YORK®	*MILLENNIUM*™ **AIR COOLED SCREW LIQUID CHILLERS** **MODELS YCAS STYLE 'F'**	
WIRING DIAGRAM	Supersedes: Nothing	Form 201.18-W4 (899)

MODELS YCAS0360 THROUGH YCAS0440
STYLE F

28971AR

c UL ®

200, 230, 380,
460, & 575 Models

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WARNING

HIGH VOLTAGE
is used in the operation of this equipment
DEATH OR SERIOUS INJURY
may result if personnel fail to observe precautions.

Work on electronic equipment should not be undertaken unless the individual(s) has (have) been trained in the proper maintenance of the equipment and is (are) familiar with its potential hazards.

Shut off power supply to equipment before beginning work and follow lockout procedures. When working inside equipment with power off, take special care to discharge every capacitor likely to hold dangerous potential.

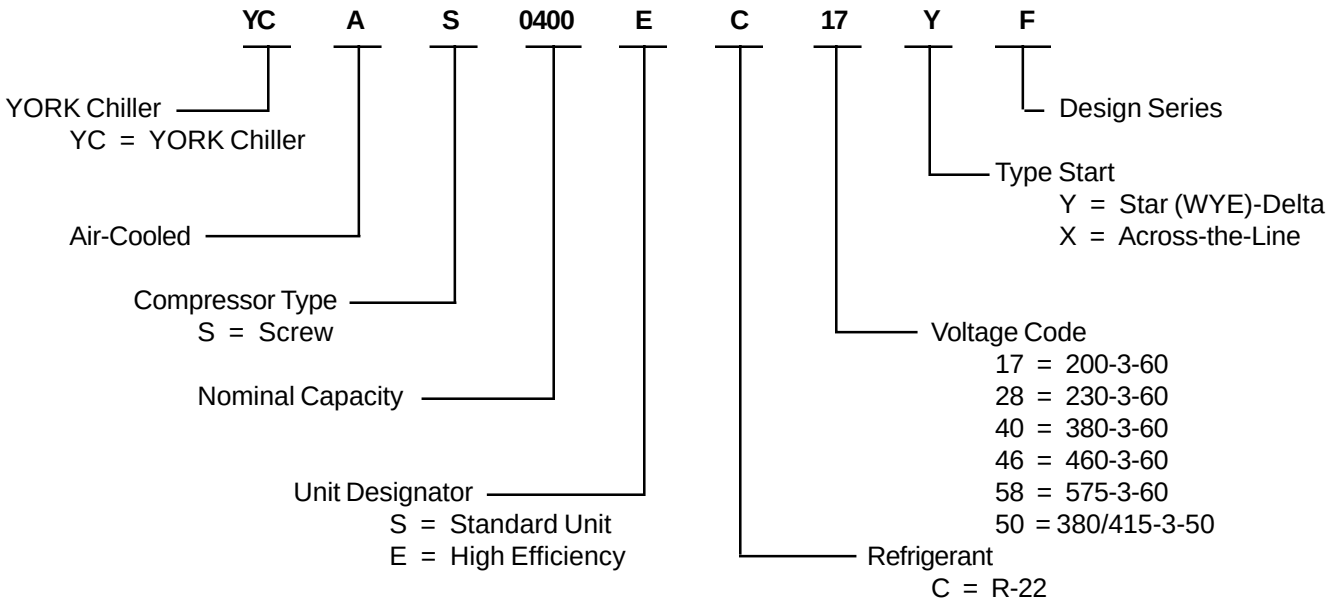
Be careful not to contact high voltage connections when installing or operating this equipment.

LOW VOLTAGE

DO NOT be misled by the term “low voltage”. Voltages as low as 50 volts may cause death.

NOMENCLATURE

The Model Number denotes the following characteristics of the unit:



ELECTRICAL DATA - 60 Hz

MULTIPLE POINT POWER SUPPLY CONNECTION

(Two Field Provided Power Supply Circuits to the Chiller. Field Connections to Factory provided Terminal Block (Std) or Disconnects (Opt) in the Options Panel. Circuit Breaker (opt[10]) in each of the two Motor Control Centers.)

Chiller Model YCAS	Volts	Electrical System #1 Field Supplied Wiring														
		Field Provided Power Supply				Factory Provided (Lugs) Wire Range[7]		Compressor #1			Compressor #3			Fan[11, 12] Data		
		MCA[1]	Min NF Disc SW[2]	Over-Current Protection[13] Min.[3,5]	Over-Current Protection[13] Max.[4,6]	Standard Terminal block	Optional NF Disc. Switch	RLA	Y-Δ LRA	XL-LRA	RLA	Y-Δ LRA	XL-LRA	Qty	FLA (ea)	LRA (ea)
	380	442	600	500	600	(2) 2AWG-300kcm	(2) 250-500kcm	199	343	1,093	155	343	1,093	8	4.8	23.0
0360EC	460	365	400	450	500	(1)1/0-(2)4/0AWG	250-500 kcm	164	280	893	128	280	893	8	4.0	19.0
	575	292	400	350	450	(1)1/0-(2)4/0AWG	250-500 kcm	131	224	714	103	224	714	8	3.1	15.2
	380	473	600	600	600	(2) 2AWG-300kcm	(2) 250-500kcm	181	343	1,093	199	343	1,093	9	4.8	23.0
0400EC	460	390	400	450	500	(1)1/0-(2)4/0AWG	250-500 kcm	149	280	893	164	280	893	9	4.0	19.0
	575	311	400	350	400	(1)1/0-(2)4/0AWG	250-500 kcm	119	224	714	131	224	714	9	3.1	15.2
	380	524	600	600	700	(2)1/0AWG-500kcm	(2) 250-500kcm	197	343	1,093	227	343	1,093	9	4.8	23.0
0440EC	460	429	600	500	600	(2) 2AWG-300kcm	(2) 250-500kcm	163	280	893	184	280	893	9	4.0	19.0
	575	342	400	400	450	(1)1/0-(2)4/0AWG	250-500 kcm	130	224	714	147	224	714	9	3.1	15.2

NOTES

1. Minimum circuit ampacity (MCA) is based on 125% of the rated load amps for the largest motor plus 100% of the rated load amps for all other loads included in the circuit, per N.E.C. Article 430-24. If a Factory Mounted Control Transformer is provided, add the following to the system #1 MCA values in the YCAS Tables: -17, add 15 amps; -28, add 12 amps; -40, add 7 amps; -46, add 6 amps; -58, add 5 amps.
2. The recommended disconnect switch is based on a minimum of 115% of the summation rated load amps of all the loads included in the circuit, per N.E.C. 440 - 12A1.
3. Minimum fuse size is based on 150% of the largest motor RLA plus 100% of the remaining RLAs (U.L. Standard 1995, Section 36.1). Minimum fuse rating = (1.5 x largest compressor RLA) + other compressor RLAs + (# fans x each fan motor FLA).
4. Maximum dual element fuse size is based on 225% maximum plus 100% of the rated load amps for all other loads included in the circuit, per N.E.C. 440-22. Maximum fuse rating = (2.25 x largest compressor RLA) + other compressor RLAs + (# fans x each fan motor FLA).
5. Minimum circuit breaker is 150% maximum plus 100% of rated load amps included in the circuit, per circuit per U.L. 1995 Fig. 36.2. Minimum circuit breaker rating = (1.5 x largest compressor RLA) + other compressor RLAs + (# fans x each fan motor FLA).
6. Maximum circuit breaker is based on 225% maximum plus 100% of the rated load amps for all loads included in the circuit, per circuit, per U.L. 1995 Fig. 36.2. Maximum circuit breaker rating = (2.25 x largest compressor RLA) + other compressor RLAs + (# fans x each fan motor FLA).

Chiller Model YCAS	Volts	Electrical System #2 Field Supplied Wiring														
		Field Provided Power Supply				Factory Provided (Lugs) Wire Range		Compressor #2			Compressor #4			Fan[11, 12] Data		
		MCA[1]	Min NF Disc SW[2]	Over-Current Protection[13] Min.[3,5]	Over-Current Protection[13] Max.[4,6]	Standard Terminal block	Optional NF Disc. Switch	RLA	Y-Δ LRA	XL-LRA	RLA	Y-Δ LRA	XL-LRA	Qty	FLA (ea)	LRA (ea)
	380	442	600	500	600	(2) 2AWG-300kcm	(2) 250-500kcm	199	343	1,093	155	343	1,093	8	4.8	23.0
0360EC	460	365	400	450	500	(1)1/0-(2)4/0AWG	250-500 kcm	164	280	893	128	280	893	8	4.0	19.0
	575	292	400	350	450	(1)1/0-(2)4/0AWG	250-500 kcm	131	224	714	103	224	714	8	3.1	15.2
	380	473	600	600	600	(2) 2AWG-300kcm	(2) 250-500kcm	181	343	1,093	199	343	1,093	9	4.8	23.0
0400EC	460	390	400	450	500	(1)1/0-(2)4/0AWG	250-500 kcm	149	280	893	164	280	893	9	4.0	19.0
	575	311	400	350	400	(1)1/0-(2)4/0AWG	250-500 kcm	119	224	714	131	224	714	9	3.1	15.2
	380	524	600	600	700	(2)1/0AWG-500kcm	(2) 250-500kcm	197	343	1,093	227	343	1,093	9	4.8	23.0
0440EC	460	429	600	500	600	(2) 2AWG-300kcm	(2) 250-500kcm	163	280	893	184	280	893	9	4.0	19.0
	575	342	400	400	450	(1)1/0-(2)4/0AWG	250-500 kcm	130	224	714	147	224	714	9	3.1	15.2

7. The Incoming Wire Range is the minimum and maximum wire size that can be accommodated by unit wiring lugs. The (1), (2), or (3) indicate the number of termination points or lugs which are available per phase. Actual wire size and number of wires per phase must be determined based on ampacity and job requirements using N.E.C. wire sizing information. The above recommendations are based on the National Electric Code and using copper connectors only. Field wiring must also comply with local codes.
8. A ground lug is provided for each compressor system to accommodate field grounding conductor per N.E.C. Article 250-54. A control circuit grounding lug is also supplied. Incoming ground wire range is #6 - 350 MCM.
9. The field supplied disconnect is a “Disconnecting Means” as defined in N.E.C. 100.B, and is intended for isolating the unit from the available power supply to perform maintenance and troubleshooting. This disconnect is not intended to be a Load Break Device.
10. Two-compressor machines with single-point power connection, and equipped with Star-Delta compressor motor start, must also include Factory provided circuit breakers in each motor control center. All 3 & 4 compressor machines equipped with Star-Delta compressor motor start must also include Factory-provided circuit breakers in each motor control center.
11. Consult factory for Electrical Data on units equipped with “High Static Fan” Option. High Static Fans are 3.8 kW each.
12. FLA for “Low Noise Fan” motors: 200V = 8.0A, 230V = 7.8A, 380V = 4.4A, 460V = 3.6A, 575V = 2.9A.
13. Group Rated breaker must be HACR type for cUL Machines.

ELECTRICAL DATA - 60 Hz

OPTIONAL SINGLE-POINT POWER SUPPLY CONNECTION AND INTERNAL UNIT CIRCUIT BREAKERS

(One Field Provided Power Supply Circuit to the chiller. Field connections to Power Terminal Block (standard) or Non-Fused Disconnect (option) in 'Option Panel'. Circuit Breakers in each Motor Control Center

CHILLER MODEL YCAS	VOLTS	FIELD SUPPLIED WIRING					
		FIELD PROVIDED POWER SUPPLY				FACTORY PROVIDED (LUGS) WIRE RANGE[7]	
		MCA[1]	MIN NF DISC SW[2]	OVER-CURRENT PROTECTION[13] MIN.[3,5]	OVER-CURRENT PROTECTION[13] MAX.[4,6]	TERMINAL BLOCK (LUGS) WIRE RANGE	NF DISC. SWITCH (LUGS) WIRE RANGE
0360EC	380	835	1000	1000	1000	(3)1/0AWG-500kcm	(4)4/0AWG-500kcm
	460	689	800	800	800	(3) #2 AWG-300kcm	(3)2/0AWG-400kcm
	575	550	600	600	600	(2)1/0AWG-500kcm	(2) 250-500kcm
0400EC	380	896	1000	1000	1000	(3)1/0AWG-500kcm	(4)4/0AWG-500kcm
	460	739	1000	800	800	(3) #2 AWG-300kcm	(4)4/0AWG-500kcm
	575	589	800	700	700	(2)1/0AWG-500kcm	(3)2/0AWG-400kcm
0440EC	380	991	1200	1200	1200	(3)1/0AWG-500kcm	(4)4/0AWG-500kcm
	460	812	1000	1000	1000	(3)1/0AWG-500kcm	(4)4/0AWG-500kcm
	575	647	800	800	800	(2)1/0AWG-500kcm	(3)2/0AWG-400kcm

NOTES

1. Minimum circuit ampacity (MCA) is based on 125% of the rated load amps for the largest motor plus 100% of the rated load amps for all other loads included in the circuit, per N.E.C. Article 430-24. If a Factory Mounted Control Transformer is provided, add the following to the system #1 MCA values in the YCAS Tables: -17, add 15 amps; -28, add 12 amps; -40, add 7 amps; -46, add 6 amps; -58, add 5 amps.
2. The recommended disconnect switch is based on a minimum of 115% of the summation rated load amps of all the loads included in the circuit, per N.E.C. 440 - 12A1.
3. Minimum fuse size is based on 150% of the largest motor RLA plus 100% of the remaining RLAs (U.L. Standard 1995, Section 36.1). Minimum fuse rating = (1.5 x largest compressor RLA) + other compressor RLAs + (# fans x each fan motor FLA).
4. Maximum dual element fuse size is based on 225% maximum plus 100% of the rated load amps for all other loads included in the circuit, per N.E.C. 440-22. Maximum fuse rating = (2.25 x largest compressor RLA) + other compressor RLAs + (# fans x each fan motor FLA).
5. Minimum circuit breaker is 150% maximum plus 100% of rated load amps included in the circuit, per circuit per U.L. 1995 Fig. 36.2. Minimum circuit breaker rating = (1.5 x largest compressor RLA) + other compressor RLAs + (# fans x each fan motor FLA).
6. Maximum circuit breaker is based on 225% maximum plus 100% of the rated load amps for all loads included in the circuit, per circuit, per U.L. 1995 Fig. 36.2. Maximum circuit breaker rating = (2.25 x largest compressor RLA) + other compressor RLAs + (# fans x each fan motor FLA).
7. The Incoming Wire Range is the minimum and maximum wire size that can be accommodated by unit wiring lugs. The (1), (2), or (3) indicate the number of termination points or lugs which are available per phase. Actual wire size and number of wires per phase must be determined based on ampacity and job requirements using N.E.C. wire sizing information. The above recommendations are based on the National Electric Code and using copper connectors only. Field wiring must also comply with local codes.
8. A ground lug is provided for each compressor system to accommodate field grounding conductor per N.E.C. Article 250-54. A control circuit grounding lug is also supplied. Incoming ground wire range is #6 - 350 MCM.
9. The field supplied disconnect is a "Disconnecting Means" as defined in N.E.C. 100.B, and is intended for isolating the unit from the available power supply to perform maintenance and troubleshooting. This disconnect is not intended to be a Load Break Device.
10. Two-compressor machines with single-point power connection, and equipped with Star-Delta compressor motor start, must also include Factory provided circuit breakers in each motor control center. All 3 & 4 compressor machines equipped with Star-Delta compressor motor start must also include Factory-provided circuit breakers in each motor control center.
11. Consult factory for Electrical Data on units equipped with "High Static Fan" Option. High Static Fans are 3.8 kW each.
12. FLA for "Low Noise Fan" motors: 200V = 8.0A, 230V = 7.8A, 380V = 4.4A, 460V = 3.6A, 575V = 2.9A.
13. Group Rated breaker must be HACR type for cUL Machines.

ELECTRICAL SYSTEM #1 FIELD SUPPLIED WIRING									ELECTRICAL SYSTEM #2 FIELD SUPPLIED WIRING								
COMPRESSOR #1 DATA			COMPRESSOR #3 DATA			FAN DATA[11, 12]			COMPRESSOR #2 DATA			COMPRESSOR #4 DATA			FAN DATA[11, 12]		
RLA	Y-Δ LRA	XL-LRA	RLA	Y-Δ LRA	XL-LRA	QTY	FLA (EA)	LRA (EA)	RLA	Y-Δ LRA	XL-LRA	RLA	Y-Δ LRA	XL-LRA	QTY	FLA (EA)	LRA (EA)
199	343	1,093	155	343	1,093	8	4.8	23.0	199	343	1,093	155	343	1,093	8	4.8	23.0
164	280	893	128	280	893	8	4.0	19.0	164	280	893	128	280	893	8	4.0	19.0
131	224	714	103	224	714	8	3.1	15.2	131	224	714	103	224	714	8	3.1	15.2
181	343	1,093	199	343	1,093	9	4.8	23.0	181	343	1,093	199	343	1,093	9	4.8	23.0
149	280	893	164	280	893	9	4.0	19.0	149	280	893	164	280	893	9	4.0	19.0
119	224	714	131	224	714	9	3.1	15.2	119	224	714	131	224	714	9	3.1	15.2
197	343	1,093	227	343	1,093	9	4.8	23.0	197	343	1,093	227	343	1,093	9	4.8	23.0
163	280	893	184	280	893	9	4.0	19.0	163	280	893	184	280	893	9	4.0	19.0
130	224	714	147	224	714	9	3.1	15.2	130	224	714	147	224	714	9	3.1	15.2

LEGEND

ACR-LINE	ACROSS THE LINE START
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	RUNNING LOAD AMPS
S.P. WIRE	SINGLE-POINT WIRING
Y-Δ	WYE-DELTA START
X-LRA	ACROSS-THE-LINE INRUSH LOCKED ROTOR AMPS
Y-LRA	WYE-DELTA INRUSH LOCKED ROTOR AMPS

VOLTAGE CODE

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

CONTROL POWER SUPPLY (UNITS WITHOUT STANDARD CONTROL CIRCUIT TRANSFORMER)

NO. OF COMPRESSORS	CONTROL POWER SUPPLY	MCA (MAX LOAD CURRENT)	MAX DUAL ELEMENT FUSE SIZE	NON-FUSED DISCONNECT SWITCH SIZE
3 or 4 (Non-CE 50/60Hz)	115V-1Ø	30A	30A	30A
3 or 4 (CE 50Hz)	115V-1Ø	25A	30A	30A

ELECTRICAL DATA - 50 Hz

50 Hz MULTIPLE POINT POWER SUPPLY CONNECTION

Two Field Provided Power Supply Circuits to the Chiller. Field Connections to Factory Provided Terminal Blocks (standard) or Disconnects (optional) in the Options Panel. Circuit Breakers (optional) in each of the two Motor Control Centers.

Chiller Model YCAS	Volts	ELECTRICAL SYSTEM #1 FIELD SUPPLIED WIRING														
		Field Provided Power Supply				Factory Provided (Lugs) Wire Range[7]		Compressor #1 Data			Compressor #3 Data			Fan Data[11, 12]		
		MRC (MCA[1])	Min NF Disc SW[2]	Over-Current Protection Min.[3,5]	Over-Current Protection Max.[4, 6]	Standard Terminal Block	Optional NF Disc. Switch	RLA	Y-Δ LRA	XL-LRA	RLA	Y-Δ LRA	XL-LRA	Qty	FLA (ea)	LRA (ea)
1063EB	380	413	600	450	500	(2) 2AWG-300kcm	(2) 250-500kcm	161	283	907	140	283	907	8	4.6	17.1
1093SB	380	436	600	450	500	(2) 2AWG-300kcm	(2) 250-500kcm	183	283	907	140	283	907	7	4.6	17.1
1163EB	380	457	600	500	500	(2) 2AWG-300kcm	(2) 250-500kcm	168	283	907	168	283	907	8	4.6	17.1
1263EB	380	494	600	500	600	(2) 2AWG-300kcm	(2) 250-500kcm	183	283	907	183	283	907	8	4.6	17.1

***** "Optional" Circuit Breakers are REQUIRED for units with CE mark.
See page 57 for Electrical Data notes.

50 Hz OPTIONAL SINGLE-POINT POWER SUPPLY CONNECTION AND INTERNAL UNIT CIRCUIT BREAKERS

One Field Provided Power Supply Circuit to the chiller. Field connections to Power Terminal Block (standard) or Non-Fused Disconnect (option) in 'Option Panel'. Circuit Breakers in each Motor Control Center

Chiller Model YCAS	Volts	Field Supplied Wiring						Electrical System #1								
		Field Provided Power Supply				Factory Provided (Lugs) Wire Range		Compressor #1 Data			Compressor #3 Data			Fan Data		
		MRC (MCA[1])	Min NF Disc SW[2]	Over-Current Protection Min.[3,5]	Over-Current Protection Max.[4, 6]	Terminal Block (Lugs) Wire Range[7]	NF Disc. Switch (Lugs) Wire Rge.	RLA	Y-Δ LRA	X-LRA	RLA	Y-Δ LRA	X-LRA	Qty	FLA (ea)	LRA (ea)
1063EB	380	826	1000	800	800	(3)1/0AWG-500kcm	(4)4/0AWG-500kcm	161	283	907	140	283	907	8	4.6	17.1
1093SB	380	872	1000	1000	1000	(3)1/0AWG-500kcm	(4)4/0AWG-500kcm	183	283	907	140	283	907	7	4.6	17.1
1163EB	380	914	1000	1000	1000	(3)1/0AWG-500kcm	(4)4/0AWG-500kcm	168	283	907	168	283	907	8	4.6	17.1
1263EB	380	989	1000	1000	1000	(3)1/0AWG-500kcm	(4)4/0AWG-500kcm	183	283	907	183	283	907	8	4.6	17.1

NOTES

1. MRC is Maximum Running Current, the maximum continuous current at any operating point in the rating range. Also referred to as MCA, or Minimum Current Ampacity to be furnished by the installer.
2. The recommended disconnect switch is based on a minimum of 115% of the summation rated load amps of all the loads included in the circuit, per N.E.C. 440 - 12A1.
3. Minimum fuse size is based on 150% of the largest motor RLA plus 100% of the remaining RLAs (U.L. Standard 1995, Section 36.1). Minimum fuse rating = (1.5 x largest compressor RLA) + other compressor RLAs + (# fans x each fan motor FLA).
4. Maximum dual element fuse size is based on 225% maximum plus 100% of the rated load amps for all other loads included in the circuit, per N.E.C. 440-22. Maximum fuse rating = (2.25 x largest compressor RLA) + other compressor RLAs + (# fans x each fan motor FLA).
5. Minimum circuit breaker is 150% maximum plus 100% of rated load amps included in the circuit, per circuit per U.L. 1995 Fig. 36.2. Minimum circuit breaker rating = (1.5 x largest compressor RLA) + other compressor RLAs + (# fans x each fan motor FLA).
6. Maximum circuit breaker is based on 225% maximum plus 100% of the rated load amps for all loads included in the circuit, per circuit, per U.L. 1995 Fig. 36.2. Maximum circuit breaker rating = (2.25 x largest compressor RLA) + other compressor RLAs + (# fans x each fan motor FLA).
7. The Incoming Wire Range is the minimum and maximum wire size that can be accommodated by unit wiring lugs. The (1), (2), or (3) indicate the number of termination points or lugs which are available per phase. Actual wire size and number of wires per phase must be determined based on ampacity and job requirements using N.E.C. wire sizing information. The above recommendations are based on the National Electric Code and using copper connectors only. Field wiring must also comply with local codes.
8. A ground lug is provided for each compressor system to accommodate field grounding conductor per N.E.C. Article 250-54. A control circuit grounding lug is also supplied. Incoming ground wire range is #6 - 350 MCM.
9. The field supplied disconnect is a "Disconnecting Means" as defined in N.E.C. 100.B, and is intended for isolating the unit from the available power supply to perform maintenance and troubleshooting. This disconnect is not intended to be a Load Break Device.
10. Two-Compressor machines with single-point power connection, and equipped with Star-Delta Compressor motor starters, must also include Factory-provided circuit breakers in each motor control center. 3 & 4 Compressor machine equipped with Star-Delta compressor motor starter, must also include factory-provided circuit breakers in each motor control center.
11. Consult factory for Electrical Data on units equipped with "High Static Fan" Option. High Static Fans are 3.5 kW each.
12. FLA for "Low Noise Fan" motors is 4.1 A.

Chiller Model YCAS	Volts	ELECTRICAL SYSTEM #2 FIELD SUPPLIED WIRING														
		Field Provided Power Supply				Factory Provided (Lugs) Wire Range[7]		Compressor #2 Data			Compressor #4 Data			Fan Data[11, 12]		
		MRC (MCA[1])	Min NF Disc SW[2]	Over-Current Protection Min.[3]	Over-Current Protection Max.[4]	Standard* Terminal Block	Optional* NF Disc. Switch	RLA	Y-Δ LRA	XL-LRA	RLA	Y-Δ LRA	XL-LRA	Qty	FLA (ea)	LRA (ea)
1063EB	380	413	600	450	500	(2) 2AWG-300kcm	(2) 250-500kcm	161	283	907	140	283	907	8	4.6	17.1
1093SB	380	436	600	450	500	(2) 2AWG-300kcm	(2) 250-500kcm	183	283	907	140	283	907	7	4.6	17.1
1163EB	380	457	600	500	500	(2) 2AWG-300kcm	(2) 250-500kcm	168	283	907	168	283	907	8	4.6	17.1
1263EB	380	494	600	500	600	(2) 2AWG-300kcm	(2) 250-500kcm	183	283	907	183	283	907	8	4.6	17.1

CHILLER MODEL YCAS	VOLTS	ELECTRICAL SYSTEM #2								
		COMPRESSOR #2 DATA			COMPRESSOR #4 DATA			FAN DATA[11, 12]		
		RLA	Y-Δ LRA	XL-LRA	RLA	Y-Δ LRA	XL-LRA	Qty	FLA (ea)	LRA (ea)
1063EB	380	161	283	907	140	283	907	8	4.6	17.1
1093SB	380	183	283	907	140	283	907	7	4.6	17.1
1163EB	380	168	283	907	168	283	907	8	4.6	17.1
1263EB	380	183	283	907	183	283	907	8	4.6	17.1

CONTROL POWER SUPPLY (UNITS WITHOUT STANDARD CONTROL CIRCUIT TRANSFORMERS)

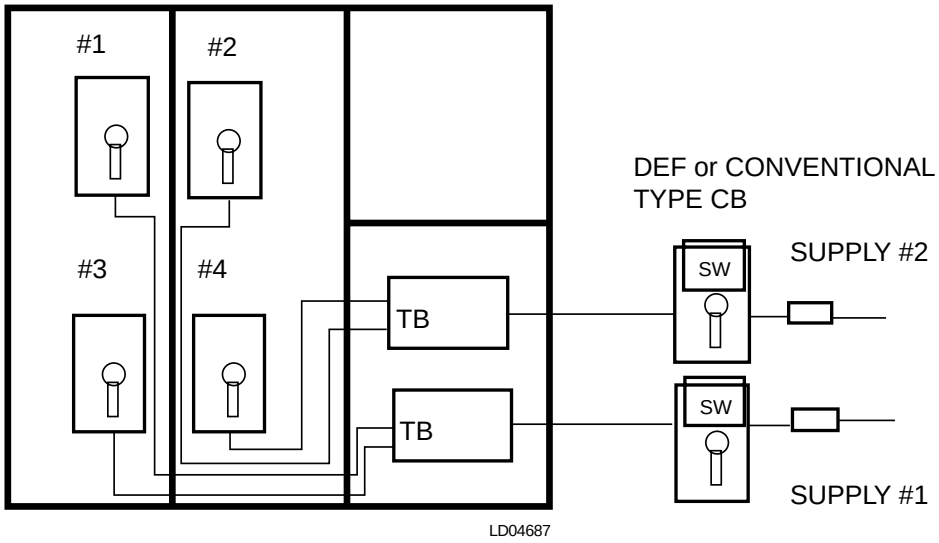
NO. OF COMPRESSORS	CONTROL POWER SUPPLY	MCA (MAX LOAD CURRENT)	MAX DUAL ELEMENT FUSE SIZE	NON-FUSED DISCONNECT SWITCH SIZE
2	115V-1Ø	20A	20A	30A
3 or 4 (Non-CE 50/60Hz)	115V-1Ø	30A	30A	30A
3 or 4 (CE 50Hz)	115V-1Ø	25A	30A	30A

LEGEND

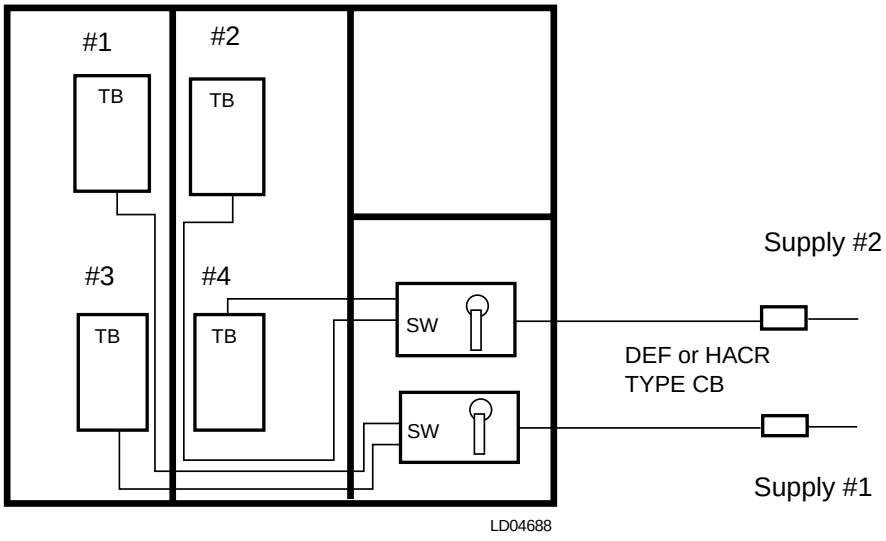
ACR-LINE	ACROSS THE LINE START	**MCA**	MINIMUM CIRCUIT AMPACITY
C.B.	CIRCUIT BREAKER	**MIN**	MINIMUM
D.E.	DUAL ELEMENT FUSE	**MIN NF**	MINIMUM NON-FUSED
DISC SW	DISCONNECT SWITCH	**RLA**	RUNNING LOAD AMPS
FACT CB	FACTORY-MOUNTED CIRCUIT BREAKER	**S.P. WIRE**	SINGLE-POINT WIRING
FLA	FULL LOAD AMPS	**Y-Δ**	WYE-DELTA START
HZ	HERTZ	**X-LRA**	ACROSS-THE-LINE INRUSH LOCKED ROTOR AMPS
MAX	MAXIMUM	**Y-LRA**	WYE-DELTA INRUSH LOCKED ROTOR AMPS

POWER WIRING POSSIBILITIES

MULTIPLE POINT WITH SEPARATE SYSTEM CIRCUIT BREAKERS

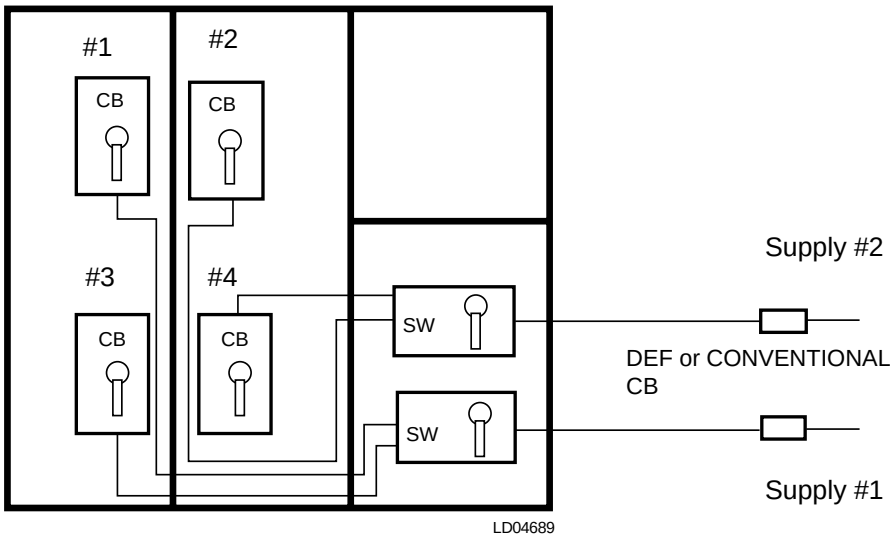


MULTIPLE POINT NON-FUSED DISCONNECTS WITH SEPARATE SYSTEM TERMINAL BLOCKS (SUITABLE FOR ACROSS-THE-LINE START ONLY)

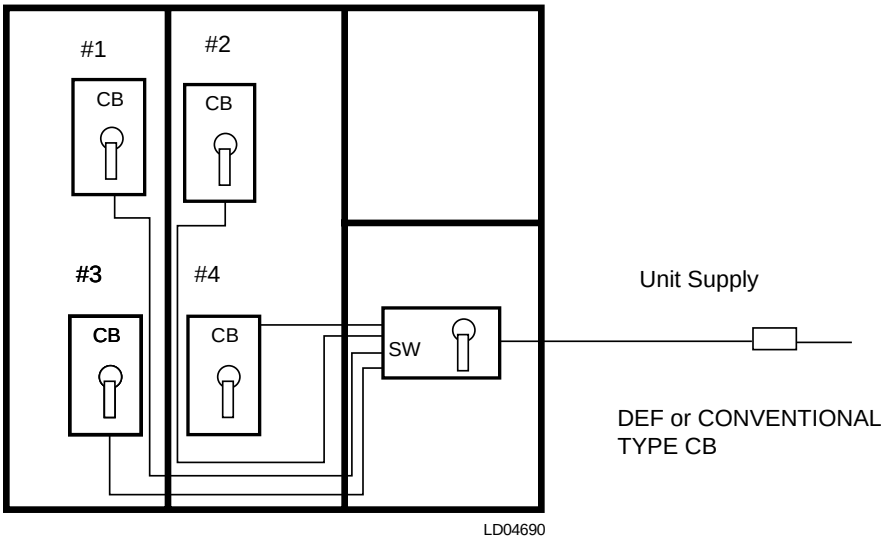


POWER WIRING POSSIBILITIES

MULTIPLE POINT NON-FUSED DISCONNECTS WITH SEPARATE SYSTEM CIRCUIT BREAKERS

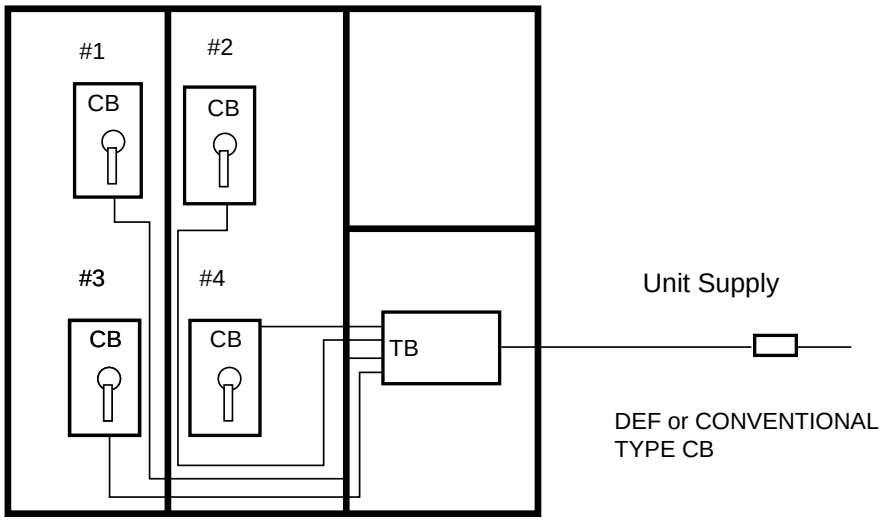


SINGLE POINT WITH NON-FUSED DISCONNECT SWITCH & SYSTEM CIRCUIT BREAKERS

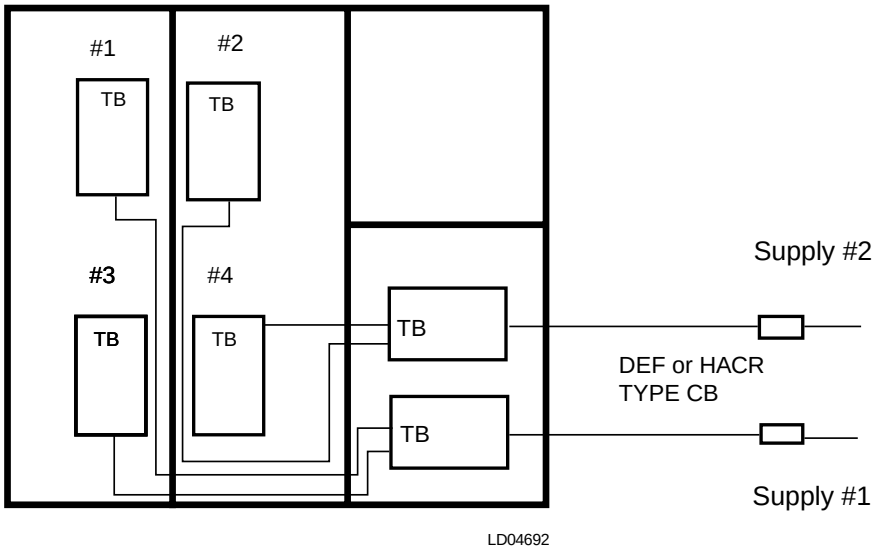


POWER WIRING POSSIBILITIES

SINGLE POINT WITH SEPARATE SYSTEM CIRCUIT BREAKERS

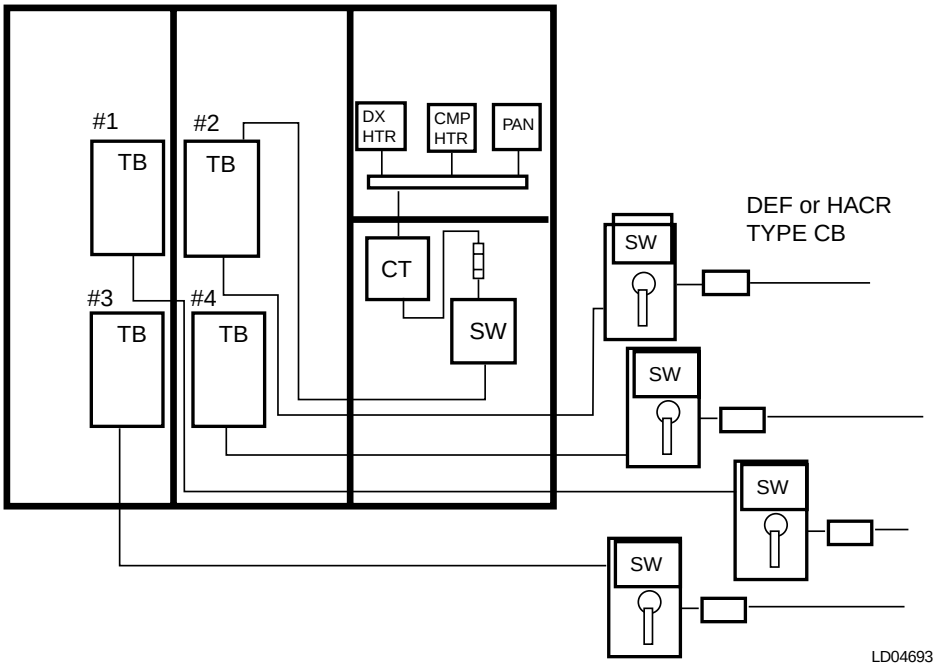


MULTIPLE POINT WITH SEPARATE SYSTEM TERMINAL BLOCKS (SUITABLE FOR ACROSS-THE-LINE START ONLY)

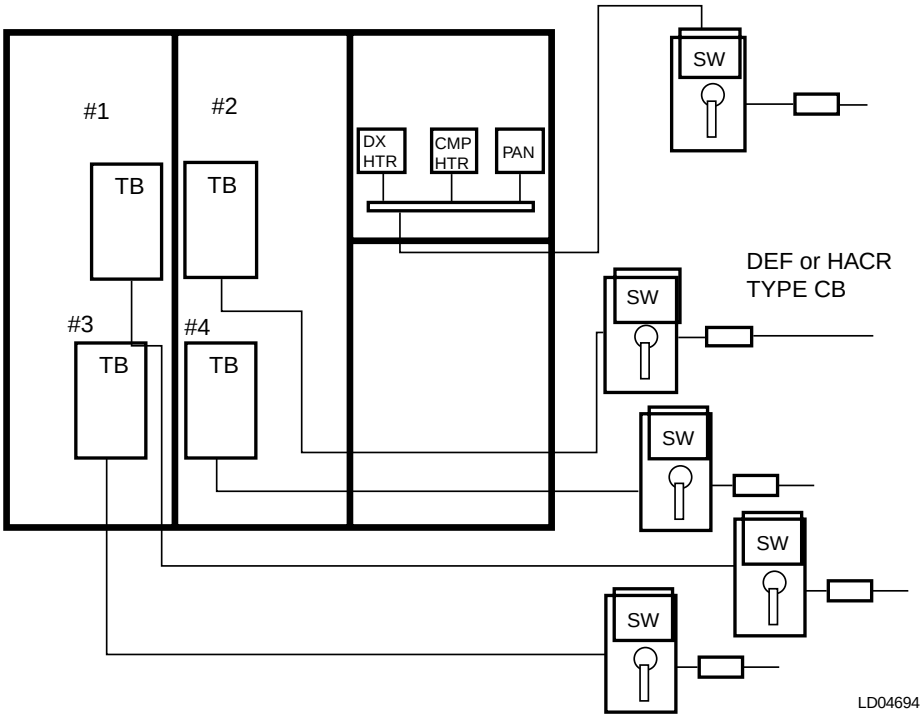


POWER WIRING POSSIBILITIES

CONTROL (120-1-60) SUPPLY VIA STANDARD CONTROL TRANSFORMER



CONTROL (120-1-60) SUPPLY WITHOUT STANDARD CONTROL TRANSFORMER



ELEMENTARY DIAGRAM
DXST DIRECT DRIVE
POWER CIRCUIT

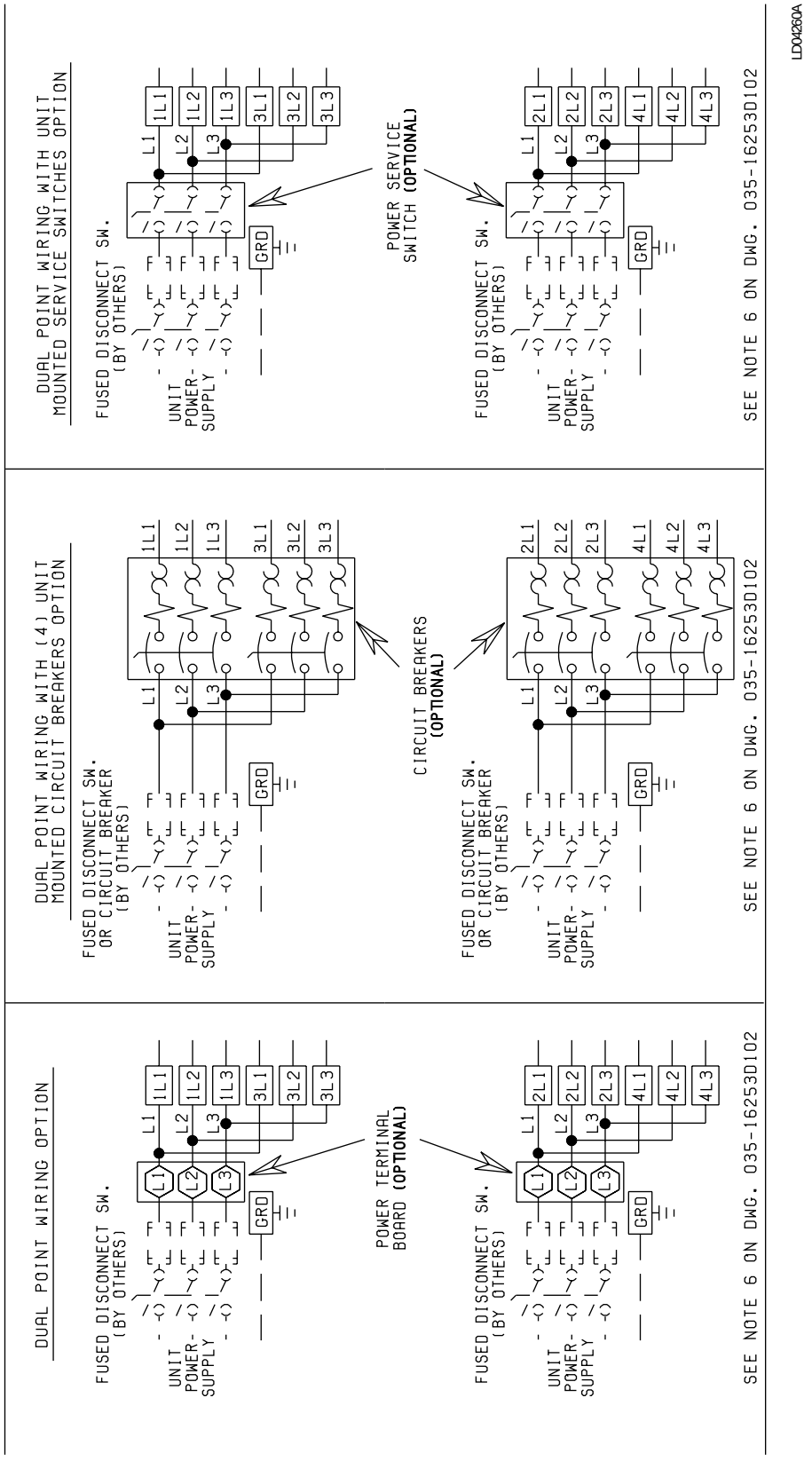


FIG. 1 – ELEMENTARY DIAGRAM

ELEMENTARY DIAGRAM
DXST DIRECT DRIVE
POWER CIRCUIT

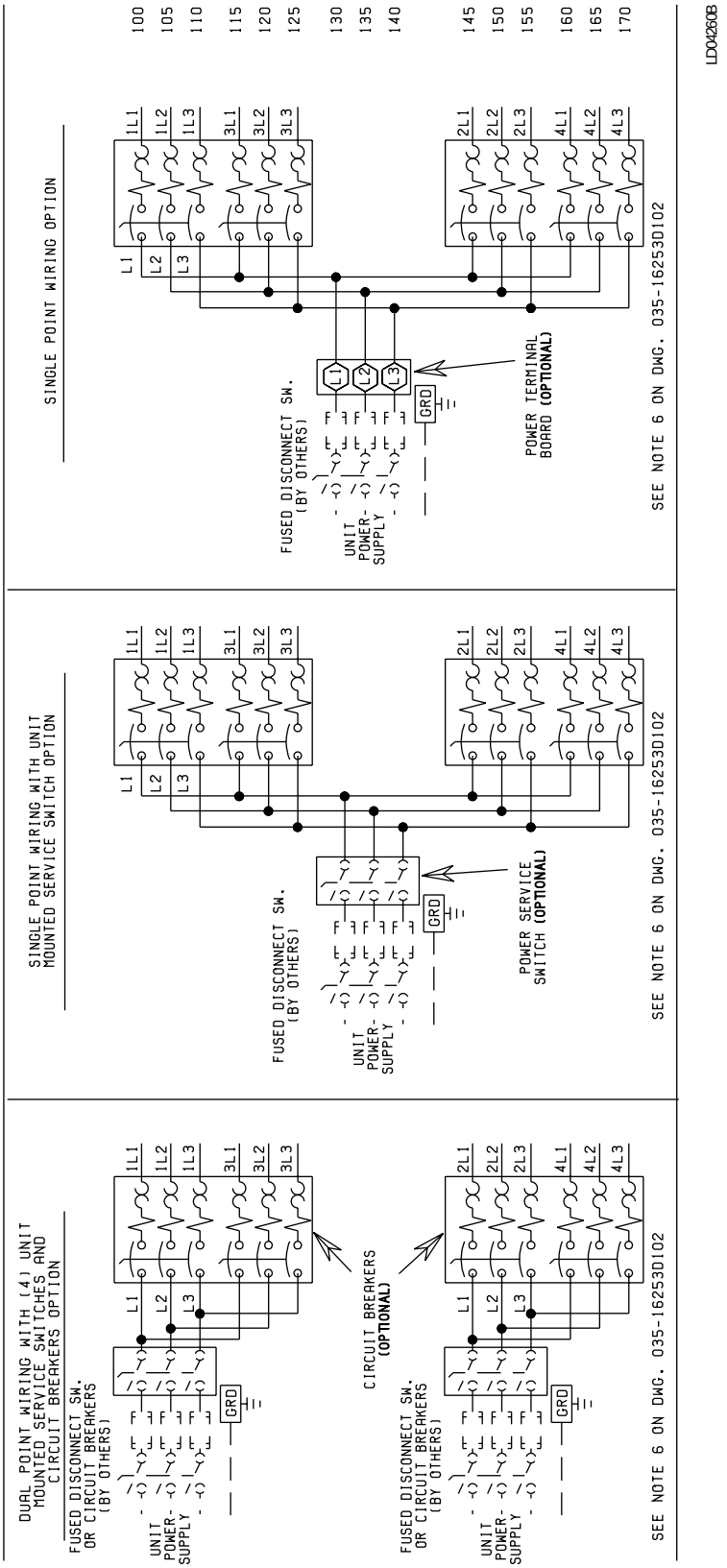
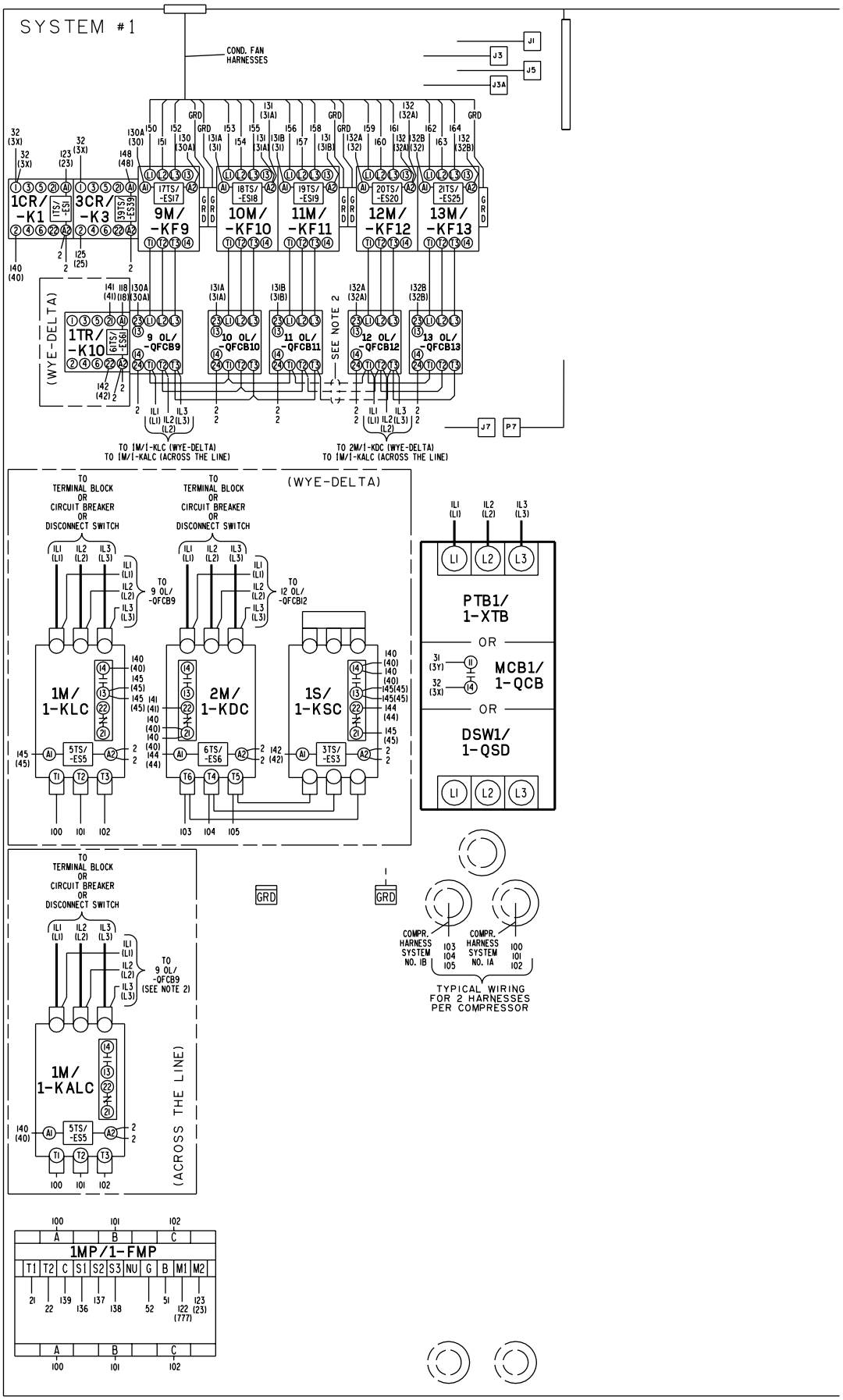


FIG. 2 – ELEMENTARY DIAGRAM

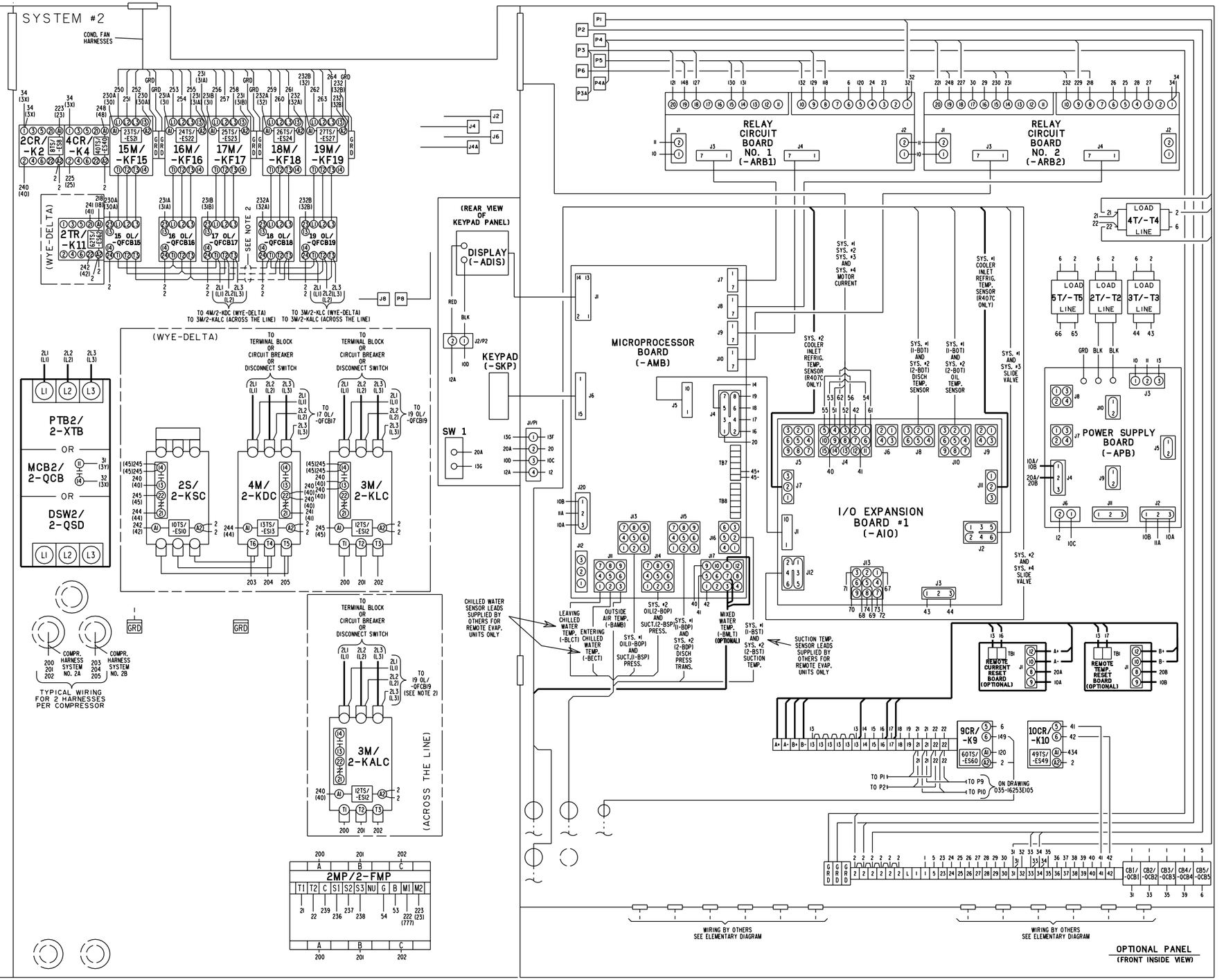
CONNECTION DIAGRAM
SYSTEMS 1 & 2



LD04265

FIG. 3 – CONNECTION DIAGRAM

FORM 201.18-W4



LD04266

Diagram continued on following pages.

CONNECTION DIAGRAM
SYSTEMS 3 & 4

Diagram continued from previous pages.

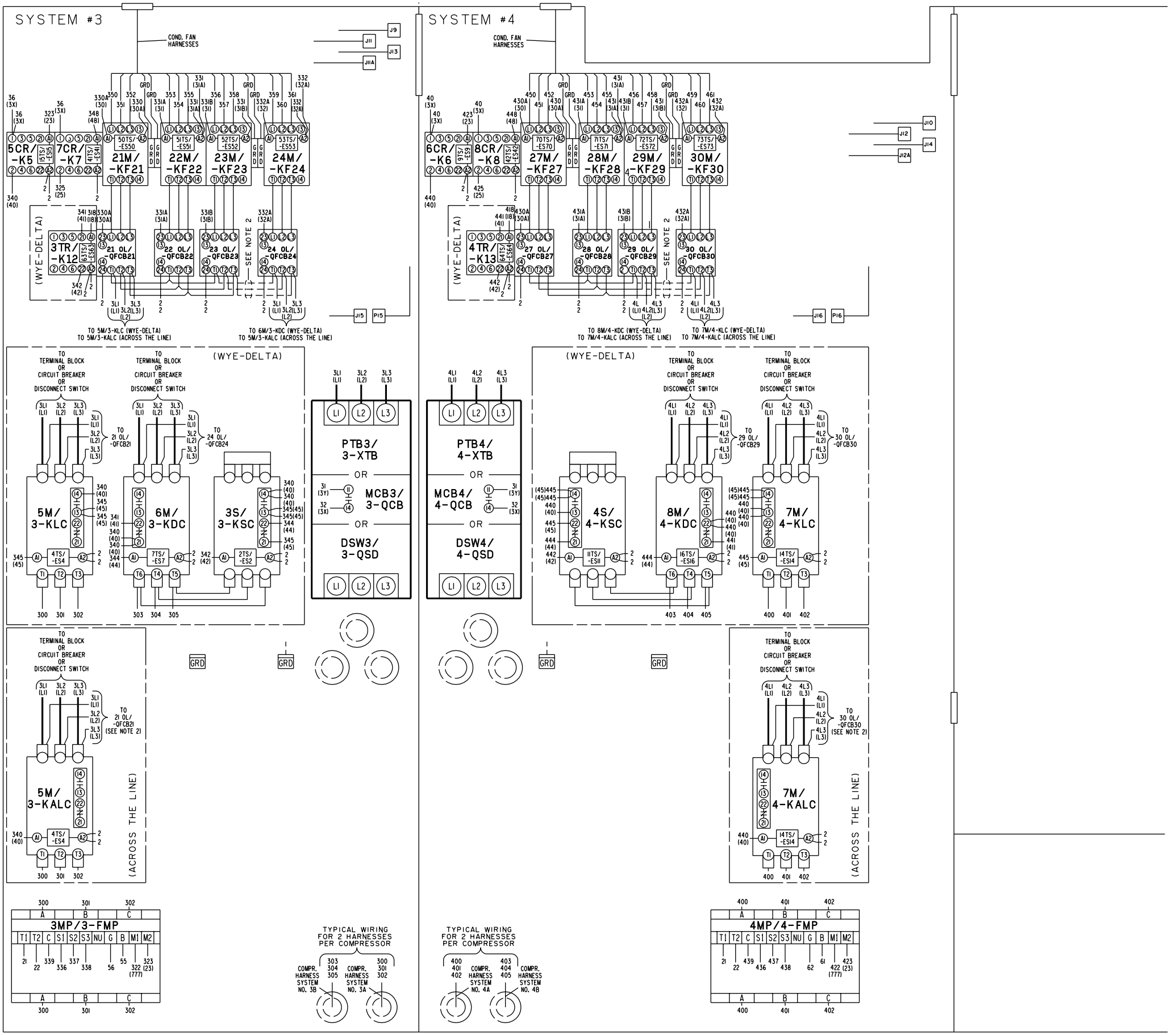
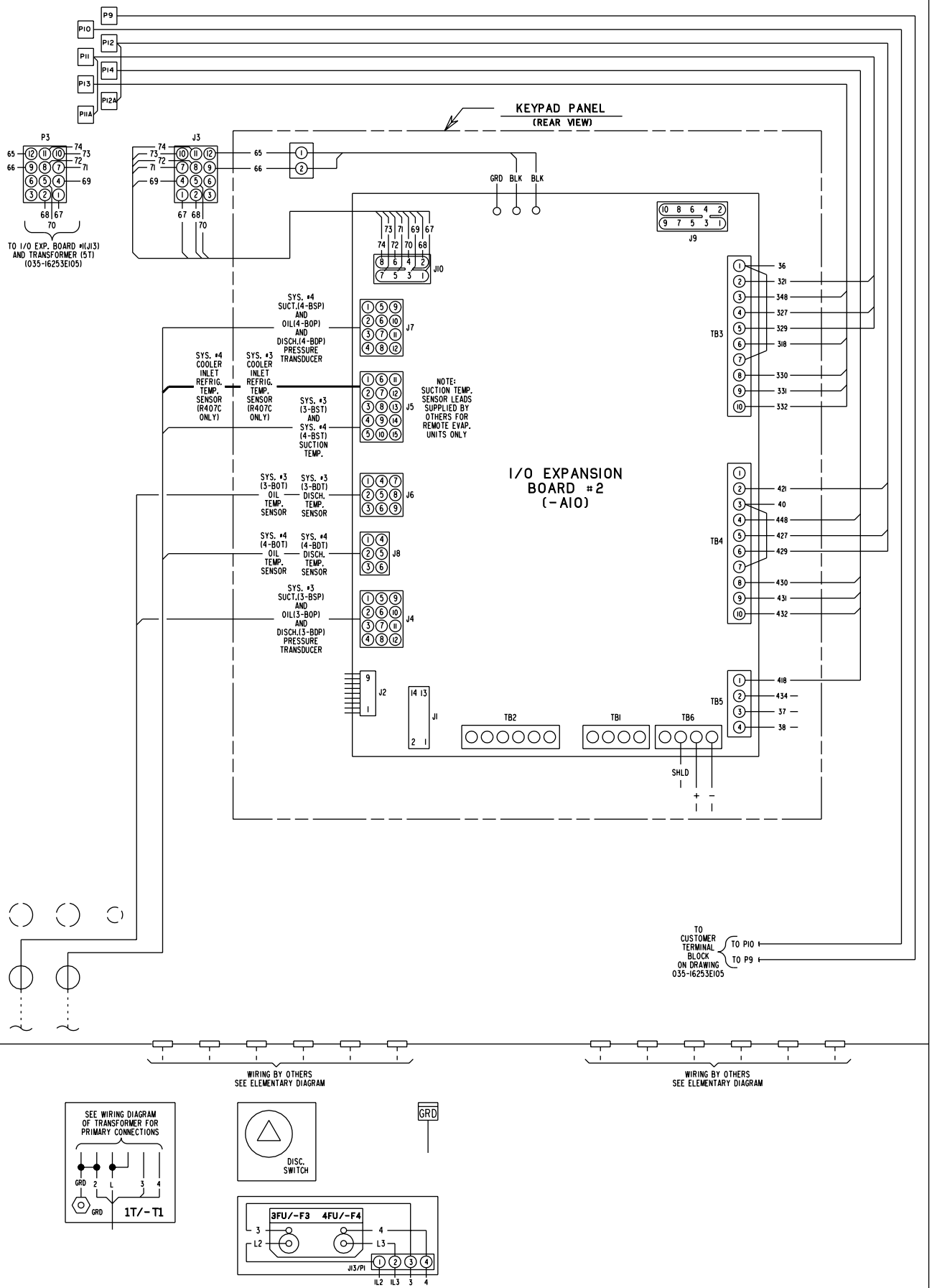


FIG. 4 – CONNECTION DIAGRAM

LD04267


P9
P10
P12
P11
P14
P13
P12A
P11A
KEYPAD PANEL
(REAR VIEW)
P3
J3
GRD BLK BLK
J9
J10
J7
J5
J6
J8
J4
J2
J1
TB2
TB1
TB6
TB3
TB4
TB5
I/O EXPANSION
BOARD #2
(-AIO)
NOTE:
SUCTION TEMP.
SENSOR LEADS
SUPPLIED BY
OTHERS FOR
REMOTE EVAP.
UNITS ONLY
SYS. #4
SUCT.(4-BSP)
AND
OIL(4-BOP)
AND
DISCH.(4-BDP)
PRESSURE
TRANSDUCER
SYS. #4
COOLER
INLET
REFRIG.
TEMP.
SENSOR
(R407C
ONLY)
SYS. #3
COOLER
INLET
REFRIG.
TEMP.
SENSOR
(R407C
ONLY)
SYS. #3
(3-BST)
AND
SYS. #4
(4-BST)
SUCTION
TEMP.
SYS. #3
(3-BOT)
OIL
TEMP.
SENSOR
SYS. #3
(3-BDT)
DISCH.
TEMP.
SENSOR
SYS. #4
(4-BOT)
OIL
TEMP.
SENSOR
SYS. #4
(4-BDT)
DISCH.
TEMP.
SENSOR
SYS. #3
SUCT.(3-BSP)
AND
OIL(3-BOP)
AND
DISCH.(3-BDP)
PRESSURE
TRANSDUCER
SHLD
+
-
TO I/O EXP. BOARD #1(J13)
AND TRANSFORMER (5T)
(035-16253E105)
TO
CUSTOMER
TERMINAL
BLOCK
ON DRAWING
035-16253E105
TO P10
TO P9
WIRING BY OTHERS
SEE ELEMENTARY DIAGRAM
WIRING BY OTHERS
SEE ELEMENTARY DIAGRAM
SEE WIRING DIAGRAM
OF TRANSFORMER FOR
PRIMARY CONNECTIONS
GRD 2 L 3 4
GRD
1T/-T1
DISC.
SWITCH
GRD
3FU/-F3 4FU/-F4
3
L2
4
L3
J13/P1
IL2 IL3 3 4

LD04268

STANDARD COMPRESSOR POWER SUPPLIES
ACROSS-THE-LINE START

STANDARD COMPRESSOR POWER SUPPLIES

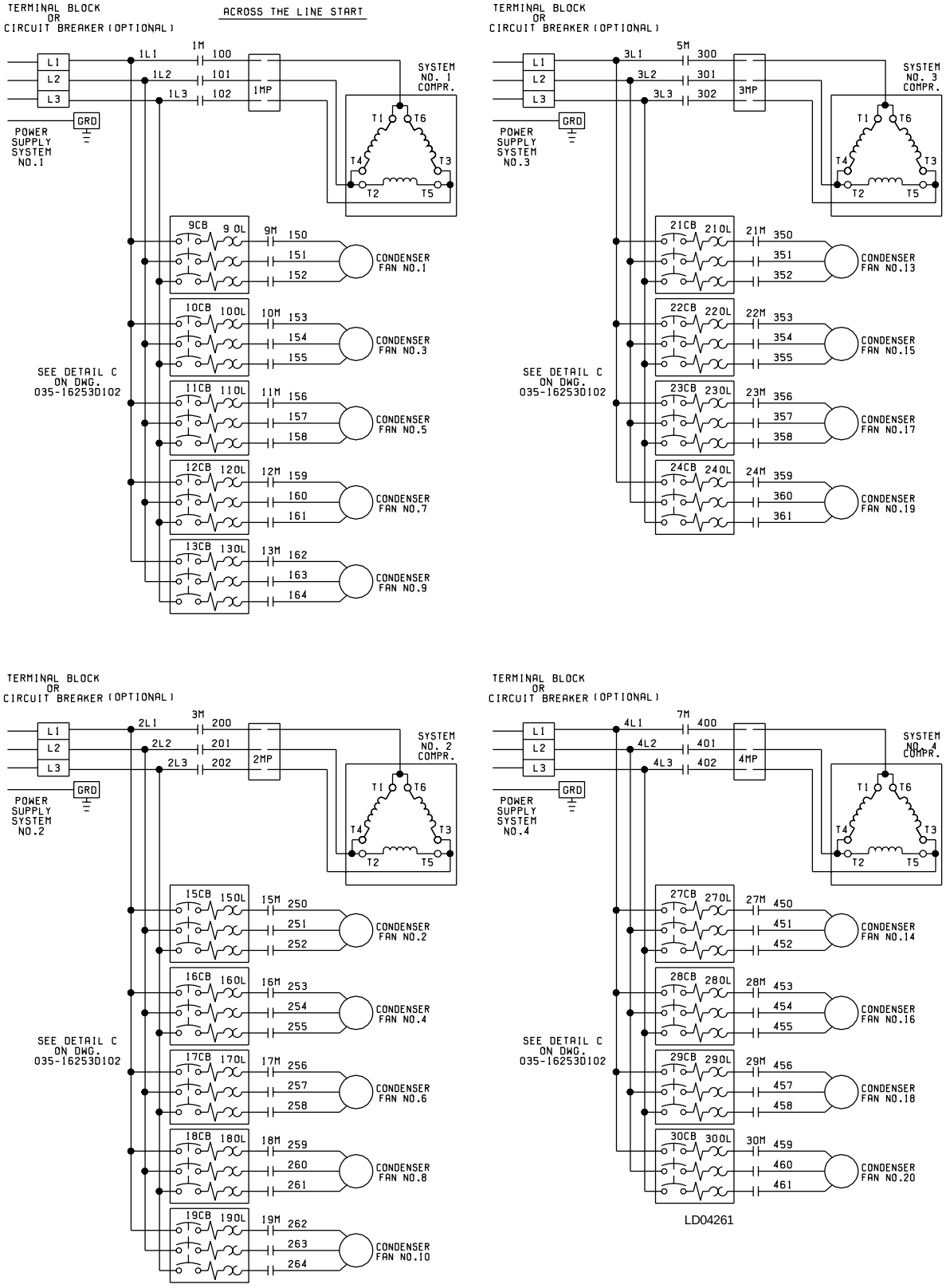


FIG. 5 – STANDARD POWER SUPPLY - ACROSS-THE-LINE START

STANDARD COMPRESSOR POWER SUPPLIES
WYE-DELTA START

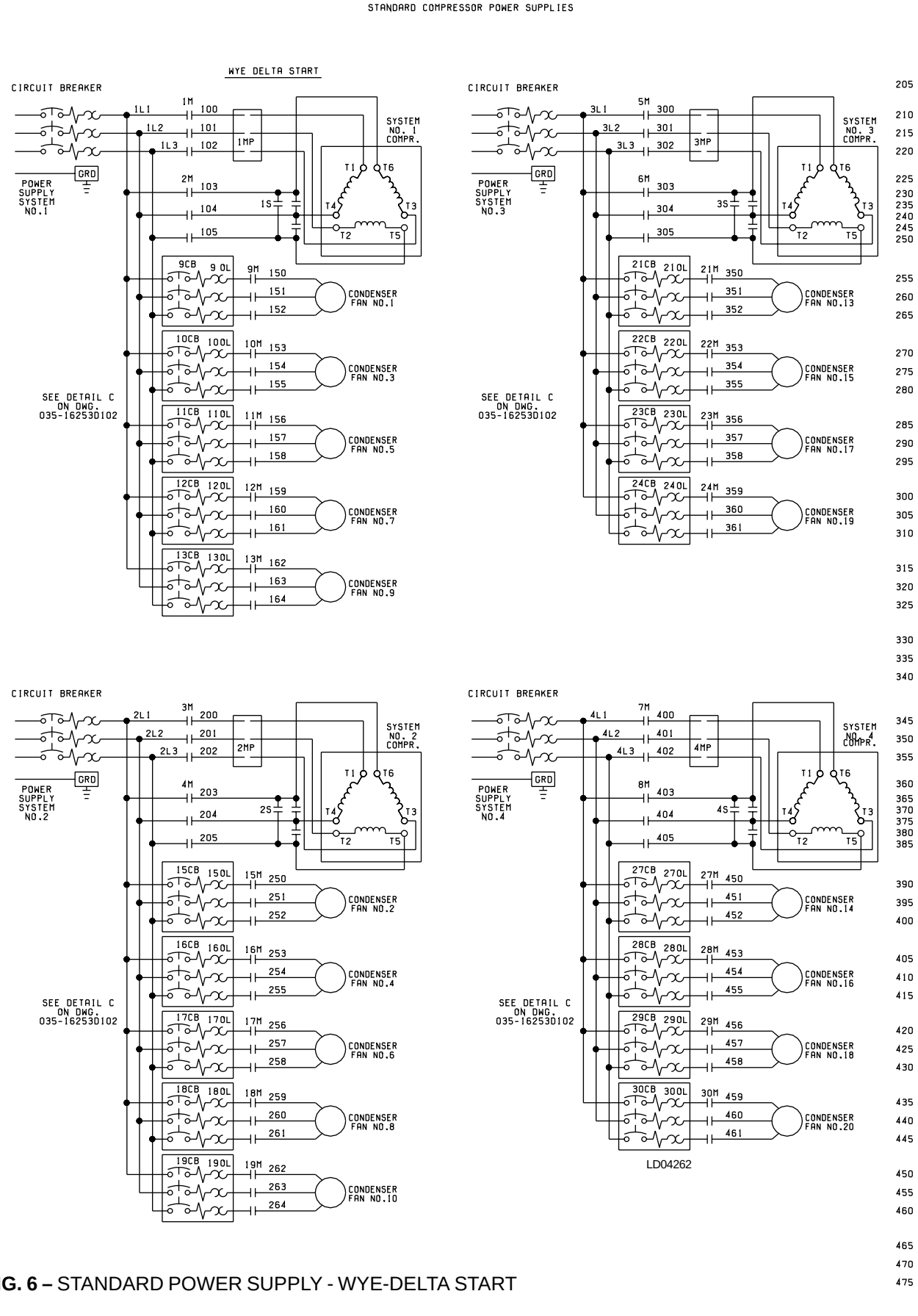


FIG. 6 – STANDARD POWER SUPPLY - WYE-DELTA START

STANDARD COMPRESSOR POWER SUPPLIES ACROSS-THE-LINE START

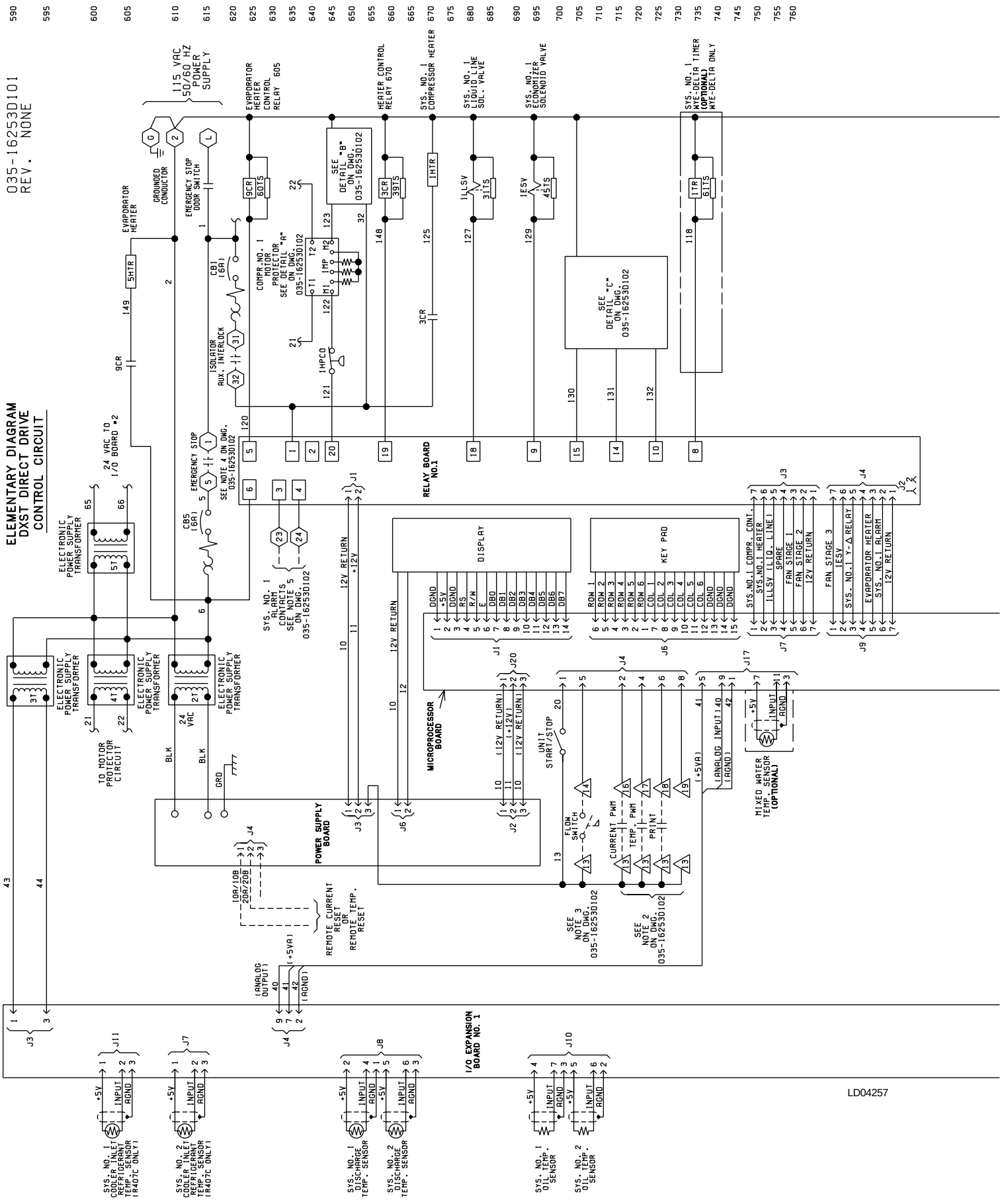
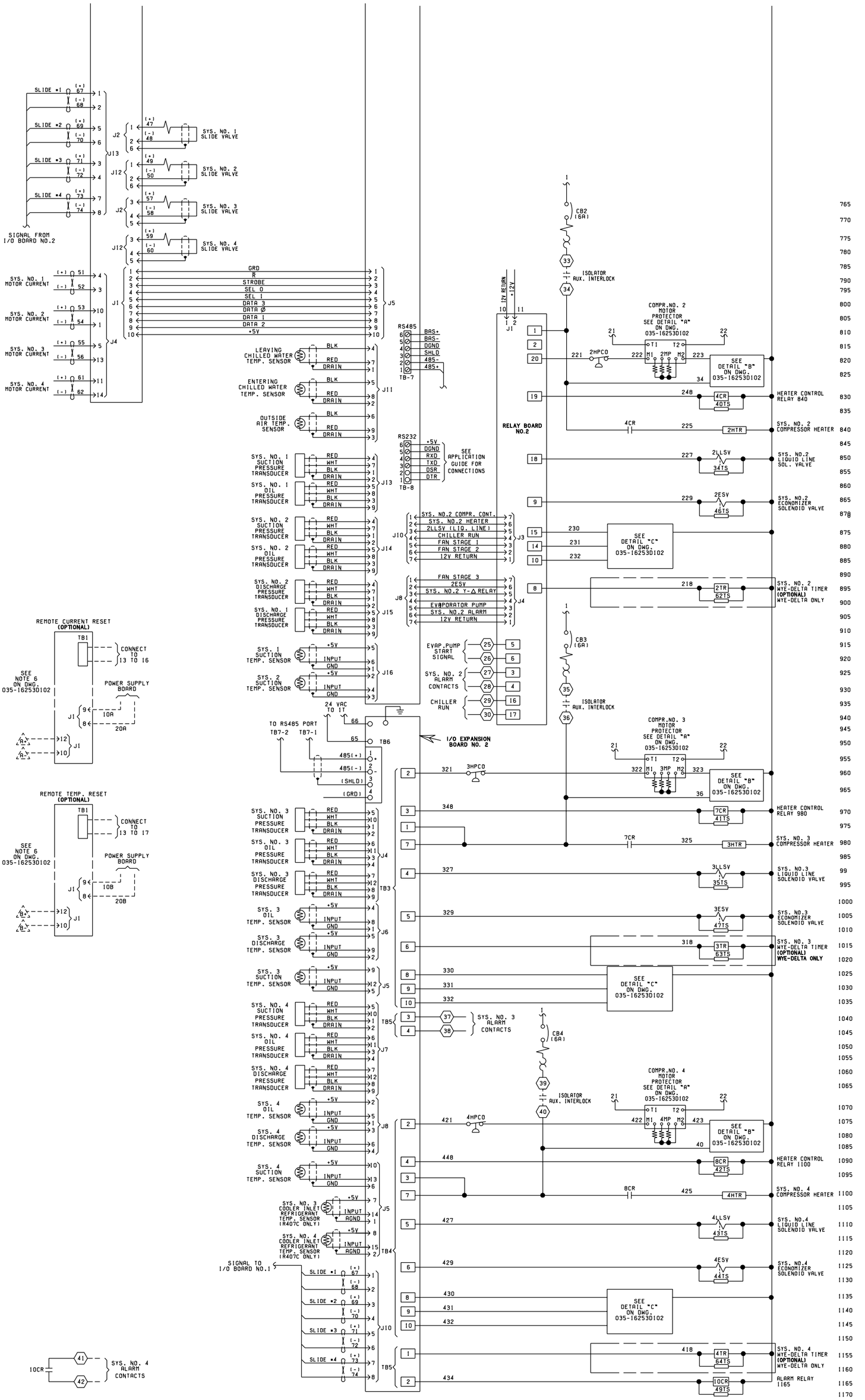


FIG. 7 – STANDARD COMPRESSOR POWER SUPPLIES - ACROSS-THE-LINE START



FORM 201.18-W4

COMPRESSOR TERMINAL BOX
SYSTEMS 1 THROUGH 4

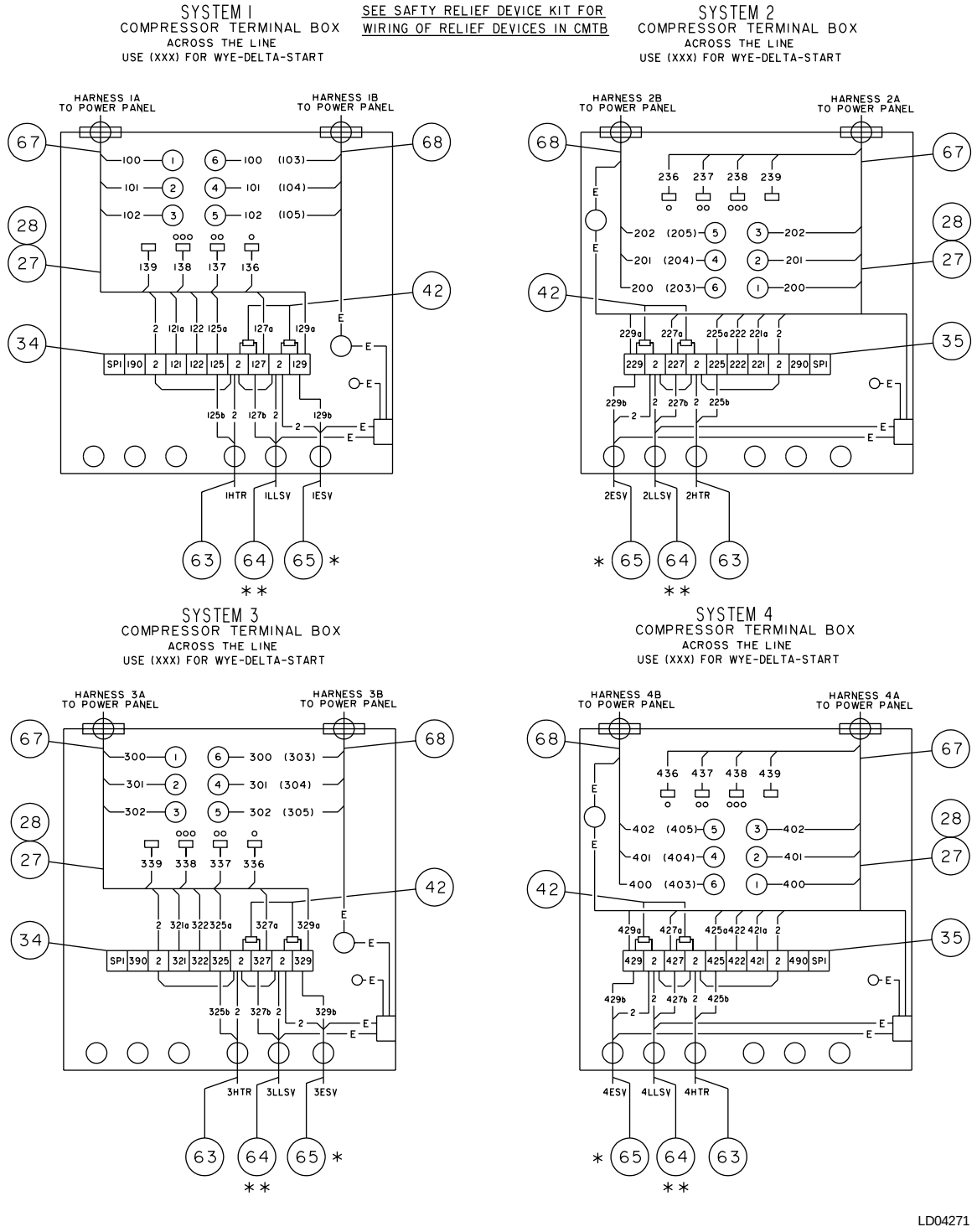


FIG. 8 – COMPRESSOR TERMINAL BOX, SYSTEMS 1-4

CONNECTION DIAGRAM - ELECTRICAL BOX
YCAS0360 - 0440, YCAS1063 - 1263 (STYLE F)
STANDARD & REMOTE EVAP. UNITS

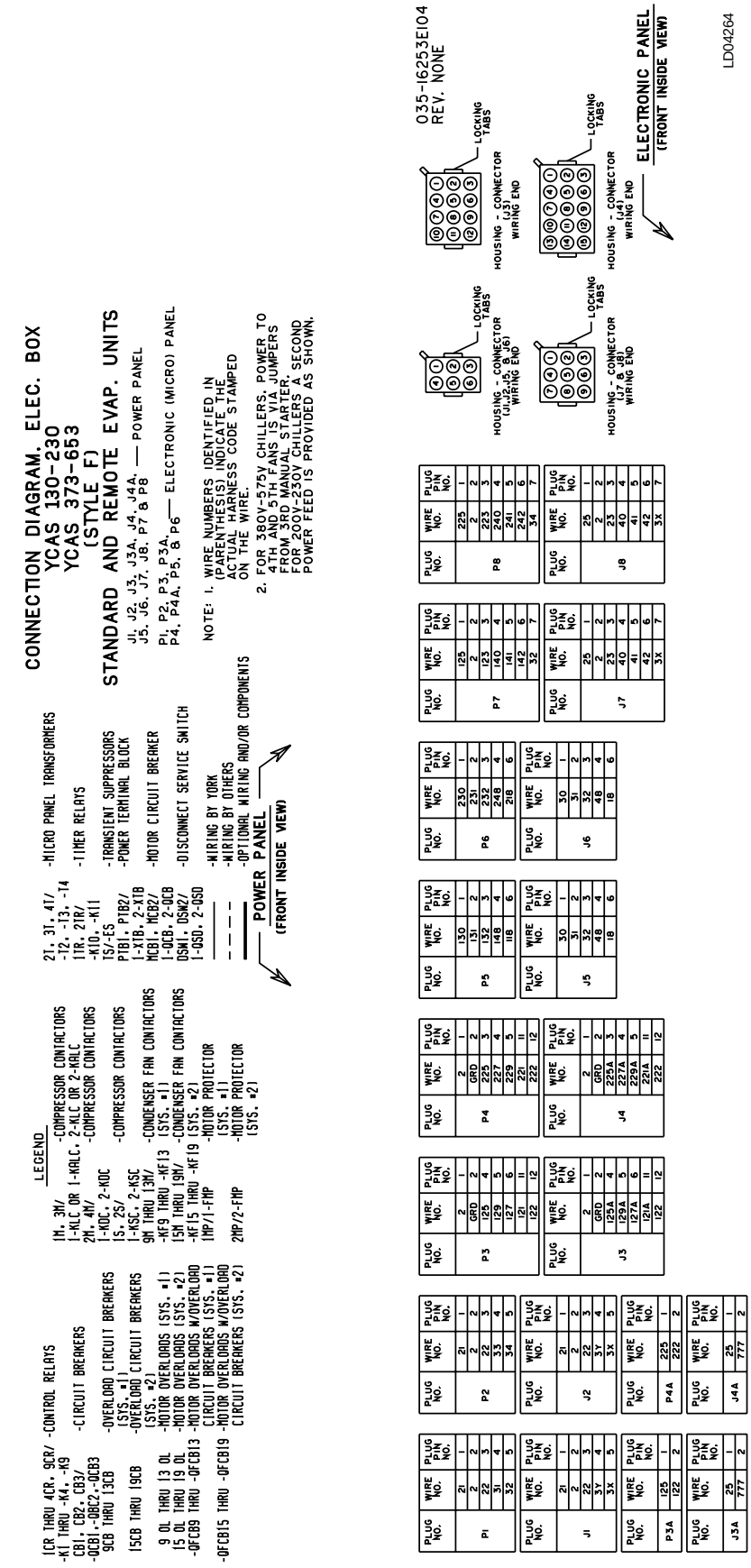


FIG. 9 – CONNECTION DIAGRAM

CONNECTION DIAGRAM - ELECTRICAL BOX
YCAS0360 - 0440, YCAS1063 - 1263 (STYLE F)
STANDARD & REMOTE EVAP. UNITS

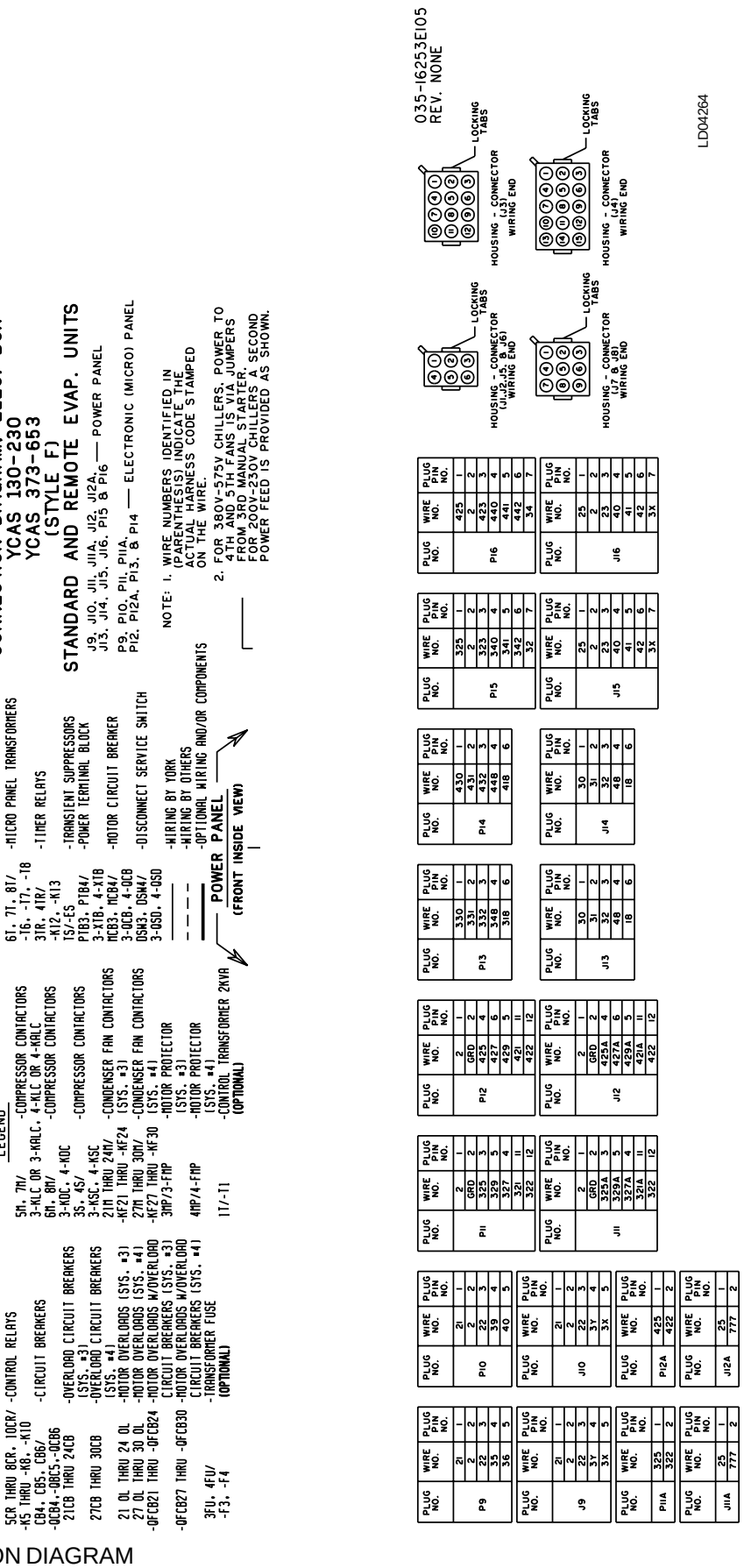
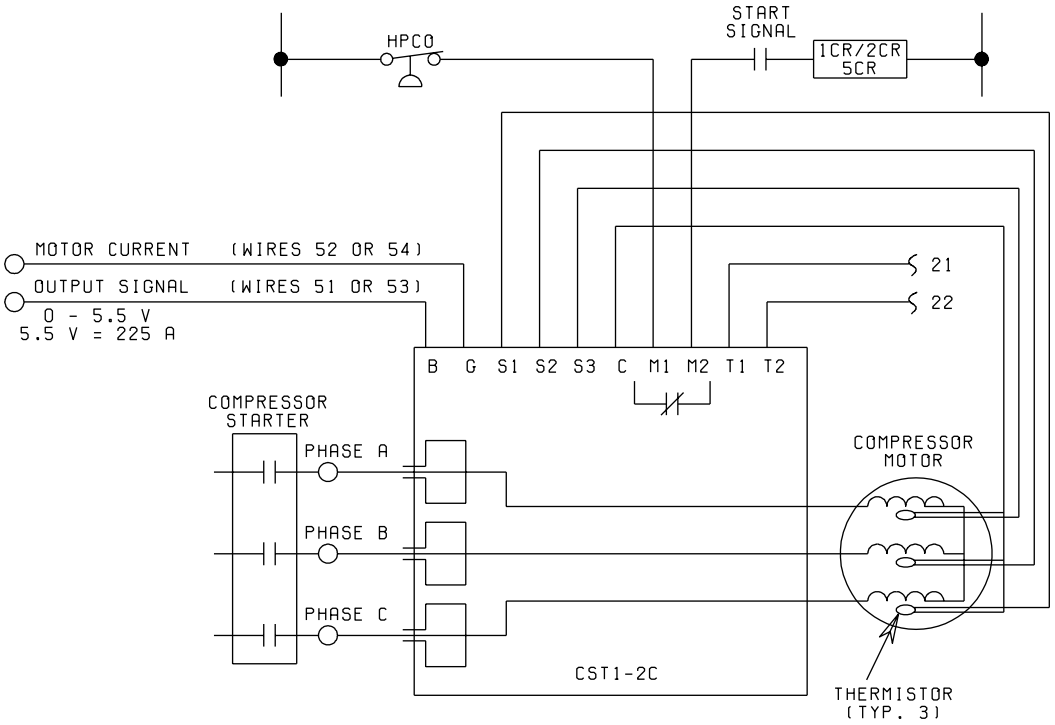


FIG. 10 – CONNECTION DIAGRAM

ELEMENTARY DIAGRAM
DXST DIRECT DRIVE
CONTROL CIRCUIT



DETAIL "A"

NOTES:
1. FIELD WIRING TO BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE NATIONAL ELECTRICAL CODE AS WELL AS ALL OTHER APPLICABLE CODES AND SPECIFICATIONS.
2. CONTACTS MUST BE SUITABLE FOR SWITCHING 24VDC. (GOLD CONTACTS RECOMMENDED). WIRING SHALL NOT BE RUN IN THE SAME CONDUIT WITH ANY LINE VOLTAGE WIRING.
3. TO CYCLE UNIT ON AND OFF AUTOMATICALLY WITH CONTACT SHOWN, INSTALL A CYCLING DEVICE IN SERIES WITH THE FLOW SWITCH (FLSW). SEE NOTE 2 FOR CONTACT RATING AND WIRING SPECIFICATIONS.
4. TO STOP UNIT (EMERGENCY STOP) WITH CONTACTS OTHER THAN THOSE SHOWN, INSTALL THE STOP CONTACT BETWEEN TERMINALS 5 AND 1. IF A STOP DEVICE IS NOT INSTALLED, A JUMPER MUST BE CONNECTED BETWEEN TERMINALS 5 AND 1. DEVICE MUST HAVE A MINIMUM CONTACT RATING OF 100VA AT 115VOLTS A.C.
5. ALARM CONTACTS ARE FOR ANNUNCIATING ALARM/UNIT MALFUNCTION. CONTACTS ARE RATED AT 115V, 100VA, RESISTIVE LOAD ONLY, AND MUST BE SUPPRESSED AT LOAD BY USER.
6. SEE INSTALLATION, OPERATION AND MAINTENANCE MANUAL WHEN OPTIONAL EQUIPMENT IS USED.
7. JUMPER MUST BE INSTALLED FOR THREE COMPRESSOR OPERATION.

LEGEND

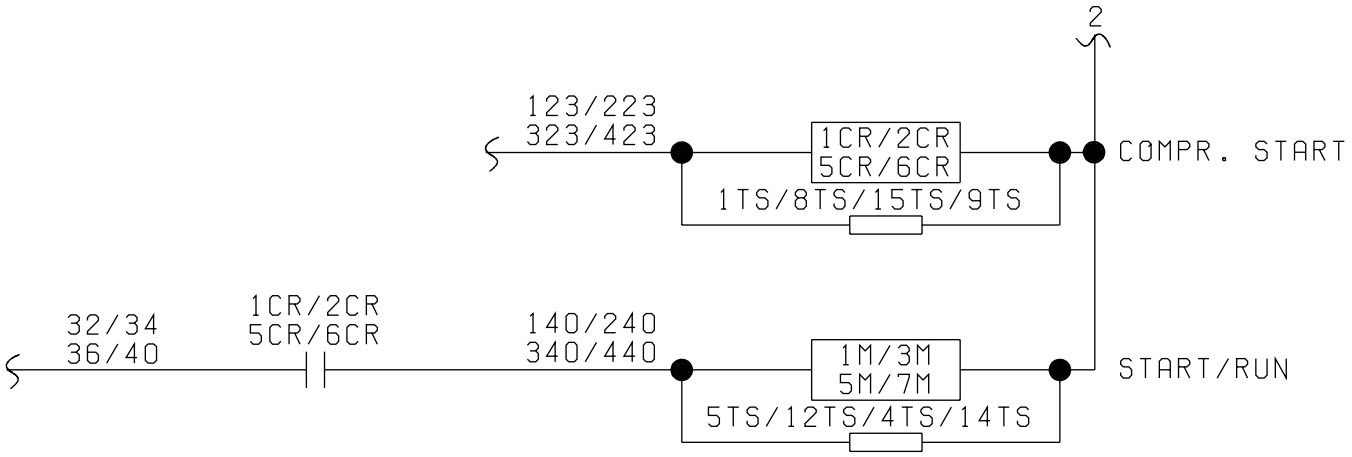
TS	TRANSIENT VOLTAGE SUPRESSION
⬡	TERMINAL BLOCK FOR CUSTOMER CONNECTIONS
△	TERMINAL BLOCK FOR CUSTOMER LOW VOLTAGE (CLASS 2) CONNECTIONS. SEE NOTE 2.
▭	TERMINAL BLOCK FOR YORK CONNECTIONS ONLY
———	WIRING AND COMPONENTS BY YORK
—·—·—	OPTIONAL EQUIPMENT
– – – –	WIRING AND/OR COMPONENTS BY OTHERS

035-15937D102
REV. NONE

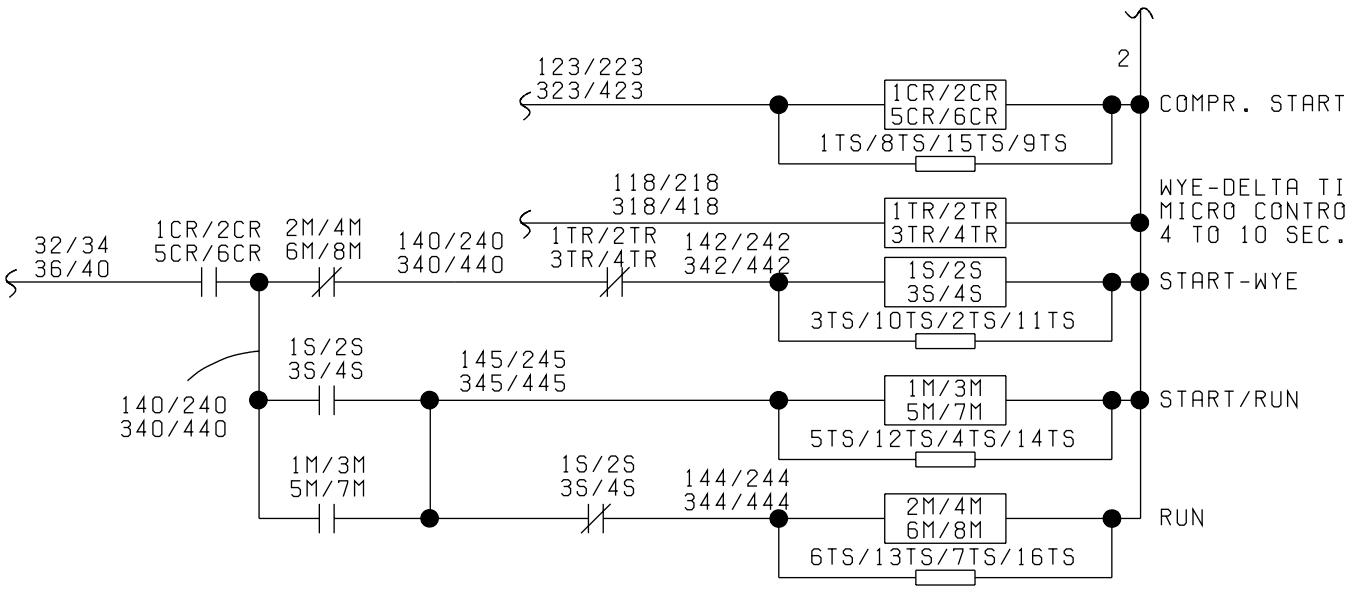
LD04177

FIG. 11 – ELEMENTARY DIAGRAM, DXST DIRECT DRIVE - CONTROL CIRCUIT

ELEMENTARY DIAGRAM
DXST DIRECT DRIVE
CONTROL CIRCUIT



ACROSS THE LINE START



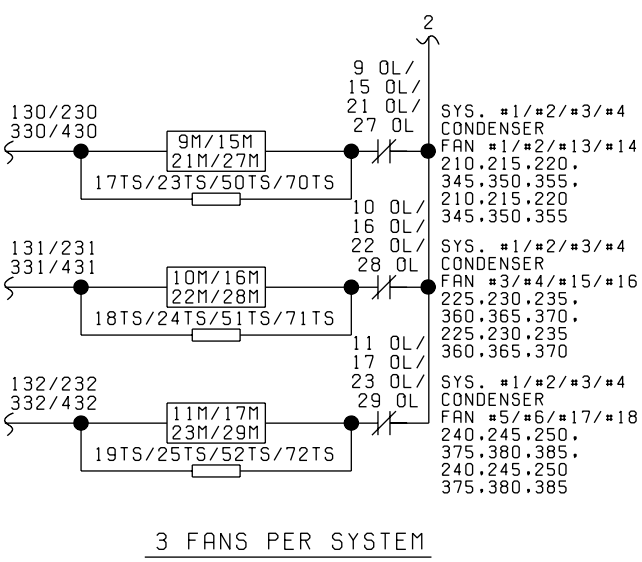
WYE DELTA START

LD04695

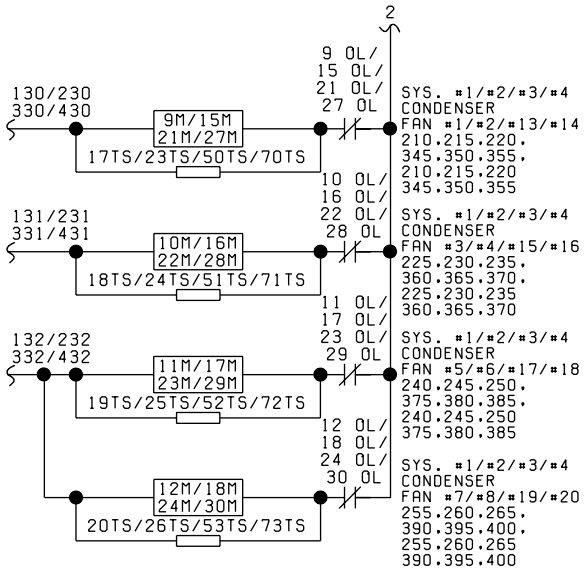
DETAIL "B"

FIG. 12 – ELEMENTARY DIAGRAM, DXST DIRECT DRIVE - CONTROL CIRCUIT

ELEMENTARY DIAGRAM
DXST DIRECT DRIVE
CONTROL CIRCUIT



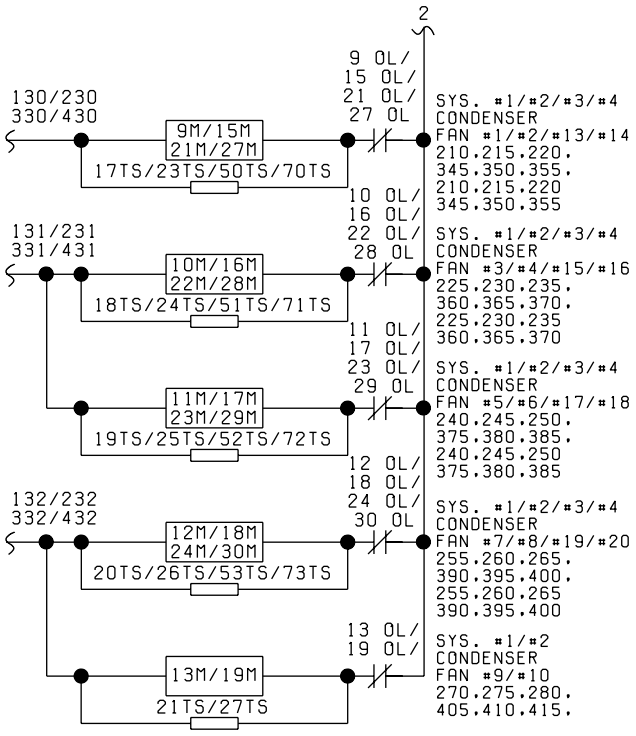
3 FANS PER SYSTEM



4 FANS PER SYSTEM

DETAIL "C"

SEE INSTALLATION, OPERATION AND MAINTENANCE MANUAL
FOR NUMBER OF CONDENSER FANS FOR CHILLER MODELS

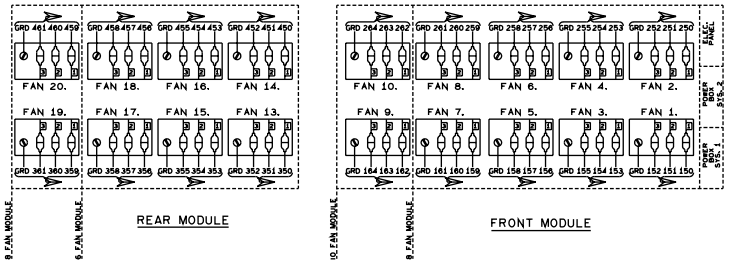


LD04757

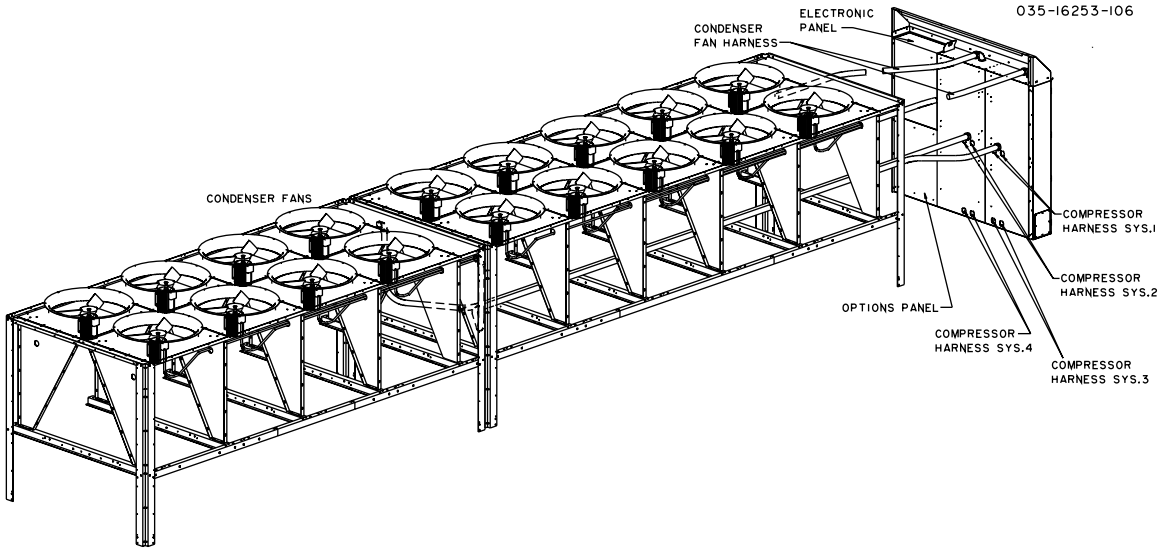
5 FANS PER SYSTEM

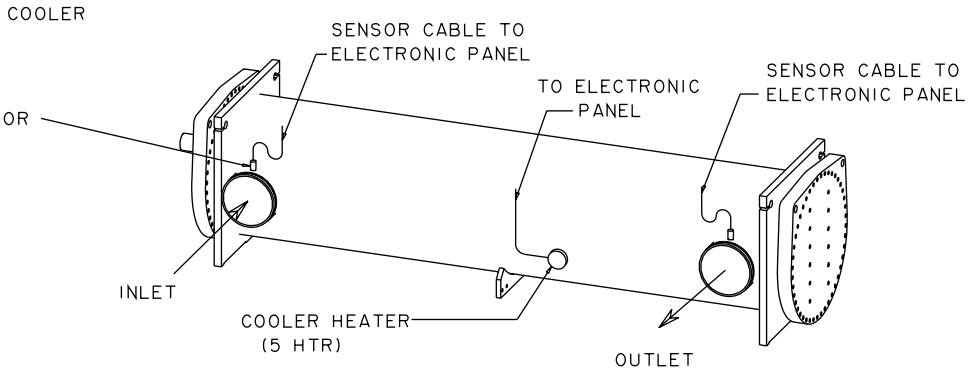
FIG. 13 – ELEMENTARY DIAGRAM, DXST DIRECT DRIVE - CONTROL CIRCUIT

CONNECTION DIAGRAM SYSTEM WIRING
STANDARD & REMOTE EVAP. UNITS



CONNECTION DIAGRAMS SYSTEM WIRING
YCAS 0360 - 0440
YCAS 1063 - 1263
YCAS 1067 - 1287
(STYLE F)
STANDARD & REMOTE EVAP.UNITS





LD04269

LEGEND

1 HPCO	SYS. NO.1 HIGH PRESS. CUTOUT
2 HPCO	SYS. NO.2 HIGH PRESS. CUTOUT
3 HPCO	SYS. NO.3 HIGH PRESS. CUTOUT
4 HPCO	SYS. NO.4 HIGH PRESS. CUTOUT
1 HTR	SYS.NO.1 COMPR. CRANKCASE HEATER
2 HTR	SYS.NO.2 COMPR. CRANKCASE HEATER
3 HTR	SYS.NO.3 COMPR. CRANKCASE HEATER
4 HTR	SYS.NO.4 COMPR. CRANKCASE HEATER
5 HTR	COOLER HEATER
1 LLSV	SYS.NO.1 LIQUID LINE SOLENIOD VALVE (UNIT IDENT)
2 LLSV	SYS.NO.2 LIQUID LINE SOLENIOD VALVE (UNIT IDENT)
3 LLSV	SYS.NO.3 LIQUID LINE SOLENIOD VALVE (UNIT IDENT)
4 LLSV	SYS.NO.4 LIQUID LINE SOLENIOD VALVE (UNIT IDENT)
1 ESV	ECONOMIZER SOLENOID VAVLE (UNIT IDENT)
2 ESV	ECONOMIZER SOLENOID VAVLE (UNIT IDENT)
3 ESV	ECONOMIZER SOLENOID VAVLE (UNIT IDENT)
4 ESV	ECONOMIZER SOLENOID VAVLE (UNIT IDENT)
TXV 1	SYS.NO.1 THERMAL EXPANSION VALVE (UNIT IDENT)
TXV 2	SYS.NO.2 THERMAL EXPANSION VALVE (UNIT IDENT)
TXV 3	SYS.NO.3 THERMAL EXPANSION VALVE (UNIT IDENT)
TXV 4	SYS.NO.4 THERMAL EXPANSION VALVE (UNIT IDENT)

FIG. 14 – CONNECTION DIAGRAM SYSTEM WIRING

CONNECTION DIAGRAM SYSTEM WIRING
STANDARD & REMOTE EVAP. UNITS

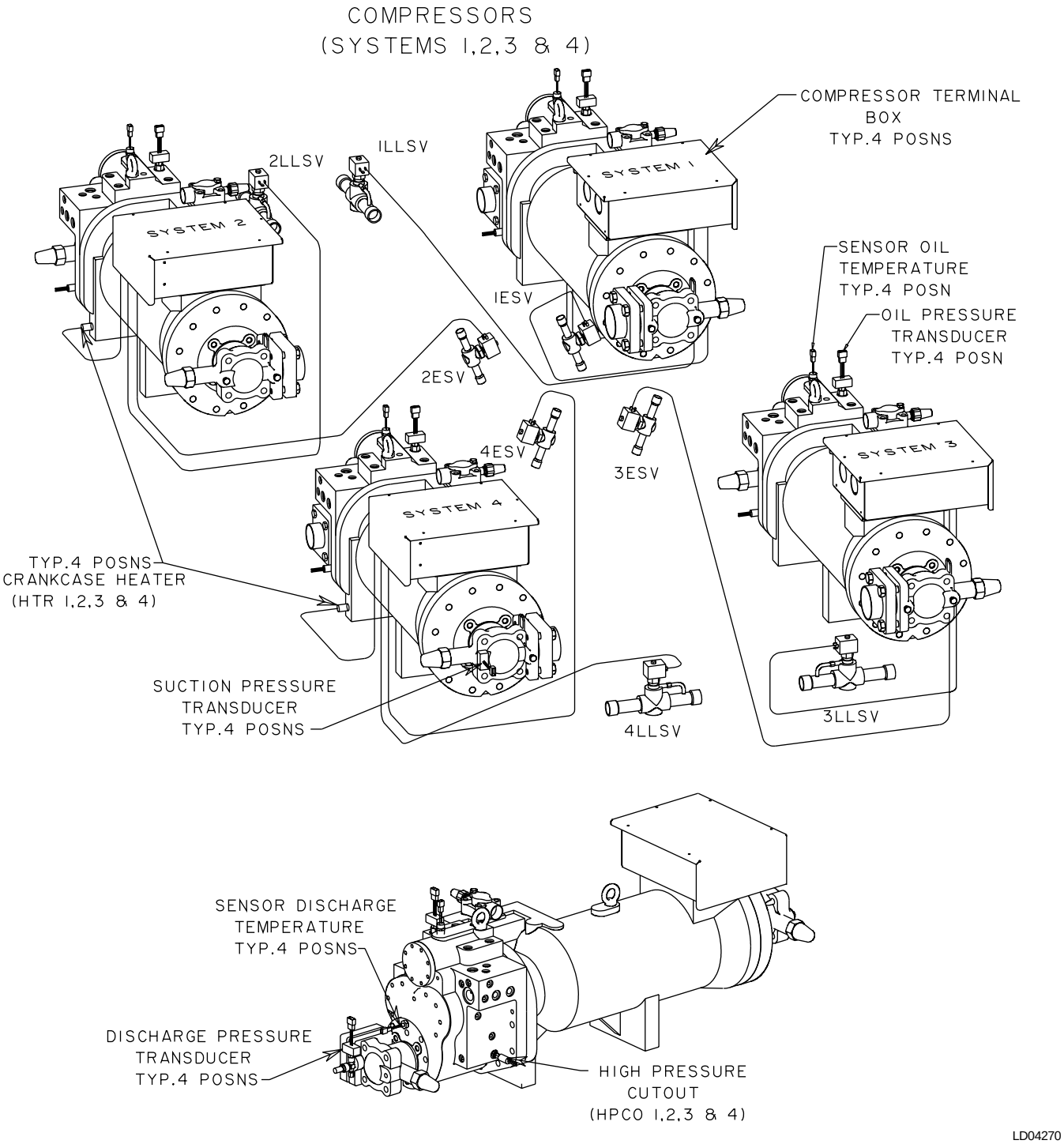


FIG. 15 – CONNECTION DIAGRAM SYSTEM WIRING

CONTROL POWER TRANSFORMER KIT (STANDARD)

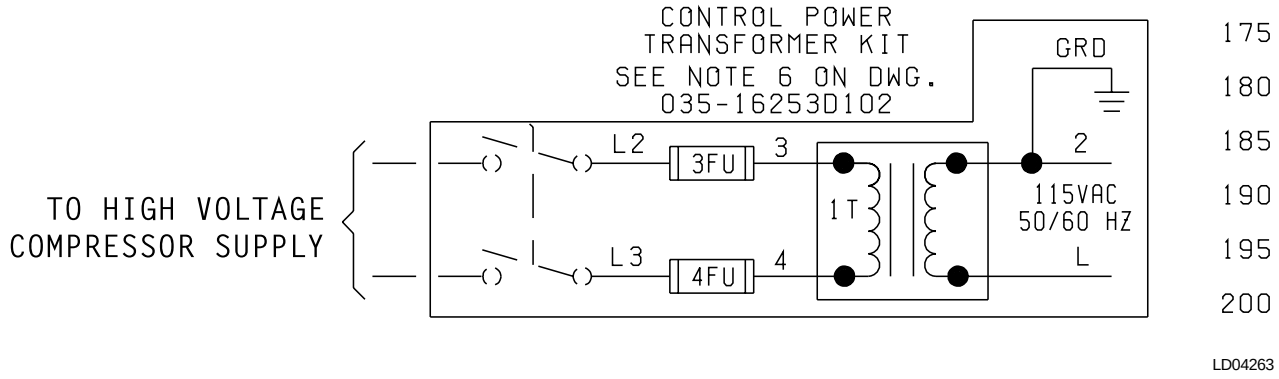


FIG. 16 – CONTROL TRANSFORMER

P.O. Box 1592, York, Pennsylvania USA 17405-1592

Form 201.18-W4 (899)
Supersedes: Nothing