Wiring Diagrams

DIAGRAM INDEX

POWER SCHEMATICS			
Unit 30HXA,C	**Voltage**	**Figure Number**	**Label Diagram No. 30HX**
076-186	ALL	1	502347
206-271	ALL	2	502349

CONTROL SCHEMATICS			
Unit 30HXA,C	**Voltage**	**Figure Number**	**Label Diagram No. 30HX**
076-271	24 (Low Voltage)	3	502503
	24	4	502504
	115, 230	5	502556
			502557

COMPONENT ARRANGEMENTS			
Unit 30HXA,C	**Voltage**	**Figure Number**	**Label Diagram No. 30HX**
076-186	ALL	6	502301
206-271	ALL	7	502356

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

LEGEND

ALM — Alarm
C — Contactor, Compressor
CB — Circuit Breaker
CCP — ComfortLink™ Compressor Protection
CFR — Condenser Fan Relay
CNFS — Condenser Flow Switch
CNP — Condenser Pump
CNPI — Condenser Pump Interlock
COMP — Compressor
CWFS — Chilled Water Flow Switch
CWP — Chilled Water Pump
CWPI — Chilled Water Pump Interlock
DGT — Discharge Gas Thermistor
DPT — Discharge Pressure Transducer
EMM — Energy Management
EPT — Economizer Pressure Transducer
EQUIP — Equipment
EWT — Entering Water
EXV — Electronic Expansion Valve
FU — Fuse
GND — Ground
HTR — Heater
HPS — High-Pressure Switch
LWT — Leaving Water
LDR — Loader
LL — Liquid Level
MBB — Main Base Board
MLV — Minimum Load Valve
OAT — Outdoor-Air Thermistor
OLS — Oil Level Switch
OPC — Oil Pump Contactor
OPT — Oil Pressure Transducer
PL — Plug Assembly
S — Shorting
SCB — Screw Compressor Board
SEC — Secondary
SN — Sensor (Toroid)
SPT — Suction Pressure Transducer
SW — Switch
T — Thermistor
TB — Terminal Block
TEMP — Temperature
TRAN — Transformer
XL — Across-the-Line
1W — Wye
2W — Delta


Terminal Block Connection


Marked Terminal


Unmarked Terminal


Unmarked Splice


Marked Wire


Marked Splice

Factory Wiring

Field Control Wiring

Field Power Wiring

Indicates common potential.
(Does not represent wiring.)

Accessories or Options

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, 380/415 v units) through a field-supplied disconnect with 15-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, 380/415-v units.
7. Terminals 13 and 14 of TB5 are for field external interlock connection for remote on-off and terminals 1 and 2 of TB5 for CWP interlock. Terminals 5 and 6 of TB2 are for CNP interlock and CNFS. The contacts must be rated for dry circuit application capable of handling a 24-v ac to 50 mA load.
8. Terminals 10 and 12 of TB5 are for control of chilled water pump starter. Terminals 11 and 12 of TB5 are for alarm. The maximum allowable load for each of these circuits is 75-va sealed.
9. Terminals 7 and 9 of TB2 are for condenser fan contactor A (HXA) or condenser water pump (HXC). Terminals 8 and 9 of TB2 are for condenser fan contactor B (HXA). The maximum allowable load for each of these circuits is 360 va inrush, 75 va sealed. Separate field power supply is not required.

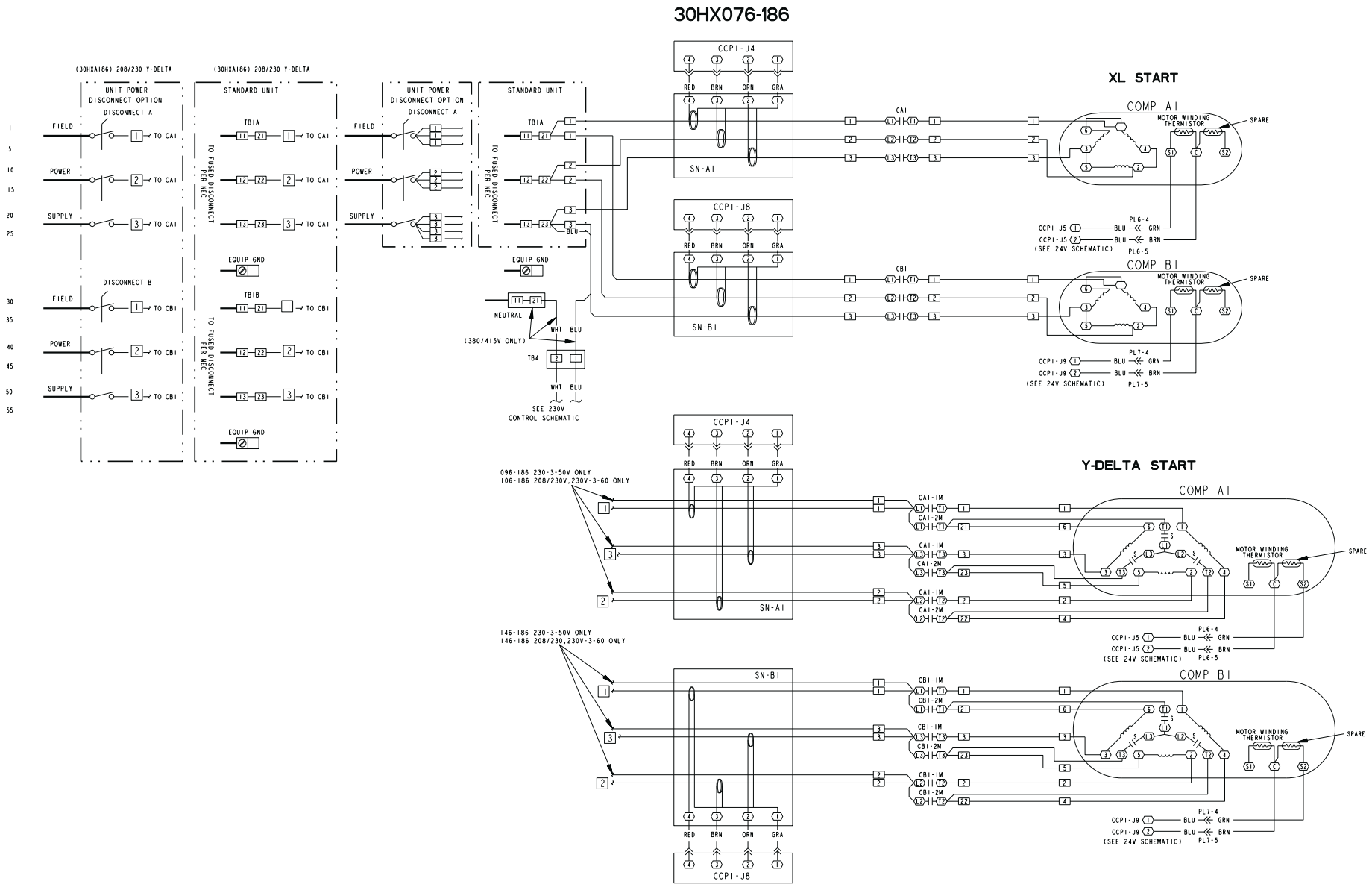

Fig. 1 — Power Wiring, 30HX076-186

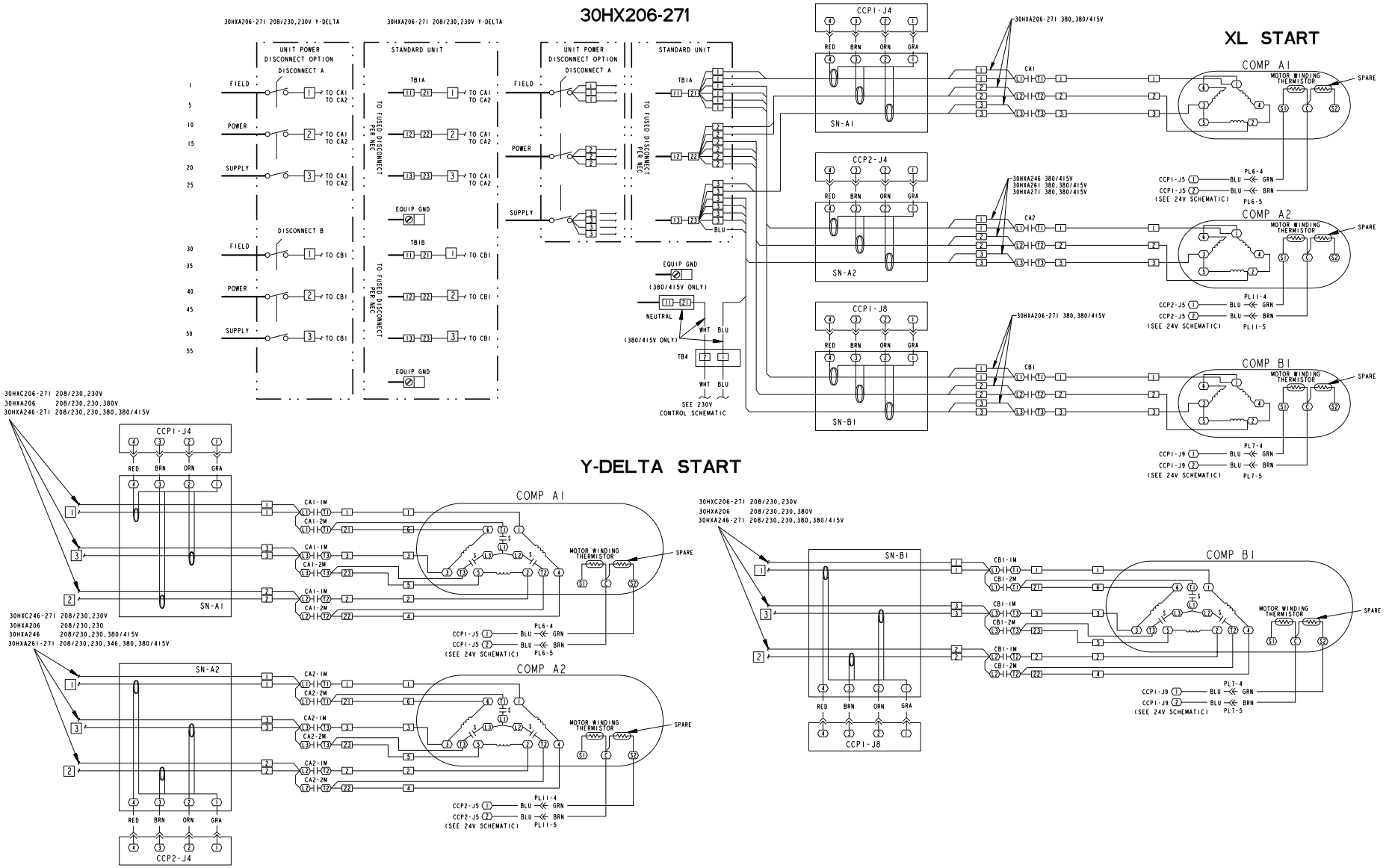

Fig. 2 — Power Wiring, 30HX206-271

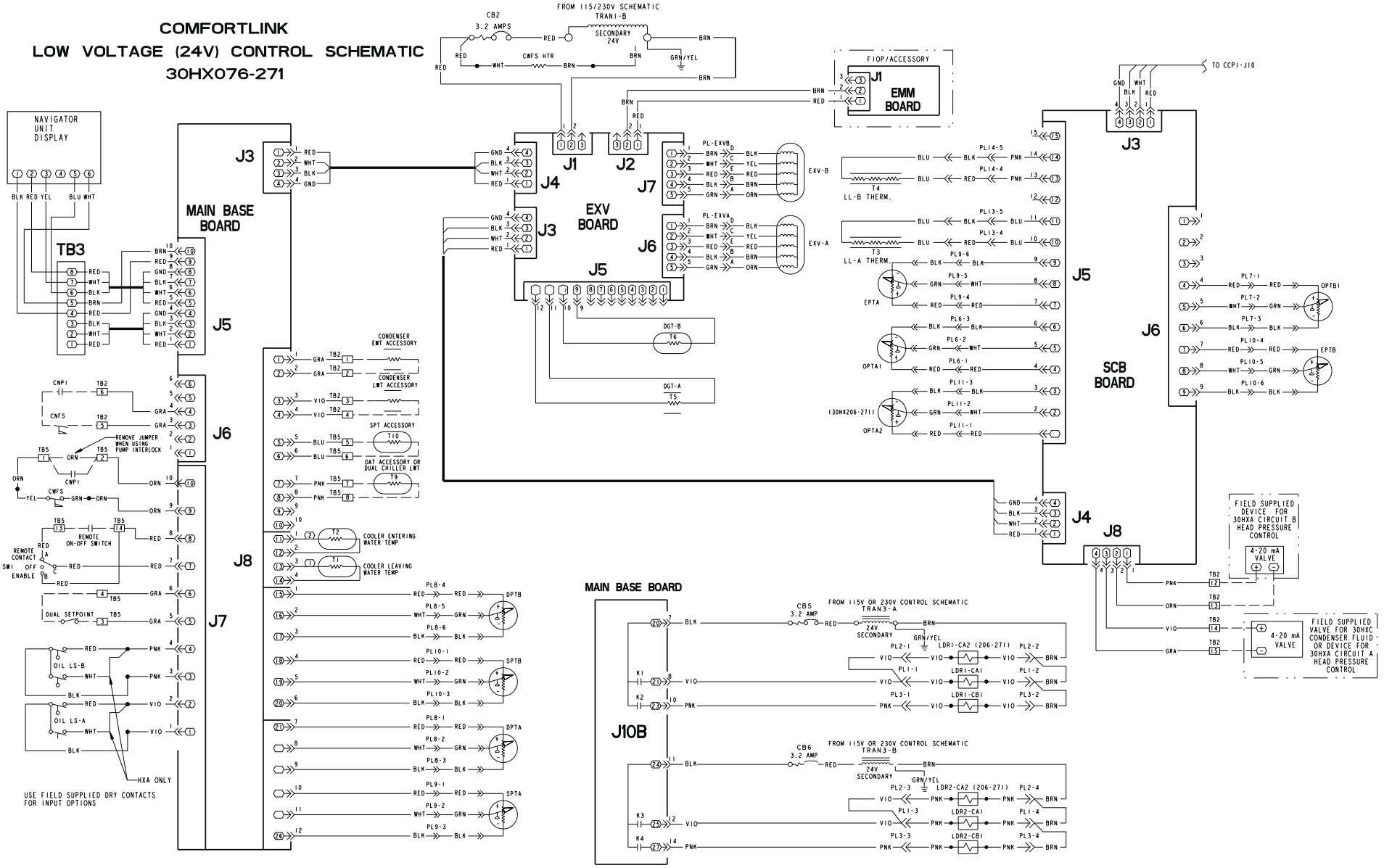

Fig. 3 — Control Wiring, 24 v, Low Voltage 30HX076-271

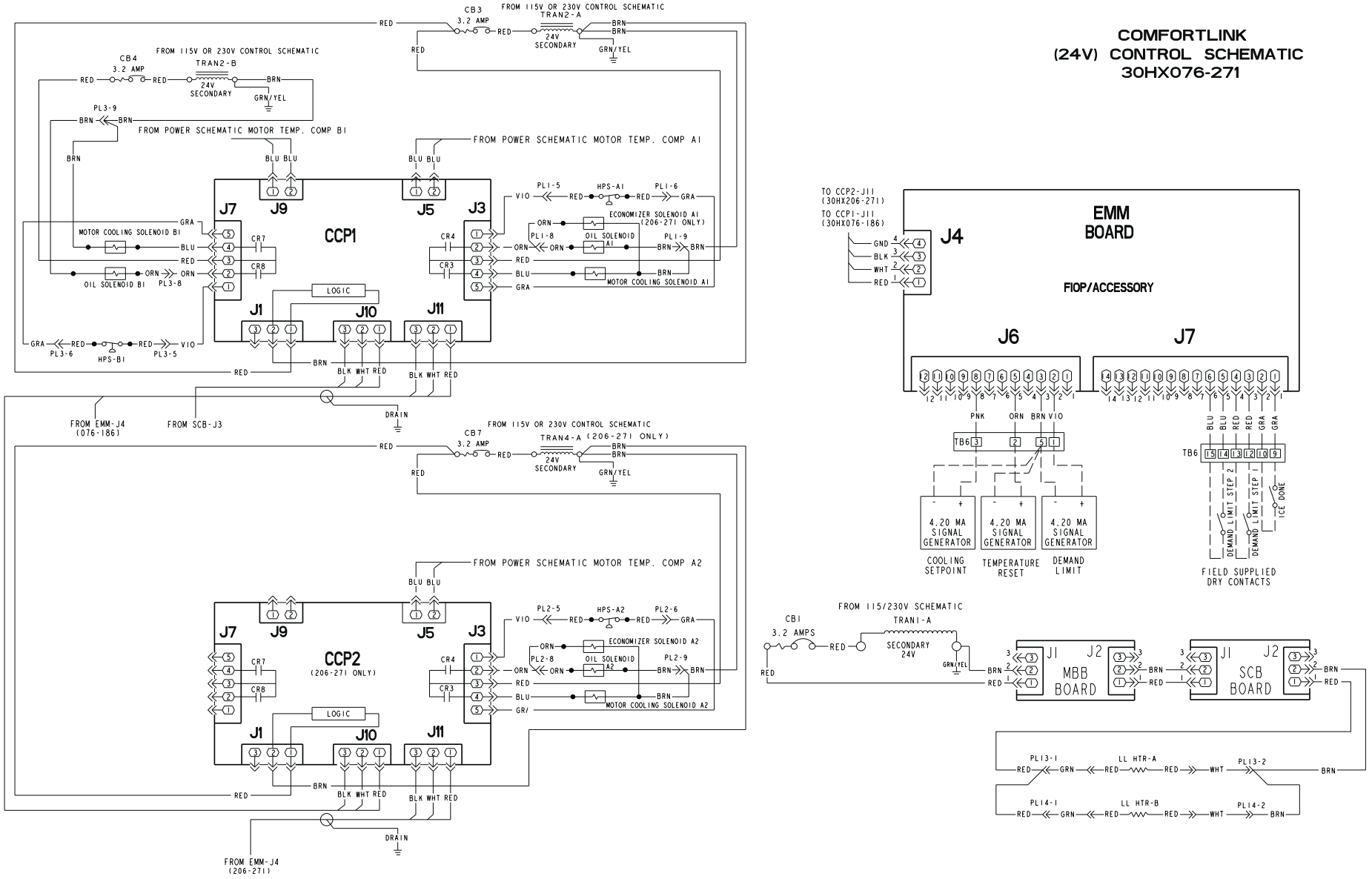

Fig. 4 — Control Wiring, 24 v, 30HX076-271

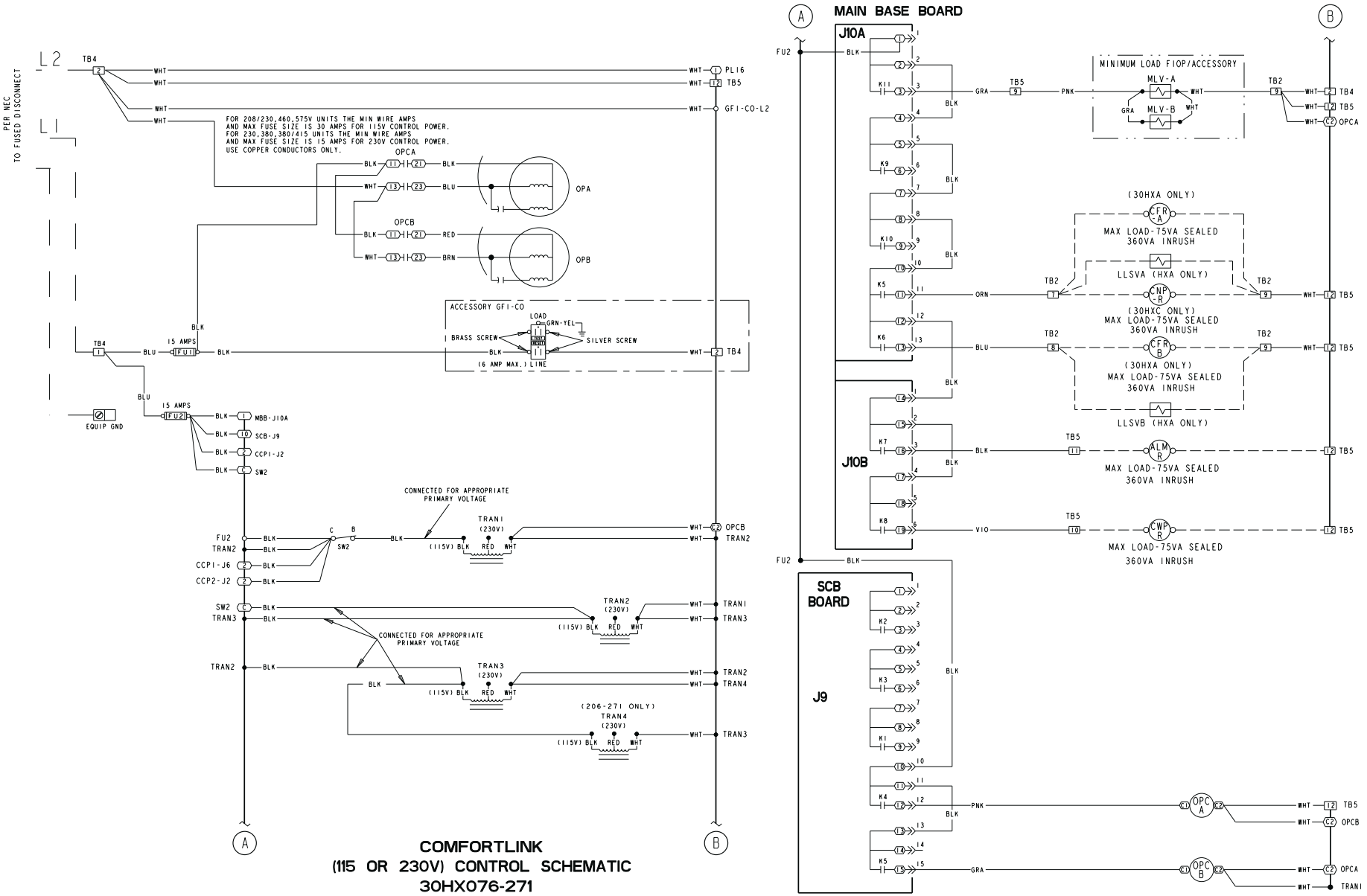

Fig. 5 — Control Wiring, 115 or 230 v, 30HX076-271

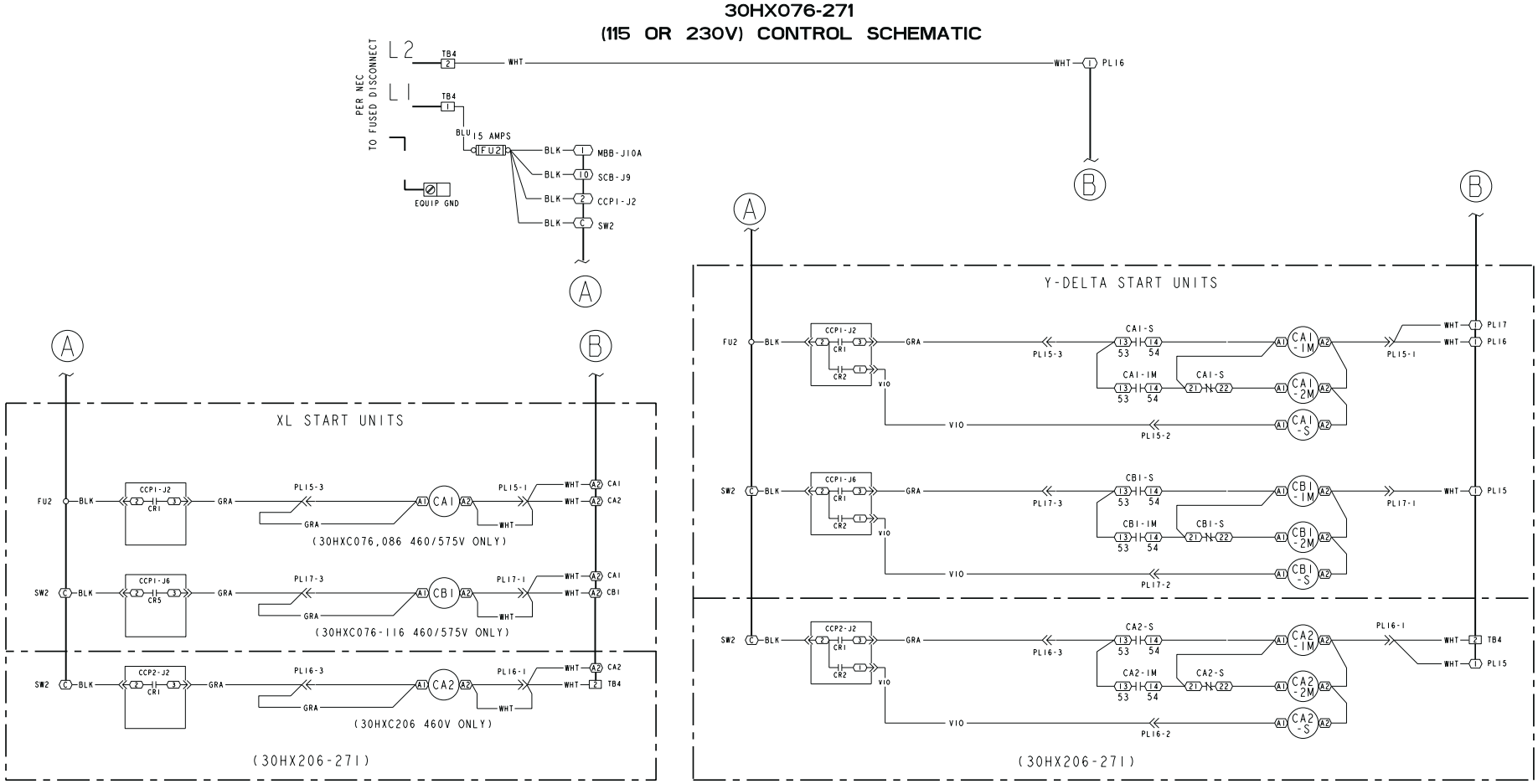

Fig. 5 — Control Wiring, 115 or 230 v, 30HX076-271 (cont)

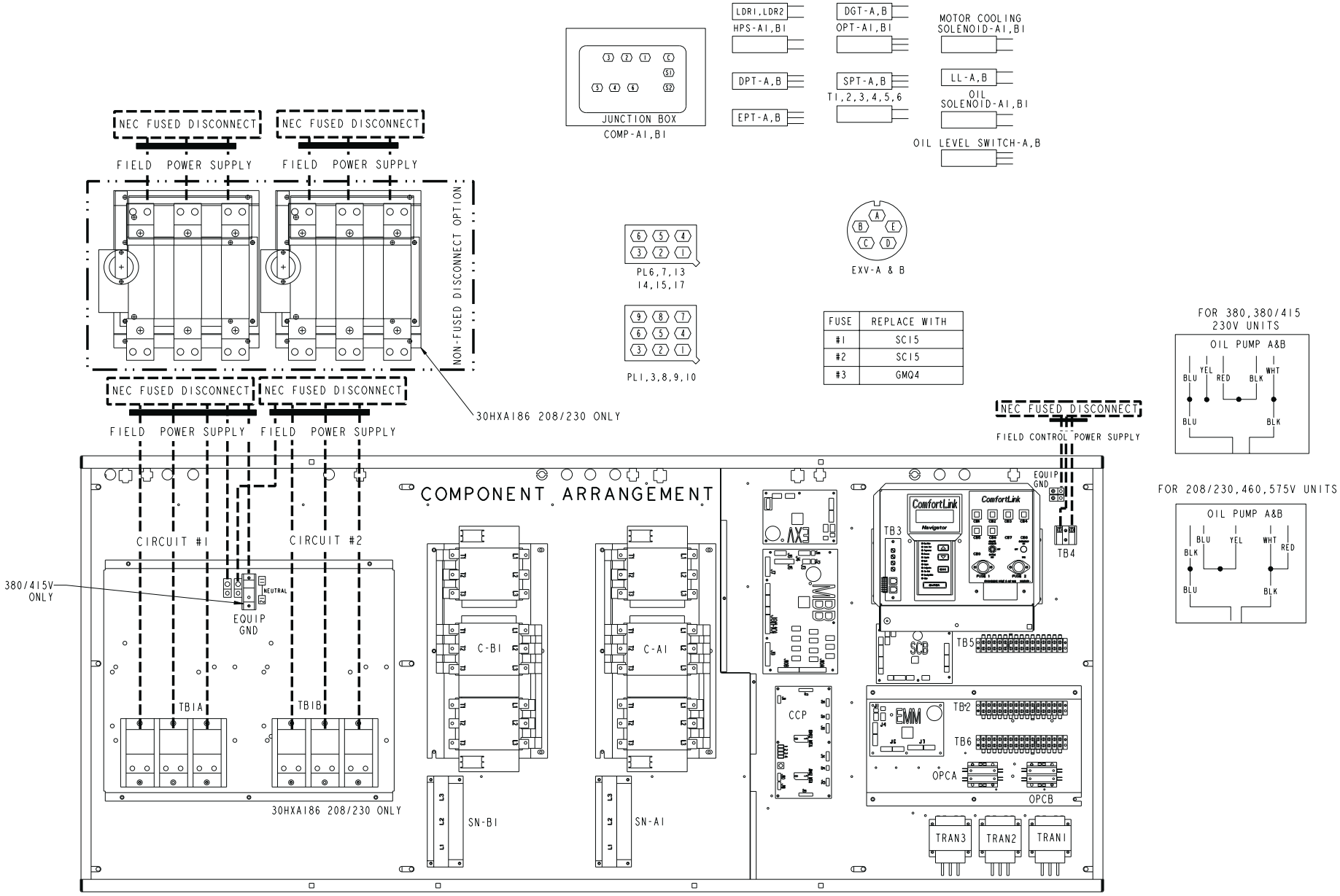

Fig. 6 — Component Arrangement, 30HX076-186

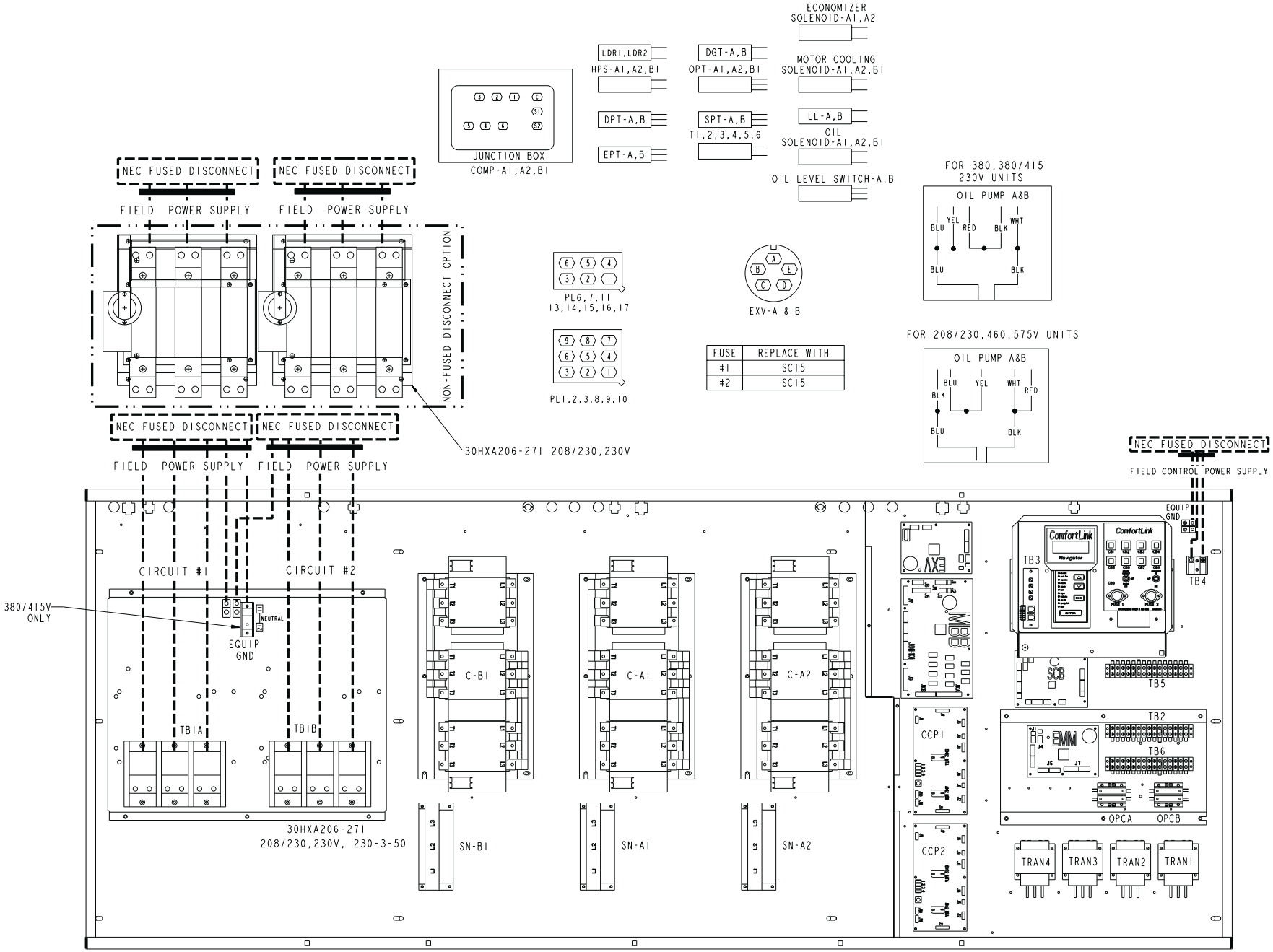

Fig. 7 — Component Arrangement, 30HX206-271