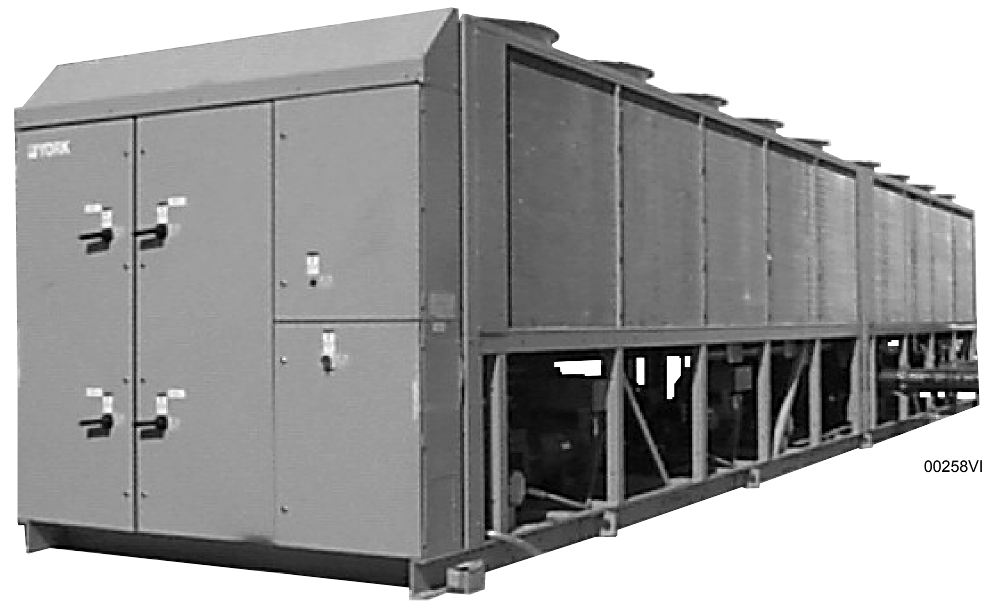
AIR-COOLED SCREW LIQUID CHILLERS

WIRING DIAGRAM	New Release	Form 201.19-W2 (304)

YCAS AIR-COOLED LIQUID CHILLERS
YCAS0250 THROUGH YCAS0330 (3 COMPRESSOR)
YCAS0360 THROUGH YCAS0440 (4 COMPRESSOR)
STYLE G
(60 Hz)



00258VIP

TABLE OF CONTENTS

LIST OF FIGURES

PAGE

NOMENCLATURE

The Model Number denotes the following characteristics of the unit:

YC A S 0330 E C 17 Y G

YORK Chiller
YC = YORK Chiller

Air-Cooled

Compressor Type
S = Screw

Nominal Capacity (tons)

Unit Designator
S = Standard Unit
E = High Efficiency
H = High Static Fans

Refrigerant
C = R-22

Voltage Code
17 = 200-3-60
28 = 230-3-60
40 = 380-3-60
46 = 460-3-60
58 = 575-3-60

Type Start
Y = Star (WYE)-Delta
X = Across-the-Line

Design Series

WARNING

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

Work on electronic equipment should not be undertaken unless the individual(s) have been trained in the proper maintenance of 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 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.

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ELECTRICAL NOTES

NOTES & LEGEND

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
-58 = 575-3-60

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 recommended fuse size is based on 150% of the largest motor RLA plus 100% of the remaining RLAs. 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 recommended circuit breaker is 150% maximum plus 100% of rated load amps included in the circuit. 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 conductors** 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 (Wye)-Delta Compressor motor start must also include factory-provided individual system circuit breakers in each motor control center. All 3 & 4 Compressor machines equipped with Star-Delta compressor motor start must also include factory-provided individual system 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 cU.L. Machines.

ELECTRICAL DATA

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

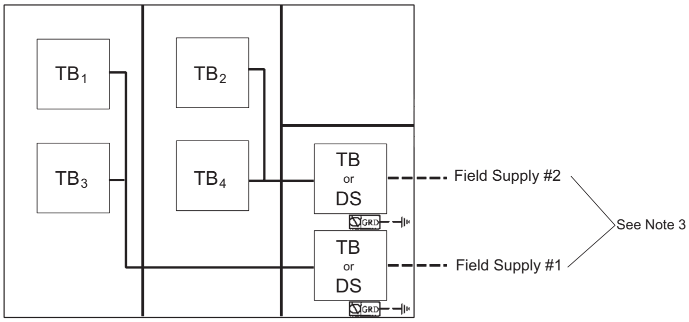
CONTROL POWER SUPPLY (UNITS WITH STANDARD CONTROL CIRCUIT TRANSFORMER)

NO. OF COMPRESSORS	CONTROL POWER SUPPLY	MCA (MAX LOAD CURRENT)	RECOMMENDED DUAL ELEMENT FUSE SIZE	NON-FUSED DISCONNECT SWITCH SIZE
3 or 4	380V - 60 HZ 460V - 60 HZ 575V - 60 HZ	9.9A 8.2A 6.5A	30A 15A 15A	— — —

TABLE 1 – COMPRESSOR DATA

MAXIMUM kW AND AMPERAGE VALUES FOR DXST COMPRESSORS																		
	COMPRESSOR MODEL AND VOLTAGE CODE																	
	DXS45LA – MOTOR CODE A (B5N, B5E, B6N, B6E)						DXS36LA – MOTOR CODE A (A5N, A5E, A6N, A6E)						DXS24LA – MOTOR CODE (TBD) (C5N, C5E, C6N, C6E)					
VOLTAGE CODE-	-17	-28	-40	-46	-50	-58	-17	-28	-40	-46	-50	-58	-17	-28	-40	-46	-50	-56
MAX kW	150	150	150	150	113	150	150	150	150	150	113	150	105	105	105	105	80	105
MAX AMPS	492	428	259	214	193	171	492	428	259	214	193	171	338	294	178	147	135	118

ELECTRICAL DATA



LD05555

MULTIPLE POINT POWER SUPPLY CONNECTION

Suitable for:
Across-The-Line-Start

Two field provided power supply circuits to the unit. Field Power Wiring connections to factory provided, Non-Fused Disconnect Switches (Opt), or Terminal Blocks (Opt) in the Option Box.

See page 6 for notes.

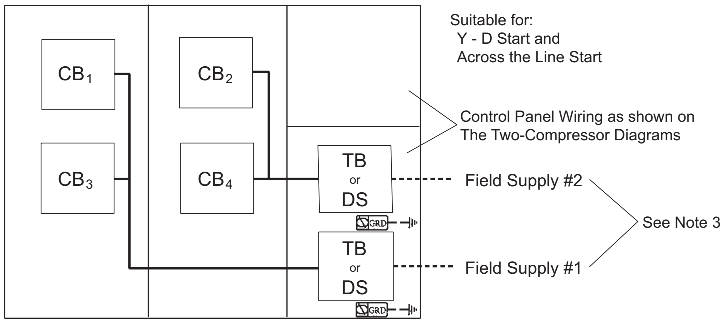
MULTIPLE POINT POWER SUPPLY CONNECTION - 3 & 4 COMPRESSOR UNITS

(Two Field Provided Power Supply Circuits to the Chiller. Field Connections to Factory provided Terminal Block (Std) or Disconnects (Opt) in the Options Panel.

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, 9]	OVER-CURRENT PROTECTION		STANDARD TERMINAL BLOCK	OPTIONAL NF DISC. SWITCH	RLA	Y-Δ LRA	X-LRA	RLA	Y-Δ LRA	X-LRA	QTY	FLA(EA)	LRA(EA)
				MIN.[3, 5]	MAX.[4, 6]											
0250EC	380	387	400	450	500	(2) # 2-300	(2) 3/0-250	155	343	1,093	155	343	1,093	8	4.8	23.0
	460	320	400	400	400	(1)2/0-(2)4/0	(2) 3/0-250	128	280	893	128	280	893	8	4.0	19.0
	575	257	400	300	350	(1)2/0-(2)4/0	(2) 3/0-250	103	224	714	103	224	714	8	3.1	15.2
0270EC	380	477	600	600	700	(2) # 2-300	(2) 250-500	155	343	1,093	227	343	1,093	8	4.8	23.0
	460	390	400	450	500	(2) # 2-300	(2) 3/0-250	128	280	893	184	280	893	8	4.0	19.0
	575	312	400	350	450	(1)2/0-(2)4/0	(2) 3/0-250	103	224	714	147	224	714	8	3.1	15.2
0300EC	380	473	600	600	600	(2) # 2-300	(2) 250-500	181	343	1,093	199	343	1,093	9	4.8	23.0
	460	390	400	450	500	(2) # 2-300	(2) 3/0-250	149	280	893	164	280	893	9	4.0	19.0
	575	311	400	350	400	(1)2/0-(2)4/0	(2) 3/0-250	119	224	714	131	224	714	9	3.1	15.2
0330EC	380	524	600	600	700	(2)2/0-500	(2) 250-500	197	343	1,093	227	343	1,093	9	4.8	23.0
	460	429	600	500	600	(2) # 2-300	(2) 250-500	163	280	893	184	280	893	9	4.0	19.0
	575	342	400	400	500	(1)2/0-(2)4/0	(2) 3/0-250	130	224	714	147	224	714	9	3.1	15.2
0360EC	380	442	600	500	600	(2) # 2-300	(2) 250-500	199	343	1,093	155	343	1,093	8	4.8	23.0
	460	365	400	450	500	(1)2/0-(2)4/0	(2) 3/0-250	164	280	893	128	280	893	8	4.0	19.0
	575	292	400	350	400	2/0 -500	(2) 3/0-250	131	224	714	103	224	714	8	3.1	15.2
0400EC	380	473	600	600	600	(2) # 2-300	(2) 250-500	181	343	1,093	199	343	1,093	9	4.8	23.0
	460	390	400	450	500	(2) # 2-300	(2) 3/0-250	149	280	893	164	280	893	9	4.0	19.0
	575	311	400	350	400	2/0-500	(2) 3/0-250	119	224	714	131	224	714	9	3.1	15.2
0440EC	380	524	600	600	700	(2)2/0-500	(2) 250-500	197	343	1,093	227	343	1,093	9	4.8	23.0
	460	429	600	500	600	(2) # 2-300	(2) 250-500	163	280	893	184	280	893	9	4.0	19.0
	575	342	400	400	450	(1)2/0-(2)4/0	(2) 3/0-250	130	224	714	147	224	714	9	3.1	15.2

See page 6 for Electrical Data footnotes.

ELECTRICAL DATA (CONT'D)



MULTIPLE POINT POWER SUPPLY CONNECTION WITH OPTIONAL INDIVIDUAL SYSTEM CIRCUIT BREAKERS

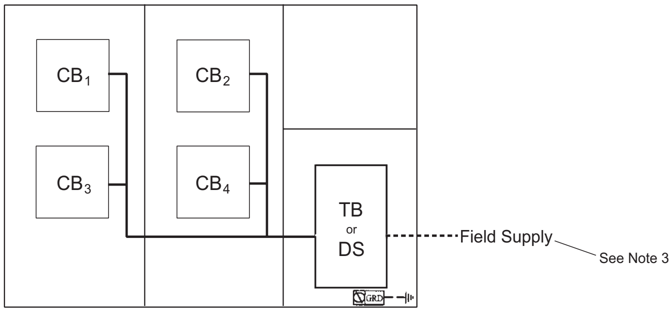
Two field provided power supply circuits to the unit with individual branch circuit protection. Field Power Wiring connections to factory provided, Non-Fused Disconnect Switches (Opt), or Terminal Blocks (Opt) in the Option Box. Factiry connections to each of the Circuit Breakers in each of the two power panels.

See page 6 for notes.

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[2,9]	OVER-CURRENT PROTECTION[13]		STANDARD TERMINAL BLOCK	OPTIONAL NF DISC. SWITCH	RLA	Y-Δ LRA	X-LRA	RLA	Y-Δ LRA	X-LRA	QTY	FLA(EA)	LRA(EA)
				MIN.[3, 5]	MAX.[4, 6]											
0250EC	380	213	200	300	350	# 2-300	# 4-300	155	343	1,093	—	—	—	4	4.8	23.0
	460	176	175	225	300	# 2-4/0	# 4-300	128	280	893	—	—	—	4	4.0	19.0
	575	141	150	175	225	# 2-4/0	# 4-300	103	224	714	—	—	—	4	3.1	15.2
0270EC	380	213	200	300	350	# 2-300	# 4-300	155	343	1,093	—	—	—	4	4.8	23.0
	460	176	175	225	300	# 2-4/0	# 4-300	128	280	893	—	—	—	4	4.0	19.0
	575	141	150	175	225	# 2-4/0	# 4-300	103	224	714	—	—	—	4	3.1	15.2
0300EC	380	250	250	300	400	# 2-300	# 6-350	181	343	1,093	—	—	—	5	4.8	23.0
	460	206	200	250	350	# 2-300	# 4-300	149	280	893	—	—	—	5	4.0	19.0
	575	164	175	200	250	# 2-4/0	# 6-350	119	224	714	—	—	—	5	3.1	15.2
0330EC	380	270	400	350	450	2/0-500	(2) 3/0-250	197	343	1,093	—	—	—	5	4.8	23.0
	460	224	225	300	350	# 2-300	# 4-300	163	280	893	—	—	—	5	4.0	19.0
	575	178	175	225	300	# 2-4/0	# 6-350	130	224	714	—	—	—	5	3.1	15.2
0360EC	380	442	600	500	600	(2) 2-300	(2) 250-500	199	343	1,093	155	343	1,093	8	4.8	23.0
	460	365	400	450	500	(1)2/0-(2)4/0	(2) 3/0-250	164	280	893	128	280	893	8	4.0	19.0
	575	292	400	350	400	2/0-500	(2) 3/0-250	131	224	714	103	224	714	8	3.1	15.2
0400EC	380	473	600	600	600	(2) # 2-300	(2) 250-500	181	343	1,093	199	343	1,093	9	4.8	23.0
	460	390	400	450	500	(1)2/0-(2)4/0	(2) 3/0-250	149	280	893	164	280	893	9	4.0	19.0
	575	311	400	350	400	2/0-500	(2) 3/0-250	119	224	714	131	224	714	9	3.1	15.2
0440EC	380	524	600	600	700	(2)2/0-500	(2) 250-500	197	343	1,093	227	343	1,093	9	4.8	23.0
	460	429	600	500	600	(2) # 2-300	(2) 250-500	163	280	893	184	280	893	9	4.0	19.0
	575	342	400	400	450	(1)2/0-(2)4/0	(2) 3/0-250	130	224	714	147	224	714	9	3.1	15.2

ELECTRICAL DATA (CONT'D)

OPTIONAL SINGLE POINT POWER SUPPLY CONNECTION AND INDIVIDUAL SYSTEM CIRCUIT BREAKERS



LD05548

Suitable for:
Y - Δ Start and
Across-The-Line-Start

One field provided power supply circuits to the unit with individual branch circuit protection. Field Power Wiring connections to factory provided, Non-Fused Disconnect Switches (Opt), or Terminal Blocks (Opt) in the Option Box.

See page 6 for notes.

OPTIONAL SINGLE-POINT POWER SUPPLY CONNECTION WITH INDIVIDUAL UNIT CIRCUIT BREAKERS

3 & 4 COMPRESSOR UNITS

(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

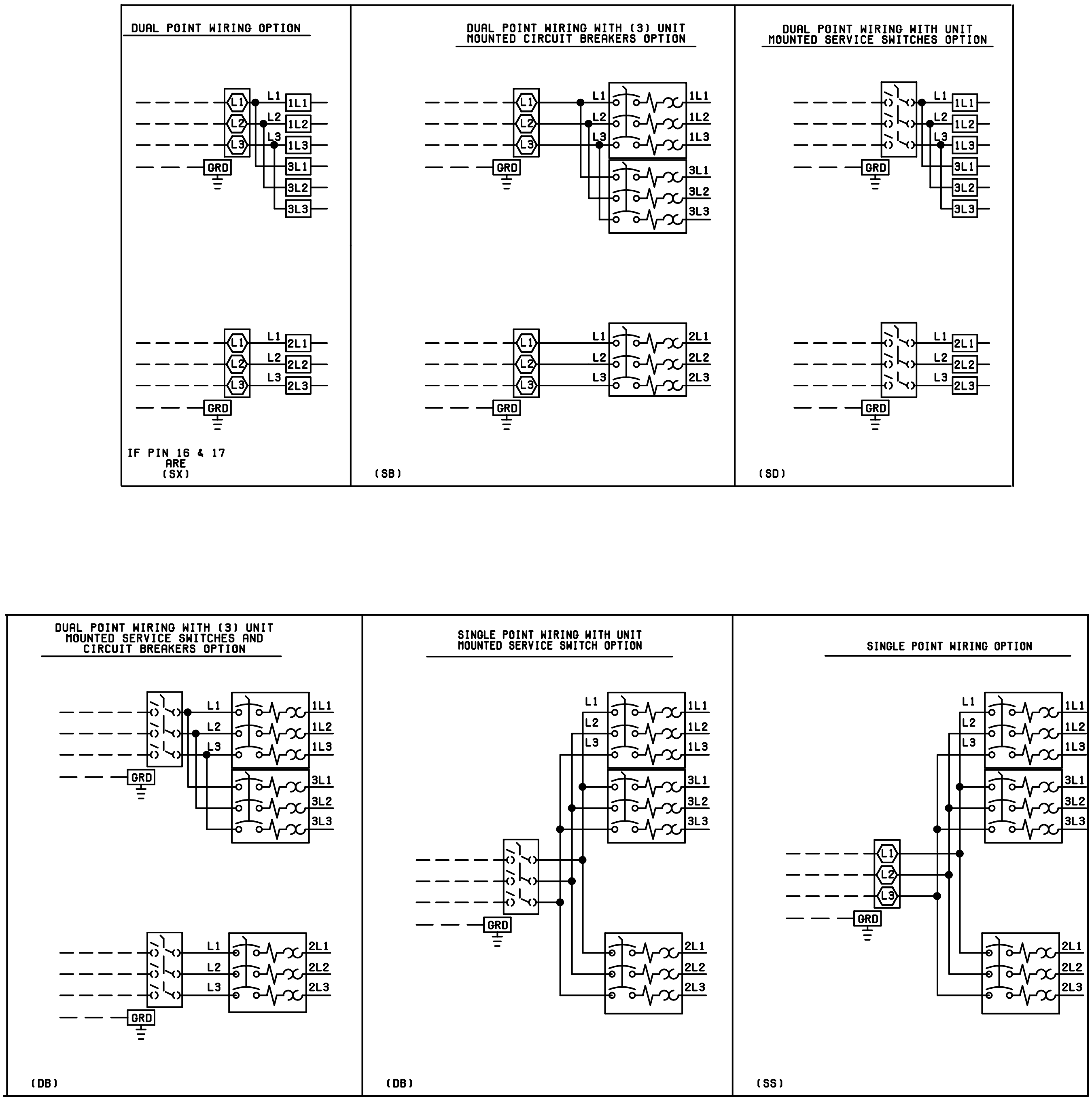
CHILLER MODEL YCAS	VOLTS	FIELD SUPPLIED WIRING					
		FIELD PROVIDED POWER SUPPLY				FACTORY PROVIDED (LUGS) WIRE RANGE[7]	
		MCA[1]	MIN NF DISC SW[2, 9]	OVER-CURRENT PROTECTION[13] MIN.[3, 5]	MAX.[4, 6]	TERMINAL BLOCK (LUGS) WIRE RANGE	NF DISC. SWITCH (LUGS) WIRE RANGE
0250EC	380	561	600	600	700	(2) 2/0-500	(2) 250-500
	460	464	600	500	500	(2) 1/0-300	(2) 250-500
	575	372	400	400	450	(2) # 2-4/0	(3) 2/0-250
0270EC	380	651	800	800	800	(2) 2/0-500	(3) 2/0-400
	460	534	600	600	700	(2) 2/0-500	(2) 250-500
	575	427	600	500	500	(2) 1/0-300	(2) 250-500
0300EC	380	678	800	800	800	(3) 1/0-300	(3) 2/0-400
	460	559	600	600	700	(2) 2/0-500	(2) 250-500
	575	445	600	500	500	(2) 1/0-500	(2) 250-500
0330EC	380	745	800	800	800	(3) 1/0-300	(3) 2/0-400
	460	612	800	700	700	(2) 2/0-500	(3) 2/0-400
	575	487	600	600	600	(2) 1/0-300	(2) 250-500
0360EC	380	835	1000	1000	1000	(3) 2/0-500	(4) 4/0-500
	460	689	800	800	800	(3) 1/0-300	(3) 2/0-400
	575	550	600	600	600	(2) 2/0-500	(2) 250-500
0400EC	380	896	1000	1000	1000	(3) 2/0-500	(4) 4/0-500
	460	739	1000	800	800	(3) 2/0-500	(4) 4/0-500
	575	589	800	700	700	(2) 2/0-500	(3) 2/0-400
0440EC	380	991	1200	1200	1200	(3) 2/0-500	(4) 4/0-500
	460	812	1000	1000	1000	(3) 2/0-500	(4) 4/0-500
	575	647	800	800	800	(2) 2/0-500	(3)2/0-400

ELECTRICAL DATA (CONT'D)

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	X-LRA	RLA	Y-Δ LRA	X-LRA	QTY	FLA (EA)	LRA (EA)	RLA	Y-Δ LRA	X-LRA	RLA	Y-Δ LRA	X-LRA	QTY	FLA (EA)	LRA(EA)
155	343	1,093	155	343	1,093	8	4.8	23.0	155	343	1,093	—	—	—	4	4.8	23.0
128	280	893	128	280	893	8	4.0	19.0	128	280	893	—	—	—	4	4.0	19.0
103	224	714	103	224	714	8	3.1	15.2	103	224	714	—	—	—	4	3.1	15.2
155	343	1,093	227	343	1,093	8	4.8	23.0	155	343	1,093	—	—	—	4	4.8	23.0
128	280	893	184	280	893	8	4.0	19.0	128	280	893	—	—	—	4	4.0	19.0
103	224	714	147	224	714	8	3.1	15.2	103	224	714	—	—	—	4	3.1	15.2
181	343	1,093	199	343	1,093	9	4.8	23.0	181	343	1,093	—	—	—	5	4.8	23.0
149	280	893	164	280	893	9	4.0	19.0	149	280	893	—	—	—	5	4.0	19.0
119	224	714	131	224	714	9	3.1	15.2	119	224	714	—	—	—	5	3.1	15.2
197	343	1,093	227	343	1,093	9	4.8	23.0	197	343	1,093	—	—	—	5	4.8	23.0
163	280	893	184	280	893	9	4.0	19.0	163	280	893	—	—	—	5	4.0	19.0
130	224	714	147	224	714	9	3.1	15.2	130	224	714	—	—	—	5	3.1	15.2
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

7

ELEMENTARY WIRING DIAGRAM
YCAS0250 - YCAS0330 (3 COMPRESSOR)



LD09350

FIG. 1 – WIRING DIAGRAM – DXST DIRECT DRIVE

ELEMENTARY WIRING DIAGRAM
YCAS0250 - YCAS0330 (3 COMPRESSOR)
ACROSS-THE-LINE START

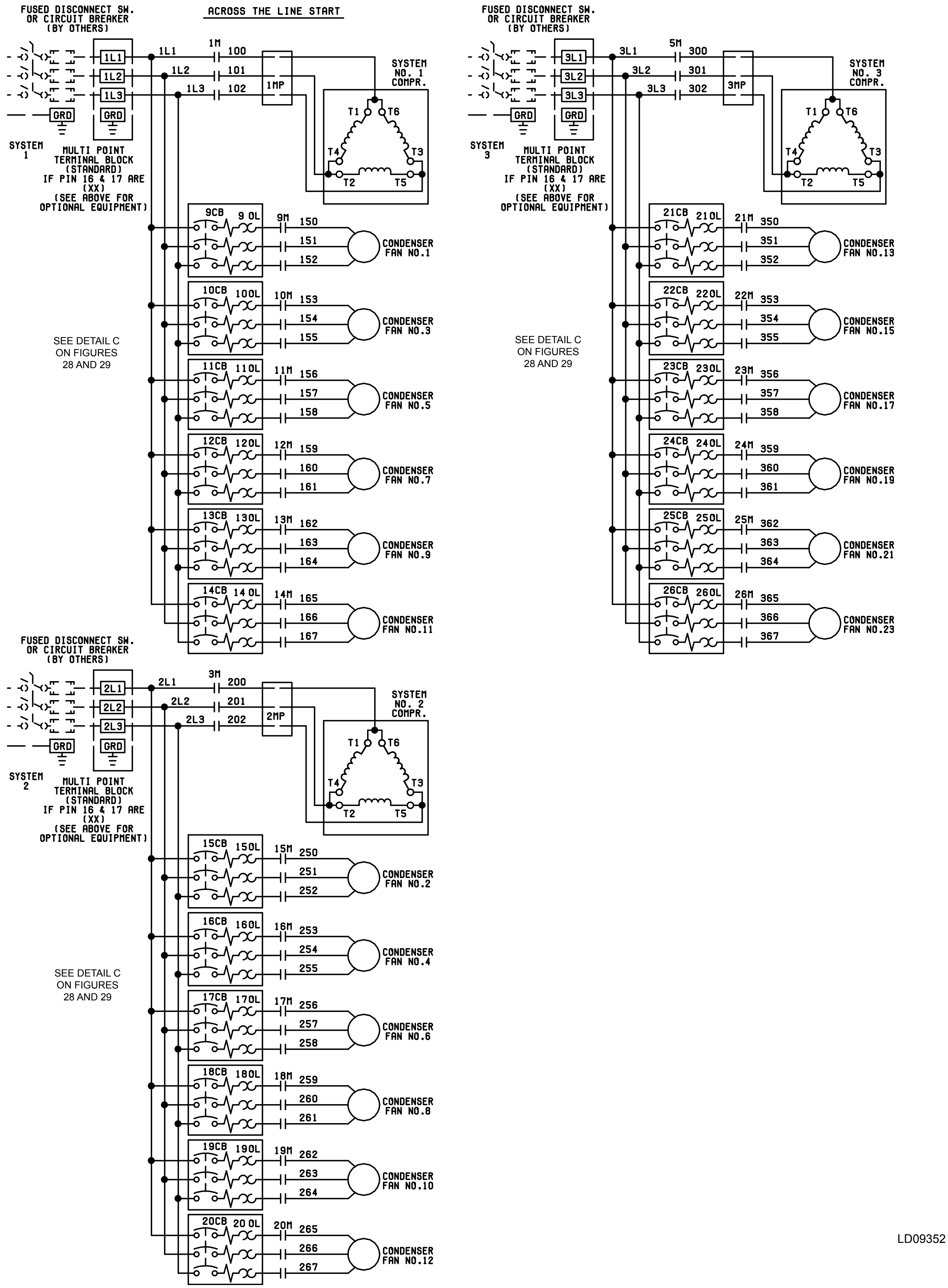


FIG. 2 – WIRING DIAGRAM – ACROSS-THE-LINE START

ELEMENTARY WIRING DIAGRAM
YCAS0250 - YCAS0330 (3 COMPRESSOR)
WYE DELTA START

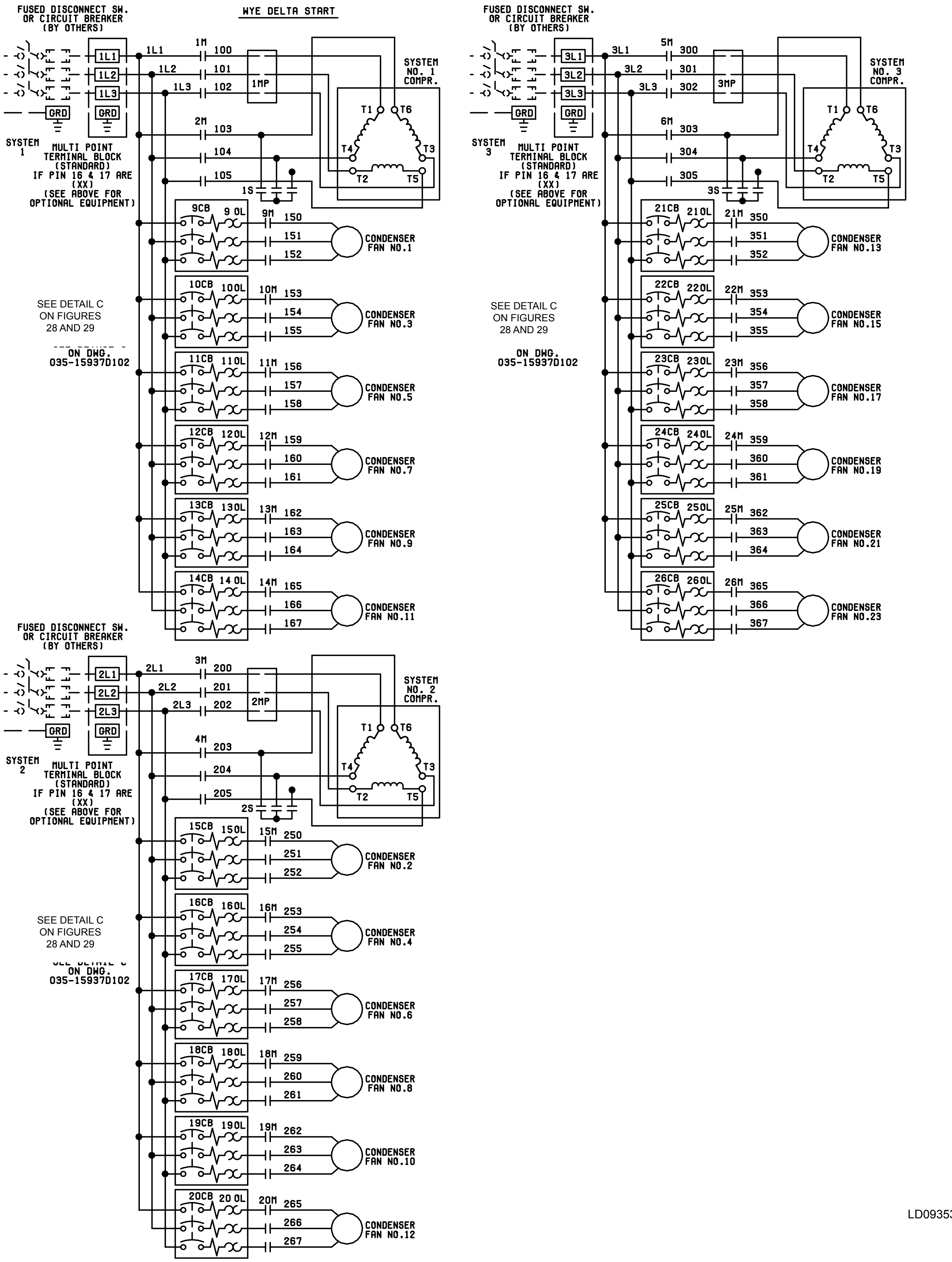


FIG. 3 – WIRING DIAGRAM – WYE DELTA START

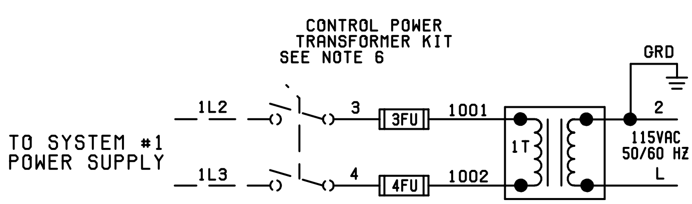
ELEMENTARY WIRING DIAGRAM (YCAS0250 - YCAS0330)
ACROSS-THE-LINE START
AND
WYE-DELTA START

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 recommend). Wiring shall not be run in the same conduit with any line voltage wiring.
3. To cycle the 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 100A at 115 volts A.C.
5. Alarm contacts are for annunciating alarm/unit malfunction. Contacts are rated at 115V, 100VA, 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

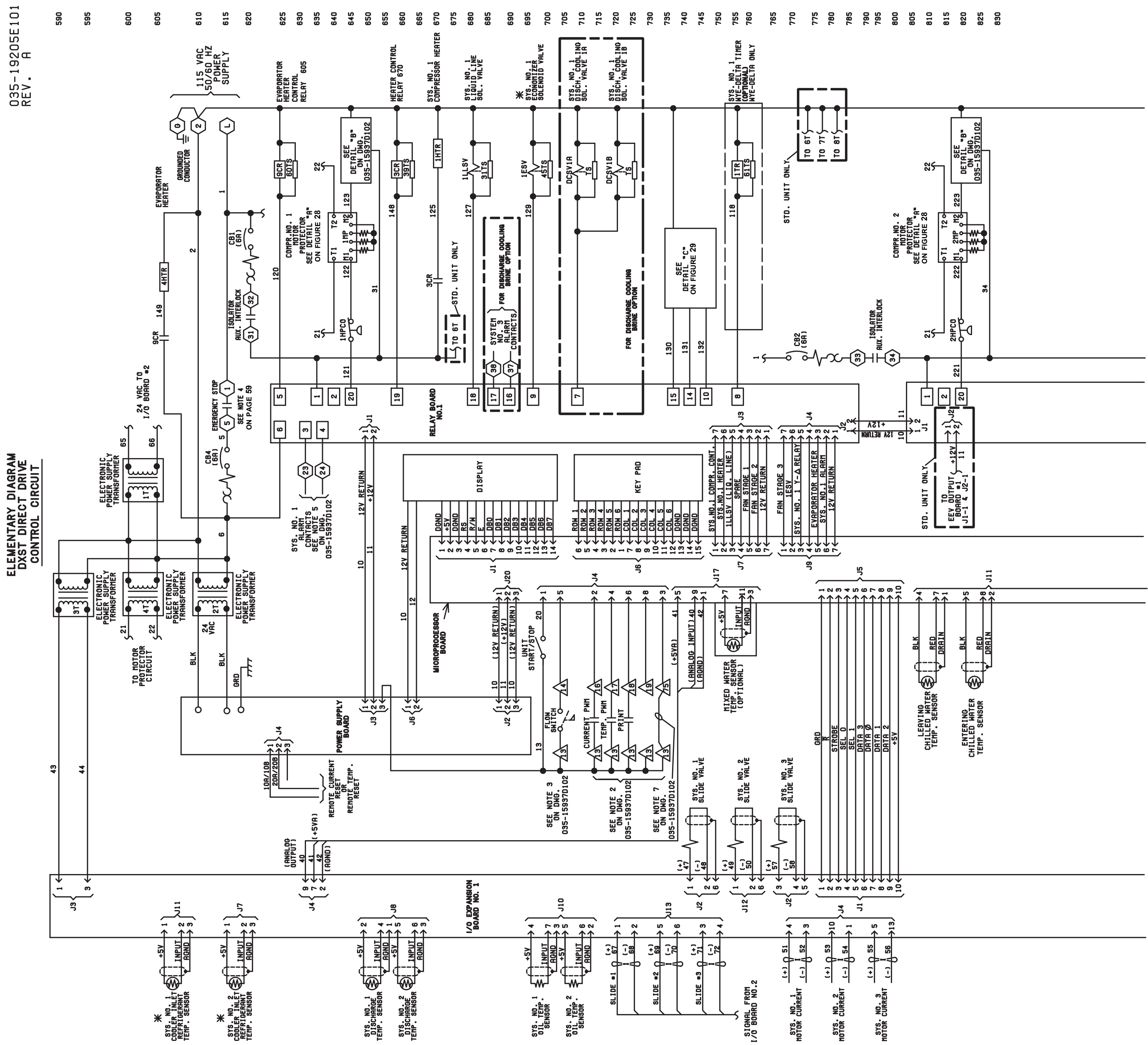
T S	Transient Voltage Suppression
⬡	Terminal Block for Customer Connections
△	Terminal Block for Customer Low Voltage (Class 2) Connections. See Note 2
□	Terminal Block for YORK Connections Only
———	Wiring and Components by YORK
—–—–	Optional Equipment
— —	Wiring and/or Components by Others



LD09351

FIG. 4 – CONTROL POWER TRANSFORMER KIT

ELEMENTARY WIRING DIAGRAM
YCAS0250 - YCAS0330 (3 COMPRESSOR)



LD09354

FIG. 5 – ELEMENTARY WIRING DIAGRAM

CAUTION:

No Controls (relays, etc.) should be mounted in the Smart Panel enclosure or connected to power supplies in the control panel. Additionally, control wiring not connected to the Smart Panel should not be run through the cabinet. This could result in nuisance faults.

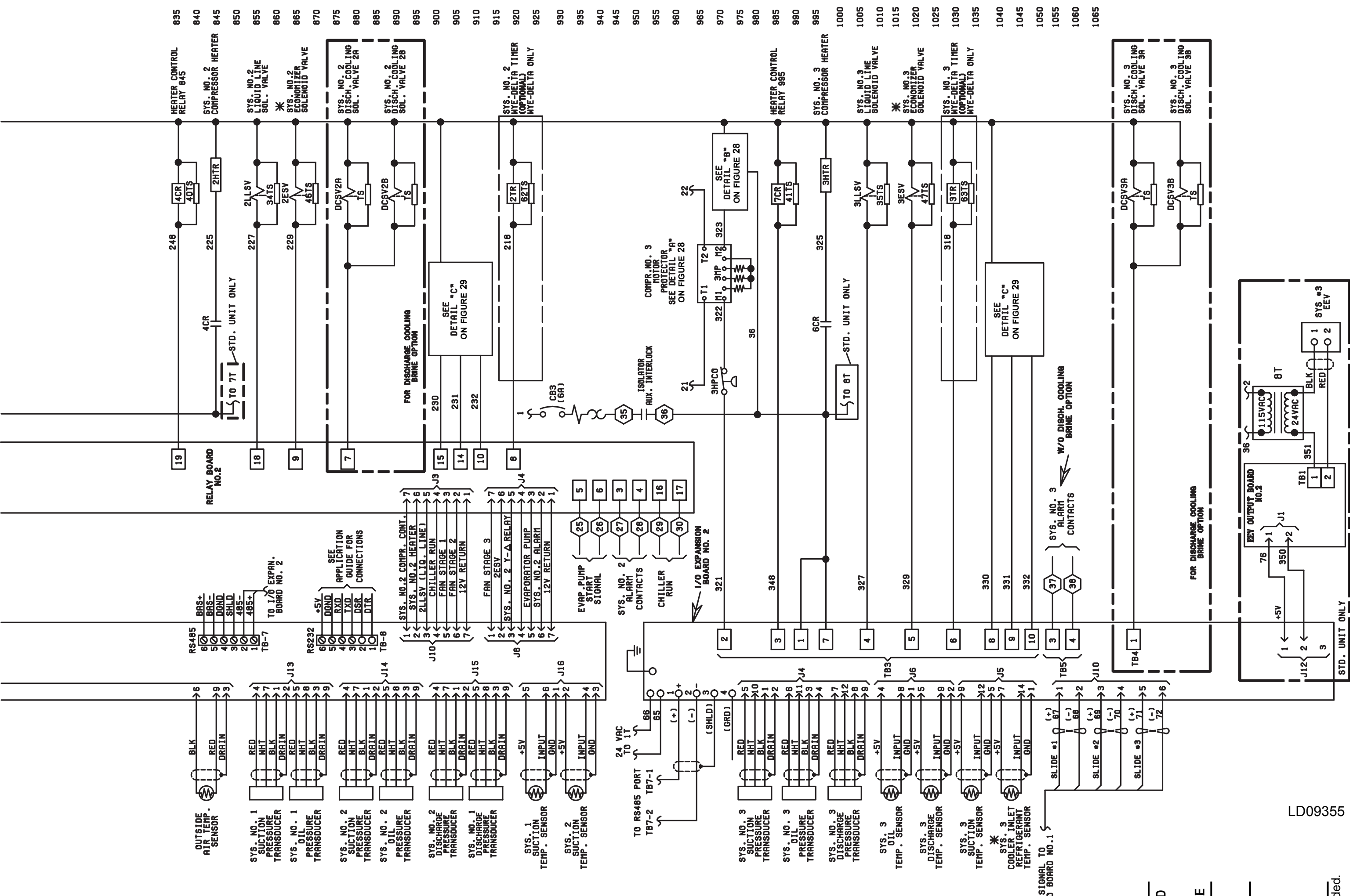
CAUTION:

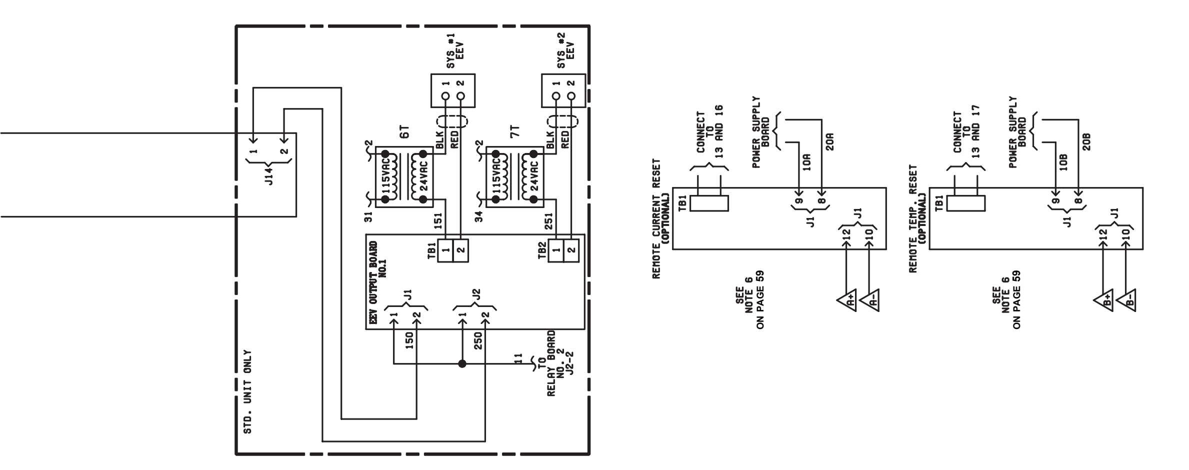
Any inductive devices (relays) wired in series with the flow switch for start/stop, into the Alarm circuitry, or pilot relays for pump starters wired through motor contactor auxiliary contacts must be suppressed with YORK P/N 031-00808-000 suppressor across the relay/contactor coil.

Any contacts connected to flow switch inputs or BAS inputs on terminals 13 - 19 or TB3, or any other terminals, must be suppressed with a YORK P/N 031-00808-000 suppressor across the relay/contactor coil.

CAUTION:

Control wiring connected to the control panel should never be run in the same conduit with power wiring.





CONTROL POWER SUPPLY

UNIT VOLTAGE		CONTROL POWER SUPPLY	MIN CIRCUIT AMP.	MAX DUAL ELEMENT FUSE SIZE	NON-FUSED DISC. SWITCH SIZE
ALL MODELS W/O TRANS.		115-1-50/60	20A	20A 250V	30A 240V
MODELS	-17	200-1-60	15A	15A 250V	30A 240V
WITH	-28	230-1-60	15A	15A 250V	30A 240V
TRANS.	-46	400-1-60	8A	8A 600V	30A 480V
*	-58	575-1-60	8A	8A 600V	30A 600V

* All primary and secondary wiring between transformer and control panel included.

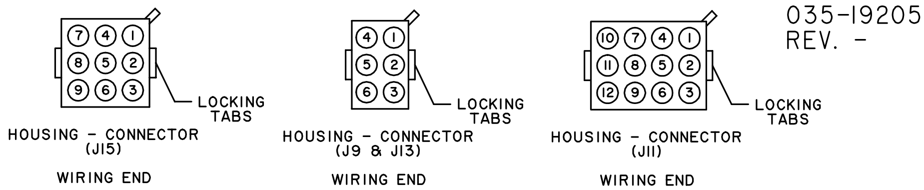
CONNECTION WIRING DIAGRAM

YCAS 250-330
STANDARD AND REMOTE EVAP. UNITS

J9, J11, J11A, J13, J15, P15 —— POWER PANEL

P9, P11, P11A, P13, —— ELECTRONIC (MICRO) PANEL

NOTE: 1. WIRE NUMBERS IDENTIFIED IN (PARENTHESIS) INDICATE THE ACTUAL HARNESS CODE STAMPED ON THE WIRE.



LEGEND

- 5CR & 7CR/ -K5 & -K7 — -CONTROL RELAYS
- CB4, CB5, CB6/ -QCB4,-QBC5,-QCB6 — -CIRCUIT BREAKERS
- 21CB THRU 26CB — -OVERLOAD CIRCUIT BREAKERS (SYS. #3)
- 21 OL THRU 26 OL — -MOTOR OVERLOADS (SYS. #3)
- -QFCB21 THRU -QFCB26 — -MOTOR OVERLOADS W/OVERLOAD CIRCUIT BREAKERS (SYS. #3)
- 3FU, 4FU/ -F3, -F4 — -TRANSFORMER FUSE **(OPTIONAL)**
- 5M 3-KLC OR 3-KALC — -COMPRESSOR CONTACTORS
- 6M/ 3-KDC — -COMPRESSOR CONTACTORS
- 3S/ 3-KSC — -COMPRESSOR CONTACTORS
- 21M THRU 26M/ -KF21 THRU -KF26 — -CONDENSER FAN CONTACTORS (SYS. #3)
- 3MP/3-FMP — -MOTOR PROTECTOR (SYS. #3)
- 1T/-T1 — -CONTROL TRANSFORMER 2KVA **(OPTIONAL)**
- 6T, 7T, 8T/ -T6, -T7, -T8 — -MICRO PANEL TRANSFORMERS
- 3TR/ -K12 — -TIMER RELAYS
- TS/-ES — -TRANSIENT SUPPRESSORS
- PTB3/ 3-XTB, — -POWER TERMINAL BLOCK
- MCB3/ 3-QCB, — -MOTOR CIRCUIT BREAKER
- DSW3/ 3-QSD, — -DISCONNECT SERVICE SWITCH
- ———— -WIRING BY YORK
- — — — — -WIRING BY OTHERS
- ━━━━ -OPTIONAL WIRING AND/OR COMPONENTS

PLUG NO.	WIRE NO.	PLUG PIN NO.
P9	21	1
	2	2
	22	3
	35	4
	36	5

PLUG NO.	WIRE NO.	PLUG PIN NO.
J9	21	1
	2	2
	22	3
	3Y	4
	3X	5

PLUG NO.	WIRE NO.	PLUG PIN NO.
P11A	325	1
	322	2

PLUG NO.	WIRE NO.	PLUG PIN NO.
J11A	25	1
	777	2

PLUG NO.	WIRE NO.	PLUG PIN NO.
P11	2	1
	GRD	2
	325	3
	329	5
	327	4
	321	11
	322	12

PLUG NO.	WIRE NO.	PLUG PIN NO.
J11	2	1
	GRD	2
	325A	3
	329A	5
	327A	4
	321A	11
	322	12

PLUG NO.	WIRE NO.	PLUG PIN NO.
P13	330	1
	331	2
	332	3
	348	4
	318	6

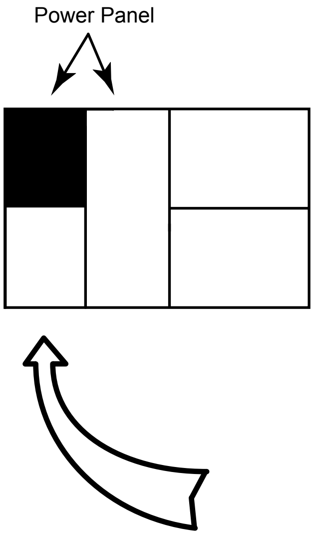
PLUG NO.	WIRE NO.	PLUG PIN NO.
J13	30	1
	31	2
	32	3
	48	4
	18	6

PLUG NO.	WIRE NO.	PLUG PIN NO.
P15	325	1
	2	2
	323	3
	340	4
	341	5
	342	6
	32	7
	TRX	8
	44	9

PLUG NO.	WIRE NO.	PLUG PIN NO.
J15	25	1
	2	2
	23	3
	40	4
	41	5
	42	6
	3X	7
	TRX	8
	44	9

LD09362

FIG. 6 – CONNECTION DIAGRAM 3 COMPRESSOR



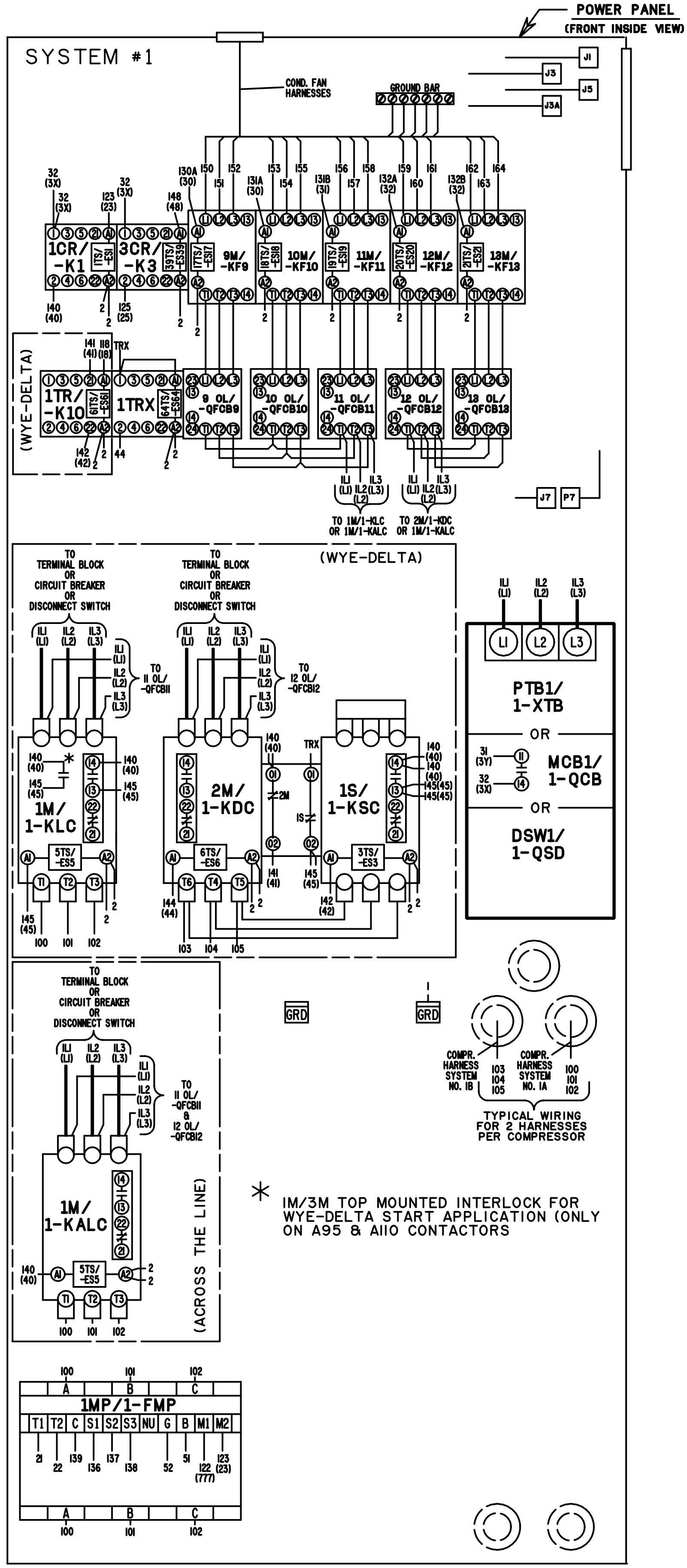
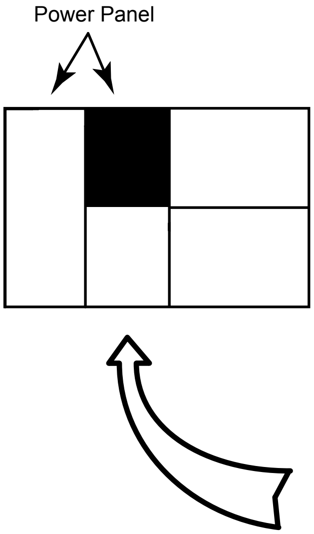


FIG. 7 – CONNECTION DIAGRAM 3 COMPRESSOR

CONNECTION WIRING DIAGRAM (CONT'D)



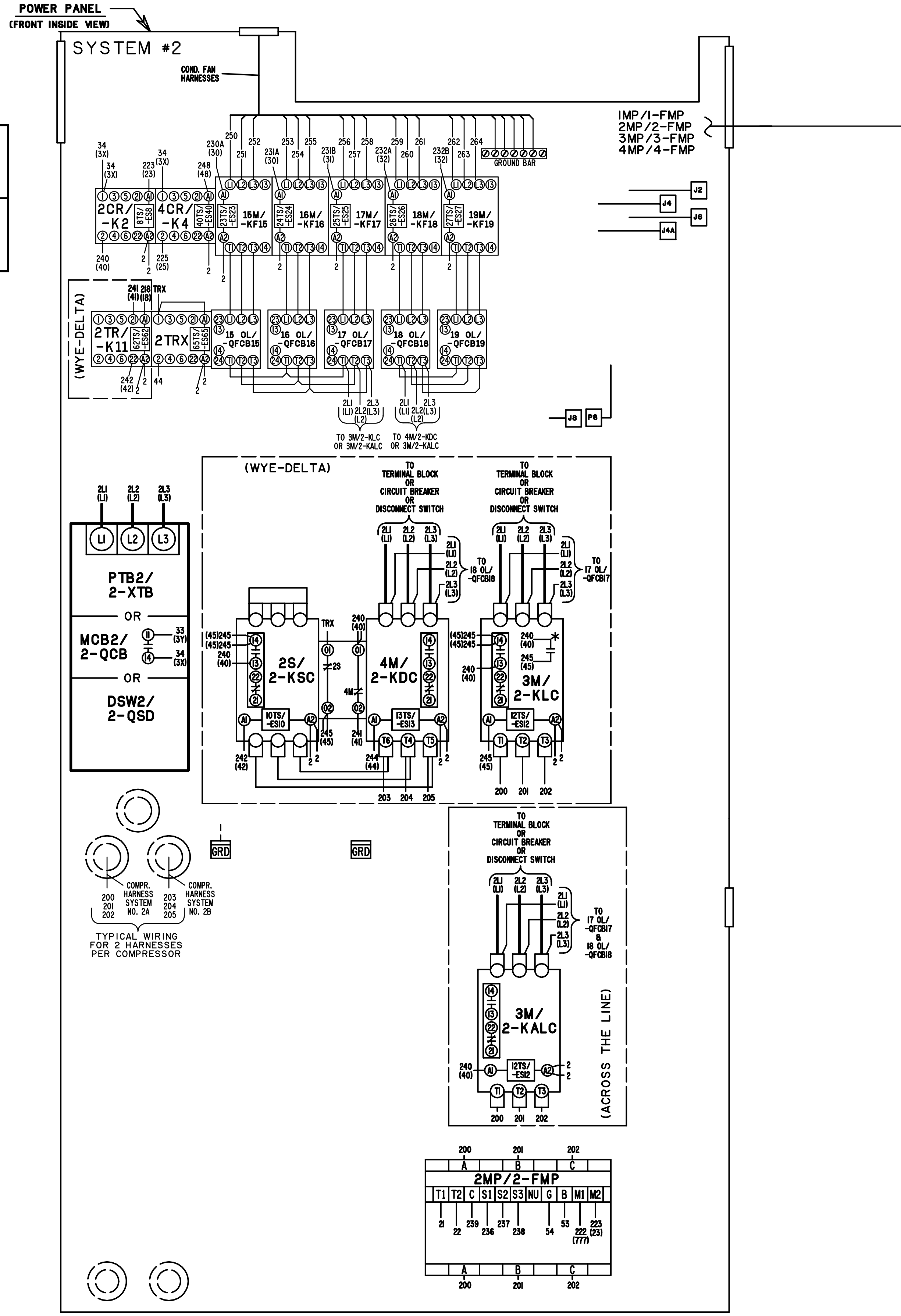
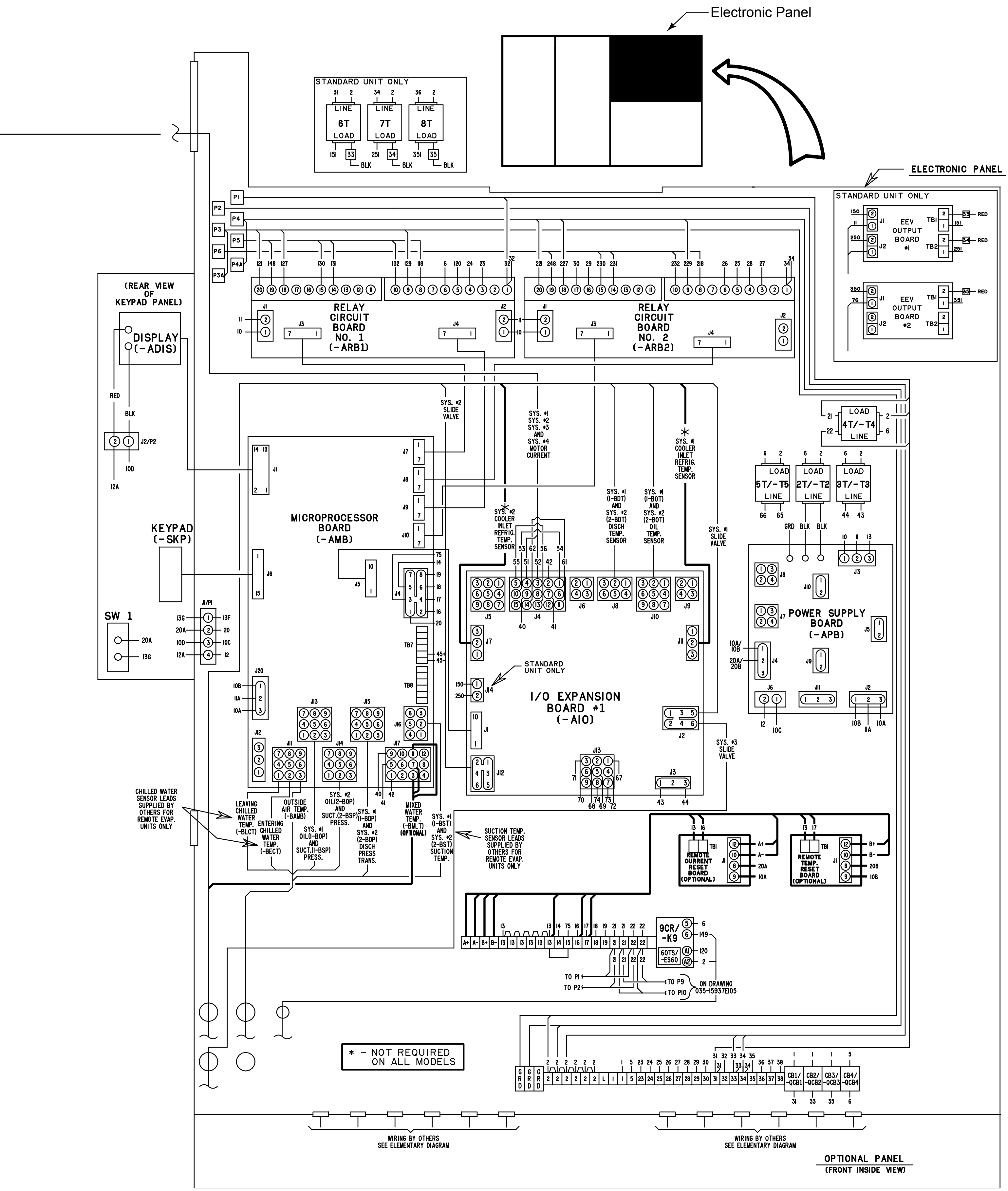


FIG. 8 – CONNECTION DIAGRAM 3 COMPRESSOR


Electronic Panel
ELECTRONIC PANEL
STANDARD UNIT ONLY
RELAY CIRCUIT BOARD NO. 1 (-ARB1)
RELAY CIRCUIT BOARD NO. 2 (-ARB2)
EEV OUTPUT BOARD #1
EEV OUTPUT BOARD #2
(REAR VIEW OF KEYPAD PANEL)
DISPLAY (-ADIS)
KEYPAD (-SKP)
SW 1
MICROPROCESSOR BOARD (-AMB)
I/O EXPANSION BOARD #1 (-AIO)
POWER SUPPLY BOARD (-APB)
REMOTE CURRENT RESET BOARD (OPTIONAL)
REMOTE TEMP. RESET BOARD (OPTIONAL)
CHILLED WATER SENSOR LEADS SUPPLIED BY OTHERS FOR REMOTE EVAP. UNITS ONLY
SUCTION TEMP. SENSOR LEADS SUPPLIED BY OTHERS FOR REMOTE EVAP. UNITS ONLY
TO P1
TO P2
TO P9
TO P10
ON DRAWING 035-15937E105
* - NOT REQUIRED ON ALL MODELS
WIRING BY OTHERS SEE ELEMENTARY DIAGRAM
OPTIONAL PANEL
(FRONT INSIDE VIEW)

LD09359

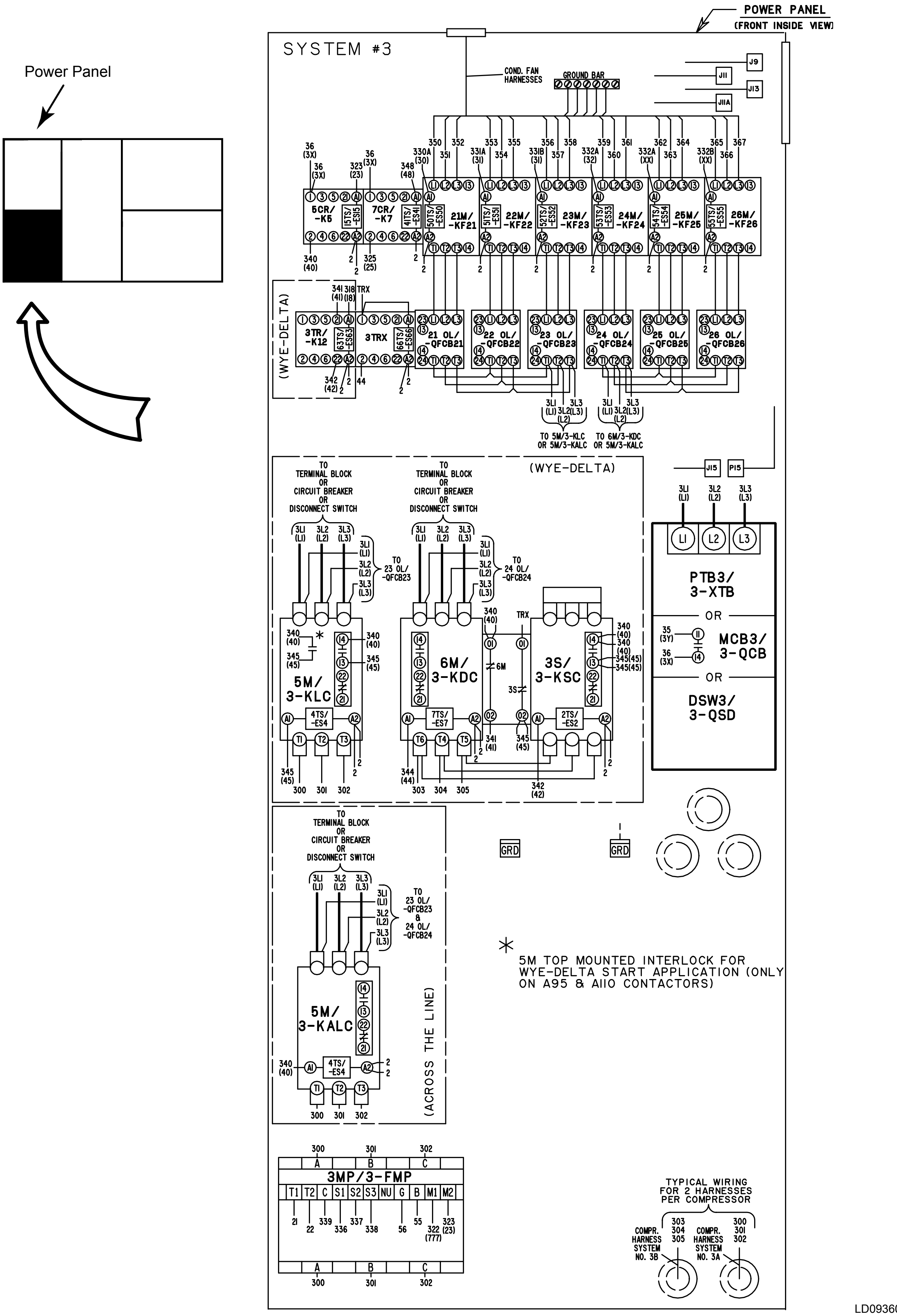


FIG. 9 – CONNECTION DIAGRAM 3 COMPRESSOR

CONNECTION WIRING DIAGRAM (CONT'D)

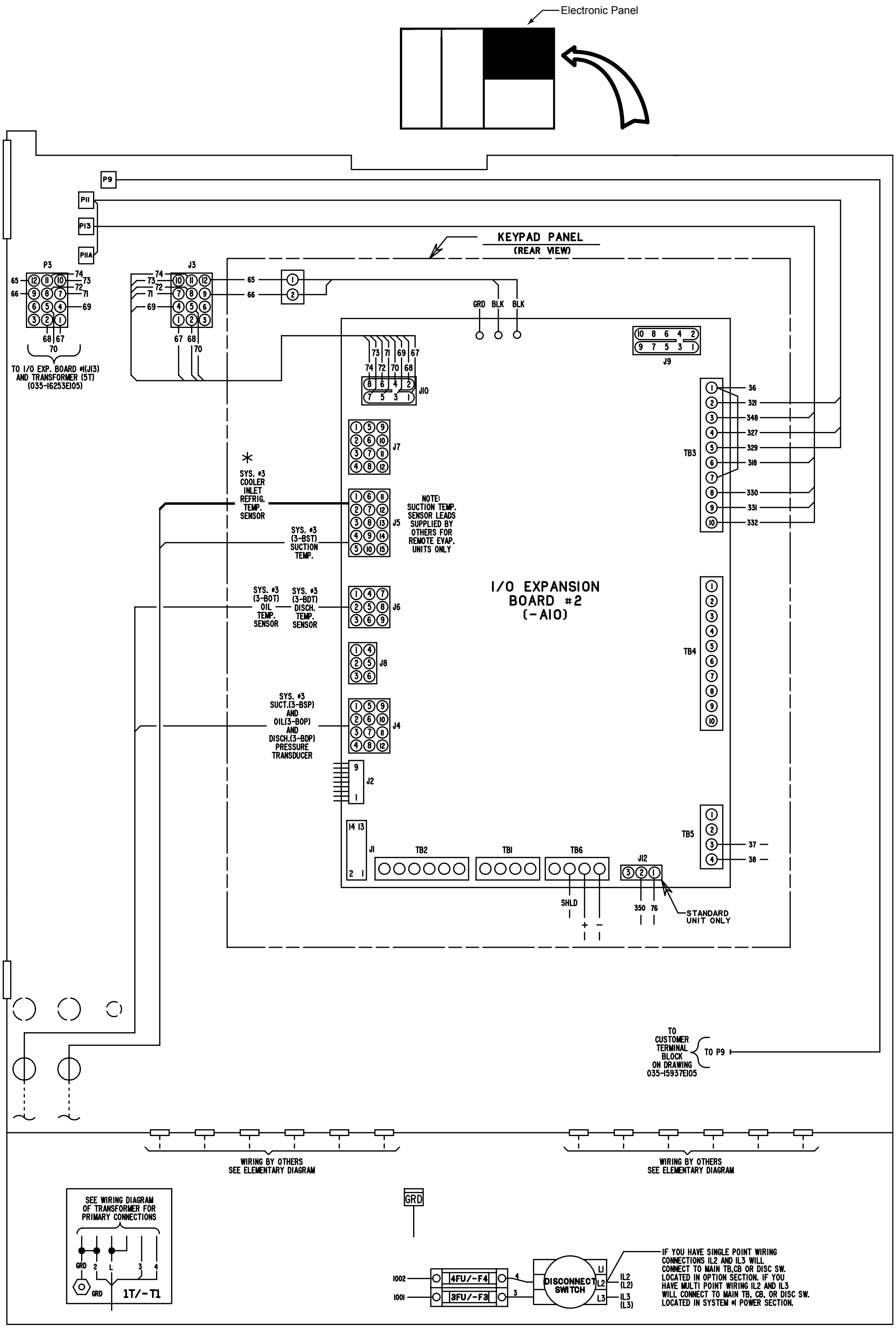


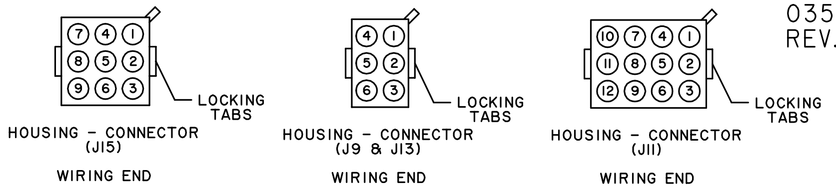
FIG. 10 – CONNECTION DIAGRAM 3 COMPRESSOR

CONNECTION DIAGRAM, ELEC. BOX YCAS 250-330 STANDARD AND REMOTE EVAP. UNITS

J9, J11, J11A, J13, J15, P15 —— POWER PANEL

P9, P11, P11A, P13, —— ELECTRONIC (MICRO) PANEL

NOTE: 1. WIRE NUMBERS IDENTIFIED IN (PARENTHESIS) INDICATE THE ACTUAL HARNESS CODE STAMPED ON THE WIRE.



035-19205
REV. -

LEGEND

5CR & 7CR/ -K5 & -K7 -CONTROL RELAYS
CB4, CB5, CB6/ -QCB4,-QBC5,-QCB6 -CIRCUIT BREAKERS
21CB THRU 26CB -OVERLOAD CIRCUIT BREAKERS (SYS. #3)
21 OL THRU 26 OL -MOTOR OVERLOADS (SYS. #3)
-QFCB21 THRU -QFCB26 -MOTOR OVERLOADS W/OVERLOAD CIRCUIT BREAKERS (SYS. #3)
3FU, 4FU/ -F3, -F4 -TRANSFORMER FUSE **(OPTIONAL)**

5M 3-KLC OR 3-KALC -COMPRESSOR CONTACTORS
6M/ 3-KDC -COMPRESSOR CONTACTORS
3S/ 3-KSC -COMPRESSOR CONTACTORS
21M THRU 26M/ -KF21 THRU -KF26 -CONDENSER FAN CONTACTORS (SYS. #3)
3MP/3-FMP -MOTOR PROTECTOR (SYS. #3)
1T/-T1 -CONTROL TRANSFORMER 2KVA **(OPTIONAL)**

6T, 7T, 8T/ -T6, -T7, -T8 -MICRO PANEL TRANSFORMERS
3TR/ -K12 -TIMER RELAYS
TS/-ES -TRANSIENT SUPPRESSORS
PTB3/ 3-XTB, -POWER TERMINAL BLOCK
MCB3/ 3-QCB, -MOTOR CIRCUIT BREAKER
DSW3/ 3-QSD, -DISCONNECT SERVICE SWITCH
———— -WIRING BY YORK
— — — — -WIRING BY OTHERS
▬▬▬▬ -OPTIONAL WIRING AND/OR COMPONENTS

PLUG NO.	WIRE NO.	PLUG PIN NO.
P9	21	1
	2	2
	22	3
	35	4
	36	5

PLUG NO.	WIRE NO.	PLUG PIN NO.
J9	21	1
	2	2
	22	3
	3Y	4
	3X	5

PLUG NO.	WIRE NO.	PLUG PIN NO.
P11A	325	1
	322	2

PLUG NO.	WIRE NO.	PLUG PIN NO.
J11A	25	1
	777	2

PLUG NO.	WIRE NO.	PLUG PIN NO.
P11	2	1
	GRD	2
	325	3
	329	5
	327	4
	321	11
	322	12

PLUG NO.	WIRE NO.	PLUG PIN NO.
J11	2	1
	GRD	2
	325A	3
	329A	5
	327A	4
	321A	11
	322	12

PLUG NO.	WIRE NO.	PLUG PIN NO.
P13	330	1
	331	2
	332	3
	348	4
	318	6

PLUG NO.	WIRE NO.	PLUG PIN NO.
J13	30	1
	31	2
	32	3
	48	4
	18	6

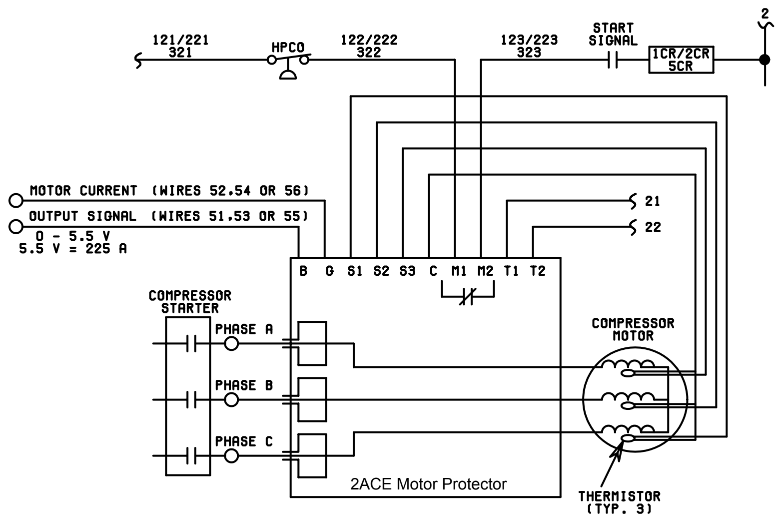
PLUG NO.	WIRE NO.	PLUG PIN NO.
P15	325	1
	2	2
	323	3
	340	4
	341	5
	342	6
	32	7
	TRX	8
	44	9

PLUG NO.	WIRE NO.	PLUG PIN NO.
J15	25	1
	2	2
	23	3
	40	4
	41	5
	42	6
	3X	7
	TRX	8
	44	9

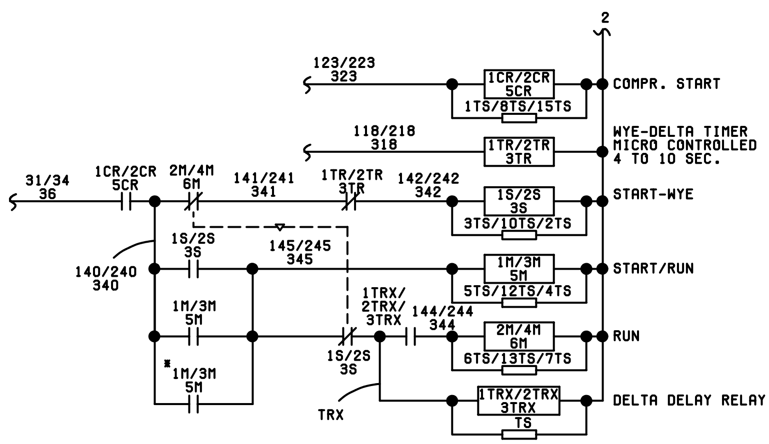
LD09362

FIG. 11 – CONNECTION DIAGRAM 3 COMPRESSOR

ELEMENTARY DIAGRAM
DXST STARTER
CONTROL CIRCUIT



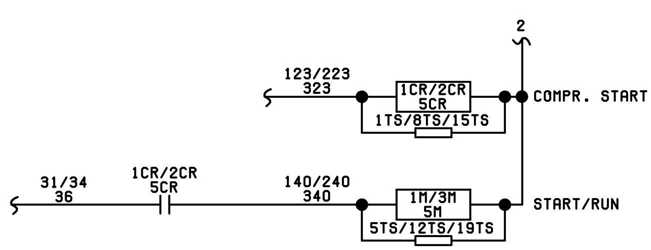
DETAIL "A"



DETAIL "B"

WYE DELTA START

* INTERLOCK ON TOP MOUNTED REALY, WYE-DELTA
ONLY ON A95 & A110 CONTACTORS)



ACROSS THE LINE START

LD09363

FIG. 12 – ELEMENTARY DIAGRAM 3 COMPRESSOR

ELEMENTARY WIRING DIAGRAM (CONT'D)

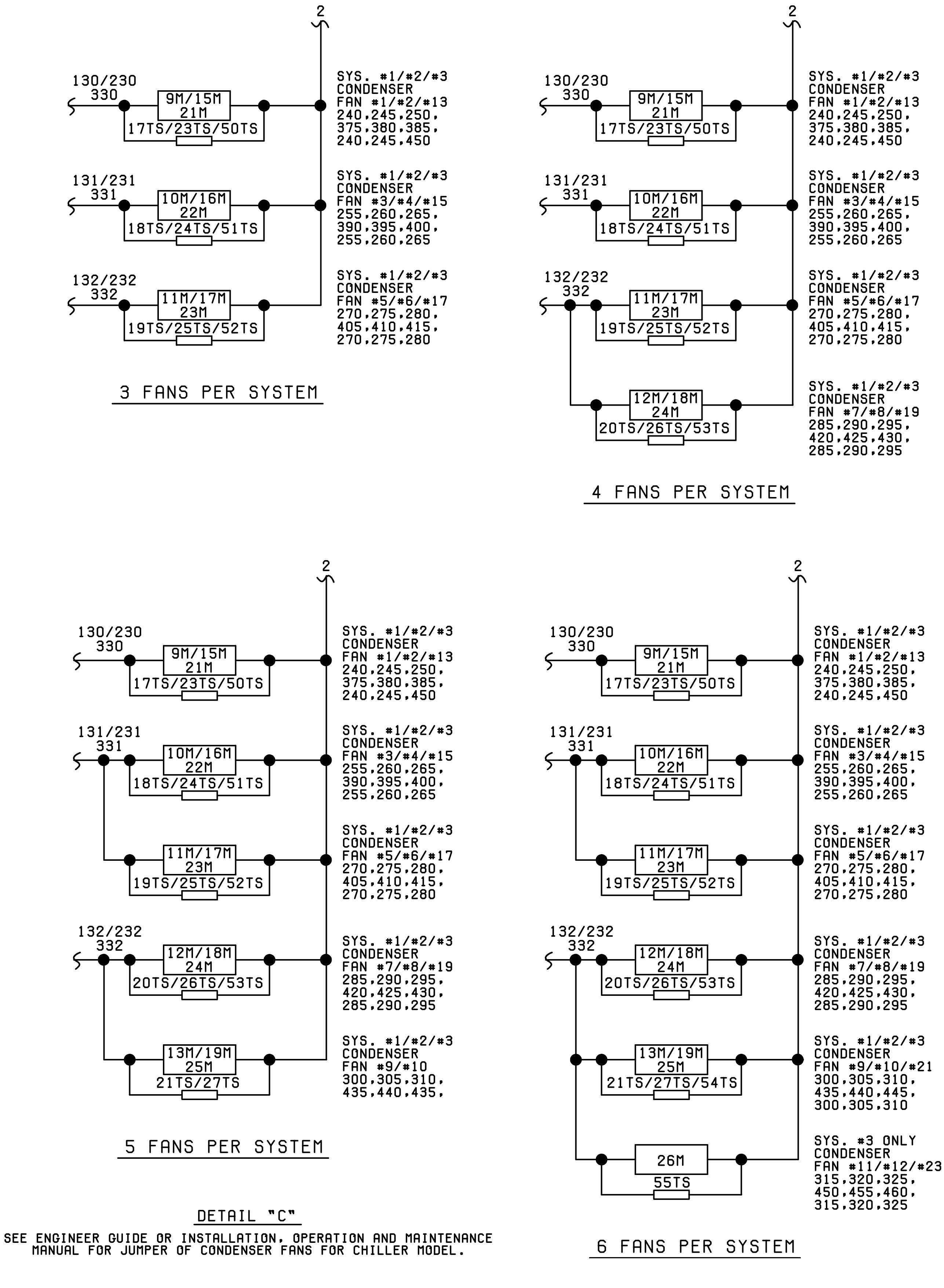
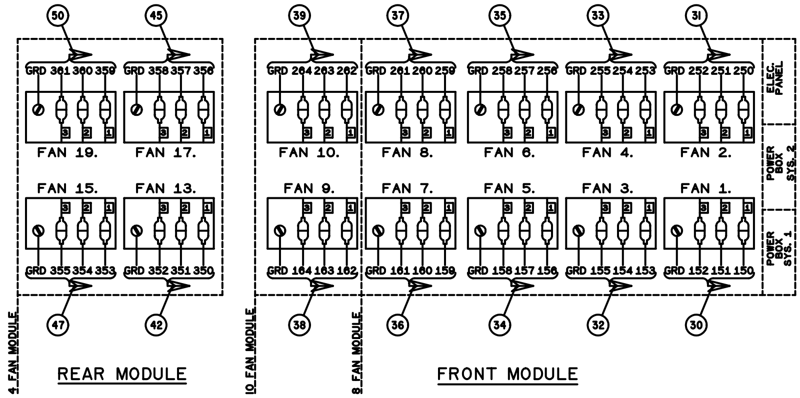


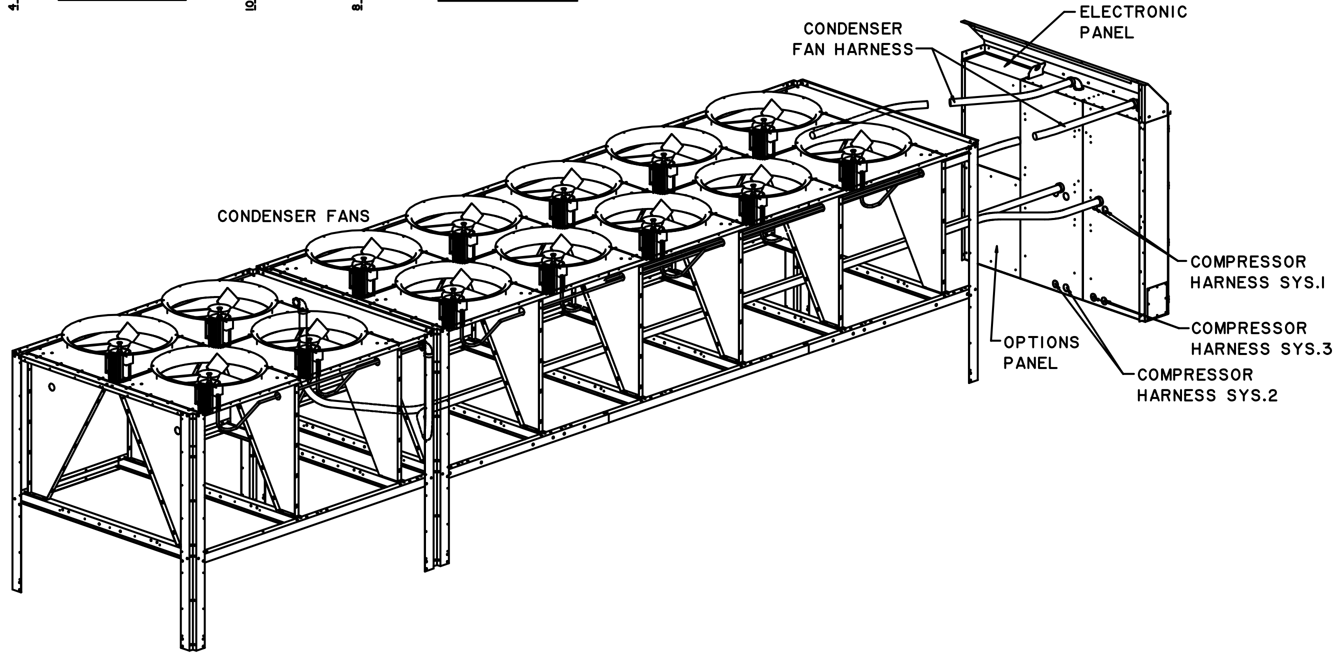
FIG. 13 – ELEMENTARY DIAGRAM DXST DIRECT DRIVE - 3 COMPRESSOR

CONNECTION DIAGRAM SYSTEM WIRING

CONNECTION DIAGRAM SYSTEM WIRING
YCAS 0250 - 0330
STANDARD & REMOTE EVAP.UNITS



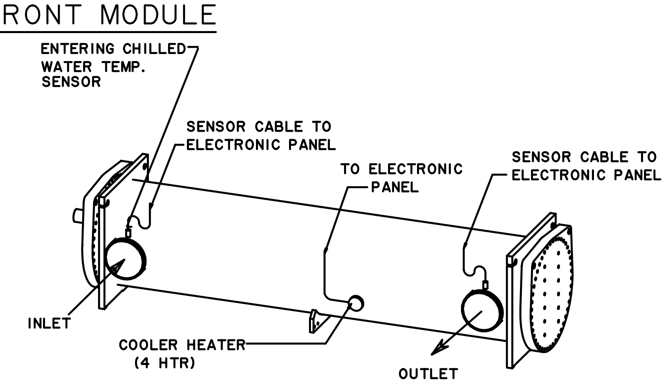
035-19205-106



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
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	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)
1 ESV	ECONOMIZER SOLENOID VAVLE (UNIT IDENT)
2 ESV	ECONOMIZER SOLENOID VAVLE (UNIT IDENT)
3 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)

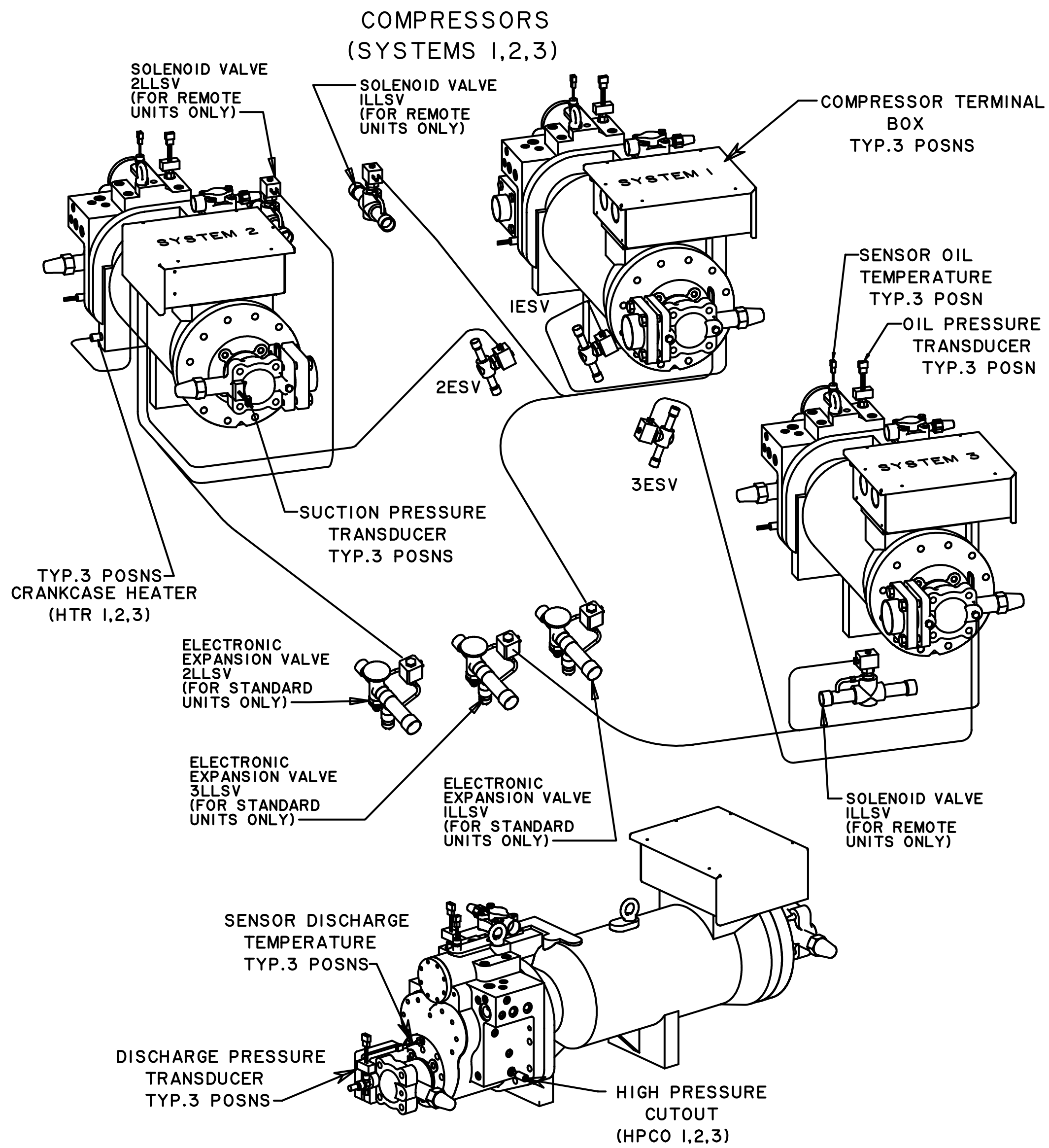
FRONT MODULE



LD09365

FIG. 14 – CONNECTION DIAGRAM SYSTEM WIRING 3 COMPRESSOR

CONNECTION DIAGRAM SYSTEM WIRING



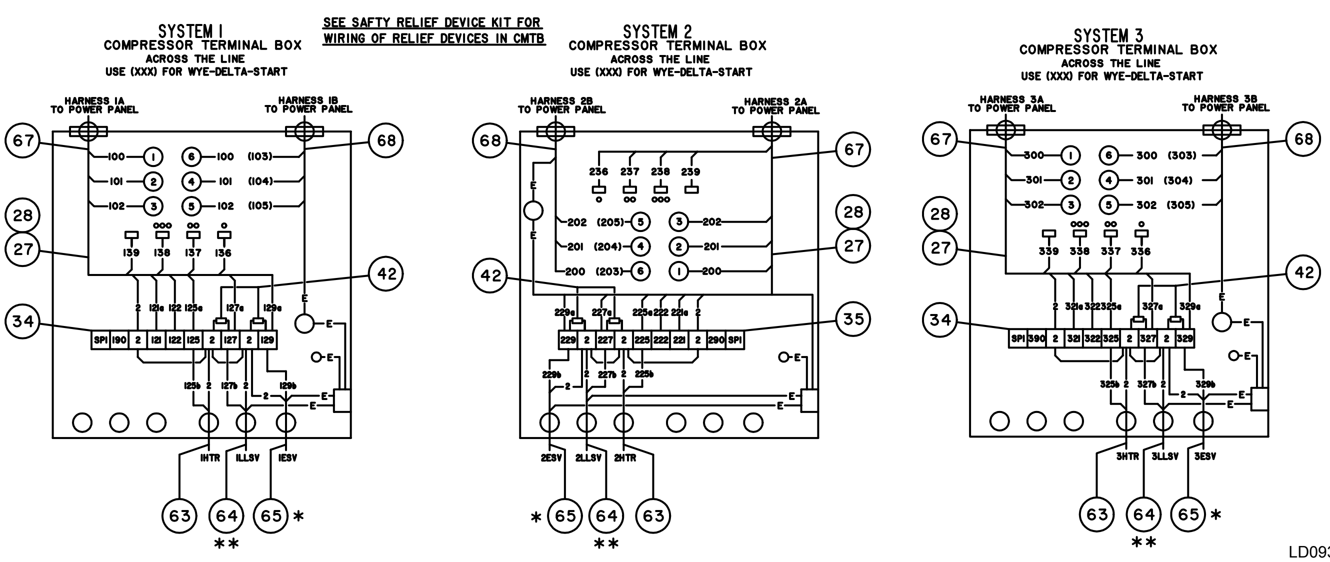


FIG. 15 – CONNECTION DIAGRAM STSTEM WIRING - 3 COMPRESSOR

ELEMENTARY WIRING DIAGRAM
YCAS0360 - YCAS0440 (4 COMPRESSOR)

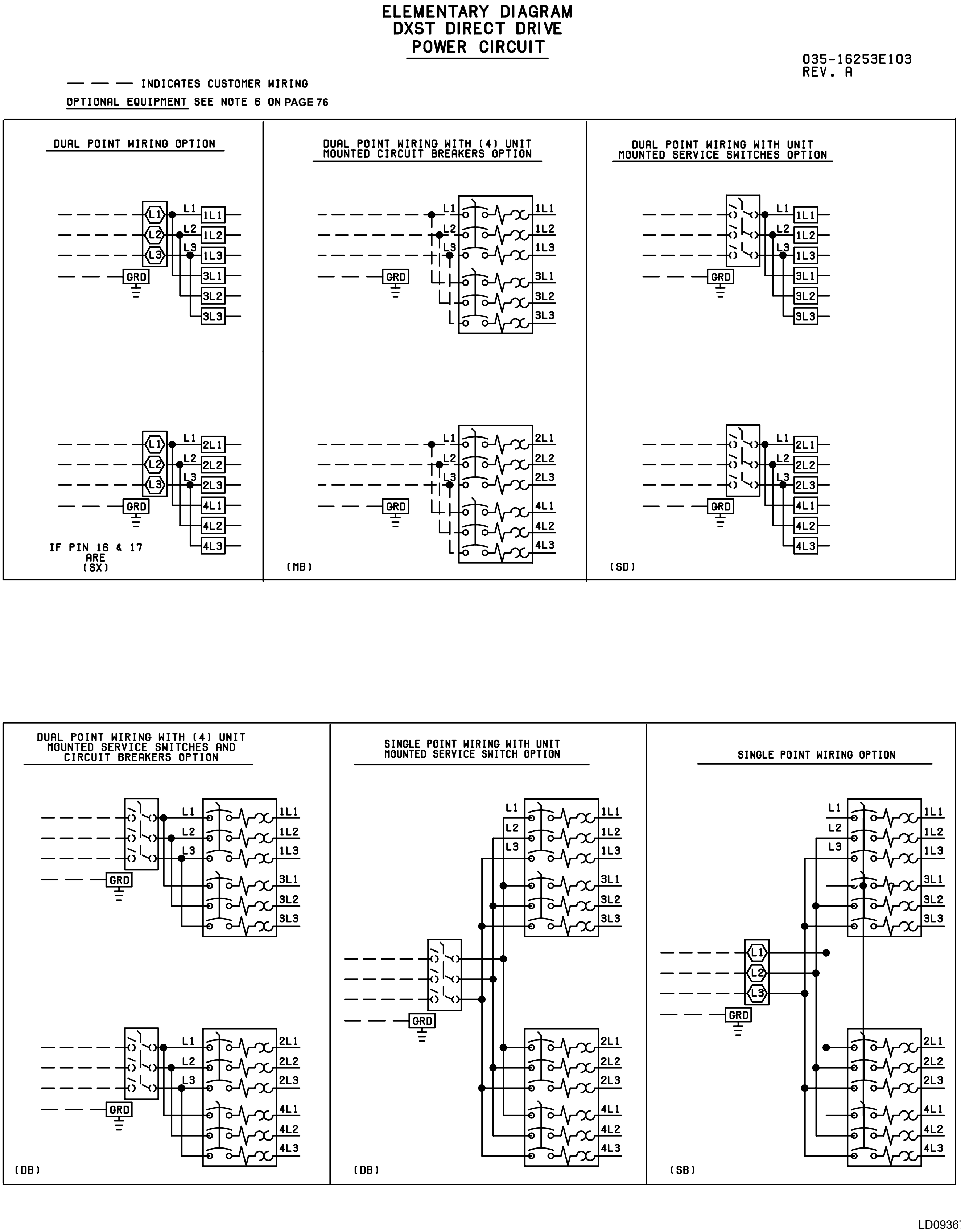


FIG. 16 – ELEMENTARY WIRING DIAGRAM - 4 COMPRESSOR

ELEMENTARY WIRING DIAGRAM
YCAS0360 - YCAS0440 (4 COMPRESSOR)

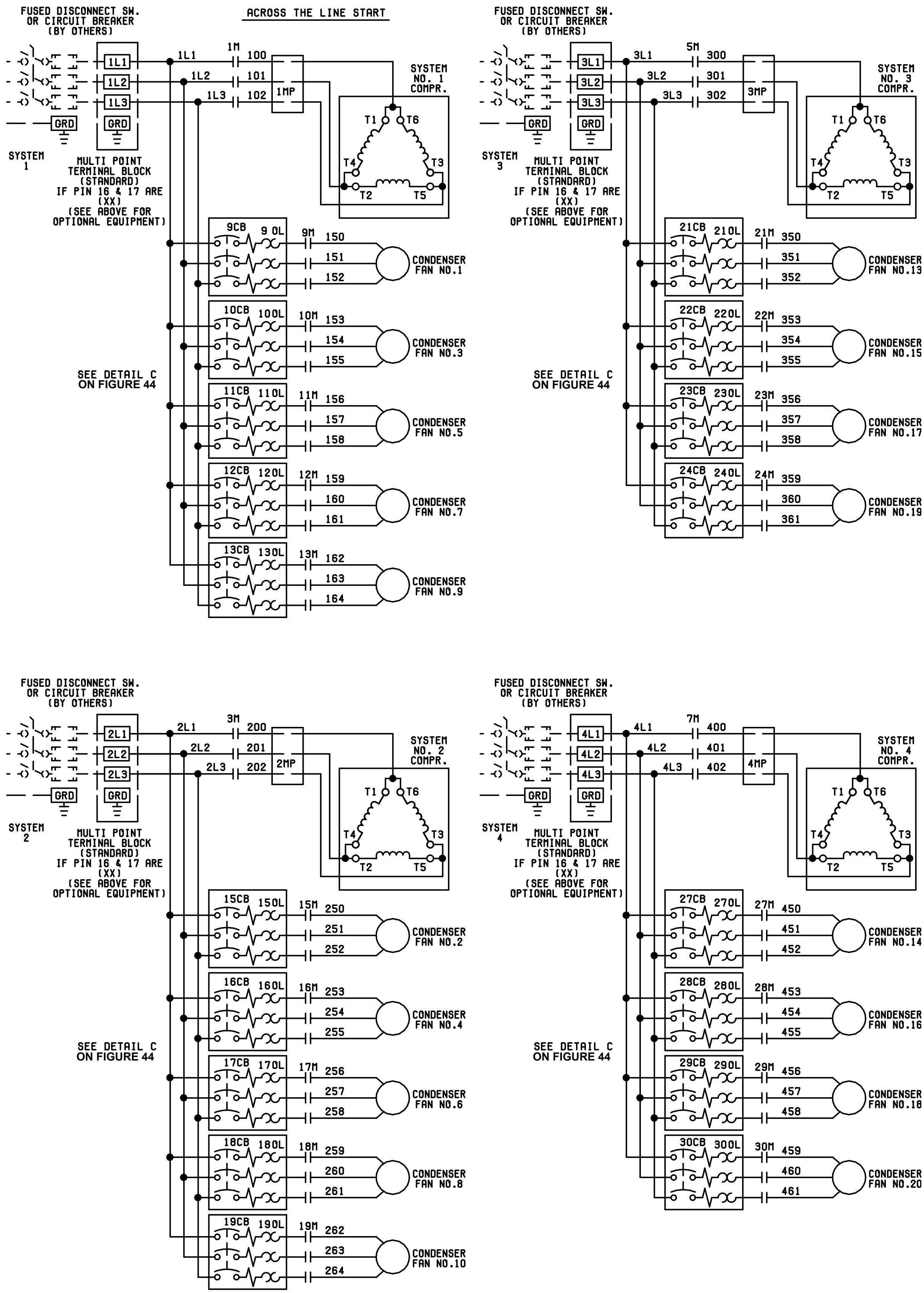


FIG. 17 – ELEMENTARY WIRING DIAGRAM - ACROSS-THE-LINE START

ELEMENTARY WIRING DIAGRAM
YCAS0360 - YCAS0440 (4 COMPRESSOR)

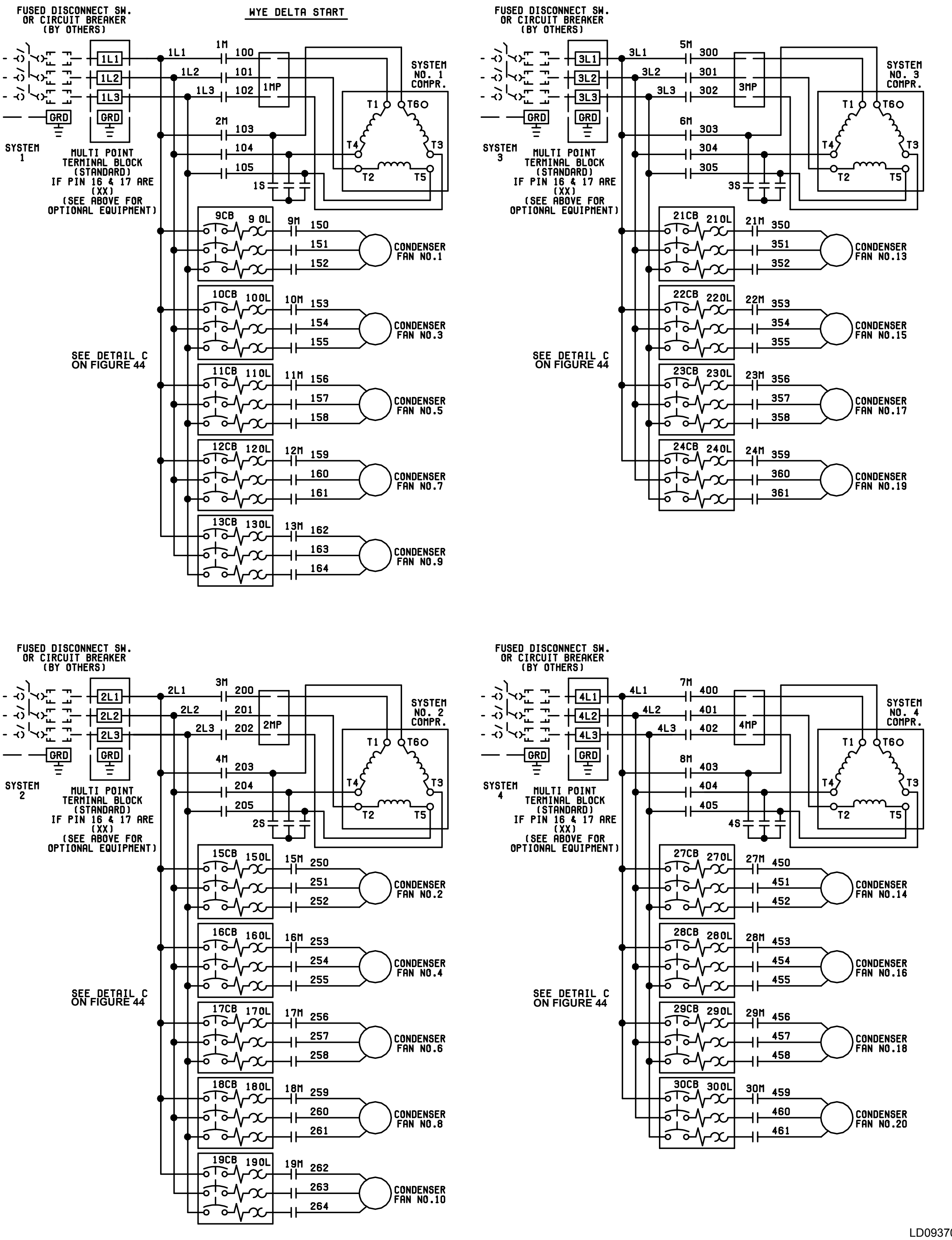


FIG. 18 – ELEMENTARY WIRING DIAGRAM - WYE DELTA

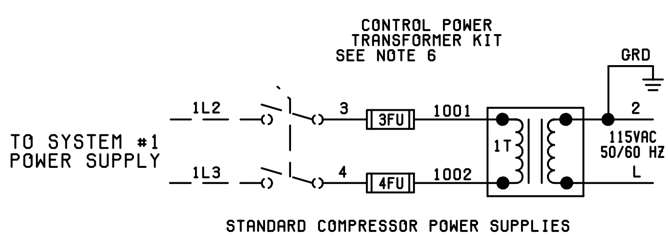
ELEMENTARY WIRING DIAGRAM (YCAS0360 - YCAS0440)
ACROSS-THE-LINE START
AND
WYE-DELTA START

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 recommend). Wiring shall not be run in the same conduit with any line voltage wiring.
3. To cycle the 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 100A at 115 volts A.C.
5. Alarm contacts are for annunciating alarm/unit malfunction. Contacts are rated at 115V, 100VA, load only, and must be suppressed at load by user.
6. See Installation, Operation and Maintenance Manual when optional equipment is used.

LEGEND

T S	Transient Voltage Suppression
⬡	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



LD09368

FIG. 19 – CONTROL POWER TRANSFORMER KIT

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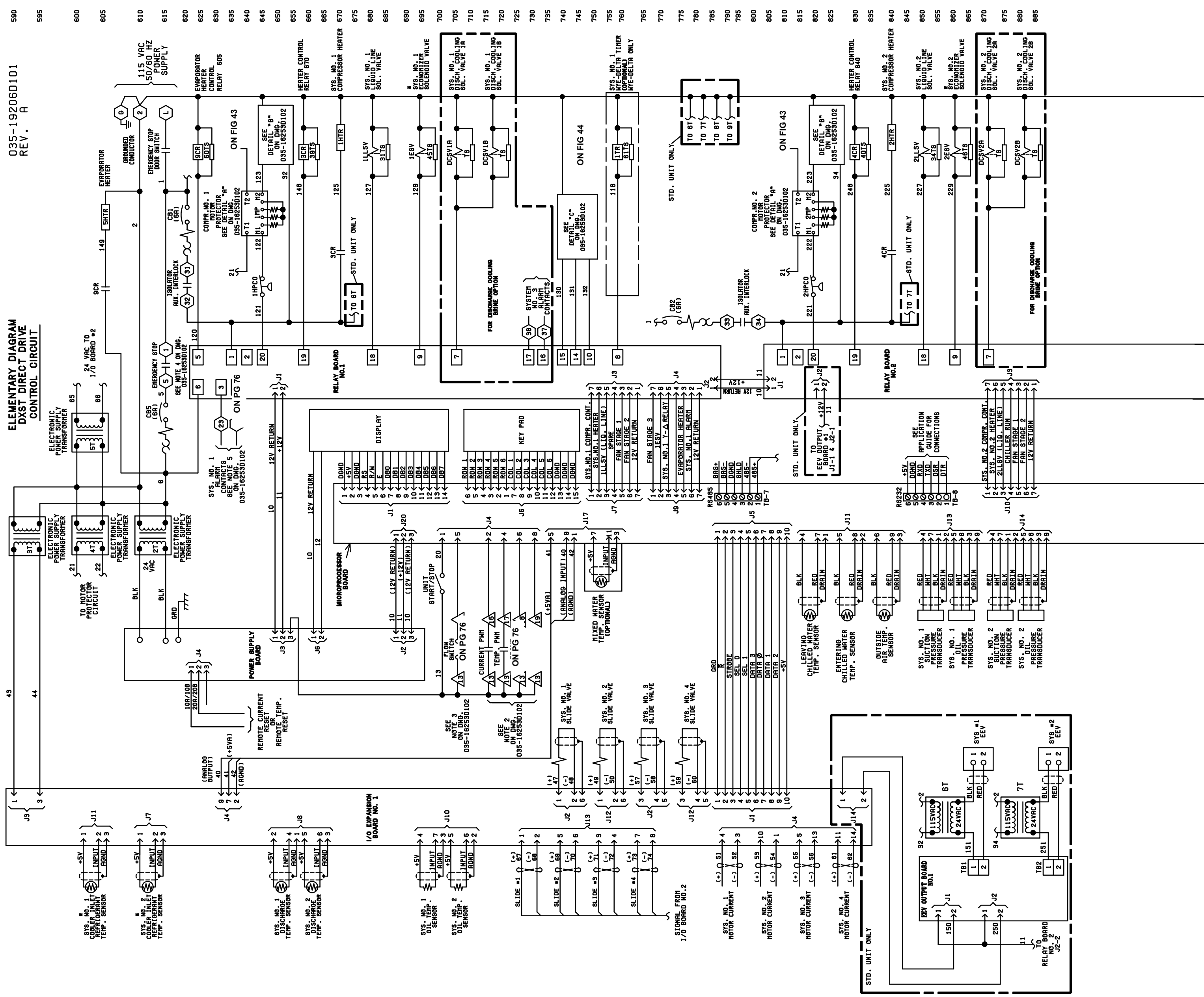
ELEMENTARY WIRING DIAGRAM
YCAS0360 - YCAS0440 (4 COMPRESSOR)



LD09371

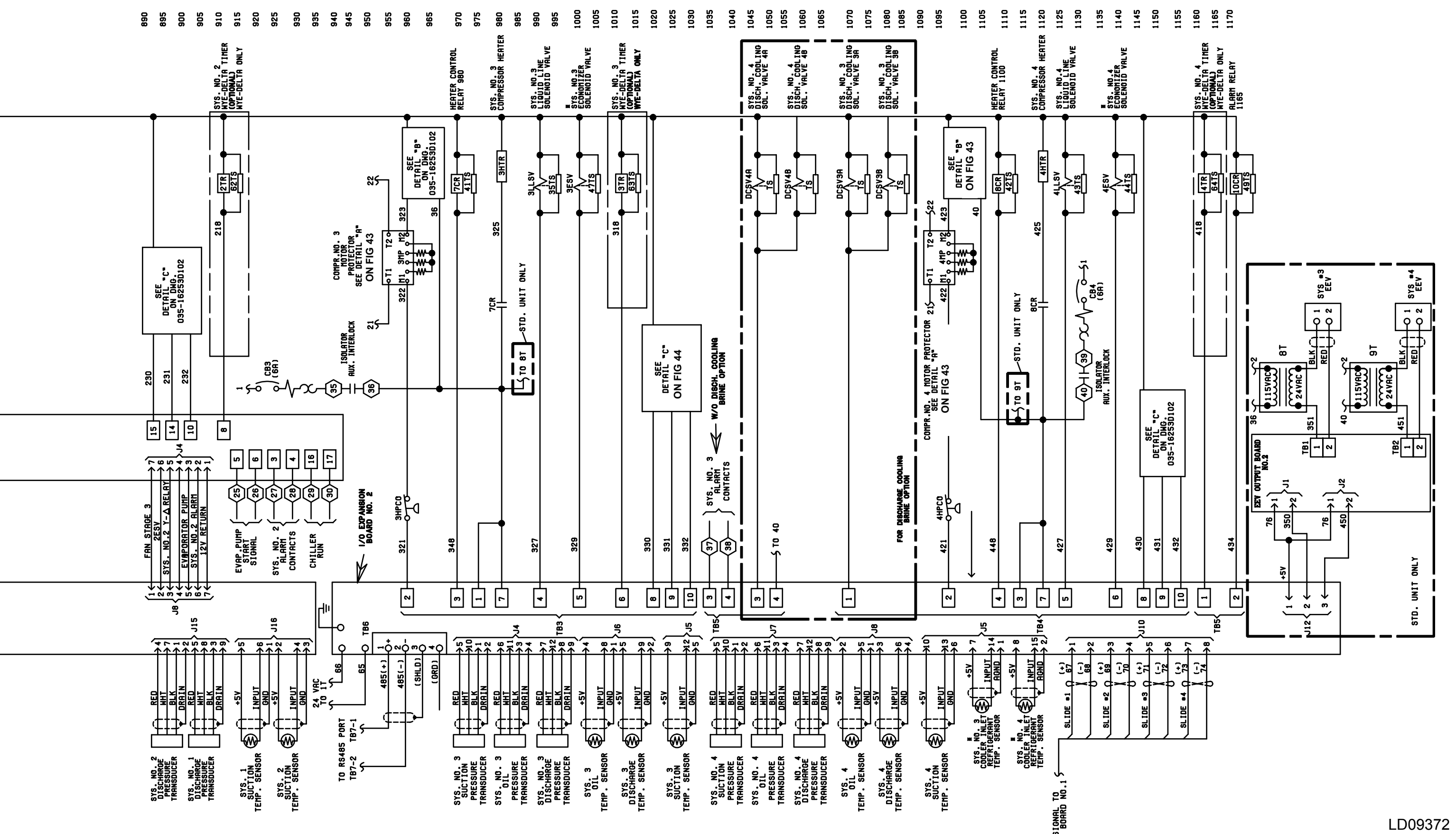
FIG. 20 – ELEMENTARY WIRING DIAGRAM

CAUTION:
No Controls (relays, etc.) should be mounted in the Smart Panel enclosure or connected to power supplies in the control panel. Additionally, control wiring not connected to the Smart Panel should not be run through the cabinet. This could result in nuisance faults.

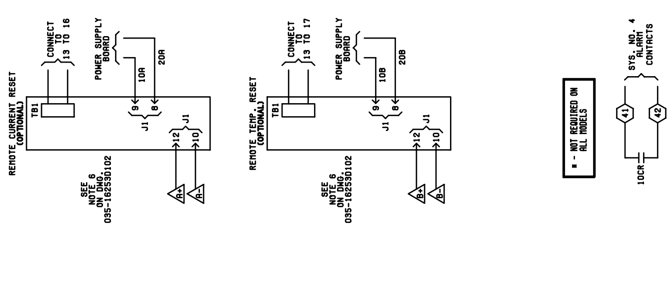
CAUTION:
Any inductive devices (relays) wired in series with the flow switch for start/stop, into the Alarm circuitry, or pilot relays for pump starters wired through motor contactor auxiliary contacts must be suppressed with YORK P/N 031-00808-000 suppressor across the relay/contactor coil.

Any contacts connected to flow switch inputs or BAS inputs on terminals 13 - 19 or TB3, or any other terminals, must be suppressed with a YORK P/N 031-00808-000 suppressor across the relay/contactor coil.

CAUTION:
Control wiring connected to the control panel should never be run in the same conduit with power wiring.



LD09372



CONTROL POWER SUPPLY

UNIT VOLTAGE		CONTROL POWER SUPPLY	MIN CIRCUIT AMP.	MAX DUAL ELEMENT FUSE SIZE	NON-FUSED DISC. SWITCH SIZE
ALL MODELS W/O TRANS.		115-1-50/60	20A	20A 250V	30A 240V
MODELS	-17	200-1-60	15A	15A 250V	30A 240V
WITH	-28	230-1-60	15A	15A 250V	30A 240V
TRANS.	-46	400-1-60	8A	8A 600V	30A 480V
*	-58	575-1-60	8A	8A 600V	30A 600V

* All primary and secondary wiring between transformer and control panel included.

CONNECTION WIRING DIAGRAM

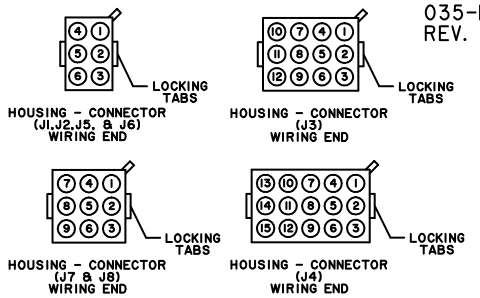
CONNECTION DIAGRAM, ELEC. BOX
YCAS 360-440
STANDARD AND REMOTE EVAP. UNITS

J1, J2, J3, J3A, J4, J4A, J5, J6, J7, J8, P7 & P8 — POWER PANEL

P1, P2, P3, P3A, P4, P4A, P5, & P6 — ELECTRONIC (MICRO) PANEL

NOTE: 1. WIRE NUMBERS IDENTIFIED IN (PARENTHESIS) INDICATE THE ACTUAL HARNESS CODE STAMPED ON THE WIRE.

035-19206E104
REV. -



LEGEND

1CR THRU 4CR, 9CR/ -K1 THRU -K4, -K9 -CONTROL RELAYS
CB1, CB2, CB3/ -QCB1,-QBC2,-QCB3 -CIRCUIT BREAKERS
9CB THRU 13CB -OVERLOAD CIRCUIT BREAKERS (SYS. #1)
15CB THRU 19CB -OVERLOAD CIRCUIT BREAKERS (SYS. #2)
9 OL THRU 13 OL -MOTOR OVERLOADS (SYS. #1)
15 OL THRU 19 OL -MOTOR OVERLOADS (SYS. #2)
-QFCB9 THRU -QFCB13 -MOTOR OVERLOADS W/OVERLOAD CIRCUIT BREAKERS (SYS. #1)
-QFCB15 THRU -QFCB19 -MOTOR OVERLOADS W/OVERLOAD CIRCUIT BREAKERS (SYS. #2)

1M, 3M/ 1-KLC OR 1-KALC, 2-KLC OR 2-KALC -COMPRESSOR CONTACTORS
2M, 4M/ 1-KDC, 2-KDC -COMPRESSOR CONTACTORS
1S, 2S/ 1-KSC, 2-KSC -COMPRESSOR CONTACTORS
9M THRU 13M/ -KF9 THRU -KF13 -CONDENSER FAN CONTACTORS (SYS. #1)
15M THRU 19M/ -KF15 THRU -KF19 -CONDENSER FAN CONTACTORS (SYS. #2)
1MP/1-FMP -MOTOR PROTECTOR (SYS. #1)
2MP/2-FMP -MOTOR PROTECTOR (SYS. #2)

2T, 3T, 4T/ -T2, -T3, -T4 -MICRO PANEL TRANSFORMERS
1TR, 2TR/ -K10, -K11 -TIMER RELAYS
TS/-ES -TRANSIENT SUPPRESSORS
PTB1, PTB2/ 1-XTB, 2-XTB -POWER TERMINAL BLOCK
MCB1, MCB2/ 1-QCB, 2-QCB -MOTOR CIRCUIT BREAKER
DSW1, DSW2/ 1-QSD, 2-QSD -DISCONNECT SERVICE SWITCH
———— -WIRING BY YORK
— — — — -WIRING BY OTHERS
━━━━ -OPTIONAL WIRING AND/OR COMPONENTS

PLUG NO.	WIRE NO.	PLUG PIN NO.
P1	21	1
	2	2
	22	3
	31	4
	32	5

PLUG NO.	WIRE NO.	PLUG PIN NO.
J1	21	1
	2	2
	22	3
	3Y	4
	3X	5

PLUG NO.	WIRE NO.	PLUG PIN NO.
P3A	125	1
	122	2

PLUG NO.	WIRE NO.	PLUG PIN NO.
J3A	25	1
	777	2

PLUG NO.	WIRE NO.	PLUG PIN NO.
P2	21	1
	2	2
	22	3
	33	4
	34	5

PLUG NO.	WIRE NO.	PLUG PIN NO.
J2	21	1
	2	2
	22	3
	3Y	4
	3X	5

PLUG NO.	WIRE NO.	PLUG PIN NO.
P4A	225	1
	222	2

PLUG NO.	WIRE NO.	PLUG PIN NO.
J4A	25	1
	777	2

PLUG NO.	WIRE NO.	PLUG PIN NO.
P3	2	1
	GRD	2
	125	4
	129	5
	127	6
	121	11
	122	12

PLUG NO.	WIRE NO.	PLUG PIN NO.
J3	2	1
	GRD	2
	125A	4
	129A	5
	127A	6
	121A	11
	122	12

PLUG NO.	WIRE NO.	PLUG PIN NO.
P4	2	1
	GRD	2
	225	3
	227	4
	229	5
	221	11
	222	12

PLUG NO.	WIRE NO.	PLUG PIN NO.
J4	2	1
	GRD	2
	225A	3
	227A	4
	229A	5
	221A	11
	222	12

PLUG NO.	WIRE NO.	PLUG PIN NO.
P5	130	1
	131	2
	132	3
	148	4
	118	6

PLUG NO.	WIRE NO.	PLUG PIN NO.
J5	30	1
	31	2
	32	3
	48	4
	18	6

PLUG NO.	WIRE NO.	PLUG PIN NO.
P6	230	1
	231	2
	232	3
	248	4
	218	6

PLUG NO.	WIRE NO.	PLUG PIN NO.
J6	30	1
	31	2
	32	3
	48	4
	18	6

PLUG NO.	WIRE NO.	PLUG PIN NO.
P7	125	1
	2	2
	123	3
	140	4
	141	5
	142	6
	32	7
	TRX	8
	44	9

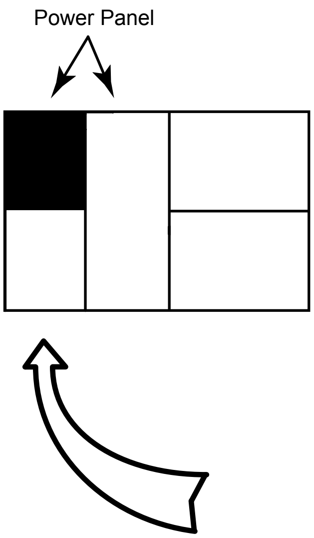
PLUG NO.	WIRE NO.	PLUG PIN NO.
J7	25	1
	2	2
	23	3
	40	4
	41	5
	42	6
	3X	7
	TRX	8
	44	9

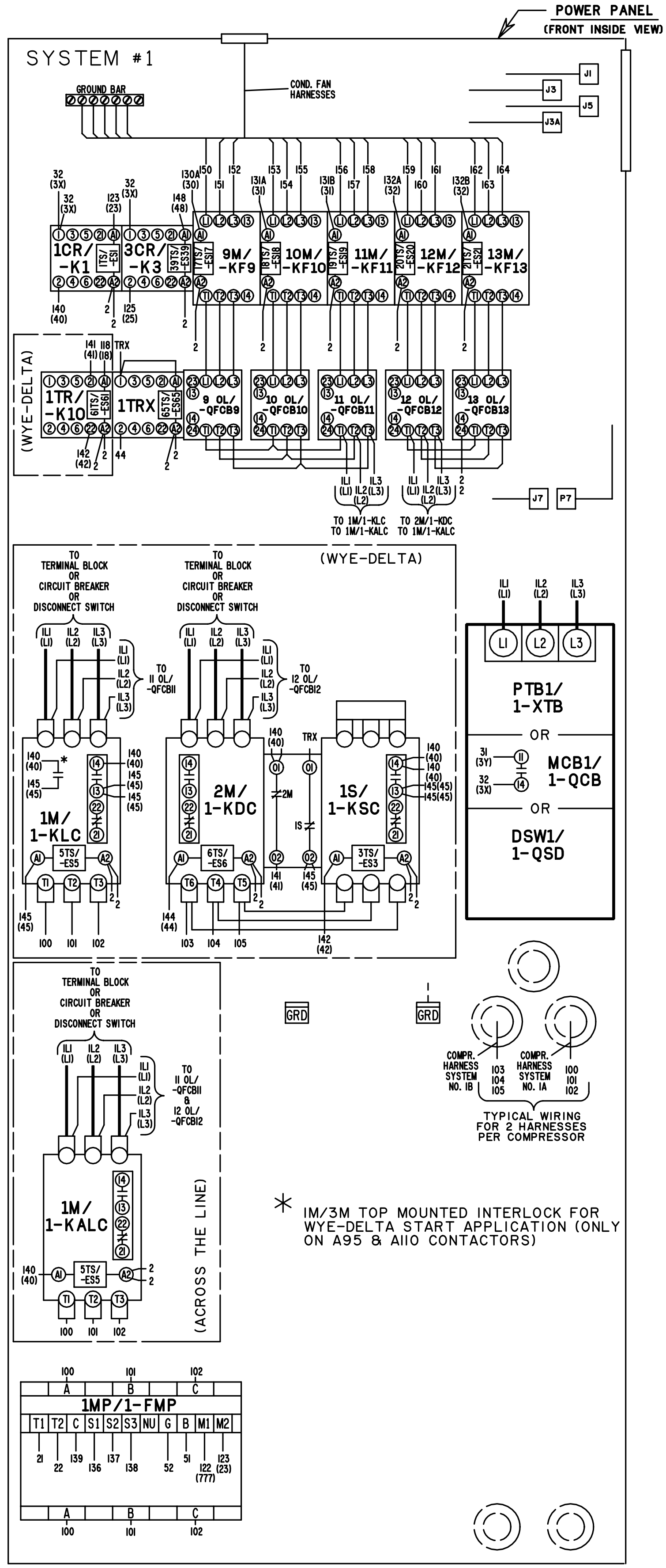
PLUG NO.	WIRE NO.	PLUG PIN NO.
P8	225	1
	2	2
	223	3
	240	4
	241	5
	242	6
	34	7
	TRX	8
	44	9

PLUG NO.	WIRE NO.	PLUG PIN NO.
J8	25	1
	2	2
	23	3
	40	4
	41	5
	42	6
	3X	7
	TRX	8
	44	9

LD09375

FIG. 21 – CONNECTION DIAGRAM 4 COMPRESSOR

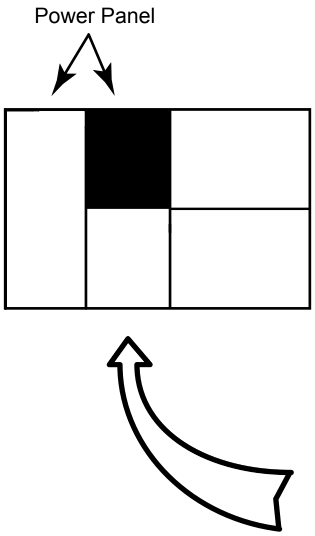




LD09376

FIG. 22 – CONNECTION DIAGRAM 4 COMPRESSOR

CONNECTION WIRING DIAGRAM



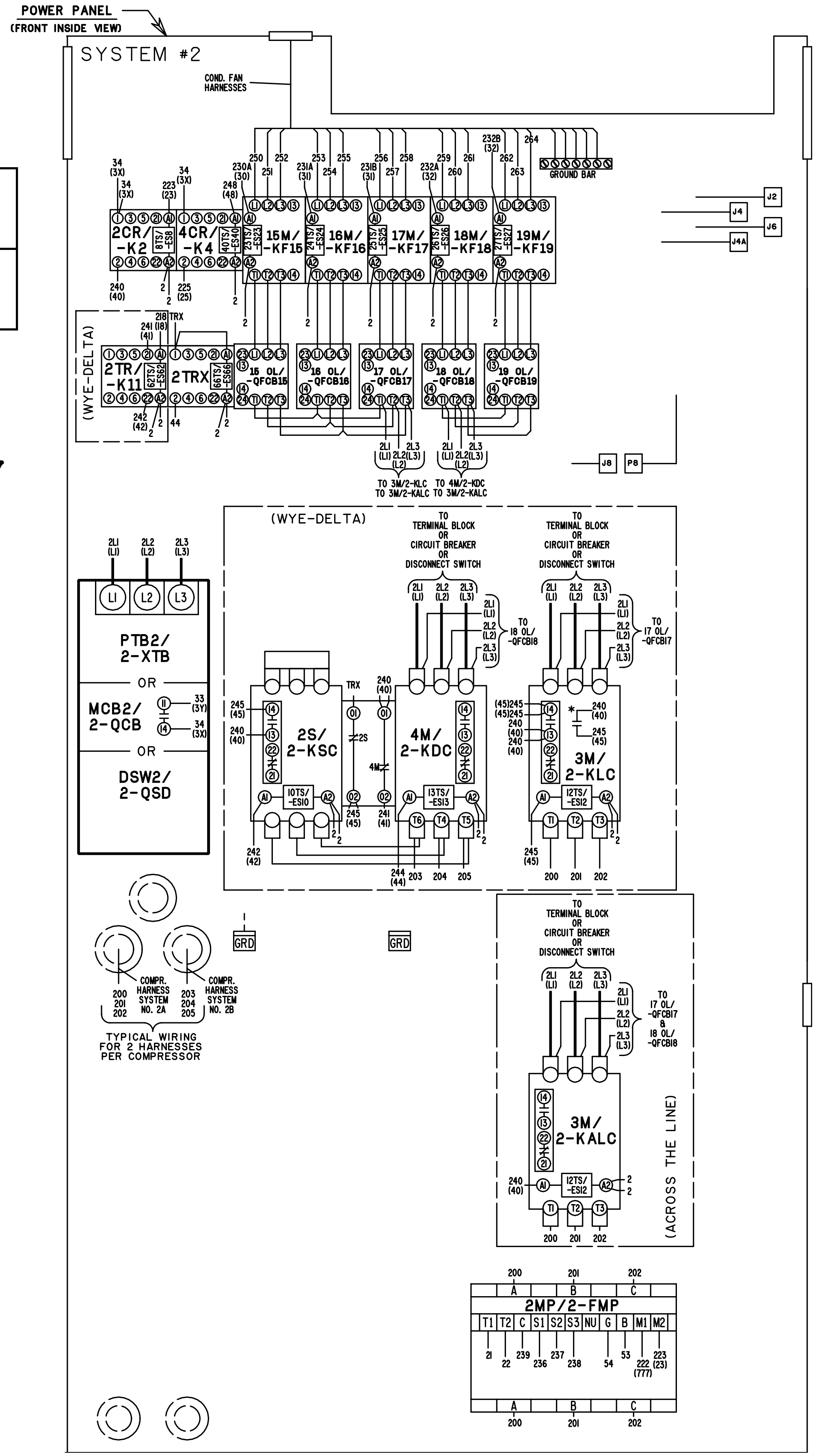


FIG. 23 – CONNECTION WIRING DIAGRAM

CONNECTION WIRING DIAGRAM

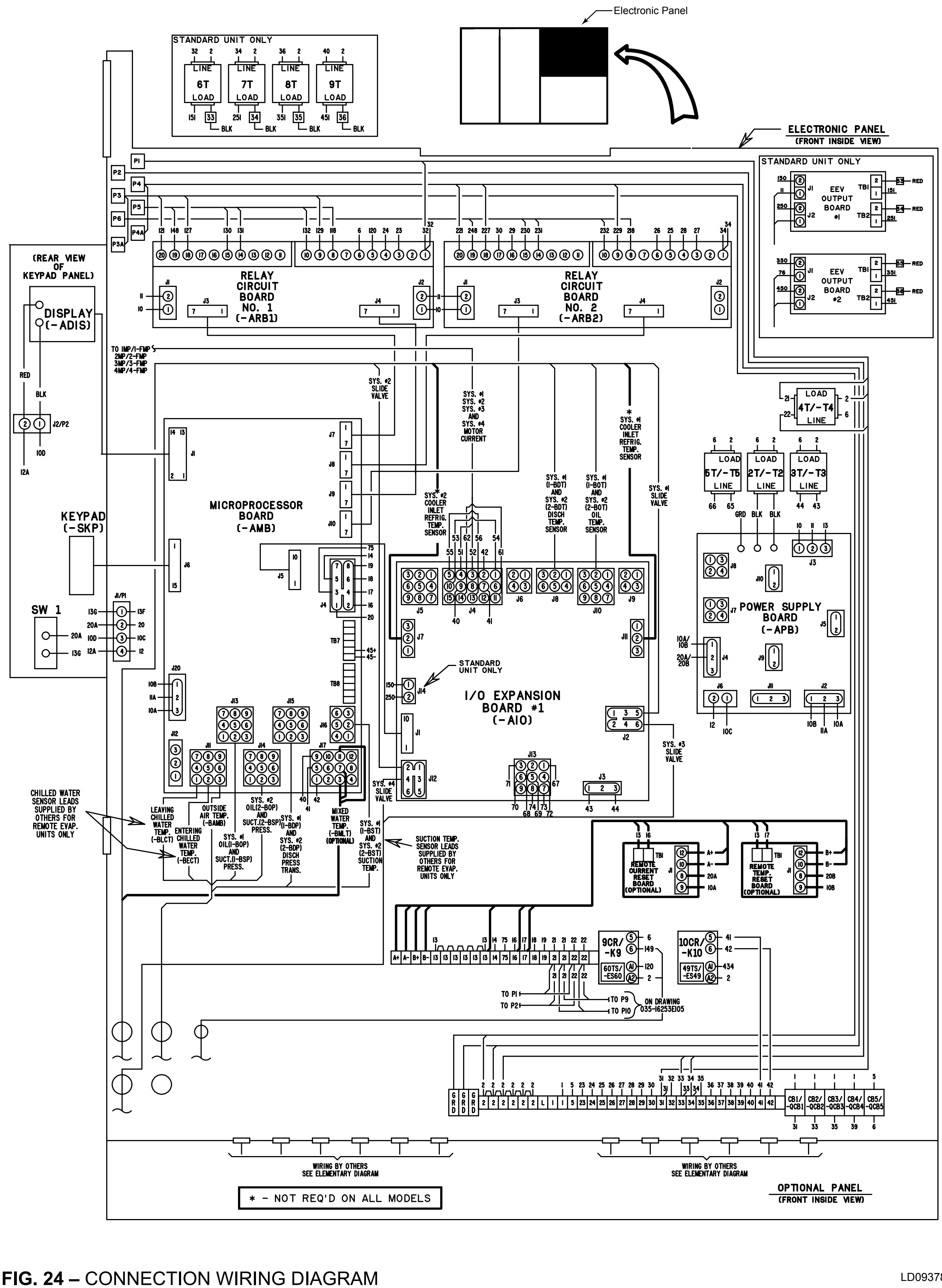


FIG. 24 – CONNECTION WIRING DIAGRAM

LD09378

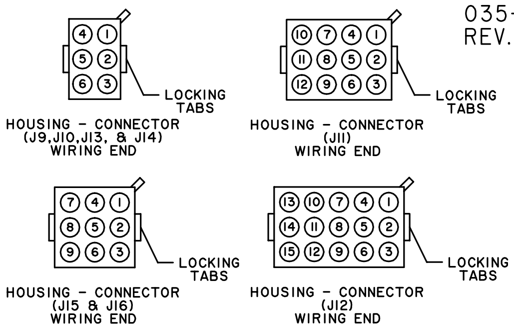
CONNECTION DIAGRAM, ELEC. BOX
YCAS 360-440
STANDARD AND REMOTE EVAP. UNITS

J9, J10, J11, J11A, J12, J12A, J13, J14, J15, J16, P15 & P16 —— POWER PANEL

P9, P10, P11, P11A, P12, P12A, P13, & P14 —— ELECTRONIC (MICRO) PANEL

NOTE: 1. WIRE NUMBERS IDENTIFIED IN (PARENTHESIS) INDICATE THE ACTUAL HARNESS CODE STAMPED ON THE WIRE.

035-19206E105
REV. -



LEGEND

5CR THRU 8CR, 10CR/ -K5 THRU -K8, -K10	-CONTROL RELAYS
CB4, CB5, CB6/ -QCB4,-QBC5,-QCB6	-CIRCUIT BREAKERS
21CB THRU 24CB	-OVERLOAD CIRCUIT BREAKERS (SYS. #3)
27CB THRU 30CB	-OVERLOAD CIRCUIT BREAKERS (SYS. #4)
21 OL THRU 24 OL	-MOTOR OVERLOADS (SYS. #3)
27 OL THRU 30 OL	-MOTOR OVERLOADS (SYS. #4)
-QFCB21 THRU -QFCB24	-MOTOR OVERLOADS W/OVERLOAD CIRCUIT BREAKERS (SYS. #3)
-QFCB27 THRU -QFCB30	-MOTOR OVERLOADS W/OVERLOAD CIRCUIT BREAKERS (SYS. #4)
3FU, 4FU/ -F3, -F4	-TRANSFORMER FUSE **(OPTIONAL)**
5M, 7M/ 3-KLC OR 3-KALC, 4-KLC OR 4-KALC	-COMPRESSOR CONTACTORS
6M, 8M/ 3-KDC, 4-KDC	-COMPRESSOR CONTACTORS
3S, 4S/ 3-KSC, 4-KSC	-COMPRESSOR CONTACTORS
21M THRU 24M/ -KF21 THRU -KF24	-CONDENSER FAN CONTACTORS (SYS. #3)
27M THRU 30M/ -KF27 THRU -KF30	-CONDENSER FAN CONTACTORS (SYS. #4)
3MP/3-FMP	-MOTOR PROTECTOR (SYS. #3)
4MP/4-FMP	-MOTOR PROTECTOR (SYS. #4)
1T/-T1	-CONTROL TRANSFORMER 2KVA **(OPTIONAL)**
6T, 7T, 8T/ -T6, -T7, -T8	-MICRO PANEL TRANSFORMERS
3TR, 4TR/ -K12, -K13	-TIMER RELAYS
TS/-ES	-TRANSIENT SUPPRESSORS
PTB3, PTB4/ 3-XTB, 4-XTB	-POWER TERMINAL BLOCK
MCB3, MCB4/ 3-QCB, 4-QCB	-MOTOR CIRCUIT BREAKER
DSW3, DSW4/ 3-QSD, 4-QSD	-DISCONNECT SERVICE SWITCH
————	-WIRING BY YORK
— — — —	-WIRING BY OTHERS
━━━━	-OPTIONAL WIRING AND/OR COMPONENTS

PLUG NO.	WIRE NO.	PLUG PIN NO.
P9	21	1
	2	2
	22	3
	35	4
	36	5

PLUG NO.	WIRE NO.	PLUG PIN NO.
J9	21	1
	2	2
	22	3
	3Y	4
	3X	5

PLUG NO.	WIRE NO.	PLUG PIN NO.
P11A	325	1
	322	2

PLUG NO.	WIRE NO.	PLUG PIN NO.
J11A	25	1
	777	2

PLUG NO.	WIRE NO.	PLUG PIN NO.
P10	21	1
	2	2
	22	3
	39	4
	40	5

PLUG NO.	WIRE NO.	PLUG PIN NO.
J10	21	1
	2	2
	22	3
	3Y	4
	3X	5

PLUG NO.	WIRE NO.	PLUG PIN NO.
P12A	425	1
	422	2

PLUG NO.	WIRE NO.	PLUG PIN NO.
J12A	25	1
	777	2

PLUG NO.	WIRE NO.	PLUG PIN NO.
P11	2	1
	GRD	2
	325	3
	329	5
	327	4
	321	11
	322	12

PLUG NO.	WIRE NO.	PLUG PIN NO.
J11	2	1
	GRD	2
	325A	3
	329A	5
	327A	4
	321A	11
	322	12

PLUG NO.	WIRE NO.	PLUG PIN NO.
P12	2	1
	GRD	2
	425	4
	427	6
	429	5
	421	11
	422	12

PLUG NO.	WIRE NO.	PLUG PIN NO.
J12	2	1
	GRD	2
	425A	4
	427A	6
	429A	5
	421A	11
	422	12

PLUG NO.	WIRE NO.	PLUG PIN NO.
P13	330	1
	331	2
	332	3
	348	4
	318	6

PLUG NO.	WIRE NO.	PLUG PIN NO.
J13	30	1
	31	2
	32	3
	48	4
	18	6

PLUG NO.	WIRE NO.	PLUG PIN NO.
P14	430	1
	431	2
	432	3
	448	4
	418	6

PLUG NO.	WIRE NO.	PLUG PIN NO.
J14	30	1
	31	2
	32	3
	48	4
	18	6

PLUG NO.	WIRE NO.	PLUG PIN NO.
P15	325	1
	2	2
	323	3
	340	4
	341	5
	342	6
	32	7
	TRX	8
	44	9

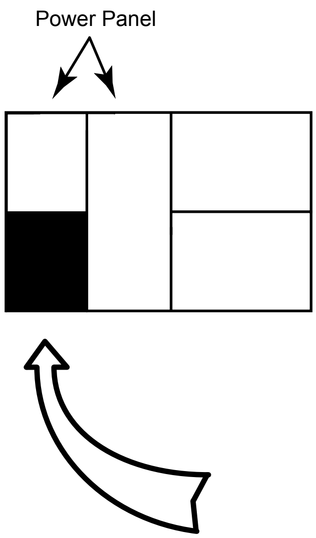
PLUG NO.	WIRE NO.	PLUG PIN NO.
J15	25	1
	2	2
	23	3
	40	4
	41	5
	42	6
	3X	7
	TRX	8
	44	9

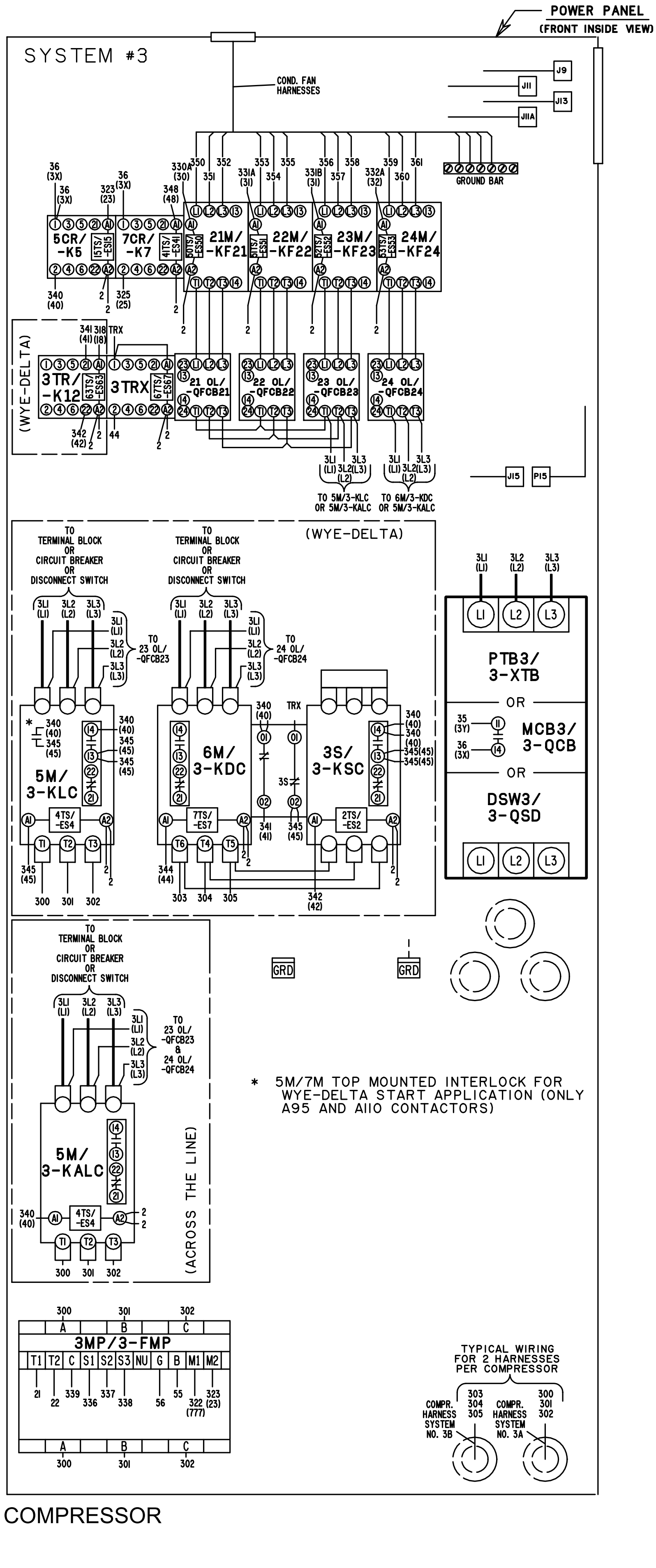
PLUG NO.	WIRE NO.	PLUG PIN NO.
P16	425	1
	2	2
	423	3
	440	4
	441	5
	442	6
	34	7
	TRX	8
	44	9

PLUG NO.	WIRE NO.	PLUG PIN NO.
J16	25	1
	2	2
	23	3
	40	4
	41	5
	42	6
	3X	7
	TRX	8
	44	9

LD09379

FIG. 25 – CONNECTION DIAGRAM 4 COMPRESSOR

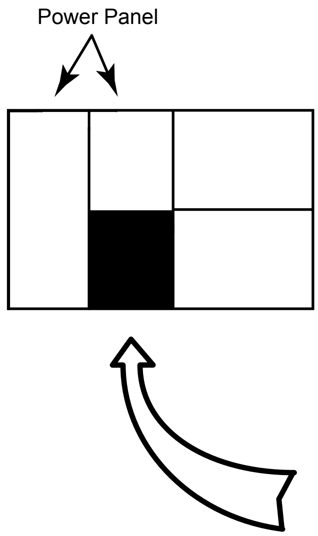


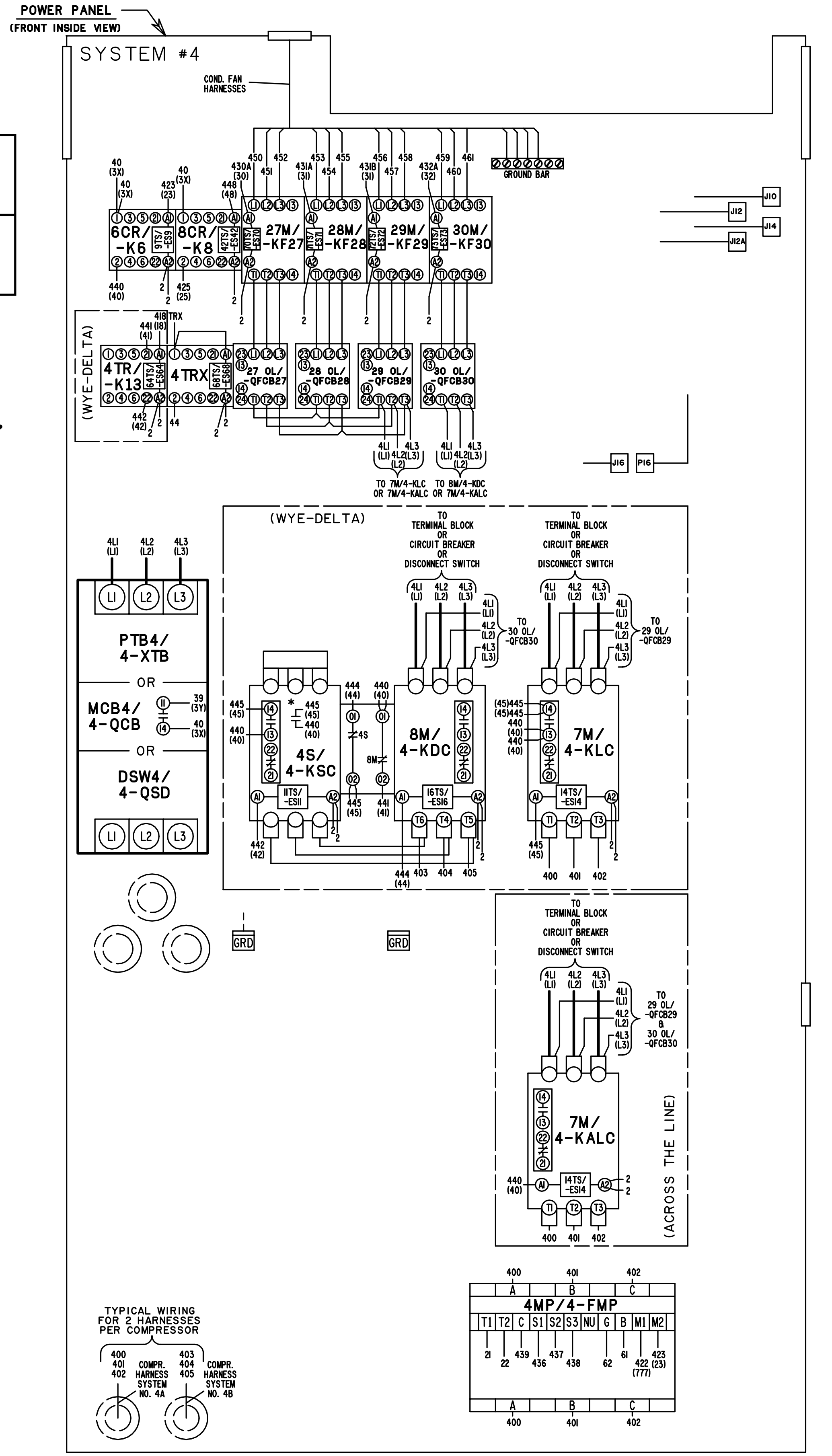


LD09380

FIG. 26 – CONNECTION DIAGRAM 4 COMPRESSOR

CONNECTION WIRING DIAGRAM

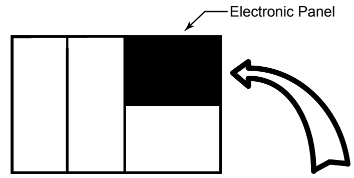




LD09381

FIG. 27 – CONNECTION DIAGRAM 4 COMPRESSOR

CONNECTION WIRING DIAGRAM



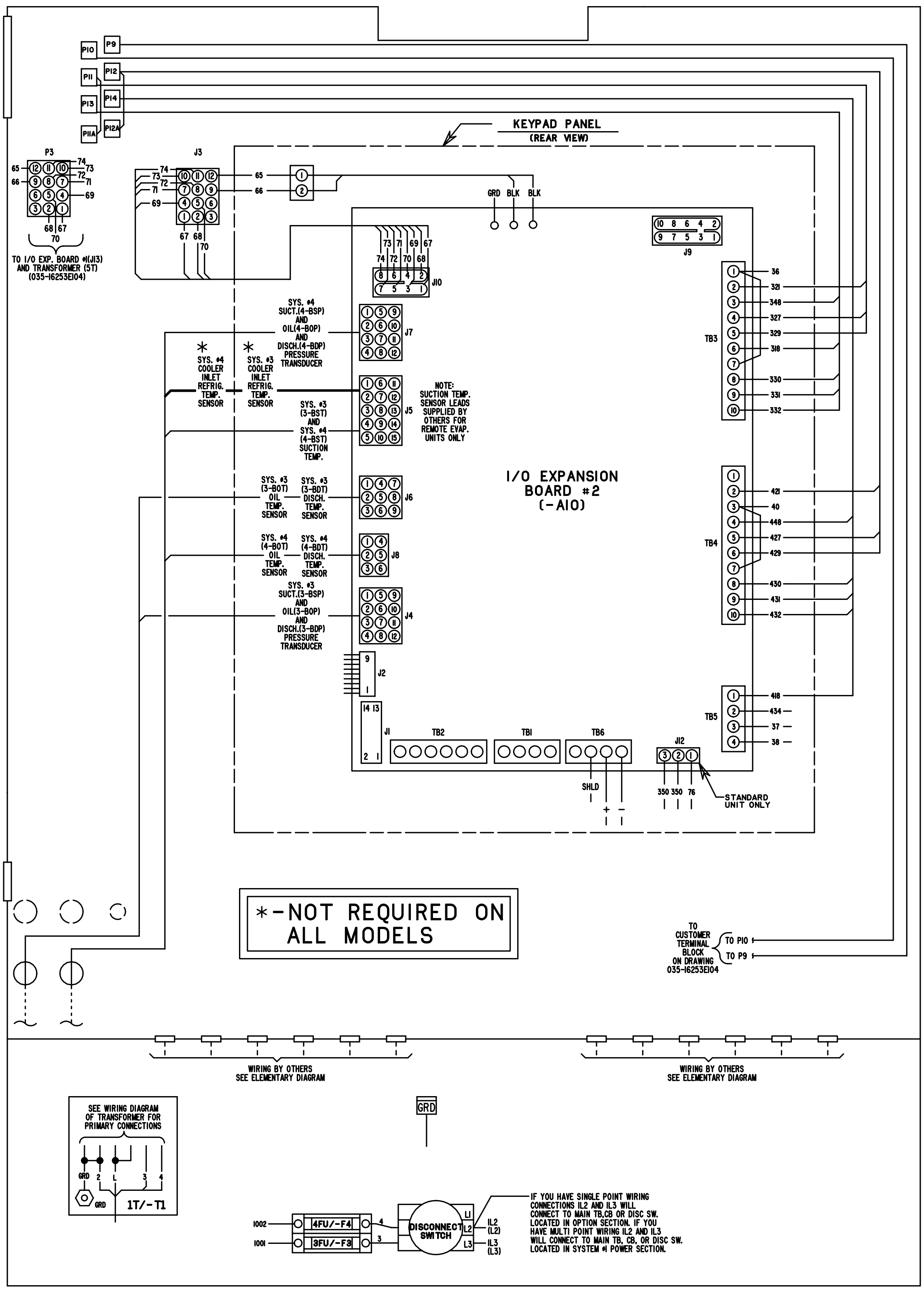
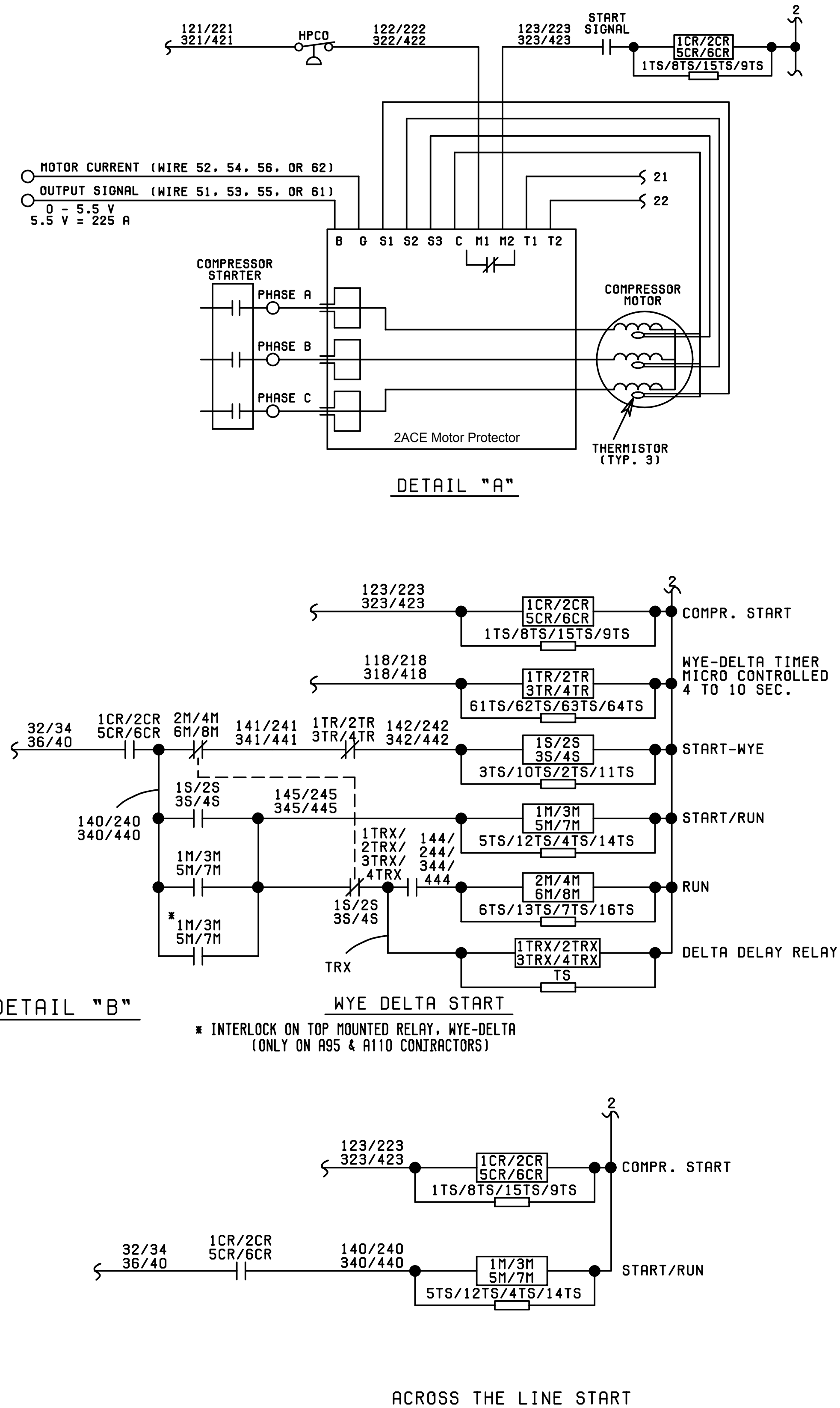


FIG. 28 – CONNECTION DIAGRAM 4 COMPRESSOR

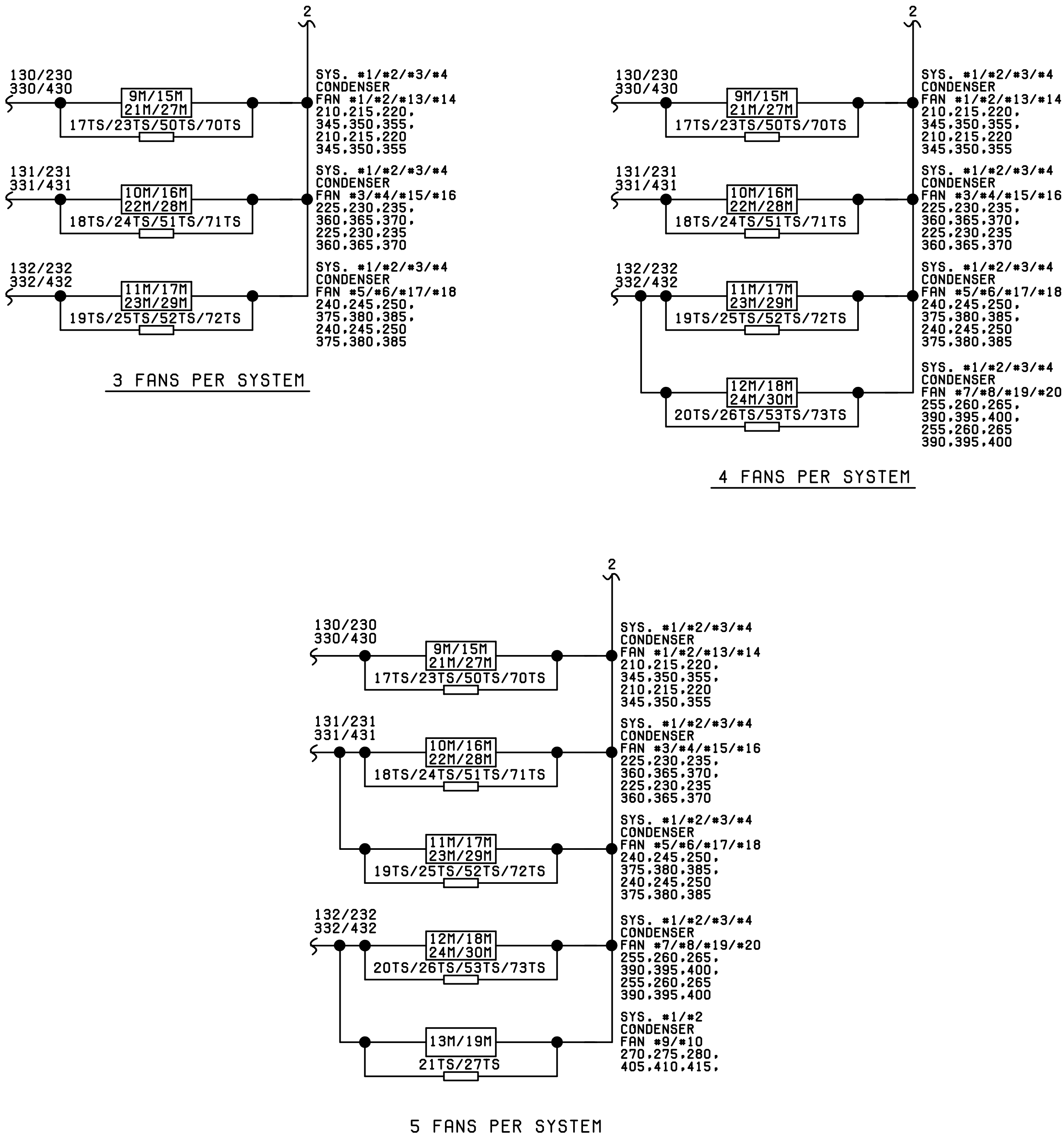
ELEMENTARY DIAGRAM
DXST STARTER
CONTROL CIRCUIT



LD09373

FIG. 29 – ELEMENTARY DIAGRAM - DXST STARTER CONTROL CIRCUIT

ELEMENTARY DIAGRAM
DXST FAN
CONTROL CIRCUIT



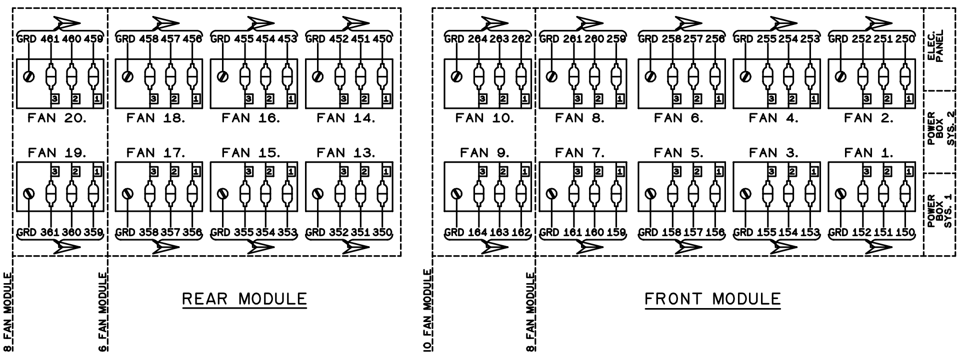
DETAIL "C"

SEE ENGINEER GUIDE OR INSTALLATION, OPERATION AND MAINTENANCE MANUAL FOR NUMBER OF CONDENSER FANS FOR CHILLER MODEL.

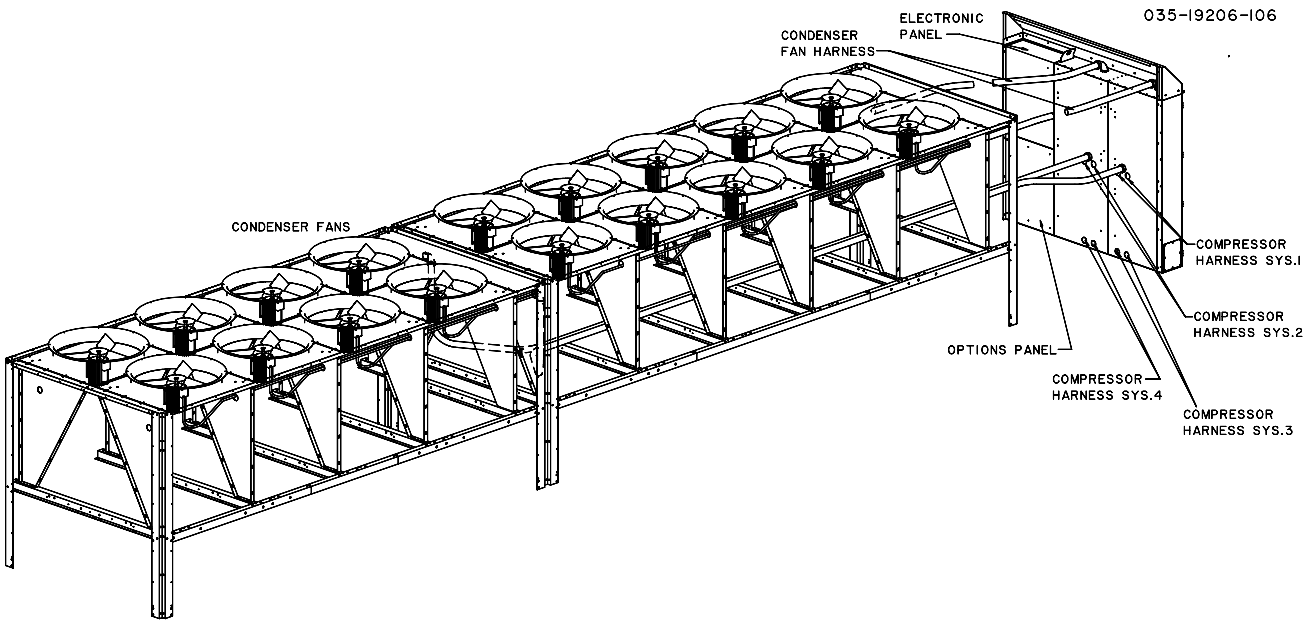
LD09374

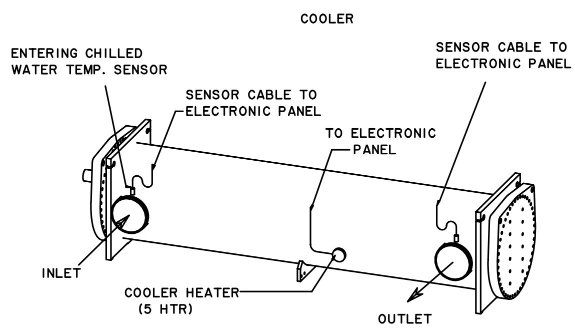
FIG. 30 – ELEMENTARY DIAGRAM - DXST FAN CONTROL CIRCUIT

CONNECTION DIAGRAM SYSTEM WIRING
STANDARD AND REMOTE EVAP UNITS



CONNECTION DIAGRAMS SYSTEM WIRING
YCAS 0360 - 0440
STANDARD & REMOTE EVAP.UNITS





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)

LD09383

FIG. 31 – CONNECTION DIAGRAM SYSTEM WIRING

CONNECTION DIAGRAM SYSTEM WIRING STANDARD AND REMOTE EVAP UNITS

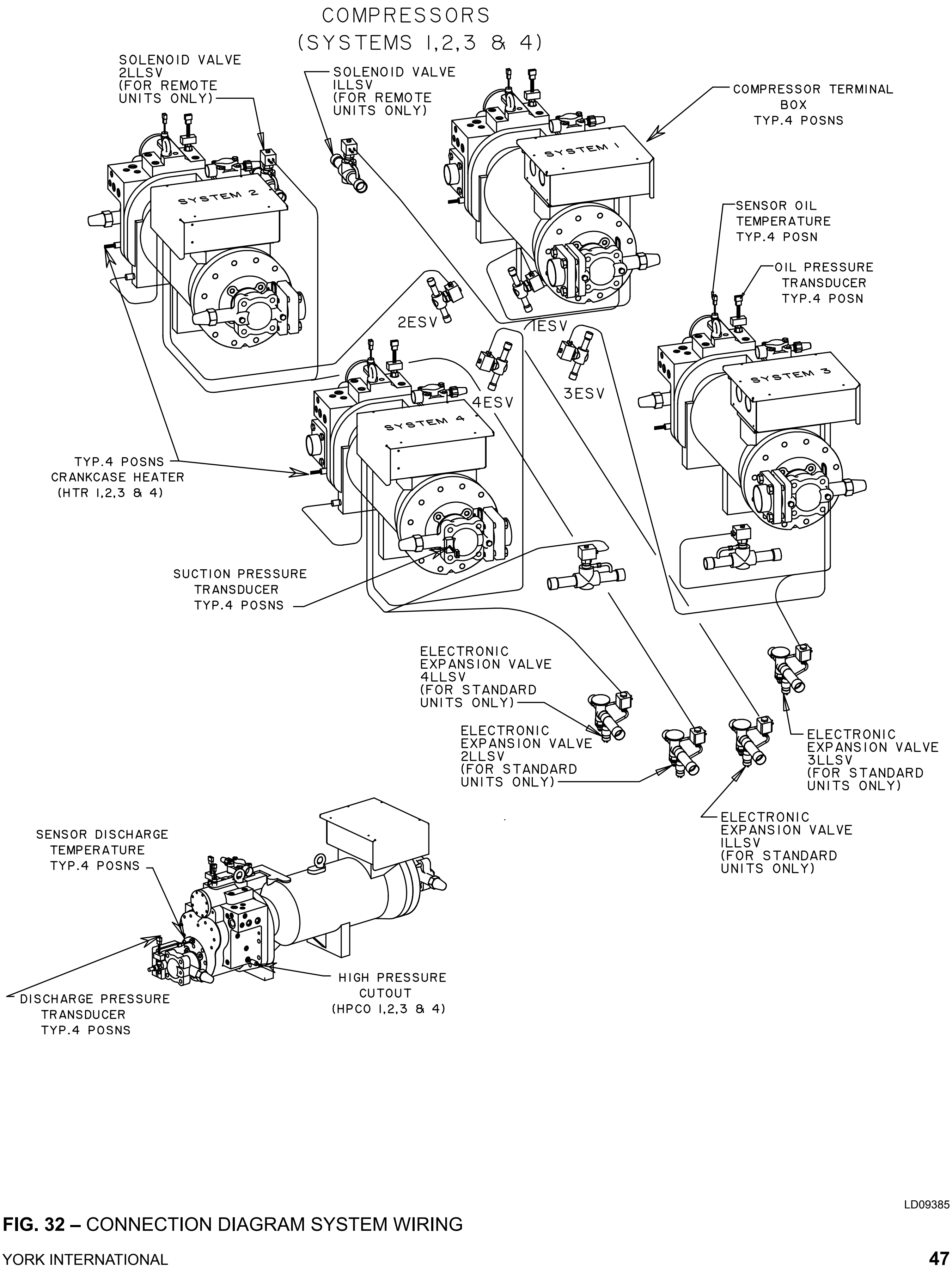


FIG. 32 – CONNECTION DIAGRAM SYSTEM WIRING

COMPRESSOR TERMINAL BOX
SYSTEM 1 THROUGH 4

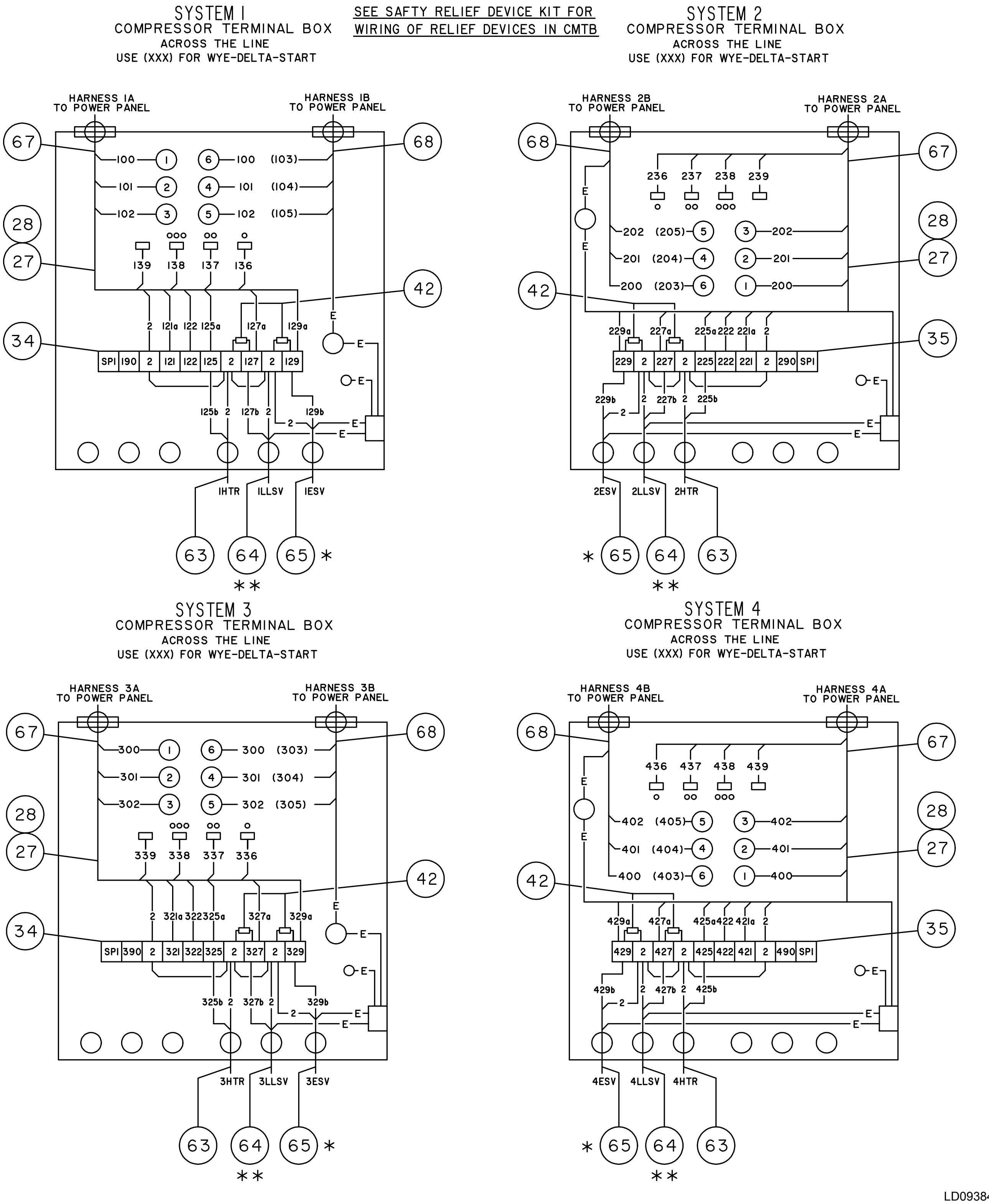


FIG. 33 – COMPRESSOR TERMINAL BOX, SYSTEM 1-4

Form 201.19-W2 (304)
New Release