YORK®	*MILLENNIUM* AIR-COOLED SCREW LIQUID CHILLERS MODELS YCAS STYLE F 50 Hz	
WIRING DIAGRAM	New Release	Form 201.18-W6 (200)

MODELS YCAS0283 THROUGH YCAS0343
50 Hz UNITS
240 THROUGH 315 kW

THE HARTFORD STEAM BOILER INSPECTION AND INSURANCE CO. 1866 ISO 9000 REGISTRATION ™

EPA Energy Star BUILDINGS ALLY

WARNING

HIGH VOLTAGE

is used in the operation of this equipment

DEATH OR SERIOUS INJURY

may result if personnel fail to observe precautions

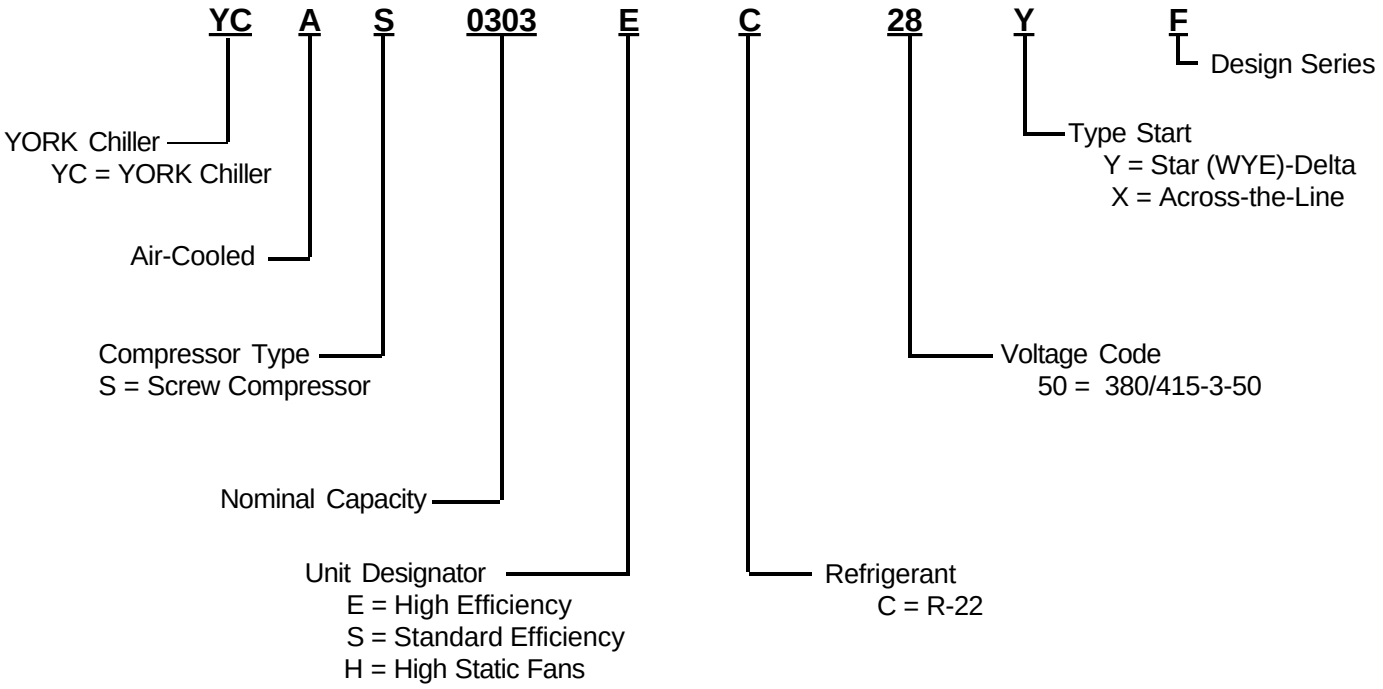
Work on electrical equipment should not be undertaken unless individual(s) has (have) been trained in the proper maintenance of the equipment and is (are) familiar with its potential hazards.

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 a dangerous potential.

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

LOW VOLTAGE

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


YC A S 0303 E C 28 Y F
Design Series
YORK Chiller
YC = YORK Chiller
Type Start
Y = Star (WYE)-Delta
X = Across-the-Line
Air-Cooled
Compressor Type
S = Screw Compressor
Voltage Code
50 = 380/415-3-50
Nominal Capacity
Unit Designator
E = High Efficiency
S = Standard Efficiency
H = High Static Fans
Refrigerant
C = R-22

MULTIPLE POINT POWER SUPPLY CONNECTION

Each of the Two Field Provided Power Supply Circuits Individually protected with Branch Circuit Protection. Field Connections to Factory provided Terminal Block [Std], disconnects [Opt], or Individual System Breakers [Opt] in each of the tow Motor Control Centers.)

Chiller Model YCAS	VOLTS	SYSTEM #1 FIELD-SUPPLIED WIRING												
		FIELD PROVIDED POWER SUPPLY				FACTORY PROVIDED (LUGS) WIRE RANG[7]			COMPRESSOR			FANS [11, 12]		
		MCA[1]	MIN NF DISC SW[2, 9]	OVER-CURRENT PROTECTION[13]										
				MIN.[3,5]	MAX.[4,6]	STD. TERM. BLOCK	OPTIONAL NF DISC. SWITCH	OPT. C.B.	RLA	Y-LRA	X-LRA	Qty	FLA (ea)	LRA (ea)
0283	380	99	100	125	150	#18 - 2	#14 - 250	#14 - 250	68	175	523	3	4.4	19.0
0303	380	102	100	125	150	#18 - 2	#14 - 250	#14 - 250	71	175	523	3	4.4	19.0
0323	380	136	150	175	225	#2 - 4/0	#14 - 250	#14 - 250	98	232	732	3	4.4	19.0
0343	380	145	150	175	225	#2 - 4/0	#14 - 250	#14 - 250	105	232	732	3	4.4	19.0

See page 11 for Electrical Notes

OPTIONAL SINGLE POINT POWER SUPPLY CONNECTION AND INDIVIDUAL UNIT CIRCUIT BREAKERS

One Field Provided Power Supply Circuit to the chiller. Field connections to Power Terminal Block or Non-Fused Disconnect in 'Option Panel'. Individual Branch Circuit Protection (Breakers) per Motor Control Center[10]

Chiller Model YCAS	VOLTS	FIELD SUPPLIED WIRING					
		FIELD PROVIDED POWER SUPPLY				FACTORY PROVIDED (LUGS) WIRE RANG[7]	
		MCA[1]	MIN NF DISC SW[2, 9]	OVER-CURRENT PROTECTION[13]			
				MIN.[3,5]	MAX.[4,6]	STD. TERM. BLOCK	OPTIONAL NF DISC. SWITCH
0283	380	197	200	200	225	#2 - 4/0	#14 - 250
0303	380	204	200	225	250	#2 - 4/0	#14 - 250
0323	380	238	250	250	300	#2 - 300	#14 - 250
0403	380	247	250	300	300	#2 - 300	#4 - 300

Chiller Model YCAS	VOLTS	SYSTEM #2 FIELD-SUPPLIED WIRING												
		FIELD PROVIDED POWER SUPPLY				FACTORY PROVIDED (LUGS) WIRE RANG[7]			COMPRESSOR			FANS [11, 12]		
		MCA[1]	MIN NF DISC SW[2, 9]	OVER-CURRENT PROTECTION[13]										
				MIN.[3,5]	MAX.[4,6]	STD. TERM. BLOCK	OPTIONAL NF DISC. SWITCH	OPT. C.B.	RLA	Y-LRA	X-LRA	Qty	FLA (ea)	LRA (ea)
0283	380	99	100	125	150	#18 - 2	#14 - 250	#14 - 250	68	175	523	3	4.4	19.0
0303	380	102	100	125	150	#18 - 2	#14 - 250	#14 - 250	71	175	523	3	4.4	19.0
0323	380	102	100	125	150	#18 - 2	#14 - 250	#14 - 250	71	175	523	3	4.4	19.0
0343	380	102	100	125	150	#18 - 2	#14 - 250	#14 - 250	71	175	523	3	4.4	19.0

Chiller Model YCAS	VOLTS	SYSTEM #1						SYSTEM #2					
		COMPRESSOR			FANS [11, 12]			COMPRESSOR			FANS [11, 12]		
		RLA	Y-LRA	X-LRA	Qty	FLA (ea)	LRA (ea)	RLA	Y-LRA	X-LRA	Qty	FLA (ea)	LRA (ea)
0283	380	159	404	1257	3	8.2	38.0	159	404	1257	3	8.2	38.0
0303	380	138	354	1103	3	7.8	33.0	138	354	1103	3	7.8	33.0
0323	380	84	219	681	3	4.8	23.0	84	219	681	3	4.8	23.0
0403	380	70	174	542	3	4.0	19.0	70	174	542	3	4.0	19.0

OPTIONAL SINGLE POINT POWER SUPPLY CONNECTION

(One Field Provided Power Supply Circuit to the chiller. Field Connection to Power Terminal Block or Non-Fused Disconnect in 'Option Panel'.
No internal Branch Circuit Protection per Motor Control Center[10].)

Chiller Model YCAS	VOLTS	FIELD SUPPLIED WIRING					
		FIELD PROVIDED POWER SUPPLY				FACTORY PROVIDED (LUGS) WIRE RANG[7]	
		MCA[1]	MIN NF DISC SW[2, 9]	OVER-CURRENT PROTECTION[13] MIN.[3,5]	OVER-CURRENT PROTECTION[13] MAX.[4,6]	STD. TERM. BLOCK	OPTIONAL NF DISC. SWITCH
0283	380	197	200	200	225	#2 - 4/0	#14 - 250
0303	380	204	200	225	250	#2 - 4/0	#14 - 250
0323	380	238	250	250	300	#2 - 300	#14 - 250
0403	380	247	250	300	300	#2 - 300	#4 - 300

OPTIONAL SINGLE POINT POWER SUPPLY CONNECTION TO FACTORY CIRCUIT BREAKER

(One Field Provided Power Supply Circuit to the chiller. Field Connection to Power Terminal Block or Non-Fused Disconnect in 'Option Panel'.
No internal Branch Circuit Protection per Motor Control Center[10].)

Chiller Model YCAS	Volts	Field Supplied Wiring			System #1					System #2				
		MCA[1]	Factory Supplied Breaker		Compressor		Fans[11, 12]			Compressor		Fans[11, 12]		
			Rating[5,6]	Wire Range[7] (Lugs)	RLA	X-LRA	Qty	FLA (ea)	LRA (ea)	RLA	X-LRA	Qty	FLA (ea)	LRA (ea)
0283	380	197	225	#14 - 250	68.0	523.0	3	4.4	19.0	68	523.0	3	4.4	19.0
0303	380	204	250	#14 - 250	71.0	523.0	3	4.4	19.0	71	523.0	3	4.4	19.0
0323	380	238	300	#14 - 250	98.0	732.0	3	4.4	19.0	71	523.0	3	4.4	19.0
0403	380	247	300	#4 - 300	105.0	732.0	3	4.4	19.0	71	523.0	3	4.4	19.0

See page 11 for Electrical Notes

Chiller Model YCAS	VOLTS	SYSTEM #1					SYSTEM #2				
		COMPRESSOR		FANS [11, 12]			COMPRESSOR		FANS [11, 12]		
		RLA	X-LRA	Qty	FLA (ea)	LRA (ea)	RLA	X-LRA	Qty	FLA (ea)	LRA (ea)
0283	380	68	523	3	4.4	19.0	68	523	3	4	19.0
0303	460	71	523	3	4.4	19.0	71	523	3	4	19.0
0323	575	98	732	3	4.4	19.0	71	523	3	4	19.0
0403	380	105	732	3	4.4	19.0	71	523	3	4	19.0

CONTROL POWER SUPPLY (UNITS WITHOUT STANDARD CONTROL CIRCUIT TRANSFORMER

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

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

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 10A; -28, add 9A; -40, add 5A; -46, add 4A; -58, add 3A.

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 (UL 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 UL **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 UL **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.

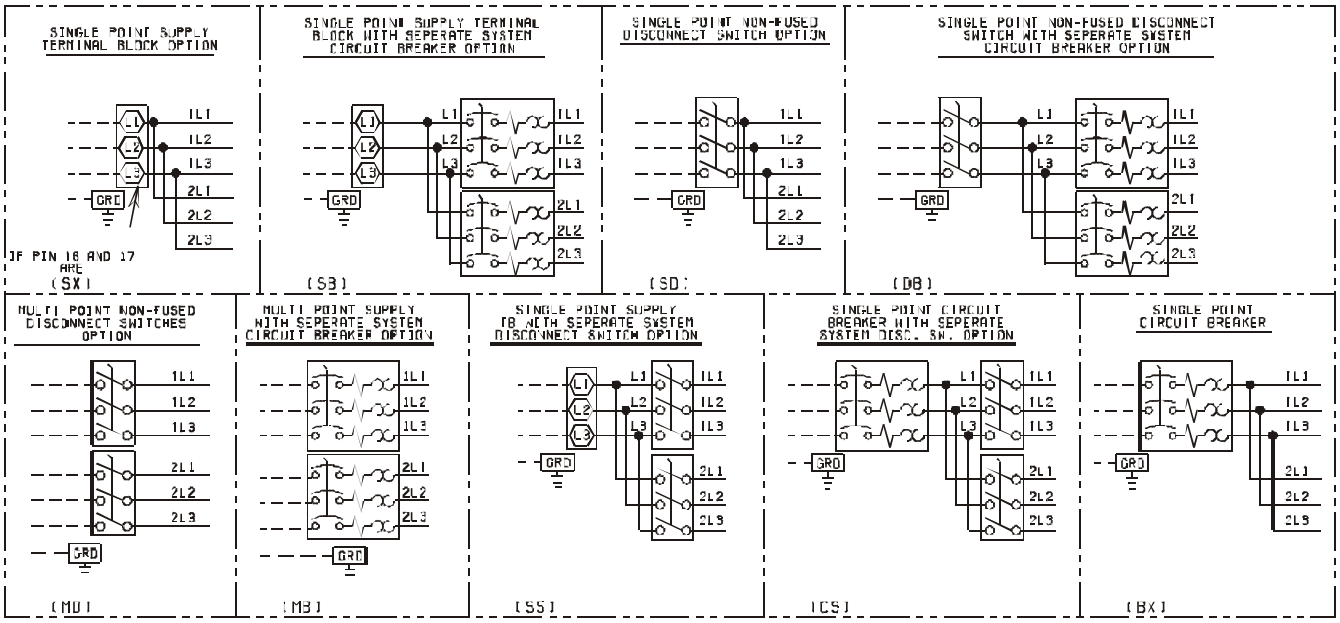
10. Two-compressor machines with single-point power connection, and equipped with Star-Delta compressor motor start must also include Factory provided circuit breakers in each motor control center. All 3 & 4 compressor machines equipped with Star-Delta compressor motor start must also include Factory provided circuit breakers in each motor control center.

11. Consult factory for Electrical Data on units equipped with “High Static Fan” option. 60Hz High Static Fans are 3.8kW each, 50Hz 3.5kW each.

12. FLA for each “Low Noise Fan” motor: 200v = 8.0A, 230v = 7.8A, 380v = 4.4A, 460v = 3.6A, 575v = 2.9A, 380v/50Hz = 4.1A.

13. Group Rated breaker must be HACR type for cUL Machines.

WIRING DIAGRAM
ACROSS-THE-LINE 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.

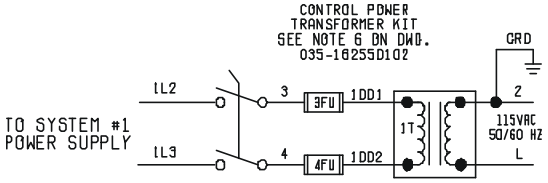
2. Contacts must be suitable for switching 24VDC. (Gold contacts recommended). Wiring shall NOT run in the same conduit with any line voltage (Class I) wiring.

3. To cycle unit on and off automatically with contacts shown, install a cycling device in series with the flow switch. 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 6A at 115 Volts AC.

5. 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.

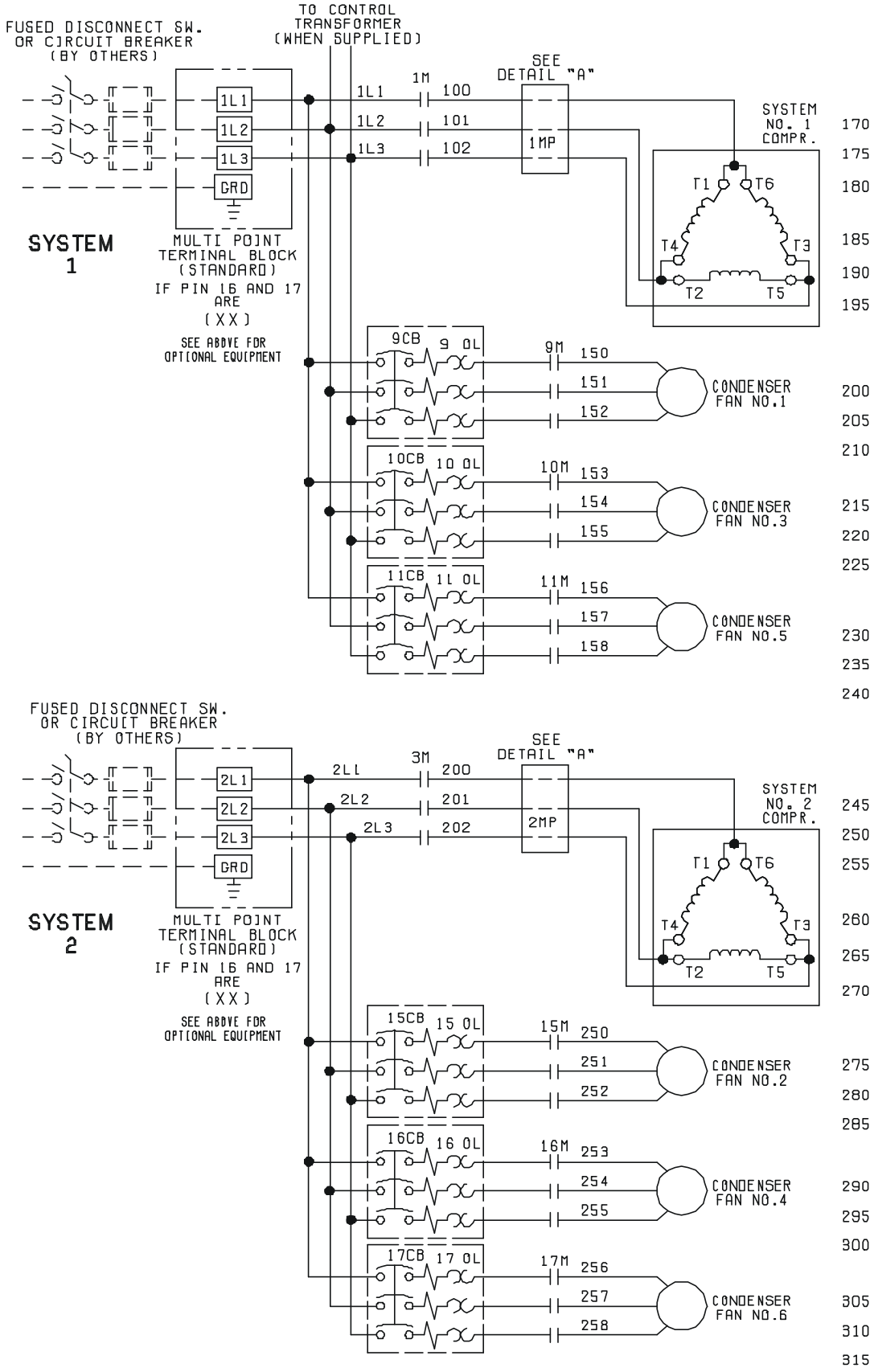


CONTROL POWER SUPPLY

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

FIG. 1 - ELEMENTARY DIAGRAM - ACROSS-THE-LINE START

WIRING DIAGRAM
ACROSS-THE-LINE START



ELEMANTARY DIAGRAM

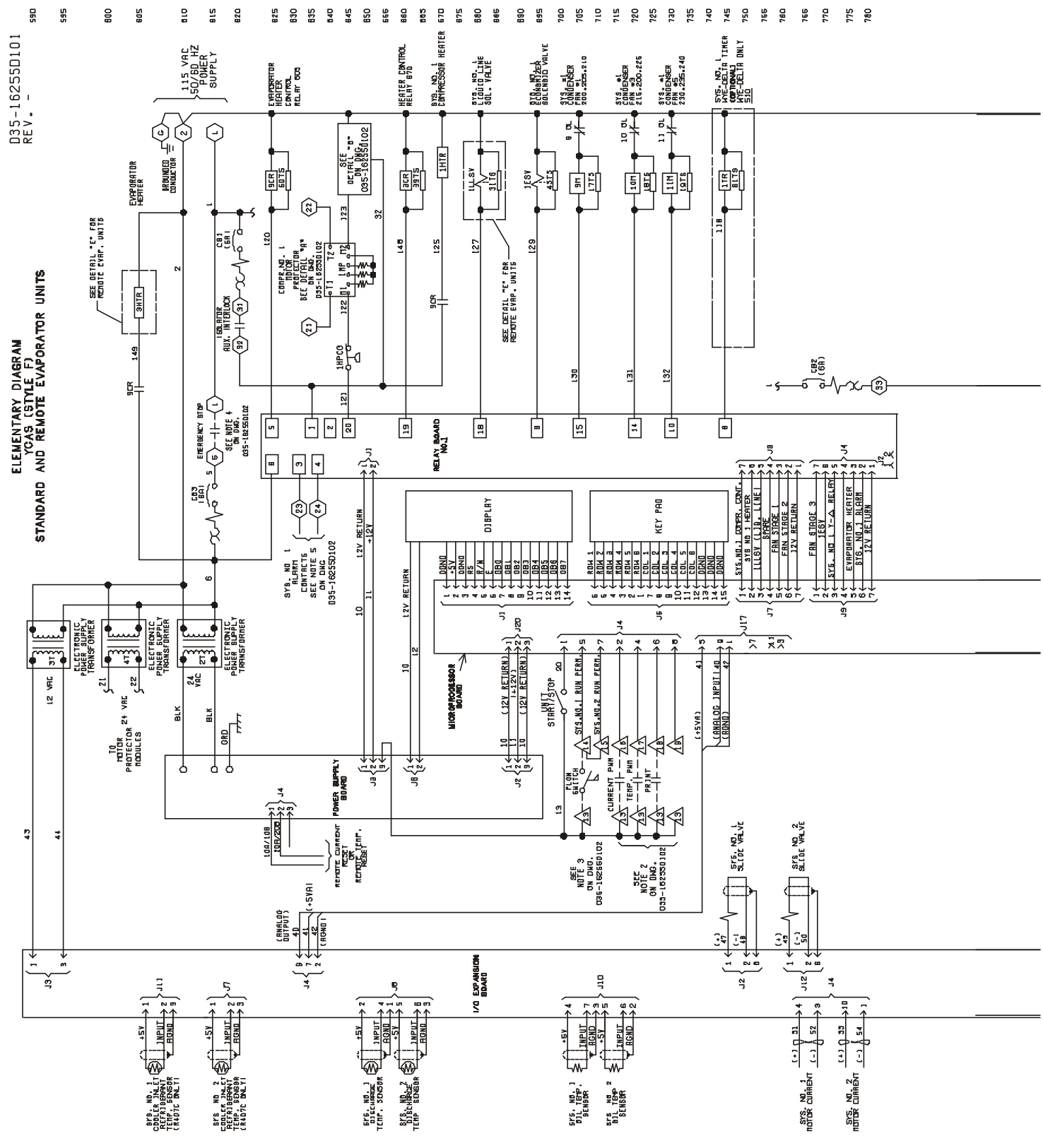
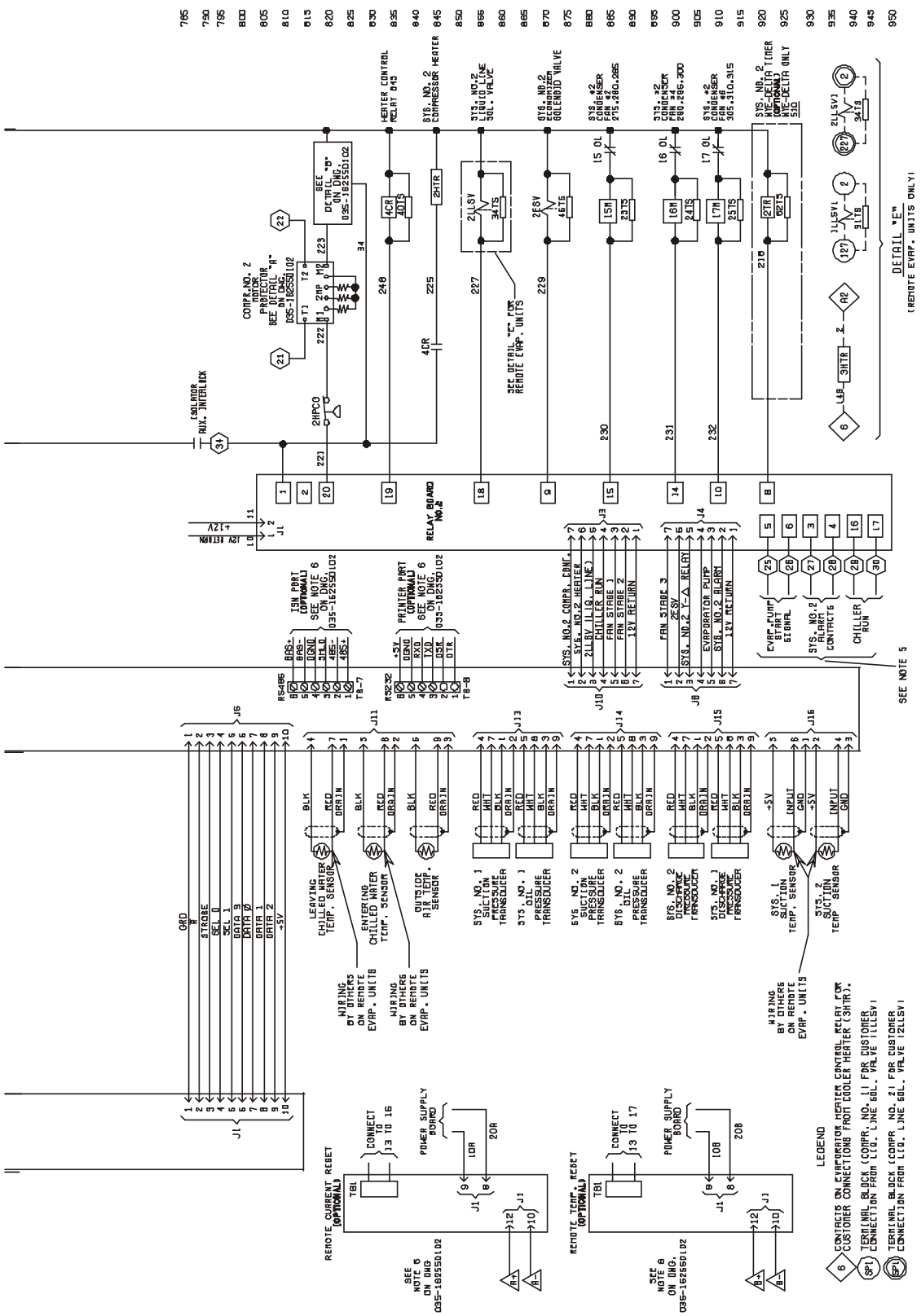


FIGURE 1 - CONTINUED

ELEMANTARY DIAGRAM



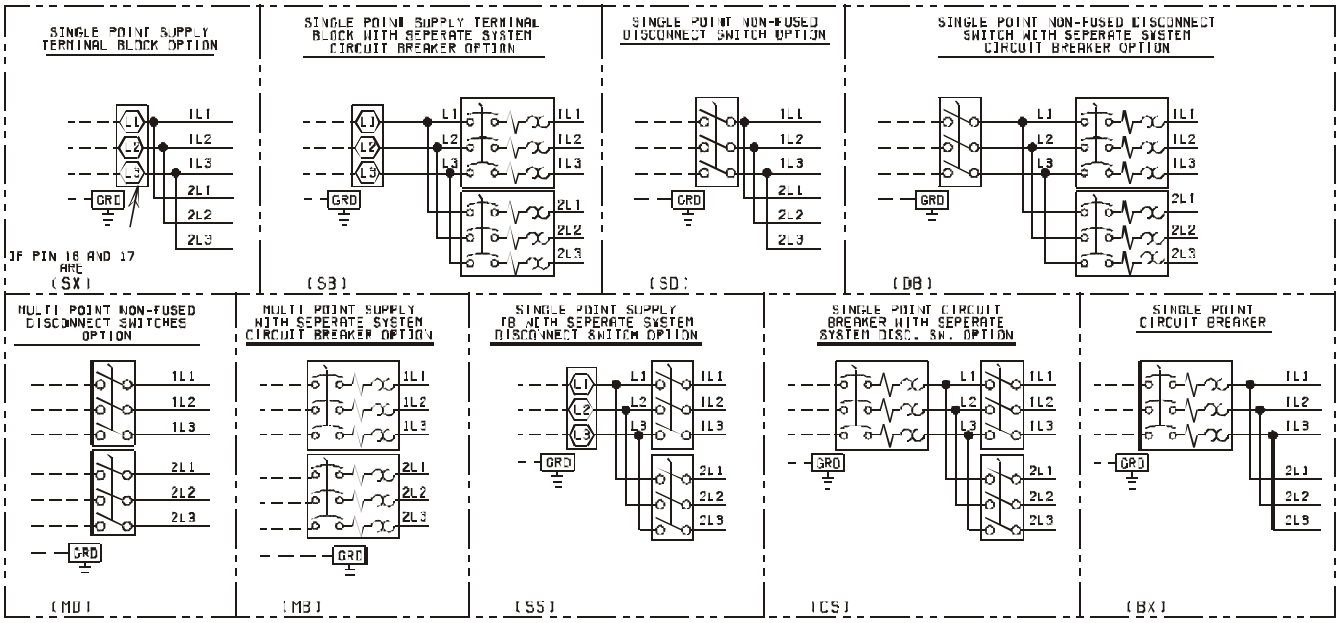
CAUTION:
No Controls (relays, etc.) should be mounted in the Smart Panel enclosure or connected to power supplies in the control panel. Additionally, control wiring not connected to the Smart Panel should not be run through the cabinet. This could result in nuisance faults.

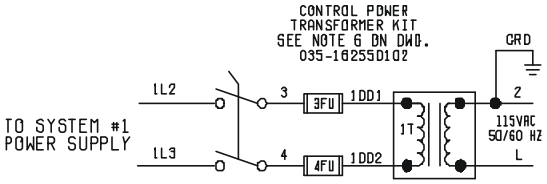
CAUTION:
Any inductive devices (relays) wired in series with the flow switch for start/stop, into the Alarm circuitry, or pilot relays for pump starters wired through motor contactor auxiliary contacts must be suppressed with YORK P/N 031-00808-000 suppressor across the relay/contactor coil.

Any contacts connected to flow switch inputs or BAS inputs on terminals, 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 power wiring.

WIRING DIAGRAM
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 recommended). Wiring shall NOT run in the same conduit with any line voltage (Class I) wiring.

3. To cycle unit on and off automatically with contacts shown, install a cycling device in series with the flow switch. 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 6A at 115 Volts AC.

5. Contacts are rated at 115V, 100VA, resistive load only, and must be suppressed at load by user.

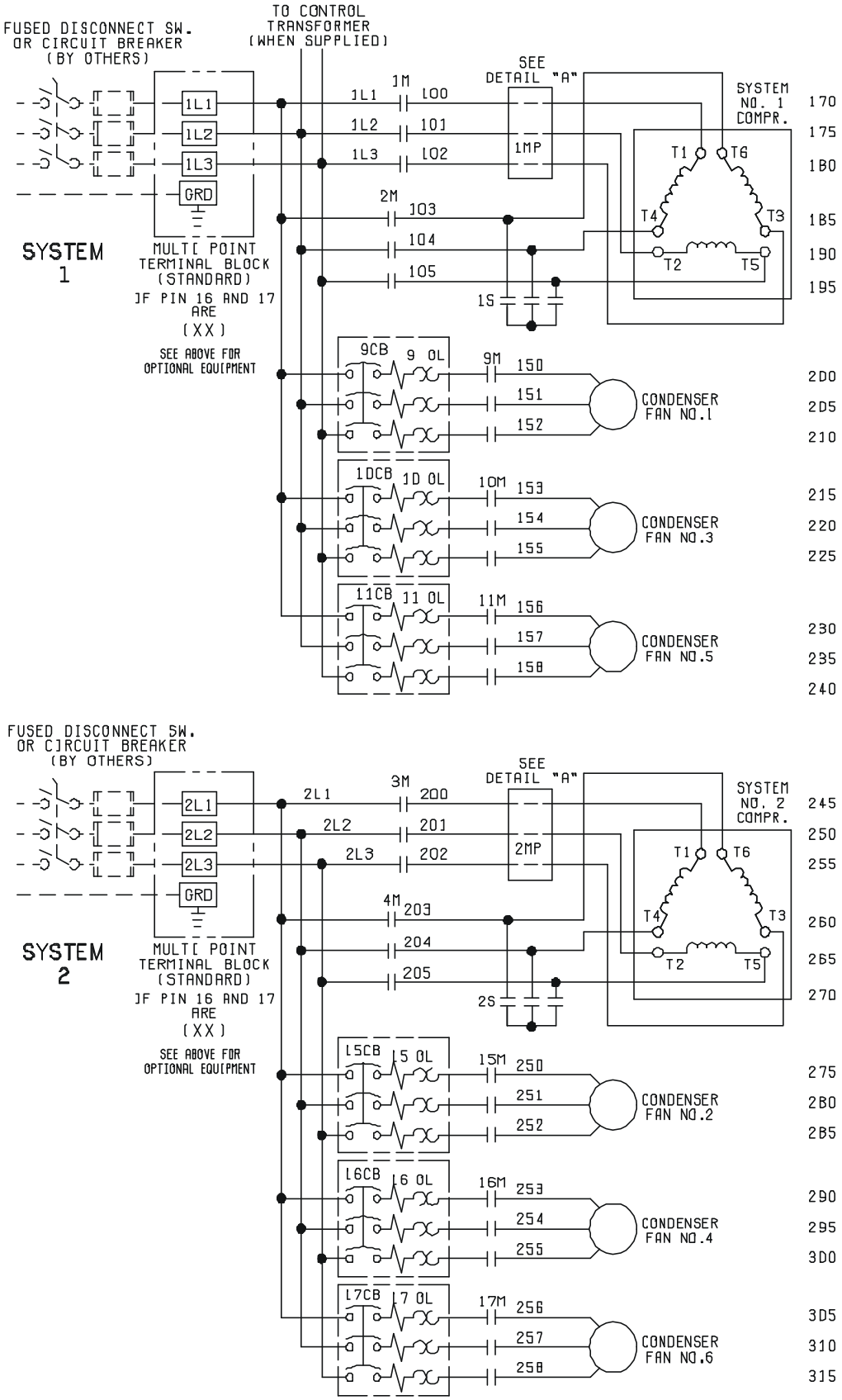
6. See Installation, Operation, and Maintenance manual when optional equipment is used.

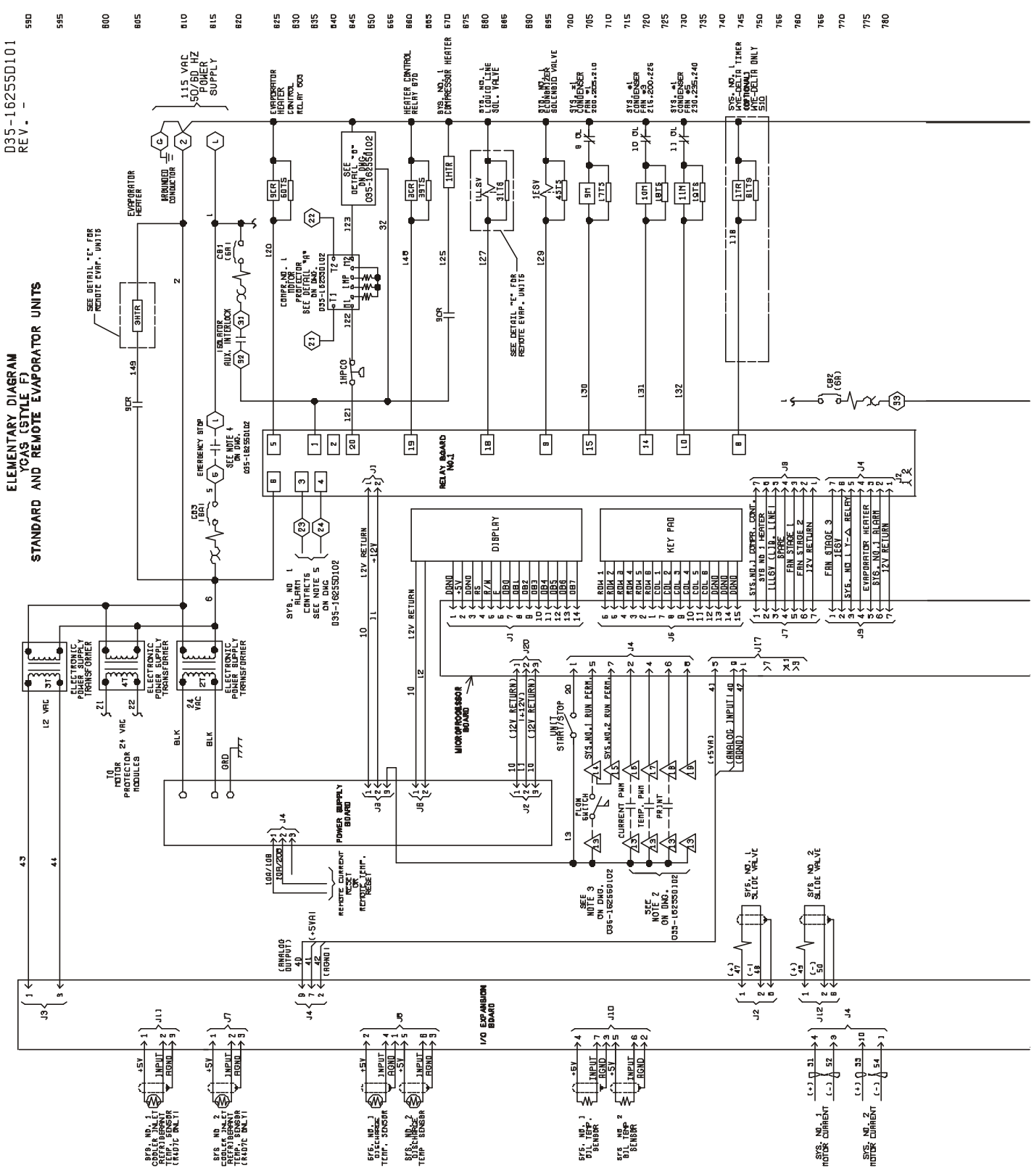
CONTROL POWER SUPPLY

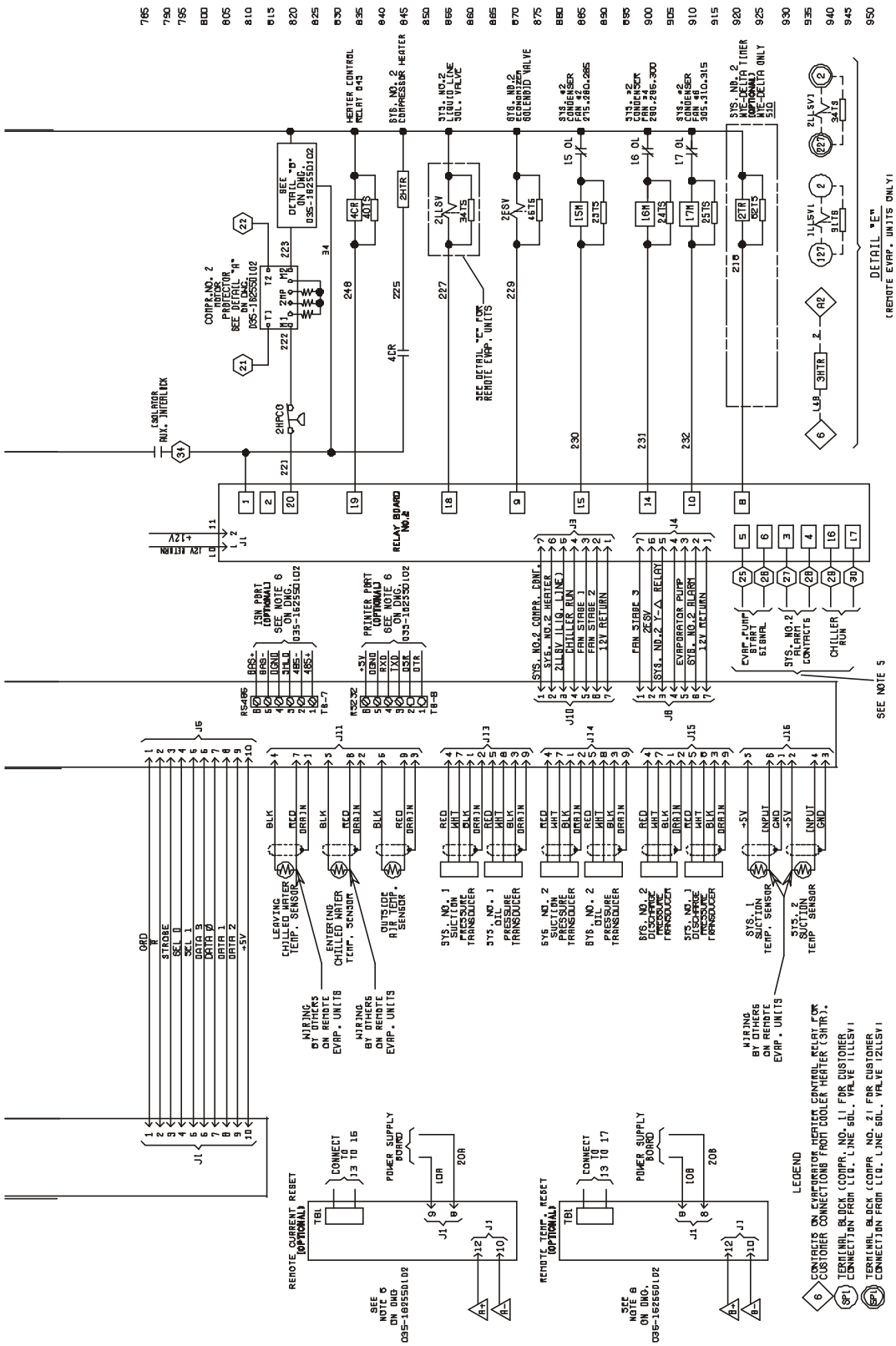
UNIT VOLTAGE		CONTROL POWER SUPPLY	MIN. CIRCUIT AMP	MAX DUAL ELEMENT FUSE SIZE	NON FUSED DISC. FUSE SIZE
ALL MODELS W/O TRANS		115-1-50/60	20A	20A 250V	30A 240V
MODELS WITH TRANS. *	-17	200-1-60	15A	15A 250V	30A 240V
	-28	230-1-60	15A	15A 250V	30A 240V
	-46	400-1-60	8A	8A 600V	30A 480V
	-58	575-1-60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

FIG. 1 - ELEMENTARY DIAGRAM - WYE-DELTA START

WIRING DIAGRAM
WYE-DELTA START




ELEMENTARY DIAGRAM
YCAS (STYLE F)
STANDARD AND REMOTE EVAPORATOR UNITS
D35-16255D101
REV. -
115 VAC 50/60 HZ POWER SUPPLY
EVAPORATOR HEATER
GROUNDED CONDUCTOR
EVAPORATOR HEATER CONTROL RELAY 6CR
HEATER CONTROL RELAY 8TD
SYS. NO. 1 COMPRESSOR HEATER
SYS. NO. 1 LIQUID LINE SOL. VALVE
SYS. NO. 1 ECONOMIZER SOLENOID VALVE
SYS. #1 CONDENSER FAN #1 200,205,210
SYS. #1 CONDENSER FANS #2,3 215,220,225
SYS. #1 CONDENSER FAN #5 230,235,240
SYS. NO. 1 WYE-DELTA TIMER (OPTIONAL) WYE-DELTA ONLY
SEE DETAIL "E" FOR REMOTE EVAP. UNITS
SEE DETAIL "D" ON DWG. D35-16255D102
COMPR. NO. 1 MOTOR PROTECTOR SEE DETAIL "A" ON DWG. D35-16255D102
ISOLATOR AUX. INTERLOCK
EMERGENCY STOP
SEE NOTE 4 ON DWG. D35-16255D102
SYS. NO. 1 ALARM CONTACTS SEE NOTE 5 ON DWG D35-16255D102
RELAY BOARD NO.1
ELECTRONIC POWER SUPPLY TRANSFORMER
TO MOTOR PROTECTOR MODULES
POWER SUPPLY BOARD
MICROPROCESSOR BOARD
DISPLAY
KEY PAD
UNIT START/STOP
SYS.NO.1 RUN PERM
SYS.NO.2 RUN PERM
FLOW SWITCH
CURRENT PWM
TEMP. PWM
PRINT
ANALOG INPUT
ANALOG OUTPUT
REMOTE CURRENT LIMIT OR REMOTE TEMP. RESET
SEE NOTE 3 ON DWG. D35-16255D102
SEE NOTE 2 ON DWG. D35-16255D102
SYS. NO. 1 SLIDE VALVE
SYS. NO. 2 SLIDE VALVE
I/O EXPANSION BOARD
SYS. NO. 1 SUCTION TEMP. SENSOR
SYS. NO. 2 SUCTION TEMP. SENSOR
SYS. NO. 1 OIL TEMP. SENSOR
SYS. NO. 2 OIL TEMP. SENSOR
SYS. NO. 1 MOTOR CURRENT
SYS. NO. 2 MOTOR CURRENT



CAUTION:
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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, 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 power wiring.

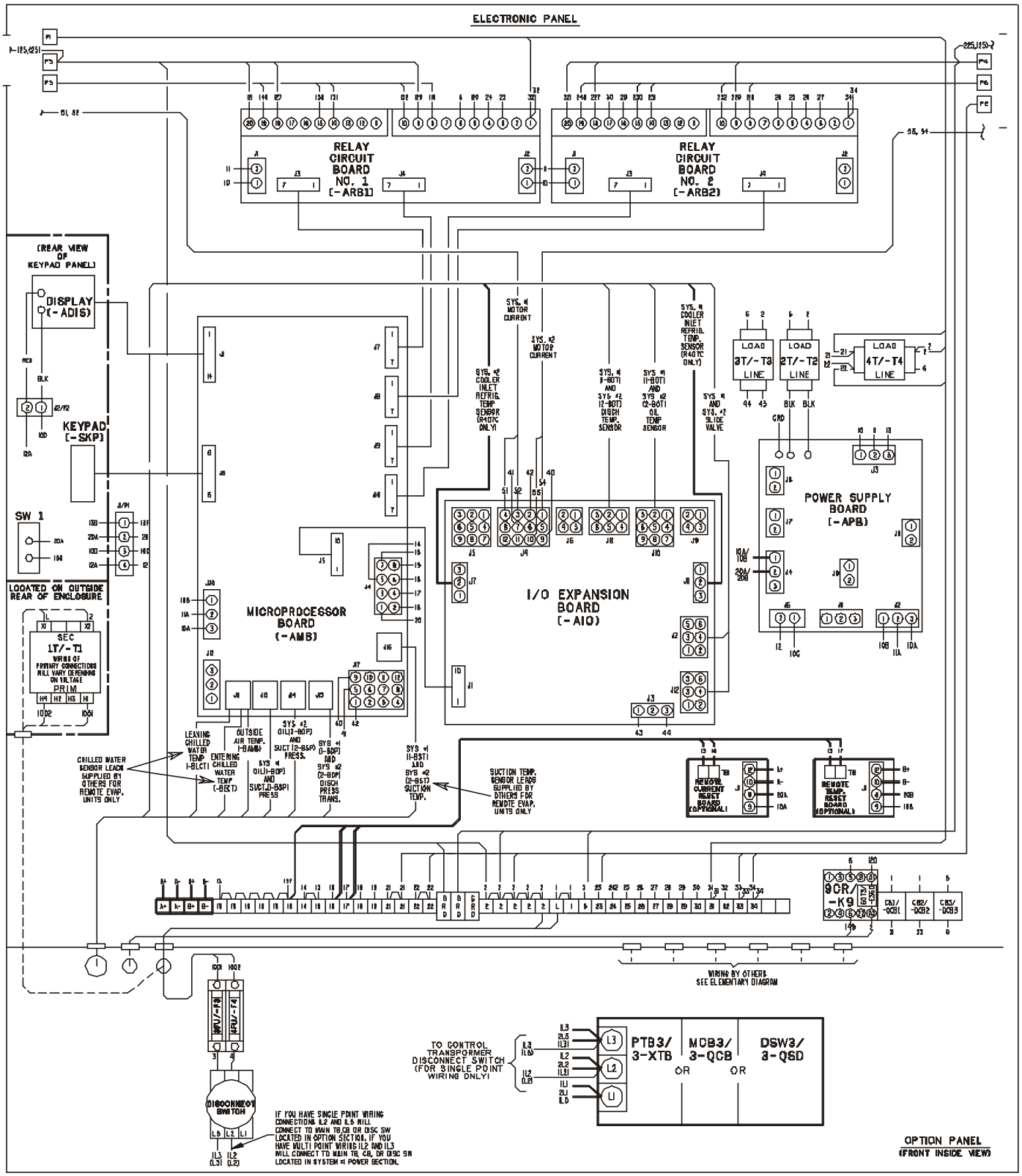
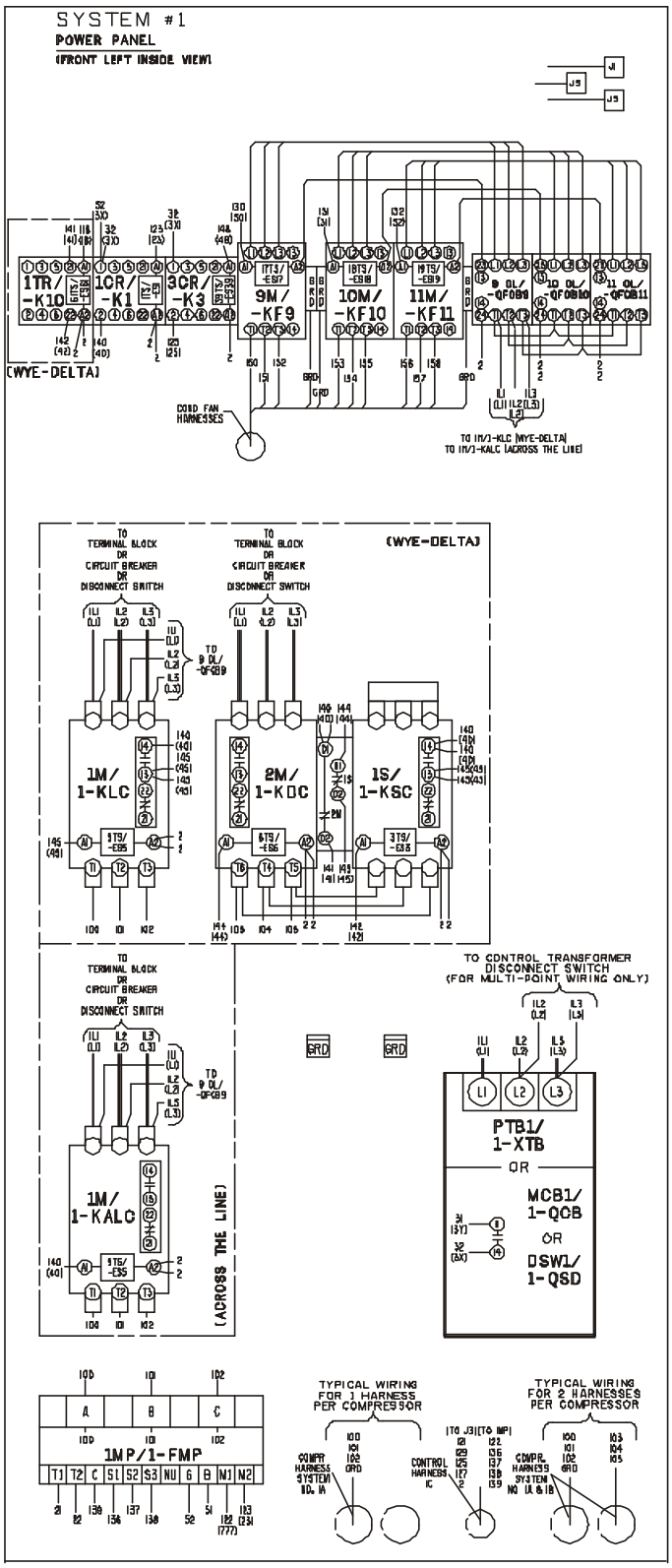
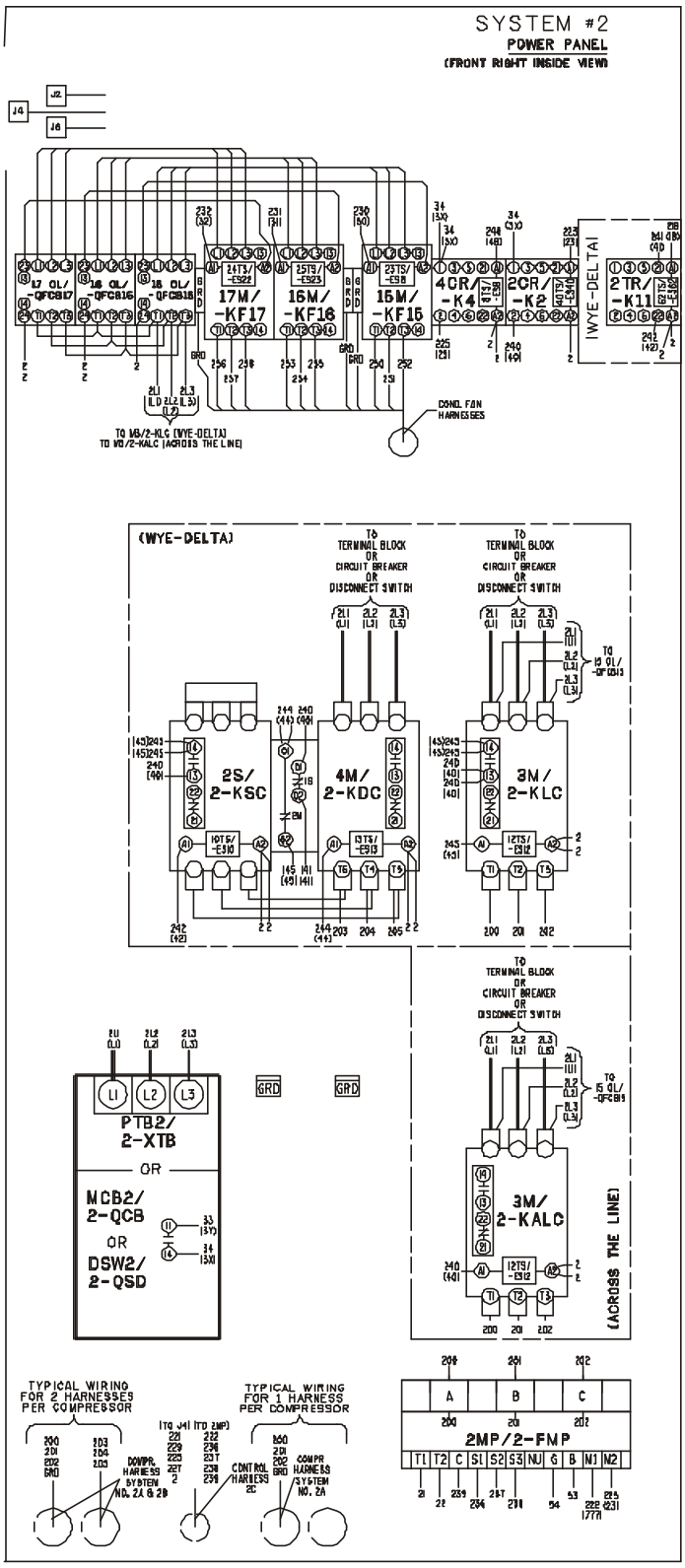


FIGURE 2 - PANEL COMPONENT LOCATIONS





Please note that the System 1 and System 2 Power Panels are located on the left and right side (respectively) of the Control Panel. They have been shown separately from the Control Panel in order to make the drawings large enough to be readable

LEGEND

CONNECTION DIAGRAM, ELEC. BOX
YCAS 75-120
(STYLE F)
STANDARD AND REMOTE EVAP. UNITS

1CR THRU 4CR, 9CR/ -K1 THRU -K4, -K9	-CONTROL RELAYS
CB1, CB2, CB3/ -QCB1,-QBC2,-QCB3	-CIRCUIT BREAKERS
9CB THRU 11CB	-OVERLOAD CIRCUIT BREAKERS (SYS. #1)
15CB THRU 17CB	-OVERLOAD CIRCUIT BREAKERS (SYS. #2)
9 OL THRU 11 OL	-MOTOR OVERLOADS (SYS. #1)
15 OL THRU 17 OL	-MOTOR OVERLOADS (SYS. #2)
-QFCB9 THRU -QFCB11	-MOTOR OVERLOADS W/OVERLOAD CIRCUIT BREAKERS (SYS. #1)
-QFCB15 THRU -QFCB17	-MOTOR OVERLOADS W/OVERLOAD CIRCUIT BREAKERS (SYS. #2)
3FU, 4FU/ -F3, -F4	-TRANSFORMER FUSE (OPTIONAL)

LEGEND

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 11M/ -KF9 THRU -KF11	-CONDENSER FAN CONTACTORS (SYS. #1)
15M THRU 17M/ -KF15 THRU -KF17	-CONDENSER FAN CONTACTORS (SYS. #2)
1MP/1-FMP	-MOTOR PROTECTOR (SYS. #1)
2MP/2-FMP	-MOTOR PROTECTOR (SYS. #2)
1T/-T1	-CONTROL TRANSFORMER 2KVA (OPTIONAL)

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

J1, J2, J3, J4, J5 & J6 —— POWER PANEL

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

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

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
P2	21	1
	2	2
	22	3
	33	4
	34	5

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

PLUG NO.	WIRE NO.	PLUG PIN NO
P4	2	1
	GRD	2
	125	3
	227	4
	229	5
	221	11
		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
P6	230	1
	231	2
	232	3
	248	4
	218	6

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

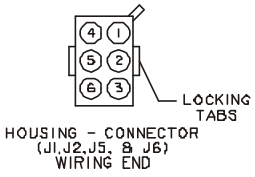
PLUG NO.	WIRE NO.	PLUG PIN NO
J2	21	1
	2	2
	22	3
	3Y	4
	3X	5

PLUG NO.	WIRE NO.	PLUG PIN NO
J3	2	1
	GRD	2
	25	4
	129A	5
	127A	6
	121A	11
		12

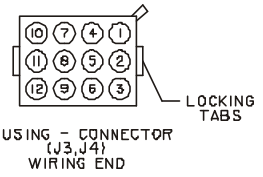
PLUG NO.	WIRE NO.	PLUG PIN NO
J4	2	1
	GRD	2
	25	3
	227A	4
	229A	5
	221A	11
		12

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
J6	30	1
	31	2
	32	3
	48	4
	18	6



HOUSING - CONNECTOR
(J1,J2,J5, & J6)
WIRING END



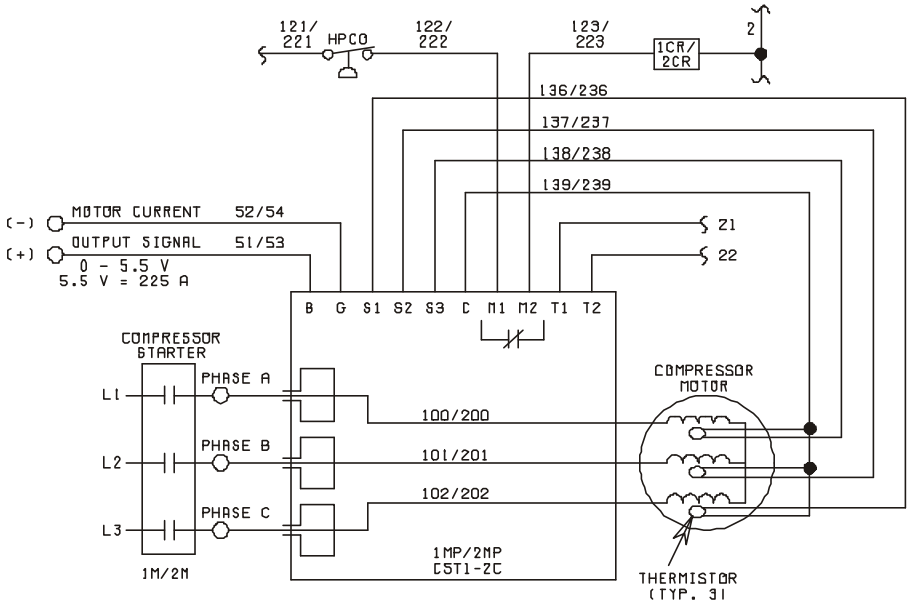
HOUSING - CONNECTOR
(J3,J4)
WIRING END

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 (CLASS 1) WIRING.
3. TO CYCLE UNIT ON AND OFF AUTOMATICALLY WITH CONTACT SHOWN, INSTALL A CYCLING DEVICE IN SERIES WITH THE FLOW SWITCH. 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 6A AT 115VOLTS A.C.
5. 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.

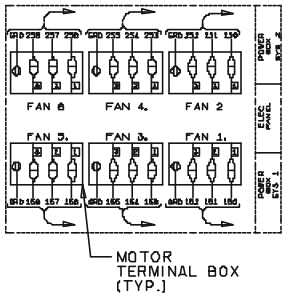
LEGEND

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



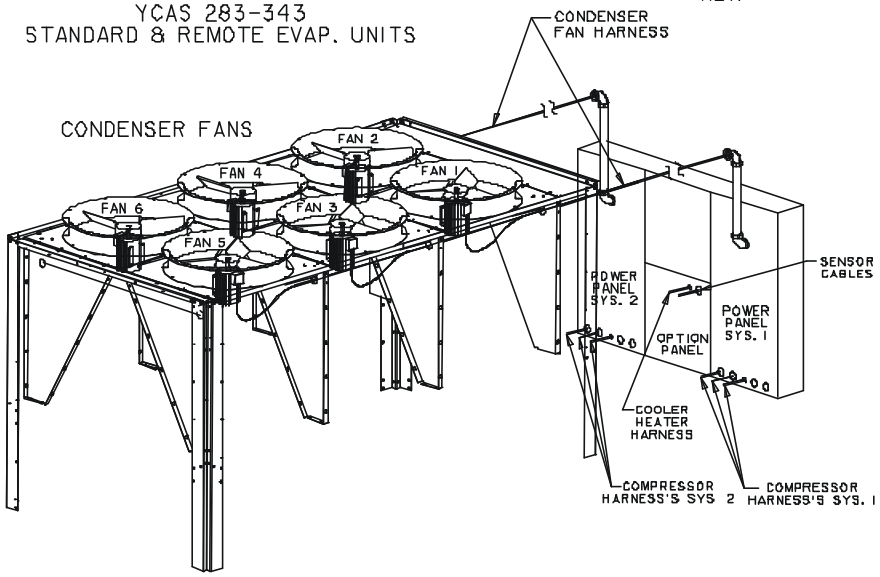
DETAIL A

CONNECTION DIAGRAM (SYSTEM WIRING)



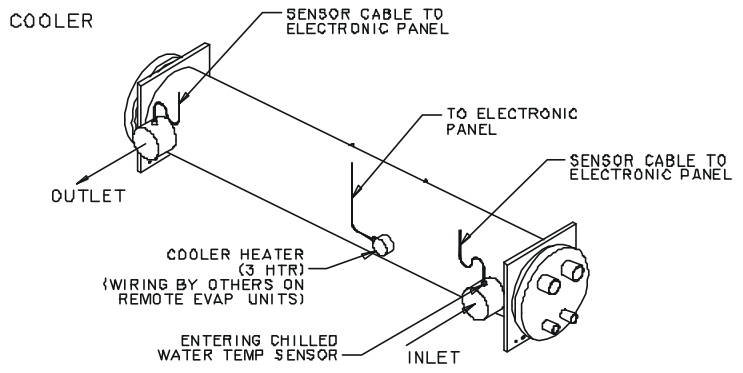
CONNECTION DIAGRAM SYSTEM WIRING
YCAS 090-120
YCAS 283-343
STANDARD & REMOTE EVAP. UNITS

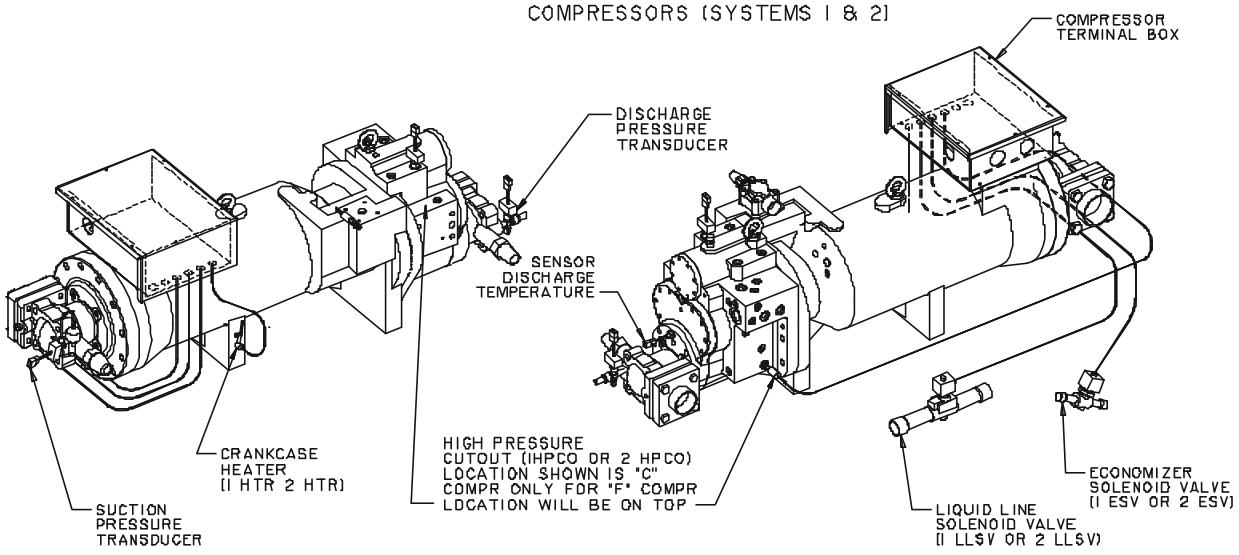
035-16255DI05
REV. -



LEGEND

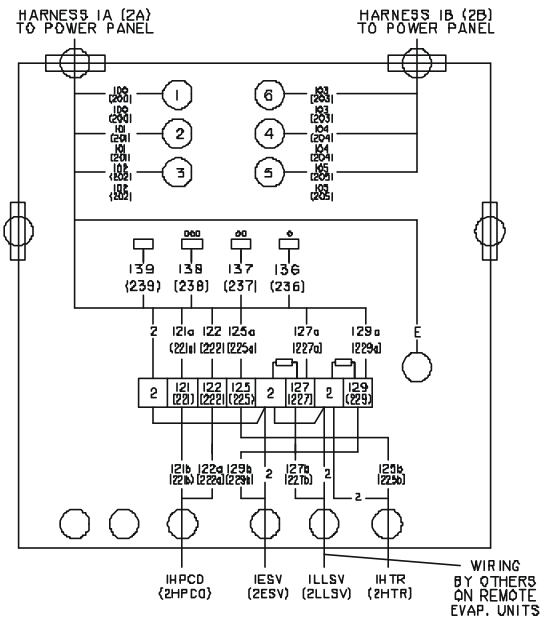
1 HPCO	SYS. No 1 HIGH PRESS CUTOUT
2 HPCO	SYS. No 2 HIGH PRESS CUTOUT
1 HTR	SYS. No.1 COMPR. CRANKCASE HEATER
2 HTR	SYS. No.2 COMPR. CRANKCASE HEATER
3 HTR	COOLER HEATER
1 LLSV	SYS. No.1 LIQUID LINE SOLENOID VALVE (UNIT IDENT)
2 LLSV	SYS. No 2 LIQUID LINE SOLENOID VALVE (UNIT IDENT)
1 ESV	ECONOMIZER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



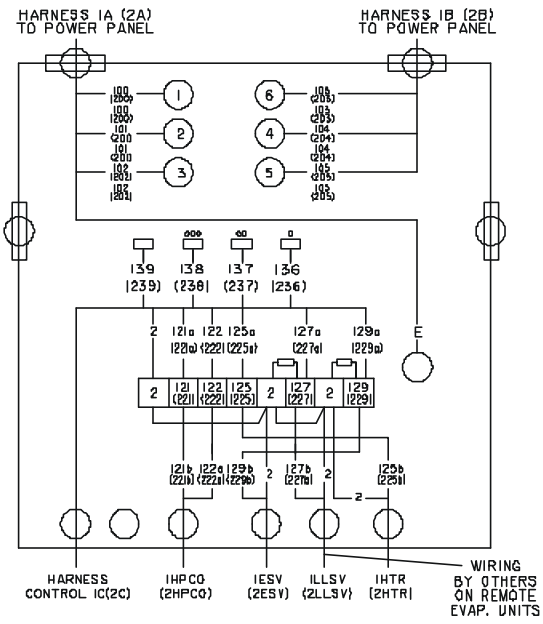


COMPRESSOR TERMINAL BOX

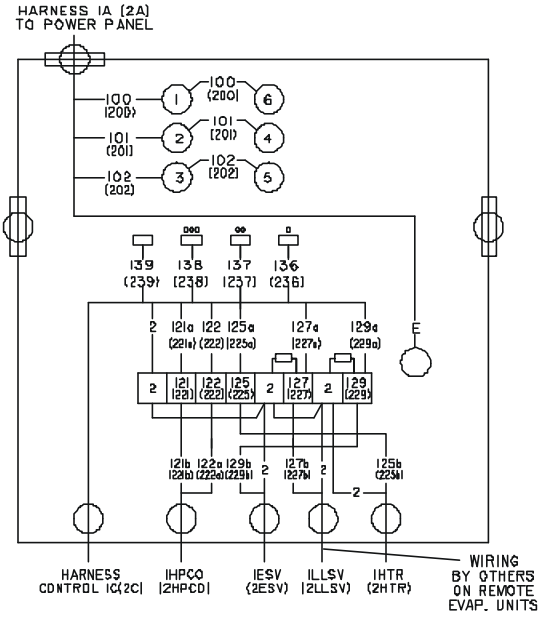
SYSTEM 1 & 2 WYE-DELTA-START
2 POWER HARNESS UNITS



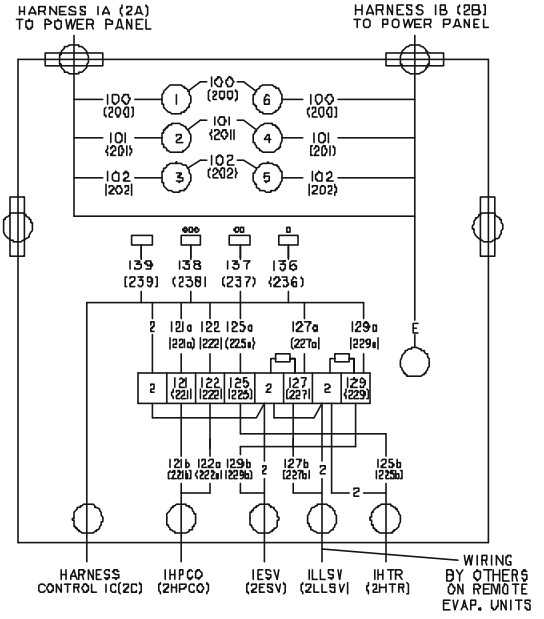
SYSTEM 1 & 2 WYE-DELTA-START
2 POWER HARNESS UNITS
W/ CONTROL HARNESS



SYSTEM 1 & 2 ACROSS THE LINE
1 POWER HARNESS UNITS
W/ CONTROL HARNESS



SYSTEM 1 & 2 ACROSS THE LINE
2 POWER HARNESS UNITS
W/ CONTROL HARNESS



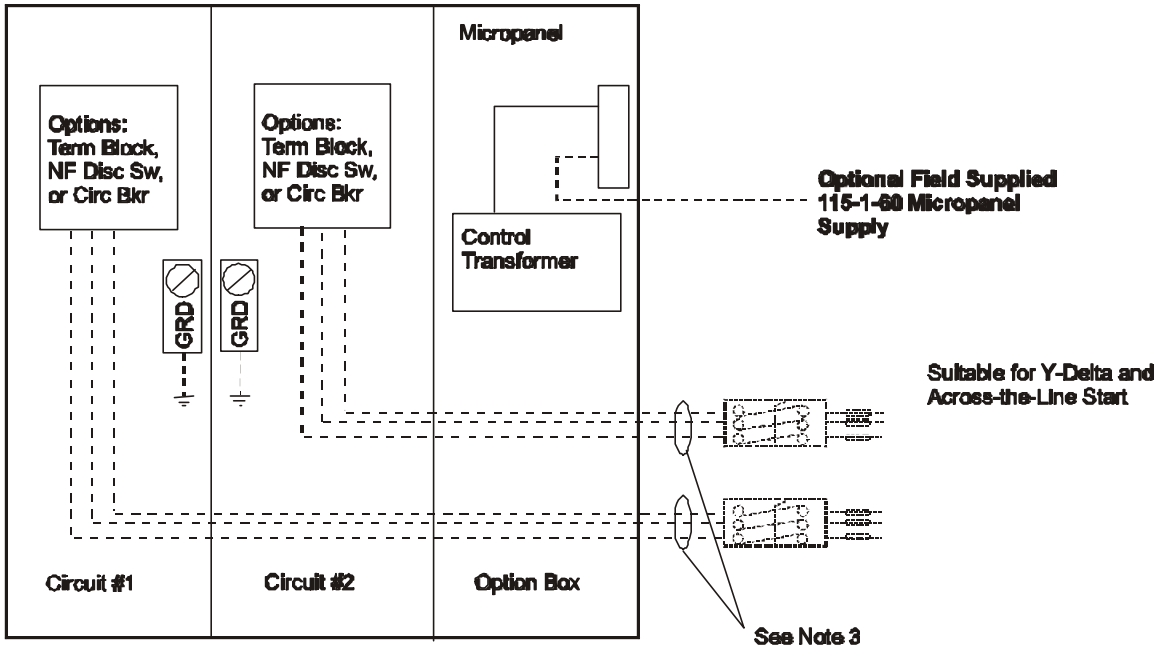


FIG. 3 - MULTIPLE POINT POWER SUPPLY CONNECTION

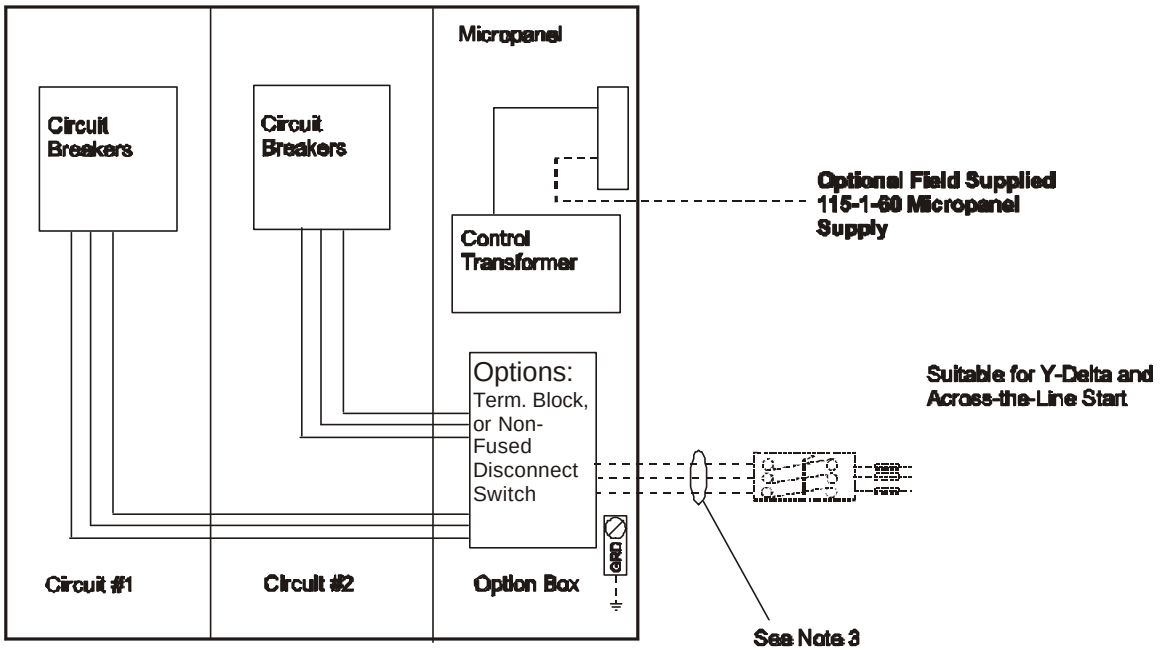


FIG. 4 - OPTIONAL SINGLE POINT POWER SUPPLY WITH INDIVIDUAL SYSTEM CIRCUIT BREAKERS

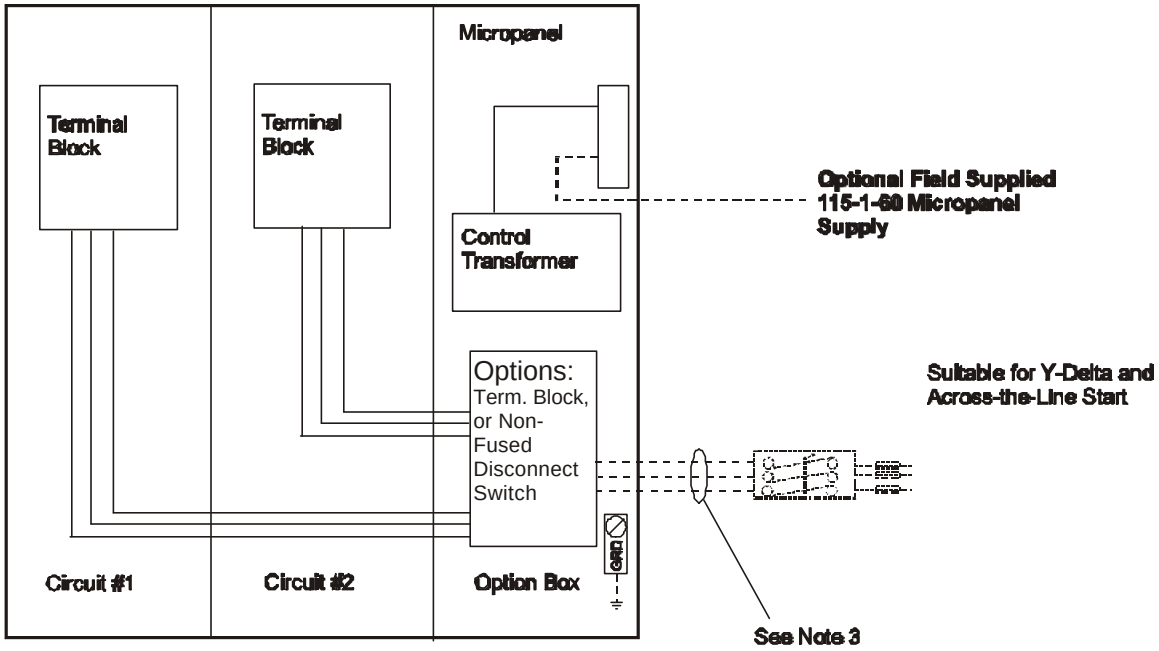


FIG. 5 - OPTIONAL SINGLE-POINT POWER SUPPLY CONNECTION WITH FIELD SUPPLIED CIRCUIT PROTECTION

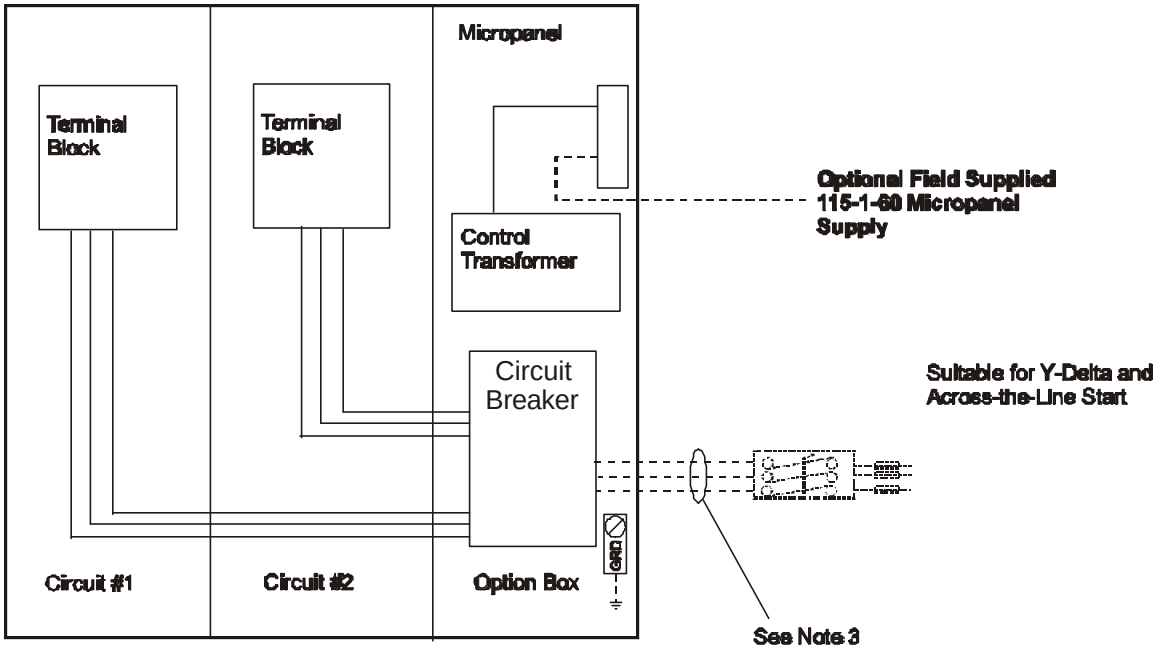


FIG. 6 - OPTIONAL SINGLE-POINT POWER SUPPLY WIRING TO FACTORY CIRCUIT BREAKER

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