

DESCRIPTION	
KEY	COMPONENT
A30	SENSOR, PRESSURE DISCHARGE AIR
A34	SENSOR, PRESSURE RETURN AIR
A55	PANEL, MAIN PANEL LENNOX
A59	PANEL, COMPRESSORS 3 AND 4
A96	CONTROL, INVERTER SUPPLY
A133	PANEL, GP BOARD LENNOX
A137	CONTROL, INVERTER RETURN
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
CB8	CIRCUIT, BREAKER T1
CB10	CIRCUIT BREAKER, MAIN DISCONNECT UNIT
CB18	CIRCUIT, BREAKER T18
F10	FUSE, OUTDOOR FAN MOTOR
F30	FUSE, TRANSFORMER T29 PRIMARY
F31	FUSE, TRANSFORMER T29 SECONDARY
F37	FUSE, COMPRESSOR GROUP 1
F38	FUSE, COMPRESSOR GROUP 2
HR1	HEATER COMPRESSOR 1
HR2	HEATER COMPRESSOR 2
HR5	HEATER COMPRESSOR 3
HR11	HEATER COMPRESSOR 4
J11	JACK, GFI, RECEPTACLE
J47	JACK, OUTDOOR FAN 1
J52	JACK, OUTDOOR FAN 2
J86	JACK, OUTDOOR FAN INTERFACE
J87	JACK, OUTDOOR FAN INTERFACE 2
J106	JACK, OUTDOOR FAN 3
J107	JACK, OUTDOOR FAN 4
J108	JACK, OUTDOOR FAN 5
J109	JACK, OUTDOOR FAN 6
J118	JACK, COMPRESSOR 3 AND 4, CONTROL
J119	JACK, COMPRESSOR 3 AND 4, INPUT
J211	JACK, INVERTER EXHAUST BLOWER
J194	JACK, I/O FOR A133 LENNOX A133 BOARD
J248	JACK, VFD CONTROL
J258	JACK, VFD CONTROL EXHAUS AIR
J263	JACK, HIGH AND LOW PRESSURE SWITCHES

J264	JACK, BLOWER DECK
J265	JACK, CONTACTORS AND RELAYS
J267	JACK, OUTDOOR FAN AREA
J268	JACK, TRANSFORMER 1 POWER
J269	JACK, HUMIDITROL
J299	JACK, HUMIDITROL INTERFACE
K1,-1	CONTACTOR, COMPRESSOR 1
K2,-1	CONTACTOR, COMPRESSOR 2
K3,-1	CONTACTOR, BLOWER
K10,-1,2	RELAY, OUTDOOR FAN 1
K14,-1	CONTACTOR, COMPRESSOR 3
K68,-1	RELAY, OUTDOOR FAN 2
K146,-1	CONTACTOR, COMPRESSOR 4
K149,-1	RELAY, OUTDOOR FAN 3
K150,-1	RELAY, OUTDOOR FAN 4
K152,-1	RELAY, OUTDOOR FAN 5
K153,-1,2	RELAY, OUTDOOR FAN 6
K199,-1	CONTACTOR, EXHAUST BLOWER 1
K201,-1	CONTACTOR, EXHAUST BLOWER 2
K202,-1	CONTACTOR, INVERTER BLOWER
K203,-2	RELAY, SUPPLY BLOWER AUX
K207,-2	RELAY, EXHAUST BLOWER AUX
L14	VALVE, SOLENOID REHEAT COIL 1
L30	VALVE, SOLENOID REHEAT COIL 2
P47	PLUG, OUTDOOR FAN 1
P52	PLUG, OUTDOOR FAN 2
P86	PLUG, OUTDOOR FAN INTERFACE
P87	PLUG, OUTDOOR FAN INTERFACE 2
P106	PLUG, OUTDOOR FAN 3
P107	PLUG, OUTDOOR FAN 4
P108	PLUG, OUTDOOR FAN 5
P109	PLUG, OUTDOOR FAN 6
P118	PLUG, COMPRESSOR 3 AND 4, CONTROL
P119	PLUG, COMPRESSOR 3 AND 4, INPUT
P211	PLUG, INVERTER EXHAUST BLOWER
P194	PLUG, I/O FOR A133 LENNOX A133 BOARD
P248	PLUG, VFD CONTROL
P258	PLUG, VFD CONTROL EXHAUS AIR
P263	PLUG, HIGH AND LOW PRESSURE SWITCHES
P264	PLUG, BLOWER DECK
P265	PLUG, CONTACTORS AND RELAYS
P267	PLUG, OUTDOOR FAN AREA
P268	PLUG, TRANSFORMERS
P269	PLUG, HUMIDITROL
P299	PLUG, SAFETY
R55	RESISTOR, VFD LOADING, A96
R56	RESISTOR, VFD LOADING, A137
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, EXHAUST FAN
S42	SWITCH, OVERLOAD RELAY BLOWER MOTOR
S48	SWITCH, DISCONNECT
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
S117	SWITCH, GFI
T1	TRANSFORMER, CONTROL
T18	TRANSFORMER, CONTACTOR
T29	TRANSFORMER, GFI
TB13	TERMINAL STRIP, POWER DISTRIBUTION
TB18	TERMINAL STRIP, CYCLE CONTROL
TB25	TERMINAL STRIP, BLOWER
TB24	TERMINAL STRIP, UNIT ADDER
TB40	TERMINAL STRIP, COMPRESSOR 1
TB41	TERMINAL STRIP, COMPRESSOR 2, 3, 4
TB47	TERMINAL STRIP, OUTDOOR FANS
TB58	TERMINAL STRIP, EXHAUST FANS
TB59	TERMINAL STRIP, INVERTER BY-PASS

← DENOTES OPTIONAL COMPONENTS
→ LINE VOLTAGE FIELD INSTALLED

- 1 S42 USED ON "M" VOLTAGE UNITS AND UNITS WITH HIGH EFFICIENCY MOTORS

2 ONLY ON UNITS WITH HUMIDITROL OPTION

3 EXTERNAL HUMIDITROL CONTACTS

4 CONNECTS TO SECTION "A" HEATING DIAGRAM, MAY BE LOCATED IN HEATING COMPARTMENT

5 S49 AND S50 ARE PART OF 5VDC CIRCUIT
- 6 F37 AND F38 ARE NOT USED ON UNITS LESS ELECTRIC HEAT, 480 AND 600 V

7 S37 AND S39 PRESSURE SWITCH CONTROL

8 VOLTAGE CONTROL SINGLE STAGE

9 VOLTAGE CONTROL TWO STAGE

10 REMOVE JUMPER BETWEEN TB24-28 AND TB24-29 WHENEVER ALC CONTROL IS USED REFER TO SECTION C DIAGRAM
- 11 A30 SENSOR AND A96 INVERTER CONTROL FOR B3 SUPPLY AIR BLOWER

12 A34 SENSOR AND A137 INVERTER CONTROL FOR B35 AND B36 EXHAUST AIR BLOWERS


13 A30 MAY BE USED WITH OR WITHOUT A34
A34 MAY BE USED WITH OR WITHOUT A30
A30 MAY BE USED WITH OR WITHOUT A34
A34 MAY BE USED WITH OR WITHOUT B9
A34 MAY BE USED WITH EITHER A96 VFD OR B9
- 14 K202-1 CONTACTOR MAY BE OMITTED ON UNITS WITH VFD OPERATION ONLY

15 USED ON VFD APPLICATIONS.

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.

01/17



WIRING DIAGRAM

01/17

537223-02

COOLING

LCH, LGH, 420S, 480S, 540S 1-G, J, M, Y

SECTION B

REV. 0

Supersedes

New Form No.

537223-02