YORK® A JOHNSON CONTROLS COMPANY	AIR-COOLED SCREW LIQUID CHILLERS	
WIRING DIAGRAMS	New Release	Form 201.21-W3 (206)

LATITUDE™

AIR-COOLED SCREW LIQUID CHILLERS
STYLE A

50075

MODELS
YCAV0267-0527, 60 HZ
(290-515 TONS)
E/V HIGH EFFICIENCY AND S/P STANDARD EFFICIENCY

R134a

WARNING!

The Control/VSD Cabinet contains lethal High AC and DC voltages. Before performing service inside the cabinet, remove the AC supply feeding the chiller.

The DC Voltage on the VSD DC Bus will take 5 minutes to bleed off, after AC power is removed. Always check the DC Bus Voltage with a Voltmeter to assure the capacitor charge has bled off before working on the system.

•NEVER short out the DC Bus to discharge the filter capacitors.

•NEVER place loose tools, debris, or any objects inside the Control Panel/VSD Cabinet.

•NEVER allow the Control Panel VSD Cabinet doors to remain open if there is a potential for rain to enter the panel. Keep doors closed and assure all latches are engaged on each door unless the unit is being serviced.

CHANGEABILITY OF THIS DOCUMENT

In complying with YORK's policy for continuous product improvement, the information contained in this document is subject to change without notice. While YORK makes no commitment to update or provide current information automatically to the manual owner, that information, if applicable, can be obtained by contacting the nearest YORK Engineered Systems Service office.

It is the responsibility of operating/service personnel to verify the applicability of these documents to the equipment in question. If there is any question in the mind of operating/service personnel as to the applicability of these documents, then prior to working on the equipment, they should verify with the owner whether the equipment has been modified and if current literature is available.

IMPORTANT!
READ BEFORE PROCEEDING!
GENERAL SAFETY GUIDELINES

This equipment is a relatively complicated apparatus. During installation, operation, maintenance or service, individuals may be exposed to certain components or conditions including, but not limited to: refrigerants, oils, materials under pressure, rotating components, and both high and low voltage. Each of these items has the potential, if misused or handled improperly, to cause bodily injury or death. It is the obligation and responsibility of operating/service personnel to identify and recognize these inherent hazards, protect themselves, and proceed safely in completing their tasks. Failure to comply with any of these requirements could result in serious damage to the equipment and the property in which it is situated, as well as severe personal injury or death to themselves and people at the site.

This document is intended for use by owner-authorized operating/service personnel. It is expected that this individual possesses independent training that will enable them to perform their assigned tasks properly and safely. It is essential that, prior to performing any task on this equipment, this individual shall have read and understood this document and any referenced materials. This individual shall also be familiar with and comply with all applicable governmental standards and regulations pertaining to the task in question.

External wiring, unless specified as an optional connection in the manufacturer's product line, is NOT to be connected inside the micro panel cabinet. Devices such as relays, switches, transducers and controls may NOT be installed inside the panel. NO external wiring is allowed to be run through the micro panel. All wiring must be in accordance with YORK's published specifications and must be performed ONLY by qualified YORK personnel. YORK will not be responsible for damages/problems resulting from improper connections to the controls or application of improper control signals. Failure to follow this will void the manufacturer's warranty and cause serious damage to property or injury to persons.

NOMENCLATURE

The model number denotes the following characteristics of the unit.

Y C A V - 0357 - S - A - 46 - V A A

- Y — YORK
- C — CHILLER
- A — AIR COOLED
- V — VSD DRIVEN SCREW COMPRESSOR
- 0357 — MODEL NUMBER
- S — UNIT DESIGNATOR
- A — REFRIGERANT - R134a
- 46 — VOLTAGE CODE
- V — STARTER - VSD
- A — DESIGN SERIES
- A — DEVELOPMENT CODE

UNIT DESIGNATOR

E- High Efficiency with Standard IPLV
S- Standard Efficiency with Standard IPLV
P- Standard Efficiency with High IPLV
V- High Efficiency with High IPLV

VOLTAGE CODE

17=200-3-60
28=230-3-60
40=380-3-60
46=460-3-60
50=380/400/415-3-60
58=575-3-60

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ELECTRICAL NOTES

1. As standard, all units have single point power connection. Contact factory for information regarding dual point power units.

2. Maximum Inverse Time Circuit Breaker - 250% of the rated input current of the drive per NEC 430.52 (C1).

3. Maximum Dual Element (Time Delay) Fuse - 225% of the rated input current of the drive per NEC 430.52 (C1).

4. MCA - Minimum Circuit Ampacity - 125% of the largest compressor RLA plus 100% of the remaining compressor RLA's plus the sum of all condenser fan FLA's per NEC 440.33

5. Recommended time delay or dual element fuse size - 150%of the largest compressor RLA plus 100% of the remaining compressor RLA's plus the sum of all condenser fan FLA's.

6. RLA - Rated Load Amps - rated in accordance with UL standard 1995.

7. Local codes may take precedence.

8. Control KVA includes operational controls and evaporator heaters.

9. System inrush current is less than RLA due to the use of YORK Variable Speed Drive technology. Typical Compressor Starting Current (First four seconds of startup):

Rated Voltage	Typical Starting Current per Compressor
200/60/3	53A
230/60/3	46A
380/60/3	29A
460/60/3	23A
575/60/3	18A

10. Optional Compressor Service Disconnect switch is available on all units.

11. Voltage Utilization Range:

Rated Voltage	Utilization Range
200/60/3	180-220
230/60/3	208-254
380/60/3	342-402
460/60/3	414-508
575/60/3	520-635

12. Condenser fan FLA applies to both low sound and ultra quiet fans.

LEGEND:

C.B.	CIRCUIT BREAKER
D.E.	DUAL ELEMENT FUSE
DISC SW	DISCONNECT SWITCH
FACT CB	FACTORY-MOUNTED CIRCUIT BREAKER
FLA	FULL LOAD AMPS
HZ	HERTZ
MAX	MAXIMUM
MCA	MINIMUM CIRCUIT AMPACITY
MIN	MINIMUM
MIN NF	MINIMUM NON-FUSED
RLA	RATED LOAD AMPS
S.P. WIRE	SINGLE-POINT WIRING

NOTES:

1. U.L. Label is provided on 60 Hz units for these electrical wiring congurations.
2. — — — — — — Dashed Line = Field Provided Wiring.
3. The above recommendations are based on the National Electric Code and using copper conductors only. Field wiring must also comply with local codes. Group Rated breaker must be HACR type for cUL machines.

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ELECTRICAL DATA

3 COMPRESSOR POWER WIRING CONNECTIONS

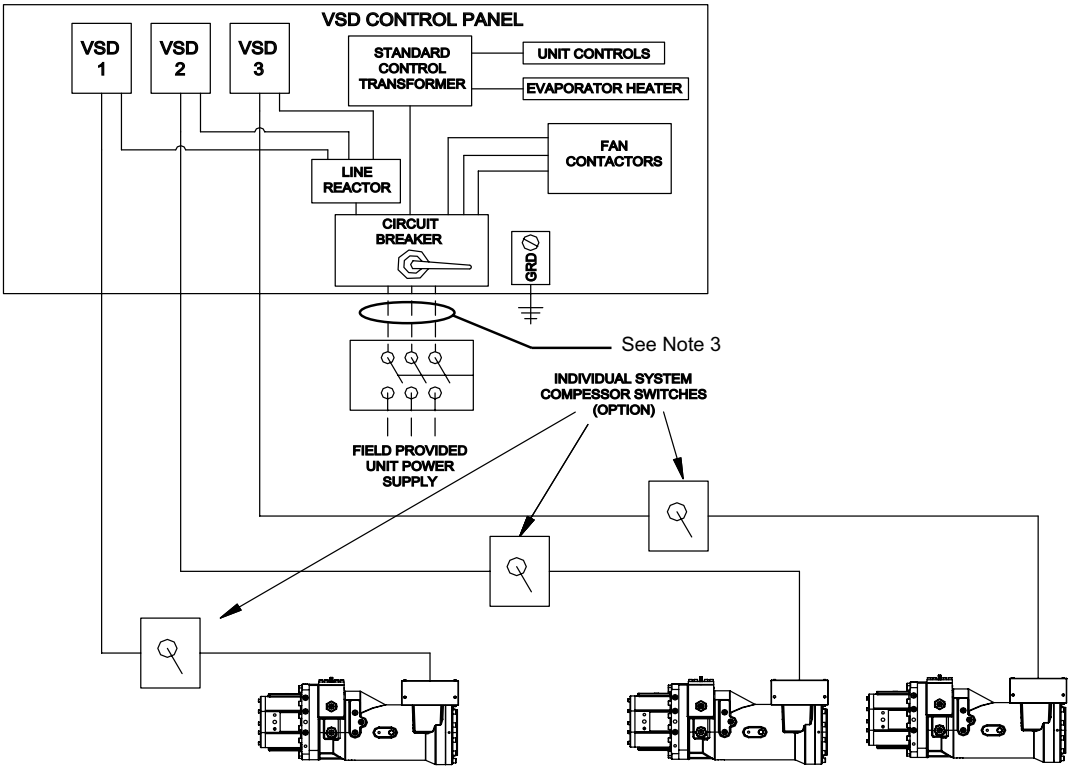


FIG. 1 - SINGLE-POINT POWER SUPPLY CONNECTION WITH CIRCUIT BREAKER PROTECTION

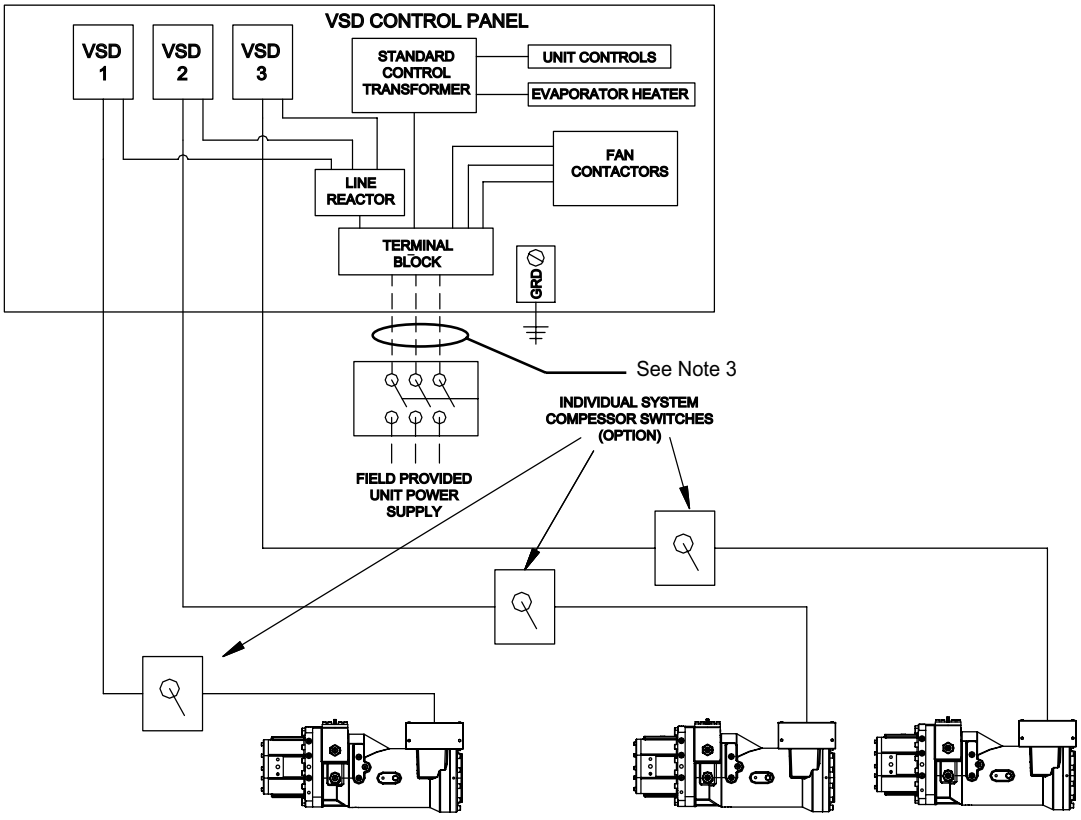


FIG. 2 - SINGLE-POINT POWER SUPPLY CONNECTION WITH TERMINAL BLOCK

ELECTRICAL DATA

4 COMPRESSOR POWER WIRING CONNECTIONS

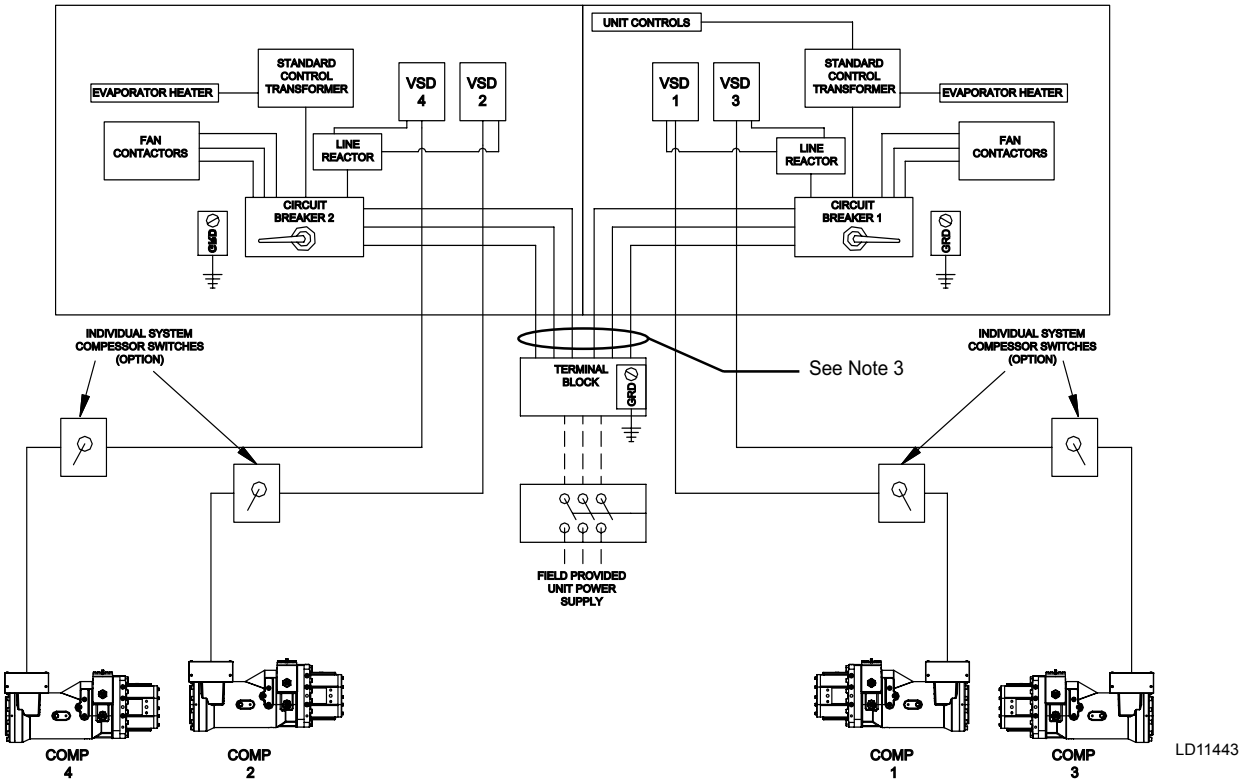


FIG. 3 - SINGLE-POINT POWER SUPPLY CONNECTION WITH CIRCUIT BREAKER PROTECTION

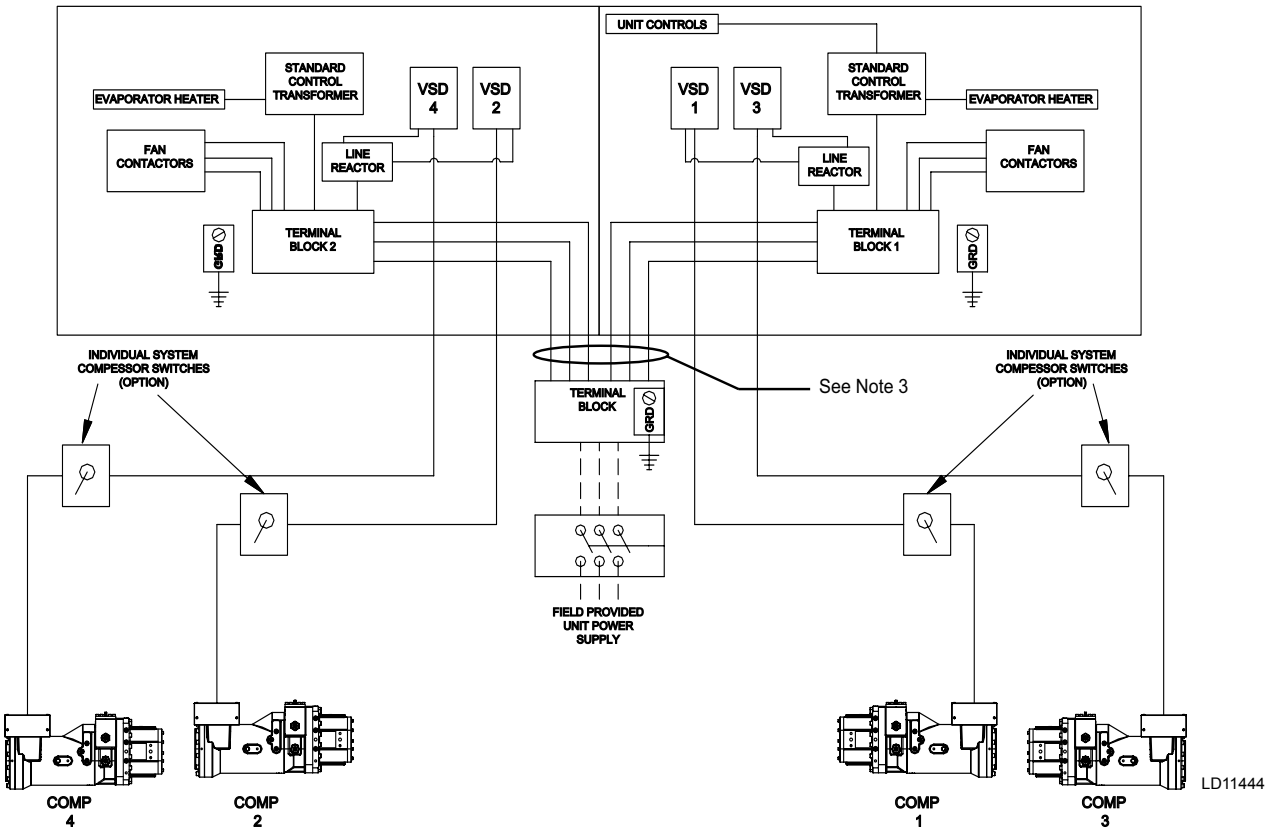


FIG. 4 - SINGLE-POINT POWER SUPPLY CONNECTION WITH TERMINAL BLOCK

ELECTRICAL DATA

4 COMPRESSOR POWER WIRING CONNECTIONS

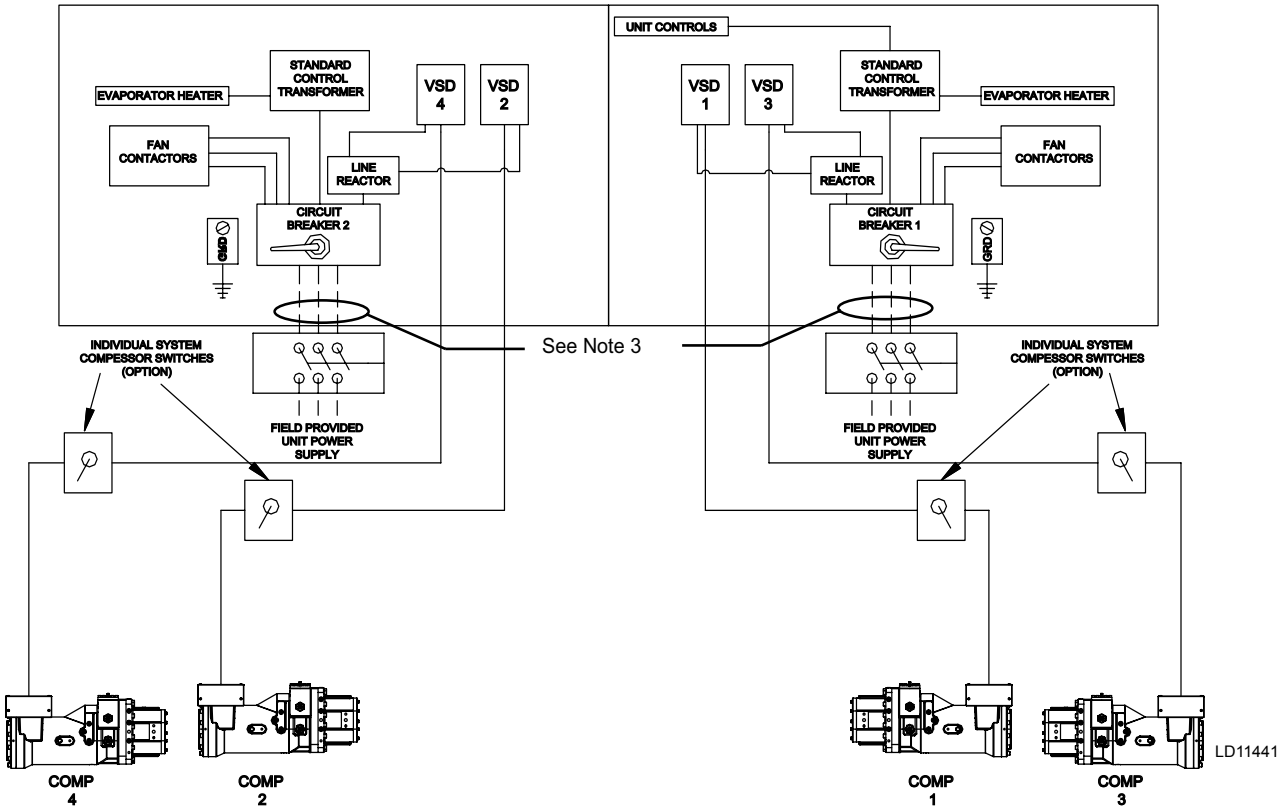


FIG. 5 - MULTI-POINT POWER SUPPLY CONNECTION WITH CIRCUIT BREAKER PROTECTION

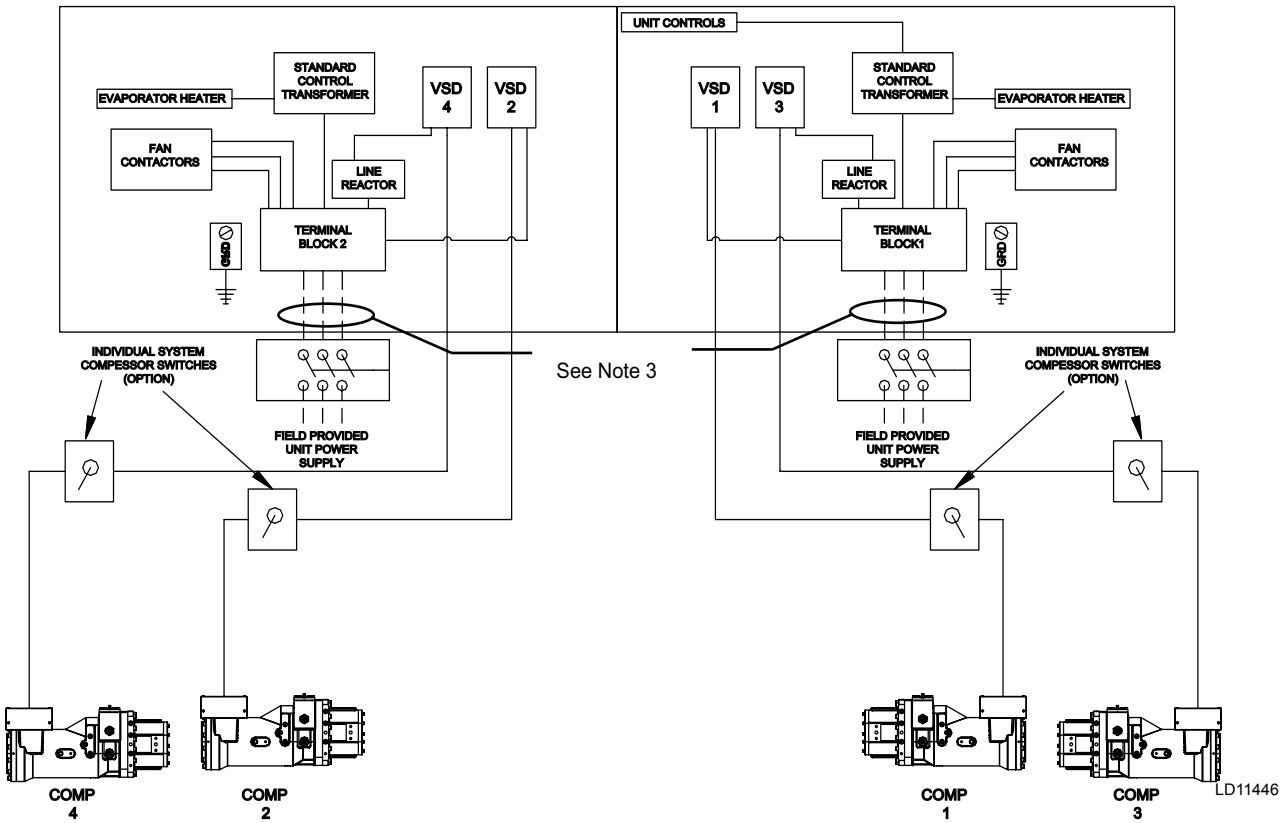


FIG. 6 - MULTI-POINT POWER SUPPLY CONNECTION WITH TERMINAL BLOCKS

3-Compressor Units Single Point (See Figs. 1 & 2)

(One Field Provided Power Supply Circuit to the Chiller.
Field Connection to Factory provided Terminal Block (Standard)
or Circuit Breaker (optional).

Standard Efficiency YCAV_ _ _ _ S/P

Model No./Nameplate			System 1			System 2			System 3			Control
			Compr	Cond. Fans		Compr	Cond. Fans		Compr	Cond. Fans		
YCAV	Volts (11)	Freq	RLA (6)	Qty.	FLA (EA)	RLA (6)	Qty.	FLA (EA)	RLA (6)	Qty.	FLA (EA)	KVA (8)
0287	380	60	184	5	3.5	207	4	3.5	136	4	3.5	2.4
	460	60	146	5	2.8	163	4	2.8	108	4	2.8	2.4
	575	60	117	5	2.2	131	4	2.2	86	4	2.2	2.4
0307	380	60	186	5	3.5	186	5	3.5	208	4	3.5	2.4
	460	60	147	5	2.8	147	5	2.8	165	4	2.8	2.4
	575	60	118	5	2.2	118	5	2.2	132	4	2.2	2.4
0357	380	60	203	5	3.5	203	5	3.5	245	6	3.5	2.4
	460	60	160	5	2.8	160	5	2.8	193	6	2.8	2.4
	575	60	129	5	2.2	129	5	2.2	155	6	2.2	2.4
0397	380	60	242	6	3.5	242	6	3.5	242	6	3.5	2.4
	460	60	191	6	2.8	191	6	2.8	191	6	2.8	2.4
	575	60	153	6	2.2	153	6	2.2	153	6	2.2	2.4

High Efficiency YCAV_ _ _ _ E/V

Model No./Nameplate			System 1			System 2			System 3			Control
			Compr	Cond. Fans		Compr	Cond. Fans		Compr	Cond. Fans		
YCAV	Volts (11)	Freq	RLA (6)	Qty.	FLA (EA)	RLA (6)	Qty.	FLA (EA)	RLA (6)	Qty.	FLA (EA)	KVA (8)
0267	380	60	179	5	3.5	179	5	3.5	133	4	3.5	2.4
	460	60	142	5	2.8	142	5	2.8	105	4	2.8	2.4
	575	60	114	5	2.2	114	5	2.2	84	4	2.2	2.4
0287	380	60	173	5	3.5	173	5	3.5	173	5	3.5	2.4
	460	60	137	5	2.8	137	5	2.8	137	5	2.8	2.4
	575	60	110	5	2.2	110	5	2.2	110	5	2.2	2.4
0327	380	60	193	5	3.5	193	5	3.5	178	6	3.5	2.4
	460	60	152	5	2.8	152	5	2.8	141	6	2.8	2.4
	575	60	122	5	2.2	122	5	2.2	113	6	2.2	2.4
0357	380	60	230	6	3.5	230	6	3.5	176	6	3.5	2.4
	460	60	181	6	2.8	181	6	2.8	139	6	2.8	2.4
	575	60	146	6	2.2	146	6	2.2	111	6	2.2	2.4

3-Compressor Units Single Point (Con't)

(One Field Provided Power Supply Circuit to the Chiller.
Field Connection to Factory provided Terminal Block (Standard)
or Circuit Breaker (optional).

Standard Efficiency YCAV_ _ _ _ S/P

Unit Short Circuit Withstand (KA)		Field Wiring & Protection				Field Wiring Lugs STD Terminal Block		Field Wiring Lugs OPT Circuit Breaker	
Terminal Block (STD)	Circuit Breaker (OPT)	Min. Ckt. Ampacity (MCA) (4)	Recomm. Fuse/Ckt. Brker Rating (5)	Max. Inverse Time Ckt. Brkr. Rating (2)	Max Dual Element Fuse Size (3)	Lugs/ Phase (1)	Lug Wire Range	Lugs/ Phase (1)	Lug Wire Range
30KA	65KA	625	700	1200	1200	4	#2 - 600 KCM	4	#4/0 - 500 KCM
30KA	65KA	494	600	1000	800	4	#2 - 600 KCM	4	#4/0 - 500 KCM
30KA	42KA	396	450	800	700	3	#2 - 600 KCM	3	#3/0 - 400 KCM
30KA	65KA	683	800	1200	1200	4	#2 - 600 KCM	4	#4/0 - 500 KCM
30KA	65KA	539	600	1000	1000	4	#2 - 600 KCM	4	#4/0 - 500 KCM
30KA	42KA	433	500	800	800	3	#2 - 600 KCM	3	#3/0 - 400 KCM
30KA	65KA	768	1000	1600	1200	4	#2 - 600 KCM	4	#4/0 - 500 KCM
30KA	65KA	607	700	1200	1200	4	#2 - 600 KCM	4	#4/0 - 500 KCM
30KA	42KA	487	600	1000	800	3	#2 - 600 KCM	3	#3/0 - 400 KCM
30KA	65KA	850	1000	1600	1600	4	#2 - 600 KCM	4	#4/0 - 500 KCM
30KA	65KA	671	800	1200	1200	4	#2 - 600 KCM	4	#4/0 - 500 KCM
30KA	42KA	538	600	1000	1000	3	#2 - 600 KCM	3	#3/0 - 400 KCM

High Efficiency YCAV_ _ _ _ E/V

Unit Short Circuit Withstand (KA)		Field Wiring & Protection				Field Wiring Lugs STD Terminal Block		Field Wiring Lugs OPT Circuit Breaker	
Terminal Block (STD)	Circuit Breaker (OPT)	Min. Ckt. Ampacity (MCA) (4)	Recomm. Fuse/Ckt. Brker Rating (5)	Max. Inverse Time Ckt. Brkr. Rating (2)	Max Dual Element Fuse Size (3)	Lugs/ Phase (1)	Lug Wire Range	Lugs/ Phase (1)	Lug Wire Range
30KA	65KA	585	700	1200	1000	4	#2 - 600 KCM	4	#4/0 - 500 KCM
30KA	65KA	463	600	1000	800	4	#2 - 600 KCM	4	#4/0 - 500 KCM
30KA	42KA	371	450	800	700	3	#2 - 600 KCM	3	#3/0 - 400 KCM
30KA	65KA	615	700	1200	1200	4	#2 - 600 KCM	4	#4/0 - 500 KCM
30KA	65KA	486	600	1000	800	4	#2 - 600 KCM	4	#4/0 - 500 KCM
30KA	42KA	389	450	800	700	3	#2 - 600 KCM	3	#2/0 -3400 KCM
30KA	65KA	669	800	1200	1200	4	#2 - 600 KCM	4	#4/0 - 500 KCM
30KA	65KA	528	600	1000	1000	4	#2 - 600 KCM	4	#4/0 - 500 KCM
30KA	42KA	424	500	800	800	3	#2 - 600 KCM	3	#3/0 - 400 KCM
30KA	65KA	756	1000	1600	1200	4	#2 - 600 KCM	4	#4/0 - 500 KCM
30KA	65KA	597	700	1200	1000	4	#2 - 600 KCM	4	#4/0 - 500 KCM
30KA	42KA	479	600	1000	800	3	#2 - 600 KCM	3	#3/0 - 400 KCM

4-Compressor Units Single Point (See Figs. 3 & 4)

(One Field Provided Power Supply Circuit.
Field Connections to Factory provided Terminal Block (Standard), or Individual System Breakers(Optional).

Standard Efficiency YCAV_ _ _ _ S/P

Model No./ Nameplate			System 1			System 2			System 3			System 4			Control	
			Compr	Cond. Fans		Compr	Cond. Fans		Compr	Cond. Fans		Compr	Cond. Fans		Sys 1/3	Sys 2/4
YCAV	Volts (11)	Freq	RLA (6)	Qty.	FLA (EA)	RLA (6)	Qty.	FLA (EA)	RLA (6)	Qty.	FLA (EA)	RLA (6)	Qty.	FLA (EA)	KVA (8)	KVA (8)
0417	380	60	198	5	3.5	198	5	3.5	198	5	3.5	198	5	3.5	2.4	1.8
	460	60	156	5	2.8	156	5	2.8	156	5	2.8	156	5	2.8	2.4	1.8
	575	60	125	5	2.2	125	5	2.2	125	5	2.2	125	5	2.2	2.4	1.8
0457	380	60	228	6	3.5	228	5	3.5	190	5	3.5	190	5	3.5	2.4	1.8
	460	60	180	6	2.8	180	5	2.8	150	5	2.8	150	5	2.8	2.4	1.8
	575	60	144	6	2.2	144	5	2.2	120	5	2.2	120	5	2.2	2.4	1.8
0477	380	60	244	6	3.5	244	6	3.5	202	5	3.5	202	5	3.5	2.4	1.8
	460	60	193	6	2.8	193	6	2.8	160	5	2.8	160	5	2.8	2.4	1.8
	575	60	155	6	2.2	155	6	2.2	128	5	2.2	128	5	2.2	2.4	1.8
0507	380	60	243	6	3.5	243	6	3.5	202	5	3.5	243	6	3.5	2.4	1.8
	460	60	192	6	2.8	191	6	2.8	159	5	2.8	191	6	2.8	2.4	1.8
	575	60	154	6	2.2	154	6	2.2	128	5	2.2	154	6	2.2	2.4	1.8
0527	380	60	242	6	3.5	242	6	3.5	242	6	3.5	242	6	3.5	2.4	1.8
	460	60	191	6	2.8	191	6	2.8	191	6	2.8	191	6	2.8	2.4	1.8
	575	60	153	6	2.2	153	6	2.2	153	6	2.2	153	6	2.2	2.4	1.8

High Efficiency YCAV_ _ _ _ E/V

Model No./Nameplate			System 1			System 2			System 3			System 4			Control	
			Compr	Cond. Fans		Compr	Cond. Fans		Compr	Cond. Fans		Compr	Cond. Fans		Sys 1/3	Sys 2/4
YCAV	Volts (11)	Freq	RLA (6)	Qty.	FLA (EA)	RLA (6)	Qty.	FLA (EA)	RLA (6)	Qty.	FLA (EA)	RLA (6)	Qty.	FLA (EA)	KVA (8)	KVA (8)
0397	380	60	173	5	3.5	173	5	3.5	173	5	3.5	173	5	3.5	2.4	1.8
	460	60	137	5	2.8	136	5	2.8	137	5	2.8	136	5	2.8	2.4	1.8
	575	60	109	5	2.2	109	5	2.2	109	5	2.2	109	5	2.2	2.4	1.8
0417	380	60	179	6	3.5	179	6	3.5	193	5	3.5	193	5	3.5	2.4	1.8
	460	60	141	6	2.8	141	6	2.8	153	5	2.8	152	5	2.8	2.4	1.8
	575	60	113	6	2.2	113	6	2.2	122	5	2.2	122	5	2.2	2.4	1.8
0477	380	60	231	6	3.5	231	6	3.5	177	6	3.5	177	6	3.5	2.4	1.8
	460	60	182	6	2.8	182	6	2.8	139	6	2.8	139	6	2.8	2.4	1.8
	575	60	146	6	2.2	146	6	2.2	112	6	2.2	112	6	2.2	2.4	1.8

4-Compressor Units Single Point (Con't)

(One Field Provided Power Supply Circuit.
Field Connections to Factory provided Terminal Block (Standard),
or Individual System Breakers(Optional).

Standard Efficiency YCAV_ _ _ _ S/

Unit Short Circuit Withstand (KA)		Field Wiring & Protection				Field Wiring Lugs STD Terminal Block		Field Wiring Lugs OPT Circuit Breaker	
Terminal Block (STD)	Circuit Breaker (OPT)	Min. Ckt. Ampacity (MCA) (4)	Recomm. Fuse/Ckt. Brkr. Rating (5)	Max. Inverse Time Ckt. Brkr. Rating (2)	Max Dual Element Fuse Size (3)	Lugs/ Phase (1)	Lug Wire Range	Lugs/ Phase (1)	Lug Wire Range
30KA	65KA	911	1000	2000	1600	4	#1/0 - 750 KCM	4	#1/0 - 750 KCM
30KA	65KA	719	800	1600	1200	4	#1/0 - 750 KCM	4	#1/0 - 750 KCM
30KA	42KA	577	700	1200	1000	4	#1/0 - 750 KCM	4	#1/0 - 750 KCM
30KA	65KA	967	1200	2000	1600	4	#1/0 - 750 KCM	4	#1/0 - 750 KCM
30KA	65KA	763	1000	1600	1200	4	#1/0 - 750 KCM	4	#1/0 - 750 KCM
30KA	42KA	612	700	1200	1200	4	#1/0 - 750 KCM	4	#1/0 - 750 KCM
30KA	65KA	1032	1200	2000	2000	4	#1/0 - 750 KCM	4	#1/0 - 750 KCM
30KA	65KA	815	1000	1600	1600	4	#1/0 - 750 KCM	4	#1/0 - 750 KCM
30KA	42KA	653	700	1200	1200	4	#1/0 - 750 KCM	4	#1/0 - 750 KCM
30KA	65KA	1073	1200	2000	2000	4	#1/0 - 750 KCM	4	#1/0 - 750 KCM
30KA	65KA	847	1000	1600	1600	4	#1/0 - 750 KCM	4	#1/0 - 750 KCM
30KA	42KA	679	800	1200	1200	4	#1/0 - 750 KCM	4	#1/0 - 750 KCM
30KA	65KA	1113	1200	2000	2000	4	#1/0 - 750 KCM	4	7#1/0 - 50 KCM
30KA	65KA	878	1000	1600	1600	4	#1/0 - 750 KCM	4	#1/0 - 750 KCM
30KA	42KA	705	800	1200	1200	4	#1/0 - 750 KCM	4	#1/0 - 750 KCM

High Efficiency YCAV_ _ _ _ E/V

Unit Short Circuit Withstand (KA)		Field Wiring & Protection				Field Wiring Lugs STD Terminal Block		Field Wiring Lugs OPT Circuit Breaker	
Terminal Block (STD)	Circuit Breaker (OPT)	Min. Ckt. Ampacity (MCA) (4)	Recomm. Fuse/Ckt. Brkr. Rating (5)	Max. Inverse Time Ckt. Brkr. Rating (2)	Max Dual Element Fuse Size (3)	Lugs/ Phase (1)	Lug Wire Range	Lugs/ Phase (1)	Lug Wire Range
30KA	65KA	805	1000	1600	1600	4	#1/0 - 750 KCM	4	#1/0 - 750 KCM
30KA	65KA	636	700	1200	1200	4	#1/0 - 750 KCM	4	#1/0 - 750 KCM
30KA	42KA	510	600	1000	1000	4	#1/0 - 750 KCM	4	#1/0 - 750 KCM
30KA	65KA	869	1000	1600	1600	4	#1/0 - 750 KCM	4	#1/0 - 750 KCM
30KA	65KA	687	800	1200	1200	4	#1/0 - 750 KCM	4	#1/0 - 750 KCM
30KA	42KA	551	600	1200	1000	4	#1/0 - 750 KCM	4	#1/0 - 750 KCM
30KA	65KA	957	1200	2000	1600	4	#1/0 - 750 KCM	4	#1/0 - 750 KCM
30KA	65KA	756	1000	1600	1200	4	#1/0 - 750 KCM	4	#1/0 - 750 KCM
30KA	42KA	606	700	1200	1200	4	#1/0 - 750 KCM	4	#1/0 - 750 KCM

4-Compressor Units Standard Efficiency Dual Point (See Figs. 5 & 6)

(Two Field Provided Power Supply Circuits.
Field Connections to Factory provided Terminal Block (Standard), or Individual System Breakers(Optional).

Standard Efficiency YCAV_ _ _ _ S/P																
Model No./ Nameplate			System 1			System 2			System 3			System 4			Control	
			Compr	Cond. Fans		Compr	Cond. Fans		Compr	Cond. Fans		Compr	Cond. Fans		Sys 1/3	Sys 2/4
YCAV	Volts (11)	Freq	RLA (6)	Qty.	FLA (EA)	RLA (6)	Qty.	FLA (EA)	RLA (6)	Qty.	FLA (EA)	RLA (6)	Qty.	FLA (EA)	KVA (8)	KVA (8)
0417	380	60	198	5	3.5	198	5	3.5	198	5	3.5	198	5	3.5	2.4	1.8
	460	60	156	5	2.8	156	5	2.8	156	5	2.8	156	5	2.8	2.4	1.8
	575	60	125	5	2.2	125	5	2.2	125	5	2.2	125	5	2.2	2.4	1.8
0457	380	60	228	6	3.5	228	5	3.5	190	5	3.5	190	5	3.5	2.4	1.8
	460	60	180	6	2.8	180	5	2.8	150	5	2.8	150	5	2.8	2.4	1.8
	575	60	144	6	2.2	144	5	2.2	120	5	2.2	120	5	2.2	2.4	1.8
0477	380	60	244	6	3.5	244	6	3.5	202	5	3.5	202	5	3.5	2.4	1.8
	460	60	193	6	2.8	193	6	2.8	160	5	2.8	160	5	2.8	2.4	1.8
	575	60	155	6	2.2	155	6	2.2	128	5	2.2	128	5	2.2	2.4	1.8
0507	380	60	243	6	3.5	243	6	3.5	202	5	3.5	243	6	3.5	2.4	1.8
	460	60	192	6	2.8	191	6	2.8	159	5	2.8	191	6	2.8	2.4	1.8
	575	60	154	6	2.2	154	6	2.2	128	5	2.2	154	6	2.2	2.4	1.8
0527	380	60	242	6	3.5	242	6	3.5	242	6	3.5	242	6	3.5	2.4	1.8
	460	60	191	6	2.8	191	6	2.8	191	6	2.8	191	6	2.8	2.4	1.8
	575	60	153	6	2.2	153	6	2.2	153	6	2.2	153	6	2.2	2.4	1.8

Standard Efficiency YCAV_ _ _ _ S/P								
YCAV	Field Wiring Lugs				Field Wiring Lugs			
	STD Terminal Blocks				OPT Circuit Breakers			
	Lugs/Phase (1)		Field Wiring Lugs		Lugs/Phase (1)		Lug Wire Range	
	Sys 1/3	Sys 2/4	Sys.1/3	Sys. 2/4	Sys 1/3	Sys 2/4	Sys. 1/3	Sys. 2/4
0417	3	3	#2 - 600 KCM	#2 - 600 KCM	3	3	#3/0 - 400 KCM	#3/0 - 400 KCM
	2	2	#2 - 600 KCM	#2 - 600 KCM	2	2	#2/0 - 500 KCM	#2/0 - 500 KCM
	2	2	#2 - 600 KCM	#2 - 600 KCM	2	2	#2/0 - 500 KCM	#2/0 - 500 KCM
0457	3	3	#2 - 600 KCM	#2 - 600 KCM	3	3	#3/0 - 400 KCM	#3/0 - 400 KCM
	2	2	#2 - 600 KCM	#2 - 600 KCM	2	2	#2/0 - 500 KCM	#2/0 - 500 KCM
	2	2	#2 - 600 KCM	#2 - 600 KCM	2	2	#2/0 - 500 KCM	#2/0 - 500 KCM
0477	3	3	#2 - 600 KCM	#2 - 600 KCM	3	3	#3/0 - 400 KCM	#3/0 - 400 KCM
	2	2	#2 - 600 KCM	#2 - 600 KCM	2	2	#2/0 - 500 KCM	#2/0 - 500 KCM
	2	2	#2 - 600 KCM	#2 - 600 KCM	2	2	#2/0 - 500 KCM	#2/0 - 500 KCM
0507	3	3	#2 - 600 KCM	#2 - 600 KCM	3	3	#3/0 - 400 KCM	#3/0 - 400 KCM
	2	2	#2 - 600 KCM	#2 - 600 KCM	2	2	#2/0 - 500 KCM	#3/0 - 500 KCM
	2	2	#2 - 600 KCM	#2 - 600 KCM	2	2	#2/0 - 500 KCM	#2/0 - 500 KCM
0527	3	3	#2 - 600 KCM	#2 - 600 KCM	3	3	#3/0 - 400 KCM	#3/0 - 400 KCM
	2	2	#2 - 600 KCM	#2 - 600 KCM	2	2	#2/0 - 500 KCM	#2/0 - 500 KCM
	2	2	#2 - 600 KCM	#2 - 600 KCM	2	2	#2/0 - 500 KCM	#2/0 - 500 KCM

4-Compressor Standard Efficiency Units Dual Point

(Two Field Provided Power Supply Circuits.
Field Connections to Factory provided Terminal Block (Standard), or Individual System Breakers(Optional).

Standard Efficiency YCAV_ _ _ _ S/P											
Unit Short Circuit Withstand (KA)				Field Wiring & Protection							
Terminal Blocks (STD)		Circuit Breakers (OPT)		Minimum Ckt. Ampacity (MCA) (4)		Recommended Fuse/Ckt. Breaker Rating (5)		Max. Inverse Time Ckt. Brkr. Rating (2)		Max Dual Element Fuse Size (3)	
Sys 1/3	Sys 2/4	Sys 1/3	Sys 2/4	Sys 1/3	Sys 2/4	Sys 1/3	Sys 2/4	Sys 1/3	Sys 2/4	Sys 1/3	Sys 2/4
30KA	30KA	65KA	65KA	480	480	600	600	1000	1000	800	800
30KA	30KA	65KA	65KA	379	379	450	450	800	800	700	700
30KA	30KA	42KA	42KA	304	304	350	350	600	600	500	500
30KA	30KA	65KA	65KA	514	510	600	600	1000	1000	800	800
30KA	30KA	65KA	65KA	406	403	500	500	800	800	700	700
30KA	30KA	42KA	42KA	325	323	400	400	600	600	600	600
30KA	30KA	65KA	65KA	546	546	700	700	1000	1000	1000	1000
30KA	30KA	65KA	65KA	431	431	500	500	800	800	800	800
30KA	30KA	42KA	42KA	346	346	400	400	700	700	600	600
30KA	30KA	65KA	65KA	545	588	700	700	1000	1200	1000	1000
30KA	30KA	65KA	65KA	430	464	500	600	800	800	800	800
30KA	30KA	42KA	42KA	345	372	400	450	700	700	600	700
30KA	30KA	65KA	65KA	587	587	700	700	1200	1200	1000	1000
30KA	30KA	65KA	65KA	463	463	600	600	800	800	800	800
30KA	30KA	42KA	42KA	372	372	450	450	700	700	700	700

4-Compressor Units High Efficiency Dual Point (See Figs. 7 & 8)

(Two Field Provided Power Supply Circuits.
Field Connections to Factory provided Terminal Block (Standard), or Individual System Breakers(Optional).

High Efficiency YCAV_ _ _ _ E/V																
Model No./ Nameplate			System 1			System 2			System 3			System 4			Control	
			Compr	Cond. Fans		Compr	Cond. Fans		Compr	Cond. Fans		Compr	Cond. Fans		Sys 1/3	Sys 2/4
YCAV	Volts (11)	Freq	RLA (6)	Qty.	FLA (EA)	RLA (6)	Qty.	FLA (EA)	RLA (6)	Qty.	FLA (EA)	RLA (6)	Qty.	FLA (EA)	KVA (8)	KVA (8)
0397	380	60	173	5	3.5	173	5	3.5	173	5	3.5	173	5	3.5	2.4	1.8
	460	60	137	5	2.8	136	5	2.8	137	5	2.8	136	5	2.8	2.4	1.8
	575	60	109	5	2.2	109	5	2.2	109	5	2.2	109	5	2.2	2.4	1.8
0417	380	60	179	6	3.5	179	6	3.5	193	5	3.5	193	5	3.5	2.4	1.8
	460	60	141	6	2.8	141	6	2.8	153	5	2.8	152	5	2.8	2.4	1.8
	575	60	113	6	2.2	113	6	2.2	122	5	2.2	122	5	2.2	2.4	1.8
0477	380	60	231	6	3.5	231	6	3.5	177	6	3.5	177	6	3.5	2.4	1.8
	460	60	182	6	2.8	182	6	2.8	139	6	2.8	139	6	2.8	2.4	1.8
	575	60	146	6	2.2	146	6	2.2	112	6	2.2	112	6	2.2	2.4	1.8

High Efficiency YCAV_ _ _ _ E/V								
YCAV	Field Wiring Lugs				Field Wiring Lugs			
	STD Terminal Blocks				OPT Circuit Breakers			
	Lugs/Phase (1)		Lug Wire Range		Lugs/Phase (1)		Lug Wire Range	
	Sys 1/3	Sys 2/4	Sys 1/3	Sys 2/4	Sys 1/3	Sys 2/4	Sys 1/3	Sys 2/4
0397	3	3	#2 - 600 KCM	#2 - 600 KCM	3	3	#3/0 - 400 KCM	#3/0 - 400 KCM
	2	2	#2 - 600 KCM	#2 - 600 KCM	2	2	#2/0 - 500 KCM	#2/0 - 500 KCM
	2	2	#2 - 600 KCM	#2 - 600 KCM	2	2	#2/0 - 500 KCM	#2/0 - 500 KCM
0417	3	3	#2 - 600 KCM	#2 - 600 KCM	3	3	#3/0 - 400 KCM	#3/0 - 400 KCM
	2	2	#2 - 600 KCM	#2 - 600 KCM	2	2	#2/0 - 500 KCM	#2/0 - 500 KCM
	2	2	#2 - 600 KCM	#2 - 600 KCM	2	2	#2/0 - 500 KCM	#2/0 - 500 KCM
0477	3	3	#2 - 600 KCM	#2 - 600 KCM	3	3	#3/0 - 400 KCM	#3/0 - 400 KCM
	2	2	#2 - 600 KCM	#2 - 600 KCM	2	2	#2/0 - 500 KCM	#2/0 - 500 KCM
	2	2	#2 - 600 KCM	#2 - 600 KCM	2	2	#2/0 - 500 KCM	#2/0 - 500 KCM

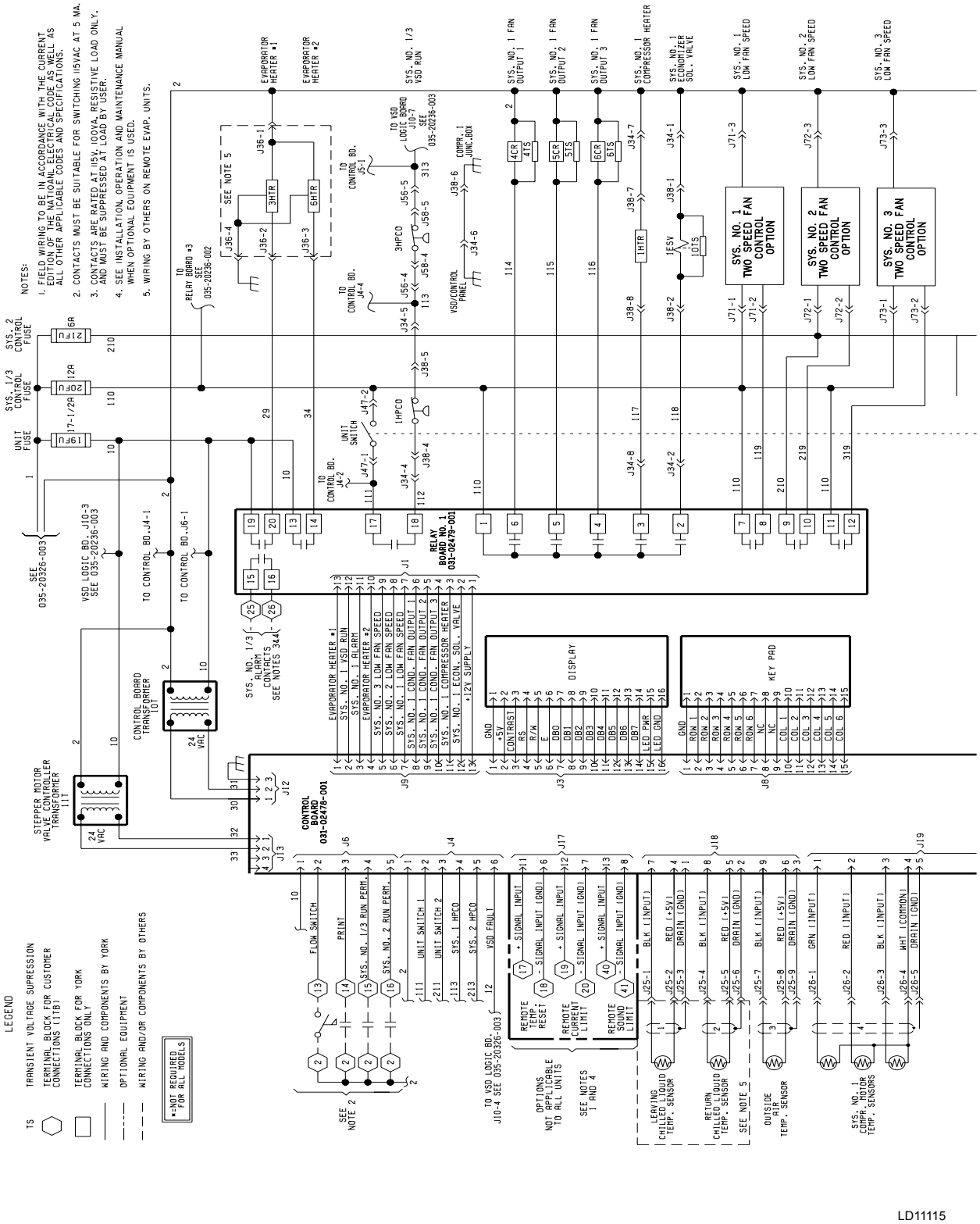
4-Compressor Units High Efficiency Dual Point

(Two Field Provided Power Supply Circuits.
Field Connections to Factory provided Terminal Block (Standard), or Individual System Breakers(Optional).

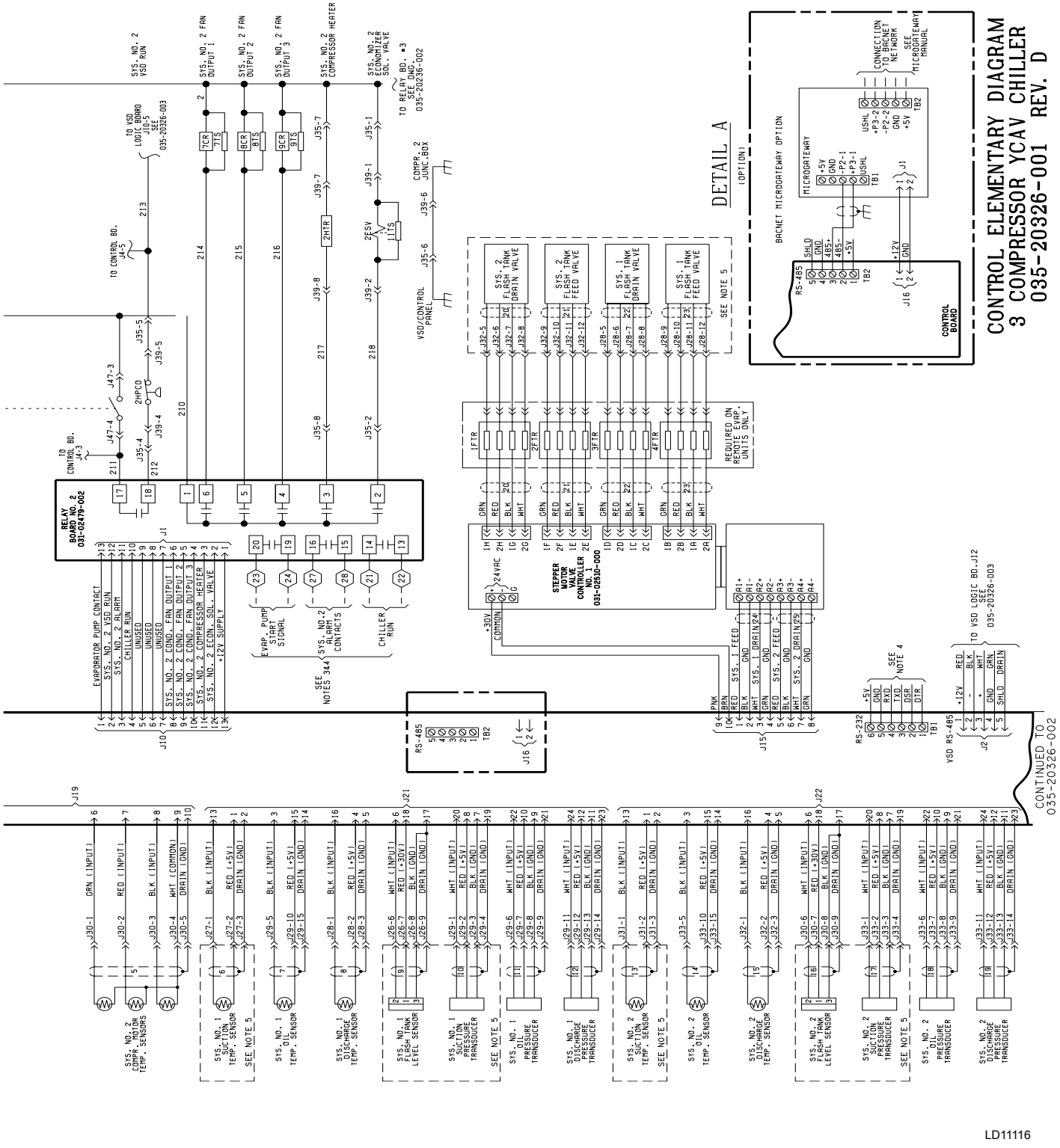
High Efficiency YCAV_ _ _ _ E/V											
Unit Short Circuit Withstand (KA)				Field Wiring & Protection							
Terminal Blocks (STD)		Circuit Breakers (OPT)		Minimum Ckt. Ampacity (MCA) (4)		Recommended Fuse/Ckt. Breaker Rating (5)		Max. Inverse Time Ckt. Brkr. Rating (2)		Max Dual Element Fuse Size (3)	
Sys 1/3	Sys 2/4	Sys 1/3	Sys 2/4	Sys 1/3	Sys 2/4	Sys 1/3	Sys 2/4	Sys 1/3	Sys 2/4	Sys 1/3	Sys 2/4
30KA	30KA	65KA	65KA	424	424	500	500	800	800	800	800
30KA	30KA	65KA	65KA	335	335	400	400	700	700	600	600
30KA	30KA	42KA	42KA	269	269	300	300	500	500	500	500
30KA	30KA	65KA	65KA	459	459	600	600	800	800	800	800
30KA	30KA	65KA	65KA	362	362	450	450	700	700	600	600
30KA	30KA	42KA	42KA	291	291	350	350	600	600	500	500
30KA	30KA	65KA	65KA	507	507	600	600	1000	1000	800	800
30KA	30KA	65KA	65KA	401	401	500	450	800	800	700	700
30KA	30KA	42KA	42KA	321	321	400	400	600	600	600	600

ELECTRICAL WIRING

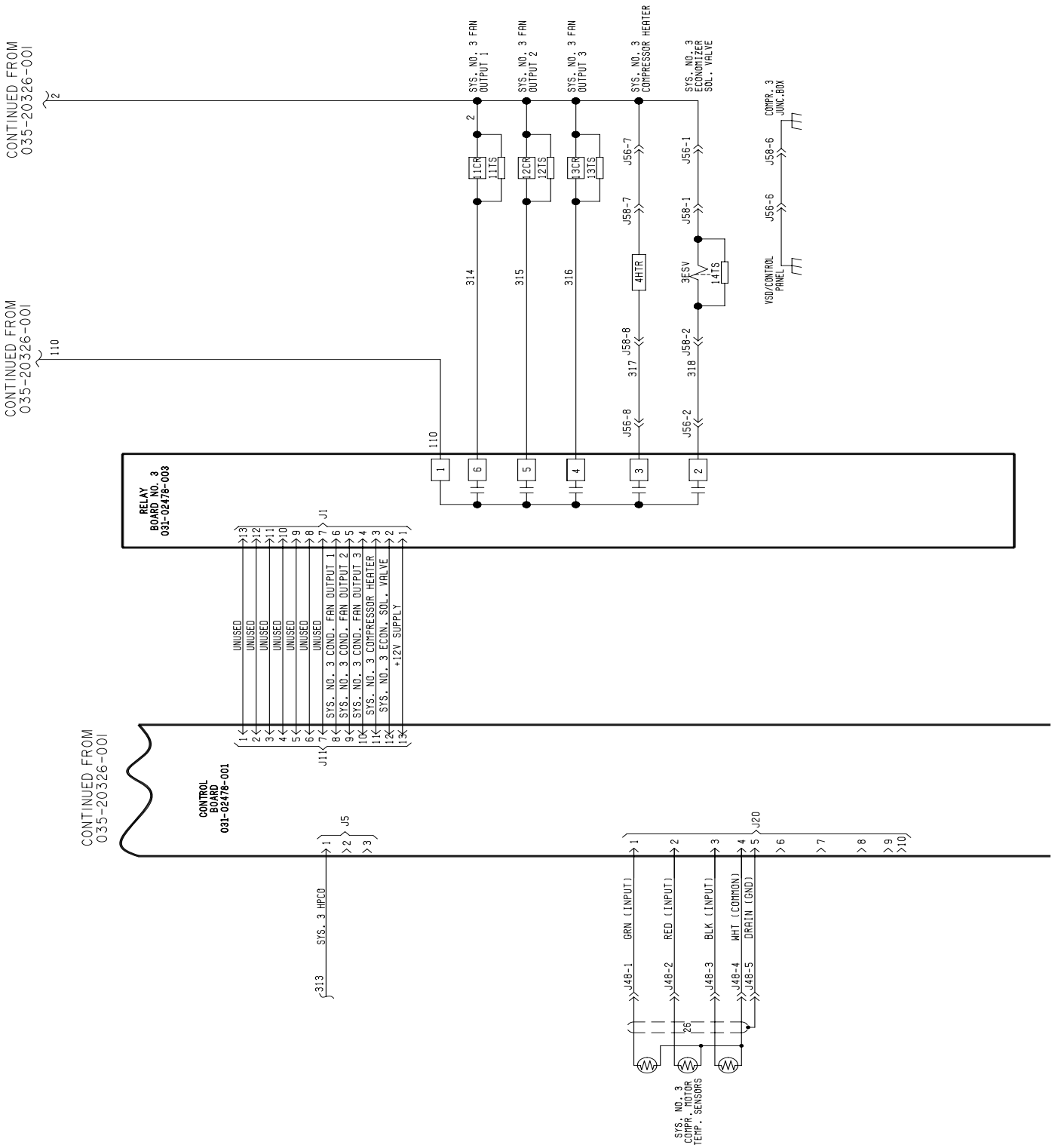
ELEMENTARY CONTROL WIRING DIAGRAM - 3 COMPRESSOR



ELEMENTARY CONTROL WIRING DIAGRAM - 3 COMPRESSOR (CON'T)

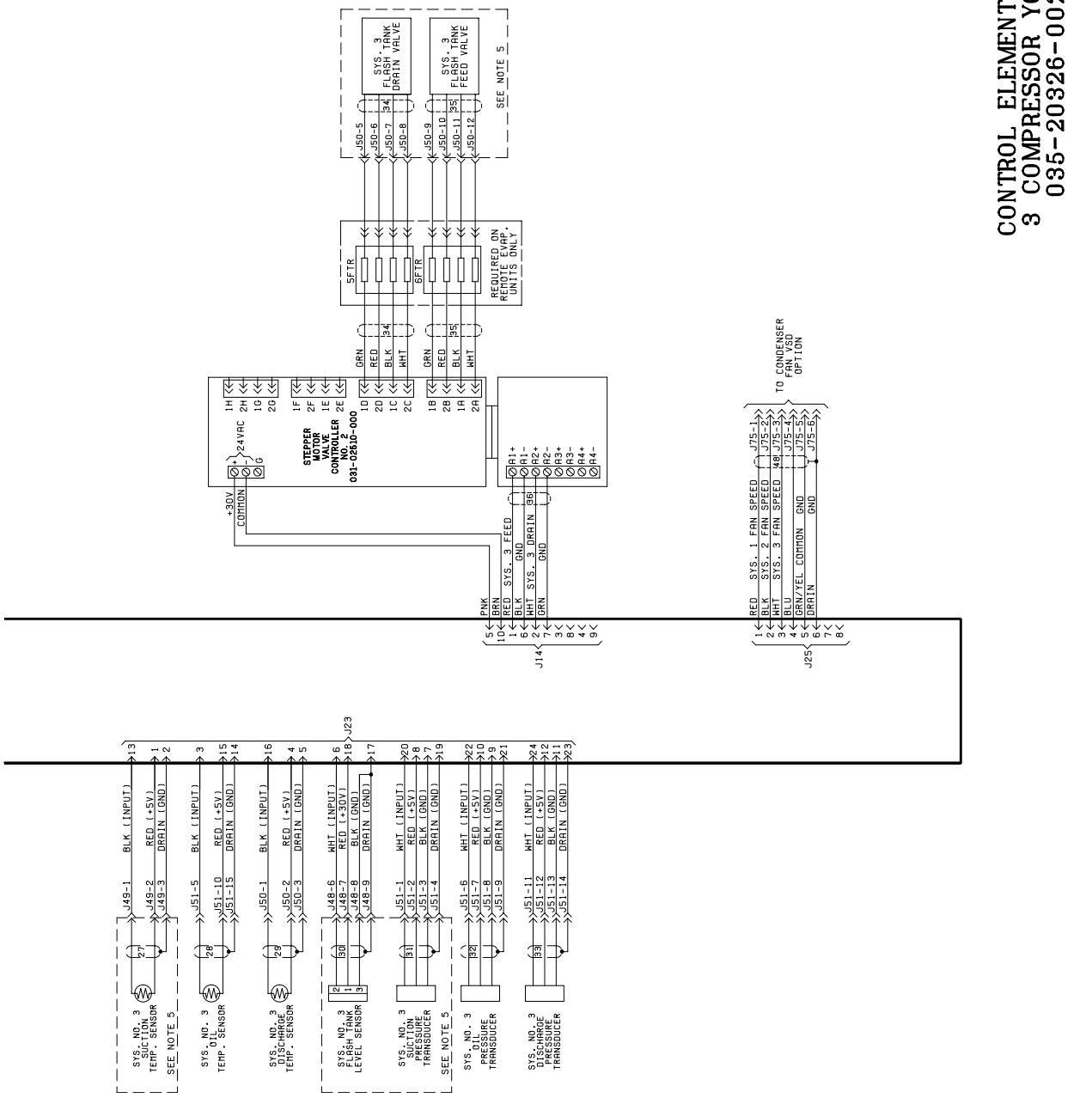


ELEMENTARY CONTROL WIRING DIAGRAM - 3 COMPRESSOR YCAV CHILLER - (CON'T)



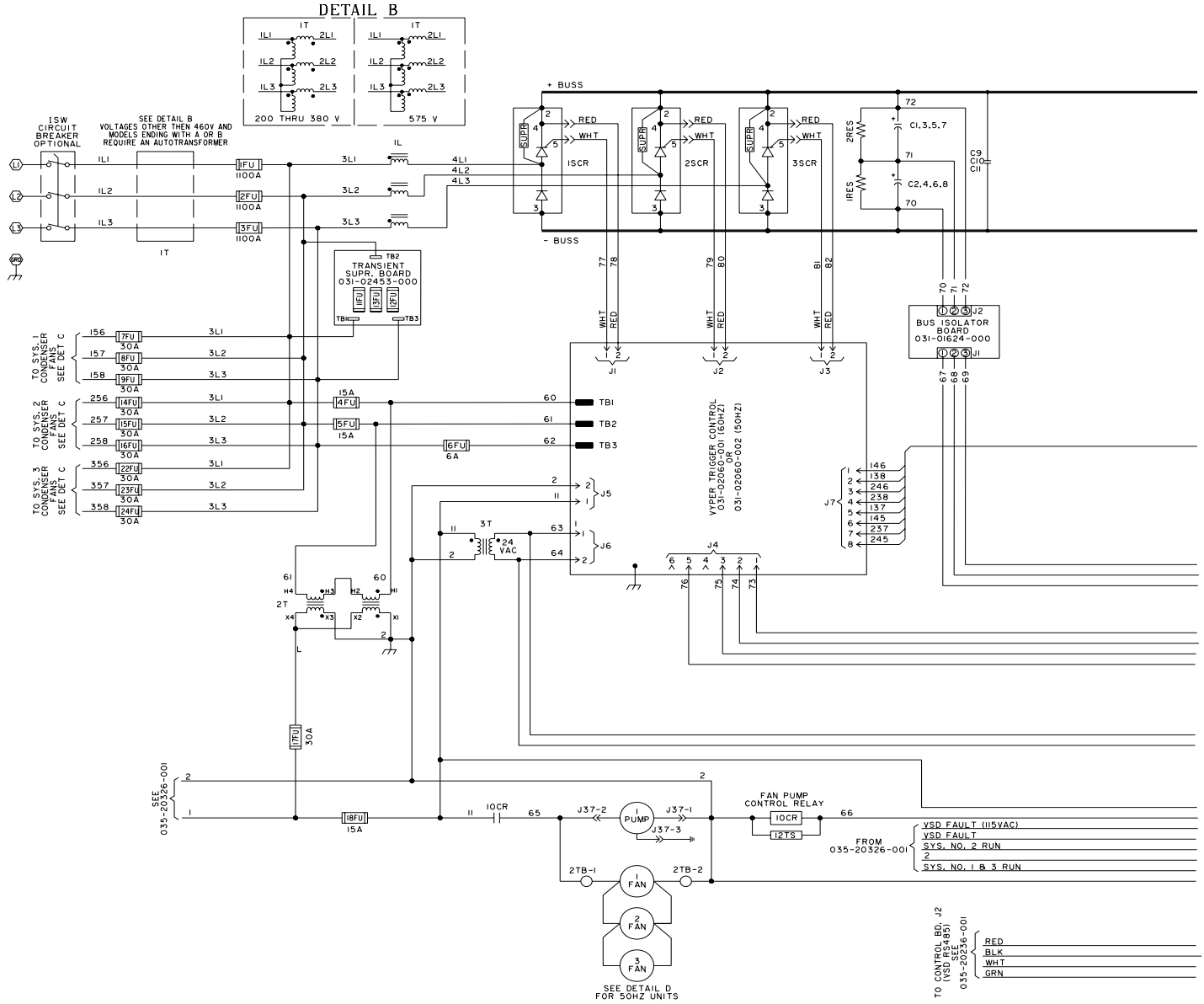
LD11117

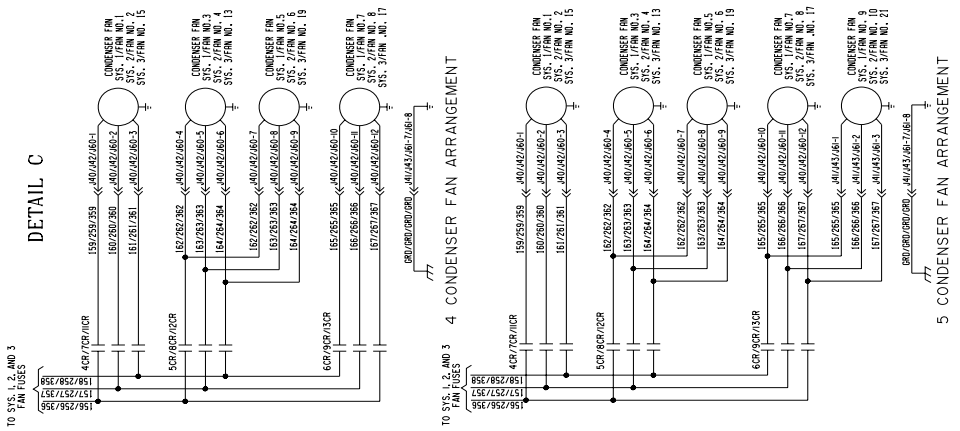
ELEMENTARY CONTROLWIRING DIAGRAM - 3 COMPRESSOR YCAV CHILLER (CON'T)



LD11118

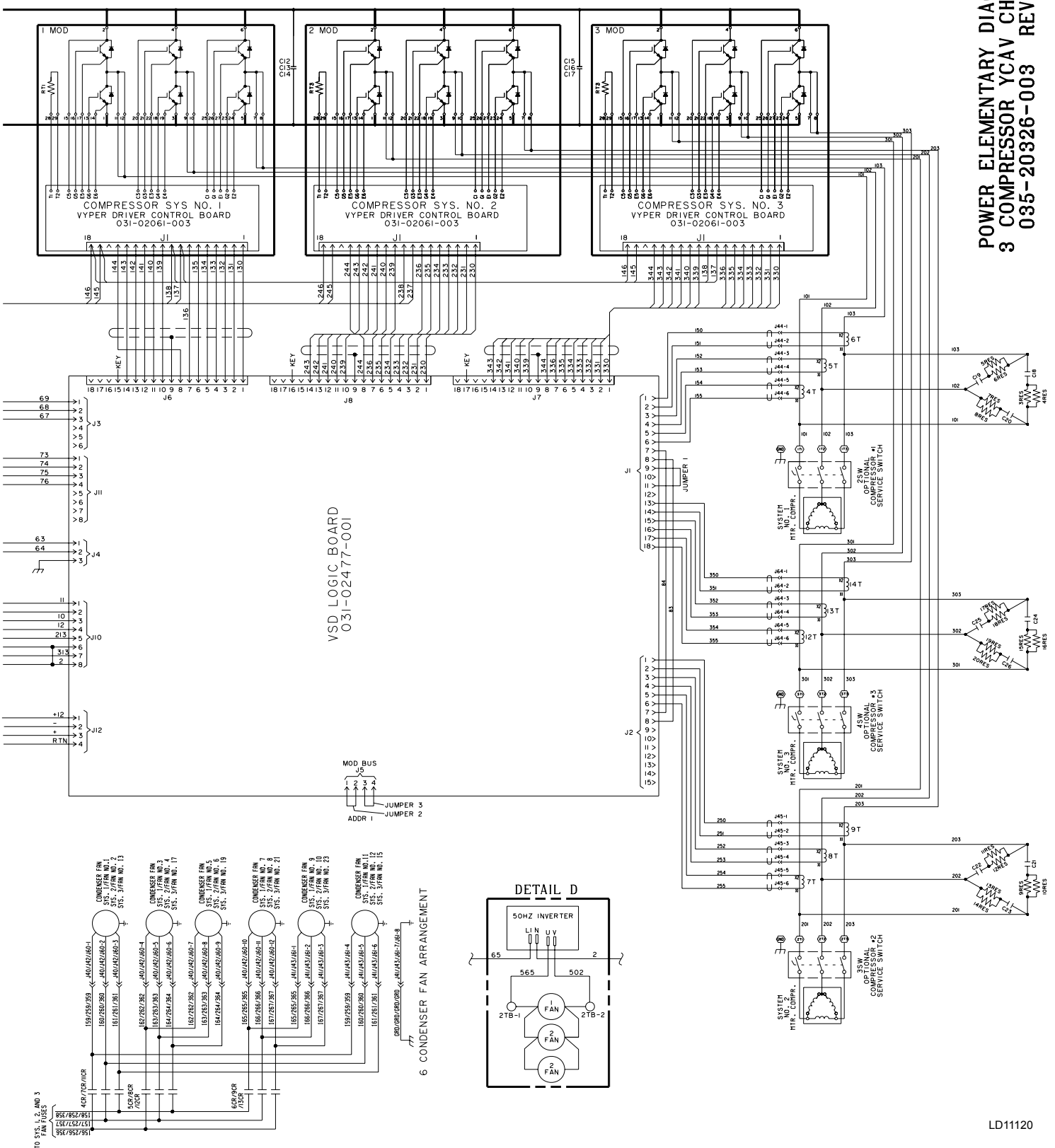
POWER ELEMENTARY WIRING DIAGRAM - 3 COMPRESSOR YCAV CHILLER



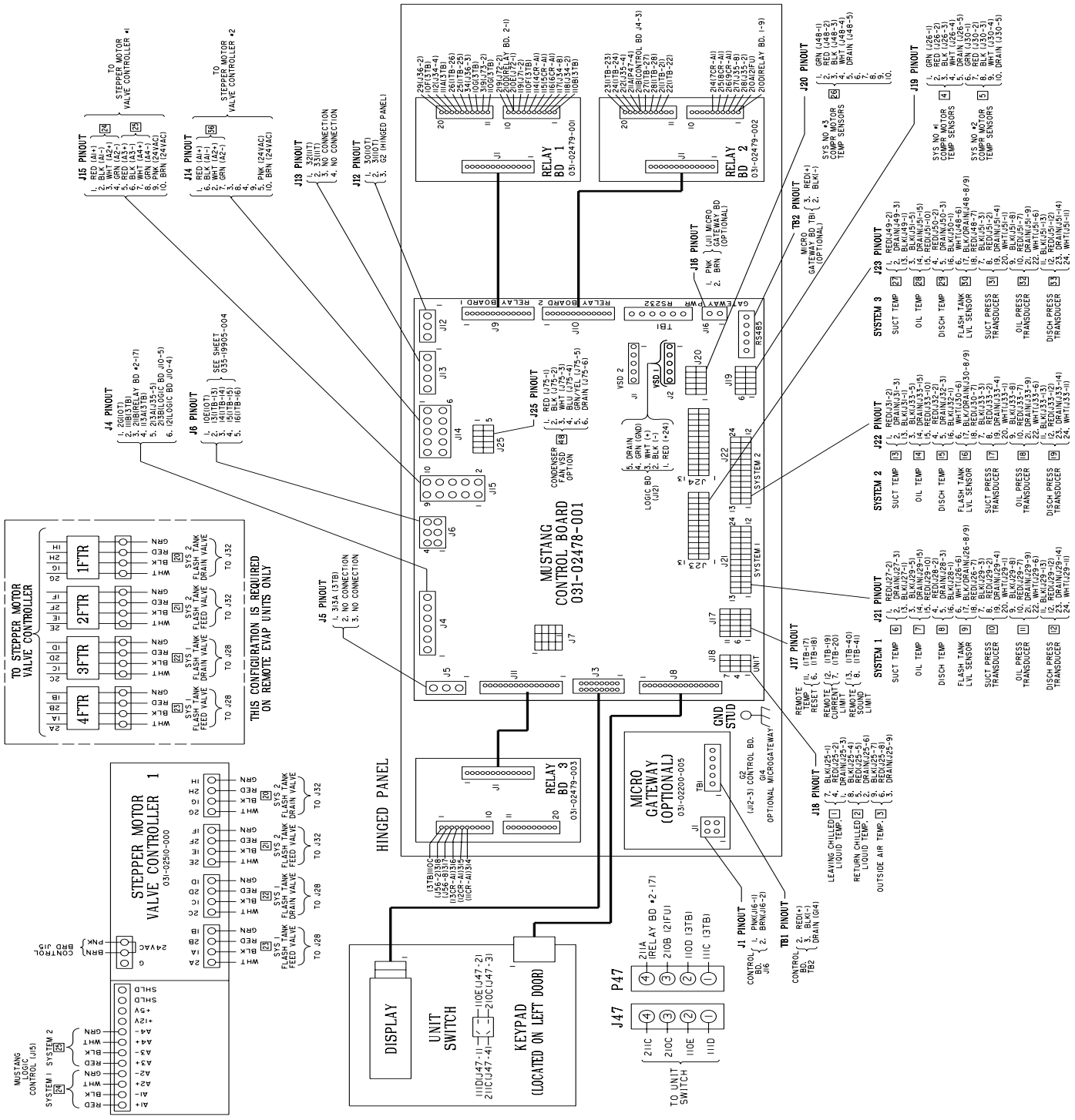


LD11119

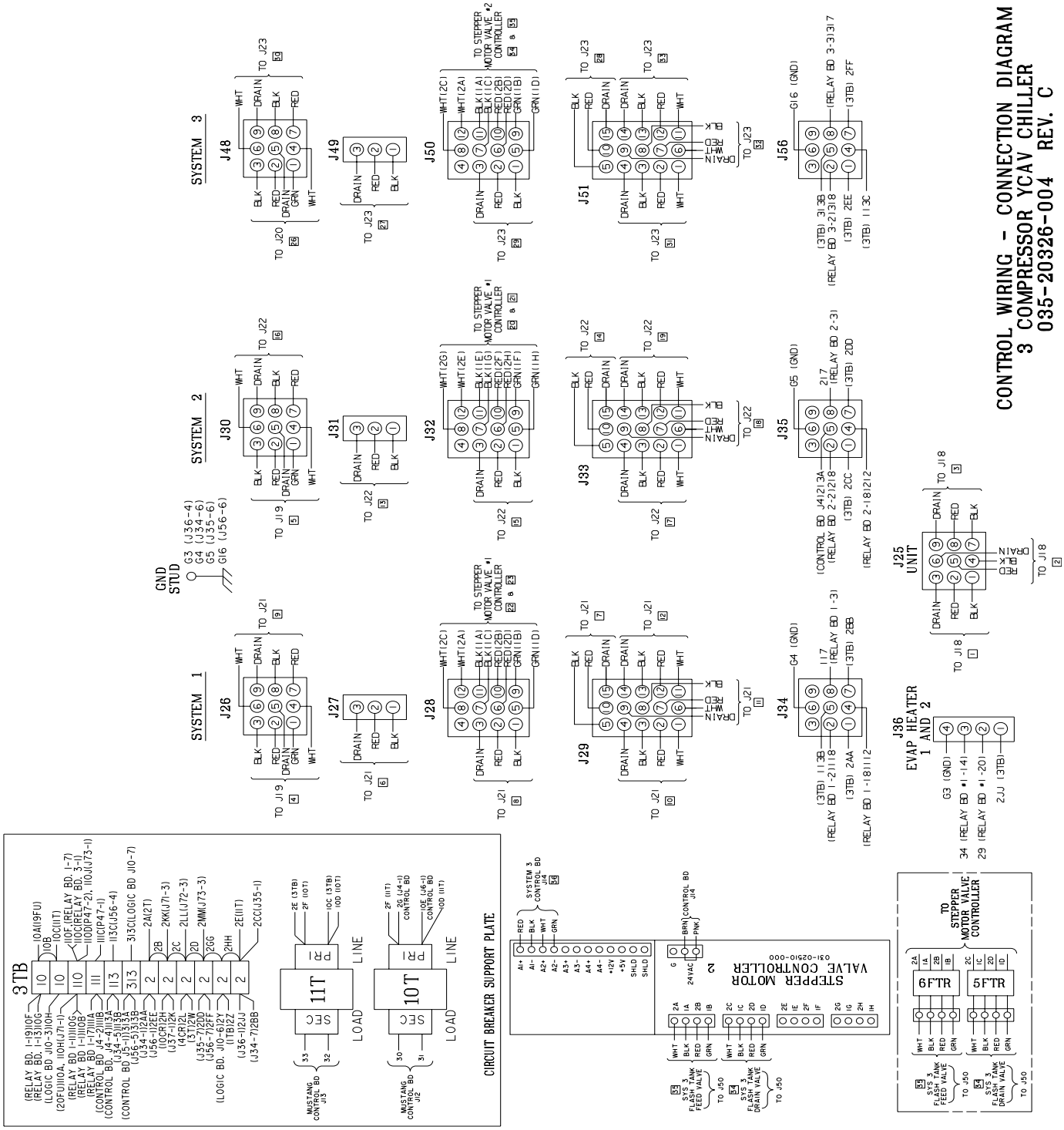
POWER ELEMENTARY DIAGRAM - 3 COMPRESSOR YCAV CHILLER (CON'T)



CONTROL WIRING CONNECTION WIRING DIAGRAM - 3 COMPRESSOR YCAV CHILLER

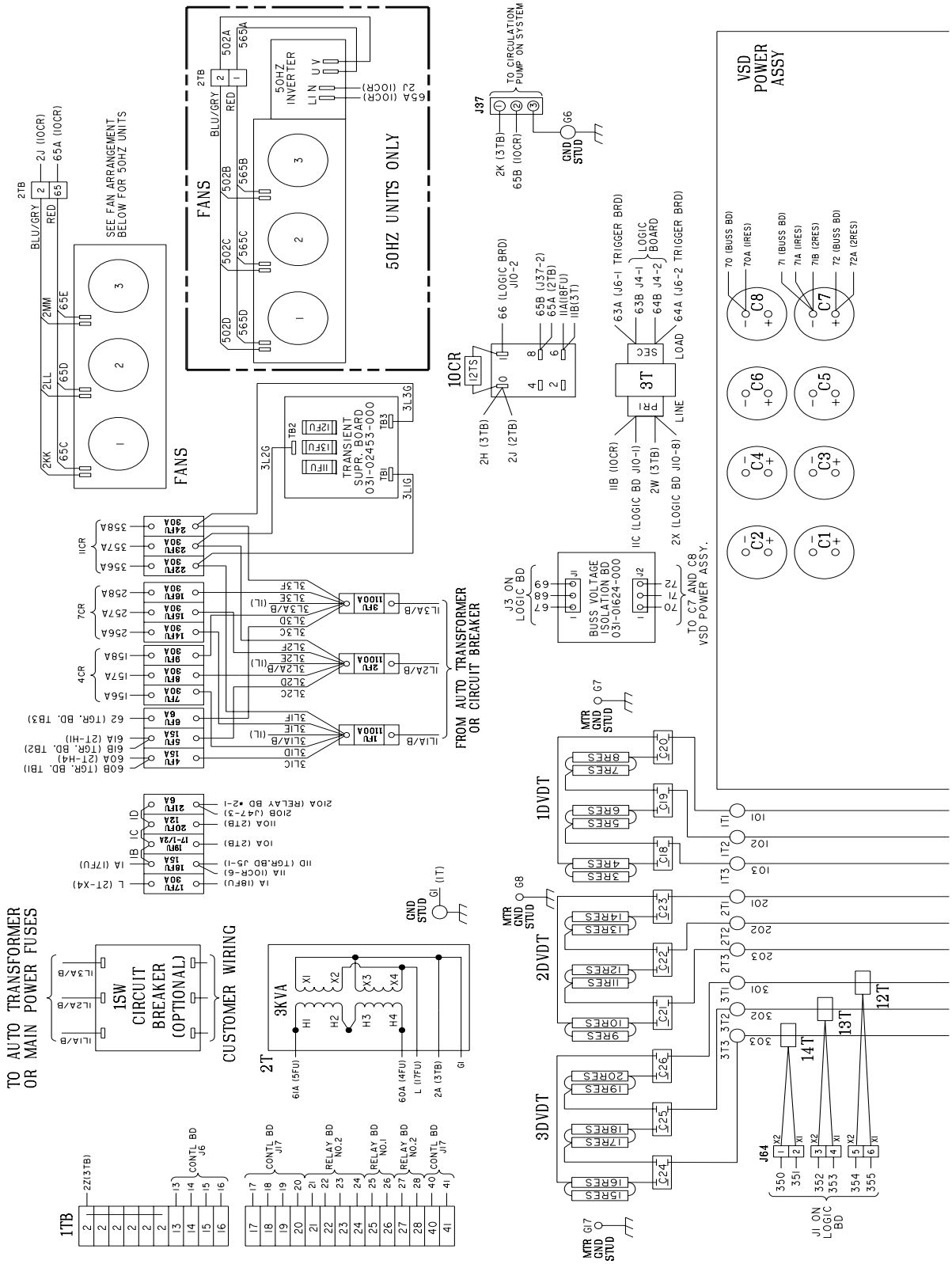


CONTROL WIRING CONNECTION WIRING DIAGRAM - 3 COMPRESSOR YCAV CHILLER (CON'T)



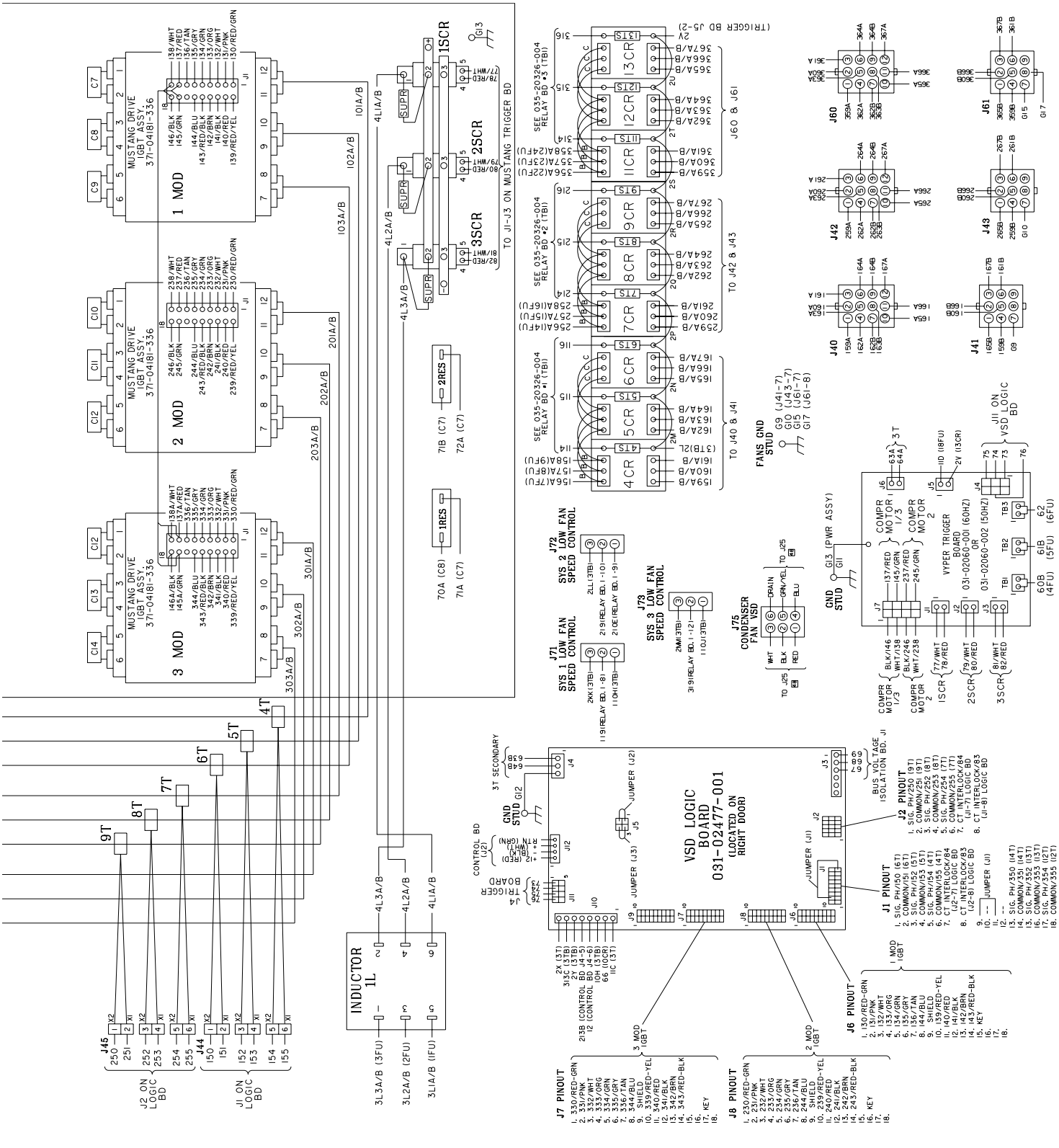
LD11122

POWER WIRING CONNECTION WIRING DIAGRAM - 3 COMPRESSOR YCAV CHILLER

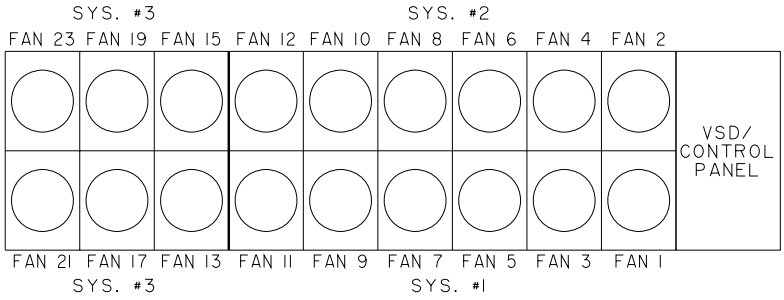


LD11123

POWER WIRING CONNECTION WIRING DIAGRAM - 3 COMPRESSOR YCAV CHILLER (CON'T)

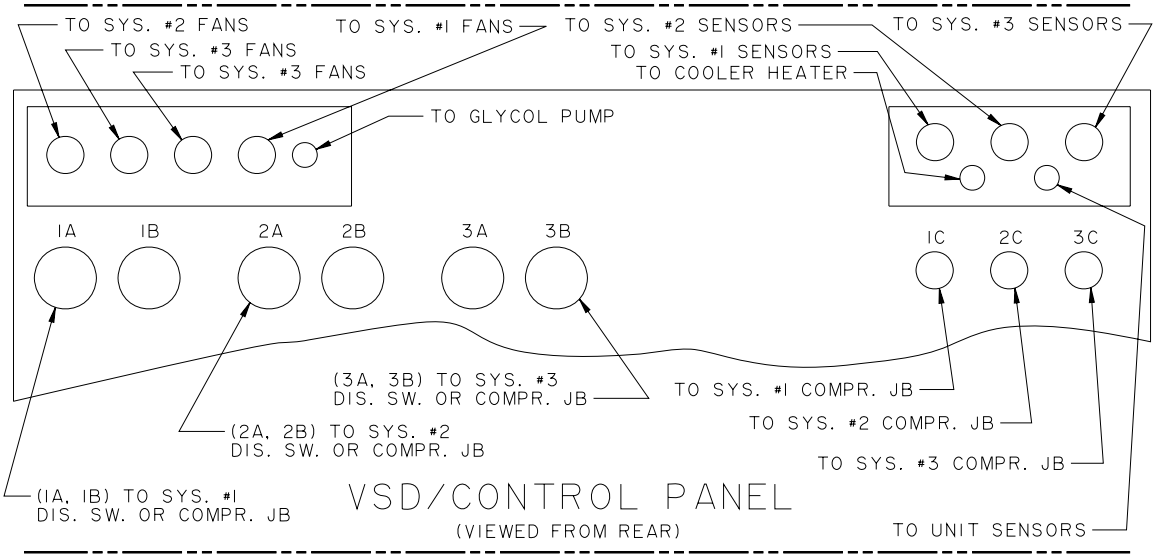


LOCATION LABEL



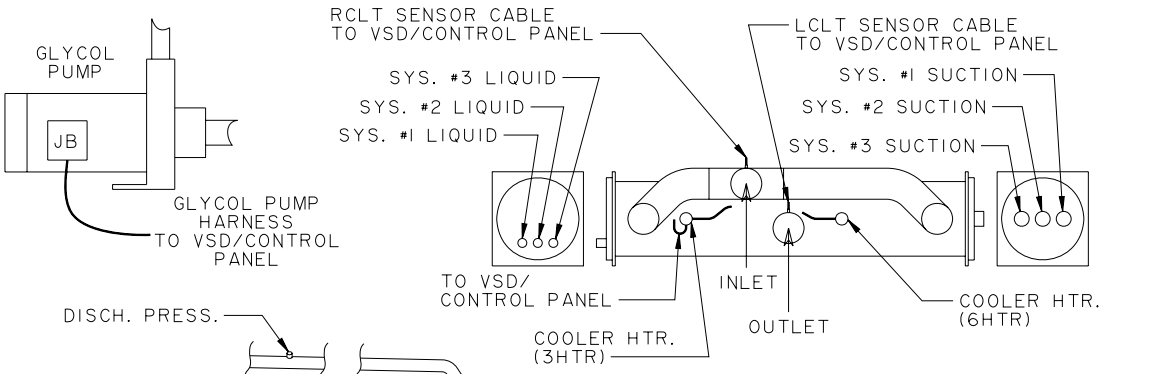
FAN LOCATIONS

(NOT ALL FANS INSTALLED ON ALL UNITS)

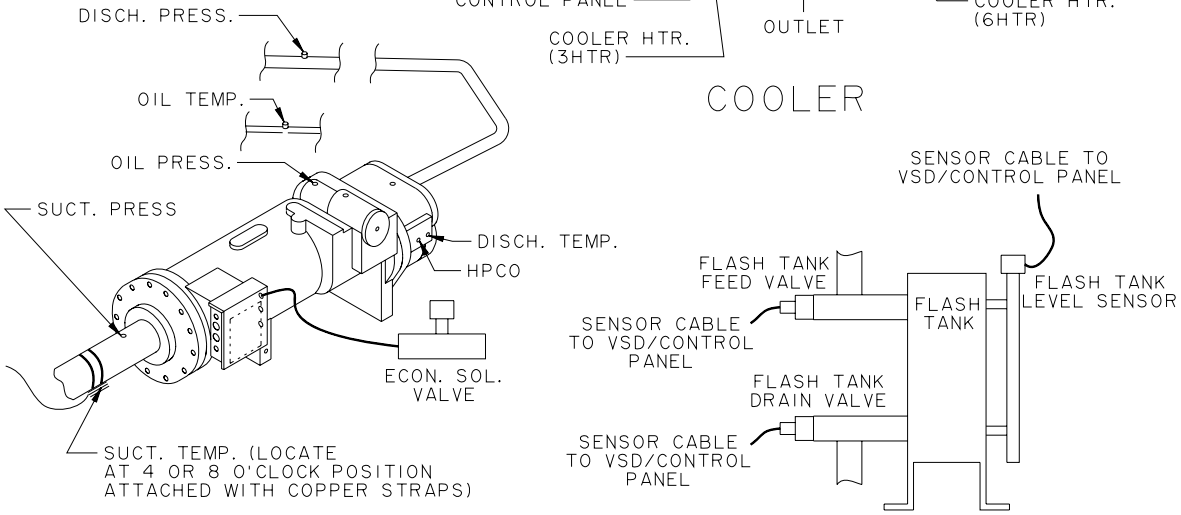


VSD/CONTROL PANEL

(VIEWED FROM REAR)



COOLER



HARNESS LOCATIONS

(TYP. FOR SYS. 1, 2 & 3, EXCEPT FOR COOLER AND GLYCOL PUMP)

SYSTEM WIRING - CONNECTION DIAGRAM 3 COMPRESSOR YCAV CHILLER

035-20326-006 REV. -

LD11125

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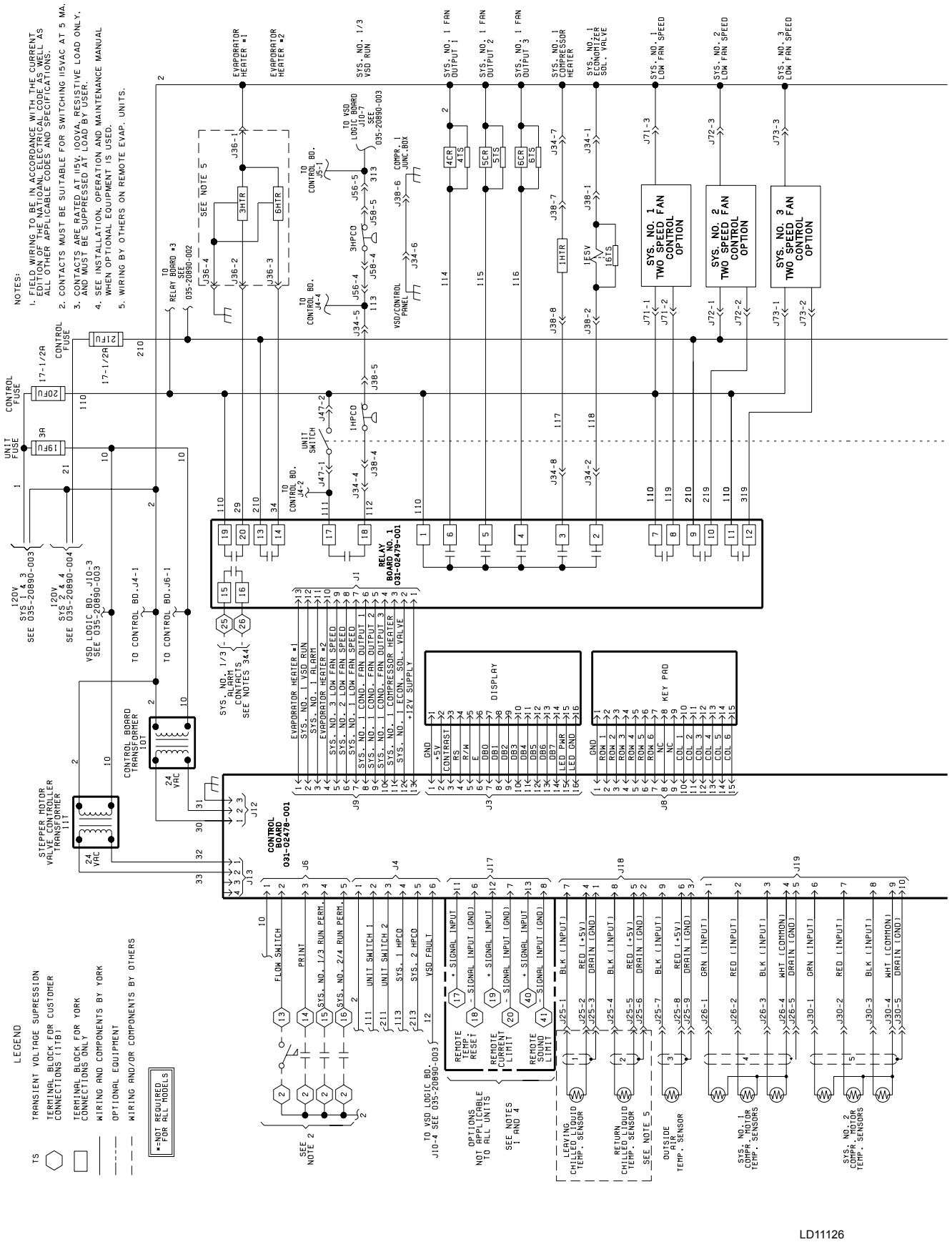
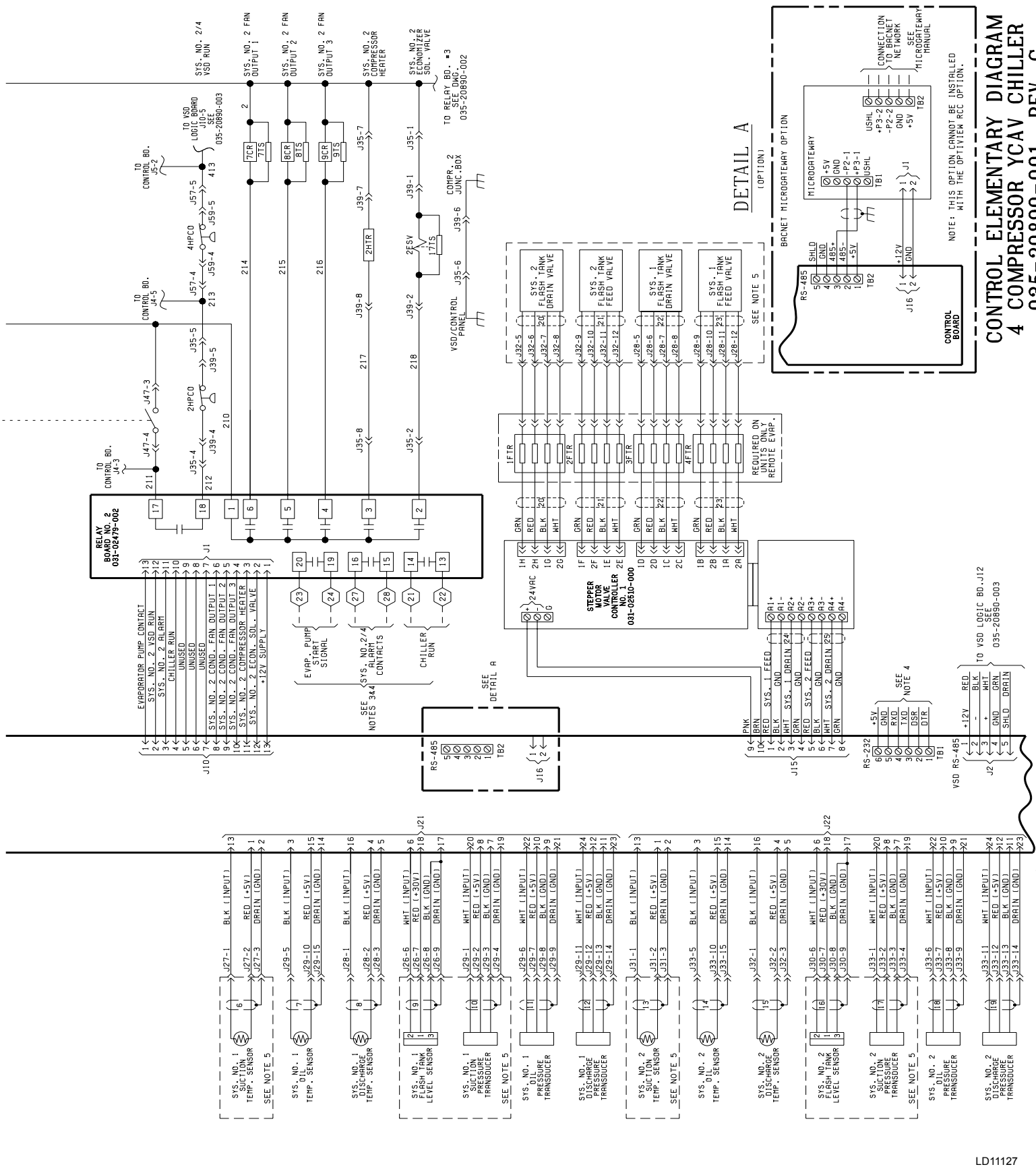
ELEMENTARY CONTROL WIRING DIAGRAM - 4 COMPRESSOR YCAV CHILLER

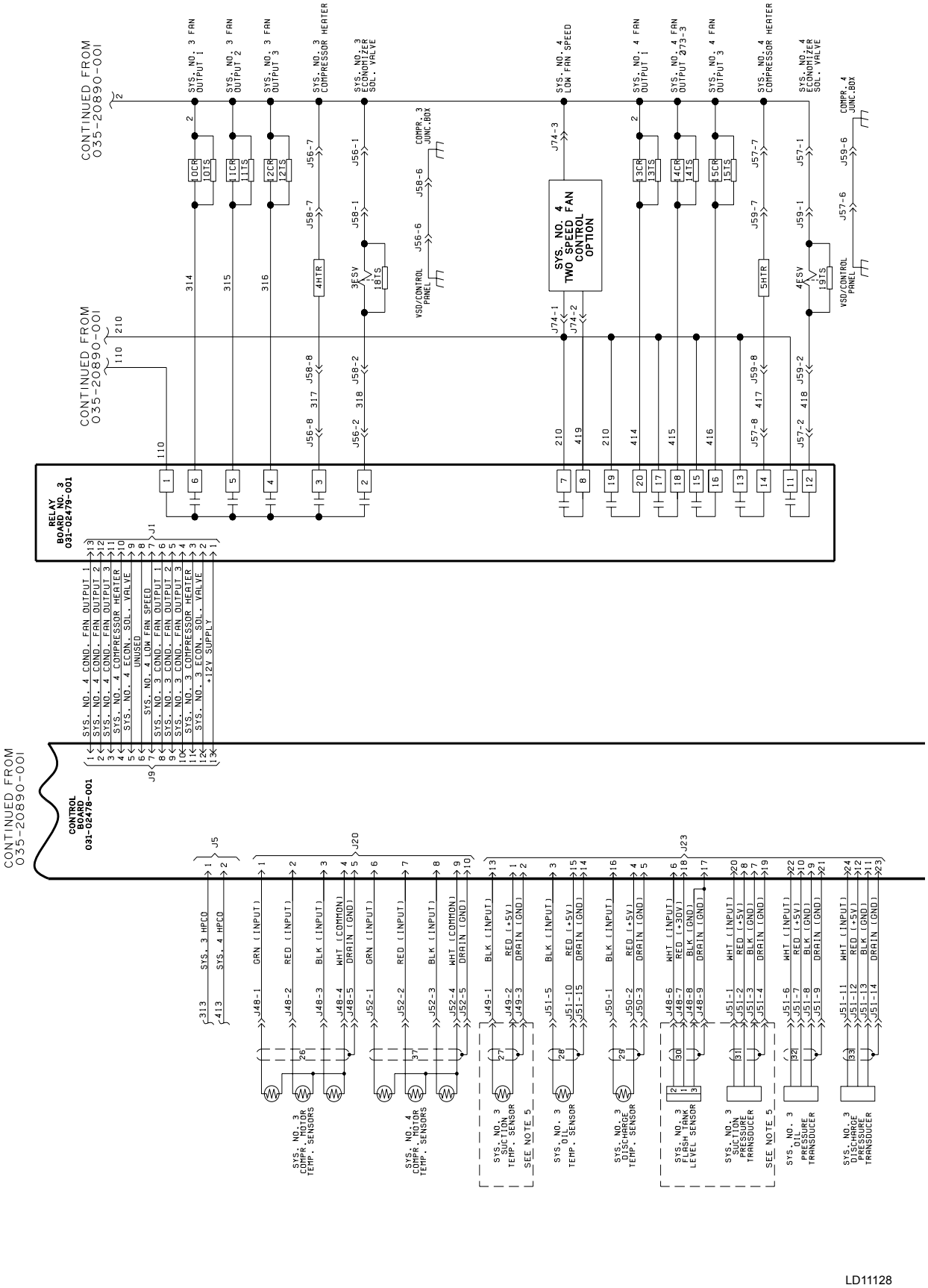


LD11126

ELEMENTARY CONTROL WIRING DIAGRAM - 4 COMPRESSOR YCAV CHILLER - (CON'T)

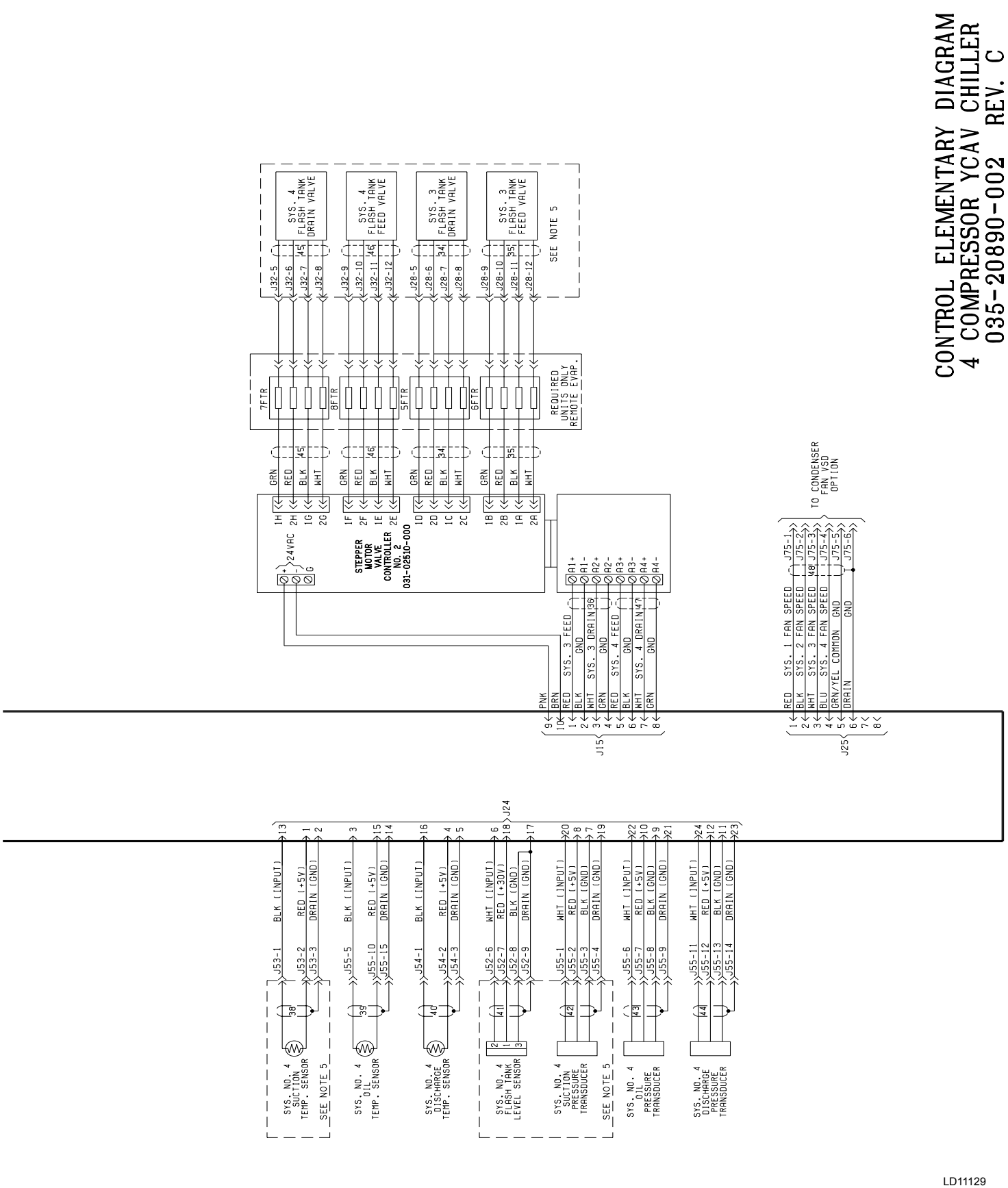


ELEMENTARY CONTROL WIRING DIAGRAM - 4 COMPRESSOR YCAV CHILLER - (CON'T)



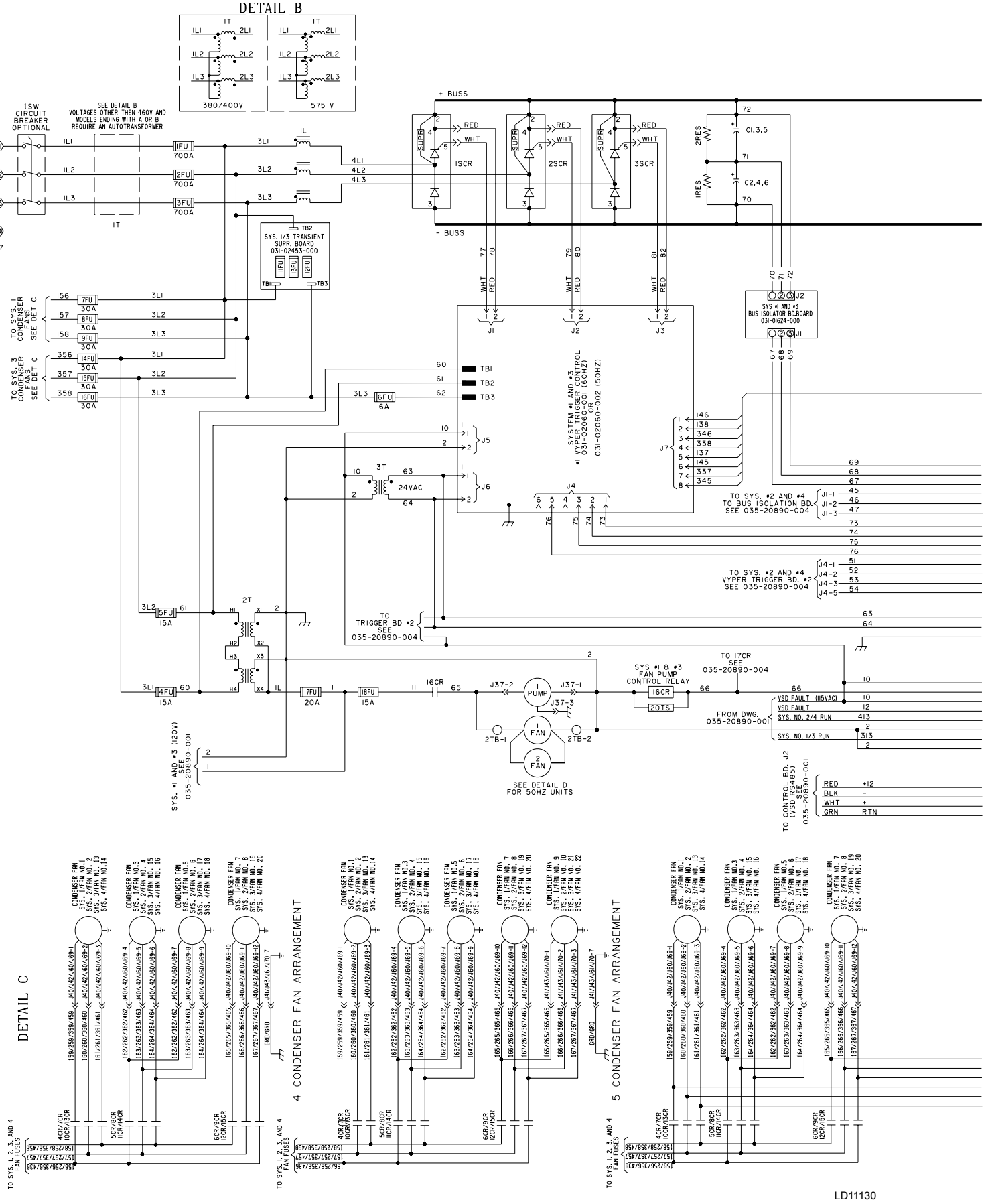
LD11128

ELEMENTARY CONTROL WIRING DIAGRAM - 4 COMPRESSOR YCAV CHILLER - (CON'T)



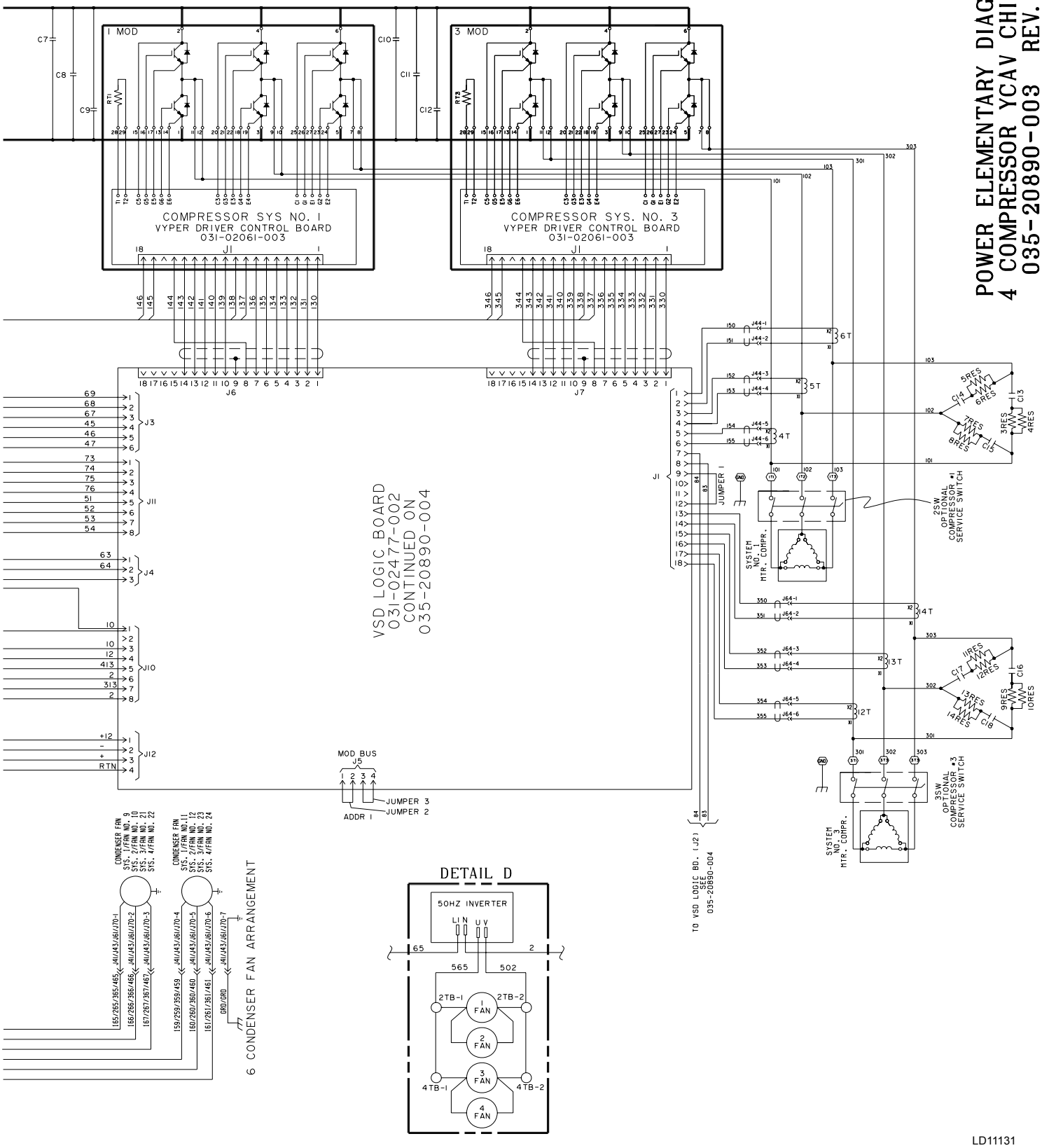
LD11129

POWER ELEMENTARY WIRING DIAGRAM - 4 COMPRESSOR YCAV CHILLER

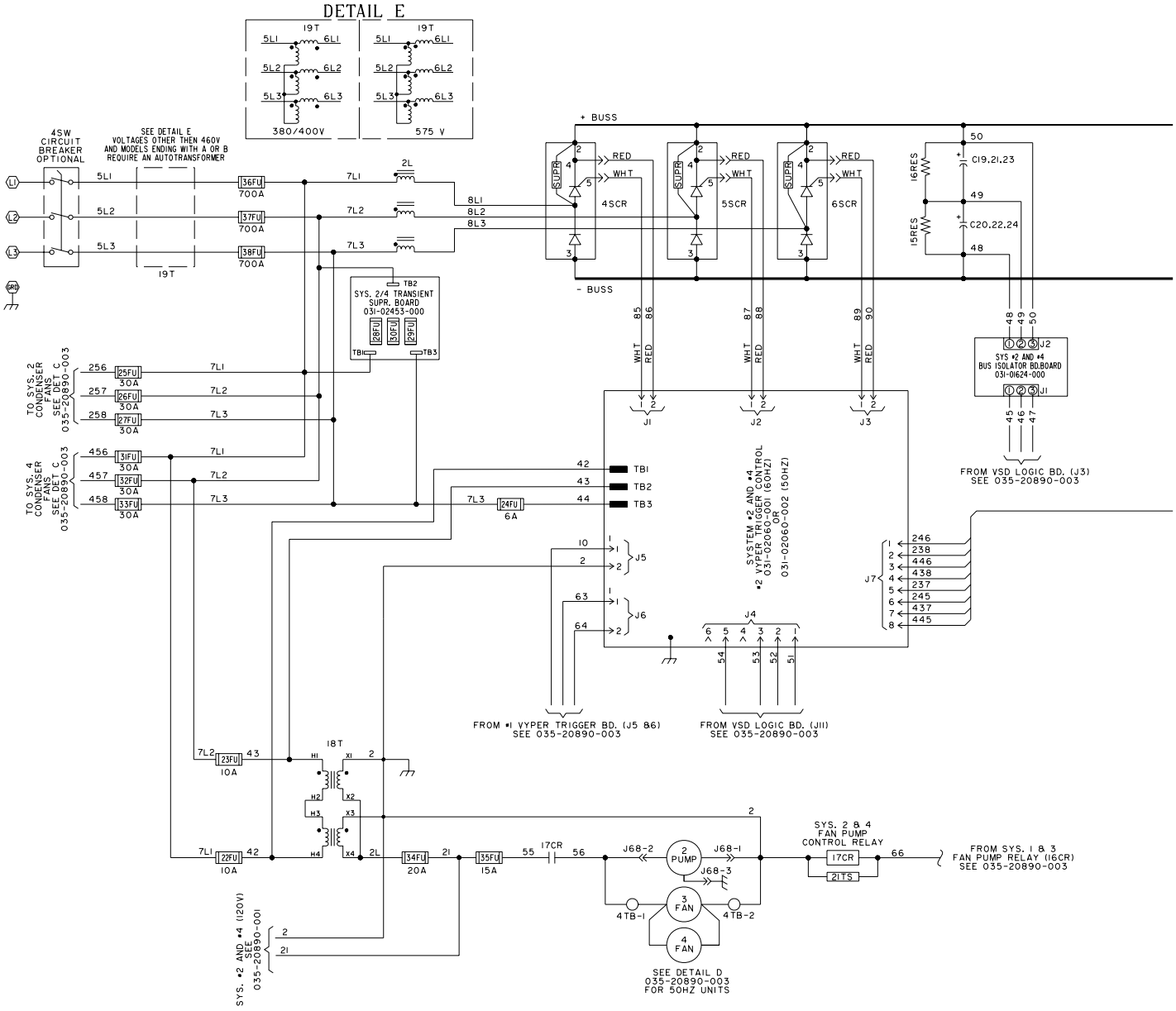


LD11130

POWER ELEMENTARY WIRING DIAGRAM - 4 COMPRESSOR YCAV CHILLER - (CON'T)

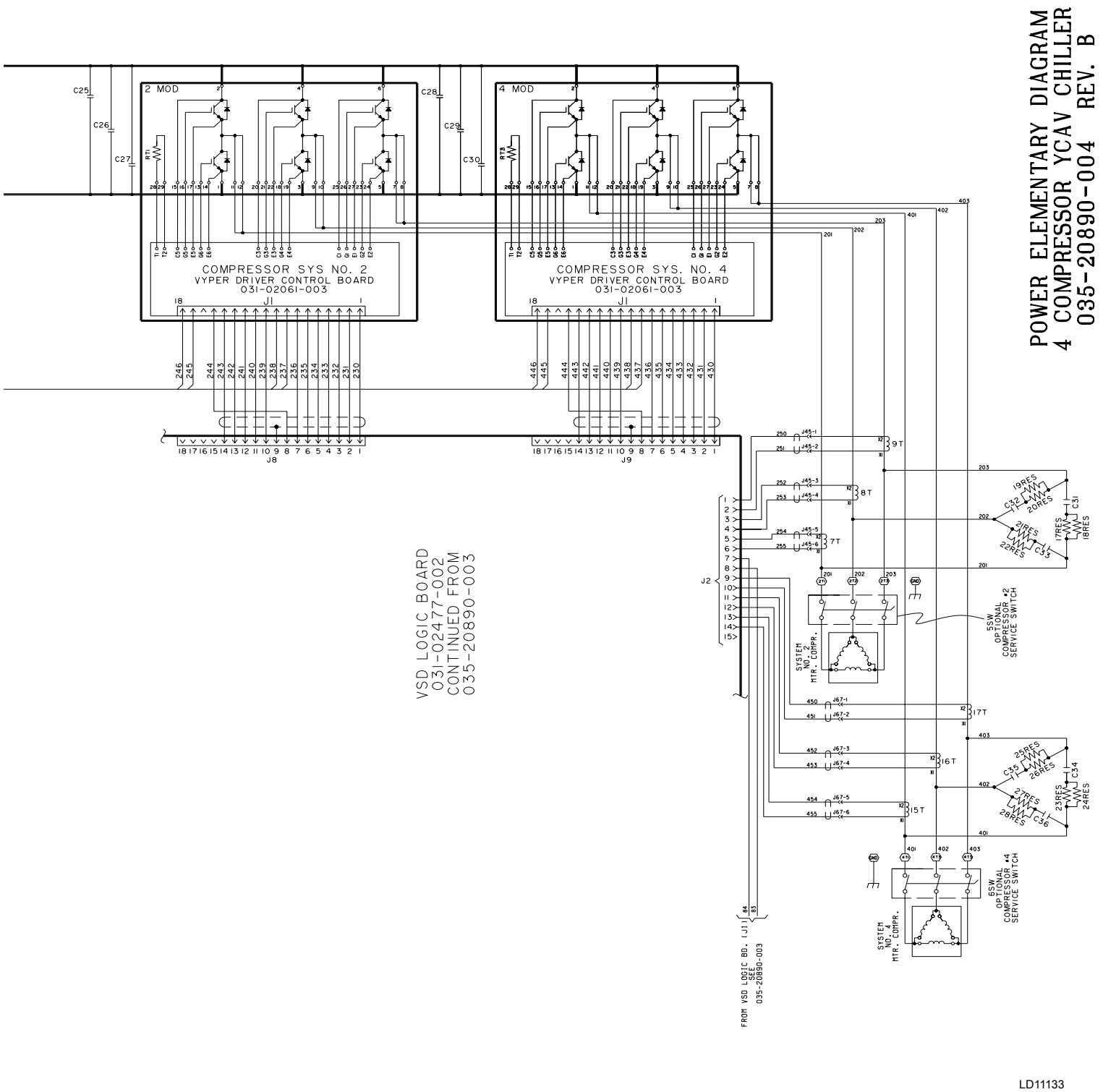


POWER ELEMENTARY WIRING DIAGRAM - 4 COMPRESSOR YCAV CHILLER - (CON'T)

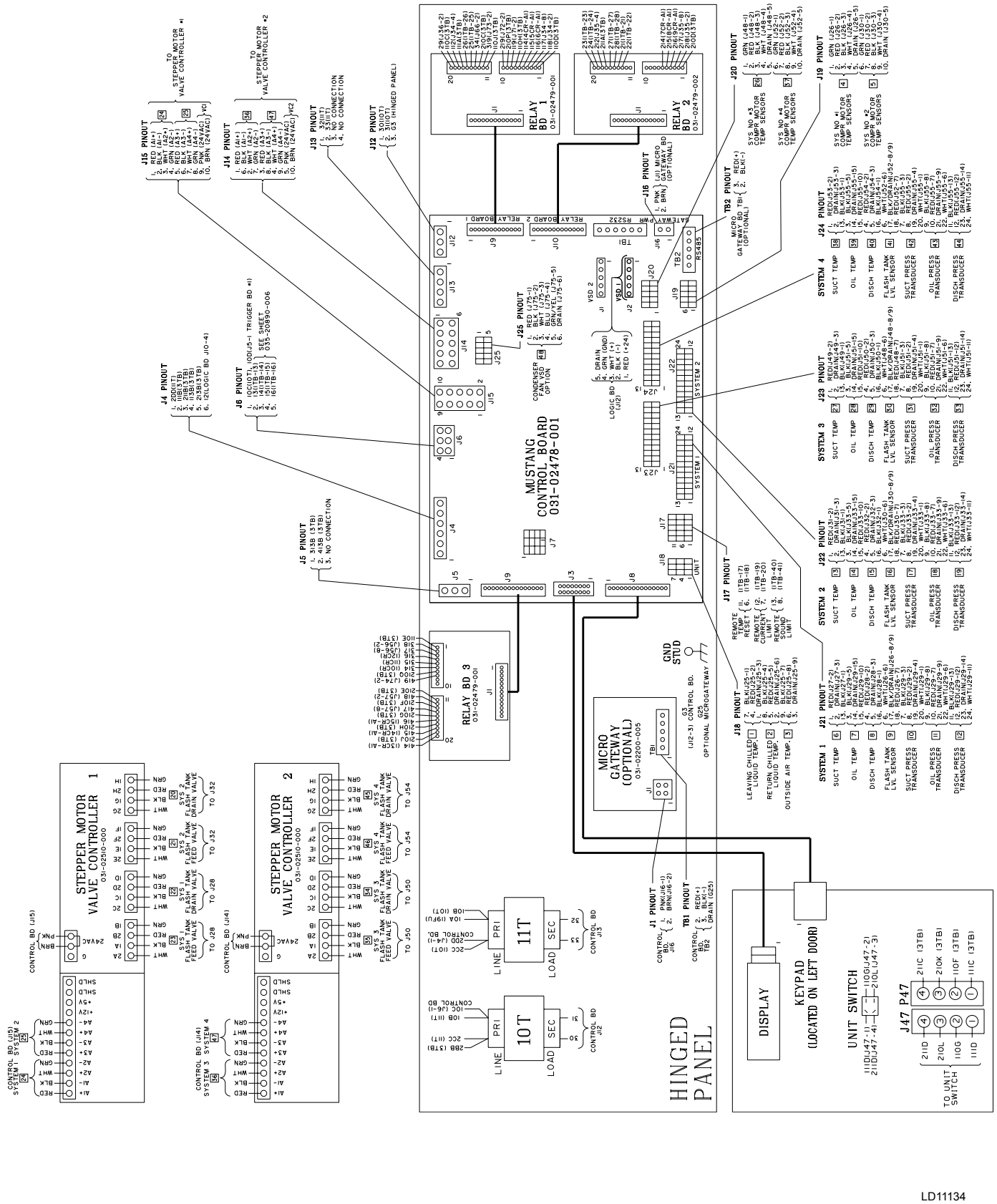


LD11132

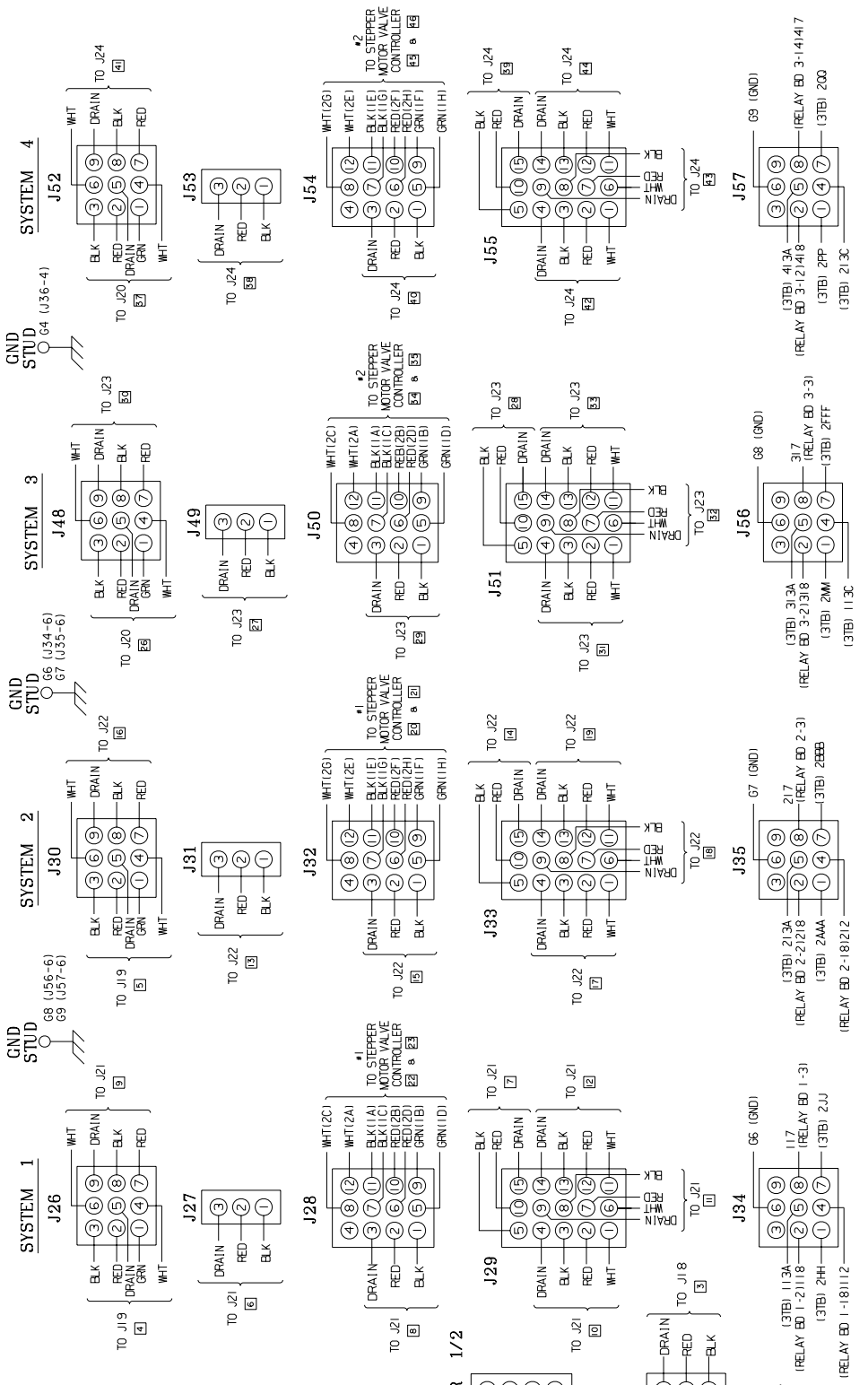
POWER ELEMENTARY WIRING DIAGRAM - 4 COMPRESSOR YCAV CHILLER - (CON'T)



CONTROL WIRING CONNECTION DIAGRAM - 4 COMPRESSOR YCAV CHILLER - (CON'T)

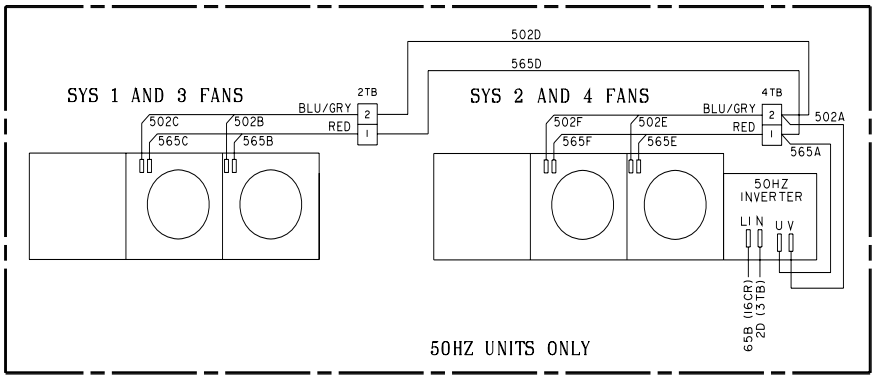


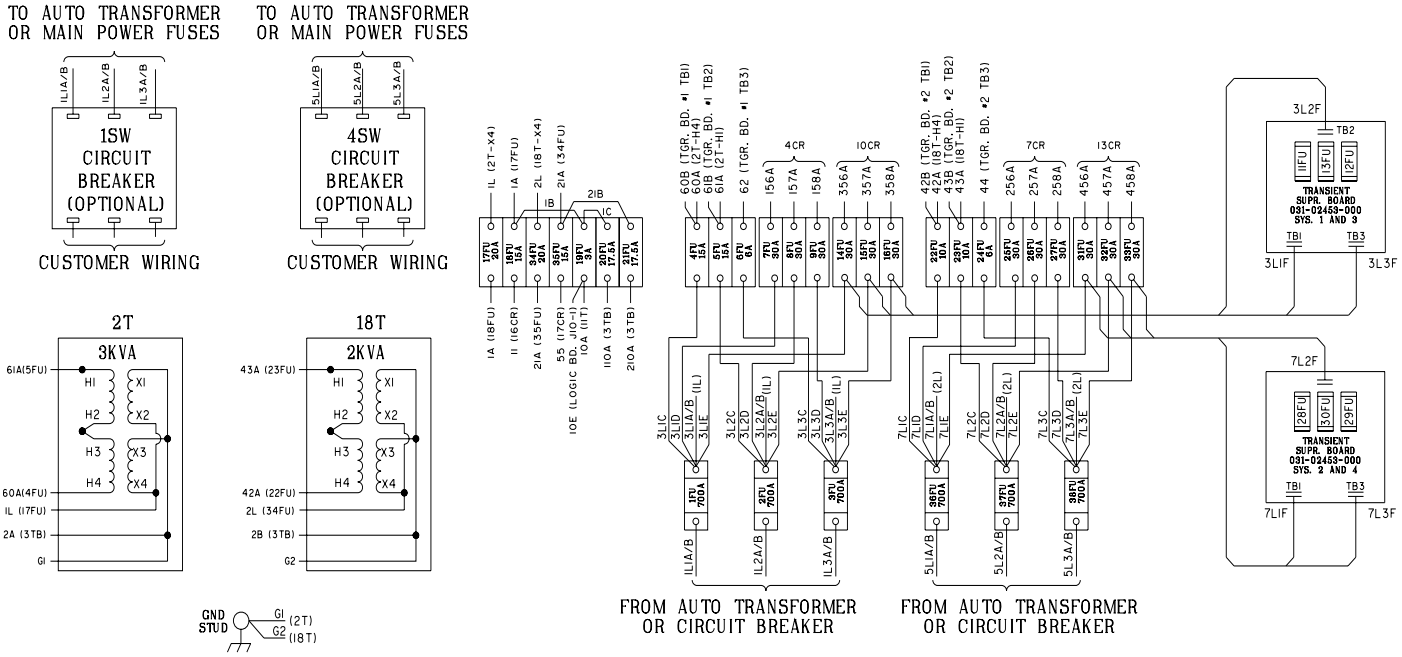
CONTROL WIRING CONNECTION DIAGRAM - 4 COMPRESSOR YCAV CHILLER - (CON'T)

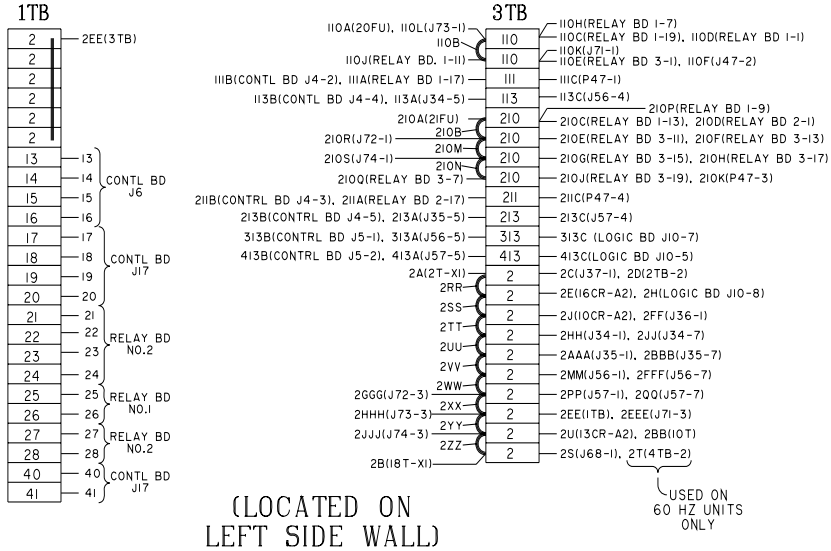


LD11135

POWER WIRING CONNECTION DIAGRAM - 4 COMPRESSOR YCAV CHILLER

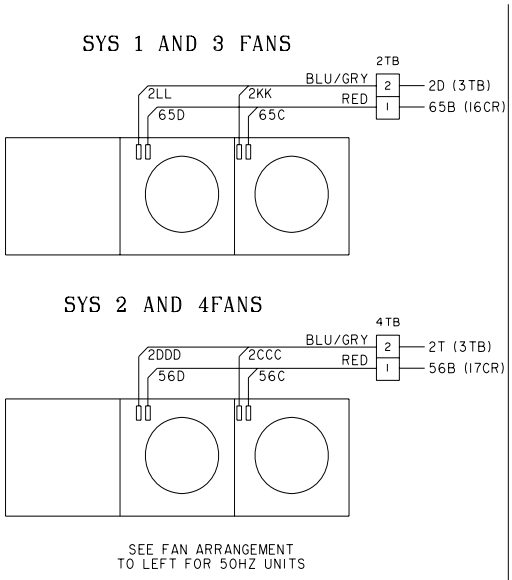


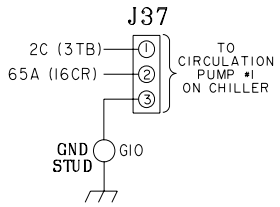


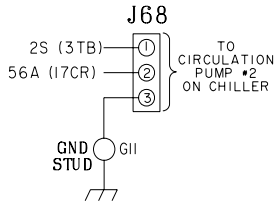


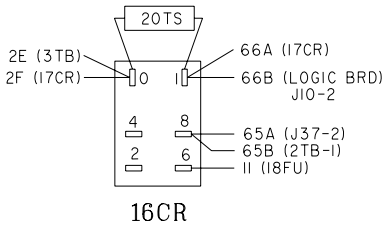
LD11136

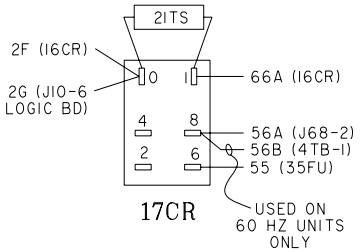
POWER WIRING CONNECTION DIAGRAM - 4 COMPRESSOR YCAV CHILLER - (CON'T)

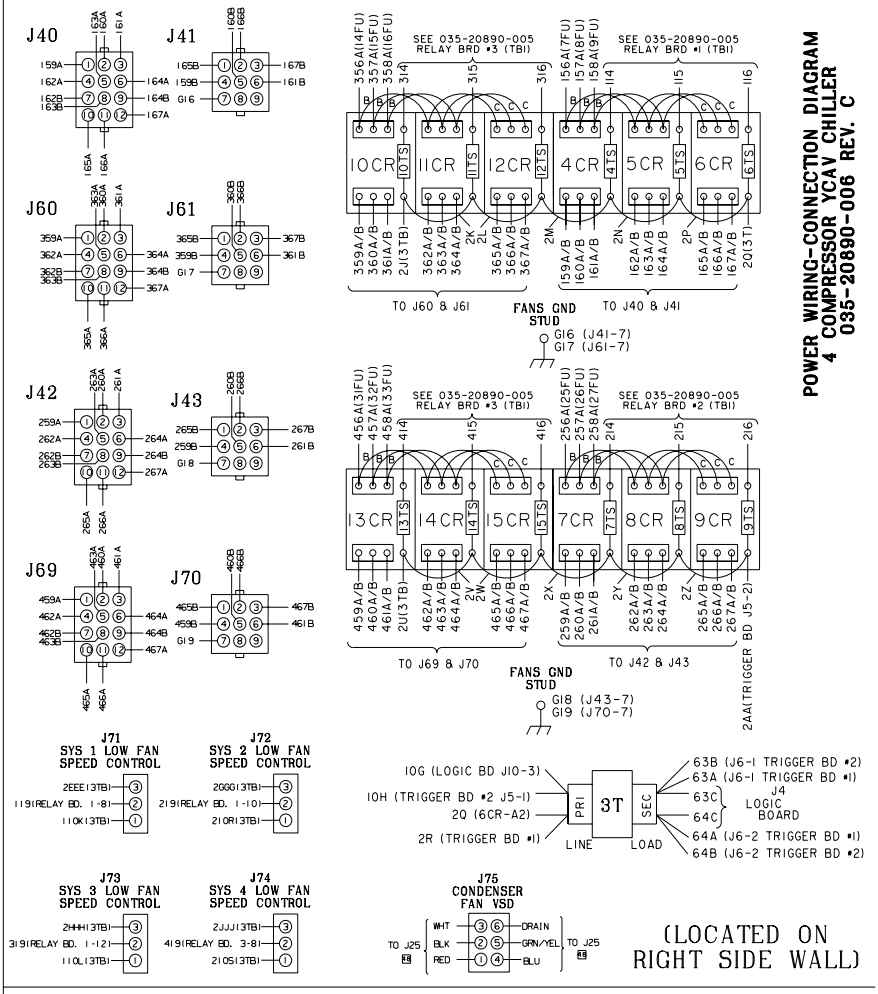




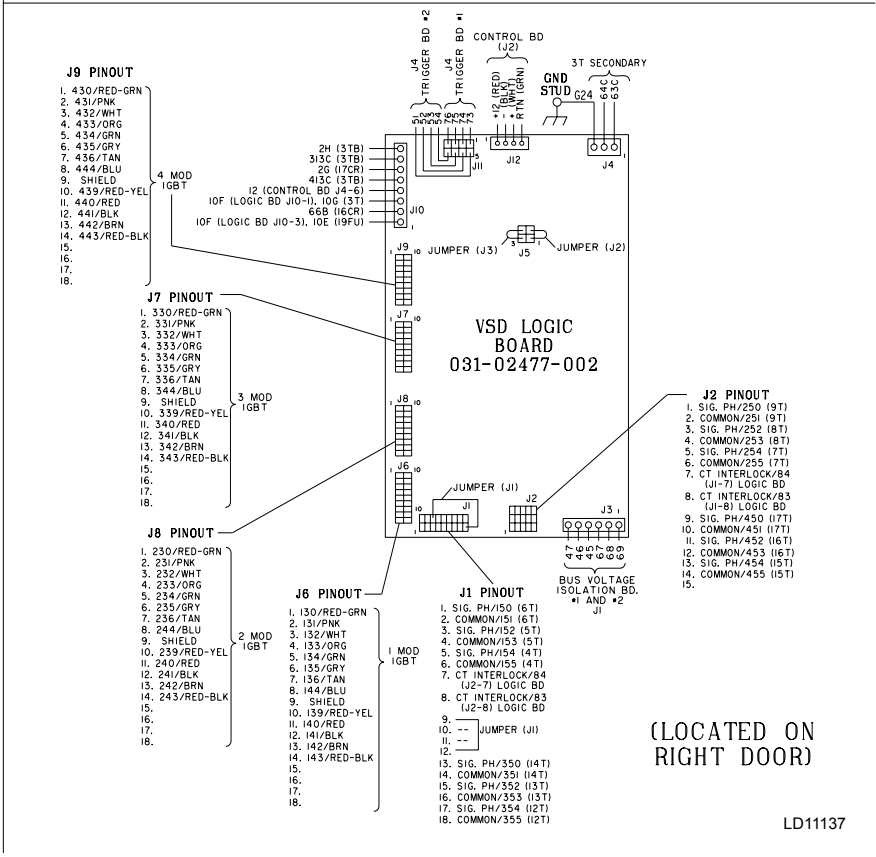








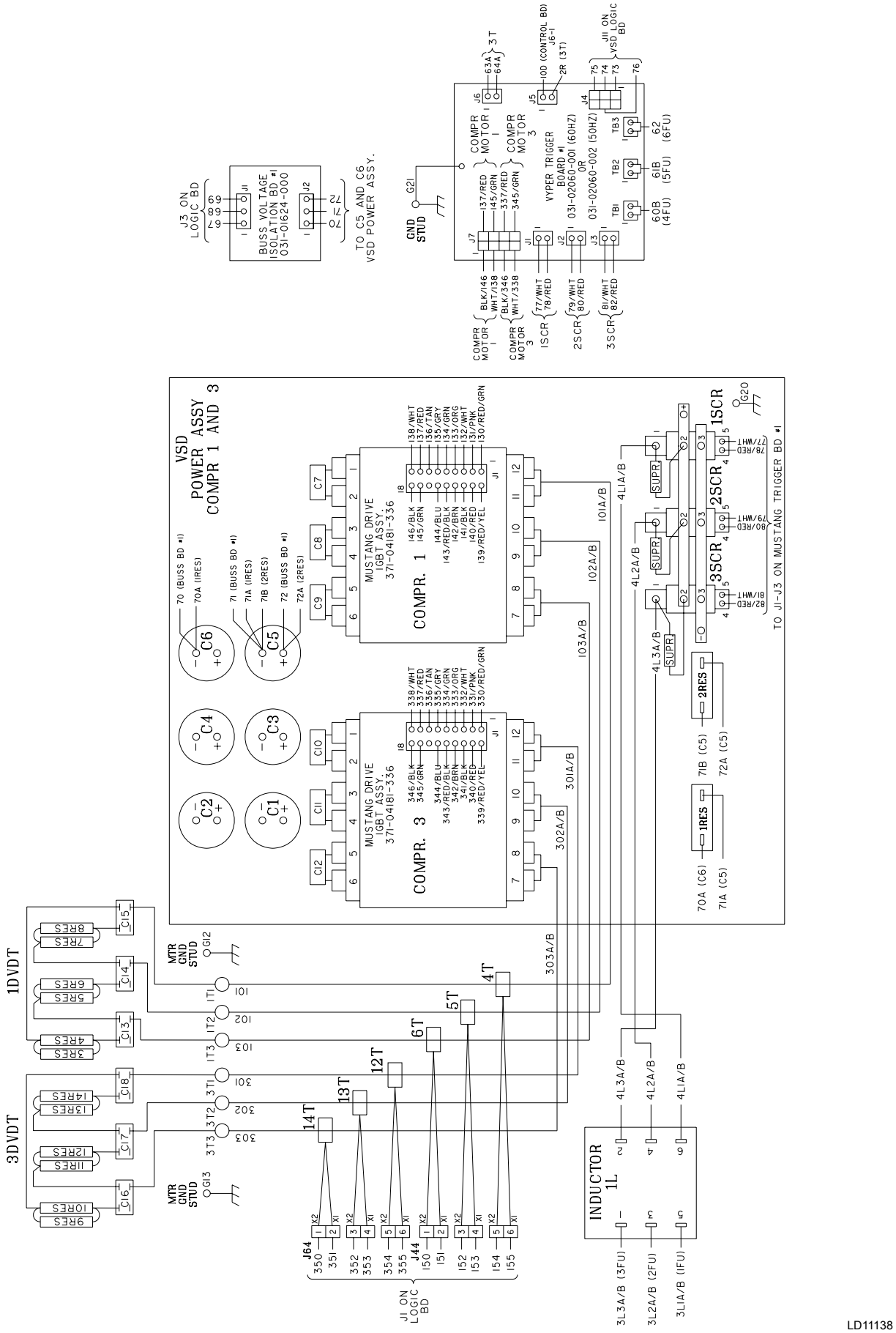
(LOCATED ON
RIGHT SIDE WALL)



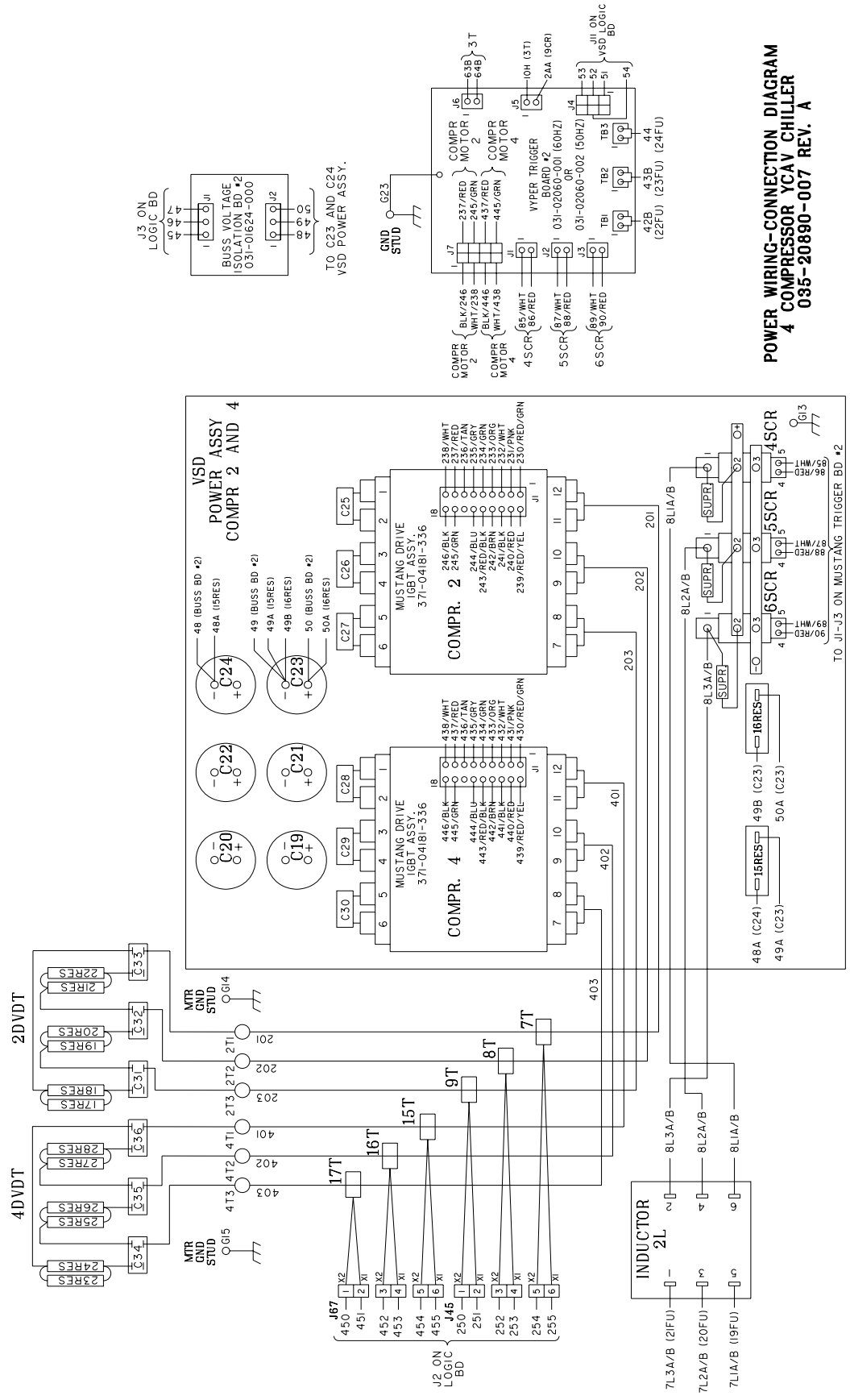
(LOCATED ON
RIGHT DOOR)

LD11137

POWER WIRING CONNECTION DIAGRAM - 4 COMPRESSOR YCAV CHILLER -(CON'T)

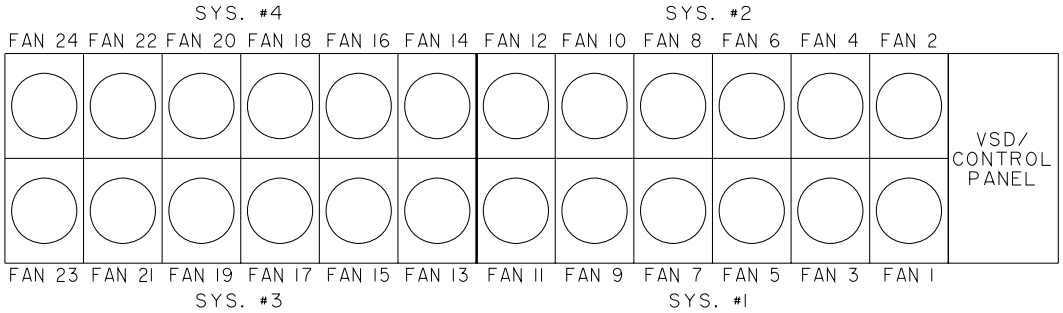


POWER WIRING CONNECTION DIAGRAM - 4 COMPRESSOR YCAV CHILLER - (CON'T)



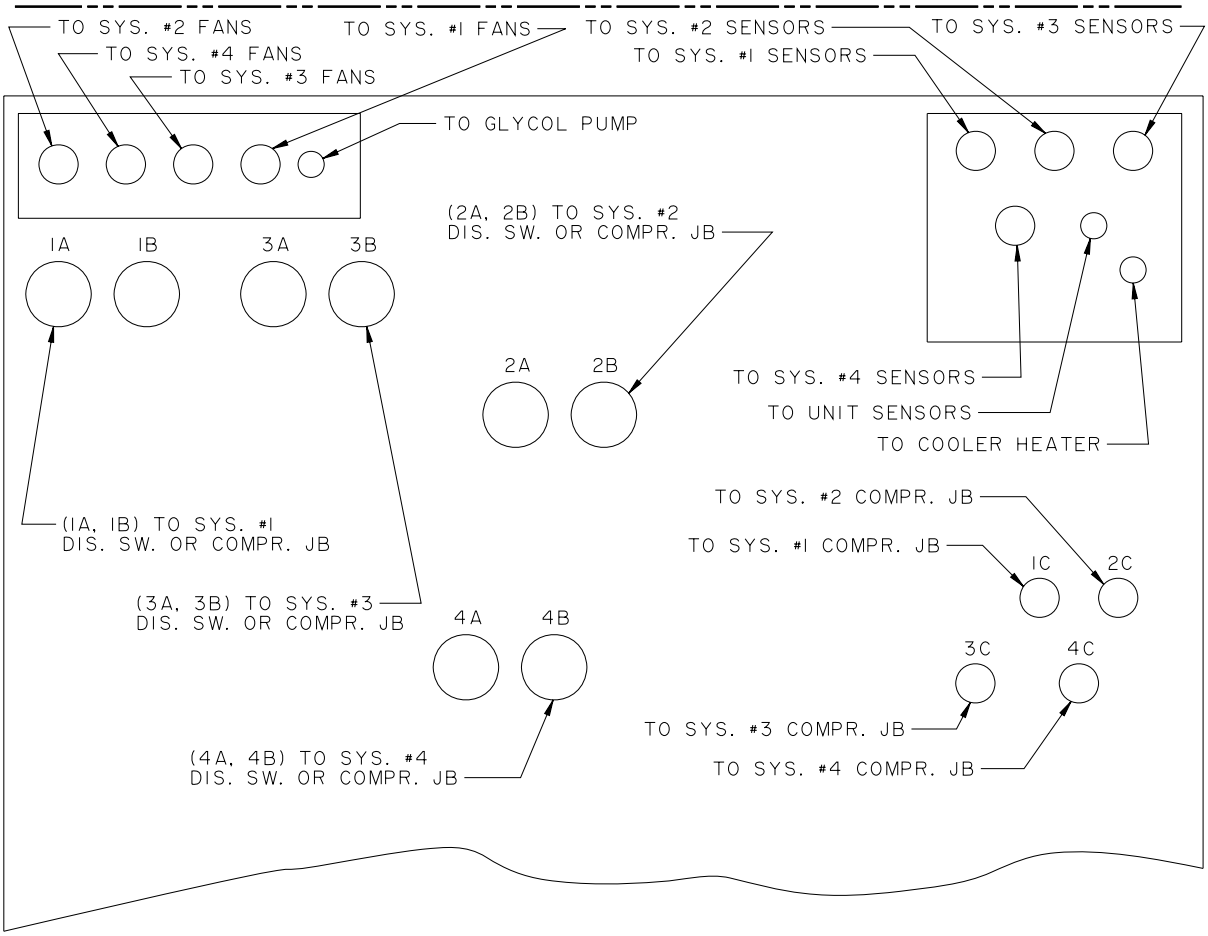
LD11139

LOCATION LABEL



FAN LOCATIONS

(NOT ALL FANS INSTALLED ON ALL UNITS)



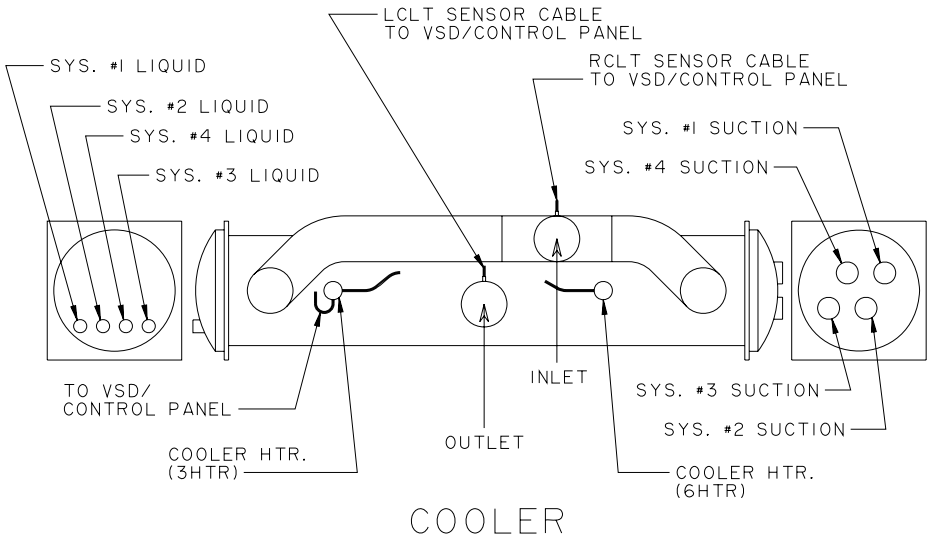
VSD/CONTROL PANEL

(VIEWED FROM REAR)

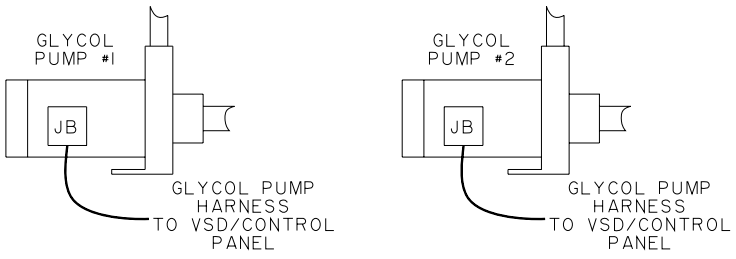
035-20890-008 REV. -

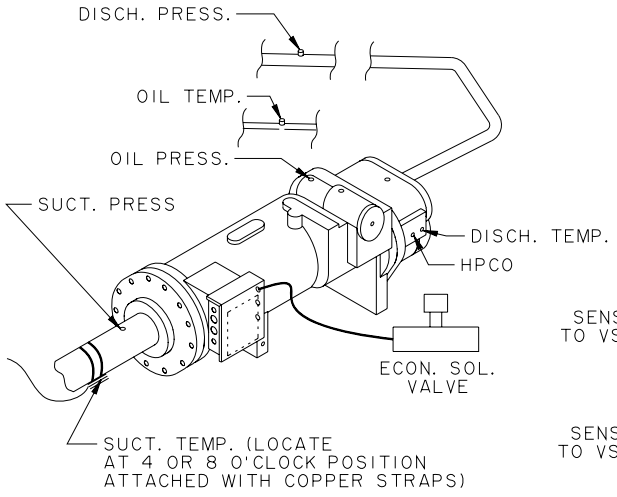
LD11140

LOCATION LABEL - (CON'T)



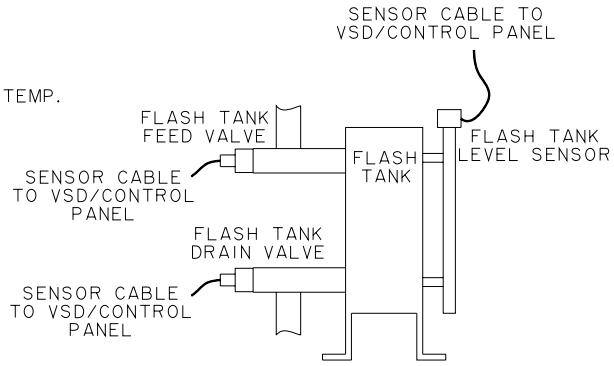
COOLER





HARNESS LOCATIONS

(TYP. FOR SYS. 1, 2, 3 & 4, EXCEPT
FOR COOLER AND GLYCOL PUMP)



SYSTEM WIRING -
CONNECTION DIAGRAM
4 COMPRESSOR YCAV CHILLER

035-20890-009 REV. -

LD11141

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