



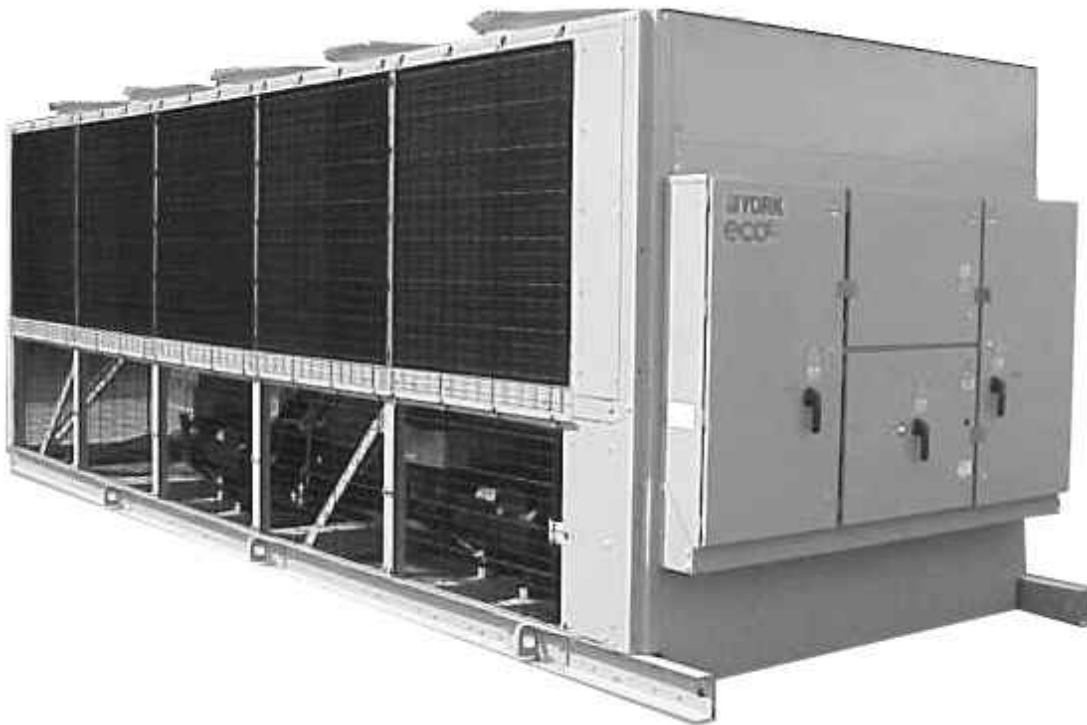
# AIR-COOLED SCREW LIQUID CHILLERS

WIRING DIAGRAM

New Release

Form 201.19-W1 (304)

## YCAS AIR-COOLED LIQUID CHILLERS YCAS0130 THROUGH YCAS0230 STYLE G (60 Hz)



Metric Conversions



200-3-60  
230-3-60  
380-3-60  
460-3-60  
575-3-60

MODELS ONLY

## TABLE OF CONTENTS

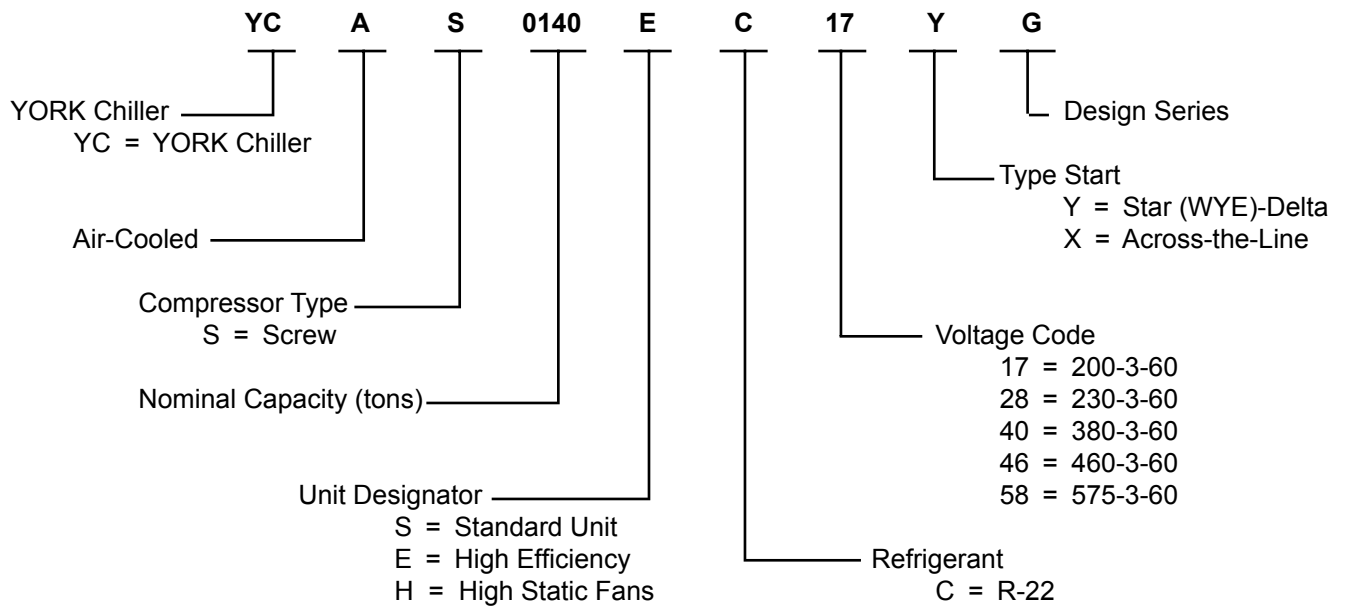
|  | <u>PAGE</u> |
|--|-------------|
| NOMENCLATURE .....                               | 3           |
| ELECTRICAL NOTES .....                           | 4           |
| ELECTRICAL DATA .....                            | 6           |
| WIRING DIAGRAM .....                             | 14          |
| ELEMENTARY DIAGRAM .....                         | 16          |
| WIRING DIAGRAM .....                             | 18          |
| ELEMENTARY DIAGRAM .....                         | 20          |
| POWER PANEL .....                                | 22          |
| CONTROL PANEL .....                              | 23          |
| POWER PANEL .....                                | 24          |
| CONNECTION DIAGRAM (SYSTEM WIRING).....          | 27          |
| COMPRESSOR TERMINAL BOX .....                    | 28          |
| ELEMENTARY DIAGRAM STARTER CONTROL CIRCUIT ..... | 29          |
| ELEMENTARY DIAGRAM FAN CONTROL .....             | 30          |

## LIST OF FIGURES

|  |    |
|--|----|
| FIG. 1 – WIRING DIAGRAM – ACROSS-THE-LINE START .....      | 14 |
| FIG. 2 – WIRING DIAGRAM – ACROSS-THE-LINE START .....      | 15 |
| FIG. 3 – ELEMENTARY DIAGRAM – ACROSS-THE-LINE START .....  | 16 |
| FIG. 4 – WIRING DIAGRAM – WYE-DELTA START .....            | 18 |
| FIG. 5 – ELEMENTARY DIAGRAM – WYE-DELTA START.....         | 19 |
| FIG. 6 – ELEMENTARY DIAGRAM – WYE-DELTA START.....         | 20 |
| FIG. 7 – POWER PANEL (SYSTEM #1) COMPONENT LOCATIONS.....  | 22 |
| FIG. 8 – CONTROL PANEL COMPONENT LOCATION .....            | 23 |
| FIG. 9 – POWER PANEL (SYSTEM #2) COMPONENT LOCATIONS.....  | 24 |
| FIG. 10 – CONNECTION DIAGRAM (SYSTEM WIRING).....          | 27 |
| FIG. 11 – COMPRESSOR TERMINAL BOX .....                    | 28 |
| FIG. 12 – ELEMENTARY DIAGRAM STARTER CONTROL CIRCUIT ..... | 29 |
| FIG. 13 – ELEMENTARY DIAGRAM FAN CONTROL CIRCUIT .....     | 30 |

## NOMENCLATURE

The Model Number denotes the following characteristics of the unit:



### 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.

# ELECTRICAL NOTES

## NOTES & LEGEND

### LEGEND

|           |  |                     |
|-----------|--|---------------------|
| ACR-LINE  | ACROSS THE LINE START                    |                     |
| C.B.      | CIRCUIT BREAKER                          | <b>VOLTAGE CODE</b> |
| D.E.      | DUAL ELEMENT FUSE                        | -17 = 200-3-60      |
| DISC SW   | DISCONNECT SWITCH                        | -28 = 230-3-60      |
| FACT CB   | FACTORY-MOUNTED CIRCUIT BREAKER          | -40 = 380-3-60      |
| FLA       | FULL LOAD AMPS                           | -46 = 460-3-60      |
| HZ        | HERTZ                                    | -58 = 575-3-60      |
| 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       |                     |

### CONTROL POWER SUPPLY (UNITS WITHOUT STANDARD CONTROL CIRCUIT TRANSFORMER)

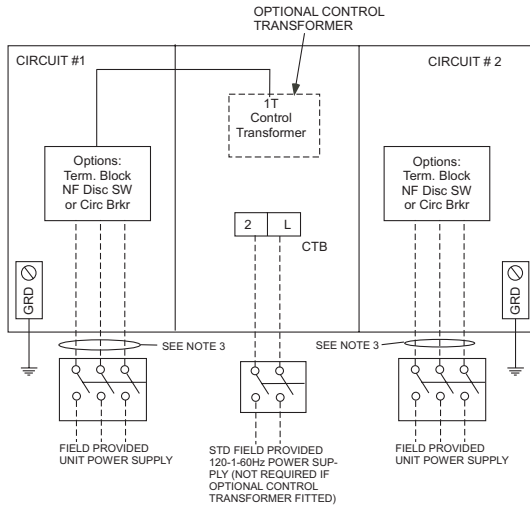
| NO. OF COMPRESSORS | CONTROL POWER SUPPLY | MCA (MAX LOAD CURRENT) | MAX DUAL ELEMENT FUSE SIZE | NON-FUSED DISCONNECT SWITCH SIZE |
|--------------------|----------------------|------------------------|----------------------------|----------------------------------|
| 2                  | 115V-1Ø              | 20A                    | 20A                        | 20A                              |

### NOTES:

- 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.
- 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.
- 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).
- 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).
- 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).
- 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).
- 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.
- 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.
- 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.
- 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.
- Consult factory for Electrical Data on units equipped with "High Static Fan" option. High Static Fans are 3.8 kW each.
- FLA for "Low Noise Fan" motors: 200V = 8.0A, 230V = 7.8A, 380V = 4.4A, 460V = 3.6A, 575V = 2.9A.
- Group Rated breaker must be HACR type for cU.L. Machines.

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# ELECTRICAL DATA



## MULTIPLE POINT POWER SUPPLY CONNECTION

Suitable for:  
**Y - Δ Start and  
 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), Circuit Breakers (Opt) or Terminal Blocks (Opt).

See page 4 for notes.

LD05548

## MULTIPLE POINT POWER SUPPLY CONNECTION - 2 COMPRESSOR UNITS

(Two Field Provided Power Supply Circuits To The Chiller. Field Connections to Factory Provided Terminal Block (Std), Disconnects (Opt), or Individual System Circuit Breakers (Opt) in each of the two Motor Control Centers.)

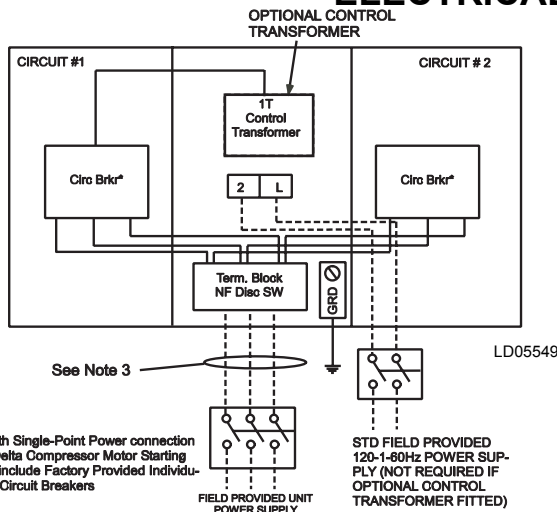
| MODEL YCAS | VOLTS | SYSTEM #1 FIELD-SUPPLIED WIRING |                                |                         |                      |                     |   |             |     |            |       |     |                        |           |
|------------|-------|---------------------------------|--------------------------------|-------------------------|----------------------|---------------------|---|-------------|-----|------------|-------|-----|------------------------|-----------|
|            |       | FIELD PROVIDED POWER SUPPLY     |                                |                         |                      |                     | FACTORY PROVIDED (LUGS) WIRE RANGE <sup>7</sup> |             |     | COMPRESSOR |       |     | FANS <sup>11, 12</sup> |           |
|            |       | MCA <sup>1</sup>                | MIN NF DISC SW <sup>2, 9</sup> | OVER-CURRENT PROTECTION |                      | STD. TERMINAL BLOCK | OPT. NF. DISC SW.                               | OPT. C.B.   | RLA | Y-LRA      | X-LRA | QTY | FLA (EA.)              | LRA (EA.) |
|            |       |                                 |                                | MIN. <sup>3, 5</sup>    | MAX. <sup>4, 6</sup> |                     |   |             |     |            |       |     |                        |           |
| 0130EC     | 200   | 340                             | 400                            | 450                     | 500                  | (2) 1/0 - 300       | (2) 3/0-250                                     | (3) 2/0-400 | 246 | 591        | N/A   | 4   | 8.2                    | 38.0      |
|            | 230   | 299                             | 400                            | 400                     | 500                  | 2/0 - (2) 4/0       | (2) 3/0-250                                     | (2) 3/0-250 | 214 | 481        | N/A   | 4   | 7.8                    | 33.0      |
|            | 380   | 181                             | 200                            | 225                     | 300                  | 1/0 - 300           | # 6 - 350                                       | # 6 - 350   | 130 | 285        | 900   | 4   | 4.8                    | 23.0      |
|            | 460   | 150                             | 150                            | 200                     | 250                  | # 2 - 4/0           | # 4 - 300                                       | # 6 - 350   | 107 | 228        | 719   | 4   | 4.0                    | 19.0      |
|            | 575   | 119                             | 150                            | 150                     | 200                  | # 2 - 4/0           | # 4 - 300                                       | # 4 - 300   | 86  | 182        | 574   | 4   | 3.1                    | 15.2      |
| 0140EC     | 200   | 366                             | 400                            | 450                     | 600                  | (2) 1/0 - 300       | (2) 3/0-250                                     | (3) 2/0-400 | 267 | 591        | N/A   | 4   | 8.2                    | 38.0      |
|            | 230   | 321                             | 400                            | 400                     | 500                  | 2/0 - (2) 4/0       | (2) 3/0-250                                     | (2) 3/0-250 | 232 | 481        | N/A   | 4   | 7.8                    | 33.0      |
|            | 380   | 195                             | 200                            | 250                     | 300                  | 1/0 - 300           | # 6 - 350                                       | # 6 - 350   | 140 | 285        | 900   | 4   | 4.8                    | 23.0      |
|            | 460   | 161                             | 200                            | 200                     | 250                  | # 2 - 4/0           | # 4 - 300                                       | # 4 - 300   | 116 | 228        | 719   | 4   | 4.0                    | 19.0      |
|            | 575   | 128                             | 150                            | 175                     | 200                  | # 2 - 4/0           | # 4 - 300                                       | # 6 - 350   | 93  | 182        | 574   | 4   | 3.1                    | 15.2      |
| 0150EC     | 200   | 402                             | 400                            | 500                     | 600                  | (2) 2/0 - 500       | (2) 3/0-250                                     | (3) 2/0-400 | 295 | 708        | N/A   | 4   | 8.2                    | 38.0      |
|            | 230   | 351                             | 400                            | 450                     | 600                  | (2) 1/0 - 300       | (2) 3/0-250                                     | (3) 2/0-400 | 256 | 642        | N/A   | 4   | 7.8                    | 33.0      |
|            | 380   | 213                             | 250                            | 300                     | 350                  | 2/0 - 500           | # 6 - 350                                       | (2) 3/0-250 | 155 | 343        | 1093  | 4   | 4.8                    | 23.0      |
|            | 460   | 176                             | 200                            | 225                     | 300                  | 1/0 - 300           | # 4 - 300                                       | # 6 - 350   | 128 | 280        | 893   | 4   | 4.0                    | 19.0      |
|            | 575   | 141                             | 150                            | 175                     | 225                  | # 2 - 4/0           | # 4 - 300                                       | # 6 - 350   | 103 | 224        | 714   | 4   | 3.1                    | 15.2      |
| 0160EC     | 200   | 402                             | 400                            | 500                     | 600                  | (2) 2/0 - 500       | (2) 3/0-250                                     | (3) 2/0-400 | 295 | 708        | N/A   | 4   | 8.2                    | 38.0      |
|            | 230   | 351                             | 400                            | 450                     | 600                  | (2) 1/0 - 300       | (2) 3/0-250                                     | (3) 2/0-400 | 256 | 642        | N/A   | 4   | 7.8                    | 33.0      |
|            | 380   | 213                             | 250                            | 300                     | 350                  | # 1 - 300           | # 6 - 350                                       | (2) 3/0-250 | 155 | 343        | 1093  | 4   | 4.8                    | 23.0      |
|            | 460   | 176                             | 200                            | 225                     | 300                  | 1/0 - 300           | # 6 - 350                                       | # 6 - 350   | 128 | 280        | 893   | 4   | 4.0                    | 19.0      |
|            | 575   | 141                             | 150                            | 175                     | 225                  | # 2 - 4/0           | # 4 - 300                                       | # 6 - 350   | 103 | 224        | 714   | 4   | 3.1                    | 15.2      |
| 0170EC     | 200   | 434                             | 600                            | 600                     | 700                  | (2) 2/0 - 500       | (3) 2/0-400                                     | (3) 2/0-400 | 321 | 708        | N/A   | 4   | 8.2                    | 38.0      |
|            | 230   | 380                             | 400                            | 450                     | 600                  | (2) # 1 - 300       | (2) 3/0-250                                     | (3) 2/0-400 | 279 | 642        | N/A   | 4   | 7.8                    | 33.0      |
|            | 380   | 230                             | 250                            | 300                     | 350                  | 2/0 - 500           | # 6 - 350                                       | (2) 3/0-250 | 169 | 343        | 1093  | 4   | 4.8                    | 23.0      |
|            | 460   | 191                             | 200                            | 250                     | 300                  | 1/0 - 300           | # 6 - 350                                       | # 6 - 350   | 140 | 280        | 893   | 4   | 4.0                    | 19.0      |
|            | 575   | 152                             | 150                            | 200                     | 250                  | # 2 - 4/0           | # 4 - 300                                       | # 6 - 350   | 112 | 224        | 714   | 4   | 3.1                    | 15.2      |
| 0180EC     | 200   | 434                             | 600                            | 600                     | 700                  | (2) 2/0 - 500       | (3) 2/0-400                                     | (3) 2/0-400 | 321 | 708        | N/A   | 4   | 8.2                    | 38.0      |
|            | 230   | 380                             | 400                            | 450                     | 600                  | (2) 2/0 - 500       | (2) 3/0-250                                     | (3) 2/0-400 | 279 | 642        | N/A   | 4   | 7.8                    | 33.0      |
|            | 380   | 230                             | 250                            | 300                     | 350                  | 2/0 - 500           | # 6 - 350                                       | (2) 3/0-250 | 169 | 343        | 1093  | 4   | 4.8                    | 23.0      |
|            | 460   | 191                             | 200                            | 250                     | 300                  | 1/0 - 300           | # 6 - 350                                       | # 6 - 350   | 140 | 280        | 893   | 4   | 4.0                    | 19.0      |
|            | 575   | 152                             | 150                            | 200                     | 250                  | # 2 - 4/0           | # 4 - 300                                       | # 6 - 350   | 112 | 224        | 714   | 4   | 3.1                    | 15.2      |
| 0200EC     | 200   | 469                             | 600                            | 600                     | 800                  | (2) 2/0 - 500       | (3) 2/0-400                                     | (3) 2/0-400 | 342 | 708        | N/A   | 5   | 8.2                    | 38.0      |
|            | 230   | 412                             | 400                            | 500                     | 700                  | (2) 2/0 - 500       | (2) 3/0-250                                     | (3) 2/0-400 | 298 | 642        | N/A   | 5   | 7.8                    | 33.0      |
|            | 380   | 250                             | 250                            | 300                     | 400                  | 2/0 - 500           | # 6 - 350                                       | (2) 3/0-250 | 181 | 343        | 1093  | 5   | 4.8                    | 23.0      |
|            | 460   | 206                             | 200                            | 250                     | 350                  | # 1 - 300           | # 6 - 350                                       | # 6 - 350   | 149 | 280        | 893   | 5   | 4.0                    | 19.0      |
|            | 575   | 164                             | 200                            | 200                     | 250                  | 1/0 - 300           | # 6 - 350                                       | # 6 - 350   | 119 | 224        | 714   | 5   | 3.1                    | 15.2      |
| 0210EC     | 200   | 509                             | 600                            | 700                     | 800                  | (2) 2/0 - 500       | (3) 2/0-400                                     | (3) 2/0-400 | 374 | 708        | N/A   | 5   | 8.2                    | 38.0      |
|            | 230   | 445                             | 600                            | 600                     | 700                  | (2) 2/0 - 500       | (2) 2/0-400                                     | (3) 2/0-400 | 325 | 642        | N/A   | 5   | 7.8                    | 33.0      |
|            | 380   | 270                             | 400                            | 350                     | 450                  | 2/0 - 500           | (2) 3/0-250                                     | (2) 3/0-250 | 197 | 343        | 1093  | 5   | 4.8                    | 23.0      |
|            | 460   | 224                             | 250                            | 300                     | 350                  | 2/0 - 500           | # 6 - 350                                       | (2) 3/0-250 | 163 | 280        | 893   | 5   | 4.0                    | 19.0      |
|            | 575   | 178                             | 200                            | 225                     | 300                  | 1/0 - 300           | # 6 - 350                                       | # 6 - 350   | 130 | 224        | 714   | 5   | 3.1                    | 15.2      |
| 0230EC     | 200   | 509                             | 600                            | 700                     | 800                  | (2) 2/0 - 500       | (3) 2/0-400                                     | (3) 2/0-400 | 374 | 708        | N/A   | 5   | 8.2                    | 38.0      |
|            | 230   | 445                             | 600                            | 600                     | 700                  | (2) 2/0 - 500       | (3) 2/0-400                                     | (3) 2/0-400 | 325 | 642        | N/A   | 5   | 7.8                    | 33.0      |
|            | 380   | 270                             | 400                            | 350                     | 450                  | 2/0 - 500           | (2) 3/0-250                                     | (2) 3/0-250 | 197 | 343        | 1093  | 5   | 4.8                    | 23.0      |
|            | 460   | 224                             | 250                            | 300                     | 350                  | 2/0 - 500           | # 6 - 350                                       | (2) 3/0-250 | 163 | 280        | 893   | 5   | 4.0                    | 19.0      |
|            | 575   | 178                             | 200                            | 225                     | 300                  | 1/0 - 300           | # 6 - 350                                       | # 6 - 350   | 130 | 224        | 714   | 5   | 3.1                    | 15.2      |

See page 4 for Electrical Data footnotes.

# ELECTRICAL DATA

| MODEL<br>YCAS | VOLTS | SYSTEM #2 FIELD-SUPPLIED WIRING |                                |                            |                     |                        |   |             |     |            |       |     |                        |              |  |
|---------------|-------|---------------------------------|--------------------------------|----------------------------|---------------------|------------------------|---|-------------|-----|------------|-------|-----|------------------------|--------------|--|
|               |       | FIELD PROVIDED POWER SUPPLY     |                                |                            |                     |                        | FACTORY PROVIDED (LUGS) WIRE RANGE <sup>7</sup> |             |     | COMPRESSOR |       |     | FANS <sup>11, 12</sup> |              |  |
|               |       | MCA <sup>1</sup>                | MIN NF<br>DISC SW <sup>9</sup> | OVER-CURRENT<br>PROTECTION |                     | STD. TERMINAL<br>BLOCK | OPT. NF.<br>DISC SW.                            | OPT. C.B.   | RLA | Y-LRA      | X-LRA | QTY | FLA<br>(EA.)           | LRA<br>(EA.) |  |
|               |       |                                 |                                | MIN. <sup>3,5</sup>        | MAX. <sup>4,6</sup> |                        |   |             |     |            |       |     |                        |              |  |
| 0130EC        | 200   | 343                             | 400                            | 450                        | 500                 | (2) 1/0 - 300          | (2) 3/0-250                                     | (3) 2/0-400 | 246 | 591        | N/A   | 4   | 8.2                    | 38.0         |  |
|               | 230   | 298                             | 400                            | 400                        | 500                 | 2/0 - (2) 4/0          | (2) 3/0-250                                     | (2) 3/0-250 | 214 | 481        | N/A   | 4   | 7.8                    | 33.0         |  |
|               | 380   | 180                             | 200                            | 225                        | 300                 | 1/0 - 300              | # 6 - 350                                       | # 6 - 350   | 130 | 285        | 900   | 4   | 4.8                    | 23.0         |  |
|               | 460   | 149                             | 150                            | 200                        | 250                 | # 2 - 4/0              | # 4 - 300                                       | # 6 - 350   | 107 | 228        | 719   | 4   | 4.0                    | 19.0         |  |
|               | 575   | 119                             | 150                            | 150                        | 200                 | # 2 - 4/0              | # 4 - 300                                       | # 4 - 300   | 86  | 182        | 574   | 4   | 3.1                    | 15.2         |  |
| 0140EC        | 200   | 368                             | 400                            | 450                        | 600                 | (2) 1/0 - 300          | (2) 3/0-250                                     | (3) 2/0-400 | 267 | 591        | N/A   | 4   | 8.2                    | 38.0         |  |
|               | 230   | 320                             | 400                            | 400                        | 500                 | 2/0 - (2) 4/0          | (2) 3/0-250                                     | (2) 3/0-250 | 232 | 481        | N/A   | 4   | 7.8                    | 33.0         |  |
|               | 380   | 194                             | 200                            | 250                        | 300                 | 1/0 - 300              | # 6 - 350                                       | # 6 - 350   | 140 | 285        | 900   | 4   | 4.8                    | 23.0         |  |
|               | 460   | 160                             | 200                            | 200                        | 250                 | # 2 - 4/0              | # 4 - 300                                       | # 6 - 350   | 116 | 228        | 719   | 4   | 4.0                    | 19.0         |  |
|               | 575   | 128                             | 150                            | 175                        | 200                 | # 2 - 4/0              | # 4 - 300                                       | # 4 - 300   | 93  | 182        | 574   | 4   | 3.1                    | 15.2         |  |
| 0150EC        | 200   | 366                             | 400                            | 450                        | 600                 | (2) 1/0 - 300          | (2) 3/0-250                                     | (3) 2/0-400 | 265 | 591        | N/A   | 4   | 8.2                    | 38.0         |  |
|               | 230   | 318                             | 400                            | 400                        | 500                 | (2) 1/0 - 300          | (2) 3/0-250                                     | (2) 3/0-250 | 230 | 481        | N/A   | 4   | 7.8                    | 33.0         |  |
|               | 380   | 192                             | 200                            | 250                        | 300                 | 1/0 - 300              | # 6 - 350                                       | # 6 - 350   | 139 | 285        | 900   | 4   | 4.8                    | 23.0         |  |
|               | 460   | 159                             | 150                            | 200                        | 250                 | 1/0 - 300              | # 6 - 350                                       | # 6 - 350   | 115 | 228        | 719   | 4   | 4.0                    | 19.0         |  |
|               | 575   | 127                             | 150                            | 175                        | 200                 | # 2 - 4/0              | # 4 - 300                                       | # 4 - 300   | 92  | 182        | 574   | 4   | 3.1                    | 15.2         |  |
| 0160EC        | 200   | 404                             | 400                            | 500                        | 600                 | (2) 2/0 - 500          | (2) 3/0-250                                     | (3) 2/0-400 | 295 | 708        | N/A   | 4   | 8.2                    | 38.0         |  |
|               | 230   | 350                             | 400                            | 450                        | 600                 | (2) 1/0 - 300          | (2) 3/0-250                                     | (3) 2/0-400 | 256 | 642        | N/A   | 4   | 7.8                    | 33.0         |  |
|               | 380   | 212                             | 200                            | 300                        | 350                 | 2/0 - 500              | # 6 - 350                                       | (2) 3/0-250 | 155 | 343        | 1093  | 4   | 4.8                    | 23.0         |  |
|               | 460   | 175                             | 200                            | 225                        | 300                 | 1/0 - 300              | # 6 - 350                                       | # 6 - 350   | 128 | 280        | 893   | 4   | 4.0                    | 19.0         |  |
|               | 575   | 141                             | 150                            | 175                        | 225                 | # 2 - 4/0              | # 4 - 300                                       | # 6 - 350   | 103 | 224        | 714   | 4   | 3.1                    | 15.2         |  |
| 0170EC        | 200   | 404                             | 400                            | 500                        | 600                 | (2) 2/0 - 500          | (2) 3/0-250                                     | (3) 2/0-400 | 295 | 708        | N/A   | 4   | 8.2                    | 38.0         |  |
|               | 230   | 350                             | 400                            | 450                        | 600                 | (2) 1/0 - 300          | (2) 3/0-250                                     | (3) 2/0-400 | 256 | 642        | N/A   | 4   | 7.8                    | 33.0         |  |
|               | 380   | 212                             | 200                            | 300                        | 350                 | # 1 - 300              | # 6 - 350                                       | (2) 3/0-250 | 155 | 343        | 1093  | 4   | 4.8                    | 23.0         |  |
|               | 460   | 175                             | 200                            | 225                        | 300                 | 1/0 - 300              | # 6 - 350                                       | # 6 - 350   | 128 | 280        | 893   | 4   | 4.0                    | 19.0         |  |
|               | 575   | 141                             | 150                            | 175                        | 225                 | # 2 - 4/0              | # 4 - 300                                       | # 6 - 350   | 103 | 224        | 714   | 4   | 3.1                    | 15.2         |  |
| 0180EC        | 200   | 436                             | 600                            | 600                        | 700                 | (2) 2/0 - 500          | (3) 2/0-400                                     | (3) 2/0-400 | 321 | 708        | N/A   | 4   | 8.2                    | 38.0         |  |
|               | 230   | 379                             | 400                            | 450                        | 600                 | (2) 2/0 - 500          | (2) 3/0-250                                     | (3) 2/0-400 | 279 | 642        | N/A   | 4   | 7.8                    | 33.0         |  |
|               | 380   | 230                             | 250                            | 300                        | 350                 | 2/0 - 500              | # 6 - 350                                       | (2) 3/0-250 | 169 | 343        | 1093  | 4   | 4.8                    | 23.0         |  |
|               | 460   | 190                             | 200                            | 250                        | 300                 | 1/0 - 300              | # 6 - 350                                       | # 6 - 350   | 140 | 280        | 893   | 4   | 4.0                    | 19.0         |  |
|               | 575   | 152                             | 150                            | 200                        | 250                 | # 2 - 4/0              | # 4 - 300                                       | # 6 - 350   | 112 | 224        | 714   | 4   | 3.1                    | 15.2         |  |
| 0200EC        | 200   | 471                             | 600                            | 600                        | 800                 | (2) 2/0 - 500          | (3) 2/0-400                                     | (3) 2/0-400 | 342 | 708        | N/A   | 5   | 8.2                    | 38.0         |  |
|               | 230   | 411                             | 400                            | 500                        | 700                 | (2) 2/0 - 500          | (2) 3/0-250                                     | (3) 2/0-400 | 298 | 642        | N/A   | 5   | 7.8                    | 33.0         |  |
|               | 380   | 249                             | 250                            | 300                        | 400                 | 2/0 - 500              | # 6 - 350                                       | (2) 3/0-250 | 181 | 343        | 1093  | 5   | 4.8                    | 23.0         |  |
|               | 460   | 205                             | 200                            | 250                        | 350                 | 2/0 - 500              | # 6 - 350                                       | # 6 - 350   | 149 | 280        | 893   | 5   | 4.0                    | 19.0         |  |
|               | 575   | 164                             | 200                            | 200                        | 250                 | 1/0 - 300              | # 6 - 350                                       | # 6 - 350   | 119 | 224        | 714   | 5   | 3.1                    | 15.2         |  |
| 0210EC        | 200   | 471                             | 600                            | 600                        | 800                 | (2) 2/0 - 500          | (3) 2/0-400                                     | (3) 2/0-400 | 342 | 708        | N/A   | 5   | 8.2                    | 38.0         |  |
|               | 230   | 411                             | 400                            | 500                        | 700                 | (2) 2/0 - 500          | (2) 3/0-250                                     | (3) 2/0-400 | 298 | 642        | N/A   | 5   | 7.8                    | 33.0         |  |
|               | 380   | 249                             | 250                            | 300                        | 400                 | 2/0 - 500              | # 6 - 350                                       | (2) 3/0-250 | 181 | 343        | 1093  | 5   | 4.8                    | 23.0         |  |
|               | 460   | 205                             | 200                            | 250                        | 350                 | # 1 - 300              | # 6 - 350                                       | # 6 - 350   | 149 | 280        | 893   | 5   | 4.0                    | 19.0         |  |
|               | 575   | 164                             | 200                            | 200                        | 250                 | 1/0 - 300              | # 4 - 300                                       | # 6 - 350   | 119 | 224        | 714   | 5   | 3.1                    | 15.2         |  |
| 0230EC        | 200   | 511                             | 600                            | 700                        | 800                 | (2) 2/0 - 500          | (3) 2/0-400                                     | (3) 2/0-400 | 374 | 708        | N/A   | 5   | 8.2                    | 38.0         |  |
|               | 230   | 444                             | 600                            | 600                        | 700                 | (2) 2/0 - 500          | (3) 2/0-400                                     | (3) 2/0-400 | 325 | 642        | N/A   | 5   | 7.8                    | 33.0         |  |
|               | 380   | 269                             | 400                            | 350                        | 450                 | 2/0 - 500              | (2) 3/0-250                                     | (2) 3/0-250 | 197 | 343        | 1093  | 5   | 4.8                    | 23.0         |  |
|               | 460   | 223                             | 250                            | 300                        | 350                 | 2/0 - 500              | # 6 - 350                                       | (2) 3/0-250 | 163 | 280        | 893   | 5   | 4.0                    | 19.0         |  |
|               | 575   | 178                             | 200                            | 225                        | 300                 | 1/0 - 300              | # 6 - 350                                       | # 6 - 350   | 130 | 224        | 714   | 5   | 3.1                    | 15.2         |  |

## ELECTRICAL DATA (CONT'D)



\* Note: With Single-Point Power connection and Star-Delta Compressor Motor Starting must also include Factory Provided Individual System Circuit Breakers

### OPTIONAL SINGLE-POINT POWER SUPPLY CONNECTION AND INDIVIDUAL SYSTEM CIRCUIT BREAKERS

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

One field provided power supply circuit to the unit. Field connections to factory provided Non-Fused Disconnect Switch (Opt), or Terminal Block (Opt). Factory connections to Circuit Breakers in each of the two Power Panels.

See page 4 for notes.

### OPTIONAL SINGLE-POINT POWER SUPPLY WITH INDIVIDUAL SYSTEM CIRCUIT BREAKERS – 2 COMPRESSOR UNITS

(One Field Provided Power Supply Circuit to the chiller. Field connections to Factory Provided Terminal Block (standard) or Non-Fused Disconnect (option). Individual System Circuit Breakers in each Motor Control Center<sup>10</sup>)

| CHILLER MODEL YCAS  | VOLTS               | FIELD-SUPPLIED WIRING       |                             |                                       |   |                         |                          |
|---------------------|---------------------|-----------------------------|-----------------------------|---------------------------------------|---|-------------------------|--------------------------|
|                     |                     | FIELD PROVIDED POWER SUPPLY |                             |                                       | FACTORY PROVIDED (LUGS) WIRE RANGE <sup>7</sup> |                         |                          |
|                     |                     | MCA <sup>1</sup>            | MIN NF DISC SW <sup>9</sup> | OVER-CURRENT PROTECTION <sup>13</sup> |   | STANDARD TERMINAL BLOCK | OPTIONAL NF DISC. SWITCH |
| MIN. <sup>3,5</sup> | MAX. <sup>4,6</sup> |                             |                             |                                       |   |                         |                          |
| 0130EC              | 200                 | 619.3                       | 800                         | 700                                   | 700   | (3) 2/0 - 500           | (3) 2/0-400              |
|                     | 230                 | 543.9                       | 600                         | 600                                   | 700   | (2) 2/0 - 500           | (2) 250-500              |
|                     | 380                 | 329.8                       | 400                         | 400                                   | 450   | (2) 1/0 - 300           | (2) 3/0-250              |
|                     | 460                 | 272.8                       | 400                         | 300                                   | 350   | 2/0 - 500               | (2) 3/0-250              |
|                     | 575                 | 217.4                       | 250                         | 250                                   | 300   | 2/0 - 500               | # 6 - 350                |
| 0140EC              | 200                 | 665.9                       | 800                         | 800                                   | 800   | (3) 2/0 - 500           | (3) 2/0-400              |
|                     | 230                 | 584.4                       | 800                         | 700                                   | 800   | (3) 2/0 - 500           | (2) 250-500              |
|                     | 380                 | 354.3                       | 400                         | 400                                   | 450   | (2) 1/0 - 300           | (2) 3/0-250              |
|                     | 460                 | 293.0                       | 400                         | 350                                   | 400   | (2) 1/0 - 300           | (2) 3/0-250              |
|                     | 575                 | 233.6                       | 250                         | 300                                   | 300   | 2/0 - 500               | # 6 - 350                |
| 0150EC              | 200                 | 698.9                       | 800                         | 800                                   | 800   | (3) 2/0 - 500           | (3) 2/0-400              |
|                     | 230                 | 612.4                       | 800                         | 700                                   | 800   | (3) 2/0 - 500           | (3) 2/0-400              |
|                     | 380                 | 371.4                       | 400                         | 450                                   | 500   | (2) 2/0 - 500           | (2) 3/0-250              |
|                     | 460                 | 307.0                       | 400                         | 350                                   | 400   | (2) 1/0 - 300           | (2) 3/0-250              |
|                     | 575                 | 245.6                       | 400                         | 300                                   | 300   | 2/0 - 500               | (2) 3/0-250              |
| 0160EC              | 200                 | 729.4                       | 800                         | 1000                                  | 800   | (3) 2/0 - 500           | (3) 2/0-400              |
|                     | 230                 | 638.4                       | 800                         | 800                                   | 800   | (3) 2/0 - 500           | (3) 2/0-400              |
|                     | 380                 | 387.2                       | 600                         | 450                                   | 500   | (2) 2/0 - 500           | (2) 250-500              |
|                     | 460                 | 320.0                       | 400                         | 400                                   | 400   | (2) 1/0 - 300           | (2) 3/0-250              |
|                     | 575                 | 256.6                       | 400                         | 300                                   | 300   | 2/0 - 500               | (2) 3/0-250              |
| 0170EC              | 200                 | 761.9                       | 800                         | 1000                                  | 1000  | (3) 2/0 - 500           | (3) 2/0-400              |
|                     | 230                 | 667.2                       | 800                         | 800                                   | 800   | (3) 2/0 - 500           | (3) 2/0-400              |
|                     | 380                 | 404.7                       | 600                         | 450                                   | 500   | (2) 2/0 - 500           | (2) 250-500              |
|                     | 460                 | 335.0                       | 400                         | 400                                   | 400   | (2) 1/0 - 300           | (2) 3/0-250              |
|                     | 575                 | 267.8                       | 400                         | 300                                   | 350   | 2/0 - 500               | (2) 3/0-250              |
| 0180EC              | 200                 | 787.9                       | 1000                        | 1000                                  | 1000  | N/A                     | N/A                      |
|                     | 230                 | 690.2                       | 800                         | 800                                   | 800   | N/A                     | N/A                      |
|                     | 380                 | 418.7                       | 600                         | 500                                   | 500   | (2) 2/0 - 500           | (2) 250-500              |
|                     | 460                 | 347.0                       | 400                         | 400                                   | 450   | (2) 1/0 - 300           | (2) 3/0-250              |
|                     | 575                 | 276.8                       | 400                         | 350                                   | 350   | (2) 1/0 - 300           | (2) 3/0-250              |
| 0200EC              | 200                 | 851.5                       | 1000                        | 1000                                  | 1000  | N/A                     | N/A                      |
|                     | 230                 | 748.5                       | 800                         | 1000                                  | 800   | N/A                     | N/A                      |
|                     | 380                 | 455.3                       | 600                         | 600                                   | 500   | (2) 2/0 - 500           | (2) 250-500              |
|                     | 460                 | 375.3                       | 400                         | 450                                   | 450   | (2) 2/0 - 500           | (2) 3/0-250              |
|                     | 575                 | 298.8                       | 400                         | 350                                   | 350   | (2) 1/0 - 300           | (2) 3/0-250              |
| 0210EC              | 200                 | 891.5                       | 1000                        | 1000                                  | 1000  | N/A                     | N/A                      |
|                     | 230                 | 782.3                       | 1000                        | 1000                                  | 1000  | N/A                     | N/A                      |
|                     | 380                 | 475.3                       | 600                         | 600                                   | 600   | (2) 2/0 - 500           | (2) 250-500              |
|                     | 460                 | 392.8                       | 600                         | 450                                   | 500   | (2) 2/0 - 500           | (2) 250-500              |
|                     | 575                 | 312.5                       | 400                         | 350                                   | 400   | (2) 1/0 - 300           | (2) 3/0-250              |
| 0230EC              | 200                 | 923.5                       | 1000                        | 1200                                  | 1200  | N/A                     | N/A                      |
|                     | 230                 | 809.3                       | 1000                        | 1000                                  | 1000  | N/A                     | N/A                      |
|                     | 380                 | 491.3                       | 600                         | 600                                   | 600   | (2) 2/0 - 500           | (2) 250-500              |
|                     | 460                 | 406.8                       | 600                         | 450                                   | 500   | (2) 2/0 - 500           | (2) 250-500              |
|                     | 575                 | 323.5                       | 400                         | 400                                   | 450   | (2) 1/0 - 300           | (2) 3/0-250              |

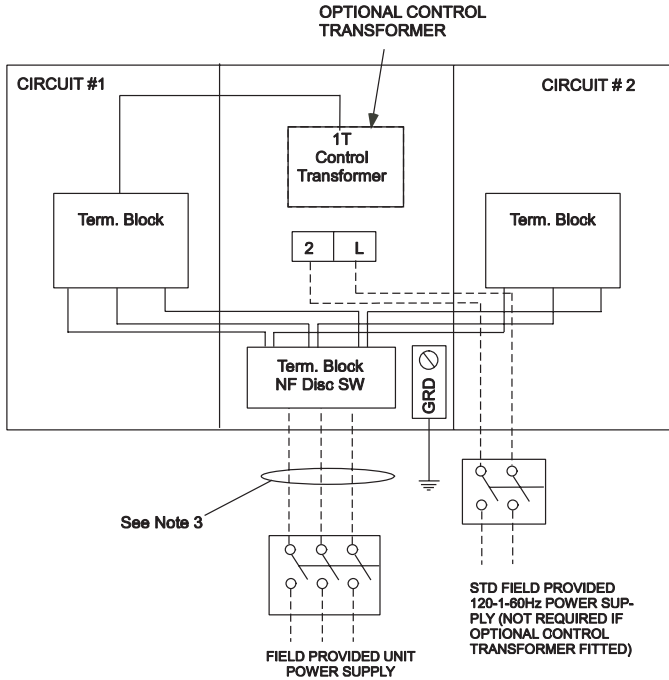
See page 4 for Electrical Data footnotes.



## ELECTRICAL DATA (CONT'D)

| MODEL<br>YCAS | VOLTS | SYSTEM #1       |       |       |                            |              |              | SYSTEM #2       |       |       |                            |              |              |
|---------------|-------|-----------------|-------|-------|----------------------------|--------------|--------------|-----------------|-------|-------|----------------------------|--------------|--------------|
|               |       | COMPRESSOR DATA |       |       | FAN DATA <sup>11, 12</sup> |              |              | COMPRESSOR DATA |       |       | FAN DATA <sup>11, 12</sup> |              |              |
|               |       | RLA             | Y-LRA | X-LRA | QTY                        | FLA<br>(EA.) | LRA<br>(EA.) | RLA             | Y-LRA | X-LRA | QTY                        | FLA<br>(EA.) | LRA<br>(EA.) |
| 0130EC        | 200   | 246.1           | 591   | 1866  | 4                          | 8.2          | 38.0         | 246.1           | 591   | 1866  | 4                          | 8.2          | 38.0         |
|               | 230   | 214.0           | 481   | 1518  | 4                          | 7.8          | 33.0         | 214.0           | 481   | 1518  | 4                          | 7.8          | 33.0         |
|               | 380   | 129.5           | 285   | 900   | 4                          | 4.8          | 23.0         | 129.5           | 285   | 900   | 4                          | 4.8          | 23.0         |
|               | 460   | 107.0           | 228   | 719   | 4                          | 4.0          | 19.0         | 107.0           | 228   | 719   | 4                          | 4.0          | 19.0         |
|               | 575   | 85.6            | 182   | 574   | 4                          | 3.1          | 15.2         | 85.6            | 182   | 574   | 4                          | 3.1          | 15.2         |
| 0140EC        | 200   | 266.8           | 591   | 1866  | 4                          | 8.2          | 38.0         | 266.8           | 591   | 1866  | 4                          | 8.2          | 38.0         |
|               | 230   | 232.0           | 481   | 1518  | 4                          | 7.8          | 33.0         | 232.0           | 481   | 1518  | 4                          | 7.8          | 33.0         |
|               | 380   | 140.4           | 285   | 900   | 4                          | 4.8          | 23.0         | 140.4           | 285   | 900   | 4                          | 4.8          | 23.0         |
|               | 460   | 116.0           | 228   | 719   | 4                          | 4.0          | 19.0         | 116.0           | 228   | 719   | 4                          | 4.0          | 19.0         |
|               | 575   | 92.8            | 182   | 574   | 4                          | 3.1          | 15.2         | 92.8            | 182   | 574   | 4                          | 3.1          | 15.2         |
| 0150EC        | 200   | 295.0           | 708   | 2256  | 4                          | 8.2          | 38.0         | 264.5           | 591   | 1866  | 4                          | 8.2          | 38.0         |
|               | 230   | 256.0           | 642   | 2045  | 4                          | 7.8          | 33.0         | 230.0           | 481   | 1518  | 4                          | 7.8          | 33.0         |
|               | 380   | 155.0           | 343   | 1093  | 4                          | 4.8          | 23.0         | 139.2           | 285   | 900   | 4                          | 4.8          | 23.0         |
|               | 460   | 128.0           | 280   | 893   | 4                          | 4.0          | 19.0         | 115.0           | 228   | 719   | 4                          | 4.0          | 19.0         |
|               | 575   | 103.0           | 224   | 714   | 4                          | 3.1          | 15.2         | 92.0            | 182   | 574   | 4                          | 3.1          | 15.2         |
| 0160EC        | 200   | 295.0           | 708   | 2256  | 4                          | 8.2          | 38.0         | 295.0           | 708   | 2256  | 4                          | 8.2          | 38.0         |
|               | 230   | 256.0           | 642   | 2045  | 4                          | 7.8          | 33.0         | 256.0           | 642   | 2045  | 4                          | 7.8          | 33.0         |
|               | 380   | 155.0           | 343   | 1093  | 4                          | 4.8          | 23.0         | 155.0           | 343   | 1093  | 4                          | 4.8          | 23.0         |
|               | 460   | 128.0           | 280   | 893   | 4                          | 4.0          | 19.0         | 128.0           | 280   | 893   | 4                          | 4.0          | 19.0         |
|               | 575   | 103.0           | 224   | 714   | 4                          | 3.1          | 15.2         | 103.0           | 224   | 714   | 4                          | 3.1          | 15.2         |
| 0170EC        | 200   | 321.0           | 708   | 2256  | 4                          | 8.2          | 38.0         | 295.0           | 708   | 2256  | 4                          | 8.2          | 38.0         |
|               | 230   | 279.0           | 642   | 2045  | 4                          | 7.8          | 33.0         | 256.0           | 642   | 2045  | 4                          | 7.8          | 33.0         |
|               | 380   | 169.0           | 343   | 1093  | 4                          | 4.8          | 23.0         | 155.0           | 343   | 1093  | 4                          | 4.8          | 23.0         |
|               | 460   | 140.0           | 280   | 893   | 4                          | 4.0          | 19.0         | 128.0           | 280   | 893   | 4                          | 4.0          | 19.0         |
|               | 575   | 112.0           | 224   | 714   | 4                          | 3.1          | 15.2         | 103.0           | 224   | 714   | 4                          | 3.1          | 15.2         |
| 0180EC        | 200   | 321.0           | N/A   | N/A   | 4                          | 8.2          | 38.0         | 321.0           | N/A   | N/A   | 4                          | 8.2          | 38.0         |
|               | 230   | 279.0           | N/A   | N/A   | 4                          | 7.8          | 33.0         | 279.0           | N/A   | N/A   | 4                          | 7.8          | 33.0         |
|               | 380   | 169.0           | 343   | 1093  | 4                          | 4.8          | 23.0         | 169.0           | 343   | 1093  | 4                          | 4.8          | 23.0         |
|               | 460   | 140.0           | 280   | 893   | 4                          | 4.0          | 19.0         | 140.0           | 280   | 893   | 4                          | 4.0          | 19.0         |
|               | 575   | 112.0           | 224   | 714   | 4                          | 3.1          | 15.2         | 112.0           | 224   | 714   | 4                          | 3.1          | 15.2         |
| 0200EC        | 200   | 342.0           | N/A   | N/A   | 5                          | 8.2          | 38.0         | 342.0           | N/A   | N/A   | 5                          | 8.2          | 38.0         |
|               | 230   | 298.0           | N/A   | N/A   | 5                          | 7.8          | 33.0         | 298.0           | N/A   | N/A   | 5                          | 7.8          | 33.0         |
|               | 380   | 181.0           | 343   | 1093  | 5                          | 4.8          | 23.0         | 181.0           | 343   | 1093  | 5                          | 4.8          | 23.0         |
|               | 460   | 149.0           | 280   | 893   | 5                          | 4.0          | 19.0         | 149.0           | 280   | 893   | 5                          | 4.0          | 19.0         |
|               | 575   | 119.0           | 224   | 714   | 5                          | 3.1          | 15.2         | 119.0           | 224   | 714   | 5                          | 3.1          | 15.2         |
| 0210EC        | 200   | 374.0           | N/A   | N/A   | 5                          | 8.2          | 38.0         | 342.0           | N/A   | N/A   | 5                          | 8.2          | 38.0         |
|               | 230   | 325.0           | N/A   | N/A   | 5                          | 7.8          | 33.0         | 298.0           | N/A   | N/A   | 5                          | 7.8          | 33.0         |
|               | 380   | 197.0           | 343   | 1093  | 5                          | 4.8          | 23.0         | 181.0           | 343   | 1093  | 5                          | 4.8          | 23.0         |
|               | 460   | 163.0           | 280   | 893   | 5                          | 4.0          | 19.0         | 149.0           | 280   | 893   | 5                          | 4.0          | 19.0         |
|               | 575   | 130.0           | 224   | 714   | 5                          | 3.1          | 15.2         | 119.0           | 224   | 714   | 5                          | 3.1          | 15.2         |
| 0230EC        | 200   | 374.0           | N/A   | N/A   | 5                          | 8.2          | 38.0         | 374.0           | N/A   | N/A   | 5                          | 8.2          | 38.0         |
|               | 230   | 325.0           | N/A   | N/A   | 5                          | 7.8          | 33.0         | 325.0           | N/A   | N/A   | 5                          | 7.8          | 33.0         |
|               | 380   | 197.0           | 343   | 1093  | 5                          | 4.8          | 23.0         | 197.0           | 343   | 1093  | 5                          | 4.8          | 23.0         |
|               | 460   | 163.0           | 280   | 893   | 5                          | 4.0          | 19.0         | 163.0           | 280   | 893   | 5                          | 4.0          | 19.0         |
|               | 575   | 130.0           | 224   | 714   | 5                          | 3.1          | 15.2         | 130.0           | 224   | 714   | 5                          | 3.1          | 15.2         |

## ELECTRICAL DATA (CONT'D)



### OPTIONAL SINGLE-POINT POWER SUPPLY CONNECTION WITH FIELD SUPPLIED CIRCUIT PROTECTION

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

One field provided power supply circuit to the unit. Field connections to factory provided Non-Fused Disconnect Switch (Opt), or Terminal Block (Opt). Factory connections to Terminal Blocks in each of the two Power Panels.

See page 4 for notes.

LD05550

### OPTIONAL SINGLE-POINT POWER SUPPLY CONNECTION – 2 COMPRESSOR UNITS

(One Field Provided Power Supply Circuit to the Chiller. Field connections to Factory Provided Terminal Block (Standard) or Non-Fused Disconnect (option). No Internal Branch Circuit Protection (Breakers) per Motor Control Center<sup>10</sup>)

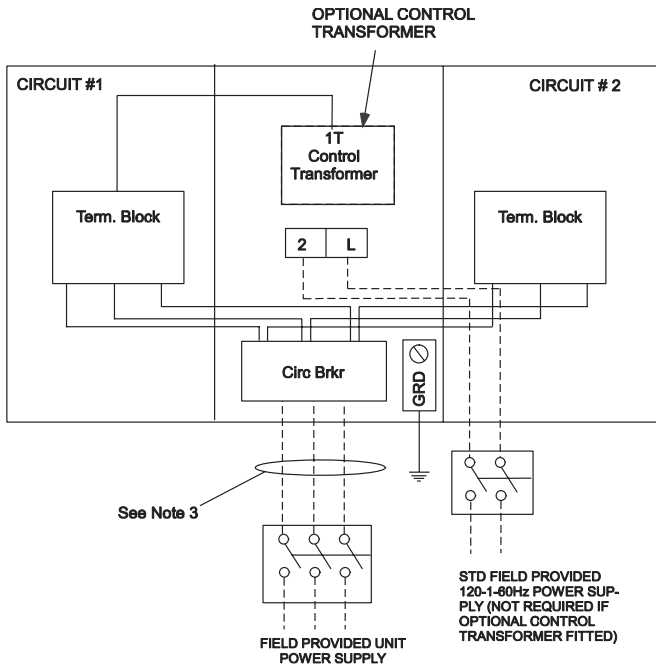
| CHILLER MODEL YCAS | VOLTS | FIELD-SUPPLIED WIRING       |                               |                                       |     |   |                          |
|--------------------|-------|-----------------------------|-------------------------------|---------------------------------------|-----|---|--------------------------|
|                    |       | FIELD PROVIDED POWER SUPPLY |                               |                                       |     | FACTORY PROVIDED (LUGS) WIRE RANGE <sup>7</sup> |                          |
|                    |       | MCA <sup>1</sup>            | MIN NF DISC SW <sup>2,9</sup> | OVER-CURRENT PROTECTION <sup>13</sup> |     | STANDARD TERMINAL BLOCK                         | OPTIONAL NF DISC. SWITCH |
|                    |       |                             | MIN. <sup>3,5</sup>           | MAX. <sup>4,6</sup>                   |     |   |                          |
| 0130EC             | 460   | 273                         | 400                           | 300                                   | 350 | # 1 - 500                                       | (2) 3/0-250              |
|                    | 575   | 217                         | 250                           | 250                                   | 300 | # 1 - 500                                       | # 6 - 350                |
| 0140EC             | 460   | 293                         | 400                           | 350                                   | 400 | (2) # 2 - 300                                   | (2) 3/0-250              |
|                    | 575   | 234                         | 250                           | 300                                   | 300 | # 1 - 500                                       | # 6 - 350                |
| 0150EC             | 460   | 307                         | 400                           | 350                                   | 400 | (2) # 2 - 300                                   | (2) 3/0-250              |
|                    | 575   | 246                         | 400                           | 300                                   | 300 | # 1 - 500                                       | (2) 3/0-250              |
| 0160EC             | 460   | 320                         | 400                           | 400                                   | 400 | (2) # 2 - 300                                   | (2) 3/0-250              |
|                    | 575   | 257                         | 400                           | 300                                   | 350 | # 1 - 500                                       | (2) 3/0-250              |
| 0170EC             | 460   | 335                         | 400                           | 400                                   | 450 | (2) # 2 - 300                                   | (2) 3/0-250              |
|                    | 575   | 268                         | 400                           | 300                                   | 350 | # 1 - 500                                       | (2) 3/0-250              |
| 0180EC             | 460   | 347                         | 400                           | 400                                   | 450 | (2) # 2 - 300                                   | (2) 3/0-250              |
|                    | 575   | 277                         | 400                           | 350                                   | 350 | (2) # 2 - 300                                   | (2) 3/0-250              |
| 0200EC             | 460   | 375                         | 400                           | 450                                   | 500 | (2) # 1 - 500                                   | (2) 3/0-250              |
|                    | 575   | 299                         | 400                           | 350                                   | 400 | (2) # 2 - 300                                   | (2) 3/0-250              |
| 0210EC             | 460   | 393                         | 600                           | 450                                   | 500 | (2) # 1 - 500                                   | (2) 250-500              |
|                    | 575   | 313                         | 400                           | 350                                   | 400 | (2) # 2 - 300                                   | (2) 3/0-250              |
| 0230EC             | 460   | 407                         | 600                           | 450                                   | 500 | (2) # 1 - 500                                   | (2) 250-500              |
|                    | 575   | 324                         | 400                           | 400                                   | 450 | (2) # 2 - 300                                   | (2) 3/0-250              |

See page 4 for Electrical Data footnotes.

## ELECTRICAL DATA (CONT'D)

| MODEL<br>YCAS | VOLTS | SYSTEM #1       |       |                           |              |              | SYSTEM #2       |       |                           |              |              |
|---------------|-------|-----------------|-------|---------------------------|--------------|--------------|-----------------|-------|---------------------------|--------------|--------------|
|               |       | COMPRESSOR DATA |       | FAN DATA <sup>11,12</sup> |              |              | COMPRESSOR DATA |       | FAN DATA <sup>11,12</sup> |              |              |
|               |       | RLA             | X-LRA | QTY                       | FLA<br>(EA.) | LRA<br>(EA.) | RLA             | X-LRA | QTY                       | FLA<br>(EA.) | LRA<br>(EA.) |
| 0130EC        | 460   | 107             | 719   | 4                         | 4.0          | 19.0         | 107             | 719   | 4                         | 4.0          | 19.0         |
|               | 575   | 86              | 574   | 4                         | 3.1          | 15.2         | 86              | 574   | 4                         | 3.1          | 15.2         |
| 0140EC        | 460   | 116             | 719   | 4                         | 4.0          | 19.0         | 116             | 719   | 4                         | 4.0          | 19.0         |
|               | 575   | 93              | 574   | 4                         | 3.1          | 15.2         | 93              | 574   | 4                         | 3.1          | 15.2         |
| 0150EC        | 460   | 128             | 893   | 4                         | 4.0          | 19.0         | 115             | 719   | 4                         | 4.0          | 19.0         |
|               | 575   | 103             | 714   | 4                         | 3.1          | 15.2         | 92              | 574   | 4                         | 3.1          | 15.2         |
| 0160EC        | 460   | 128             | 893   | 4                         | 4.0          | 19.0         | 128             | 893   | 4                         | 4.0          | 19.0         |
|               | 575   | 103             | 714   | 4                         | 3.1          | 15.2         | 103             | 714   | 4                         | 3.1          | 15.2         |
| 0170EC        | 460   | 140             | 893   | 4                         | 4.0          | 19.0         | 128             | 893   | 4                         | 4.0          | 19.0         |
|               | 575   | 112             | 714   | 4                         | 3.1          | 15.2         | 103             | 714   | 4                         | 3.1          | 15.2         |
| 0180EC        | 460   | 140             | 893   | 4                         | 4.0          | 19.0         | 140             | 893   | 4                         | 4.0          | 19.0         |
|               | 575   | 112             | 714   | 4                         | 3.1          | 15.2         | 112             | 714   | 4                         | 3.1          | 15.2         |
| 0200EC        | 460   | 149             | 893   | 5                         | 4.0          | 19.0         | 149             | 893   | 5                         | 4.0          | 19.0         |
|               | 575   | 119             | 714   | 5                         | 3.1          | 15.2         | 119             | 714   | 5                         | 3.1          | 15.2         |
| 0210EC        | 460   | 163             | 893   | 5                         | 4.0          | 19.0         | 149             | 893   | 5                         | 4.0          | 19.0         |
|               | 575   | 130             | 714   | 5                         | 3.1          | 15.2         | 119             | 714   | 5                         | 3.1          | 15.2         |
| 0230EC        | 460   | 163             | 893   | 5                         | 4.0          | 19.0         | 163             | 893   | 5                         | 4.0          | 19.0         |
|               | 575   | 130             | 714   | 5                         | 3.1          | 15.2         | 130             | 714   | 5                         | 3.1          | 15.2         |

## ELECTRICAL DATA (CONT'D)



### OPTIONAL SINGLE-POINT POWER SUPPLY CONNECTION TO FACTORY CIRCUIT BREAKER

**Suitable for:  
Across-The-Line-Start**

One field provided power supply circuit to the unit. Field connections to factory provided Circuit Breaker in the Options Panel. Factory connections to Terminal Blocks in each of the two Power Panels.

See page 4 for notes.

LD05551

### OPTIONAL SINGLE-POINT POWER SUPPLY CONNECTION TO FACTORY CIRCUIT BREAKER – 2 COMPRESSOR UNITS

(One Field Provided Power Supply Circuit to the chiller. Field Connections to Factory Provided Circuit Breaker.  
No Internal Branch Circuit Protection (Breakers) per Motor Control Center<sup>10</sup>.)

| MODEL YCAS | VOLTS | FIELD SUPPLIED WIRING |                          |                                | SYSTEM #1  |       |                       |         |         | SYSTEM #2  |       |                       |         |         |
|------------|-------|-----------------------|--------------------------|--------------------------------|------------|-------|-----------------------|---------|---------|------------|-------|-----------------------|---------|---------|
|            |       | MCA <sup>1</sup>      | FACTORY SUPPLIED BREAKER |                                | COMPRESSOR |       | FANS <sup>11,12</sup> |         |         | COMPRESSOR |       | FANS <sup>11,12</sup> |         |         |
|            |       |                       | RATING <sup>2</sup>      | WIRE RANGE <sup>7</sup> (LUGS) | RLA        | X-LRA | QTY                   | FLA(ea) | LRA(ea) | RLA        | X-LRA | QTY                   | FLA(ea) | LRA(ea) |
| 0130EC     | 460   | 273                   | 400                      | (2) 3/0-250                    | 107        | 719   | 4                     | 4.0     | 19.0    | 107        | 719   | 4                     | 4.0     | 19.0    |
|            | 575   | 217                   | 250                      | # 6 - 350                      | 86         | 574   | 4                     | 3.1     | 15.2    | 86         | 574   | 4                     | 3.1     | 15.2    |
| 0140EC     | 460   | 293                   | 400                      | (2) 3/0-250                    | 116        | 719   | 4                     | 4.0     | 19.0    | 116        | 719   | 4                     | 4.0     | 19.0    |
|            | 575   | 234                   | 400                      | (2) 3/0-250                    | 93         | 574   | 4                     | 3.1     | 15.2    | 93         | 574   | 4                     | 3.1     | 15.2    |
| 0150EC     | 460   | 307                   | 400                      | (2) 3/0-250                    | 128        | 893   | 4                     | 4.0     | 19.0    | 115        | 719   | 4                     | 4.0     | 19.0    |
|            | 575   | 246                   | 400                      | (2) 3/0-250                    | 103        | 714   | 4                     | 3.1     | 15.2    | 92         | 574   | 4                     | 3.1     | 15.2    |
| 0160EC     | 460   | 320                   | 400                      | (2) 3/0-250                    | 128        | 893   | 4                     | 4.0     | 19.0    | 128        | 893   | 4                     | 4.0     | 19.0    |
|            | 575   | 257                   | 400                      | (2) 3/0-250                    | 103        | 714   | 4                     | 3.1     | 15.2    | 103        | 714   | 4                     | 3.1     | 15.2    |
| 0170EC     | 460   | 335                   | 400                      | (2) 3/0-250                    | 140        | 893   | 4                     | 4.0     | 19.0    | 128        | 893   | 4                     | 4.0     | 19.0    |
|            | 575   | 268                   | 400                      | (2) 3/0-250                    | 112        | 714   | 4                     | 3.1     | 15.2    | 103        | 714   | 4                     | 3.1     | 15.2    |
| 0180EC     | 460   | 347                   | 400                      | (2) 3/0-250                    | 140        | 893   | 4                     | 4.0     | 19.0    | 140        | 893   | 4                     | 4.0     | 19.0    |
|            | 575   | 277                   | 400                      | (2) 3/0-250                    | 112        | 714   | 4                     | 3.1     | 15.2    | 112        | 714   | 4                     | 3.1     | 15.2    |
| 0200EC     | 460   | 375                   | 600                      | (3) 2/0-400                    | 149        | 893   | 5                     | 4.0     | 19.0    | 149        | 893   | 5                     | 4.0     | 19.0    |
|            | 575   | 299                   | 400                      | (2) 3/0-250                    | 119        | 714   | 5                     | 3.1     | 15.2    | 119        | 714   | 5                     | 3.1     | 15.2    |
| 0210EC     | 460   | 393                   | 600                      | (3) 2/0-400                    | 163        | 893   | 5                     | 4.0     | 19.0    | 149        | 893   | 5                     | 4.0     | 19.0    |
|            | 575   | 313                   | 400                      | (2) 3/0-250                    | 130        | 714   | 5                     | 3.1     | 15.2    | 119        | 714   | 5                     | 3.1     | 15.2    |
| 0230EC     | 460   | 407                   | 600                      | (3) 2/0-400                    | 163        | 893   | 5                     | 4.0     | 19.0    | 163        | 893   | 5                     | 4.0     | 19.0    |
|            | 575   | 324                   | 400                      | (2) 3/0-250                    | 130        | 714   | 5                     | 3.1     | 15.2    | 130        | 714   | 5                     | 3.1     | 15.2    |

**NOTES:** Wye-Delta Compressor Start not available with this option.  
See page 4 for Electrical Data footnotes.

**NOTES:**

1. ----- Dashed Line indicates Field Provided Wiring.
2. The above recommendations are based on the National Electric Code and using copper connectors only. Field wiring must also comply with local codes.

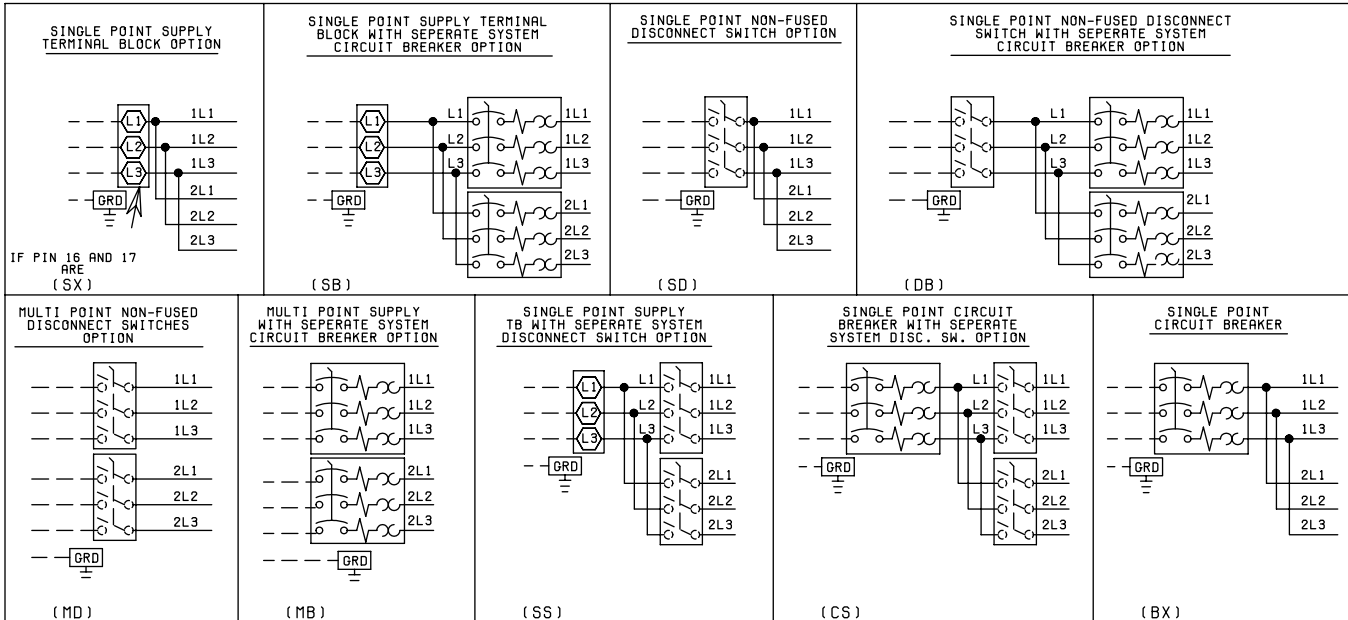
## ELECTRICAL DATA (CONT'D)

### COMPRESSOR DATA

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

# WIRING DIAGRAM ACROSS-THE-LINE START

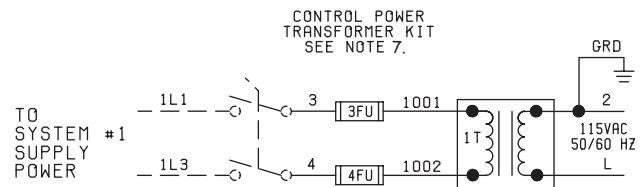
OPTIONAL EQUIPMENT SEE NOTE 7.



**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. Numbers along the right side of a diagram are line identification numbers. The numbers at each line indicate the line number location of relay contacts. An unlined contact location signifies a normally closed contact. Numbers adjacent to circuit lines are the circuit identification numbers.
3. Any customer supplied contacts must be suitable for switching 24VDC. (Gold contacts recommended.) Control Wiring must not be run in the same conduit with any line voltage wiring.
4. To cycle unit on and off automatically with contact shown, install a cycling device in series with the flow switch (FSLW). See Note 3 for contact rating and wiring specifications. Also refer to cautions on page 17.
5. To stop unit (Emergency Stop) with contacts other than those shown, install the stop contact between 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 115 volts A.C.
6. 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.
7. See Installation, Operation and Maintenance Manual when optional equipment is used.
8. Control panel to be securely connected to earth ground.
9. Use 2KVA transformer in optional transformer kit unless there are optional oil separator sump heaters which necessitates using a 3KVA transformer.

LD09231



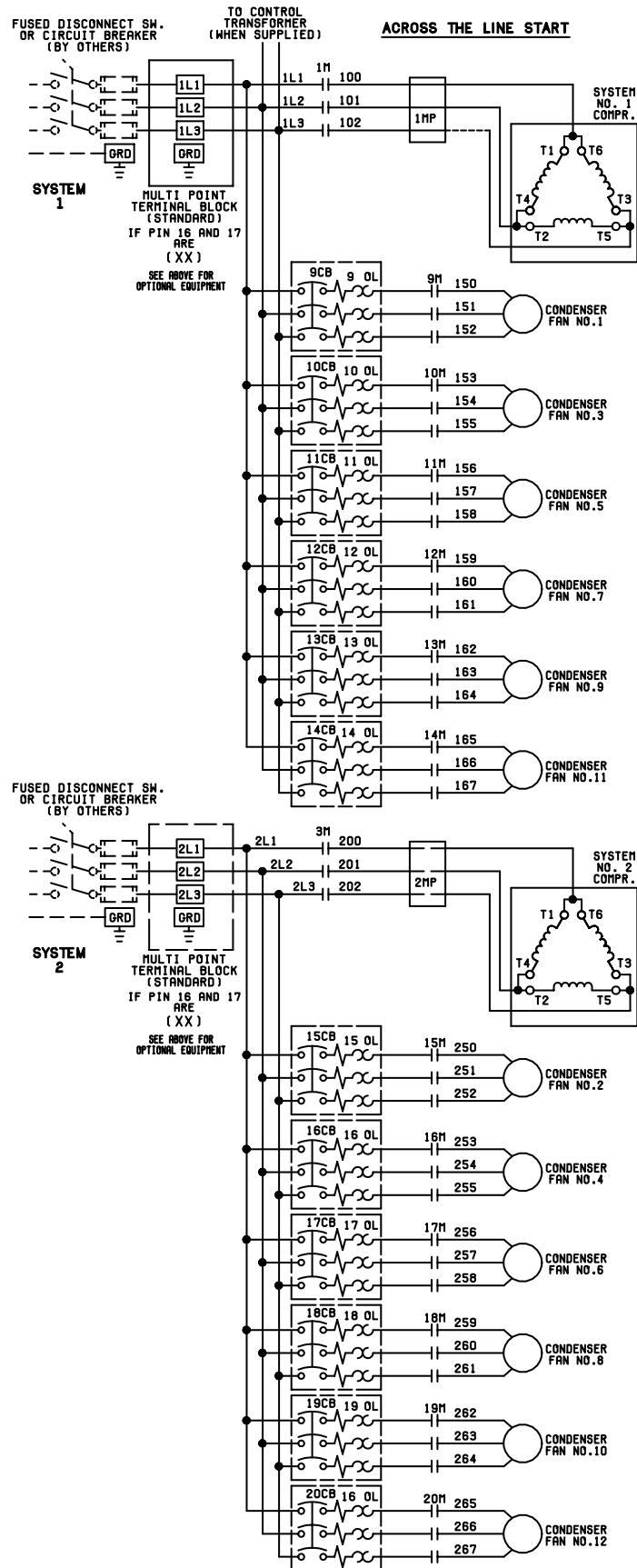
LD09232

**LEGEND**

- TS 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

**FIG. 1 – WIRING DIAGRAM – ACROSS-THE-LINE START**

## WIRING DIAGRAM (CONT'D) ACROSS-THE-LINE START



LD09233

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

# ELEMENTARY DIAGRAM

035-18672E101  
REV. D

ELEMENTARY DIAGRAM  
YCAS 130-230  
YCAS 373-653  
(STYLE F)

## STANDARD AND REMOTE EVAPORATOR UNITS

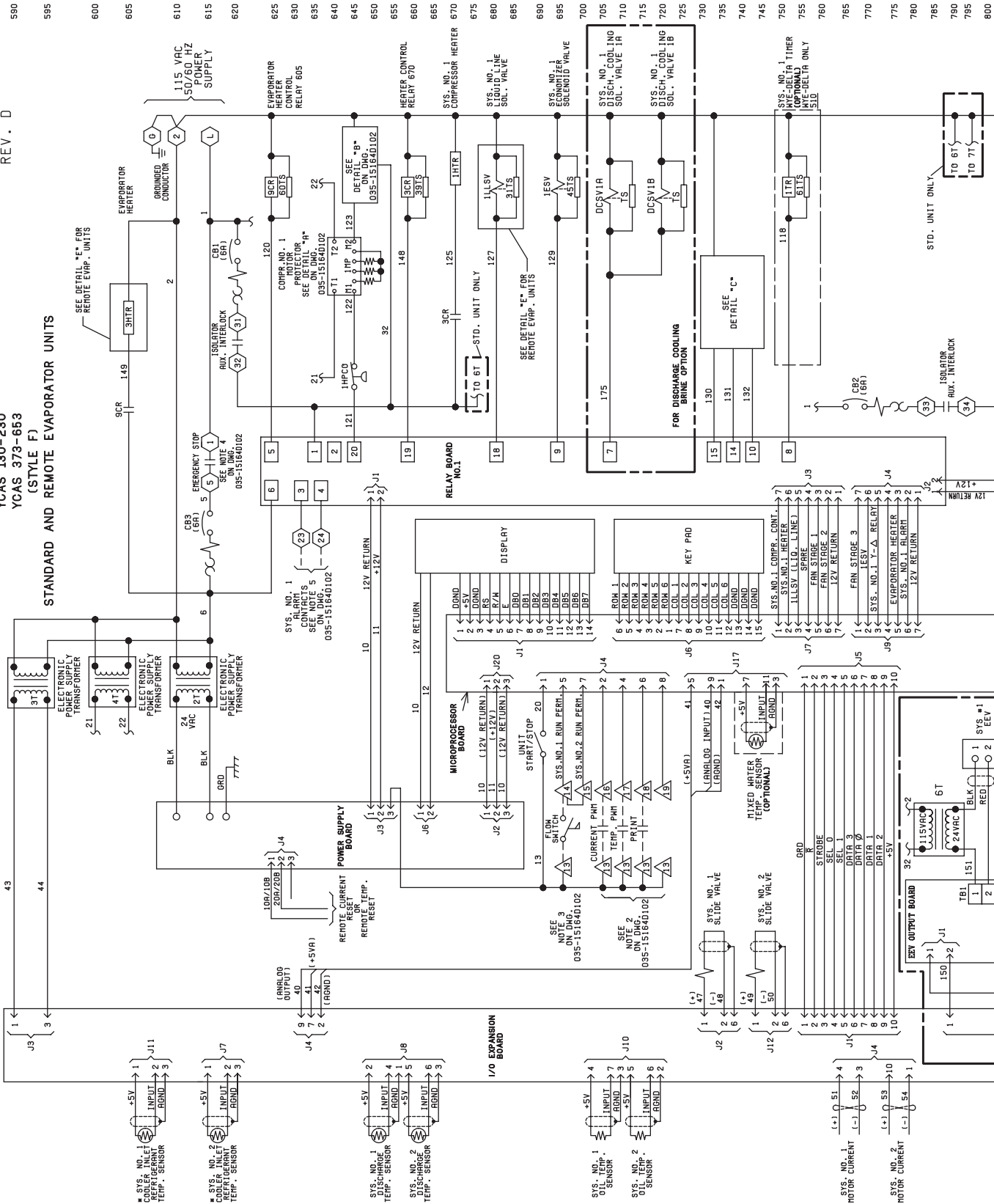
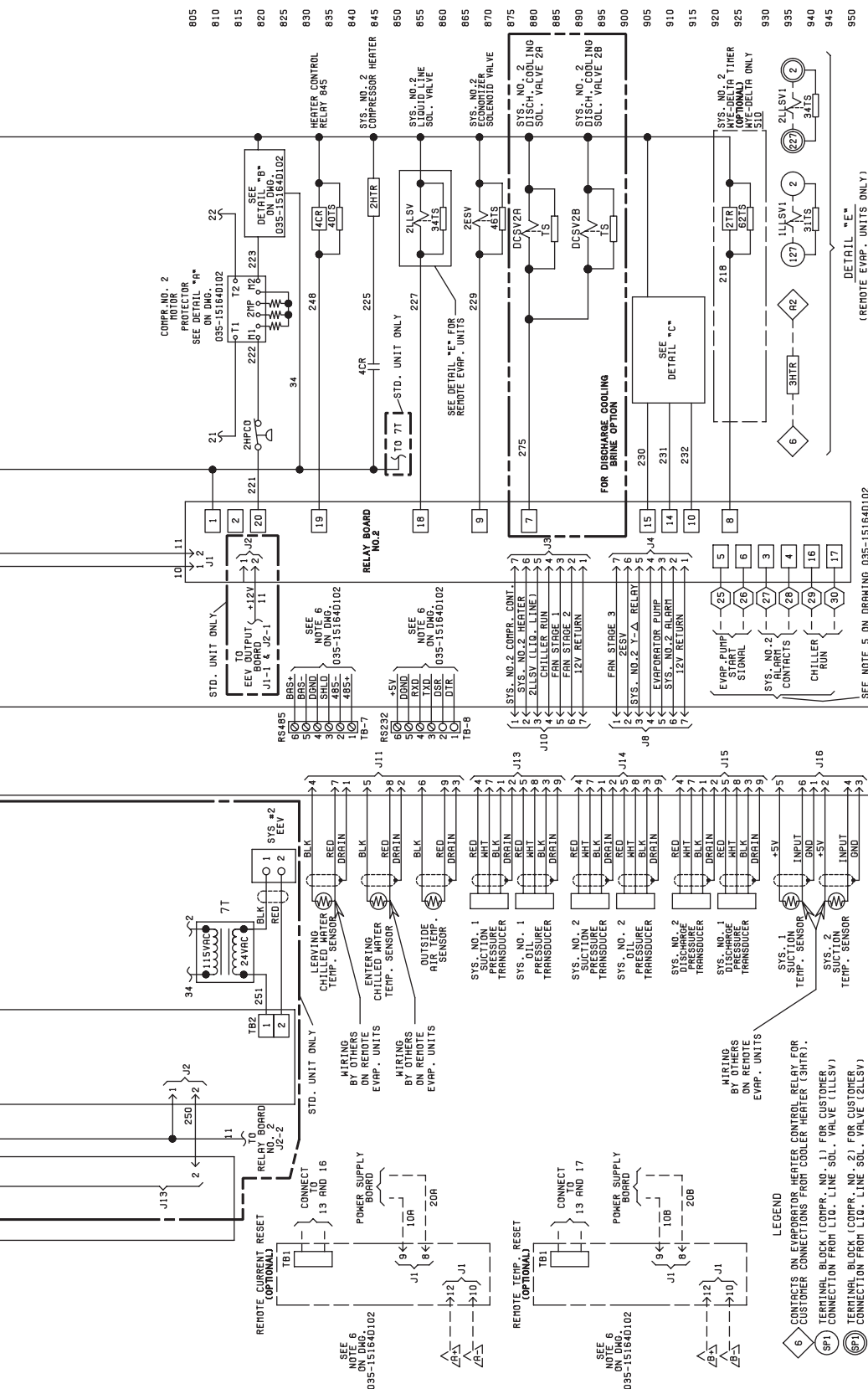


FIG. 3 - ELEMENTARY DIAGRAM - ACROSS-THE-LINE START



# ELEMENTARY DIAGRAM (CONT'D)



**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**

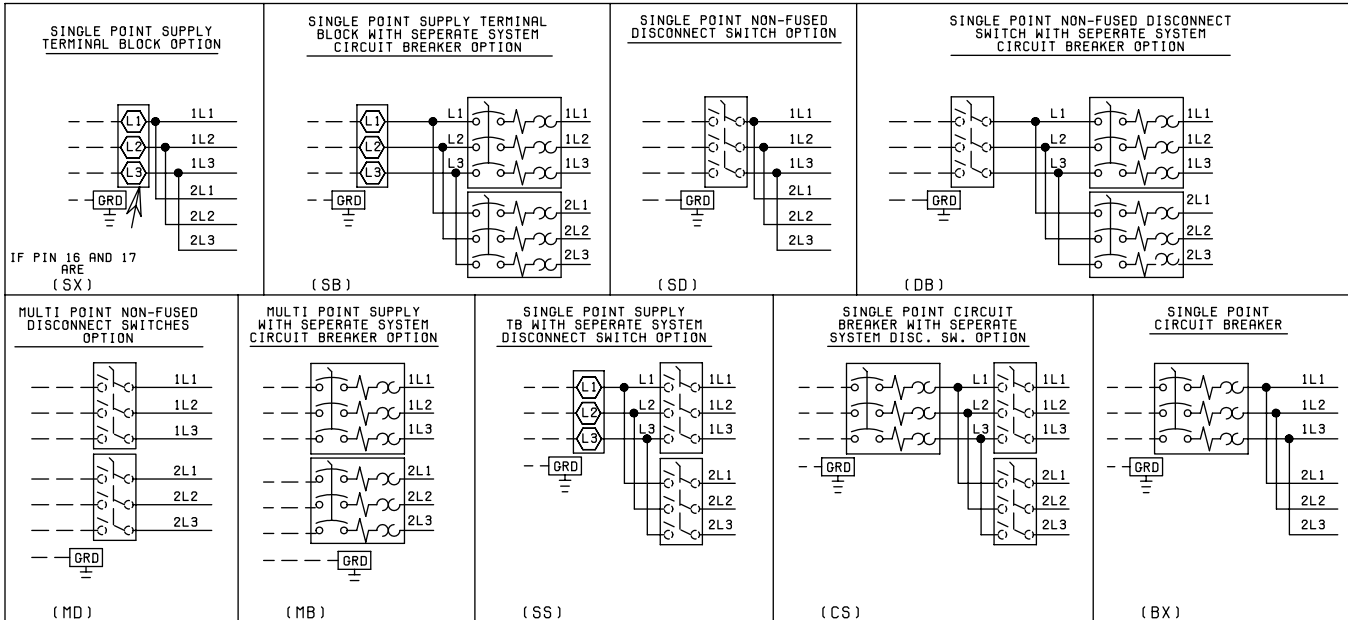
| UNIT VOLTAGE          | CONTROL POWER SUPPLY | MIN CIRCUIT AMP. | MAX DUAL ELEMENT FUSE SIZE | NON-FUSED DISC. SWITCH SIZE |
|-----------------------|----------------------|------------------|----------------------------|-----------------------------|
| ALL MODELS W/O TRANS. | 115-1-50/60         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

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

LD09481

# WIRING DIAGRAM WYE-DELTA START

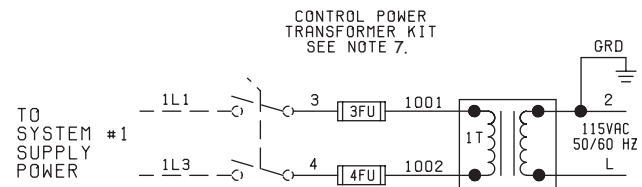
OPTIONAL EQUIPMENT SEE NOTE 7.



**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. Numbers along the right side of a diagram are line identification numbers. The numbers at each line indicate the line number location of relay contacts. An unlined contact location signifies a normally closed contact. Numbers adjacent to circuit lines are the circuit identification numbers.
3. Any customer supplied contacts must be suitable for switching 24VDC. (Gold contacts recommended.) Control Wiring must not be run in the same conduit with any line voltage wiring.
4. To cycle unit on and off automatically with contact shown, install a cycling device in series with the flow switch (FSLW). See Note 3 for contact rating and wiring specifications. Also refer to cautions on page 21.
5. To stop unit (Emergency Stop) with contacts other than those shown, install the stop contact between 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 115 volts A.C.
6. 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.
7. See Installation, Operation and Maintenance Manual when optional equipment is used.
8. Control panel to be securely connected to earth ground.

LD09231



LD09232

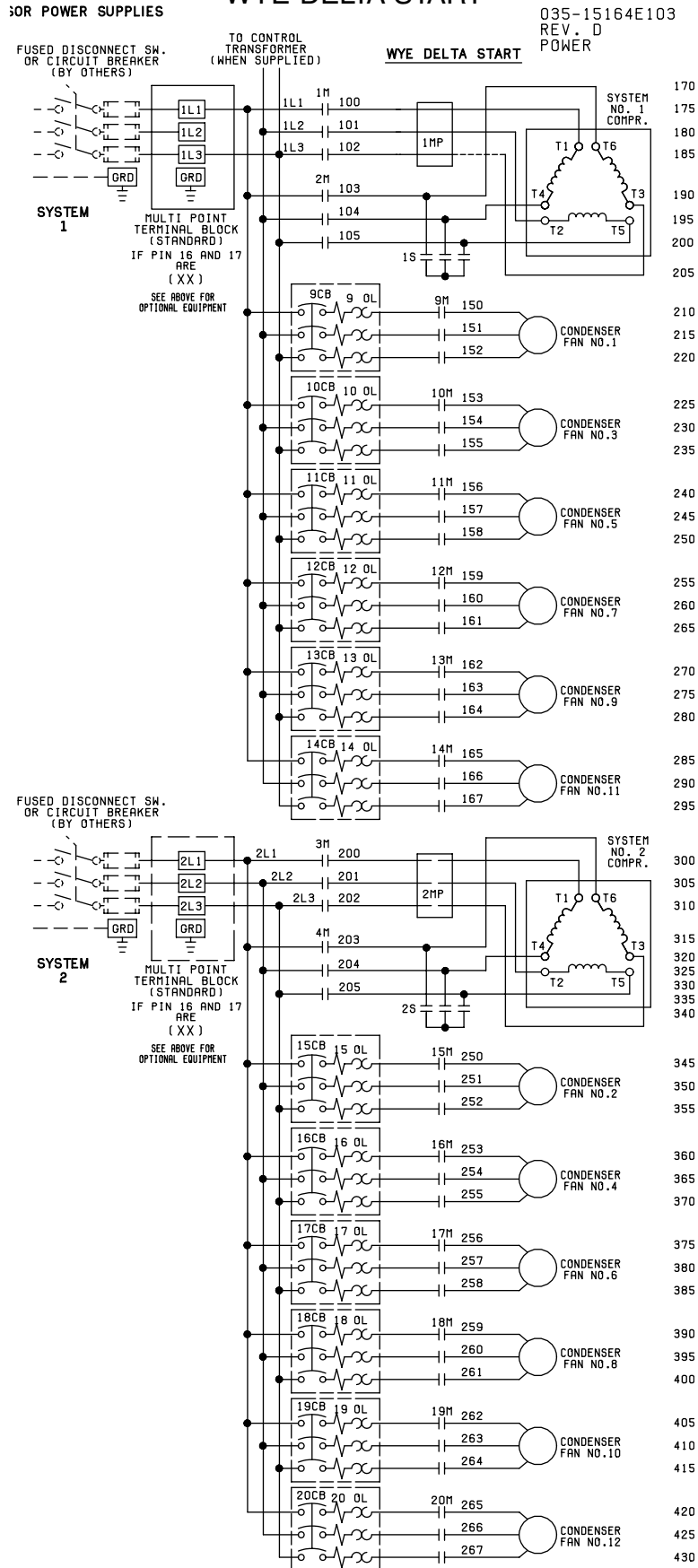
**LEGEND**

- TS 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

**FIG. 4 – WIRING DIAGRAM – WYE-DELTA START**

# WIRING DIAGRAM (CONT'D)

## WYE-DELTA START



LD09236

**FIG. 5 – ELEMENTARY DIAGRAM – WYE-DELTA START**

# ELEMENTARY DIAGRAM

035-18672E101  
REV. D

ELEMENTARY DIAGRAM  
YCAS 130-230  
YCAS 373-653  
(STYLE F)

## STANDARD AND REMOTE EVAPORATOR UNITS

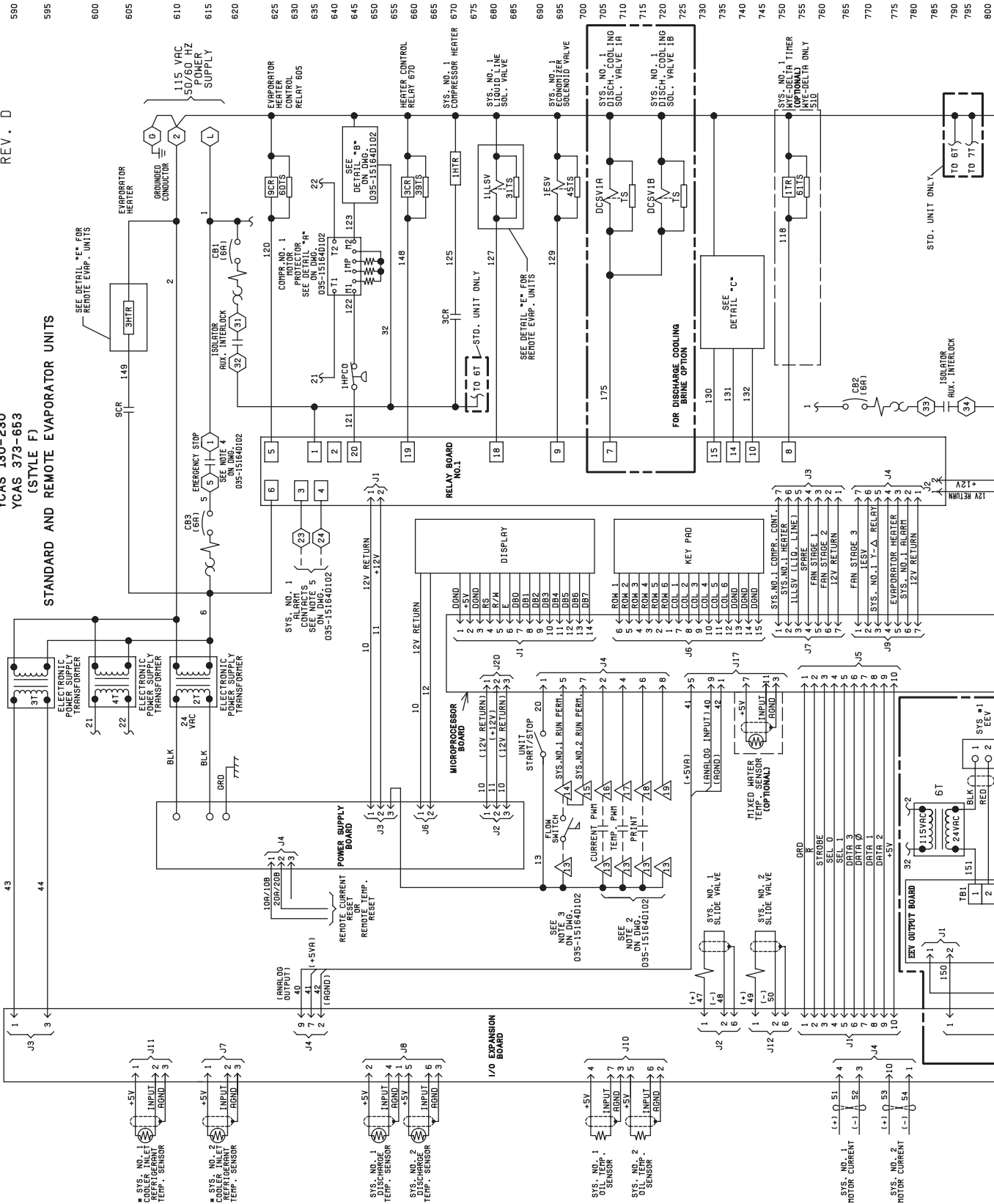
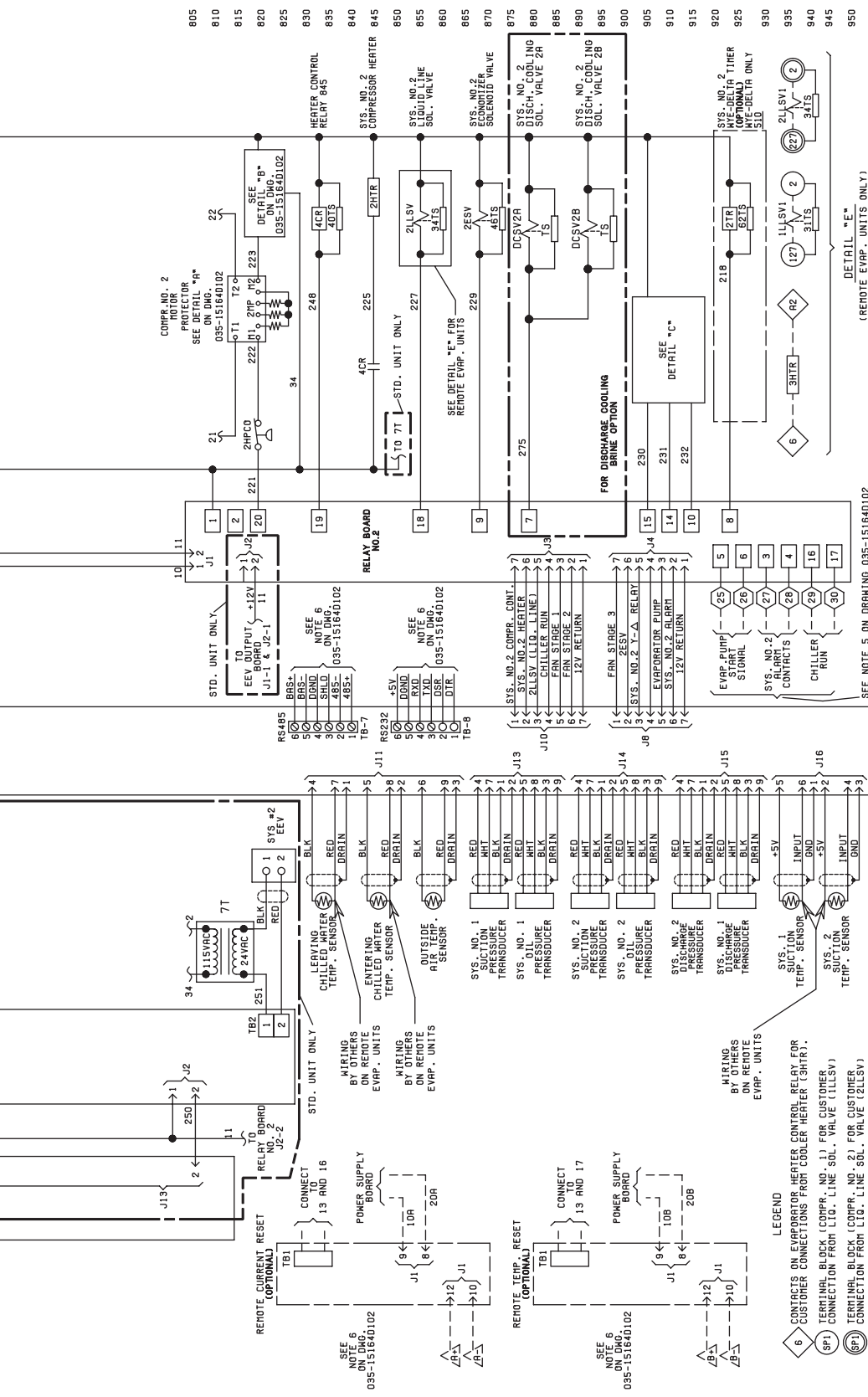


FIG. 6 – ELEMENTARY DIAGRAM – WYE-DELTA START

# ELEMENTARY DIAGRAM (CONT'D)



**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.

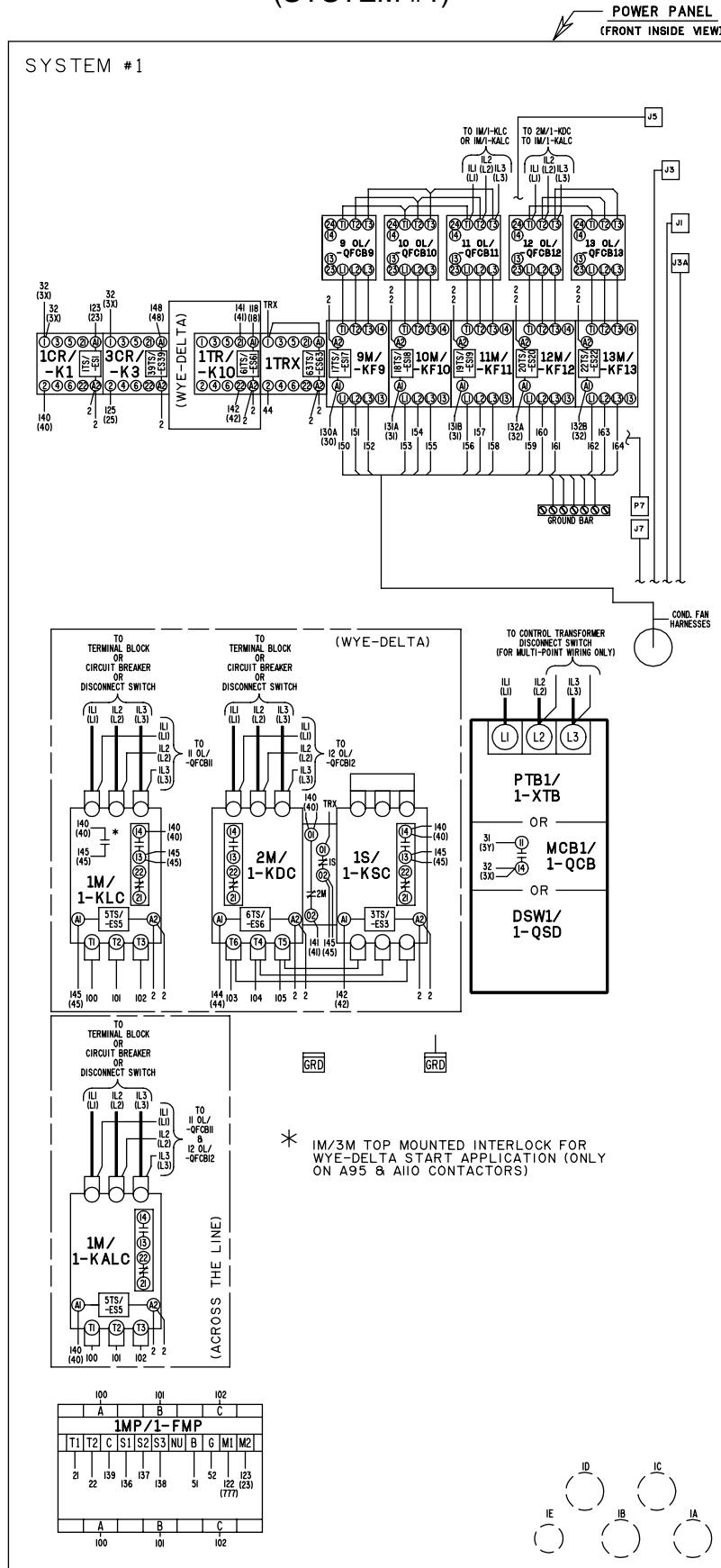
**CONTROL POWER SUPPLY**

| 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 WITH TRANS.    | -17                  | 200-1-60         | 15A                        | 30A 240V                    |
|                       | -28                  | 230-1-60         | 15A                        | 30A 240V                    |
|                       | -46                  | 400-1-60         | 8A                         | 30A 480V                    |
|                       | -58                  | 575-1-60         | 8A                         | 30A 600V                    |

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

LD09481

# POWER PANEL (SYSTEM #1)



LD09238

FIG. 7 – POWER PANEL (SYSTEM #1) COMPONENT LOCATIONS

# CONTROL PANEL

ELECTRONIC PANEL  
(FRONT INSIDE VIEW)

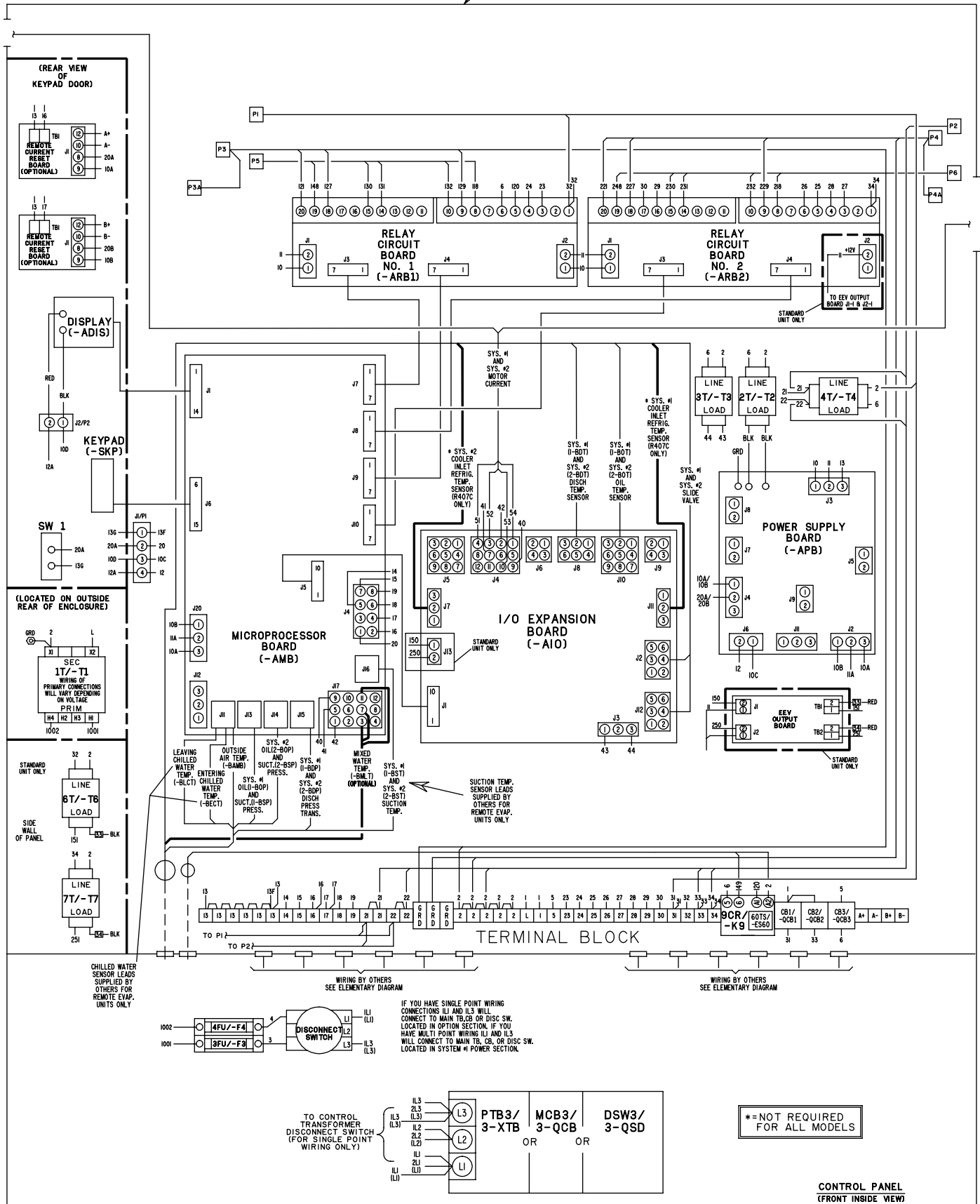
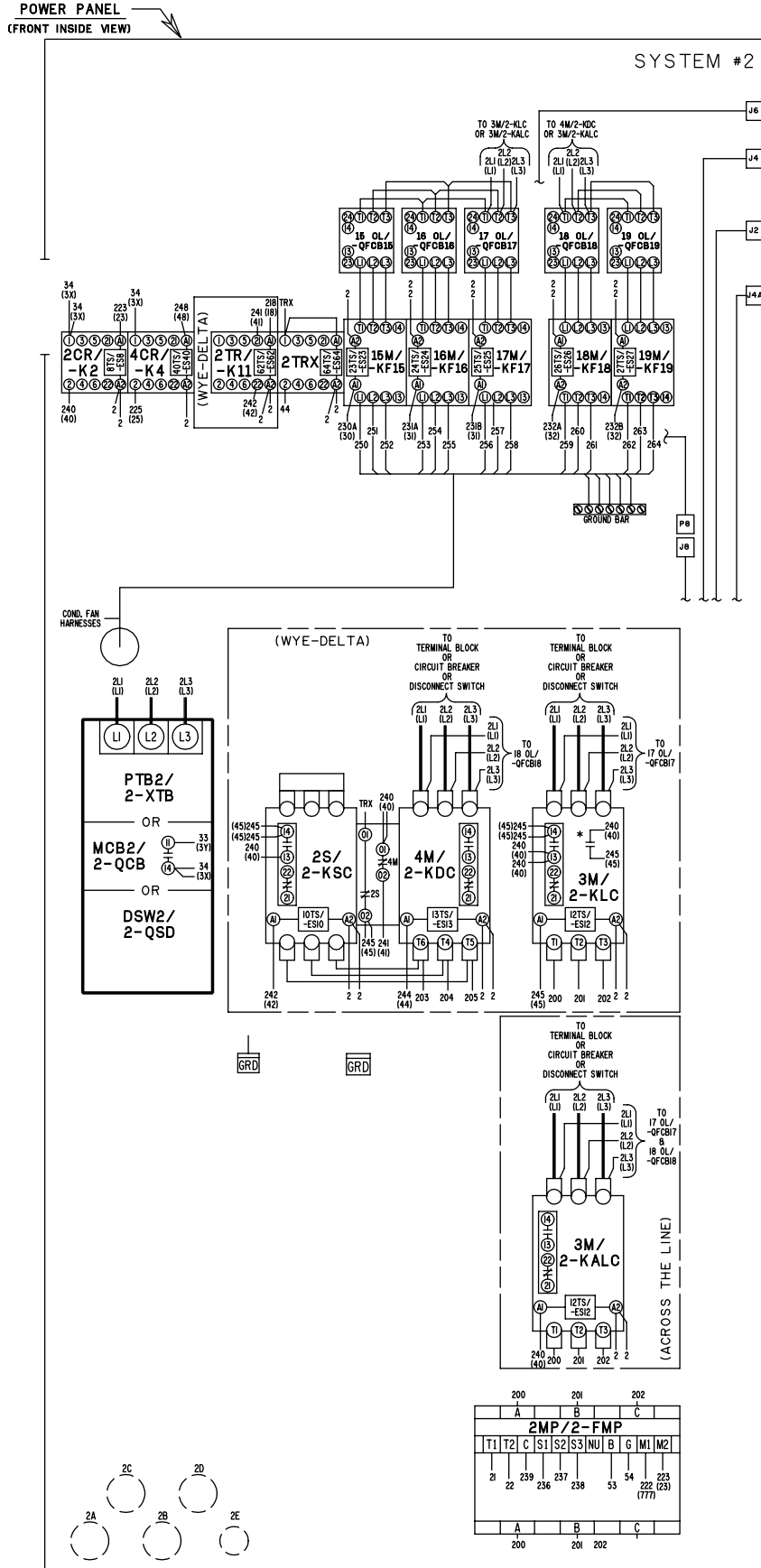


FIG. 8 – CONTROL PANEL COMPONENT LOCATION

# POWER PANEL (SYSTEM #2)



LD09240

FIG. 9 – POWER PANEL (SYSTEM #2) COMPONENT LOCATIONS



# LEGEND

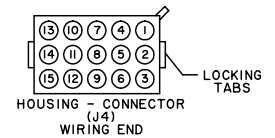
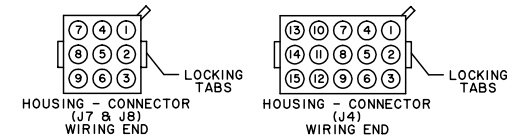
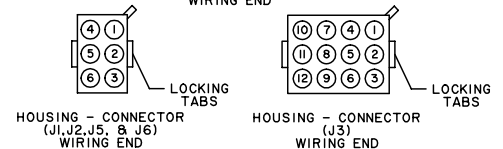
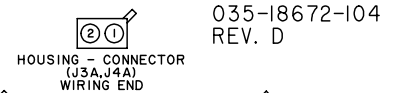
- |   |  |   |  |  |   |
|---|--|---|--|--|---|
| 1CR THRU 4CR, 9CR/<br>-K1 THRU -K4, -K9<br>CB1, CB2, CB3/<br>-QCB1, -QCB2, -QCB3<br>9CB THRU 13CB | -CONTROL RELAYS<br>-CIRCUIT BREAKERS<br>-OVERLOAD CIRCUIT BREAKERS (SYS. #1)<br>-OVERLOAD CIRCUIT BREAKERS (SYS. #2) | 1M, 3M/<br>1-KLC OR 1-KALC,<br>2M, 4M/<br>1-KDC, 2-KDC<br>1S, 2S/<br>1-KSC, 2-KSC<br>9M THRU 13M/<br>-KF9 THRU -KF13<br>15M THRU 19M/<br>-KF15 THRU -KF19<br>1MP/1-FMP<br>2MP/2-FMP<br>1T/-T1 | -COMPRESSOR CONTACTORS<br>-COMPRESSOR CONTACTORS<br>-COMPRESSOR CONTACTORS<br>-CONDENSER FAN CONTACTORS (SYS. #1)<br>-CONDENSER FAN CONTACTORS (SYS. #2)<br>-MOTOR PROTECTOR (SYS. #1)<br>-MOTOR PROTECTOR (SYS. #2)<br>-CONTROL TRANSFORMER 2KVA (OPTIONAL) | 2T, 3T, 4T/<br>-T2, -T3, -T4<br>1TR, 2TR/<br>-K10, -K11<br>TS/-ES<br>PTB1, PTB2/<br>1-XTB, 2-XTB<br>MCB1, MCB2/<br>1-QCB, 2-QCB<br>DSW1, DSW2/<br>1-QSD, 2-QSD | -MICRO PANEL TRANSFORMERS<br>-TIMER RELAYS<br>-TRANSIENT SUPPRESSORS<br>-POWER TERMINAL BLOCK<br>-MOTOR CIRCUIT BREAKER<br>-DISCONNECT SERVICE SWITCH<br>-WIRING BY YORK<br>-WIRING BY OTHERS<br>-OPTIONAL WIRING AND/OR COMPONENTS |
|---|--|---|--|--|---|

## CONNECTION DIAGRAM, ELEC. BOX YCAS0130-0230 YCAS0373-0653

### STANDARD AND REMOTE EVAP. UNITS

J1, J2, J3, J3A, J4, J4A, — POWER PANEL  
J5, J6, J7, J8, P7 & P8  
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(25)  | 4            |
|          | 129      | 5            |
|          | 127      | 6            |
|          | 121      | 11           |
|          | 222(777) | 12           |

| PLUG NO. | WIRE NO. | PLUG PIN NO. |
|----------|----------|--------------|
| P4       | 2        | 1            |
|          | GRD      | 2            |
|          | 225(25)  | 3            |
|          | 227      | 4            |
|          | 229      | 5            |
|          | 221      | 11           |
|          | 222(777) | 12           |

| 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            |
|          | 125A     | 4            |
|          | 129A     | 5            |
|          | 127A     | 6            |
|          | 121A     | 11           |
|          | 122      | 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. |
|----------|----------|--------------|
| P3A      | 125      | 1            |
|          | 122      | 2            |

| 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. |
|----------|----------|--------------|
| 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. |
|----------|----------|--------------|
| 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. |
|----------|----------|--------------|
| P4A      | 225      | 1            |
|          | 225      | 2            |

| 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            |

| 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. |
|----------|----------|--------------|
| J8       | 25       | 1            |
|          | 2        | 2            |
|          | 23       | 3            |
|          | 40       | 4            |
|          | 41       | 5            |
|          | 42       | 6            |
|          | 3X       | 7            |
|          | TRX      | 8            |
|          | 44       | 9            |
|          |          |              |

NOTES:

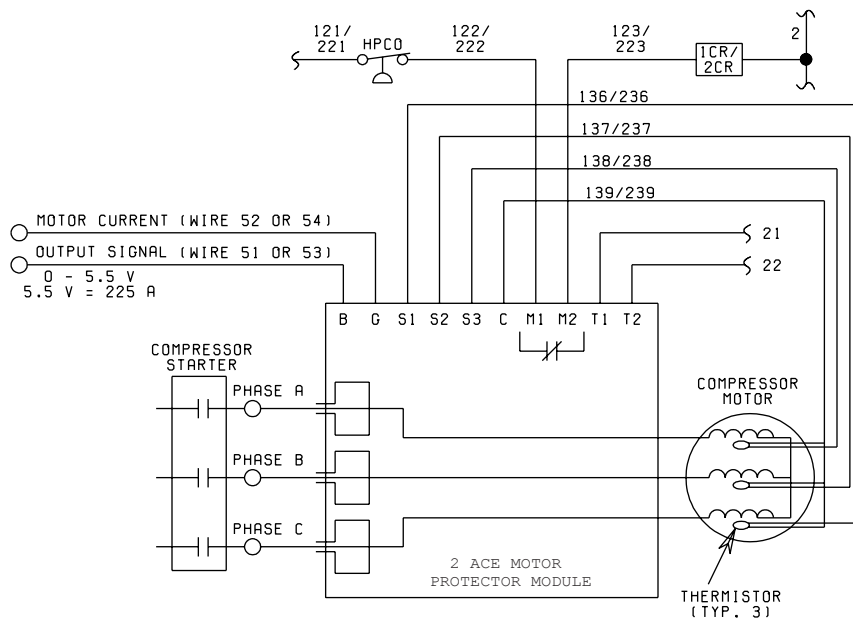
1. FIELD WIRING TO BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE NATIONAL ELECTRICAL CODE AS WELL AS ALL OTHER APPLICABLE CODES AND SPECIFICATIONS.
2. CONTACTS MUST BE SUITABLE FOR SWITCHING 24VDC. (GOLD CONTACTS RECOMMENDED). WIRING SHALL NOT BE RUN IN THE SAME CONDUIT WITH ANY LINE VOLTAGE (CLASS 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.

LD03282

LEGEND

- |   |  |
|---|--|
| TS  | 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   |

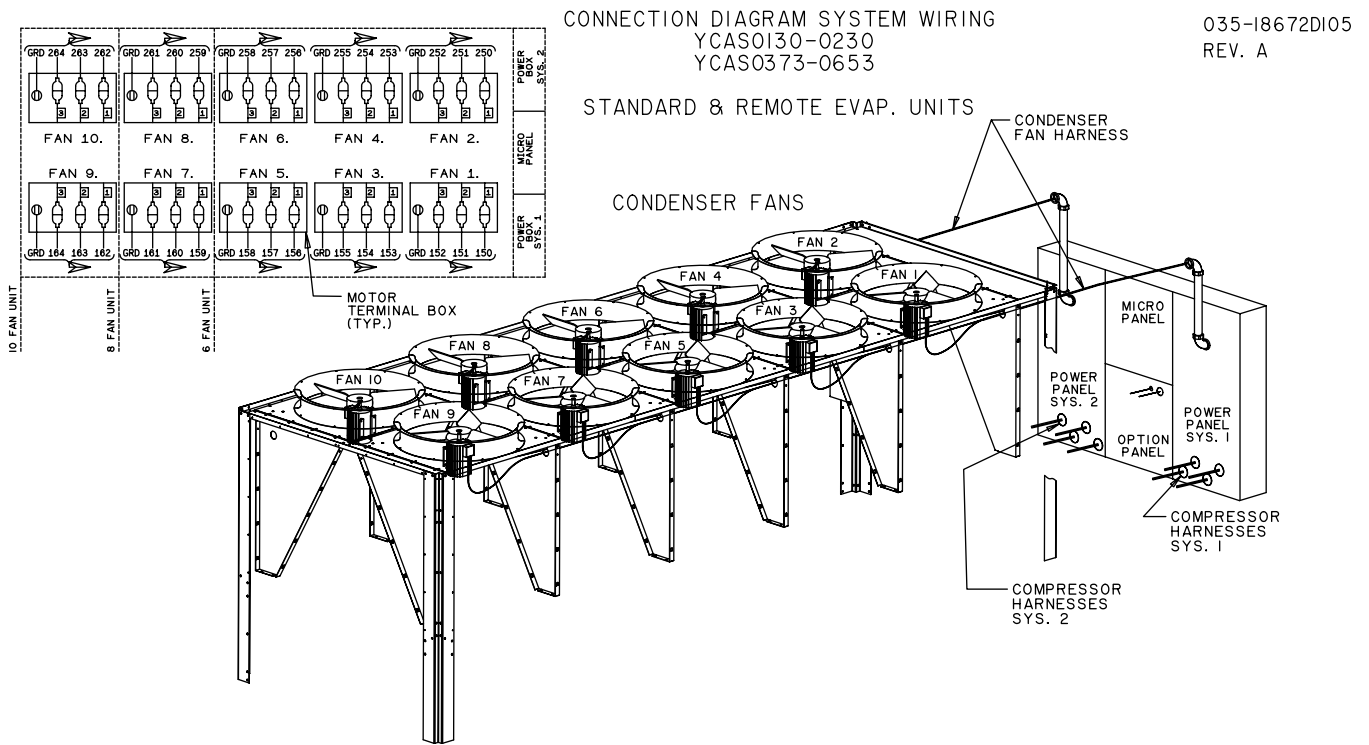
LD03283



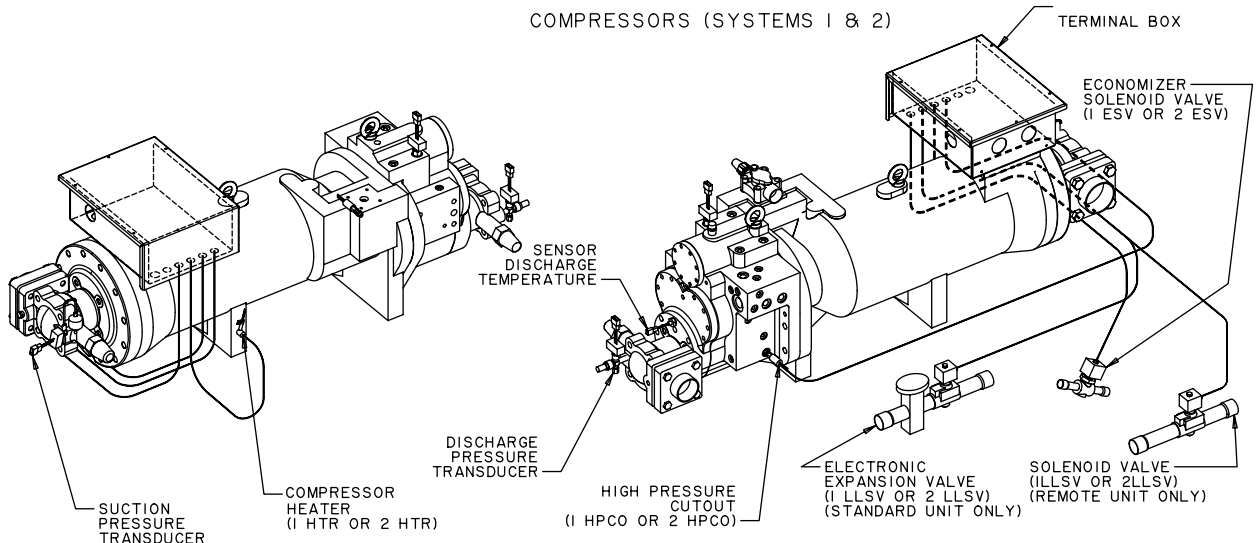
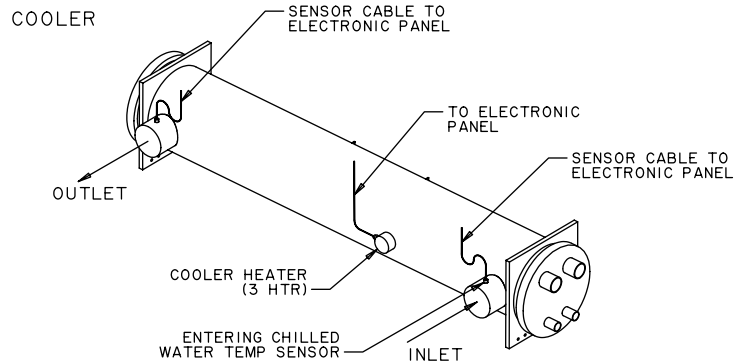
DETAIL "A"

LD03284

# CONNECTION DIAGRAM (SYSTEM WIRING)



- 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 ELECTRONIC EXPANSION VALVE PILOT SOLENOID (STAN. UNIT ONLY)
  - 2 LLSV SYS. No.2 ELECTRONIC EXPANSION VALVE PILOT SOLENOID (STAN. UNIT ONLY)
  - 1 LLSV SYS. No.1 LIQUID LINE SOLENOID VALVE (REMOTE UNIT ONLY)
  - 2 LLSV SYS. No.2 LIQUID LINE SOLENOID VALVE (REMOTE UNIT ONLY)
  - 1 ESV ECONOMIZER SOLENOID VALVE (UNIT IDENT)
  - 2 ESV ECONOMIZER SOLENOID VALVE (UNIT IDENT)
  - TXV 1 SYS. No.1 THERMAL EXPANSION VALVE (UNIT)
  - TXV 2



**FIG. 10 – CONNECTION DIAGRAM (SYSTEM WIRING)**

# COMPRESSOR TERMINAL BOX

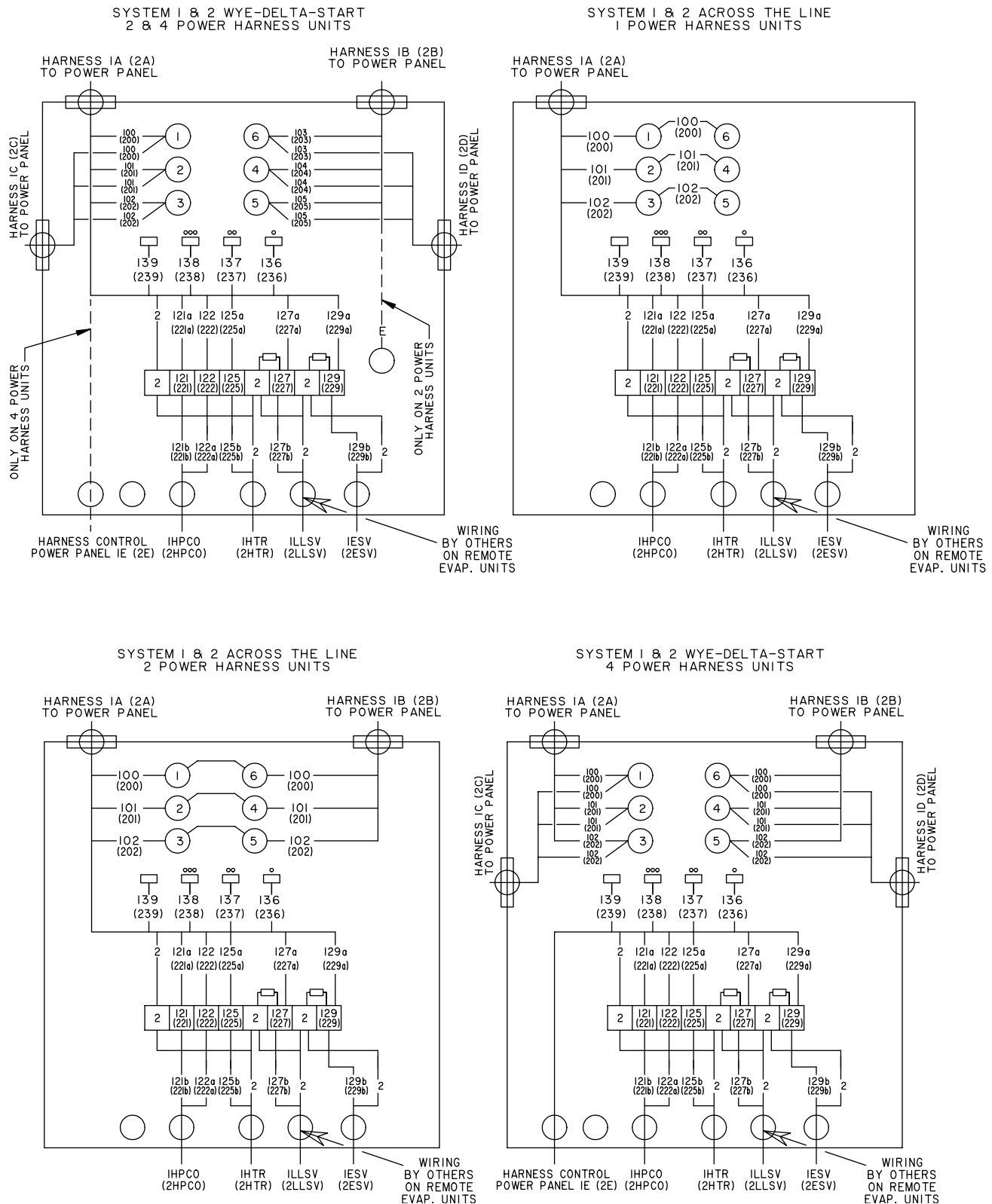
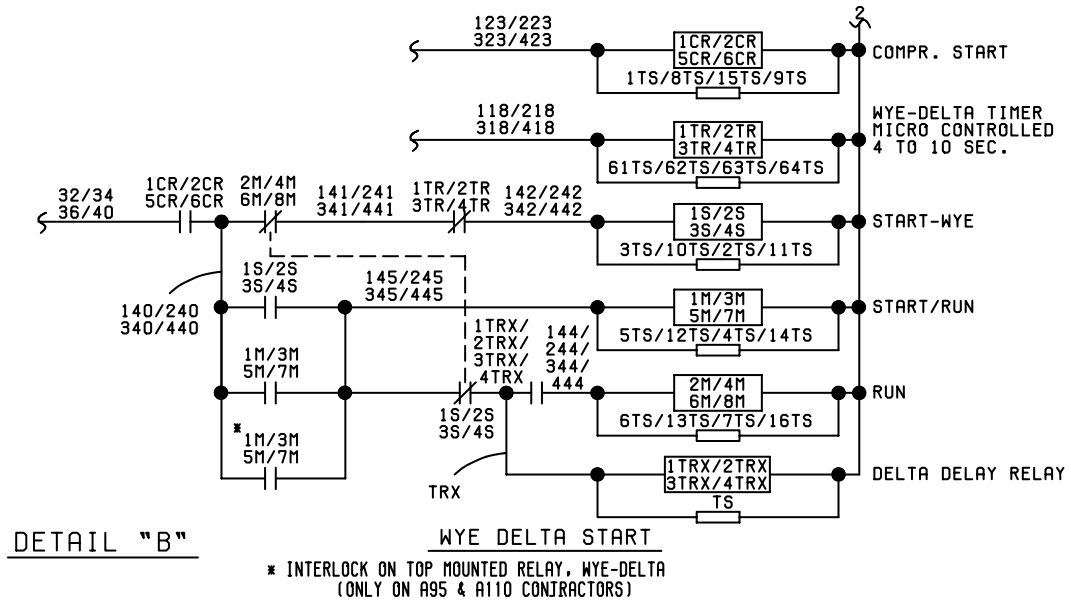


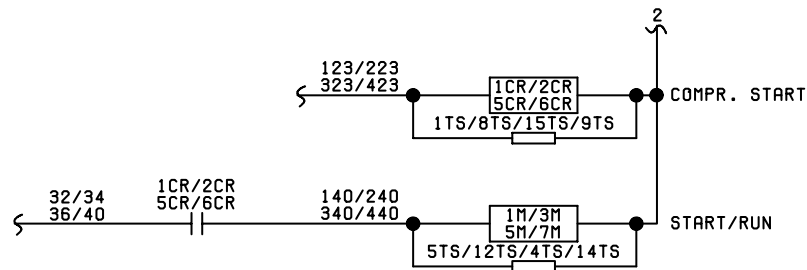
FIG. 11 – COMPRESSOR TERMINAL BOX

LD09243

## ELEMENTARY DIAGRAM STARTER CONTROL CIRCUIT



DETAIL "B"

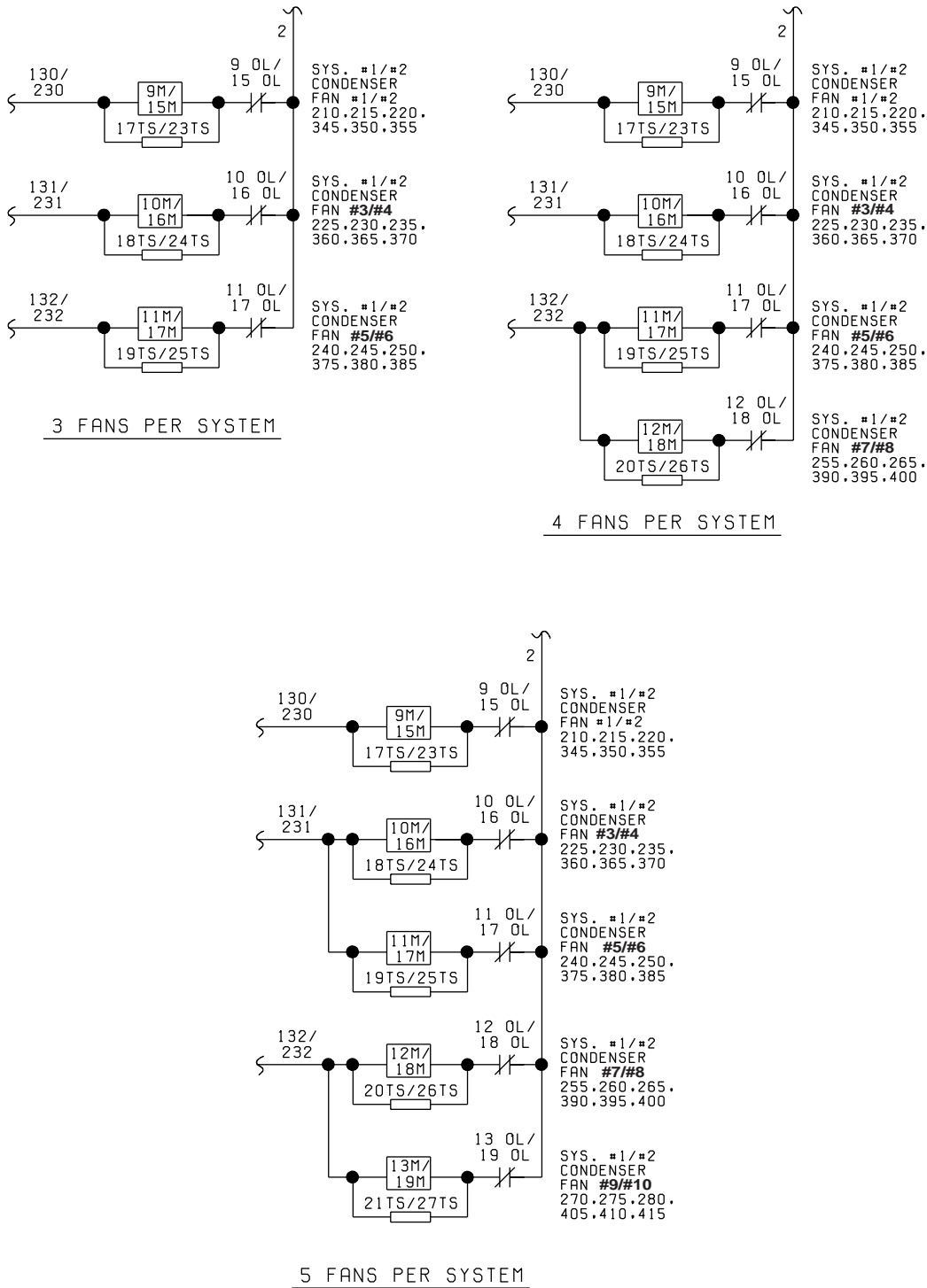


ACROSS THE LINE START

LD09373

FIG. 12 – ELEMENTARY DIAGRAM STARTER CONTROL CIRCUIT

# ELEMENTARY DIAGRAM FAN CONTROL



## DETAIL "C"

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

LD06840

**FIG. 13 – ELEMENTARY DIAGRAM FAN CONTROL CIRCUIT**

## NOTES

