



| KEY | COMPONENT | DESCRIPTION |
|------|-----------------------------------------|-------------|
| A30 | SENSOR, PRESSURE DISCHARGE AIR | |
| A34 | SENSOR, PRESSURE RETURN AIR | |
| A55 | PANEL, MAIN PANEL LENNOX | |
| A96 | CONTROL, INVERTER SUPPLY | |
| A178 | PANEL, COMP 3 & 4, C3 SECOND STAGE HEAT | |
| A187 | CONTROL, GENERAL PURPOSE GP3 | |
| B1 | COMPRESSOR 1 | |
| B2 | COMPRESSOR 2 | |
| B3 | MOTOR, BLOWER | |
| B4 | MOTOR, OUTDOOR FAN 1 | |
| B5 | MOTOR, OUTDOOR FAN 2 | |
| B13 | COMPRESSOR 3 | |
| B20 | COMPRESSOR 4 | |
| B21 | MOTOR, OUTDOOR FAN 3 | |
| B22 | MOTOR, OUTDOOR FAN 4 | |
| B23 | MOTOR, OUTDOOR FAN 5 | |
| B24 | MOTOR, OUTDOOR FAN 6 | |
| B35 | MOTOR, EXHAUST BLOWER 1 | |
| B36 | MOTOR, EXHAUST BLOWER 2 | |
| C1 | CAPACITOR, OUTDOOR FAN 1 | |
| C2 | CAPACITOR, OUTDOOR FAN 2 | |
| C18 | CAPACITOR, OUTDOOR FAN 3 | |
| C19 | CAPACITOR, OUTDOOR FAN 4 | |
| C20 | CAPACITOR, OUTDOOR FAN 5 | |
| C21 | CAPACITOR, OUTDOOR FAN 6 | |
| S117 | SWITCH, GFI | |
| T1 | TRANSFORMER, CONTROL | |
| T18 | TRANSFORMER, CONTACTOR | |
| T29 | TRANSFORMER, GFI | |
| C21 | CAPACITOR, OUTDOOR FAN 6 | |
| TB2 | TERMINAL BLOCK, POWER DISTRIBUTION | |
| TB18 | TERMINAL STRIP, CYCLE CONTROL | |
| TB24 | TERMINAL STRIP, UNIT ADDER | |
| TB25 | TERMINAL STRIP, BLOWER | |
| TB40 | TERMINAL STRIP, COMPRESSOR 1 | |
| TB41 | TERMINAL STRIP, COMPRESSOR 2,3,4 | |
| TB47 | TERMINAL STRIP, OUTDOOR FANS | |
| TB58 | TERMINAL STRIP, POWER EXHAUST | |
| TB59 | TERMINAL STRIP, POWER EXHAUST | |
| HR1 | HEATER COMPRESSOR 1 | |
| HR2 | HEATER COMPRESSOR 2 | |
| HR5 | HEATER COMPRESSOR 3 | |
| HR11 | HEATER COMPRESSOR 4 | |
| K1 | CONTACTOR, COMPRESSOR 1 | |
| K2 | CONTACTOR, COMPRESSOR 2 | |
| K10 | RELAY, OUTDOOR FAN 1 | |
| K14 | CONTACTOR, COMPRESSOR 3 | |
| K68 | RELAY, OUTDOOR FAN 2 | |
| K146 | CONTACTOR, COMPRESSOR 4 | |
| K149 | RELAY, OUTDOOR FAN 3 | |
| K150 | RELAY, OUTDOOR FAN 4 | |
| K152 | RELAY, OUTDOOR FAN 5 | |
| K153 | RELAY, OUTDOOR FAN 6 | |
| K199 | CONTACTOR, EXHAUST STG 1 | |
| K201 | CONTACTOR, EXHAUST STG 2 | |
| K203 | RELAY, INVERTER CONTROL | |

| L14 | VALVE, SOLENOID REHEAT COIL 1 |
|------|-------------------------------------------|
| L30 | VALVE, SOLENOID REHEAT COIL 2 |
| R55 | RESISTOR, VFD LOADING, A96 |
| RT17 | SENSOR, OUTDOOR AIR |
| S4 | SWITCH, LIMIT HI PRESS COMPRESS 1 |
| S7 | SWITCH, LIMIT HI PRESS COMPRESS 2 |
| S11 | SWITCH, LOW PRESS, LOW AMBIENT KIT COMP 1 |
| S28 | SWITCH, LIMIT HI PRESS COMPRESS 3 |
| S37 | SWITCH, PRESSURE EXHAUST FAN |
| S39 | SWITCH, PRESSURE EXHAUST FAN |
| S49 | SWITCH, FREEZE STAT COMPRESS 1 |
| S50 | SWITCH, FREEZE STAT COMPRESS 2 |
| S53 | SWITCH, FREEZE STAT COMPRESS 3 |
| S84 | SWITCH, LOW PRESS, LOW AMBIENT KIT COMP 2 |
| S85 | SWITCH, LOW PRESS, LOW AMBIENT KIT COMP 3 |
| S87 | SWITCH, LOW PRESS, COMP 1 |
| S88 | SWITCH, LOW PRESS, COMP 2 |
| S94 | SWITCH, LOW PRESS, LOW AMBIENT KIT COMP 4 |
| S95 | SWITCH, FREEZE STAT COMPRESS 4 |
| S96 | SWITCH, LIMIT HI PRESS COMPRESS 4 |
| S97 | SWITCH, LOW PRESS, COMP 4 |
| S98 | SWITCH, LOW PRESS, COMP 3 |

| J/P | JACK / PLUG DESCRIPTION |
|-----|--------------------------------|
| 11 | GFI, RECEPTACLE |
| 86 | OUTDOOR FAN INTERFACE |
| 87 | OUTDOOR FAN INTERFACE 2 |
| 118 | COMPRESSOR 3 AND 4, CONTROL |
| 119 | COMPRESSOR 3 AND 4, INPUT |
| 248 | VFD CONTROL |
| 259 | BLOWER ECM MOTOR |
| 263 | HIGH AND LOW PRESSURE SWITCHES |
| 264 | BLOWER DECK |
| 265 | CONTACTORS AND RELAYS |
| 267 | OUTDOOR FAN AREA |
| 268 | TRANSFORMER 1 POWER |
| 269 | HUMIDITROL |
| 299 | HUMIDITROL INTERFACE |
| 348 | CONTROL, GENERAL PURPOSE GP3 |

120 VAC FIELD PROVIDED POWER SUPPLY IS REQUIRED

NOTE: USE COPPER CONDUCTORS ONLY

- ▲ P.E LESS INVERTER WIRING SHOWN
- ▲ ONLY ON UNITS WITH HUMIDITROL OPTION
- ▲ EXTERNAL HUMIDITROL CONTACTS
- ▲ CONNECTS TO SECTION "A" HEATING DIAGRAM, MAY BE LOCATED IN HEATING COMPARTMENT
- ▲ S49,S50,S53 AND S95 ARE PART OF 5VDC CIRCUIT
- ▲ F37 AND F38 ARE NOT USED ON UNITS LESS ELECTRIC HEAT, 480 AND 600 V
- ▲ S37 AND S39 PRESSURE SWITCH CONTROL FOR POWER EXHAUST
- ▲ VOLTAGE CONTROL SINGLE STAGE P.E
- ▲ VOLTAGE CONTROL TWO STAGE P.E
- ▲ A30 SENSOR FOR B3 SUPPLY AIR BLOWER IN VAV APPLICATIONS ONLY
- ▲ A34 SENSOR AND A137 INVERTER CONTROL FOR B35 AND B36 EXHAUST AIR BLOWERS
- ▲ A30 MAY BE USED WITH OR WITHOUT A34 A34 MAY BE USED WITH OR WITHOUT A30
- ▲ FOR UNITS WITH BYPASS OPTION, PLEASE REFER TO SECTION 3B WIRING DIAGRAM
- ▲ FOR POWER EXHAUST INVERTER WIRING, PLEASE REFER TO SECTION 5B WIRING DIAGRAM
- ▲ F61 USED ON ALL UNITS WITH LGH UNITS SCCR OPTION
- ▲ S48 IS FIELD INSTALLED ON ALL LCH UNITS WITH SCCR OPTION

NOTE - IF ANY WIRE IN THIS APPLIANCE IS REPLACED IT MUST BE REPLACED WITH WIRE OF LIKE SIZE, RATING, TERMINATION AND INSULATION THICKNESS.

WARNING - ELECTRIC SHOCK HAZARD, CAN CAUSE INJURY OR DEATH . UNIT MUST BE GROUNDED IN ACCORDANCE WITH NATIONAL AND LOCAL CODES. DISCONNECT ALL POWER BEFORE SERVICING.

- DENOTES OPTIONAL COMPONENTS
- LINE VOLTAGE FIELD INSTALLED
- - - CLASS II FIELD WIRING

| | | |
|------------------------------|------------------------|--------|
| 2019/08 | WIRING DIAGRAM | 08/19 |
| 538067-01 | | |
| COOLING - VFD | | |
| LCH 420H, 480H, 600S 3- G, J | | |
| SECTION B | | REV. 0 |
| Supersedes | New Form No. 538067-01 | |