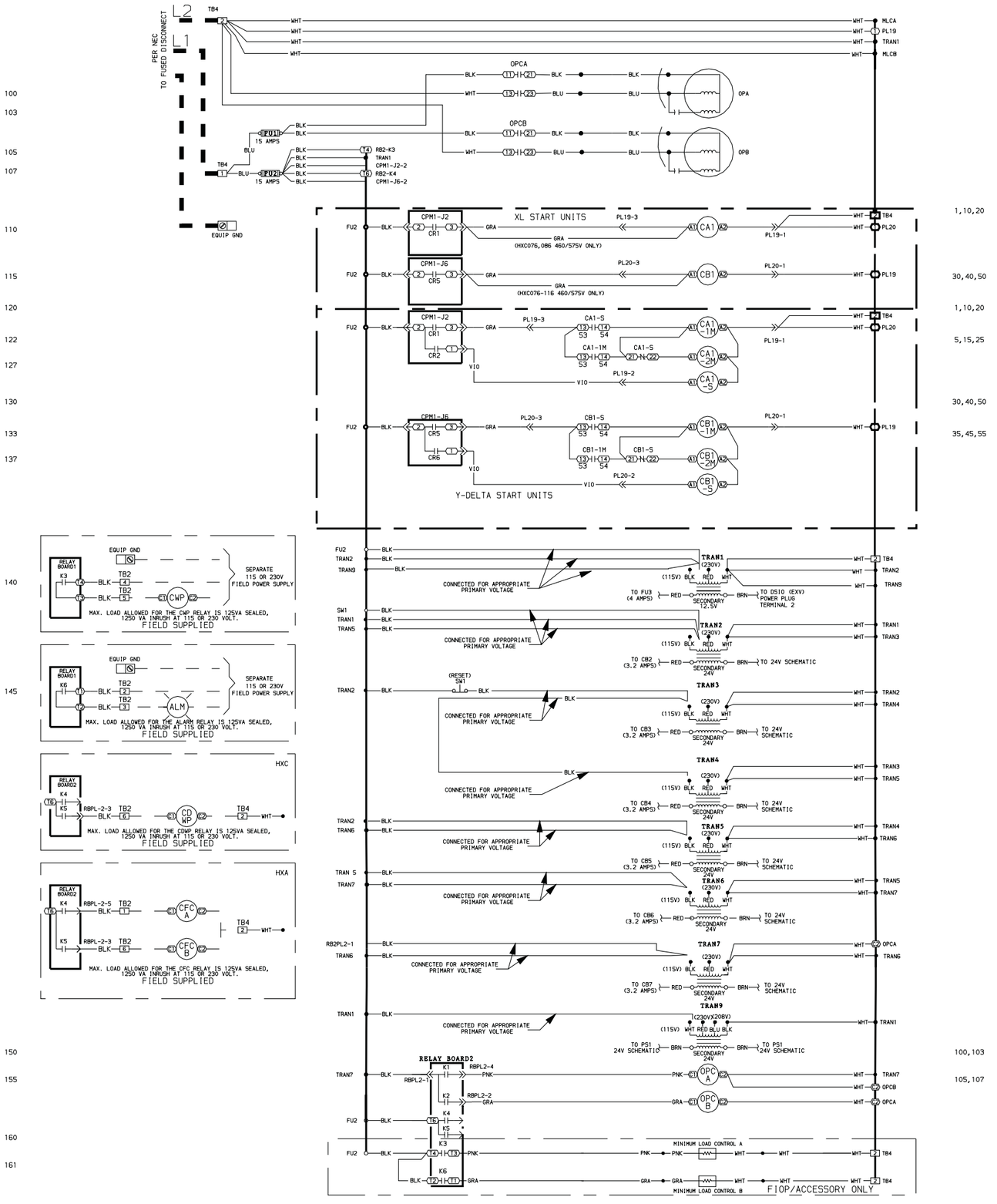


Fig. 4 — Control Schematic, 30HXA,C076-186; 115, 230 V

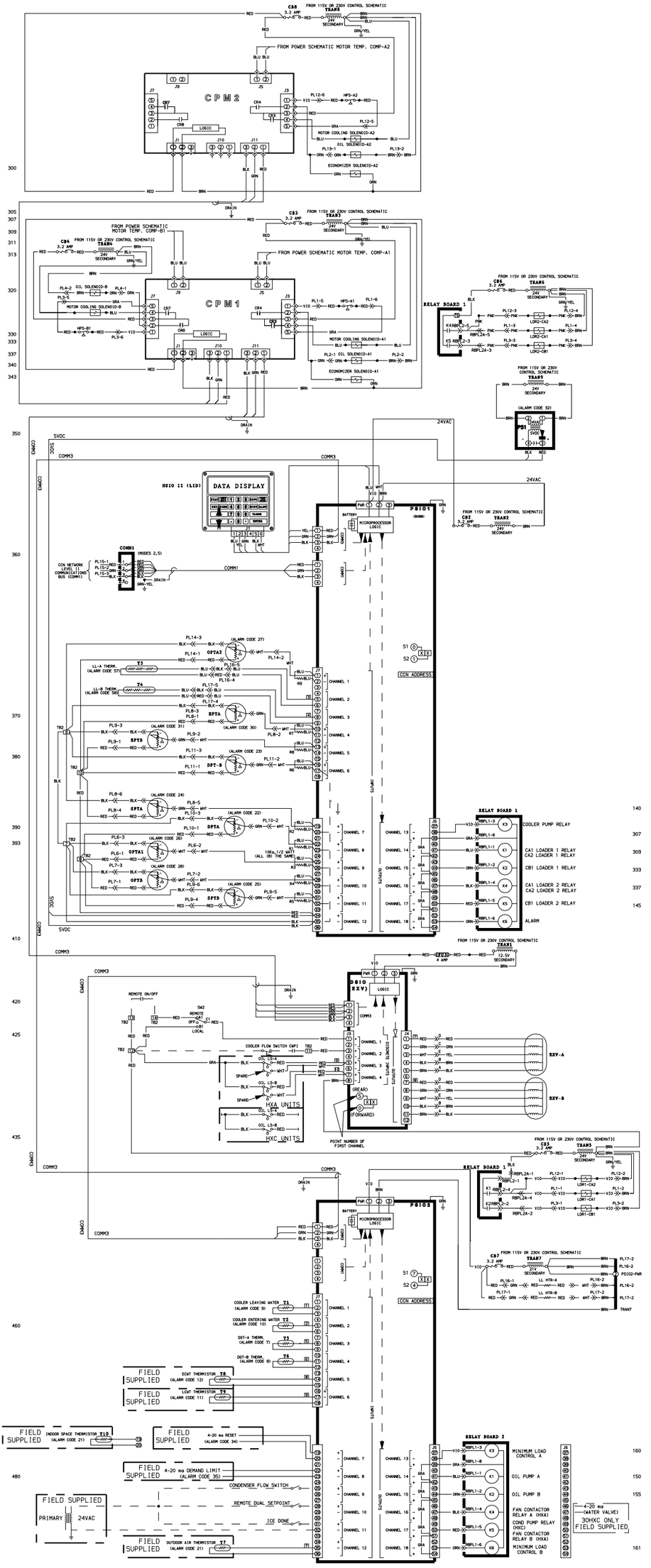


Fig. 5 — Control Schematic, 30HXA,C206-271; 24 V

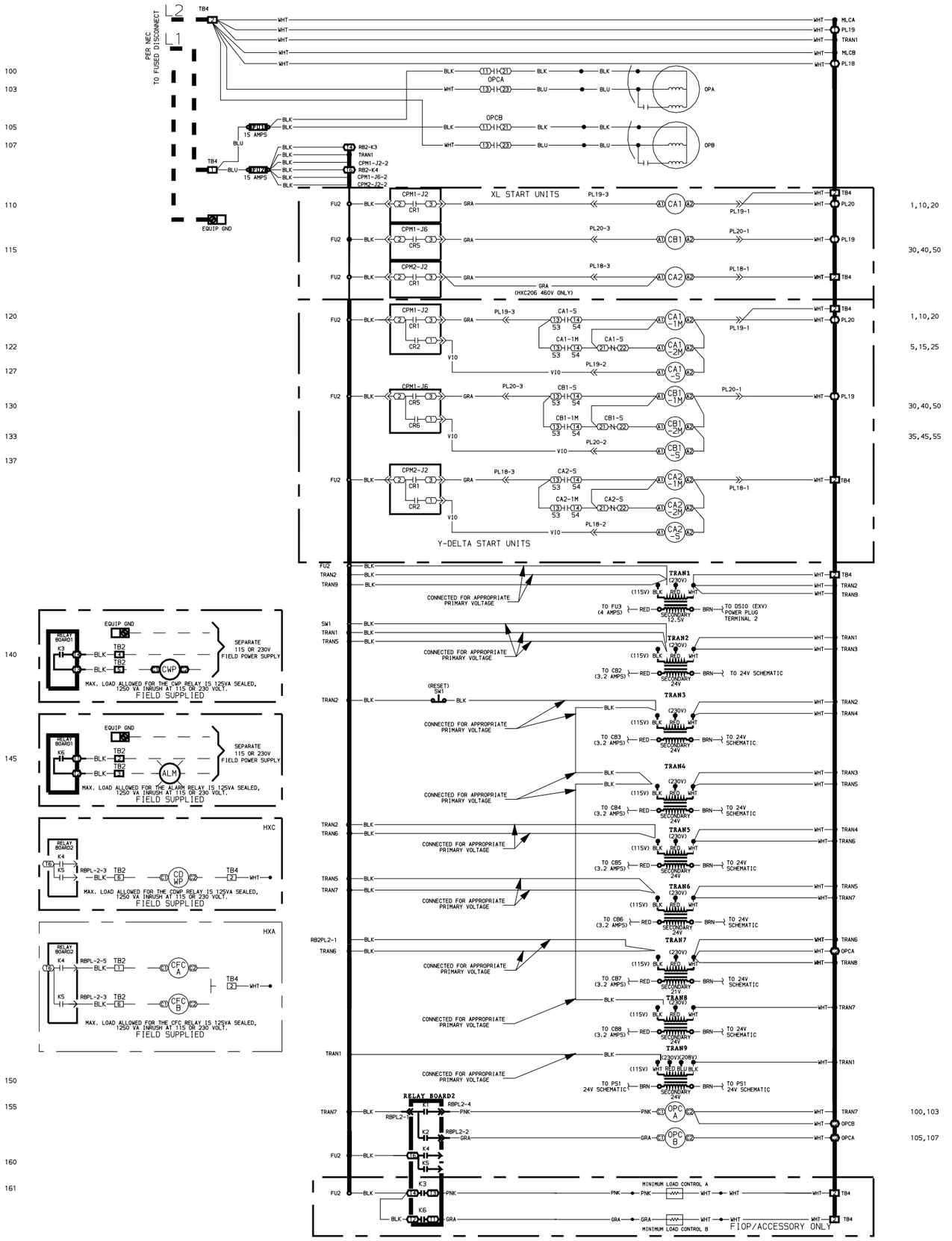


Fig. 6 — Control Schematic, 30HXA,C206-271; 115, 230 V

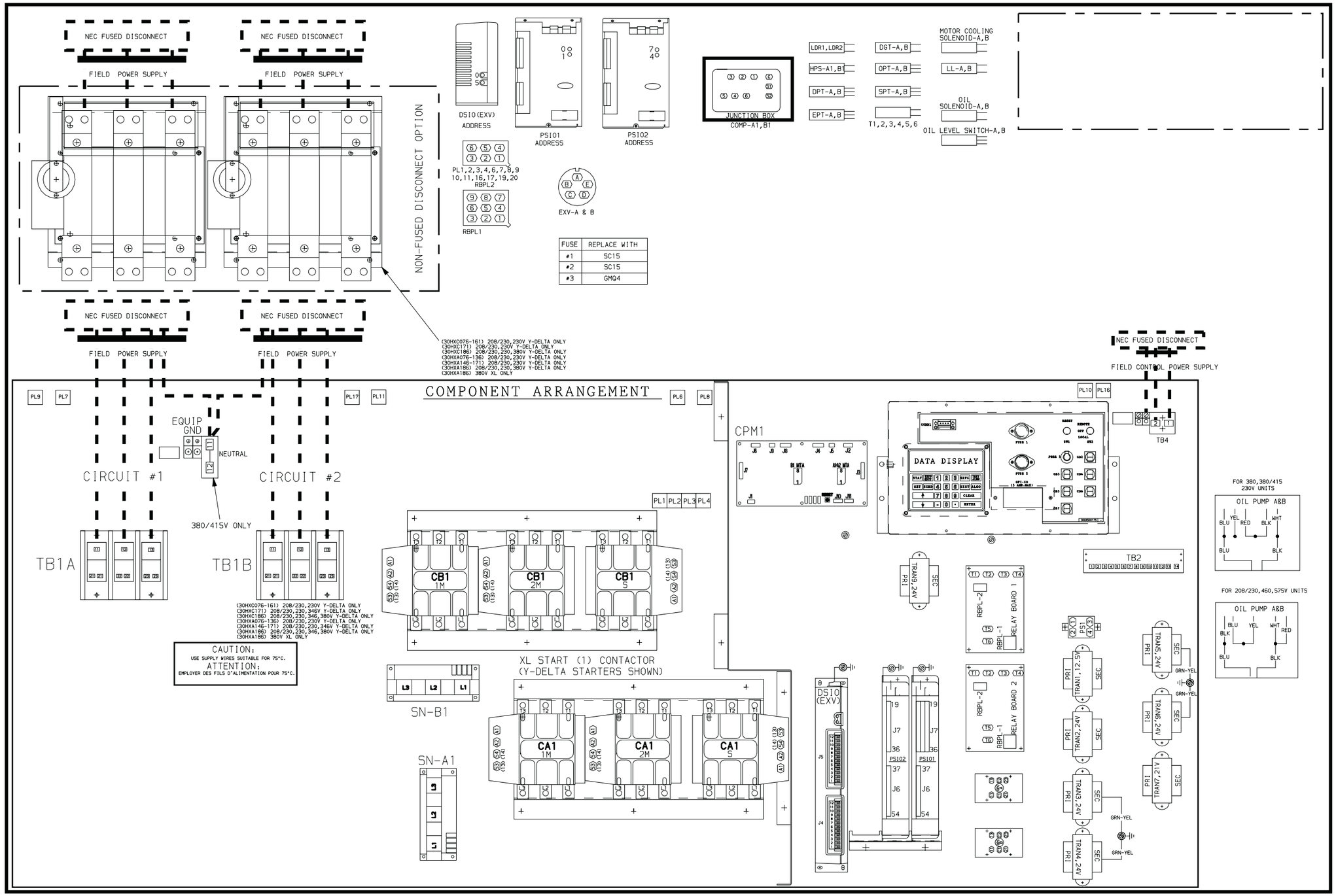


Fig. 7 — Component Arrangement, 30HXA,C076-186

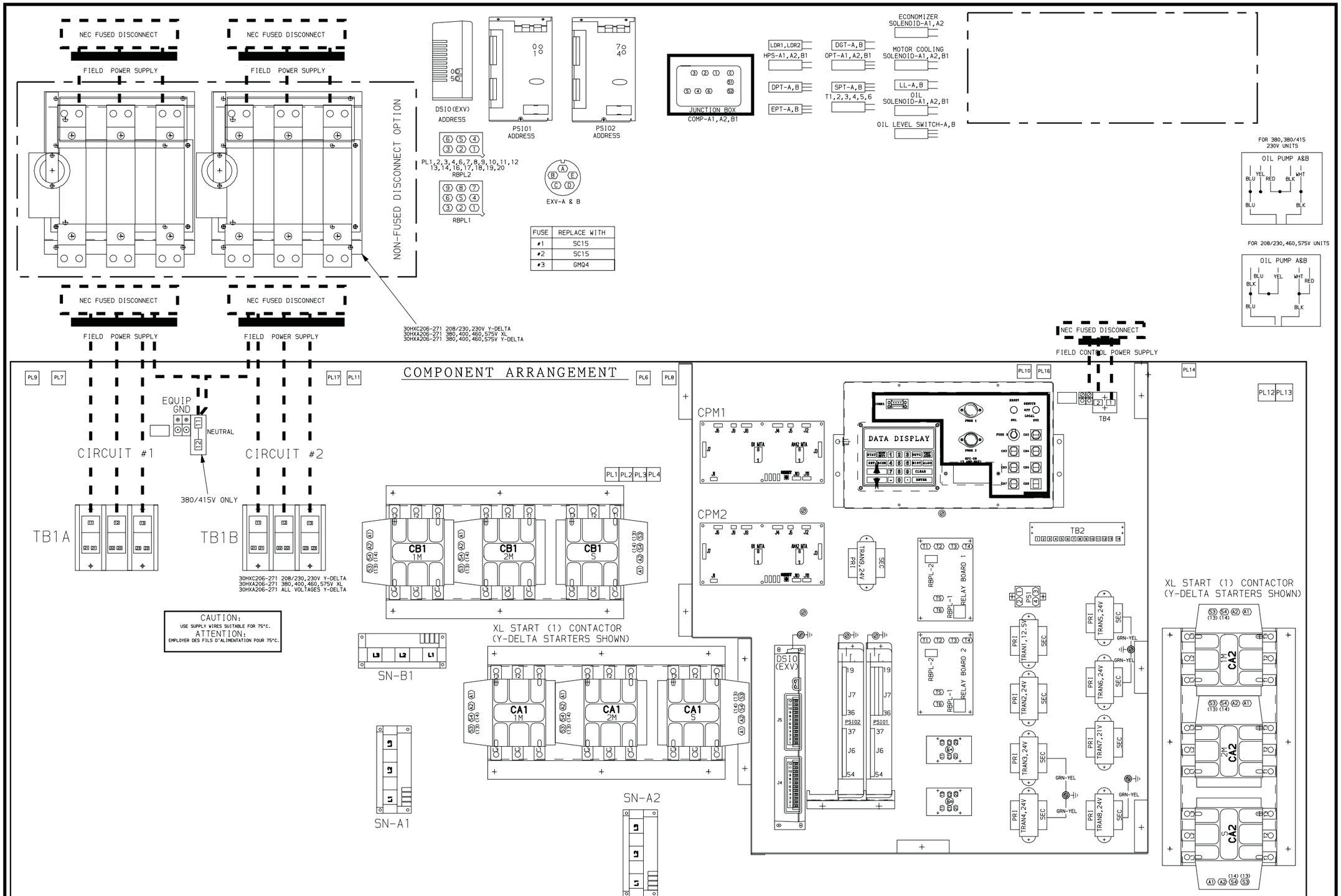


Fig. 8 — Control Arrangement, 30HXA,C206-271